

Sociocultural Information Gap in the Dive Tourism Industry: Evidence from Komodo National Park

Agustinus Rusdianto Berto¹, Endah Murwani²

^{1,2}Communication Sciences, Faculty of Communication, Universitas Multimedia Nusantara

Jl. Boulevard, Gading Serpong, Tangerang, Banten, 15111 Indonesia

Email: agustinus.berto@umn.ac.id*; endahmurwani@umn.ac.id²

*Corresponding author

Abstract

Through the perspective of partnership for Sustainable Development Goals (SDGs 17th), this study aims to identify and describe the information gaps among stakeholders of the dive tourism industry of Komodo National Park as one of the super-priority tourism destinations in Indonesia. Researchers studied documents, performed field observation, and conducted in-depth interviews with 20 stakeholders. Qualitative content analysis revealed several notable findings. First, the information gaps among stakeholders are generally linked to knowledge disparity about tourism-technical and local sociocultural issues. Sociocultural information, particularly on environment preservation issues, shows the tendency to predominate everyday discourse rather than tourism technical information. Second, the foreigner community appears to be better than local stakeholders at mastering the sociocultural information discourse, particularly in terms of collaboration on environment preservation information. Further studies are needed to examine the interaction among actors predominating the sociocultural information management and their strategies to collaborate in maximizing the role of Destination Management Organization-Destination Governance (DMO-DG).

Keywords: Dive Tourism; Komodo National Park; Qualitative Content Analysis; Sociocultural Information Gap; Stakeholder Collaboration

Abstrak

Penelitian ini bertujuan untuk mengidentifikasi dan mendeskripsikan kesenjangan informasi di antara para pemangku kepentingan industri wisata selam Taman Nasional Komodo melalui perspektif kemitraan dalam Sustainable Development Goals (SDGs ke-17). Peneliti melakukan kajian literatur, observasi lapangan, dan wawancara mendalam terhadap 20 pemangku kepentingan yang terlibat. Analisis isi kualitatif mengungkapkan beberapa temuan menarik. Pertama, kesenjangan informasi di antara pemangku kepentingannya lebih berkaitan dengan disparitas pengetahuan menyangkut isu-isu teknis pariwisata dan sosiokultural lokal. Informasi sosiokultural, khususnya mengenai isu-isu pelestarian lingkungan, cenderung lebih mendominasi diskursus keseharian ketimbang informasi teknis pariwisata. Kedua, daripada pemangku kepentingan lokal, komunitas Warga Negara Asing lebih menguasai diskursus sosiokultural, terutama dalam hal kolaborasi informasi pelestarian lingkungan. Studi lebih lanjut diperlukan untuk mengkaji relasi aktor-aktor yang mendominasi pengelolaan informasi-informasi sosiokultural tersebut beserta strategi pengelolaannya.

Kata kunci: Wisata Selam; Taman Nasional Komodo; Analisis Konten Kualitatif; Kesenjangan Informasi Sosiokultural; Kolaborasi Pemangku Kepentingan

Introduction

The Indonesian tourism industry has supplied the fourth-largest amount of foreign exchange capital to the country after the oil and gas sector, the coal industry, and the palm oil industry; it is projected to keep increasing year by year since 2015 (Katadata, 2018). However, considering the potential for leakage, it is uncertain that foreign exchange can be optimally extracted from tourism, particularly the marine tourism

subsector (potential revenue estimated at USD 1,2 trillion), which is still relatively overlooked by the government (Teguh, 2020). This is the case for Komodo National Park (KNP), a World Heritage Site with many dive sites attracting professional divers from around the globe (Russell, 2019).

Ironically, even as one of the Indonesian super-priority destinations (Anggoro, 2019), the potential underwater beauty of KNP has not yet succeeded in attracting domestic tourists.

As a consequence of leakage, the considerable number of international tourist visits to KNP has turned out to be inversely proportional to the local Regional Own-source Revenue (West Manggarai Statistics, 2019). Moreover, the valuation of KNP tourism revenue has been predicted to be more than IDR 1 trillion (USD 66 million) per year, with diving and snorkeling as the biggest contributors (Shinta, 2017).

Several studies on the tourism impact of KNP have found the main sources of tourism leakage (Erb, 2015; Remmer, 2017; Teguh, 2013). The first is the large quantity of business or asset ownership by people from outside the region (e.g., national entrepreneurs or conglomerates and transnational business groups and consortiums), which subsequently marginalizes local people or entrepreneurs. The second is the imbalance of the division of authority between central and local governments (e.g., ticketing, taxes, retribution, licenses, etc.), resulting in the local society getting less direct benefits from the economic tourism revenue of KNP.

Nevertheless, as the manifestation of the sustainable tourism concept, which is closely related to the accomplishment of Sustainable Development Goals (SDGs), the main problems of the dive tourism industry are not only linked to the uncertainties of economic income, but also to the discourses of environment and social community issues directly reciprocal to the dive site ecosystem. To comprehend these issues, every stakeholder needs to engage an intensive information-exchange process in each product distribution chain, from producers and intermediaries (wholesalers or retailers) to the end consumer (Holloway & Humphreys, 2016; Susilo et al., 2016).

