Marine Conservation Tourism and Local Communities
The Case of Raja Ampat, Indonesia

Ery Atmodjo

Marine Conservation Tourism and Local Communities
The case of Raja Ampat, Indonesia

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Propositions

1. Those who have control over natural resources benefit most from marine conservation tourism.
   (This thesis)

2. Implementation of a community-based approach in marine conservation tourism development has a tendency to shift natural resource ownership from communal to private.
   (This thesis)

3. In managing marine protected area networks, the ecological notion of connectivity must be accompanied with a socioeconomic notion of connectivity.

4. Payments for environmental services to compensate destructive fishermen for withholding fishing must match opportunity costs in order to be acceptable.

5. In many cities flood infrastructure provides more benefits to the rich than to the poor.

6. Home gardening relieves stress while working from home, both in pandemic times and during a PhD.

Propositions belonging to the thesis, entitled

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Marine Conservation Tourism and Local Communities

The Case of Raja Ampat, Indonesia

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Marine Conservation Tourism and Local Communities

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Thesis

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List of Abbreviations

ADB	Asian Development Bank
BHS	Bird's Head Seascape
CBNRM	Community-Based Natural Resource Management
CBT	Community-Based Tourism
CI	Conservation International
COREMAP	Coral Reef Rehabilitation and Management Program
CTI	Coral Triangle Initiative
CTMPA	Coral Triangle Marine Protected Area System
ES	Environmental Services/Ecosystem Services
ESSF	Ecosystem Service Stewardship Fee
FAO	Food and Agriculture Organization
FGD	Focus Group Discussion
GSTC	Global Sustainable Tourism Criteria
KKP	Kementerian Kelautan dan Perikanan (Ministry of Marine and Fishery)
LIPI	Lembaga Ilmu Pengetahuan Indonesia (Indonesian Institute of Science)
MER	Misool Eco Resort
MPA	Marine Protected Area
NGO	Non-Governmental Organization
PES	Payment of Ecosystem Services
SME	Small and Medium Enterprise
SOP	Standard Operating Procedure
SR	Starling Resources
TNC	The Nature Conservancy
UPTD-KKPD	Unit Pelaksana Teknis - Kawasan Konservasi Perairan Daerah (Technical Implementation Unit - Regional Marine Protected Area)
USAID	United States Agency for International Development
WB	The World Bank
WTP	Willingness To Pay
WWF	World Wide Fund For Nature

Chapter 1: Introduction

1.1. Global trends in marine conservation

Marine ecosystems are continuously threatened and under pressure due to human activities that lead to degradation and loss of biodiversity (Larsen et al., 2018; Maestro et al., 2019). These threats to the sustainability of marine ecosystems are reflected by the decrease of the number of underexploited stocks of fish and harvested species in monitored areas, while the number of overexploited stocks in monitored areas is increasing (FAO, 2018). Advancement in technology is considered to contribute strongly to the growing overfishing (Hughes, 2003). In addition to overfishing, destructive and illegal fishing also threatens the sustainability of marine ecosystems (Petrossian, 2015). Consequences of the threats to marine ecosystems are not limited to the loss of biodiversity, but also have serious implications for the safety and the socioeconomic conditions of people living and working in the respective region (Ahmad Kamil et al., 2017; Asaad et al., 2018).

Different approaches have been employed to address the global problem of stock depletion and marine resource degradation due to overfishing, illegal and destructive harvesting, as well as other forms of marine habitat destruction. Regulatory frameworks that restrict fishing efforts are applied to protect endangered and threatened species. Major regulatory tools to protect threatened and endangered species are bans or harvest limits on particular species, minimum sizes of fish, types of gears regulation, licensing, and quota for specific species (Jungblut et al., 2020). Place-based approaches are also commonly used to protect vulnerable and important species, for example by bans on fishing in spawning or breeding grounds of particular species (Fraschetti et al., 2018), or on deep water fishing (Abdul Malak et al., 2011), to avoid the destruction of habitat. More recently, place-based approaches are employed to protect ecosystems as a whole rather than focusing on particular species. As ecosystems consist of various living organisms and non-living components in an environment (Hutubessy and Mosse, 2015), ecosystem approaches focus on interactions among living organisms within the ecosystem and the adjacent area as well as on the physical environment (Tanaka, 2011). Ecosystem based marine management does not aim at manipulating the ecosystem, it rather focuses on managing human activities in the ecosystem (United Nations, 2007). Human activities are assumed to be part of the ecosystem (Hutubessy and Mosse, 2015). Ecosystem approaches take into consideration various drivers of pressure to marine environment simultaneously (Murawski, 2007).

Marine protected areas (MPA) are widely supported as part of the ecosystem approach in marine areas (Abdul Malak et al., 2011; Halik et al., 2018), and are becoming a central approach in the global efforts for conserving marine biodiversity and managing fisheries

(Gelcich et al., 2013; Islam et al., 2013; Rylance, 2016). An MPA can be defined as "a clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values" (Day et al., 2012). The number and area of MPAs expand faster than the number and area of terrestrial protected areas, from around 188 MPAs in 1970 to more than 15,000 MPAs covering 7.3% of world's ocean in 2019 (Figure 1.1). Parties participating in the Convention on Biological Diversity Conference in Aichi in 2010 set a target of at least 10% MPA coverage worldwide to be realized by 2020 (UNEP-WCMC and IUCN, 2012). Marine space within national jurisdiction has remarkably exceeded the protection target with 17% of the area is protected. However, only slightly more than 1% of marine area beyond national jurisdiction is under protection, results in only a little more than 7% of global ocean is under protection in 2018 (UNEP-WCM et al., 2018).

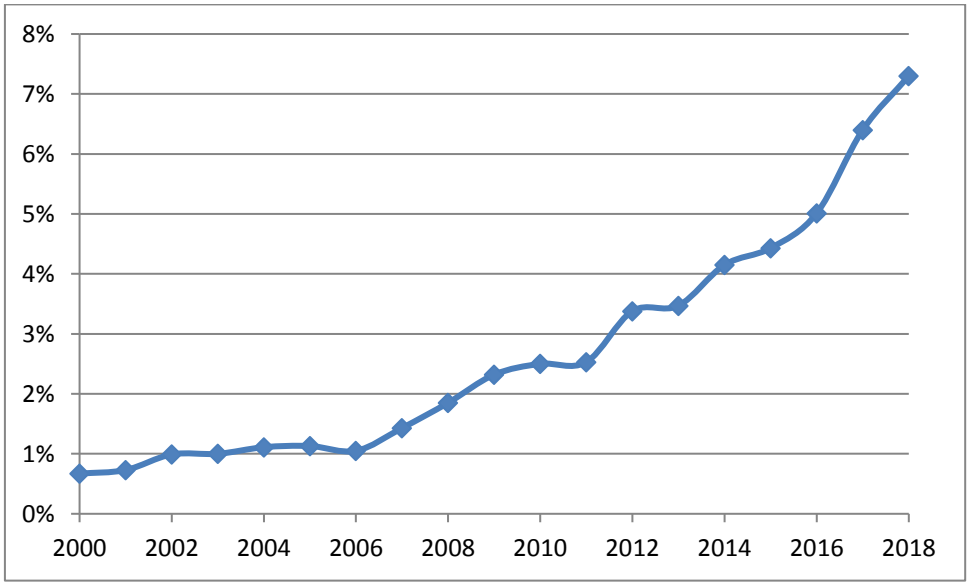
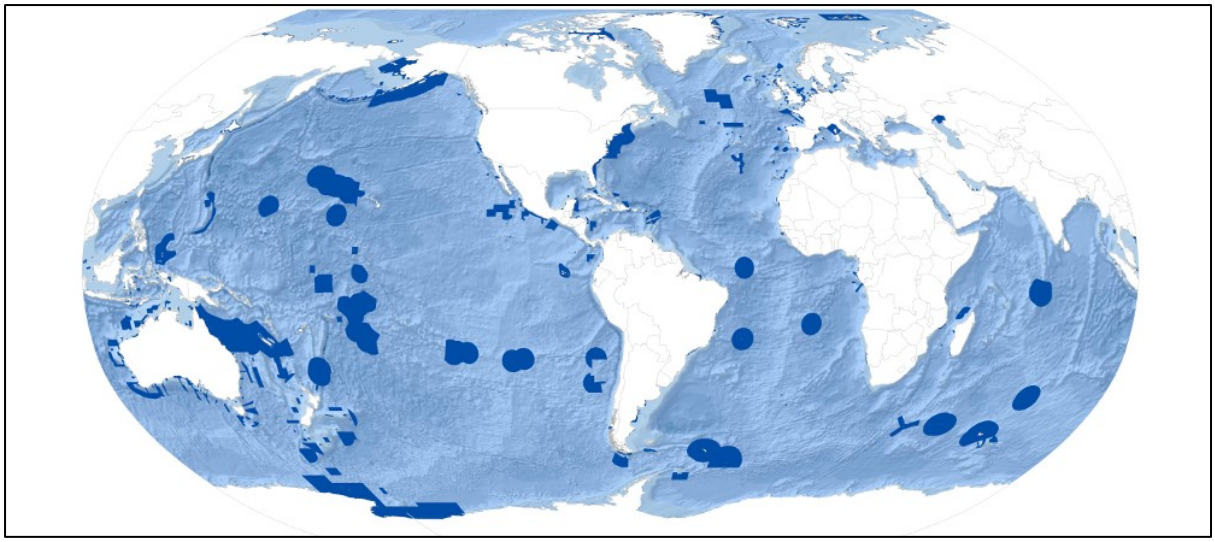


Figure 1.1. Growth in marine protected area coverage (based on Thorpe et al., 2011; UNEP-WCM et al., 2018)

Unlike marine sanctuaries where no activity is allowed to take place, the overall goal of an MPA is maintaining marine ecosystem functions and its productive ability while allowing for utilization of marine resources in a sustainable way. Specific objectives of MPAs may differ from one to the other. Agardy (1997) generalized numerous possible specific objectives of MPAs into five groups, i.e. (1) to protect and manage marine resources on specific issues and species in specific delineated areas, (2) to provide sites for experiments related to marine conservation and management, (3) to include local community participation in marine resource management and promote equitable sharing of marine resource benefit for local

communities, (4) to govern the utilization of resources aimed at sustainable rates, and (5) to establish buffers against future unforeseeable mismanagement of marine resources. Some examples of more specific objectives of MPAs are: "to conserve ecological processes, landscapes and biodiversity, and protect them from anthropogenic threats; the sustainable use of resources, taking into account socio-economic interests; to guarantee educational, cultural and scientific content" (Maestro et al., 2019). Consequently, protection levels in some MPAs might be lower or higher than in others. The concept of MPA also introduces the utilization of marine conservation for multiple categories of users. Zones are implemented in MPA management where the establishment of specific objectives is to serve multiple user groups (Agostini et al., 2012; Grantham et al., 2013). Particular zones are dedicated to particular activities or forms of utilization by particular group(s), while no-take zones may also be available. Distribution of large MPAs across the globe is depicted Figure 1.2.

One of challenges in achieving successful MPA is sufficient and sustainable financing (Failler et al., 2019; Morrison et al., 2012; Pomeroy et al., 2005). MPA management activities can be divided into three areas, i.e. enforcement, monitoring, and outreach (Ban et al., 2011). Cost components to perform management activities include fuel, equipment, salary of staff, maintenance of facilities and equipment, and capital replacement costs (Emerton, 2014; Lutchman et al., 2005). Enforcement and monitoring are considered major management activities to achieve MPA objectives of biodiversity conservation (Sanchirico et al., 2002). However, financing management activities is only part of the overall financial requirement for a long term successful MPA (Emerton, 2014). Rightsholders and stakeholders participation, including local community, is essential for strong MPA governance achievement (Agardy, 1997; Mol, 2016; Okazaki, 2008). Lack of financial assets can hinder local community's compliance toward MPA management rules, such as the use of destructive fishing gears (Silva, 2006; Tobey and Torell, 2006). MPAs often implement programs aimed at diversification of local livelihood to compensate opportunity costs that burden the local community (Chen, 2010; Emerton, 2014). Alternative income generating activities might have positive effects on local community support for MPA, such as to refrain from extracting marine resources in destructive ways (Elliott et al., 2001; Silva, 2006). Adequate financial resources need to be provided to run programs to help local community to improve their skill and capital asset to shift to alternative livelihood (Arceo and Granados-Barba, 2010; Cinner et al., 2009; Elliott et al., 2001). The costs of maintaining an MPA beyond management activities is often much greater (Emerton, 2014). The financial status of many MPAs worldwide, especially in developing countries, are critical, and some of them are considered "paper park" (Githiru et al., 2015; Rife et al., 2013; Rylance, 2016).



