

Conflicts in Mangrove-based Tourism in Kulon Progo, Indonesia

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Abstract

It has become increasingly common to develop the ecosystem of mangrove into a tourism product. Such trend is also seen in Indonesia, including the coastal part of Kulon Progo, Yogyakarta Province. However, as the case of other tourism niches, the development of mangrove-based tourism more often than not is facing myriad challenges. This brief research paper aims to identify the challenges related to mangrove-based tourism development, by using Kulon Progo mangrove areas as a case study. Based on data gathered from observation, GIS mapping, semi-structured interviewing, and literature study, this research finds that conflicts have been occurring in the development process of mangrove-based tourism in Kulon Progo. Conflicts related to local-to-local relations, intergroup competition, destination management, and tourism income distribution have been hindering the tourism development process. Given the main findings, potential conflict resolutions may include stakeholder collaboration, product innovation, and paradigmatic shift to shy away from mass tourism development model. This research contributes to the body of literature on mangrove tourism by adding the issue of tourism conflicts into the debate.

Keywords: *conflict; mangrove tourism; tourism development; Kulon Progo.*

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Introduction

Indonesia has the world's largest mangrove ecosystem, accounting for approximately half of Asia's mangrove ecosystem (Alongi, 2014; Donato et al., 2011). Mangrove ecosystems perform various ecological functions: habitat for marine life, sedimentation control in downstream area, resisting waves and tsunami, and sea level rise protection area (Barbier et al., 2011; Kauffman et al., 2020). Besides, they are able to absorb and store carbon three times higher than other ecosystems, which is important for climate change mitigation and adaptation (Howard et al., 2017; Kauffman et al., 2020; Murdiyarto et al., 2015; Mursyid et al., 2021).

Mangrove ecosystem also has crucial roles on the socio-economic life of local communities (Hakim et al., 2017; Mursyid et al., 2021). Over years, local communities have routinely used mangroves for various purposes, including firewood provision, raw materials for making charcoal, building materials, fishing gear, and other non-wood products, such as tannins and medicines sourced from mangrove sap (Kusmana & Sukristijiono, 2016). In addition, mangrove ecosystems are widely used as tourism destinations, capable of attracting millions of tourists and billions of US dollars (Spalding & Parrett, 2019).

In Indonesia, mangrove ecosystems have been developed as tourism destinations to encourage economic benefits for local communities, governments, and private business (Duffy, 2015; Friess, 2017). One of such places is the south coast of Kulon Progo Regency, DI Yogyakarta Province. Specifically local communities around the estuary zone of Bogowonto River have been utilizing mangrove ecosystems as mangrove tourism sites since 2016. Mangrove-based tourism in the area can be seen as a continuation of conservation effort, as its environment has been harmed by land use changes for aquacultures, esp. shrimp pond farming.

Prior studies on mangrove-based tourism in coastal Kulon Progo reveal the importance of community participation in governing mangrove-based tourism (Fistiningrum & Harini, 2021), supporting and resisting factors of mangrove tourism development (Arrahmah & Wicaksono, 2020), and community support on tourism in mangrove ecosystem (Astikasari et al., 2023). While these studies provide empirical insights on the role played by community in determining mangrove tourism development direction, the bigger picture of multistakeholders' governance and subsequent challenges enabled by those arrangements remains unexplored.

This brief research paper presents empirical evidence from mangrove-based tourism sites in Jangkar Village, Kulon Progo. As the findings will show, challenges to tourism development and governance have manifested in various forms of conflict, specifically in relation to local-to-local relations, intergroup competition, destination management, and income distribution. These conflicts hinder the development of mangrove tourism.

To follow up this introduction, the article will discuss literature review on tourism conflict, before moving to methods. Then, results and discussion will follow, focusing on the manifestations of tourism conflict in mangrove-based tourism in Kulon Progo, as well as potential conflict resolutions, which may include stakeholder collaboration, product innovation, and paradigmatic shift to shy away from mass tourism development model.