Continuous collaboration in managing tourism information with diverse parties is required so that the high economic revenue of KNP's tourism can produce direct benefits to the welfare of Indonesian society and the surrounding environment. Due to its cross-cultural nature,

the dive industry of KNP plays a strategic role in sustaining the balance of development growth, particularly in terms of economic, social, and environmental aspects. This stable, conducive balance can certainly affect KNP's positive image as a super-priority destination that is very attractive to young tourists, as Indonesia's most prominent potential visitor (Choirisa et al., 2021).

As the embodiment of 17 SDGs' agenda, the collaboration of tourism information is believed to be able to strengthen the partnership of the private and public sectors, which involve many stakeholders (e.g., international, national, regional, and local) to accomplish other main agendas of the SDGs (World Tourism Organization, 2018). Nonetheless, such collaboration is hampered by the uneven quality and quantity of human resources in the West Manggarai Regency, the administrative region where KNP is situated. Consequently, a weakening of competition in facing the capital powers of outsiders coming to the region occurs.

These problems, however, are not only associated with the limited access to tourism information, but also the motivation and ability of local stakeholders in harnessing various existing tourism information. Do local stakeholders fully understand their need for information and scrupulously sort through it, or contrarily, do they solely go off of mainstream information? This study attempts to identify and describe the information gaps in the TNK dive tourism industry based on the perspectives of the stakeholders.

Information Gap in the Dive Tourism

Based on the theory of information introduced by Shannon & Weaver (1964), information is a form of knowledge to reduce uncertainty. Information is different from other kinds of resources (e.g., energy, money) in that the more it is used, the higher its value will be. It does not depreciate even when used repeatedly over a long period. According to Shannon & Weaver (1964), information can be defined as a situation

of uncertainty where there is an option out of a group of alternatives in the decision-making process, and the main function of information is to eliminate elements of uncertainty.

The economist Fritz Machlup (1962) projected the emergence of information's capital power in the trends of the economic structure shift of the US from an industrial to information society (with a knowledge-based economy).

Alvin Toffler (1980) appends this idea with the concept of "the third wave," namely, an era of post-industrial society (information society) that utilizes information as a production factor due to its everlasting character, which makes it the most economical resource or raw material. Information can help overcome the scarcity of resources, which is the core of the most significant economic problems. The accuracy of information helps (economic) decision-making, reducing uncertainty by eliminating dilemmatic yet less fruitful alternatives (Boyes & Melvin, 2009).

According to Parkin (2012), the value of information is highly determined by its efficiency and effectivity. Efficiency refers to how relevant the information is to an individual's need or desire, while effectivity is associated with the amount of knowledge possessed by an individual about the problems related to the information. The more knowledge a person has on a particular problem, the less information he needs. Therefore, additional information may not be as valuable or fruitful to the individual, such as more specific and complicated information. For example, the weather forecast indicating that rain will fall tomorrow is very valuable, particularly in the region where the rain will potentially occur. However, extra information about the rainfall rate in millimeters is not as valuable to the general public, though it is highly valuable to certain people, such as pilots or sailors.

Therefore, to make a piece of information efficient and effective, performing a careful selection of information rather than flooding information (referred to as information overload or over-informing) as a result of excessive

communication actions (communication or over-communication) is very much required. In practice, the monopoly of information is often practiced by certain industries to increase benefit or profit by increasing the element of uncertainty or the incompleteness of the information.

David Shenk (1997) analogizes the inefficiency and ineffectiveness of information management with obesity. At first, an individual will experience information hunger so that he will swallow any information as long as it is delicious, although he does not need it, analogous to what happens to people with the habit of consuming high-cholesterol foods. Eventually, the information glut triggers illness and declining physical and mental health. The mass of information the individual absorbs decreases his ability to digest a new piece of information. It becomes difficult for him to distinguish which information is healthy and which is not; he becomes dependent on the information he usually consumes.

As predicted by Daniel Bell (1973), since information has become the most valuable commodity in post-industrial society, the most elite individuals in post-industrial society are the producers of information or knowledge.

In line with Bell's prediction, Obstfeld (2005) found the importance of cross-cultural or managerial (vertical) and sectoral (horizontal) collaboration in increasing the innovation productivity of an automotive design company in the US instead of practicing never-ending competition with one another (an individualistic approach). Interestingly, the research also indicates that one's level of technical knowledge (skill) is inversely proportional to his level of involvement in creating innovation. The level of one's social knowledge and background information turns out to improve their involvement in producing innovation. The disposition toward routine discussion with stakeholders, either formally or informally, has triggered innovators to widen their horizons and to open their minds to perceive various innovation initiatives.



Figure 1. Komodo National Park and Labuan Bajo, East Nusa Tenggara
Source: Google Earth (2018)

In the context of the tourism industry, Ying *et al.* (2014) have found that links to other websites that also support the tourism business in the US improve the connectivity of corresponding businesses by fulfilling consumers' needs for information. A similar indication is also found by Ingram & Roberts (2000), that information exchange among hotel managers in Australia, including among competitors, increases the revenue of hotels, particularly during the low seasons.

However, from an intercultural perspective, the spirit of teamwork is an integral part of collectivist culture, which tends to be inseparable from Asian societies (such as Indonesia), as opposed to Western societies (like the US and Australia), which emphasize competitive values (Hofstede *et al.*, 2010).

