

# Analysis of Ecotourism Development and Sustainability in The Heart of Borneo, Indonesia

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## Abstract

*This research critically evaluates the current planning and implementation of ecotourism development in the Indonesian part of the Heart of Borneo. In 2012, President Susilo Bambang Yudhoyono declared that Indonesia would pay more attention to forest preservation rather than exploitation. However, anthropogenic activities continue damaging the Heart of Borneo. Ecotourism development is viewed as a solution to mitigate the area's environmental and socio-economic issues; however, development remains in the planning phase. Thus, this research aims to evaluate the planning of ecotourism in the Heart of Borneo and the extent development aligns with 'best practice'. Taking a constructionist approach that utilised secondary document analysis, this research analysed 36 documents published by several non-governmental and governmental institutions, academic journals and online media in Indonesia. Several gaps were identified between the socio-environmental policies and the rhetoric produced by the government and ministries, highlighting an inconsistency on the governmental level in conducting sustainable tourism development. Local involvement also needs to be improved through partnerships to achieve the Heart of Borneo's ecotourism development goals.*

**Keywords:** ecotourism, development, sustainability, environment, culture, Borneo

## Introduction

The tourism industry is a vital sector in Indonesia, with profit jumping from US\$12.2 billion in 2015 to US\$17 billion in 2018 (Rosana; Ministry of Tourism, 2019). The significant growth of the tourism industry motivates the government to advance tourism development in numerous destinations across the country (Lonely Planet, 2019).

However, rapid tourism development has caused severe issues in some local areas, such as freshwater shortages in Bali, Indonesia's number one tourist destination (Smith, 2018). Such issue has led the Indonesian government to turn to tourism development that focuses on sustaining the local area's natural and social capital (Kumparan; CNN Indonesia, 2019). With the attention to maintaining the sustainability of the local area's environment, communities and economies, ecotourism development has been perceived by the Indonesian government to be a holistic approach in developing a destination and maintaining its assets, and a solution to mitigating tourism impacts in the country (Björk, 2000; Nasution, 2019b; Mahmud, 2019d; CNN Indonesia, 2019; Kehl & Sekartjakrarini, 2012; WWF, 2012b).

The concept of ecotourism has, however, gained broad concern because it has been identified that ecotourism has been commercialized without highlighting conservational efforts (Suhandi, 2020). Such misuse is argued to be an obstacle for ecotourism development in achieving its sustainability goals (Sharpley, 2006). There thus appears to be an emerging inconsistency in the construction of ecotourism in Indonesia, instigating this research to examine the extent to which the planning phase of ecotourism in the context of Indonesia aligns with best practice constructions of ecotourism. To that end, this research takes focus with the Heart of Borneo in Borneo, Indonesia, referred to, herein, as the HoB.

The world's third-largest island, Borneo is highly bio-diverse and is the last transboundary tropical forest of three countries in Southeast Asia: Indonesia, Malaysia and Brunei Darussalam (WWF, 2016a; 2012a). Mountainous forests and river basins span across the island that is home to thousands of wildlife species, which most are endemic to the island such as the orangutans (WWF, 2016a; 2012a; 2012b). In addition, Borneo has over 3,000 tree species, 267 commercial timber species, over 200 mammals (including 13 primates), and varieties of birds, amphibians and reptiles (WWF, 2018; HoB Initiative, no date-b).

However, the rainforest of Borneo has been under environmental threats due to fire and smoke, illegal logging, mining and land conversions to plantations (WWF, 2016a; 2016c). WWF (no date) noted that between 1985 and 2001, the island lost over 50 per cent of its lowland protected rainforest, while over 6 million hectares of land were converted into palm oil plantations in 2007. The number is likely to have risen further because the Indonesian government has identified plans to increase palm oil production in Borneo from 20 million tonnes in 2009 to 40 million tonnes in 2020 (WWF, no date).

The damaged habitat influenced the decrease of animal populations (WWF, 2016a; 2016b). In 2016, the orangutans in Borneo were claimed as 'endangered' as their population was estimated less than 69,000 (WWF, 2016c; 2016b). In the same year, the number decreased drastically due to anthropogenic activities, changing the status of the species to 'critically endangered' (WWF, 2016b; Kompas.com, 2019).