Literature Review

Tourism development and conflicts almost always go hand in hand. The impact of conflict, conflict management, and conflict resolution have been the recurring themes in tourism literature (Porter & Salazar, 2005). The general idea is conflict can be detrimental for tourism development and governance processes, even though conflicts can also be constructive at times, for instance resulting in enhanced communications and more balanced power relations between tourism stakeholders (Mwesiumo & Halpern, 2016).

There have been various sources of conflict in tourism setting. In context of tourism planning, Almeida et al. (2017) categorize sources of conflicts based on difference in values, competing interests, communication issues, information gaps, and power inequalities. All of them essentially are related to relationship between tourism stakeholders.

In general, conflicts in tourism may involve local communities, government agencies, private sectors, tourists, and non-governmental organizations (Porter & Salazar, 2005). Conflicts can occur within a group of stakeholders, such as conflict within local community/intercommunal conflict (Hitchcock & Darma Putra, 2005), interfirm conflict (Mwesiumo & Halpern, 2016), and management-related conflict between different levels of government (Satria et al., 2006). Besides, conflicts can also occur between different stakeholder groups, such as conflict between local residents and tourism business (Fallon, 2001; Kinseng et al., 2018), conflict between local communities and tourists (Tsaor et al., 2018), and conflict between local residents and government (Wang & Yotsumoto, 2019).

In many tourism contexts, including in Indonesia, (tourism) resource is a prominent topic in the discussion about conflict. These include conflicts about or related to land (Kinseng et al., 2018), water (Cole, 2012), marine resource (Hampton & Jeyacheya, 2015), heritage (Porter & Salazar, 2005), and else. Discussion on 'resource-centered' conflict (Yang et al., 2013) is also often about resource use/commodification, hence further linked to the pressing issue of (re)distribution of economic benefits from tourism (Wang & Yotsumoto, 2019). Generally speaking, conflicts often happen because the benefits (i.e., income/revenue) from tourism activities rarely equally shared among involved stakeholders—simply due to the unequal power relations between them. Few usually get more benefits than others, resulting in conflicts.

The manifestations of conflict in tourism can differ, ranging from 'emerging conflict' to 'manifest conflict' (Almeida et al., 2017). In the words of Mwesiumo and Halpern (2016), in context of interfirm conflict, conflicts can manifest overtly and covertly. It means that some tourism conflicts can be hard to observe, while others are very much seen. Conflict can also be understood in terms of when/where it happens within life cycle of tourism area (Butler, 1980). Yang et al. (2013), in their study on social conflict in ethnic tourism in China, found that value/belief-centered conflicts occur in exploration stage, resource-centered conflicts in involvement stage, and power-centered conflicts in development stage. In this sense, tourism conflicts are very dynamic and may have different sources, phases, and manifestations.

The dynamics and complexities of tourism conflicts—in terms of manifestations, sources, stakeholders involved, or else—often lead to complex ways of finding possible resolutions. While it is generally believed that there is no single remedy for all kinds of conflict,

collaboration is often mentioned in tourism literature. Lee et al. even went as far as saying, “the [tourism] industry’s fragmentation and diversity necessitate collaboration” (2010: 355). As Almeida et al. (2018) argued, collaborative approach in conflict management, at least in theory, allows a more cooperation among stakeholders, hence often resulting in conflict transformation and resolution. All in all, having a collaborative structure in tourism development and governance is seen as helpful in mitigating, managing, and resolving conflicts.

Methods

Primary data in this research were collected through observation (Creswell, 2014; Merriam & Tisdell, 2016) and geographical mapping, performed using a geographic information system-based model. Besides, semi-structured interviews with 12 key informants who are regularly involved in mangrove tourism activities on the south coast of Kulon Progo Regency were also conducted. Key informants were chosen based on the assumption that they are important actors, both individuals and institutions, who understand the issues and can provide reliable information (Persada & Aji, 2021). Meanwhile, secondary data were gathered using literature study, a data collection approach that involves completing literature reviews of documents in the form of textual, visual, digital, and physical items pertinent to research (Merriam & Tisdell, 2016). Furthermore, data analysis in this research were conducted using thematic analysis, a strategy of identifying themes and patterns in the gathered data in relation to the research questions (Braun & Clarke, 2013).