As opposed to other industries and even the tourism industry in general, in the context of the dive tourism industry, information collaboration among stakeholders does not exclusively emphasize economic issues but also sociocultural issues, particularly those related to environmental conservation and local community empowerment. As a manifestation of sustainable tourism, the immense attention to these issues will have a mutual benefit to the sustainability of the dive sites and the welfare of the surrounding community.

Flumerfelt (1999) calls it the paradox of "tourism destroying tourism," namely, the degradation of the dive sites' environments because of the struggle for tourism resources between local people and expatriate communities, which occurs precisely because of a symbiotic economic relationship that does not consider social heterogeneity factors and the value of environmental conservation. This means that, as shown by Uyarra *et al.* (2010), economic systems for tourism (such as fee systems) must support environmental conservation for the sustainability of dive sites.

Therefore, it is necessary to strengthen a network of cross-stakeholder information partnerships, either public or private, from the government to carriers, constructed attractions, accommodations, professional tourism organizations, tour operators, travel agents, tour guides, and the community (Holloway & Humphreys, 2016; Susilo *et al.*, 2016).

Previous studies of the dive tourism industry in various countries have also revealed the existence of these forms of sociocultural information partnerships. Bentz *et al.* (2016) found that managing environmental issues in Portugal can create a fresh niche market for diving tourists' segmentation. In the United States, Maurin (2008) found that environmental information

Table 1 List of Informant

No.	Stakeholders	Informant
1.	Policy maker	<ul style="list-style-type: none"> Theodorus Suhardi (head of tourism and cultural agency of West Manggarai Regency)
2.	Leaders of a professional tourism association	<ul style="list-style-type: none"> Sebastian Pandang (head of the Indonesian Tour Guide Association, West Manggarai Regency Branch), Ervis Budisetiawan (Association of the Indonesian Tours And Travel Agencies, manager of Le Pirate)
3.	Local lecturers of local tourism educational institutions	<ul style="list-style-type: none"> Efraim Soba (head of the tourism program at SMKN 1 Komodo, owner of local tour operator)
4.	Coordinators of NGOs	<ul style="list-style-type: none"> Jensy Sartin (WWF Labuan Bajo coordinator)
5.	Tourists/travellers (divers)	<ul style="list-style-type: none"> Ricardo Indra (divers from Jakarta) Le Berre Chloe (divers from France)
6.	Dive guides (local and foreign)	<ul style="list-style-type: none"> Stanis Stan (senior local dive guide, freelancer) Salesius Yeremias (senior local dive guide, freelancer) Masnun Mukti (senior local dive guide, freelancer) Hila Jansen (local dive guide in Divine Diving) Mohammad Syahrijal Mansyur (local dive guide, freelancer) Vinsensius Patrisno Slamet (local dive guide, freelancer) Ardus Egitadeus (local dive guide, freelancer)
7.	Dive operator managers and owners (local and foreign)	<ul style="list-style-type: none"> Condo Subagyo (owner of CNDive, senior local dive guide) Titis Langenati (owner of Diver Paradise) Frans X. Suhardi (manager of Dive Komodo) Marta Muslin (manager of Wicked Good, Wicked Diving) Komang (manager of Grand Komodo Hotel), Ketut (manager of Grand Komodo Diving) Igor Dedkov (owner of Red Whale) Luca Canessa (manager of Somer Dive Center, foreign dive guide)

Source: Processed by Researchers (2021)

becomes a key factor in the formation of groups and alliances among marine stakeholders and precipitates action. Meanwhile, in Taiwan and Mexico, a variety of environmental and legal information is used by dive guides to educate their guests through pre-dive briefing activities (Andy *et al.*, 2014; Golby, 2015; Ríos-Jara *et al.*, 2013).

But in developing tourism destinations such as the North Aegean (Dikou & Troumbis, 2006), or those in dispute like on Sipadan Island (Musa, 2002), environmental information needs to be used in collaboration with other information, such as political, economic, and legal information. In addition, in Raja Ampat, which is laden with illegal fishing, intensive partnerships with local governments, non-governmental conservation organizations (NGOs), and local civil society can provide a holistic understanding of the intricacies of existing bureaucratic issues (Steenbergen, 2013).

However, it is also undeniable that there are many dive tourism industries that still prioritize technical diving information over sociocultural information, such as in Malaysia (Salim *et al.*, 2013; Zhang & Chung, 2015), Thailand (Augustine *et al.*, 2016; Dearden *et al.*, 2006), the Philippines (Kuklok, 2012; Lowe & Tejada, 2019; Roche *et al.*, 2016), Fiji (Fitzsimmons, 2009), Barbados (Kirkbride-Smith *et al.*, 2013), Australia (Pabel & Coghlan, 2011), Italia (Cerrano *et al.*, 2016), and South Africa (Schoeman *et al.*, 2016).