Source: ("UN Ocean Action," n.d.) Available at https://oceanconference.un.org/oceanaction

Figure 1.2. Distribution of marine protected areas worldwide

As recipients of MPA financing are diverse, there should be a portfolio of financial resources that can cover all costs for long term effective running of an MPA (Emerton, 2014). While in general the government takes responsibility for financing an MPA through official government budget (Dwyer, 2019; Lutchman et al., 2005; Wilkie et al., 2001), other financing schemes are often implemented in maintenance of MPAs, such as philanthropy donation (Govan et al., 2009; Rife et al., 2013), public-private partnership (World Bank, 2012), private community-partnership (Lamers et al., 2014b), international cooperation for development assistance (Borrini et al., 2013), or various forms of commercial use of MPAs (Emang et al., 2016; Teh et al., 2008).

Designation of MPA entails rearrangement of marine resources utilization and potentially has adverse consequences to traditional resource users. Degree of changes in marine resource use arrangement is dependent on conservation regime being implemented. Fishermen will be required to refrain completely from marine space designated as protected area implementing the strictest rules such as marine park (Sanchirico et al., 2002). MPA implementing zoning approach will require fishermen to either move from their traditional fishing ground to another zone, or to continue utilizing resource in the same zone but shift to alternative livelihood strategy. These can result in consequences in more operating cost and less harvest (Pascal, 2011). Shifting away from protected area or no take zone is not always contribute to conservation because overuse and destructive use of marine resources could still happen outside the boundary of protected area or no take zone. Traditional marine resource users might need to spend more operating costs due to the shifts to farther fishing grounds. Species and gear restriction implemented in MPA also potentially affects fishermen negatively.

To offset unfavorable consequences to local communities, MPA should generate economic benefit to those affected negatively exceeding indirect or opportunity costs imposed to them. Marine conservation tourism is considered suitable economic tool to be developed in protected area. When marine conservation tourism is implemented properly, it can be an alternative livelihood strategy providing income to traditional users (Ghorbani et al., 2015), especially local community who has the resource rights. Local communities can benefit from MPA by providing food, accommodation, or transport to tourists visiting MPA (Viana, 2018). Benefit of MPA through marine conservation tourism could motivate local community to protect their natural environment (Okazaki, 2008). Marine conservation tourism can reduce cost and increase benefit of MPA to local community (Babu, 2012). If illegal use of marine resource is induced by need for income (McKenna et al., 2002), poverty alleviation though marine conservation tourism within and near MPA can offer solution to the root of environmental problem MPA designation aims to solve (Pascal, 2011).

1.2. Governing and financing MPAs

Globally, MPAs are managed and governed through various actor arrangements. Overall, governmental agencies are assumed to be responsible for the delineation and management of MPAs (De Santo, 2012). However, non-state actors involved in marine conservation are not limited to NGOs and local communities. In different parts of the world private sector parties are also contributing to marine conservation efforts in different ways, such as a role in MPA management or even developing private sector-led MPAs (Bottema and Bush, 2012; Riedmiller, 2003; Svensson et al., 2009). Participation of local communities in MPA management is considered important to gain necessary support for the longer term viability of MPAs, as local communities are sometimes holders of property rights or holders of marine resources, or affected by the designation of MPAs (Alder et al., 1994; Rodríguez-Martínez, 2008; Springer, 2006). The degree of community participation in planning and management of MPAs worldwide varies.

Community-based MPAs, established and managed to enable intense participation of local communities, are usually small in size, aimed at achieving local ecological objectives and located mainly in developing countries (Agarwal, 2010; Horigue et al., 2012; Pokharel and Tiwari, 2013). While these small MPAs are sufficient to achieve local biological and fishery objectives, they lack the capacity to contribute towards wider biodiversity objectives, such as ecosystem connectivity or regional scale ecological considerations (Sala, 2002; Weeks et al., 2014). Collaboration and partnership in developing larger scale MPAs or networks of MPAs is needed as management of such initiatives is complex, requiring appropriate approaches to

connect various stakeholders across multiple scales (Fidelman et al., 2012). State as well as non-state organizations are involved at multiple levels in the design, planning and management of especially larger MPAs and MPA networks to address the limitations of community-based conservation (Alder et al., 1994; Riedmiller, 2003; Rudyanto et al., 2016). Centralization, i.e. the transition from community-based to a more centralized management of MPAs, often happens with varying results (Christie, 2004; Mills et al., 2010; Rodríguez-Martínez, 2008).

1.3. Marine conservation tourism

Many protected areas worldwide implement tourism as part of management to fill the financial gap and achieve conservation and sustainable development objectives. These forms of tourism that contribute towards biodiversity conservation have been coined conservation tourism (Buckley, 2010). Conservation tourism, ecotourism and nature-based tourism, are growing rapidly. It is estimated that one third of global tourism spending goes to ecotourism (Boley and Green, 2016; Ghorbani et al., 2015). Richness in biodiversity is the main reason for tourists visiting marine protected areas in developing countries (UNWTO, 2010). We term these form of tourism based-on experiences of, and contributing financially to, MPAs marine conservation tourism. Revenues from marine conservation tourism could significantly support MPA management, is potentially greater than the illegal use value of marine resources (Dharmaratne et al., 2000; Vianna et al., 2018), and even contributes a large share in tourism industry or economy (Edwards, 2009). Various mechanism are applied by different MPAs to obtain revenues from tourism, such as user fees (Brunnschweile, 2010; Tongson and Dygico, 2004), entrance fee and licensing fee (Hunt and Vargas, 2018; Thur, 2010; Whitelaw et al., 2014), philanthropic donations (Reid-Grant and Bhat, 2009), social-venture capital (Lamers et al., 2014b) or private conservation areas (De Santo, 2012). A community-based tourism (CBT) approach is often implemented in the development of marine conservation tourism in attempting to fulfill the economic needs of local communities in these areas (Ndivo et al., 2016).

In addition to providing financial resources for conservation, marine conservation tourism is also considered a tool for local (sustainable) development, i.e. livelihood improvement of local communities living in and around MPAs as well as generating revenues for local government. Local communities can derive marine conservation benefit through tourism in various ways. Firstly, marine conservation tourism can be an alternative livelihood for local communities, by setting up an enterprise providing tourist services or working for a tourism-related business. Secondly, marine conservation tourism can generate demand for local

products and services, such as agricultural and fishery products as well as accommodation and transport. Thirdly, local communities can also obtain benefits from marine conservation tourism from receiving their share from tourism benefit sharing agreements with MPA management. Fourthly, tax and levy to tourism operators generates income for local government to be used to provide services to the community (Brunnschweile, 2010; Kinseng et al., 2018; Vianna et al., 2018). Sufficient tourism benefits to local communities is crucial to obtain and maintain their support to MPAs (Diedrich, 2007; Moswete et al., 2011; Sitikarn, 2008).

Literature suggests that entrance fee raises tourist awareness that they are in an MPA established to achieve biodiversity conservation (Mach, 2020), which in turn helps to develop their respect toward MPA and affects their attitude and behavior (Stronza et al., 2019). When marine conservation provides benefit to local community, their attitude toward biodiversity protection could also improve (Abu Bakar and Wall, 2019; Butowski, 2016). Hence, marine conservation tourism can affect attitudes toward marine protected areas of both tourists and host community.

As earlier mentioned, marine conservation tourism can bring conservation benefit, local livelihood enhancement, and economic benefit. These three aspects of marine conservation benefits support each other if marine conservation tourism is well implemented. A well maintained and biodiverse marine environment resulted from proper MPA management can provide income to local community for their livelihood as well as to local government for local development, in addition to covering MPA management expenditures. Tourists tend to visit environments that are more biodiverse. Marine conservation efforts that promote the livelihood of host communities will lead to higher compliance toward MPA regulation, as well as to an improved local development. Similarly, local government revenues from marine conservation tourism can be allocated to support MPA management as well as to enhance local livelihood. Hence, marine conservation tourism can then be defined as tourism that supports biodiversity conservation, promotes livelihood of people living in and adjacent to the target area and contributes to local economic development.

While marine conservation tourism defined in this way implies that there are three objectives (marine biodiversity conservation, local livelihood promotion and local economic enhancement), balancing the three objectives is quite challenging. Marine conservation tourism may become a source of conflict when benefits are not (perceived to be) shared equitably within local communities or unfairly appropriated by tourism operators, which will hinder support for MPAs (Moswete et al., 2011; Nguyen and Funck, 2019). Promoting local

community participation in marine conservation tourism is often hindered by various factors. A lack of local skills in providing adequate tourism services limits local people to participate and triggers the need for migrant wage labor. Lack of local tourism skills also causes difficulties in accumulating capital from revenues to sustain tourism business. Unclear natural resource ownership rights hinders partnership agreement with local communities., And heterogeneity of interests leads to competition rather than collaboration among local community stakeholders (Bagul, 2009; Bennett and Dearden, 2014a). The latter can also lead to reduced social cohesion and endanger traditional value (Babu, 2012; Kinseng et al., 2018). As tourists prefer a healthy environment and a rich biodiversity, a too strong focus on tourist revenues may lead to excessive tourism activities, over-development and increased human concentration which destroys the marine habitat, threaten animal welfare as well as public safety (Babu, 2012; Brandt et al., 2019; Gallagher and Huveneers, 2018; Kim et al., 2020).

1.4. The Coral Triangle Initiative

Across the world, various efforts have been taken to scale-up small MPAs to form a larger network of MPAs that requires governance across regional and even national boundaries to improve management effectiveness. The Coral Triangle Initiative (CTI) is an example of a multilateral partnership to conserve marine resources, involving six Southeast Asian and Pacific countries. This biodiverse region hosts the highest diversity of coral reefs, reef fish species and diverse mangrove forests in the world; it is considered a global center of biodiversity (Burke et al., 2012; Wilkinson et al., 2006). The area became a global priority for marine conservation due to increasing threats by illegal use of marine resources, over-exploitation and adverse impacts of terrestrial development activities (Agostini et al., 2012). The CTI facilitates the achievement of Aichi Target 11[1], which resulted from commitments

[1] The tenth meeting of the Conference of the Parties to the Convention on Biological Diversity, in Nagoya, Japan, resulted in 20 Aichi Biodiversity targets organized under five Strategic Goals. Strategic Goal C focuses on improvement of the status of biodiversity by safeguarding ecosystem, species and genetic diversity includes in-situ conservation. Aichi Target 11 of Strategic Goal C stated that by 2020 at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscape and seascapes (CBD, 2018).

of the participating countries to increase the coverage of MPAs. By creating ecological connections across national jurisdictions the Coral Triangle Marine Protected Area System (CTMPA) was established (Weeks et al., 2014; Yulianto et al., 2010). CTI is thereby contributing to the achievement of the global conservation coverage target of 10% effective MPAs (UNEP-WCM and IUCN, 2016). In total the CTMPA covers more than 200,881 km^2 encompassing Indonesia, Malaysia, Papua New Guinea, Philippines, Solomon Islands, and Timor-Leste. There are more than 1,900 MPAs within the boundaries of the seascape, established during the last four decades under legal mandates ranging from village customary laws to national legal frameworks (White et al., 2014). Indonesia made a commitment to establish MPAs covering 200,000 km^2 by 2020 to contribute to CTMPA (Yulianto et al., 2010).

A partnership for marine conservation also exists within the boundaries of CTI itself, which works in similar ways but on a smaller scale. While CTI is an intergovernmental marine conservation arrangement (Fidelman and Ekstrom, 2012), the Bird's Head Seascape (BHS) is a partnership of international NGOs (Bird's Head Seascape Papua, n.d.) which works closely with other stakeholders, including national and local governments, universities, local communities, and local NGOs (About The Bird's Head Seascape, n.d.). Located in West Papua Province of Indonesia, the network of MPAs under the BHS consists of 20 MPAs, including the MPA network of Raja Ampat (Figure 1.3). It is considered the epicenter of tropical shallow marine biodiversity for its rich diversity in reef species and reef fishes (Mangubhai et al., 2012). BHS is currently gaining momentum from the provincial government's policy initiative of "Conservation Province" (Conservation International, n.d.), which promotes marine conservation through clear sustainability goals and targets for planning and budget cycles of government agencies and departments.