Findings

Overview of Research Site

Yogyakarta has 40.1 hectares of mangrove ecosystems, more than 50% of which are located in Kulon Progo Regency, specifically in Jangkarán Village, Temon Subdistrict. This area stretches from west to east along Pasir Mendit and Pasir Kadilangu coastlines. Mangrove ecosystems in the area have vegetation in sloping coastal areas flooded by seawater; thus, their ecology is heavily influenced by tidal conditions (Astikasari et al., 2023). Moreover, mangrove-based tourism in Jangkarán Village is concentrated in two hamlets, Pasir Kadilangu and Pasir Mendit, with three main mangrove tourism sites: Pantai Pasir Kadilangu Mangrove Area, Jembatan Api-Api Mangrove Area, and Wana Tirta Pasir Mendit Mangrove Area (Fig. 1).

Historically, the mangrove spots in Jangkarán Village were previously recognized as an aquaculture compound. In the past, these areas were unproductive and not heavily populated with mangroves. The government and numerous nonprofit organizations then gradually started planting mangroves in 1989, 2009, and 2012.



Figure 1. Map of Research Locations

(Source: Authors, 2023—Created using QGIS 3.28.)

Land use in mangrove areas were originally intended to facilitate motilities of residents, who mostly work as pond farmers. This is demonstrated by dozens of shrimp ponds placed over the coastline area of mangrove tourism sites (Fig. 2). However, over time, people from surrounding communities frequented mangrove sites in Jangkaran Village for tourism related purposes. Due to the increasing number of visitors, local communities took initiative to build several bridges for walking along the estuary zone of Bogowonto River. The bridge has enabled access to shrimp pond area in 2016, as well as become prominent infrastructure for strolling around the mangrove forests. Later it turned into a tourist attraction in itself.



Figure 2. Local Community Shrimp Ponds Around Mangrove Tourism Sites
(Source: Authors, 2023)



Figure 3. Boat for Recreational Purposes at Mangrove Tourism Sites
(Source: Authors, 2023)

Mangrove tourism in Jangkaran Village was most visited in 2017-2018, during which the tourism operators could generate millions of rupiah per day on weekends. However, in the mid-2019, number of tourist arrivals began to fall, as did tourism income. Most of the income have come from entrance fee, and there are just a few tourism products created to provide economic value for tourists, one of which is a boat river tour along estuary zone of Bogowonto River (Fig. 3). As a result, tourists have limited tourism product options to buy.



Figure 4. Portrait of the Abandoned Wana Tirta Pasir Mendit Mangrove Tourism Area (Source: Authors, 2023)

Mangrove tourism sites in Jangkaran Village were initially managed by four local community groups: Wanatirta, Maju Lestari, Jembatan Api-Api Mangrove, and Pantai Pasir Kadilangu. Yet, Maju Lestari ceased to manage mangrove tourism in Pasir Mendit. The same fate occurred to Wana Tirta which, following COVID-19 pandemic, stopped managing Wana Tirta Mangrove

Tourism Area, even though tourists keep visiting the place on regular basis. As a result, Wana Tirta looks abandoned (Fig. 4), while in fact it was the first area designated for mangrove conservation, had been visited by 30,000 tourists prior to pandemic, and has the most diverse mangrove vegetation in Jangkaran Village.

Conflicts over Mangroves

Challenges of mangrove-based tourism development in Jangkaran Village, Kulon Progo, primarily manifest through the existence of conflicts, particularly in relation to local-to-local relations, intergroup competition, destination management, and income distribution. The findings discussed here will cover all of these manifestations of conflict. Yet, important to note, they intersect with each other; hence each is not mutually exclusive.