Research Methods

The data were gathered over six months at Labuan Bajo (see Figure 1) from July until December 2018 and consist of a literature study, field observations, and in-depth interviews of 20 stakeholders of KNP dive tourism that represent several entities: (1) the policymaker (from the Tourism and Cultural Agency of

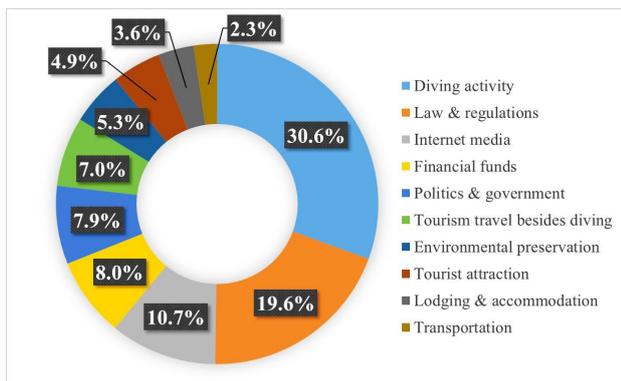


Figure 2. The Categories of Dive Tourism Information

Source: Processed by Researchers (2020)

West Manggarai Regency); (2) the leaders of a professional tourism association; (3) the local lecturers of local tourism educational institutions;

(4) the coordinators of NGOs; (5) tourists or travelers (divers); (6) dive guides (local and foreign); and (7) dive operator managers and owners (local and foreign) (see Table 1). The informants were selected purposively using snowball sampling based on the recommendations of each stakeholder. Subsequently, they were asked open-ended questions about the main problems that often occur in the KNP dive tourism industry. Once gathered, researchers analyzed the data findings using directed content analysis to find the categories or subcategories (themes or patterns) of various existing dive tourism information. The qualitative data analysis was conducted systematically and deductively performed by an initial coding scheme derived from existing theories or concepts or relevant research findings (Assarroudi *et al.*, 2018).

Based on the intensities (percentages) and similarities of the major topic or issue in the concept of the tourism industry stakeholder network (Holloway & Humphreys, 2016), the coding analysis found ten information categories that illustrate the problems of the KNP dive tourism industry (see Figure 2).

Meanwhile, to ensure the goodness criteria of this research, researchers improved the authenticity and trustworthiness of the data findings by utilizing several methods (Daymon & Holloway, 2010). First, to gain authentic ideas from the informants, researchers took an overt role through participatory approaches in several informant activities. Based on that, researchers developed a lengthy description of the actual conditions and situations. This process leaves a trail of documentation and inventory that can be transparently audited by other researchers.

Furthermore, to avoid subjectivity bias, researchers consistently preserve the originality of data (e.g., direct quotations) and also use critical reflexivity on the data findings through the triangulation method. In the triangulation of data, researchers check the consistency of the informants' answers to various sources. Then, as a part of exploratory sequential research, researchers triangulate quantitative methods (sociometric survey) with the same number of informants to check the consistency of data findings (e.g., categories and subcategories).

Results of Research and Discussion

Based on the coding analysis of the twenty informants, the discourse of main problems concerning information in the dive tourism industry of KNP can be classified into ten categories (see Figure 2). The first is information associated with the diving activity (30.6%). The major issue is the identity contestation between locals and non-locals, particularly in relation to the disparity of the dive guide's expertise or skill and collaboration in sharing dive information. The contestation is illustrated by the fierce competition among workers (dive guides, managers, and cruise directors), between workers and dive operator owners, and among the dive operator owners themselves.

On the surface, the competition seems to be fierce only between Indonesian citizens and foreigners (who are often addressed as “*bule*”), particularly in terms of work ethics, security and safety standards, communication skills (particularly during the pre-dive briefing), mastery of technology, diving skills, formal education, love for the ocean environment, and income (salary and fee). However, like an iceberg, competition is also latent between locals (West Manggarai and non-West Manggarai or Manggarai and non-Manggarai) or between locals and non-locals (Flores and non-Flores or East Nusa Tenggara and non-East Nusa Tenggara).

Unfortunately, the habit of collective information sharing among local owners and workers (in Manggarai, Flores, or East Nusa Tenggara) is not rooted, unlike among the migrants (including those from outside East Nusa Tenggara and foreigners). Information collaboration is practiced more intensely by dive operator owners and managers’ communities whose members are mostly foreigners. Although they are structurally led by local managers, behind the scenes, they are controlled by foreign owners.

Besides communicating formally in writing (such as for the standardization of dive safety and the reporting of violations and current conditions of dive sites), they also practice a tacit norm, namely, information collaboration informally following secret spoken agreements, such as the standardization of package prices and worker’s fees, the blacklisting of local dive guides, recruitment of illegal workers, collaboration in guest sharing among members, and even spreading certain rumors. One of the community coordinators showed the contents of their chat group: “Here are the reports. This is fishermen, there is fishing here every day, there are anchors here, here is the boat [the name of a tycoon in Indonesia] he dumped anchors in several locations. Every day there are reports. This is the boat [the name of a tourism business that operates in the fields of

restaurants, hotels, and tour operators], they [the manager] then said, just report it, then I will fire the captain if he keeps doing it.... This is now anchoring at Manta Point. Every day, not only updates, but reports directly from the field, from dive sites.” (Interview with Marta Muslin, September 8th, 2018)

The second category is information about laws or regulations (19.6%). Relevant to issues of identity, this type of information explains various labor and organizational (corporate) regulation violations that make competition fiercer, resulting in frictions on-site chiefly associated with business permits, workers’ legality, and differences in the understanding of locality.

In terms of permits, several foreign dive operators recklessly put aside requirements and stipulations in foreign investment regulations in Indonesia, particularly the total equity value of companies that must exceed IDR 10 billion (USD 657,354). As a result, foreign businessmen seek other alternatives, such as putting the names of local workers on the company establishment act so that it can be registered as local or national.