Aiming to protect Borneo's ecosystem from further damage, the governments of Indonesia, Malaysia and Brunei Darussalam have claimed to be taking a holistic approach by incorporating sustainable development within the conservation and land use planning (WWF, 2012a; 2018). Thus, in 2007, the Heart of Borneo (HoB) Initiative was launched as a commitment to conservational efforts and development in the HoB (WWF, 2012a).

The Indonesian part of the HoB takes about 16 hectares (71 per cent) of the total conservation area (CNN Indonesia, 2019; Nasution, 2019a), crossing four provinces: North, East, Central and West Borneo. The Indonesian HoB has at least seven national parks, including Betung Kerihun National Park (BKNP) and Danau Sentarum National Park (DSNP) in West Borneo (Mahmud,

2019a), Sebangau National Park in Central Borneo (WWF, 2011), and Muller Mountain Range in West and East Borneo (WWF, 2016a).

In June 2012, Indonesian President, Susilo Bambang Yudhoyono, stated that the country's economic strategy would shift from forest exploitation to forest preservation to protect the sustainability of the socio-environmental resources (WWF, 2012c). The President's statement is viewed as a commitment to maintaining the sustainability of the HoB, following Malaysia's and Brunei Darussalam's conservational programs like the 'The Heart of Borneo +5 and beyond' and 'Brunei's Green Pursuit' in the respective countries (WWF, 2012c). The Presidential Regulation No.3 (2012) was then established, emphasising that 45 per cent of Indonesian Borneo will be preserved as a conservation area (WWF, 2012a; 2018).

Ironically, anthropogenic activities like forest fires for land conversions still occur in the BKNP (Mahmud, 2019c). However, Mahmud (2019c) emphasised that the local government has been and will be taking measures to mitigate these negative impacts. Ecotourism is viewed as one of the feasible solutions to mitigate issues (Mahmud, 2019c; HoB Initiative, no date-a; WWF, 2012b). Ecotourism makes one of the HoB Initiative's five main programs to achieve sustainable development goals by recognising and conserving the socio-environmental values in the HoB (HoB Initiative, no date-a; WWF, 2012b). Thus, the implementation needs to be in conjunction with the tourism plan of each country (HoB Initiative, no date-b).

In the Indonesian HoB, ecotourism has only been promoted since 2017; however, the WWF recorded that Borneo's tourism sector has adopted the core principles of ecotourism development since the 1990s (CNN Indonesia, 2019). The national park officials of the Indonesian HoB defined ecotourism as an environmentally-friendly tourism development that considers visitor education, destination capacity limits, cultural preservation and local empowerment (Mahmud, 2019c). Ecotourism development is also considered as an alternative source of income for the local communities, empowering them to open local homestay, tour guiding and transportation businesses (WWF, 2011; 2012b; Kumparan, 2019; Yuniarti, 2018). If well managed, it has been argued that ecotourism could generate profits in the area, for example, through taxes and licenses (WWF, 2012b).

Importantly, there is no data of visitor numbers per year coming to the Indonesian HoB, nor are there insights into the tourism revenue generated; instigating uncertainties as to the potential significance of ecotourism in the Indonesian HoB. Thus, despite promise, ecotourism implementation in the Indonesian HoB seems to remain disjointed due to, among other reasons, limited insights into the effectiveness of its implementation in conservational efforts.

To explore ecotourism development in the HoB, and determine potential inconsistencies in planning for ecotourism, this research asks, how is ecotourism currently being implemented across the Indonesian HoB, and what are the current challenges inhibiting the strategic development of ecotourism in this area? To answer this question, this research has the objective

to identify and assess challenges on the planning and implementation of ecotourism sustainability and development within the Indonesian HoB, and determine how ecotourism might be enhanced to ensure alignment with best practice.

## Theoretical Framework

According to Holden & Fennell (2013), the term 'eco' in 'ecotourism' is derived from 'ecological'. The term was introduced by Hetzer in 1965 to describe interactions between visitors and the local environment and culture with fundamental ethics of mitigating environmental and social impacts, while maximising local economic benefits and visitor satisfaction (Holden & Fennell, 2013; Blamey, 1997; Cobbinah, 2015; Dowling, 2013).

While ecotourism provides conservational ideals, its definition remains heterogeneous and evolving (Cobbinah, 2015). According to Cobbinah (2015), the evolvement of the ecotourism concept was influenced by the increasing concerns among socio-environmental researchers towards tourism's ongoing negative impacts in the 1990s. These discussions were deemed to push ecotourism to incorporate the value of prospering the local economy.