As hinted before, there are only two groups currently in charge of managing the mangrove tourism sites in Jangkaran Village: Jembatan Api-Api Mangrove Group and Pantai Pasir Kadilangu Mangrove Group. The two groups have been competing to each other to keep their business alive during and following the pandemic.

'Tourist arrivals decreased dramatically. It has impacted local communities. For example, only 33 of 42 members of Pantai Pasir Kadilangu who are still active. Mangrove tourism attraction is less crowded than before. After pandemic, only two tourists may visit on a single day during a weekday. Prior to pandemic, we spent 300 million rupiah on bridges for tourists in the mangrove area. As tourist arrivals are significantly lower than before pandemic, investment in bridge construction has disrupted local groups' financial stability.' (Interview with Sr)

The decrease of tourist arrivals, which has direct impact to mangrove groups' incomes, has severely affected its members.

Furthermore, the governance of mangrove tourism by local community groups does not always result in favorable outcomes. On several occasions, it has resulted in competition between groups, especially given that groups that manage tourist attractions in Jangkaran Village are not included in the jurisdiction of legal community groups governed by village-level government, such as *Kelompok Sadar Wisata (Pokdarwis)*¹. With mangrove areas are close to each other, competition between groups—to attract tourists—is only escalating.

One instance of conflict between mangrove tourism groups is related to the design of tourist circulation system or tourist flow. This issue has long been bottlenecked, and no significant solution has been proposed and implemented.

'Design of visitor flow has resulted in conflict between local groups which manage Jangkaran's mangrove areas. Pantai Pasir Kadilangu and Jembatan ApiApi have always had an advantage due to their proximity to main road, resulting in more tourist arrivals than other sites. As a result, there was a perception that the two locations have monopolized tourist arrivals, causing social fragmentation, which is the source of conflict.' (Interview with Sp)

In terms of tourist circulation/flow based on spatial pattern of existing road system, Pantai Pasir Kadilangu and Jembatan Api-Api indeed have more benefits. As their locations are closer to local main road, the two mangrove areas are easier to visit than Wana Tirta, which is located at the westernmost corner of Jangkaran Village, making it more difficult to access. This situation—or perception—of conflict eventually led to a lack of collaboration between local mangrove tourism groups of Pantai Pasir Kadilangu, Jembatan Api-Api, and even Wana Tirta. These groups often conflicted over attracting tourists to their mangrove areas. Such farfromideal situation is exacerbated even more by the non-existence of a proper forum for regulating these groups, particularly at the local level.

Reflecting on Regulation of Governor of DIY Province No. 40 of 2020 concerning Tourism Village, it is suggested that community-based tourism in Yogyakarta is administered under *Kelompok Sadar Wisata (Pokdarwis)* at village level. This means that local community groups organizing tourism at village level, including mangrove tourism in Jangkaran Village, can be positioned as units or working groups under *Kelompok Sadar Wisata*. However, the consolidation of tourism management organizations is usually controlled by *Badan Usaha Milik Desa (BUMDes)*, 'Village Owned Enterprises'. Local government is currently working on Tourism Village Development Master Plan. It is seen as the foundation for local government to develop a legal administration with an ability to promote the integration of tourism management within local communities. In general, this plan is welcomed by local community groups.

'We wish that the Tourism Village Development Master Plan will be the answer, as a reference document that possesses legal standing, to stop frequent tourismrelated conflicts in this area. To be honest, we are tired of conflicting to each other due to mangrove tourism issues. Anyway, we are neighbors and have similar predecessors.' (Interview with Kw)

¹ *Kelompok Sadar Wisata (Pokdarwis)* is a local organization responsible for the management of the entire tourism activities in local level. It usually adopts a community-based tourism model and consists of local residents.