The rampant illegal foreign dive guides hired by local and non-local dive operators have strengthened negative sentiments toward foreign identities. This often triggers on-site conflicts, such as the underwater fight between an illegal foreign dive guide and a local dive guide (Knott, 2015).

Initially, some foreigners only sat in managerial or instructor positions to stimulate the transfer of knowledge to local workers, but over time, they have also incorporated low-level jobs. The regulatory gap in Indonesia makes it possible for a person to become a dive guide after merely receiving a rescue diver certificate. Meanwhile, all of the international diver training associations (e.g., Professional Association of Diving Instructors and Scuba Schools International) require a higher-level certificate, at least a divemaster certification.

On the other hand, it is hard for the immigration authority to detect the practice because dive guides usually disguise themselves as tourists or social workers. Although risky, owners still dare to recruit them because they are willing to be paid cheaply. However, it must be noted that not all foreign dive operators participate in negative practices; some of them improve the skills of local workers or recruit local youths and train them as professional dive guides through education or training scholarships. Another issue regarding this information is still associated with debates on the meaning of locality itself, as experienced by one of the dive operator owners who came from outside East Nusa Tenggara:

“Once it had happened, a mob of local people came to me, [they said] why are all the workers not from here [Labuan Bajo, West Manggarai]? I said this is from Manggarai [Middle], it’s from East Manggarai. They want someone from here. Now what is wrong, the Manggarai people [Middle] are not your people too?” (Interview with Titis Langenati, October 24th, 2018)

The third category involves information related to Internet media (10.7%). This type of information discourse explains the issues concerning marketing or promotional strategy via the Internet. Social media, email, and chatting applications are usually used by dive operators to exchange diving documentation (photos or videos) with their guests, so they also serve as a marketing database, particularly with guests that have dived repeatedly with the same operator. Upper-middle-class guests usually book online before their departure date (pre-booking).

On the contrary, guests whose financial abilities are lower-middle-class (usually backpackers) are used to traveling spontaneously, so they are more likely to book offline on the spot and to visit shops looking for cheap prices (walk-in guests). There are reportedly more arrivals of backpackers than any other tourist type. In reality, the ability to sell or promote is more likely to be possessed by foreign workers, particularly the ability to maximize the benefits of their international friendship networks.

Besides its use for promotional or marketing activities, internet media is also used to spread guests’ positive experiences by word of mouth (WOM). These testimonials are usually written on TripAdvisor as short reviews or ratings (Choirisa et al., 2021). However, not all owners trust the authenticity of these reviews and ratings. Fierce competition among dive operators has led to a war of posting negative comments to take down their competitor’s accounts, especially those outside the dive operator community.

The fourth category is related to financial fund information (8%). In general, the main issues in this category are the household income and spending management of dive guides. In terms of income, dive guides’ take-home pay is high enough, more than that of the primary standard income of government bureaucrats.

A permanent dive worker, in general, usually gets a salary from around IDR 5 million to IDR 12.5 million (USD 328 to USD 821) per month, depending on their dive level and experience. This excludes commissions or fees. Fees range from around IDR 50,000 to IDR 1 million (USD 3.3 to USD 66.46) per day, depending on the worker’s reputation and level of dive skill (“flight hours”).

Freelance dive guides, in particular, can earn more commission per day than permanent workers, as they do not receive a salary. However, compared to permanent workers, the income of freelancers is relatively unstable. As a strategy, many freelancers choose to work on liveaboard (LOB) ships so that they can move to other dive tourist destinations when they are in high season (e.g., Raja Ampat).

Despite dive workers’ high income, their daily spending is also high due to the high price of necessities in Labuan Bajo. In 2017, for instance, the inflation rate in the West Manggarai Regency reached 4.67% (Mammilianus, 2018), surpassing the national inflation rate, which was only 3.61% (Statistics Indonesia, 2018). Additionally, the strong tourism culture within their social environment has made their spending extravagant, as they must adapt to the lifestyle of foreigners to cement certain relations sustaining their job.

Interestingly, the native Manggarai must engage in another kind of inevitable routine spending, namely, to meet traditional costume needs. Usually, a family performs “*kumpul kope*” (money collection) to help other family members or colleagues who want to put on events.

The fifth category has to do with information concerning politics and government (7.9%). In sum, it concerns the authority gap in the management of KNP between the Central Government, represented by the KNP Office as the subordinate of the Ministry of Environment and Forestry, and the local government, represented by East Nusa Tenggara Provincial and West Manggarai Regency.

The gap occurs because of the weak control over and supervision of KNP, which has led to a high number of violations in the area, such as problems related to retribution (e.g., entrance fees, ports, etc.), business permits, environmental conservation, structure and infrastructure development, clean water, and human resource quality (e.g., employment, bureaucracy, corruption, illegal levies, etc.).

More precisely, major criticism is triggered by the vast scope of KNP’s authority in managing tourism revenue, even though the revenue does not affect the local society. The reason for this is that most of the revenue must be deposited to the Central Government as Non-Tax State Revenue (NTSR). In 2018, more than IDR 33 billion (USD 2 million) was deposited as NTSR (West Manggarai Statistics, 2019). It is, however, solely extracted from the entrance retribution of KNP (individuals or groups), general tourism activity (trekking, diving, snorkeling, etc.), and water vehicle entrance passes (for motorboats and cruise ships).