At the turn of the millennium, tourism remained to generate adverse impacts. This issue urged ecotourism to put forth environmental and cultural preservation, as well as local and visitor participation to support conservational efforts (Cobbinah, 2015; Sirakaya et al.; Scheyvens, 1999; Goodwin, 1996). Ecotourism then became increasingly aware of sustainability principles in the 2000s (Cobbinah, 2015), although its implementation often remained to neglect local participation (Okazaki, 2008). Thus, social and tourism researchers were deemed to push ecotourism to pay more attention to local prosperity, participation and cultural preservation (Cobbinah, 2015; Okazaki, 2008).

Ecotourism is claimed to be the fastest-growing market in the tourism sector (Holden & Fennell, 2013; Stoian & Isbacescu, 2013; Sharpley, 2006). In ten years, ecotourism jumped from contributing two to four per cent profit (US\$25 billion) of international tourism businesses in 2003 to 25 per cent profit (US\$473 billion) in 2012 (Cater, 2006 quoted in Holden & Fennell, 2013; Hawkins & Lamoureux, 2001; Wu, 2012).

Nonetheless, it remains unclear whether the conservational foundations of the concept have been utilised alongside the concept's increased implementation. The popularity of ecotourism is argued to have caused improper use of the label, including in Indonesia, where ecotourism is deemed to be commercialized without embracing its principles (Sharpley, 2006; Suhandi, 2020). With Sharpley (2006) warning that such misuse risks positioning 'ecotourism' solely as a label of consumption and thus becoming an obstacle to sustainability goals.

The stakeholder engagement becomes another concern in the current ecotourism implementation. Ecotourism development involves various stakeholders whose purposes could be conflicting (Chandel & Mishra, 2016) and may lead to lack of substantial philosophies in

planning ecotourism development (Ramirez & Santana, 2019), further serving as an obstacle in achieving sustainability goals. These issues have led some researchers to question the virtues of ecotourism. Therefore, understanding of ecotourism's environmental, social, and economic dimensions, and how they are planned, implemented and monitored is essential to the foundation of ecotourism development (Chandel & Mishra, 2016).

Several researchers have suggested that the triple-bottom line (TBL) measurement offers a holistic approach to evaluate the implementation of ecotourism development (Buckley, 2003; Wood; Zahedi, 2004; Stoddard et al., 2012). Today, TBL is considered as best practice for ecotourism because the framework is viewed to align with ecotourism principles by many ecotourism ventures around the world (Wise, 2016; Buckley, 2003). TBL accounts for all three aspects that become the main focus and form the foundations of ecotourism: the environmental, social and economic aspects.

### Environmental Impacts

Visitor numbers become a vital element when assessing the environmental impacts of ecotourism (Gössling, 1999). Increasing visitor numbers are thought to be linear with negative environmental impacts (Obua, 1997) because tourism activities and development contribute to the destruction of the local environment. Tourism has been found to generate trash pollution from visitors (Chin et al., 2000), air and sound pollution from tour vehicles (Mancini et al., 2018; Buckley, 2001) and land clearings for accommodations development (Buckley, 2001). All these environmental issues could increase rapidly with the rise of the visitor numbers.

At the same time, ecotourism is deemed to have positive influences on the local environment (Buckley; Frost, 2001). According to Buckley (2001), ecotourism could be an alternative for more beneficial land use compared to farming and other anthropogenic activities which are often considered to cause deforestation. Frost (2001) added that ecotourism's sustainability principles make a unique selling point in attracting visitors to help minimise negative environmental impacts, and thus, raise their awareness towards conservational efforts (Walter, 2009; Sirakaya et al., 1999).

Thus, although ecotourism has several challenges concerning environmental issues, it has also been found to benefit environmental preservation. Taking these issues into account, ecotourism development needs to find a balance between preserving the environment and generating profit from visitors. It has been suggested that such balance could be achieved by considering the destination's capacity in the planning phase; ensuring that the destination possesses the capability to absorb tourism activities without damaging the environment, as proposed by Butarbutar & Soemarno (2013).