Lastly, mangrove tourism in Jangkarán Village has also had conflict related to income distribution. Two hamlets where the mangrove tourism sites are located have long been rendered 'isolated', situated in the southwestern corner of Kulon Progo Regency. This has fueled tensions between local mangrove tourism groups and village residents from Purworejo Regency, Central Java Province, because tourists visiting mangrove destinations need to travel through Purworejo's villages and subdistricts. Local residents of few villages in Purworejo have so far received fewer economic benefits than their Kulon Progo counterparts, whereas their villages have served as important access for mangrove tourism in Jangkarán Village.

'Our geographical location is problematic. We frequently confront neighboring villages and subdistricts because tourists must travel through Purworejo to get here. Residents of Purworejo believe that they receive little financial benefit from tourism. However, there is no direct road access from Yogyakarta for tourists. Tensions between mangrove tourism groups in Jangkarán and communities in Purworejo became very 'hot' in 2017 or 2018. Ultimately, Regents of Kulon Progo and Purworejo must get involved to resolve the problem.' (Interview with Sp)

Because of such high potential of conflict, mangrove tourism groups have attempted to get residents outside Pasir Mendit and Pasir Kadilangu hamlets involved in tourism, mainly as additional daily workers during the peak tourism season. Besides, they invite the 'outsiders', especially those from Jogoboyo Village in Purworejo, to become tourism product vendors at the mangrove tourism sites in Jangkarán Village.

Discussion and Conclusion

Research from Jangkarán Village, Kulon Progo, Yogyakarta, have shown that challenges to the development and governance of mangrove tourism may manifest in conflicts. There are four intersecting manifestations of conflict in our case study: local-to-local relation, intergroup competition, destination management, and tourism income distribution.

Competition between local mangroves groups in Jangkarán Village represent conflicts related to local-to-local relation, as well as intergroup competition. The latter is akin to interfirm conflict (Mwesiumo & Halpern, 2016) which, as our case study also shows, can be preconditioned by exogenous event (i.e., pandemic) and triggered by perception of unfairness and dissatisfaction with other group's performance (i.e., geographical advantage of Pantai Pasir Kadilangu and Jembatan Api-Api, which resulted in more tourist visits). Meanwhile, conflict related to local-to-local relation should be reflected in light of the importance of avoiding intercommunal conflict, as Hitchcock and Darma Putra (2005) explicated in context of post-bombing Bali tourism. Taking lessons from the Balinese case study, measures to avoid intercommunal conflict, and simultaneously strengthen local-to-local relation, needs to be placed upon context-specific and place-based cultural strategies in Kulon Progo.

Furthermore, findings on tourist circulation system and much-anticipated Tourism Village Development Master Plan also point to conflicts related to local-to-local relation, as well as destination management. In this context, collaborative approach in managing/ resolving/ avoiding conflict might be necessary. As Saito and Ruhanen (2017) stated, stakeholder collaboration is needed as an important variable in tourism destination

management. The processes of destination management, through tourist flow system and masterplan, can also be seen as a part of conflict resolution among local residents in Jangkaran Village. It should be understood, though, that building and performing collaborative structure in tourism can often be very 'messy' and taking a very long time to succeed (Lee et al., 2010).

Lastly, conflict related to income distribution has been represented well by finding on the tension between Jangkaran Village and neighboring villages in Purworejo, Central Java. This issue is very much related to a political economy question of 'who gets what' from tourism. As Wang and Yotsumoto (2019) argued, in context of tourism in rural China, conflicts derived from distribution of tourism income are mostly related to revenue from entrance ticket and job opportunities. This is resonant with realities in Jangkaran Village, in which entrance fee forms the primary source of income—hence needs to be equally shared—and job opportunities remain limited, as there has not been much product innovation in the mangrove tourism sites.

All in all, given the main findings, potential conflict resolutions in mangrove tourism in Jangkaran Village, Kulon Progo, may include stakeholder collaboration, tourism product innovation, and paradigmatic shift to shy away from mass tourism development model. Nevertheless, further research is needed to have more grounded and empirical understandings on these potential resolutions. In addition, due to focus on local communities in mangrove destination, our findings are mostly about conflict involving local residents. Future research on mangrove tourism might need to understand conflicts involving other stakeholders.

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