After NTSR is deposited, the central government will put it back into the region as profit-sharing funds (PSF). The problem is that the amount of PSF received by the regional government is not necessarily proportional to the previously deposited NTSR. As a result, the

local government, as the holder of autonomy rights, feels that it has not been given full rights to manage KNP as their resource. Yet, not many of the local people understand authority issues. The lack of transparency and licensing data system synchronization has resulted in each institution having different data references, including data on KNP’s tourism revenue.

The sixth category is information on tourism travel besides diving (7%). It concerns offline promotional and marketing issues, particularly tourism packages other than diving. As previously discussed in regard to Internet media information, the domination of the backpacker tourist has caused most promotional and marketing activities to rely on face-to-face communication, particularly WOM, instead of the exhibition (local, national, or international). However, both activities do not only sell dive tourism but also other packages, such as the Flores Overland Tour, trekking and snorkeling in several islands around KNP, kayaking by the shoreline, and cultural tourism in traditional dance studios and traditional villages.

In WOM, the dive operator usually relies on the recommendations of their guests, either directly or indirectly. In most cases, repeat guests directly recommend the service to those close to them (e.g., family and colleagues). Therefore, the effects will be more significant, as WOM potentially brings in guests in large groups, such as Asian tourists (Choirisa et al., 2021). On the other hand, the reputation of the dive guides may also be at stake, because not all complaints from their guests are communicated directly; some are delivered through their social media accounts.

For dive guides, especially freelancers, reviews will benefit them in getting job recommendations. Fierce competition among dive operators and dive guides has forced them to apply WOM creatively based on the differentiation of certain target consumers. One strategy is to use social messages to arouse the emotions of prospective guests. An example of

this is focusing on the stereotypes of minority niche groups whose diving skills are often underestimated and rejected by most foreign dive operators, such as differently-abled people or those of certain ethnicities or nationalities (e.g., people from India, Korea, or China). This strong negative stereotype is partly due to the arrogance of certain ethnic or nationality identities in the world of diving (e.g., Western countries).

The seventh category concerns environmental conservation information (5.3%). The main issues are associated with KNP's underwater ecosystem preservation, particularly the marine biota, which have become the featured icons of dive tourism (e.g., mantas, sharks, turtles, dugongs, and coral reefs).

In fact, the challenge of KNP conservation lies in rampant violations involving various parties, from tourists and locals to businessmen and their workers. It is common for tourists to touch the coral reef while taking underwater photos or videos. Some of them even purposely snap off pieces of coral reef to be brought back home or sold as souvenirs or collectible items. Lured by big tips (fees), there are dive guides who allow their guests to carry out these acts. One example was a case in which a dive guide wheedled Komodo dragons by feeding them around the shore of Nusa Kode Island (Kamil, 2018).

Meanwhile, locals still practice illegal fishing and overfishing around dive sites, resulting in conflict between fishermen and divers. Nonetheless, not all of the perpetrators are the local fishermen living around the area; many come from other regions. Their primary motive is economic in nature as a result of the TNK zonation system, which constrains their main source of livelihood. The local authority has come up with a solution, namely the migration of work from fishermen to tourism actors (e.g., souvenir craftsmen, homestay hosts, and tour guides).

However, this solution has not been very effective because the violations also involve tourist businessmen and their workers, although their activities are not so exposed. Ironically, their economic levels and environmental knowledge are significantly higher than those of the fishermen. Their motive is maximizing the efficiency of their operational budgets (profits) to fulfill the demand of seafood from each of their business lines (horizontal and vertical integration), such as restaurants, hotels, tourist boats, and dive operators.

World Wildlife Fund (WWF) Indonesia, through the Signing Blue program, has tried to control these illegal practices by conducting legality audits of fish used by tourism service providers. Unfortunately, by the end of 2018, there were only six companies taking part in the program (WWF Indonesia, 2018). According to the program coordinator, the lack of participation is due to the strict assessment standards that they apply in auditing existing sustainable products: "The signing blue standard, [the owner] must buy sustainable fish. For example, obtained from fishermen who can actually be tracked where to catch their fish, what are their fishing gear . . . We sample directly, for example [the owner] claims to get the fish source from this fisherman . . . We check with the fishermen, see the list, what size of fish is usually ordered by the [owner] of this [dive] operator or restaurant." (Interview with Jency Sartin, October 5th 2018)

The eighth category is information related to tourist attractions (4.9%). The major issues in this category concern the management of culinary and cultural tourism. Besides owning dive centers, several foreigners also run restaurants or café or bar businesses. Furthermore, the culinary business is also predominated by businessmen originating from other regions (Indonesian citizens and foreigners). Large restaurant owners tend to possess several tourism businesses, either horizontally or vertically.

As discussed above, tourist boats, besides being used for dive activities, are also utilized for fishing. As a result, businessmen can obtain fresh fish that are rarely found in fish markets. In addition to violating permits, this practice also inflicts financial loss to local fishermen and fish sellers.

A similar case also occurs in farms and plantations. Because it is still difficult to find other sources of organic food supplies, restaurant owners take the initiative to plant food themselves. As a result, there is no knowledge transfer to local farmers. The lack of supervision from the local authority has enabled the continuation of these practices.