### Social Impacts

According to Wearing (2001, p.395), 'community' is 'a group of people who share a common identity, such as geographical location, class and/or ethnic background.' Local people are thought

to be the ones who understand the most about the surrounding nature (Wearing, 2001) and the characteristics of their communities (Gursoy et al., 2010).

While Wearing (2001) added that local communities might share the same concern towards environmental destruction, Goodwin (1996) argued that many communities still conduct unsustainable activities, like overfishing. Thus, it is imperative to ensure that the local people feel benefitted from ecotourism development, to encourage them to support the development by utilising sustainable environmental management for their livelihoods (Goodwin, 1996). This notion emphasises the importance of incorporating local participation and values to support maintaining the destination's sustainability.

Crucially, however, ecotourism development has often been found to neglect the needs of the local people, as development has tended to prioritise visitors' expectation (Wearing, 2001). For instance, ecotourism has led to new land restrictions (Wearing, 2001; Stronza & Gordillo, 2008), which may lead to conflicts between the local people and other stakeholders (Wearing, 2001; Stronza & Gordillo, 2008). Therefore, it is considered 'best practice' for the local communities to be involved through partnerships in developing ecotourism to avoid these issues (Goodwin, 1996; Chandel & Mishra, 2016; Scheyvens, 1999).

On the other hand, ecotourism is often claimed to generate new job and business opportunities for the local people. However, local people are perceived to have 'insufficient knowledge' on ecotourism businesses which could become a challenge in the development; thus, several studies suggesting workshops as solutions to enhance the local people's skills and network (Wearing, 2001; Chandel & Mishra, 2016; Stronza & Gordilla, 2008; McKercher, 2001). Such challenges raise concerns towards modernisation of ecotourism which could devalue local tradition (Wearing, 2001). While this issue highlights the importance of local participation, it also raises concerns the extent to which ecotourism development should gain partnerships with the local people to plan for and manage ecotourism.

### Economic Impacts

Ecotourism is claimed to have played an essential part in generating profit through 'sales, income, and other parameters' (Wearing, 2001; Lindberg & Sturt, 1996; Libosada Jr., 2009). Lindberg (2001) proposed that ecotourism economic effect comprises of three impacts:

1. 'Direct impacts' from visitors' spending in tourism ventures.
2. 'Indirect impacts' when tourism ventures purchase resources to provide services.
3. 'Induced impacts' when employees of tourism ventures spend their living cost.

Through visitor spending, ecotourism has been found to generate tourist expenditures which could be utilised to support further conservational efforts (Lindberg, 2001; Sangpikul, 2017; Goodwin, 1996). However, tourism ventures have been criticised for often purchasing resources

from outside the region, causing leakage in many destinations in the world (Linberg, 2001). Leakage has also caused a small velocity of money within the local area despite profit generated from ecotourism development, giving 'no direct impact' to the local communities (Lindberg, 2001; Wall, 1997; Libosada Jr., 2009; Fennell, 2008).

Thus, Libosada Jr. (2009) encouraged local communities to open tourism ventures and generate profit to benefit the area. Such recommendation highlights the importance of local participation to generate profit if ecotourism is to genuinely benefit local communities and uphold ecotourism's core principles.

## Research Methodology

Through the constructionist framework, this research used qualitative data with documents selected and analysed between April 2020 to July 2020. The documents were sourced through internet search engines, utilising the following keywords: 'ecotourism' (and 'ekowisata' in Indonesian), 'Heart of Borneo' (and 'Jantung Kalimantan' in Indonesian) and 'Berwisata di Jantung Kalimantan' (travelling to the Heart of Borneo). This research also used Google Scholar and the University of Glasgow's online library for academic journals on sustainable tourism management.

A total of 36 documents available on public domain were utilised, delivered in English and Indonesian; with the researcher being fluent in both languages. More specifically, this research used ten reports by the WWF published from 2004 to 2018, one of which was a collaboration with another institution, the PwC. Aiming to deliver a holistic evaluation of sustainable ecotourism development in the HoB, this research also assessed documents from TFCA, Forclime, the HoB Initiative, online media, journal academics and an episode on the Indonesian HoB that was published in five online videos, produced by CNN Indonesia.

To evaluate the secondary document data critically, this research particularly used thematic analysis which involved searching, reviewing and defining themes after data selection (Braun & Clarke, 2006).