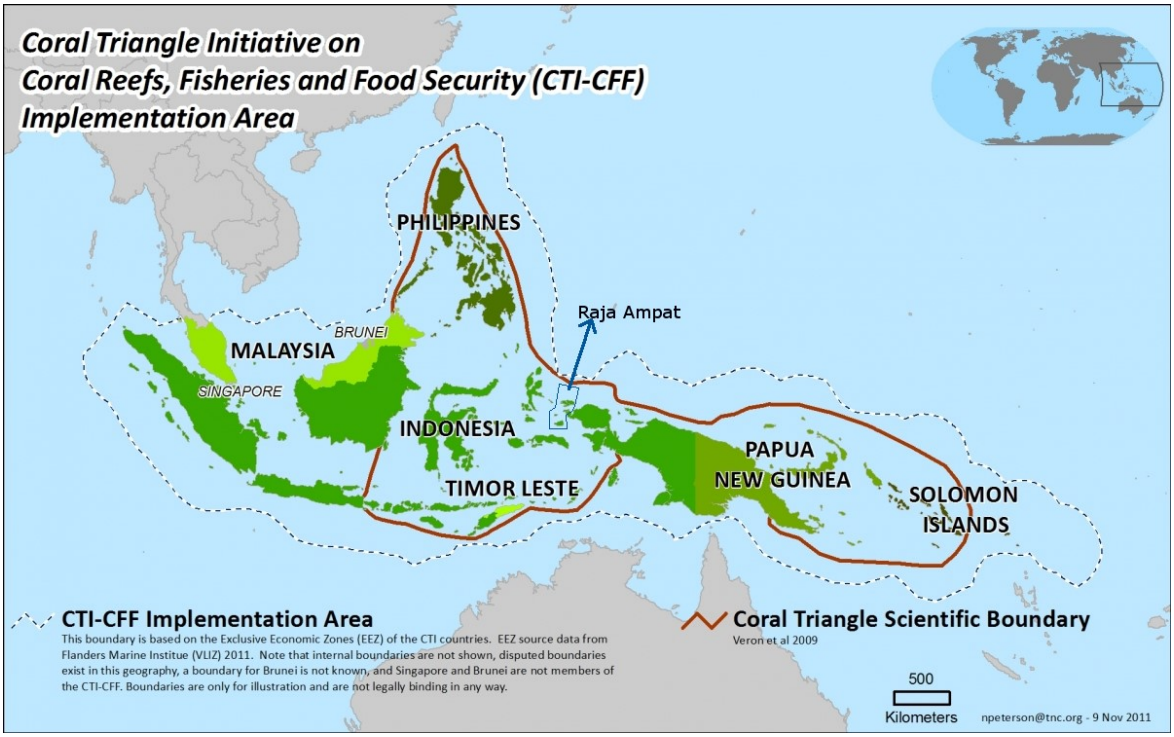


Figure 1.3. Map of Coral Triangle Initiative (modified from CTI-CFF Regional Map, 2011)

1.5. Raja Ampat marine conservation tourism

Raja Ampat Regency, located at the north western tip of West Papua Province of Indonesia, was established in 2003 as a result of the deep and extensive decentralization policy of the Indonesian state (Barr et al., 2006; Tokede et al., 2005). At the heart of the Coral Triangle, Raja Ampat draws global attention because of its richness in marine biodiversity (Asaad et al., 2018; McLeod et al., 2009; Pemerintah Kabupaten Raja Ampat, 2006). Raja Ampat archipelago is important in the national context because it raised awareness of the priority of the Bird's Head Seascape for conservation nationally and internationally (Agostini et al., 2012).

The region is threatened by illegal fishing and overfishing, the exploitation of gas and oil, as well as timber extraction (Mangubhai et al., 2012). Threats to marine resources and over exploitation have led to the establishment of a network of marine protected areas (MPAs) consisting of six MPAs, scattered from the northern tip of Raja Ampat to the most southern part of the regency and covering 11,130 km^2 (Agostini et al., 2012; Donnelly et al., 2002; Rudyanto et al., 2016). The Indonesian decentralization policy is said to have facilitated the designation of the MPA network because the regency government obtained much more authority in controlling natural resources. The regency regulation forms the legal basis for the MPA network, and the regency established a technical agency within the Fishery and

Marine Office which was assigned the management function of the MPAs (Rudyanto et al., 2016)

The MPA network in Raja Ampat was designated under the auspices of international conservation NGOs, especially The Nature Conservancy (TNC) and Conservation International (CI) (Rudyanto et al., 2016). Prior to the designation, World Wide Fund for Nature (WWF), together with the regional university and the natural resource conservation authority, was involved in research and outreach in Raja Ampat (Donnelly et al., 2002; Rudyanto et al., 2016). Local community groups, including customary rights owners and fishermen, were also consulted in the establishment of the MPA network (Mustaghfirin et al., 2012). Major funding was made available by philanthropy organizations, such as the Walton Family Foundation and Lucille Packard, as well as the World Bank (Rudyanto et al., 2016).

Tourism has been growing in Raja Ampat over the last decades in terms of tourism businesses and tourist visits. Several government policies were issued to make sure that the development of tourism goes hand in hand with conservation and provides benefits for local communities. Implementation of the Raja Ampat tourist entrance fee and provisions to limit the number of tourism operators are examples of such policies (Mangubhai et al., 2012). In addition, the local government also adopted a community-based tourism approach to promote local community participation in tourism development, through which the provision of subsidies is made available to local tourism businesses (Dinas Budpar Raja Ampat, 2011).

Various non-state actors have been and are playing important roles in Raja Ampat marine conservation tourism development. Private actors were part of the establishment of marine conservation and tourism in Raja Ampat. For instance, in Misool a private-community partnership between a resort owner and the customary community was established under auspices of TNC to establish a marine conservation area (Halim and Udelhoven, 2010). Other resort businesses engaged in collaboration with the global NGOs in conducting MPA surveillance using an ultralight aircraft (Steenbergen, 2013). .

The local community is given an important position in efforts to promote and implement marine conservation tourism in terms of participation and the allocation of expected benefits. The nature and evolvement of marine conservation tourism governance and its implications for the local community is unknown. While most research evaluated marine biodiversity conservation (Agostini et al., 2012; Borsa and Nugroho, 2010; Mangubhai et al., 2012; McLeod et al., 2009) and socioeconomic impacts separately (Sayori, 2009; Tafalas, 2010), there is a lack of research that studies marine conservation tourism governance simultaneously with and in relation to its benefits to local community. Raja Ampat MPA

network is part of the MPA network of BHS, and both are within the CTI boundary. A better understanding of marine conservation tourism governance and its implication to the flows of benefit to local community of Raja Ampat is valuable, and can derive lessons learned for the sustainable development of biodiverse areas in the wider region.

1.6. Research objectives and questions

The objectives of this dissertation are twofold:

1. To understand the evolvement of marine conservation tourism governance and the role of non-state actors in these governance arrangements.
2. To assess the effectiveness of different policy instruments in shaping, generating and allocating benefits to and within local communities from marine conservation tourism.

Research questions:

1. How has marine conservation tourism in Raja Ampat been co-governed over the last decades, and what role have non-state actors played in the evolving governance arrangements?
2. How has the regional policy of community-based tourism in Raja Ampat been implemented in terms of its congruency with the customary right regime and its effect on local community engagement, as well as on tourism benefit distribution to the local community?

1.7. Research methodology

1.7.1. Research design

The aim of this research is to obtain an in-depth understanding of the shift in governance, the particular policy arrangements applied, and its effects on local communities of marine conservation tourism. A case study research design is chosen to achieve the research objectives and to address the research questions. Case studies are suitable to answer either descriptive questions or explanatory questions (*how* and *why*) focusing on contemporary phenomena (Yin, 2009). As the research questions in this research are formulated to achieve explanation about marine tourism governance in a decentralization context, this research approach is considered suitable. The case study approach is also selected when phenomena under study, such as the evolving co-governance of marine conservation tourism, are difficult to be distinguished from the context, such as the decentralization process. Phenomena studied in this research are marine tourism co-governance evolvement in decentralization context

(question 1); Marine conservation tourism policy instruments and factors shaping the effectiveness of the policy to direct the benefit to local community (question 2). Case studies also allow researchers to do in-depth examination of factors within a phenomenon under study (Yin, 2003). Particular data collection techniques, such as surveys, in-depth interviews of participant observation, can be applied as part of a case study strategy, depending on the research questions asked.

1.7.2. Data collection and analysis

This research uses both primary data and secondary data (Kumar, 2011). Primary data collected to address the research question were both qualitative (e.g. regulation on marine conservation tourism) using interviews and observations, and quantitative data (e.g. marine conservation benefits to local community) using surveys. Topic lists were prepared for conducting semi-structured interviews to collect qualitative data from primary sources, while structured questionnaires were prepared to collect quantitative data from respondents (see Appendices 1 - 4). Selection of respondents for qualitative data collection was done using snowball method (Kumar, 2011). The initial step was interviewing key respondents in marine conservation tourisms, i.e. staff of tourism office, staff of marine and fishery office (including MPA authority), and representatives of NGOs engaged in marine conservation tourism. This was the starting point of snowball sampling to recruit further respondents. The initial step resulted in information on potential key respondents from various backgrounds such as community leaders, key entrepreneurs, high rank and government officials. Meeting important resource persons to conduct interviews turned out to be challenging as Raja Ampat is a remote archipelago where accessibility and transportation is limited and costly. In addition, some respondents are mobile which complicated the inclusion of their views and data in this study, for example the liveaboard operators. To overcome these challenges some of the respondents were sent the topic lists and questionnaire through email, while some interviews were carried out via telephone and social media, such as WhatsApp.

Nevertheless, most interviews were carried out face-to-face and recorded (see Appendices 5 and 6). Interview notes were taken during semi-structured interviews, and additional sub-topics were added during interviews. Results from structured interviews were filled in the structured questionnaires immediately. As electricity is still limited in most remote parts of Raja Ampat, many interview records were transcribed later with the help of field notes made during the interview. Informal interviews were also held in case formal interviewing was not possible. Field observations were also made and documented for analysis. The researcher was able to do participant observation in two ways: i.e. as a tourist visiting local tourist

amenities and as a consultant for developing the community fund that is part of the tourist entrance fee arrangement.

Preliminary observations revealed that purposive sampling to determine the respondents to be interviewed for quantitative data collection was the realistic strategy for several reasons. Quantitative data required in this research is mainly used for estimating marine conservation benefits to local communities flowing through different segments of the tourism value chain. Each of the nodes can be seen as a cluster rather than as a strata, because preliminary observations revealed that the magnitudes and variance of benefits delivered by each of the segments are different. While most liveaboards are not operating year-round in Raja Ampat, resorts and homestays are scattered across a vast area of MPAs, which would make contacting and visiting respondents according to probability sampling costly and time consuming. Tour guides and speedboat operators are neither registered nor recorded by any of the authorities, which complicated making a sampling frame. Therefore, purposive sampling (Kumar, 2011; Taherdoost, 2016) was applied to select respondents and to determine the sample sizes from each of the nodes of the marine conservation tourism value chain. Results of each of the cluster of stakeholders interviewed was made on a daily basis to determine whether the sample sizes for each of the clusters was sufficient. This was done by assessing whether the variability of data captured by interviews for each of the clusters was sufficient. Data obtained from the survey were analysed using descriptive statistics.

Various types of secondary data sources were used in this research, such as published and unpublished documents and reports collected from government institutions and NGOs. Minutes and presentations of meetings were collected mainly from NGOs. Statistical data from various sources were also collected.

Qualitative data were listed and sorted according to issues they contained. Data containing similar issues were listed in the same category, e.g. authority, actors, funding, customary rule, etc. They were coded according to the respective category they belong to. Organized data was then analysed to identify governance patterns, actors and their roles in the governance. Historical data were organized chronologically to reveal the evolvement of marine conservation governance.

1.7.3. Internal and external validity

Validity refers to the extent to which empirical findings reflect reality being investigated (Kumar, 2011). There are two types of validity, i.e. internal validity which refers to the credibility of the findings, and external validity which refers to the generalizability of the research findings. To ensure internal validity of quantitative data, the researcher made sure

that research instruments, such as the questionnaires were able to capture the data that resembled reality. As purposive sampling is used in the survey part of this research, a review of the interview results was done to make sure that sample size is sufficient to capture reality by comparing variability of important parameters measured from each unit of analysis to secondary data regarding respective parameters. For example, as types of tourism services (cruise and dive) and the capacity of liveaboards were assumed to affect the research findings, the variability of data on those parameters were compared to variability from secondary data from tourism office. Similarly, as homestay capacity is assumed to have effect on marine conservation benefit accrued to local community, variability of the parameter in data collected was compared to variability of homestay capacity from secondary data from website of Raja Ampat homestay association. Triangulation was conducted to ensure internal validity of qualitative data obtained. In addition to data cross check with different sources, triangulation was also made by conducting field observation and focus group discussions. Participation as consultant for NGOs and MPA authorities in developing a community fund from the tourism entrance fee also enabled the researcher to triangulate.