Meanwhile, cultural tourism does not seem to be the priority for dive tourists because they are more likely to stay onboard the boats (LOB). Rather, cultural tourism is solely an alternative activity to pass surface intervals. Therefore, it seems only natural that the length of stay of foreign diving tourists is relatively short compared with that of non-diving tourists who are Indonesian citizens.

The ninth category is information about lodging or accommodations (3.6%). It mainly questions the ambiguity of LOB accommodations. In the dive tourism industry, the accommodation that is in greater demand among the guests is the LOB boat, generally known as the “floating hotel” (*hotel apung*).

LOBs are also considered more practical and efficient for exploring KNP. Consequently, land interaction is minimal. In 2018, for instance, the average length of stay was only 1.92 days for foreign tourists and 1.59 days for domestic tourists. As a result, occupancy rates were also low, being only 29.50% in non-starred hotels and 58.19% in starred hotels (West Manggarai Statistics, 2019).

However, the regulation in Indonesia categorizes LOBs as sailboats with accommodation tourism businesses instead of as accommodations because they do not physically look like conventional buildings.

As a result, LOBs are not subject to accommodation tax or retribution and only have to pay entrance pass retribution to KNP.

Nonetheless, LOBs also provide room amenities and services, which can be compared to those of starred hotels, such as the case of the Pinisi ships. Ironically, since most of the LOBs are not based in Labuan Bajo but periodically arrive from other regions, they are not locally owned. Their arrival or departure patterns are relatively consistent, following those of the tourists' arrivals. They usually surge before the high seasons in July and September, then plummet just before the low seasons arrive in November, lasting until February (West Manggarai Statistics, 2019).

The last category is information related to transportation (2.3%). The main focus is on the consequences of the increasing number of flights and their effect on airport pickup activities. The air transport infrastructures seem to have improved prior to and post-Sail Komodo 2013. Since then, access to Labuan Bajo has become easier, particularly due to direct flights from major Indonesian cities (Jakarta, Denpasar, and Surabaya).

This triggers a competitive climate among several airlines, which has made the price of airline tickets much more competitive. This has triggered an improvement in the number of visits to KNP, particularly from domestic tourists (West Manggarai Statistics, 2016). Interestingly, the high number of domestic tourist visits has led to the emergence of a new travel style in KNP: “selfie tourism.”

Yet, the impact of the increasing flight volume does affect not only domestic tourists but also foreign tourists. This is observable in the congested activity of tourists' pickups at the airport. Usually, they are picked up by their colleagues (“*bule jemput bule*” or foreigners picking up foreigners), who are either dive operator workers or owners. This is in an effort to secure the interests of dive operator owners over the illegal workers who are about to work in their company.

Based on the intensities and similarities of the issues, researchers classified the ten categories of dive tourism information into two major groups of information. The first is the tourism information group, which comprises the micro-information directly related to dive tourism products (e.g., diving, tours besides diving, tourism attractions, lodging or accommodations, and transportation).

The second is non-tourism information, which includes macro-information that is indirectly related to dive tourism products but is still closely related to the interests of dive tourism actors, particularly in explaining the problem fluctuation occurring in the dive tourism industry of KNP (e.g., laws or regulations, internet media, financial budget, politics or government, and environmental conservation). In principle, the difference between the two categories lies in the characteristics of the main issues.

In the tourism information group, for instance, the main issues are related to the technical aspects of tourism. Meanwhile, in the non-tourism information group, the discussions' contents are about society's sociocultural issues. Interestingly, based on the content's intensity, the sociocultural information group (51.5%) tends to predominate the issue rather than the tourism technical information group (48.5%). As an in-situ tourism destination that is still its pioneering stage, sociocultural problems often occur in the KNP and Labuan Bajo (Dikou & Troumbis, 2006; Teguh, 2013).

Unfortunately, the management of sociocultural issues is not taken seriously by the authority. This is indicated by the massive development of physical tourism infrastructure in KNP and Labuan Bajo (Lewokeda, 2018), which is not balanced with the development of sociocultural infrastructure for the local community through the improvement of human resource capacity. Therefore, it is necessary to develop an education and training system that is integrated with the dive tourism industry.

On the other hand, dive activity issues tend to be the most intensely discussed information among the stakeholders. The high intensity of this information shows there is an information gap among the stakeholders. The information overload of diving techniques can lead to over-communication among them (Parkin, 2012). Since they are too "full" of technical matters related to diving, they put aside other information that they need in order to comprehend the rising problems, such as sociocultural issues (Augustine et al., 2016; Dearden et al., 2006; Fitzsimmons, 2009; Kuklok, 2012; Schoeman et al., 2016). The accumulation of technical information glut might lead to metaphorical obesity for those who routinely consume it (Shenk, 1997).

The information gap occurs because stakeholders are more likely to encounter technical information related to tourism, particularly dive activity information, at work every day. This information is automatically cumulated to their knowledge. Meanwhile, because most sociocultural issues are rather sensitive, sociocultural information surfaces less in their daily activities. Therefore, they tend to discuss it informally (even in secret) within their limited friendship circle.

In other words, technical information related to tourism manifests naturally, whereas sociocultural information is still latent and minimally expressed. Although they have seemingly subsided within daily reality, sociocultural issues possess conflict potentials, which can grow if they are not sufficiently overcome. That latent nature of sociocultural issues is like a time bomb: It can explode at any time, particularly when related to environmental conservation, legal frameworks, economic gain, and political will (Dikou & Troumbis, 2006; Musa, 2002; Salim et al., 2013).