## Research Findings and Discussion

This research identified six major themes within and across the analysed dataset to evaluate sustainable ecotourism development in the HoB, which will be discussed in two sections. The first section, 'the government and policies', critically evaluates four themes: 'ecotourism development policies', 'environmental issues', 'economic issues', and 'demand and capacity.' The second section, 'the local communities', analyses two themes: 'local wisdom' and 'local businesses and empowerment.'

## The Government and Policies

### Ecotourism Development Policies

Following President Susilo Bambang Yudhoyono's declaration on incorporating forest preservation in the country's economic strategy in 2012 (WWF, 2012c), Indonesia seemed to focus on ecotourism development. According to Yanindraputri (2016), ecotourism development in Indonesia is managed by the Ministry of Forestry, which is deemed to have an understanding of ecotourism principles. Whilst Nasution (2019b) outlined that the Ministry of Tourism also aims to escalate ecotourism businesses by merely focusing on increasing visitor numbers, suggesting that the Ministry of Tourism has limited engagement with ecotourism planning. The distinct objectives between the Ministry of Forestry and Ministry of Tourism instigate a concern whether these ministries could collaborate in managing ecotourism development in Indonesia.

According to Rhama (2017), Indonesia has two types of master plans to regulate tourism development. The first one is the Master Plan for National Tourism Development (RIPPARNAS) which was deemed to regulate tourism development on the national level. The second one manages tourism development in each province, namely the Master Plan for Provincial Tourism Development (RIPPARPROV) (Rhama, 2017). Rhama (2017) found that the concept of ecotourism development was incorporated only within the RIPPARPROV, which could be perceived that ecotourism is a focus of the local government in the province, in this context the Central Borneo authorities, rather than the national government. This finding generates concern regarding the national government's committed to sustainable development, as per the President's declaration.

The RIPPARPROV of Central Borneo claims that ecotourism development must focus on sustainability, but Rhama (2017) found limited details regarding ecotourism and its relationship to sustainability within the document. For instance, the RIPPARPROV is perceived only to provide one policy regarding local communities, which regulates the enhancement of local businesses, despite mentioning the importance of local participation several times. Rhama (2017) further evaluated that the RIPPARPROV seems to be omitting the imperative role of the visitors by outlining that sustainable ecotourism development is merely the responsibility of the government, private sectors and local communities.

No evidence suggested whether the RIPPARPROV in East, West and North Borneo, in which the HoB area covers, are also lacking in details of ecotourism principles, nor were these documents available on the public domain. Nonetheless, limited detail on the definition of ecotourism in the Central Borneo's RIPPARPROV could indicate the government's lack of value and in-depth planning on ecotourism, which may generate insufficient regulations in developing the HoB as an ecotourism destination. This issue suggests that claims by the government are discursive and political, rather than pragmatic and meaningful.

### Environmental Issues

To protect the biodiversity in the HoB, the area was officiated as a National Strategic Area (NSA), a status that often marks a trade and military zone (PwC & WWF, 2011). The HoB is the first area to be recognised as an NSA for its natural resources (PwC & WWF, 2011), suggesting that the government is committed to protecting the area's natural values.

Nevertheless, the HoB is perceived to remain vulnerable from environmental issues such as forest fire (WWF, 2012a; 2016b; CNN Indonesia, 2019); raising a concern whether the government has genuinely committed to conservational efforts, as questioned by Yanindraputri (2016). WWF reported that forest fires to open plantations had reduced 50 per cent of the habitat of orangutan between 1973 to 2005, and another 9 per cent decline from 2005 to 2015 (WWF, 2016b), decreasing animal populations such as orangutans, proboscis monkeys, and Bornean pygmy elephants (WWF, 2016a; 2016b). Deforestation was also deemed by WWF (2012a) to have polluted the river that supports the local livelihoods throughout Borneo.

WWF (2016a) claimed that the HoB has weak spatial planning, as the local government often permitted development in areas perceived to be fragile by the WWF. This claim was supported by Yanindraputri (2016) who found an inconsistency within the government institution in conducting conservational efforts because, by allowing land conversions for profit, the local government is deemed to support investments rather than forest preservation, despite the national government's calls for ecotourism development and conservation.

This inconsistency is believed to cause many environmental implications in the HoB and highlights the government's continued lack of value on ecotourism, despite emphasising conservation concerns. Therefore, it is essential to question the foundations of the current planning strategy in developing sustainable ecotourism in the HoB, and the extent to which the government is genuinely invested in developing HoB as an area of conservation and ecotourism destination.