The generalizability of the research findings facilitates comparison among findings from other locations and allow lessons learned to be implemented in other areas with similar settings and context. This research is conducted by applying theoretical notions that can also be relevant in a wider context beyond Raja Ampat. The concluding chapter of this thesis will further expand on the generalizability of the finding beyond Rajah Ampat. As marine conservation tourism in Raja Ampat is relatively new and only few similar forms of tourism exist in Indonesia, other areas in Indonesia can potentially learn from Raja Ampat marine conservation tourism.

1.8. Outline of thesis

This thesis consists of an introduction and conclusion chapter and a collection of four scientific papers written to be published separately in scientific journals. Chapter 2 to 5 will provide sequential case studies to address the two research questions. The first and the final chapter serve as the "wrapping" to the bundle.

Chapter 2 is a historical analysis to the evolvement of marine tourism conservation governance in Raja Ampat within a decentralization context. Here a conceptual framework is developed to analyse the evolvement of co-governance in two dimensions, i.e. the mode of governance arrangement and the level of decentralization. Chapter 3 and Chapter 4 zoom in on two policy instruments which are parts of the complex and evolving marine conservation governance of Raja Ampat outlined in Chapter 2. The two chapters are on policy instrument

governing tourism entrance fee and on policy instrument governing homestay respectively. Chapter 5 provides overall assessment of the contribution of value chain segments to marine conservation benefit flow to local communities.

Chapter 6 draws conclusions from the four substantive chapters of this dissertation to answer the research questions. In addition, the chapter also discusses the key results of this dissertation in light of the academic debates on marine conservation, sustainable tourism, co-governance of natural resource use and local community involvement, and the methodological limitations and implications, as well as outlines a possible research agenda for marine conservation tourism governance in Raja Ampat and beyond.

Chapter 2: Governing dynamics in marine conservation tourism in Raja Ampat, Indonesia[2]

Abstract

Decentralization has been promoted to improve lower level governmental and non-governmental organization's participation in governing tourism, nature conservation and development. Literature on how and the extent to which regional and local government and non-governmental organizations engage in co-governance arrangements for marine conservation tourism is still limited. This paper examines how governance arrangements for marine conservation tourism in the new regency of Raja Ampat, Indonesia, have evolved as a result of Indonesia's decentralization policy and what role NGOs have played in this process. The analysis shows that over a period of two decades NGOs have played a major co-governance role by informing and mobilizing local communities, by establishing and managing marine protected areas, as well as by supporting the technical and financial capacity of the newly established regional government of Raja Ampat. Over time a patchwork of non-state governance and open co-governance arrangements in marine conservation tourism transformed into more integrated closed co-governance arrangements, in which state authority became more important. NGOs, however, continue to play a pivotal role in marine conservation tourism governance arrangements, even now that a recentralization in Indonesia's marine conservation governance is likely to take place.

Keywords: marine conservation tourism; co-governance; non-governmental organization; decentralization.

[2] This chapter has been published as: Atmodjo, E., Lamers, M., Mol, A.P.J., 2019. Governing Dynamics in Marine Conservation Tourism in Raja Ampat, Indonesia. *Tourism Planning & Development 16, 1–19*

2.1. Introduction

Protected areas are considered effective policy instruments for maintaining biodiversity, conserving endangered species, reducing depletion of animal populations and maintaining ecological functions (Macdonald et al., 2012; Morrison et al., 2012; Tang et al., 2011). Within the marine environment, degradation of marine environments due to overexploitation of fisheries, illegal extraction of marine resources and pollution has prompted the designation of marine protected areas (MPAs). Approximately 12% of the land and water surface has been established officially as protected area (Fuller et al., 2010; Tang et al., 2011), and approximately 5% of the world's ocean surface has been designated as MPA (Oikonomou and Dikou, 2008). However, studies have revealed that a key barrier to the effective management of terrestrial and marine protected areas is insufficient funding (Bruner et al., 2004; James et al., 1999). Government funding, particularly in developing countries, does not meet the costs of conserving biodiversity, maintaining te protected area or to expand the protected area network (Balmford et al., 2003; James et al., 1999). Private sector funding, such as through tourism, is becoming a strategic alternative to fill the financial deficit for the operation and expansion of protected areas,

The growth of the tourism industry and its reposition as key economic sector in coastal areas (Miller, 1993) has induced the adoption of marine tourism in the integration of marine conservation and development (Oikonomou and Dikou, 2008). Conservation tourism, defined as tourism making "an ecologically significant net positive contribution to the effective conservation of biological diversity" (Buckley, 2010), has been argued to improve the effectiveness of biodiversity conservation in several ways. First, except for the most restrictive regimes, most approaches to marine protected area governance incorporate marine tourism to a certain degree (Stewart, 1993) to generate income from nature-based attractions for conservation management (Brightsmith et al., 2008). The contribution of tourism income to finance the operation of protected areas can reach as much as 80% of the management budget (Morrison et al., 2012; Naidoo and Adamowicz, 2005). Second, tourism opens opportunities for diversification of livelihood for communities living in and around protected areas by establishing new revenue generating activities, which in turn encourages them to protect natural resources (Cobbinah et al., 2015; Van Wijk et al., 2015). Third, tourism and natural resources conservation can have a dynamic and intricate relationship, for example protected areas with a higher biodiversity resulting from successful nature conservation measures are claimed to be preferred by tourists (Boley and Green, 2016; Naidoo and Adamowicz, 2005). At the same time, differentiation in income from tourism among

communities living in, or near, different villages in protected areas might create tensions (Van Beukering et al., 2007b) and increase the complexity of protected area governance.

The establishment of protected areas and the development of conservation tourism often result from, or involve, a process of devolution that encompasses the transfer of power, authority and responsibilities to regional and local government levels, as well as to non-state actors, in shaping and implementing policies for tourism development (Cheema and Rondinelli, 2007; Lamers et al., 2014b). Devolution is expected to bring about accelerated economic development, improvement of political stability, as well as enhancement of public participation in governance. A local government unit that is close to its local constituency is considered to make and implement decisions that are more likely to reflect the demand for local services in a more timely manner (Cheema and Rondinelli, 2007). This aligns with the more widely used argument that involvement of multiple stakeholders in decision making and planning increases the longer term effectiveness of marine conservation (Rodríguez-Martínez, 2008). These decentralized efforts are believed to build upon the need for natural resource use and management based on participation and collective action of user communities and collaboration between state and non-state actors (Bramwell and Sharman, 1999; Conley and Moote, 2003; Nelson and Agrawal, 2008; Ostrom, 2005).

Devolution and decentralization, however, are not a panacea for dealing with central government failure. In spite of its better understanding of the needs and desires of the constituents, local governments may lack capacity, in terms of finances, technical resources, or appropriate legal frameworks (Larson, 2002). A poorly functioning national law system may also hinder the effectiveness of local governments (Smith, 1998). Further, even in cases where political systems have been successfully decentralized, there can still be a lack of evidence that decentralization has been responsive to the poor and the marginalized (Crook and Manor, 1998). Despite the long experiences with beneficial interactions between tourism and marine conservation, there is surprisingly little research that examines how and by whom marine conservation tourism is (to be) governed over the longer term. This paper contributes to the debate on the governance of marine conservation tourism by examining how governance arrangements for marine conservation tourism developed over time in Raja Ampat, Indonesia, and what role non-state actors can and do play in such evolving governance arrangements.

Empirically, we will draw on the dynamic development of marine conservation tourism in Raja Ampat archipelago, in West-Papua, Indonesia. Raja Ampat is in the heart of the so called coral triangle, hosting the richest marine biodiversity in the world. Raja Ampat was

established as a new regency in 2002 and became operational in 2005, following the decentralization policy of the Indonesian government. In collaboration with two major international non-governmental conservation organizations the new regency government has established 6 MPAs and numerous no-take zones and strongly promoted the development of marine tourism. At the moment (2017) some 11 resorts, 40 liveaboards with yearly operating permit, and more than 40 local home stays are in operation in Raja Ampat.

Conceptually, we will employ (in section 2) the concept of governance arrangements to map (section 4) and analyse (section 5) the different governance arrangements that have emerged and changed during the period of analysis (1998-2015), by identifying governing actors, interaction of actors, and governance resources, instruments and strategies (Mol, 2016; Runhaar et al., 2017). In line with the decentralization context, we introduce three sub-regency tiers - i.e. MPA, district, and village - to analyse the dynamics in governance arrangements within and across these tiers. These tiers reflect a spatial scope of particular governance arrangements, rather than a hierarchy of authority or sovereignty.

2.2. Governance arrangements

Since the early 1990s, various forms of collaborative governance and partnerships involving diverse societal actors have been deployed for advancing sustainable tourism (Haase et al., 2009; Lamers et al., 2014b; Selin, 1999). Also in natural resource management more widely, institutions have been restructured from state-based governance to a wide variety of arrangements as a result of decentralization, privatization and economic reform policies, often involving private economic and civil society actors at local and regional levels to enhance participation, equitability and effectiveness (Meynen and Doornbos, 2004). The surge for effective collaborative governance arrangements for sustainable tourism and natural resource conservation reflects wider trends in the literature (Glasbergen et al., 2007; Visseren-Hamakers et al., 2012) and is a manifestation of the widely recognized shift from government to governance, or the shift from state authority towards networked governance arrangements based on multiple authorities of state, market or civil society actors (Kooiman, 2003; Rhodes, 1996).

Arnouts et al. (2012) developed an analytical framework based on Kooiman (2003) to distinguish different types of governance arrangements. Governance arrangements differ depending on the extent to which governmental and non-governmental actors are involved in governing, vis-à-vis each other (Treib et al., 2005). Arnouts et al. (2012) came up with a continuum of governance arrangements, which consists of hierarchical governance, closed co-governance, open co-governance and self-governance. While hierarchical governance

refers to the domain of the nation-state, with non-governmental actors in a subservient role, self-governance, on the other extreme, focuses on the predominance of non-governmental actors, with government keeping a distance. Co-governance is located in between these two extreme governance arrangements and emphasizes the collaboration between governmental and non-governmental actors, either in closed and restricted or more open and flexible settings (Arnouts et al., 2012).

For the purpose of our study we adapt this analytical scheme of governance arrangements of Arnouts et al. (2012) in two ways. First, in marine tourism conservation, governance arrangements that exclude (to a major extent) public authorities (hence the one extreme category of Arnouts et al., 2012) involve as much (inter)national NGOs as local civil society entities and private economic actors. Hence, for this category of governance arrangements self-governance is not an adequate concept. The concept of non-state governance better covers and describes governance arrangements in which state government is largely absent and which are dominated by NGOs, private firms and local civil society actors.

Second, in marine tourism conservation devolution of authority involves the shift from state governance via collaborative governance to non-state governance, but can also entail a decentralization in governance in which national marine conservation authority is relocated to local (state) entities. This should be interpreted as a second dimension in devolution, and requires a further adaptation of the analytical scheme of governance arrangements as initially proposed by Arnouts et al. (2012). Figure 2.1 visualizes our conceptual mode to analyse developments in governance arrangements in marine conservation tourism, with on the horizontal axis the slightly adapted distinction in governance arrangements as proposed by Arnouts et al. (2012), while the vertical axis emphasizes decentralization in terms of levels.