Therefore, sociocultural information should be integrated into stakeholders' technical work routines. For instance, they can insert messages related to environmental conservation along

with its legal aspects when conducting pre-dive briefing activities (Andy et al., 2014; Golby, 2015). Economically, mapping sociocultural problems can also produce a potential niche segmentation for the diving tourism market (Bentz et al., 2016), which, in the case of KNP, is a certain minority identity group.

This finding confirms the results of previous studies which have found out that the high caring attitude toward the environment conservation issues of divers and dive operators can reduce the negative impact of recreational diving at various dive sites around the world (Cerrano et al., 2016; Kirkbride-Smith et al., 2013; Lowe & Tejada, 2019; Pabel & Coghlan, 2011; Ríos-Jara et al., 2013; Roche et al., 2016).

Moreover, the main issues of environmental conservation information have great implications for the sustainability of KNP as the main source of livelihood of the dive tourism industry. Environmental conservation information also plays a pivotal role in triggering sociocultural problems, as discussed earlier. Unfortunately, environmental conservation information lacks attention from the stakeholders.

The limited discussion concerning environmental conservation information can potentially increase uncertainty (Shannon & Weaver, 1964). Uncertainty is observable in local stakeholders' confusion, including dive guides, who still engage in environmental violations in the KNP and Labuan Bajo areas (e.g., illegal fishing, overfishing, feeding, single-use plastics, or loitering). In other words, there is an information gap in tourism environmental conservation knowledge between the stakeholders.

This discrepancy is caused by the distortion of economic factors related to tourism. It is feared that the excessive exploitation of KNP's tourism economic revenue may trigger the paradox of "tourism destroying tourism" (Flumerfelt, 1999), which can be fatal for the sustainability of KNP and its local community. This is because,

in the diving tourism industry, determinant factors such as tourism economic gains and environmental conservation are complementary, not substitutional (Uyarra et al., 2010; Zhang & Chung, 2015). Unfortunately, most of the tourism stakeholders of KNP have not yet realized this.

According to the perspective of the tourism economy, the limitation of environmental conservation knowledge leads to a scarcity of information sources. This scarcity gives the information a high economic value (Boyes & Melvin, 2009; Machlup, 1962; Toffler, 1980). In other words, anyone who can control or produce environmental conservation knowledge has the potential to become a super-elite among society (Bell, 1973).

The mastery of knowledge is observable among the foreign dive operator worker or owner community, which cares and actively manifests environmental conservation information. This means that it is not merely related to an image or discourse building, but also requires consistency of actual practices in the field (e.g., financial aids and human resource support) along with strengthening daily collaborative information actions with the competent authorities (e.g., sharing pictures or videos of violations that occur in KNP using social media platforms).

As Steenbergen (2013) found in Raja Ampat destinations, fostering relationships with local authorities and conservation NGOs largely determines the existence of a dive operator. According to Obstfeld (2005), cross-group information collaboration, be it either structural or sectoral, will be more profitable in improving innovation productivity than competing. Specifically, environmental information collaboration can unify the alliance of several stakeholders (Maurin, 2008). But unfortunately, most environmental conservation activities tend to be exclusive and are only carried out among certain business identity groups (e.g., local to local or foreigner to a foreigner).

In fact, information collaboration with different entities, even with competitors, is more fruitful to improving business income (Ingram & Roberts, 2000). This is because, in practice, information collaboration can fulfill information needs, which become more diverse (Ying et al., 2014). This means that in the context of business competition, local KNP communities in Indonesia are not always culturally collectivistic (Hofstede et al., 2010), but can also be individualistic.

Conclusion

This research has identified several interesting findings concerning the information gap of dive tourism in KNP. Firstly, there was a sociocultural information gap among its local stakeholders. In fact, sociocultural inequality tends to dominate and blanket the daily reality of KNP's dive tourism industry, instead of technical problems related to tourism itself. This is observable from the dominance of sociocultural information that often surfaces in the discussions of the stakeholders, rather than technical information related to tourism.

Secondly, the sociocultural information gap mostly occurs because of the lack of environmental conservation knowledge among KNP's dive tourism industry stakeholders. In daily discussions, KNP's environmental conservation information still lacks special attention from its local stakeholders compared with other sociocultural information.

The low level of environmental conservation knowledge among local stakeholders, especially dive tourism actors, has a part in perpetuating the environmental violations that often occur in KNP. As an artery of the tourism industry, the environmental damage in KNP has forced the authorities to apply carrying capacity policies to limit tourists' visits.

Unfortunately, the collectivity in sharing environmental conservation information is performed more intensely by the foreign dive community than by local stakeholders. These collaborating activities are conducted via chat groups, social media, and face-to-face communication.

Therefore, to create a stable form of information collaboration that can penetrate certain boundaries of identity (local, national, and foreign), an information technology system for tourism is needed to connect all KNP stakeholders, particularly to bridge the gap in sociocultural issues that occur in local communities, especially regarding environmental conservation.

Further study is needed to map the significant actors that predominate sociocultural information management in KNP tourism networks, along with their various management strategies to collaborate in maximizing the others destination using the role of Destination Management Organization-Destination Governance (DMO-DG).

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