### Economic Issues

One of the HoB's significant funding sources is the country's national and regional budget revenue and expenditure. However, income from the national government is perceived to be finite (HoB Initiative, no date-b; Mahmud, 2019a). Thus, the HoB is noted to receive funding from international organisations, like Asian Development Bank and World Bank, and several donor countries like the United Kingdom, Australia, and Japan (HoB Initiative, no date-b).

While those funds were utilised to maintain the sustainability of the HoB (HoB Initiative, no date-b), it may have caused economic leakage because it benefitted investors outside of the HoB, as noted by WWF and the DSNP authorities (WWF, 2012a; Mahmud, 2019c). This issue instigates an urgency for the HoB to find solutions to mitigate leakage problem because, as proposed by Linberg (2001), leakage causes unequal money distribution in the area and gives 'no direct impact' to the local communities, which contradict ecotourism's sustainability goals.

It may also be essential to question the extent to which international organisations have been involved in the planning phase of ecotourism development; whether they monitor sustainable ecotourism development in the area or solely support the HoB through funding. Due to several gaps in the environmental policies, the planning and implementation of ecotourism in the HoB may need robust monitoring from international organisations to ensure that the development aligns with ecotourism principles and achieve its sustainability goals.

#### Demand and Capacity

Nasution (2019b) found that Indonesian HoB seems to be currently less popular to visitors compared to the Malaysian region, most likely due to lack of information and communication technology and inadequate marketing skills to promote the area (Nasution, 2019b; Yuniarti et al., 2018; Kompas.com, 2016; Timotius, 2019). Inadequate infrastructure has also been suggested as an influence on the small market demand, as it causes expensive transportation cost (Yuniarti et al., 2018; WWF, 2007; Kehl & Sekartjakrarini, 2012).

There were differing views between national park officials, WWF and academic researchers on how to improve the infrastructure within the HoB. On the one hand, easy accessibility like the direct road to Sarawak, Malaysia is expected to attract more visitors to the Indonesian HoB (WWF, 2007; Mahmud, 2019e). Conversely, increasing visitor numbers may exceed the destination's capacity, which may upsurge the negative environmental impacts (WWF, 2007; Obua, 1997). Such conflicts appear to be a challenge in the progress of ecotourism implementation in the HoB.

More broadly, the Ministry of Tourism has pressured the Bornean governments by targeting 20 million international visitors and contributing 20 per cent of the national tourism revenue in 2019 (Nasution, 2019b). The highly ambitious target on visitor numbers per year also appears to contradict the ecotourism principles, raising concern as to whether the Ministry of Tourism's objectives in enhancing visitor numbers on the national scale contradicts with the conservational principles of ecotourism promoted on the regional scale of the HoB. However, no evidence specifically suggested how much the tourism revenue was targeted for the HoB and whether the HoB has received support or revenue from the Ministry of Tourism.

Conversely, the Ministry of Forestry and the local authorities seemed to embrace ecotourism principles. However, they may need support in infrastructure and marketing, which has not been received from the Ministry of Tourism that has been generating tourism revenue to support such initiatives. Thus, there is a lack of connection in the planning and management of ecotourism in the HoB. The Indonesian government must decide the extent to which ecotourism can continue to be managed effectively across the Ministry of Tourism, the Ministry of Forestry, and the local authorities.

## The Local Communities

### Local Wisdom

The livelihoods of the local communities in the HoB is considered to highly depend on forest products, including non-timber, fish, and water, for food and medicine (WWF, 2016a; no date; Mahmud, 2019b). WWF repeatedly highlighted that local people are rich with local wisdom (WWF, 2012c), which this research found could align with ecotourism principles. For instance, as identified by WWF (2012c; 2004) and Eghenter (2006), the Dayak tribe has been utilising customary law and council to manage the forest sustainably and help local people solve conflicts with companies and the government. Thus, customary law and councils could be useful tools to ensure local involvement and sustainability in ecotourism development.

Despite alignment, no documents seemed to detail how exactly local wisdom is incorporated in the concept of sustainable ecotourism in the area and vice versa. Thus, this research would question whether the ecotourism development in the HoB has incorporated local wisdom within the planning phase and the extent to which local communities participate and benefit from the development.