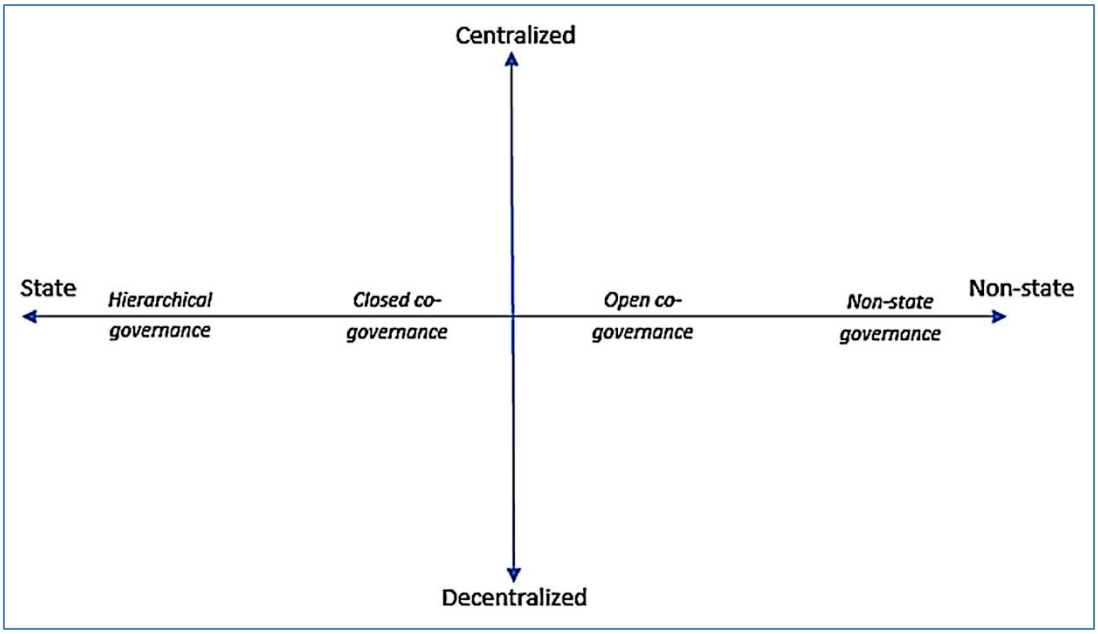


Figure 2.1. Dimensions in governance arrangements

2.3. Methodology

As this paper is trying to obtain an in-depth understanding of developments in marine conservation tourism governance a qualitative research design was chosen (Kumar, 2011). The research is set in Raja Ampat, an archipelago in West Papua Province, Indonesia (see Figure 2.2), consisting of four large islands and more than 600 small islands and atolls. The area draws global attention because of its richness in marine biodiversity (Agostini et al., 2012; McLeod et al., 2009). Raja Ampat was established as a regional administrative unit in 2002 and became operational in 2005 (Pemerintah Kabupaten Raja Ampat, 2006) resulting from the decentralization policy of the Indonesian state (Barr et al., 2006). Threats to marine biodiversity in the area (Mangubhai et al., 2012) encouraged marine conservation efforts involving various state agencies and international non-governmental organizations, such as Conservation International (CI) and The Nature Conservancy (TNC). The World Bank coral reef rehabilitation and management program (COREMAP II) has been deployed in Raja Ampat since 2005. Based on these conservation initiatives marine tourism activities have been growing over the last decade (Mangubhai et al., 2012; Tafalas, 2010). These developments have called for the need to understand the role of different actors, including their discourses and resources, in the (co-)governance of marine conservation tourism to achieve the multiple objectives of protecting marine biodiversity and enhancing economic development, and how these roles change over time. The case of Raja Ampat allows for an in-depth exploration of the phenomenon in a particular temporal and spatial setting (Kumar, 2011; Yin, 1994).

Fieldwork was carried out between October 2014 and December 2015. Three qualitative data collection techniques were used in this research, i.e. in-depth interviewing, participant observation and document analysis (Kumar, 2011; Ritchie and Lewis, 2003). In-depth interviewing was used to obtain information regarding the ideas, roles, resources and experiences of actors involved in, as well as the rules, procedures and events relevant for, conservation tourism governance arrangements (Kumar, 2011; Ritchie and Lewis, 2003). The fieldwork took place just after the inauguration of the new president of Indonesia and parallel with the local election process in Raja Ampat regency. This meant that the mobility of potential respondents was high, both in spatial and organizational sense. Since individual MPAs are scattered across Raja Ampat many selected respondents had to be visited in remote settings. Furthermore, some mobile respondents, like liveaboard operators, are only operational in Raja Ampat during particular months of the year. These factors, together with a poor transport and communication infrastructure, have challenged the inclusion of relevant respondents. Nevertheless, thirty in-depth interviews were held with individuals and small groups, involving 37 respondents in total, identified using a snowball method (Arnouts, 2010). Respondents typically included those in leading positions in marine conservation tourism governance, both in the present and during the past two decades, such as state and local government directors and staff, NGO officers and staff, community leaders and tourism operators. Most interviews were recorded and subsequently transcribed verbatim. Second, during fieldwork the lead author managed to participate in a number of activities and meetings as observer, as well as consulting expert participant. Observation of discussions and interactions between actors was conducted during such meetings. Further, observations were made of physical conditions relevant to the research, for example of marine conservation or tourism infrastructure. Third, document analysis was conducted to obtain information from secondary sources. This type of analysis was carried out based on various types of documents collected before and during the fieldwork, such as reports (published and unpublished), maps, minutes of meetings and websites. These data sources were triangulated in the analysis to ensure the validity of research results.

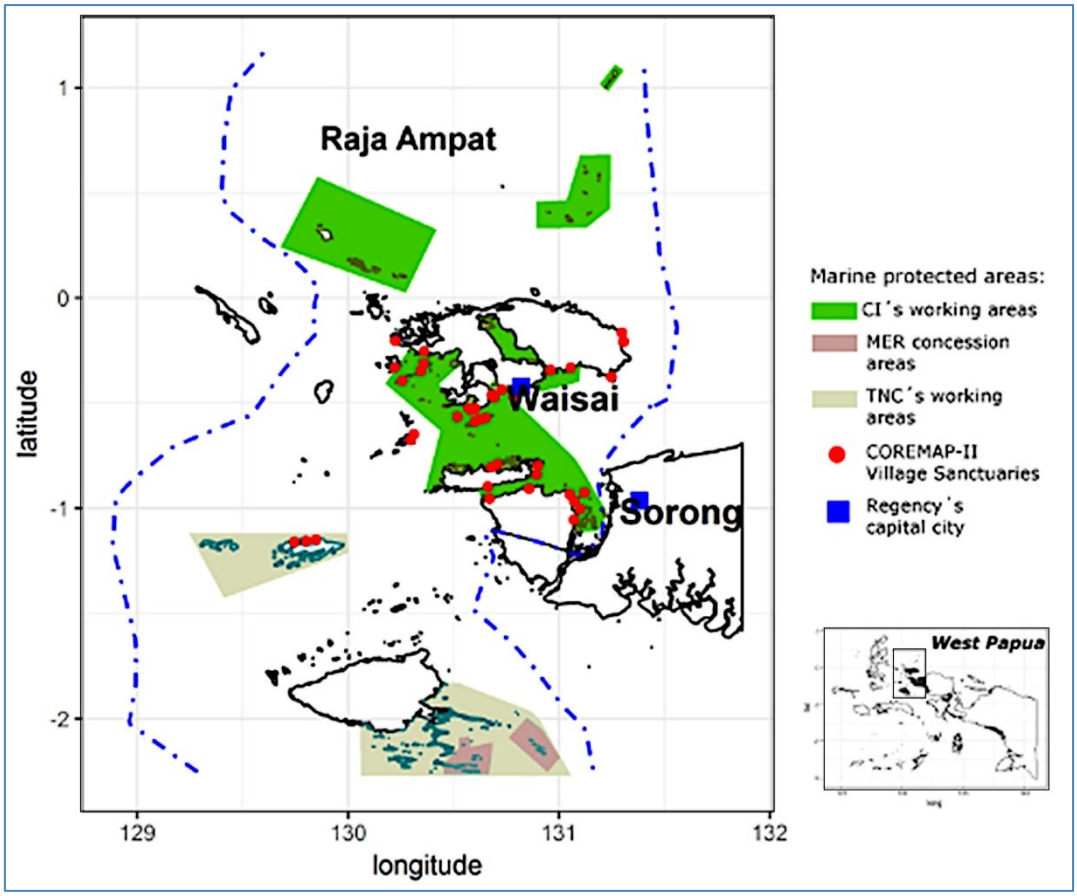


Figure 2.2. Map of the study area

Data analysis was carried out in three steps. The first step entailed a historical analysis to discover past events and developments from various sources (Wyche et al., 2006) relevant to marine conservation tourism governance in Raja Ampat. The analysis period ranges from 1998 till 2015. The year 1998 marked the end of the New Order regime, characterized by centralized policy, and the start of political reforms that changed the political situation drastically. The last 15 years are characterized by extensive decentralization and devolution policies, including in natural resource management (Barr et al., 2006). To be able to analyse development trends in marine tourism conservation governance three phases were identified and data on the key events and milestones, such as the designation of MPAs, the enactment of regulations and the formation of key organizations, were traced chronologically in these three phases. The second step concerned the identification of governance arrangements in the three phases identified. These governance arrangements were described and analysed using the framework pictured in Figure 2.1. In step three the various identified and analysed governance arrangements were cross-compared and interrelated, leading to an overall, dynamic perspective of the development of marine conservation tourism governance in Raja Ampat.

2.4. The development of marine conservation tourism governance in Raja Ampat

Important events leading to development and change in marine conservation tourism governance in Raja Ampat are graphed in a timeline (Figure 2.3). From this timeline three temporal phases were distinguished, i.e. the scoping phase, the establishment phase and the transfer phase. In this section we will characterize these three phases and analyse key temporarily stable policy arrangements relevant for marine conservation tourism.

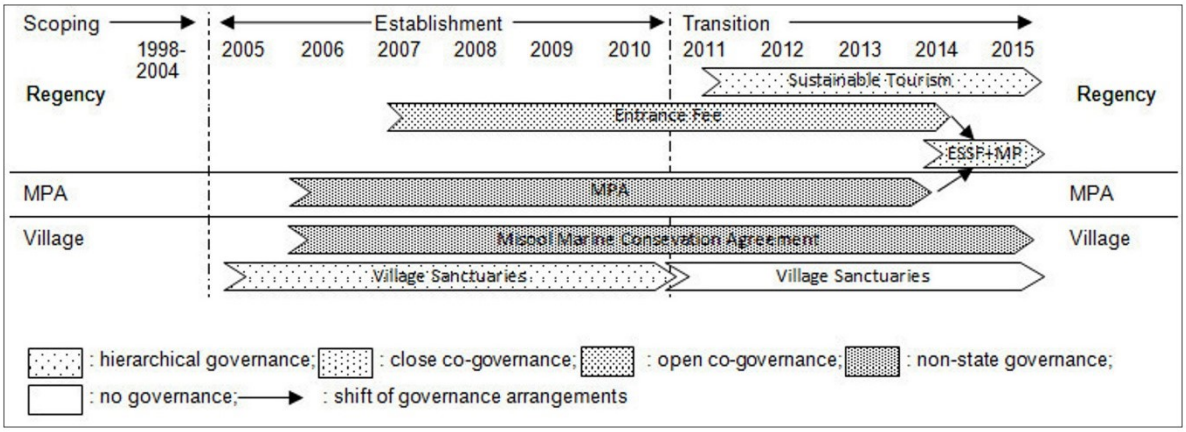


Figure 2.3. The evolvement of governance arrangements for marine conservation tourism 1998-2015

2.4.1. The scoping phase

The period between 1998 and 2005 marks the starting phase of conservation tourism development in Raja Ampat. The decentralization policy of the Indonesian state gave more autonomy to local government, marked by the establishment of Raja Ampat regency and its separation from Sorong regency in this period (Pemerintah Kabupaten Raja Ampat, 2006). Several tourism businesses started to emerge, in addition to one resort that already operated before 1998, all operating largely independently and without much governance interference. Conservation efforts were initiated by international NGOs, mainly Conservation International (CI), The Nature Conservancy (TNC) and World Wildlife Fund (WWF). These were primarily focused on research, mobilization and outreach activities to provide information for policy makers and communities on the status of the marine ecosystem and the importance of conservation. These initiatives were influenced by the 2003 Tomolol Declaration, which laid out a collective agreement on the commitment of stakeholders to utilize natural resources in ecological ways for the sake of the local community. A staff member of CI and local leader, describes this stage as follows:

> "We started to approach the government and the customary communities in 2002, to promote understanding that Raja Ampat resources must be guarded in the form of protected areas, which will benefit the local communities as well as the local government if managed properly"

This led to further collaboration in marine conservation tourism governance, supported by international philanthropist funders, like the Walton Family Foundation, as well as the World Bank (WB), Asian Development Bank (ADB), and USAID. In this early phase collaboration between the NGOs and with governmental agencies was intermittent and project based; there was little to no institutionalized collaboration between NGOs or between governmental and non-governmental actors. Particularly with the Bird's Head Seascape (BHS) initiative, funded by the David and Lucille Packard Foundation, research, outreach and collaboration of CI, TNC and WWF took a more formal shape, including a secretariat for this collaboration in Manokwari. As the name implies, the working area of Bird Head Seascape initiative is covering several regencies in the western part of West Papua province, with a growing number of participating organizations, including other local and international NGOs, government agencies and market actors.

2.4.2. Establishment phase

The period between 2005 and 2011 can be marked as the establishment phase, in which the Raja Ampat regency established a basic organizational structure, such as the appointment of the Regent and Vice Regent, and the establishment of working units necessary to carry out daily government affairs. The period also saw the emergence of several governance arrangements for marine conservation and conservation tourism, predominantly lead and funded in parallel by governmental and non-governmental actors.

In 2004 the Coral Reef Rehabilitation and Management Program, a World Bank project supported by Asian Development Bank (ADB) and USAID, selected in its second phase Raja Ampat as one of the implementation areas (hence named COREMAP-II). COREMAP-II aimed to rehabilitate and achieve sustainable use of coral reefs and associated ecosystems, by enhancing the welfare of coastal communities. This project was executed by the Ministry of Marine and Fishery (KKP), Indonesia Science Institute (LIPI), the Regency Office of Marine and Fishery (DKP) and local communities. COREMAP-II brought a predefined institutional design for community-based conservation to 39 target villages in Raja Ampat. The approach consisted of the erection of Coral Reef Resource Management Institutes (management institutes hereafter) in the target villages; the delineation of no-take zones near target villages, called village sanctuaries; the establishment of community surveillance groups (surveillance groups hereafter) to conduct marine patrols around village sanctuaries, the provision of

microfinance to improve local and alternative livelihood; and the recruitment of 80 local village motivators. The village motivators were expected to run the management institutes and their sub-organizations, supervised by facilitators and consultants from COREMAP-II. The project not only attempted to implement a decentralized approach for organizing community-based conservation in target villages, but also to institutionalize the approach across the region through the establishment of a microfinance unit in target villages which supported alternative livelihoods and surveillance groups to do patrols around village sanctuaries. The COREMAP-II project was terminated in 2010.

In the same period, based on the research and outreach activities discussed above, CI and TNC set themselves to establishing MPAs and community-private partnerships (Lamers et al., 2014b). A community leaders agreement was signed in Kofiau in 2006, to designate the boundaries of marine waters to be protected, followed by a community leaders declaration for a partly transfer of customary rights of marine resources from communities to be managed by the regency government. This became the milestone of MPA emergence and provided the basis for structured and organized conservation activity in the form of MPAs, funded by the Walton Family Foundation. This declaration was followed by other declarations, increasing the number and coverage of MPAs across the archipelago. The 6 MPAs were initially managed by CI and TNC in their designated parts of the regency because there was no government unit capable of managing the MPA network, by setting up and funding marine patrol and surveillance field staff from the villages. The MPA declarations also marked the establishment of conservation partnerships between NGOs and communities and paved the way for government involvement in conservation. For example, in 2006 the Misool Eco Resort was established, as a partnership between a private entrepreneur and a community, based on TNC's Marine Conservation Agreement model (Halim and Udelhoven, 2010). In exchange for financial rewards the Misool Eco Resort (MER) entrepreneur obtained marine concessions from the Misool community, from which local population would no longer harvest from concession areas (both water and islands areas), which could then be used as exclusive zones for non-consumptive marine tourism purposes.

The establishment phase is characterized by the emergence and proliferation of marine conservation tourism practices. Both governmental and non-governmental initiatives became more structured and better funded, but were still largely ran in parallel. For example, despite the fact that all village sanctuaries were located in an MPA developed by CI and TNC, limited collaboration existed between CI, TNC and COREMAP-II, for example in joint approaches for patrolling MPAs and village sanctuaries.

International non-governmental actors were quite influential during the early and institutionalization phases, but the year 2007 marked the emergence of strong government involvement in both policy setting and implementation in marine conservation tourism. Increases in visitors and liveaboard operators have generated local community awareness about the economic value of marine resources over which they hold customary rights. Communities asked for fees from tourists and tourism operators visiting attractive spots. This was considered unfavorable for marine tourism development. To eliminate this practice, a region-wide tourism entrance fee was developed (Atmodjo et al., 2017). The entrance fee rate was based on a negotiation between the government and liveaboard operators in a meeting brought about by CI in Bali. Studies were conducted by CI to calculate the ecosystem services provided by Raja Ampat's marine resources and the willingness to pay for these services by tourists. A team consisting of NGOs, government officials and tourism operators was created in 2007, called Non-Retribution Tourism Fund Management Team, assigned with responsibilities to collect and manage entrance fees. Revenues were used for general support of the regency government, financing conservation efforts, establishment of a community welfare fund to support local livelihood, and management costs of the management team.

2.4.3. The transfer phase

While the management of the MPA network was already transferred to a technical unit (MPA authority hereafter) under the Office of Marine and Fishery in 2008, it was not fully staffed until 2011 when a surveillance and monitoring task force (task force hereafter) was introduced in the organizational structure. The task force was staffed with non-civil servants. Operational staff costs of the task force were financed by CI. The zoning of the MPAs was determined prior to this under the auspices of the two NGOs, whereby the Misool Eco Resort concession areas were designated as two no-take zones within the Misool MPA. At the same time, contracts of CI's field staffs were discontinued. Starling Resources, an environmental management consultancy firm, got involved in institutional and capacity building of the MPA authority, through funds of the David and Lucile Packard Foundation. After a preparation process in which the NGOs and Starling Resources were intensively involved, the MPA authority unit was awarded public service body status in 2014, which, unlike ordinary governmental working units, allowed it to directly use revenues generated from operational activities in a more flexible way. Furthermore, in 2011 the regency tourism office released a policy to limit the number of resorts to 20 and liveaboards operating yearly to 40. The policy, formulated in auspices of CI and TNC, also recognized homestays as accommodation business owned and run by local community members. Misool Baseftin, a local NGO, was

established in 2012 to conduct surveillance of Misool Eco Resort concession areas. In addition, Misool Baseftin is also conducting community development programs in villages where customary owners live who sign concession contract with Misool Eco Resort. Since then, marine rangers and community development staff were separated from Misool Eco Resort, to improve transparency and accountability of the budgets Misool Baseftin received from various parties for managing the no-take zones set up by Misool Eco Resort. To enhance the capacity of MPA authority and communities in marine conservation tourism, Starling Resources invited the management consultant Seventy Three to mentor the management of marine conservation tourism businesses owned and run by local communities. This encouraged local tourism businesses to become stewards of their marine resources. The state surveillance and monitoring task force was dissolved in 2014 and responsibilities were replaced at the MPA authority. As in this year the MPA authority was allowed to receive donations due to its public service body status, funds from CI that were previously used to finance operational and staff costs of the task force were transferred to the MPA authority. Also, TNC conservation facilitators were recruited by the MPA authority and TNC provided donations for the management of MPAs. While CI transferred a major part of their conservation infrastructure to the MPA authority, TNC allowed their field stations and speed boats to be used for operational purposes by the MPA authority. In order to coordinate the transfer of supporting activities (funding, consulting, advising, mentoring, bridging with other stakeholders) to the MPA authority, CI, TNC, and Starling Resources formed a transition team, led by Starling Resources. In 2015, the tourist entrance fee system was replaced by the ecosystem service stewardship fee (ESSF), whereby fees are collected and managed by the MPA authority (Atmodjo et al., 2017).

2.5. Changing governance arrangements in Raja Ampat's marine conservation tourism: a discussion

Our analysis suggests that over time proliferation of marine conservation tourism arrangements has emerged at different levels, creating a patchwork of partly overlapping governance arrangements (see Figure 2.3). Governance arrangements were implemented both at the regency level as well as locally, like in the case of MPAs or village sanctuaries. Such a patchwork is common in regions with strong conservation interests, limited government capacity, and different international conservation NGOs implementing their initiatives (Lamers et al., 2014b; Pellis et al., 2015).

Conservation NGOs have played, and continue to play, an enormously important role in the establishment and institutionalization of marine conservation tourism in Raja Ampat. Two

big international NGOs played their role as advocacy NGO (Yaziji and Doh, 2009), aimed at bringing and legitimizing marine conservation tourism. Constrained by regulations and project (funding) duration, the NGOs have taken a "lead and transfer" strategy, by delineating MPAs, managing the MPAs, enhancing government capacity, and enhancing community support for marine conservation tourism development. All resources and efforts such as finance, expertise, and bridging stakeholders are aimed at making the strategy work. The "lead" part of the strategy started with the decentralization policy, when the capacity of the newly established local government was still weak. International NGOs initiated or took part in and dominated nearly all marine conservation (tourism) governance arrangements. In the scoping phase, while the new regional government of Raja Ampat was still defining its organizational structure and infrastructure, the NGOs conducted extensive research and outreach on marine conservation. Afterwards, they proposed the delineation of MPAs and management zones to local communities, and managed MPAs with and on behalf of the local communities (Rudyanto et al., 2016). For example, TNC facilitated the marine conservation agreement between Misool Eco Resort and the community members who own the customary rights (Halim and Udelhoven, 2010). During the transfer phase, the NGOs formed a closed co-governance arrangement with the regency's MPA authority. The effectiveness of this closed co-governance arrangement (the result of the strategy) is beyond the scope of this article. Overall, the responsibilities taken up by the NGOs, both at the local and the regional level, reflects the devolution of tasks from state to non-state actors, parallel to those from central to lower levels of government.

Besides the proliferation of non-state governance arrangements, the conservation tourism governance arrangements in Raja Ampat during the last decade have been dynamic and transformational, as most governance arrangements that were set up in the establishment phase changed. The most remarkable shift has been the drive to manage the proliferation by bringing "the environmental state back in" (Mol, 2016) after the strong involvement of non-state actors. This has led to a development from non-state governance and open co-governance arrangements in the direction of closed co-governance arrangements. For example, the tourism entrance fee, which was managed collaboratively among various stakeholders such as conservation NGOs, resorts, liveaboard operators and homestay operators under the coordination of the regency's Tourism Office, shifted to the ecosystem services stewardship fee managed by the MPA authority, a governmental technical unit under the Marine and Fishery Office (Atmodjo et al., 2017). Almost at the same time, MPAs which were designated and managed by two NGOs separately involving local communities, were transferred to be managed by the MPA authority. The NGOs, together with Starling

Resources, took a new role as partners of the MPA authority in the management of MPAs. They provide advises and facilitate institutional capacity building such as developing operating procedures, conducting staff training, linking the MPA authority with other stakeholders, as well as financing the new entrance fee scheme. The two NGOs provided funding, sourced from Walton Family Foundation, to cover the operational cost of the MPA authority. The tourism entrance fee and MPA network were two separate and independent governance arrangements, although revenues from the tourist entrance fee were spent on conservation activities conducted in MPAs (Atmodjo et al., 2017). The transfer of MPA management and of the new entrance fee scheme to the regency MPA authority also reflects the integration of the two arrangements into a single closed co-governance arrangement.

The shift from non-state governance arrangements and more open co-governance arrangements to a closed co-governance arrangement gives the impression that the regency decided to take over and centralize the management of the MPA network and the entrance fee scheme. But it was as much the NGOs that pushed the management of the MPA network back to the regency's government. Already in the scoping phase the NGOs encouraged the customary right owners to hand over the mandate of marine resources management (of MPAs) to the regency. This process somewhat runs counter to recent political ecology perspectives on the role of large conservation NGOs that enlarge control over natural resources through neoliberal arrangements with the private sector (e.g. Brockington, 2008; Sachedina, Igoe, & Brockington, 2010). Private foundation funding is indeed playing an important role in financing governmental and non-governmental marine conservation efforts in Raja Ampat, but the international NGOs are rather aiming to institutionalize conservation within the long term and legitimate authority of the regency. The status of the NGOs as foreign organizations and predefined project (funding) duration prevent them from managing the MPA networks permanently. The local manager of CI in Sorong confirmed this reason:

> "As a foreign NGO we are not allowed to operate protected areas. The territories belong to customary communities and the government. They are the ones who hold the right to manage the protected areas. We assist them to manage the protected areas, and focus our position to provide scientific information when required".

Therefore preparations for handing over MPA management to the regency have been taken in an early phase of the marine conservation process. The transfer of the tourist entrance fee management from the regency's tourism office to the MPA authority was driven by organizational challenges, which meant that a considerable share of the fund remained undisbursed in the committee's bank account when the committee was dismissed. As explained by a local TNC manager:

> "Members of the committee living in different locations made it difficult to arrange committee meetings every three months to disburse the entrance fee revenue. In addition, NGO leaders are quite mobile, so lower level staffs often attended the meetings which meant that decisions often couldn't be made"

Besides being managed by a single institution, the design of the new arrangement has partially dealt with these effectiveness issues, by developing a comprehensive set of operating procedures (Atmodjo et al., 2017).