Moreover, Eghenter (2006) found that national regulations in Indonesia have not detailed the rights of the local communities in conservation areas. Inadequate strong policies on environmental preservation and human rights of the local people may raise conflicts between the local communities, government and companies. Such conflicts could put local communities at a disadvantage, which is contrary to the objectives of ecotourism development. This issue further instigates the question as to whether ecotourism development has genuinely enhanced the social and cultural sustainability of the local people in the HoB.

### Local Businesses and Empowerment

Ecotourism businesses are argued to be a vital extra source of income for local households (WWF, 2016c; 2012a; Yuniarti et al., 2018; Kumparan, 2019). WWF (2012b) roughly calculated that if a family homestay offers US\$2 per room per night, the family may generate up to US\$40 a month by renting a room to 10 visitors, with each visitor stays for two nights. WWF (2012b) predicted that the family could generate the same amount of income from agriculture, and even more if they offer other services such as food, laundry, and tour guiding.

The local people of the HoB are noted to have been opening local businesses like homestays and transportation rentals (Yuniarti et al., 2018). Nevertheless, there are some challenges concerning local businesses. According to PwC & WWF (2011) and Yuniarti et al. (2018), the local people of the HoB lack in ecotourism knowledge, which may limit the 'professionalism' in running these businesses. In addition, TFCA (2017) believed ecotourism should be managed as an enterprise rather than conservation, meaning ecotourism ventures should be professionally managed to sustain the environment, the communities and the businesses. However, it was unclear how

ecotourism development defines 'professionalism' and how exactly existing businesses fail to meet this perceived 'professionalism'.

PwC & WWF (2011) and Yuniarti et al. (2018) further suggested that workshops are required to enhance the local people's knowledge of ecotourism. Forclime noted that such programs occur irregularly due to limited funding, especially from tourist revenue because of the small number of visitors (Kehl & Sekartjakrarini, 2012). This issue may limit the local people from enhancing their skills and knowledge in quality services, which could impact the sustainability of ecotourism businesses in the HoB.

Importantly, the requirement to enhance professionalism, which is often perceived as a Westernised concept, may contradict with the principles of ecotourism development. Exposure to modern skills and knowledge may erode traditional knowledge and cultural practices among the young generation, as concerned by WWF (2012c). Thus, it is essential to determine how the local communities perceive training and skills development, and how traditional knowledge and business skills might be combined so that ecotourism ventures could be managed 'professionally' while embracing the local heritage culture. Future studies could further evaluate this topic.

Lastly, some local businesses were found to set a higher price than others, which caused unequal income distribution and a social gap among the local people (Yuniarti et al., 2018). Therefore, stakeholders may need to create and monitor standardised pricing for hospitality services in the HoB and establish a scheme to make sure that profit generated from ecotourism is equally distributed to the local communities.

## Conclusion

There were several gaps in the policies on preserving the environment and protecting the rights of the local communities; with inconsistencies at the government level. Therefore, the government may need to reform more robust policies on environmental preservation and sustainable ecotourism development which could be useful as a solid foundation in conducting conservational efforts. The government may also need to reassess its approach in planning and implementing sustainable development to reach sustainability goals genuinely. More specifically, the Ministry of Tourism and the Ministry of Forestry may need to collaborate well to ensure that ecotourism development aligns with its principles to sustain the natural and cultural resources while maintaining the business with adequate promotion and infrastructure.

The Indonesian HoB may need to encourage, enhance and monitor locally-owned ecotourism ventures in the area to ensure equal income distribution and mitigate economic leakage. Some local people in the HoB seemed to have been establishing hospitality services. However, they were deemed to be lacking in ecotourism skills and knowledge, which may cause insufficient 'professionalism' in managing the businesses. Thus, ecotourism development in the Indonesian HoB may need to conduct workshops to enhance the local communities' skills in managing

ecotourism businesses, with a collaborative approach, where traditions are incorporated to present localised forms of hospitality. Furthermore, it is also essential to make sure that these classes are conducted regularly to sustain local empowerment.

These recommendations are also deemed imperative to increase visitor number and visitor spending in the HoB to gain more ecotourism direct impact on the local people. However, environmental issues may escalate with the rise of visitor number. Thus, ecotourism development in the Indonesian HoB also needs to consider the destination's capacity in the planning phase to protect the sustainability of natural and cultural resources

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