Arguments for decentralization are often related to participation of local population (Ntsebeza, 2004). Over time, however, local communities have been involved in different and sometimes confusing ways in consecutive marine conservation tourism governance arrangements. In research and outreach activities during the scoping phase, local communities were informed on the status and utilization of, and the threats to, marine resources. They were also consulted in the delineation and establishment of the MPAs, and the zones within them. For example, village sanctuaries established during COREMAP-II are located in the Dampier Strait MPA, which was developed by CI. Despite the absence of a clearly structured collaboration between CI and COREMAP-II, CI agreed to involve community surveillance groups of village sanctuaries in their MPA patrols. The concession area of Misool Eco Resort, arranged through the marine conservation agreement, is within the South Misool MPA delineated by TNC. The communities with which Misool Eco Resort engaged in the marine conservation agreement are also involved in the MPA establishment by TNC. While some local community members were also recruited by tourism operators and international NGOs during the scoping phase, this number increased starkly in the establishment phase. However, TNC and CI applied different schemes in their recruitment. While TNC recruited local community members as field facilitators and paid them on activity basis, CI recruited them as field staff and paid on a monthly basis. They basically performed the same function in the field, but had a different employment status. The village institutions to handle village sanctuaries (established by COREMAP-II) have not been adopted into the management of the new MPA authority, while there is also no visible coordination between rangers of Misool Baseftin and the South Misool area division of the MPA authority. Overall, community participation does not seem to have improved during the transformation course of governance arrangements. The management institutes developed during COREMAP-II project were practically dismissed. A former leader of the community surveillance group of Pam village simply explained the reason as: "no funds available any more to operate the organization and to cover operational cost."

The conservation tourism governance arrangements of Raja Ampat are likely to continue to change in the future, triggered by the issuance of the new Local Government Law by the

Central Government in 2014 (Steni, 2016). Initially, Indonesia's decentralization policy delegated some (central) authority to regency and municipality governments, with the provincial government only as a coordinator. Controversies on financial spending by regency and municipality authorities resulted, among others, in the decision to transfer authority in natural resource management and spatial planning, including MPAs, to the provincial government. Issuance of new Local Government Law in 2014, which requires transfer of spatial and natural resources (e.g. forests, marine) from regency to provincial government is likely to lead to a further recentralization of marine tourism conservation governance to higher government levels (province). As this law also gives the central government the right to take over management of natural resources from provincial authorities if it is considered a failure, governance arrangements may be expected to centralize even further. Hence, it is expected that "recentralization" will take place in the governance of marine conservation tourism of Raja Ampat. But also with this development, the role of (inter) national conservation NGOs is expected to continue, specifically in bridging between the Raja Ampat regency government and West Papua Province, in capacity building of the provincial government in managing the MPA network, and in ensuring continuity of marine conservation governance.

In Figure 2.4 we plotted the development over time of governance arrangements on two dimensions of devolution: decentralization, i.e. the level of jurisdiction (decentralized to centralized), and actors (hierarchical governance to non-state governance). The shifts of marine conservation governance arrangements in Raja Ampat tend to reflect a recentralization and a strengthening of the state; hence, towards hierarchical governance and more centralized institutions. However, this process was designed and pushed by the international NGOs, rather than pulled and demanded by regency government (Ribot et al., 2006).

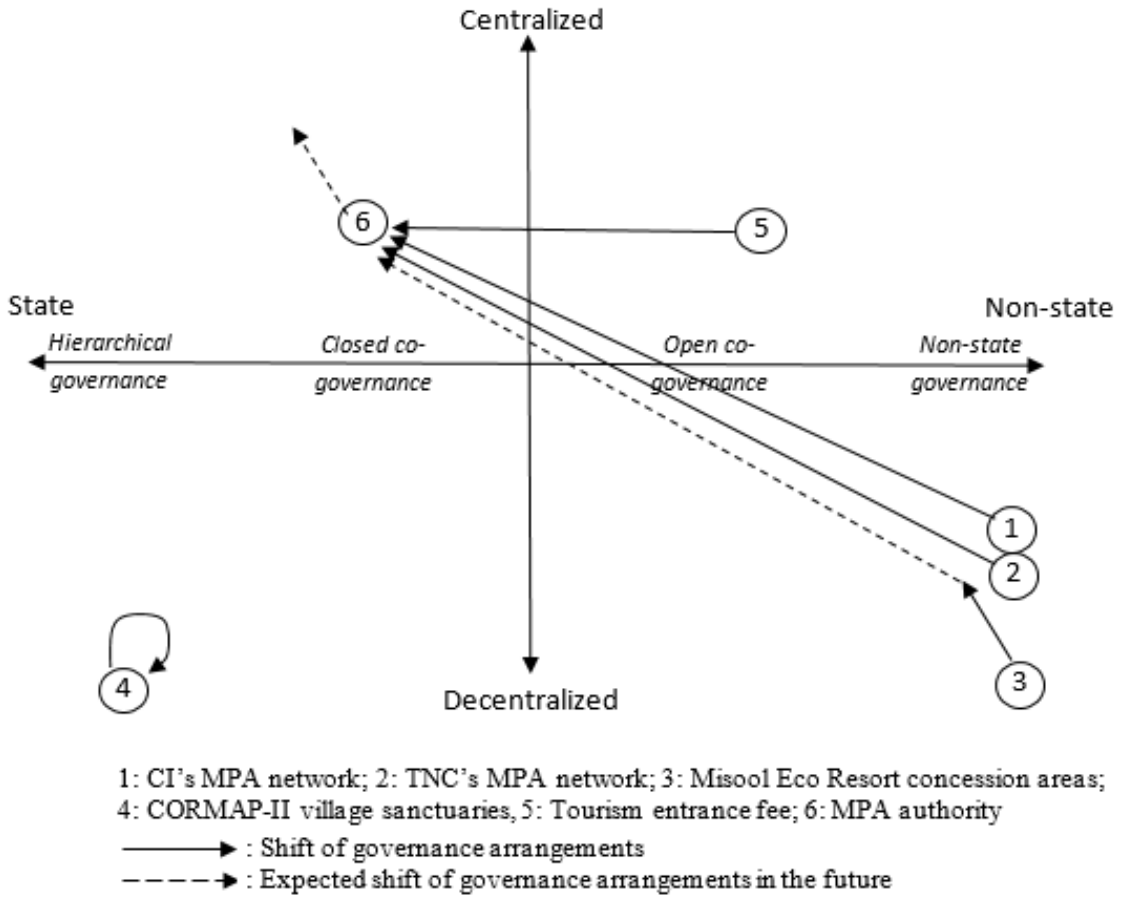


Figure 2.4. Shift of governance arrangements in marine conservation tourism: 1998-2017

2.6. Discussion and conclusion

This paper analysed the long term dynamic process of governing conservation and improving local livelihood through marine conservation tourism, focusing on the role of conservation NGOs in governance arrangements for marine conservation tourism in Raja Ampat. Over a period of two decades conservation tourism governance evolved from a non-state and open to a more closed co-governance arrangement, from a predominantly decentralized to a more centralized governance arrangement and from a patchwork of separate governance arrangements to a more integrated wider governance arrangement. International conservation NGOs have played, and continue to play, a crucial role in the establishment, institutionalization and transition of governance arrangements in marine conservation tourism in Raja Ampat, including strengthening the financial, knowledge, technical and legal capacity of the regency government of Raja Ampat. They helped the regency government to establish and institutionalize the MPA network. International NGOs also played important roles in bridging different stakeholders, for example in encouraging customary right owners to transfer the mandate of marine resources management to the local government. But also by

facilitating communication and partnerships among the regency, tourism operators and local communities around the tourism entrance fee system. By partnering with the regency, the NGOs were able to overcome their lack of legitimacy (Zaidi, 1999) in promoting and carrying out conservation measures. But they also improved the regency's legitimacy and authority in enforcing MPAs and wider marine conservation. This collaborative strategy reflects the change of the relationship between the state and NGOs in Indonesia, which was predominantly conflict-ridden in the pre-decentralization era (Bryant, 2001).

This collaborative strategy was enabled by Indonesian decentralization policy, which further devolved policy-making and implementation to lower tiers and promoted the role of non-state actors in pursuing conservation objectives. The initial more open patchwork of non-state and co-governance arrangements in marine conservation tourism developed into a more closed and more integrated co-governance arrangements at a later phase. The regency government gained more control over conservation tourism arrangements as NGOs and local communities became embedded in the structure of the MPA authority. Other stakeholders such as tourism operators and local tourism businesses played a lesser role during the later phase. Even with the envisioned future recentralization in marine conservation tourism governance (inter)national NGOs will remain important co-governing actors.

Our research identifies some ineffectiveness of conservation tourism governance arrangement in Raja Ampat, for example regarding the entrance fee system. Research on conservation tourism governance in Southeast Asia more broadly resulted in mixed results with regard to the effectiveness of institutional arrangements. For example, in the context of the transition from a community-based arrangement to a state managed protected area in Apo Island, The Philippines (Hind et al., 2010), local livelihood and infrastructure improved markedly (Russ et al., 2004). This remarkable as top-down approaches are criticized (Islam et al., 2017), while others reject the argument that CBT is more effective than other arrangements (Javier, 2003). Other results of conservation tourism governance in Malaysia and Indonesia also emphasized its ability to enhance living standards of locals, provide development funds, and create alternative livelihood (Harris, 2009; Van Beukering et al., 2007b; Yusof et al., 2013). Future research on conservation tourism governance in Raja Ampat can learn from challenges experienced in other countries, such as Malaysia, Thailand and The Philippines, such as ambiguous and overlapping regulations, inconsistencies with local settings (Hussin et al., 2015; Oracion et al., 2005; Thuy, 2016), transparency and accountability (Mohammed, 2010), exclusion of locals from decision making in planning (Johari et al., 2015), and poor coordination in multi actor and multilevel governance (Gan et al., 2019; Marzuki et al., 2014). Others point to rising equity challenges resulting from marine conservation tourism

issues, including power dissymmetry among local actors in decision making (Gier et al., 2017), equitable cost and benefit sharing at different governance levels (Othman and Zin, 2013), differences in benefits between conservation tourism actors (Ariffin & Yen, 2017; Pusiran & Xiao, 2013) and between localities in conservation tourism destinations (Van Beukering et al., 2007a). A future research agenda is needed to study as to whether the shifts in governance improve the effectiveness in achieving multiple objectives of conservation tourism, i.e. to conserve nature and at the same time to improve local livelihood through tourism development in protected area.

Chapter 3: Financing marine conservation tourism: Governing entrance fees in Raja Ampat, Indonesia[3]

Abstract

Worldwide, the growth of marine tourism is creating opportunities for financing marine protected areas (MPAs), but what these financial arrangements look like and how they can be governed at larger scales, and in equitable and transparent ways, is unclear. This paper examines the governance arrangement of two region-wide successive entrance fee systems established since 1997 in Raja Ampat, Indonesia, to finance a network of MPAs delineated under the auspices of two big international non-governmental organizations (NGO), namely Raja Ampat Entrance Fee and Raja Ampat Ecosystem Service Stewardship Fee. These two successive entrance fee systems can be viewed as payment for environmental services (PES) arrangements. The PES-like entrance fee arrangements improved in terms of participation, transparency and equity. In the second scheme, local communities in Raja Ampat were involved in the design of the disbursement of the community fund, and the criteria for disbursement became more clear and transparent. However, in both schemes there is no clear connection between the distribution of the funds and activities that improve environmental services provision (conditionality). In addition, the latter scheme is still facing equity challenges as some communities with customary rights over marine tourism hotspots are asking for additional user-fees from tourists and tourism operators.

Keywords: Conservation tourism, entrance fee, payment for ecosystem services, Raja Ampat

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[3] This chapter has been published as: Atmodjo, E., Lamers, M., Mol, A., 2017. Financing marine conservation tourism: Governing entrance fees in Raja Ampat, Indonesia. *Marine Policy 78; 181-188*

3.1. Introduction

Over the last three decades, the designation of marine protected areas (MPAs) worldwide has increased and proliferated, but not reached a similar coverage compared to terrestrial protected areas (De Santo, 2012; Thur, 2010). Generally, MPAs aim at the protection and maintenance of ecological values and biodiversity conservation in response to increasing marine activities and global environmental changes that lead to the degradation of marine resources (Depondt and Green, 2006; Reid-Grant and Bhat, 2009; Rylance, 2016). Generally, it is seen as the responsibility of the government to designate and manage MPAs (De Santo, 2012). However, government funding for managing the increasing number of MPAs is regarded insufficient (Whitelaw et al., 2014), and lack of monitoring and enforcement makes it difficult to achieve conservation objectives. With 70% to 80% of MPAs worldwide being labelled as 'paper park' (Depondt and Green, 2006), the dependency on only government funding to achieve marine conservation is therefore considered problematic (Whitelaw et al., 2014).

Marine tourism is widely regarded as a strategy to overcome the shortfall of finance for effective management of MPAs, for example through user payments and licensing fees (Depondt and Green, 2006; Thur, 2010; Whitelaw et al., 2014), philanthropic donations (Reid-Grant and Bhat, 2009), or private conservation mechanisms (De Santo, 2012). Various studies have examined the opportunities and limits of tourist entrance fees for financing MPAs, for example with regard to the tourists' willingness to pay (WTP) entrance fees to cover management costs (Chung et al., 2011; Gelcich et al., 2013; Peters and Hawkins, 2009), the mixed attitudes of tourists toward entrance fees and their structure (Bowker et al., 1999), and the impact of entrance fees on visitation (Whitelaw et al., 2014). While most of the mentioned literature focuses on the tourist side, the literature on the governance side of MPA entrance fee arrangements is rather scarce, particularly regarding their longer term ability to deliver tangible results for the stakeholders and communities involved.

A recent and relevant perspective is provided by the literature on payments for environmental services (PES). PES was invented as a market approach to overcome environmental externality problems (Gómez-Baggethun et al., 2010; Pagiola, 2008; Vatn, 2010). Implementation of PES is aimed at providing incentives to those who manage or have control over natural resources to make decisions that maintain positive or reduce negative externalities through direct market transactions. Those who bear the cost of generating a particular environmental service should be compensated by those who benefit from the service. The most widely used conceptualization of PES describes it as: (1) a voluntary

transaction between (2) at least one service provider who must secure its provision and (3) at least one service buyer for (4) environmental service (ES) (5) if and only if the service provider secures the provision of the environmental service (conditionality) (Wunder, 2005). Most PES programs worldwide are implemented for terrestrial environments (Hejnowicz et al., 2014), with common environmental services being carbon sequestration and storage, biodiversity conservation, watershed protection, and landscape beauty (Wunder, 2005), administered through different market mechanisms, such as ecotourism, watershed services, hunting permits and green commodities (Corbera et al., 2009; Hein et al., 2013). There is great potential of PES arrangements for conserving coastal and marine environmental resources, including in commercial fishing, aquaculture and marine tourism (Forest Trends (Organization) and Katoomba Group, 2010), but the current literature is limited.

Lessons from the implementation of PES arrangements in terrestrial environmental settings suggest a number of design principles for successful PES governance arrangements. First, the design of the PES arrangement needs to be clear on who the buyer is, what environmental service is delivered (conditionality) and how the payment mechanism works. Second, direct transactions between buyers and sellers are favoured over payment mechanisms aided by intermediaries (Pagiola, 2008), as direct payments enhance transparency. Third, payment mechanisms need to represent an equitable distribution of costs and benefits in the eyes of the participating groups (Adhikari and Boag, 2013). Fourth, it is important for local communities, in whose territories the PES arrangement is set, to benefit, for example by income accrued to local communities, job creation, or other forms of livelihood enhancement (Gios and Rizio, 2013). Conceptually, these design principles of PES arrangements resonate with the environmental governance literature in understanding how governance arrangements can be steered in ways that are seen by those involved as effective, participatory, equitable and transparent (Lamers et al., 2014b).

This paper aims to contribute to our understanding of policy change in financing marine conservation tourism by analysing the Raja Ampat entrance fee as a PES governance arrangement. Even though there is no explicit statement about a particular paradigm on which the Raja Ampat entrance fee was developed, it shows a relationship with the concept of ecosystem services (ES) - ecosystem processes, functions, organization or structure utilized or consumed by human being for their wellbeing (Fisher et al., 2009; Silvestri et al., 2013), where the fund paid by tourists will be used to maintain ES. Therefore, this paper will analyse the evolvement of the Raja Ampat entrance fee as a PES arrangement.

The designation of the Raja Ampat Regency in 2003 opened opportunities for marine resources to be managed locally (Varkey et al., 2010). The Indonesian central government policy regarding marine conservation gave way for the establishment of locally managed MPAs as part of sustainable marine resource use (Rudyanto et al., 2016). This has led to the establishment and management of six MPAs developed under the auspices of two international non-governmental organizations (NGOs) involved in nature conservation, i.e. Conservation International (CI) and The Nature Conservancy (TNC). The management of these MPAs has recently been transferred to the local authorities. In attempting to ensure economic benefits from tourism to local communities, in 2007 the Raja Ampat Regency government established a tourist entrance fee system (Mangubhai et al., 2012). This scheme encountered a range of governance challenges regarding the management and disbursement of the funds generated, and was revised in 2015, after being in effect for eight years.

This paper aims to understand the extent to which the revision of the entrance fee system of Raja Ampat resulted in a better design from a PES perspective, to identify the governance challenges of the arrangement with regards to transparency and equity, and to generate insights in the global challenge of financing marine conservation.

The next two sections present Raja Ampat and the methodology used in this study, including a description of the case study area, the data collection and the analysis. Subsequently a brief historical account is given of the establishment of the entrance fee scheme and the challenges faced by the Raja Ampat, followed by an analysis of the two schemes. The article closes with conclusions.

3.2. Raja Ampat marine conservation

The research is set in Raja Ampat, an archipelago in West Papua Province, Indonesia (see Figure 3.1), consisting of four large islands and more than 600 small islands and atolls. The population of Raja Ampat is relatively small, but it hosts diverse ethnic groups, including indigenous Melanesian and long time settlers from adjacent areas (Agostini et al., 2012). The area draws global attention because of its richness in marine biodiversity (Agostini et al., 2012; Mangubhai et al., 2012; McLeod et al., 2009). Following the decentralization policy of the Indonesian state (Barr et al., 2006; Tokede et al., 2005), Raja Ampat was established as a regional administrative unit in 2002, which became operational in 2005 (Pemerintah Kabupaten Raja Ampat, 2006). The fishery sector became a development priority during the first 5 years of the new Regency, while marine tourism became more important in the government development program since 2010 (Arman, 2014). The potential benefits of the rich marine biodiversity for marine tourism suffered from illegal and destructive fishing

practices, both by local community members as well as by outsiders (Larsen et al., 2011; Mangubhai et al., 2012). Threats to marine biodiversity in the area (Mangubhai et al., 2012) encouraged marine conservation efforts involving various international NGOs (Rudyanto et al., 2016), such as Conservation International (CI) and The Nature Conservancy (TNC). A network of 6 MPAs was designated under auspices of CI and TNC, covering a total of 1.113 million hectares, scattered from the north part to the south part of Raja Ampat (Rudyanto et al., 2016) (see Figure 3.1). In addition, from 2005 till 2015 the World Bank coral reef rehabilitation and management program (COREMAP II) funded and implemented various projects in the area.

In the wake of these international conservation initiatives marine tourism activities have been growing over the last decade (Mangubhai et al., 2012; Tafalas, 2010). Raja Ampat is considered a tourism hot-spot, well known for its incomparable coral reef diversity (Huffard et al., 2012). Tourism businesses increased considerably in the last decade, with around 14,000 visitors in 2015, mostly international tourists. Permanent yearly operation permits for liveaboards (tourist vessels) is limited by the Regency to 40 vessels, permits for resorts outside the capital city is limited to 20, while homestays (local accommodations) have grown to more than 40 units. Raja Ampat's tourist attractions range from coral reef SCUBA diving and snorkelling, to bird watching, kayaking and scenery sightseeing. Most of these tourist attractions are located in MPAs, with the majority in the Selat Dampier MPA, while one of the most iconic attractions, Piaynemo, is located outside any MPA (see Figure 3.1).

To ensure the benefit of marine conservation tourism to the local communities, a tourism entrance fee system has been developed by the local authority, which has undergone a number of remarkable changes since its inception. The Raja Ampat tourist entrance fee scheme thereby provides an excellent context for exploring governance arrangements of financing marine conservation tourism. The case study of Raja Ampat allows us to carry out an in-depth exploration of these governance challenges in a particular temporal and spatial setting (Kumar, 2011; Yin, 1994).

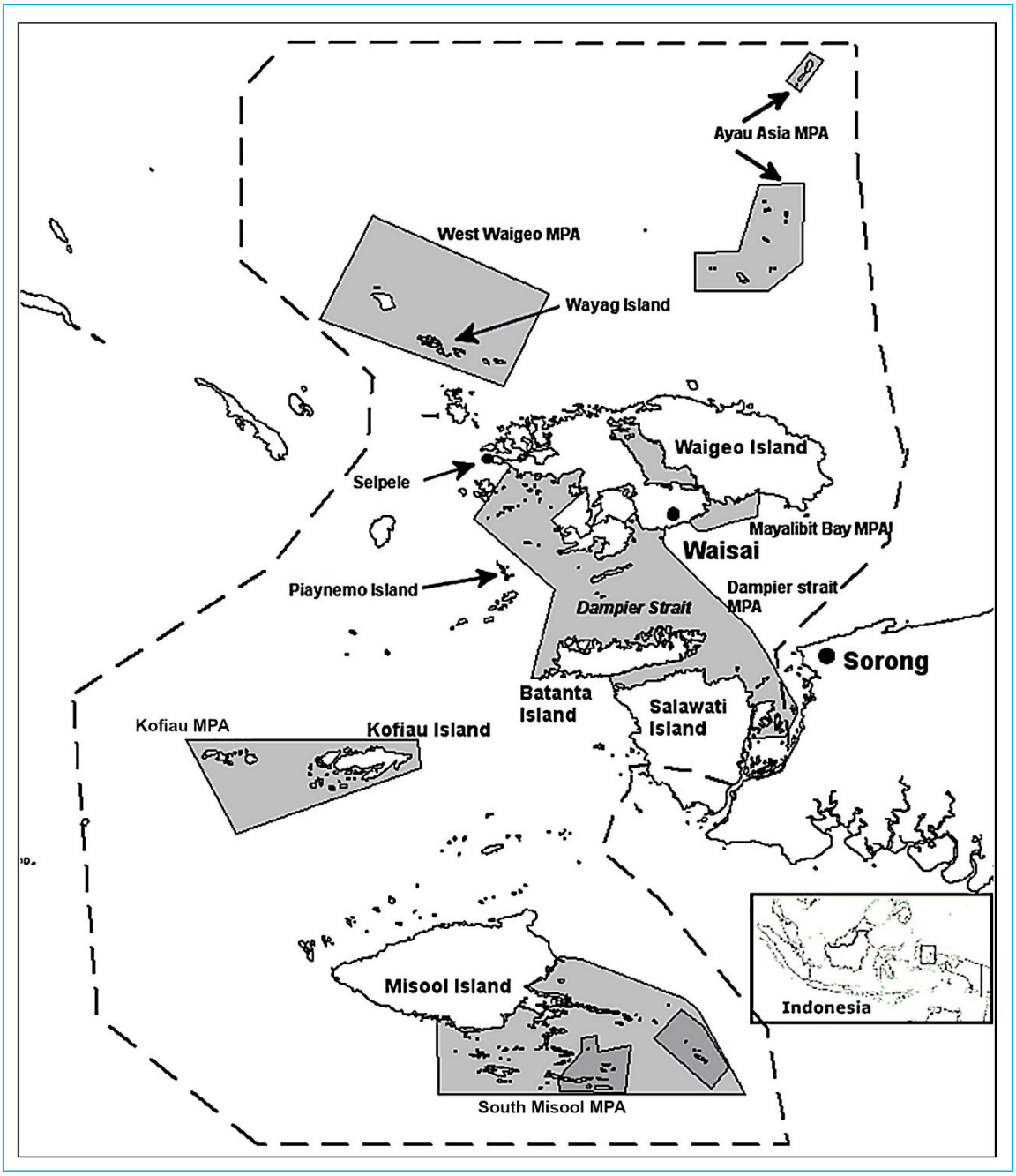

Figure 3.1. Map of the case study area

3.3. Methodology

3.3.1. Case study

To achieve the objective of this paper, i.e. understanding policy change in financing marine conservation tourism, a qualitative case study research design was chosen (Kumar, 2011). Raja Ampat as case study area provides different characteristics compared to other PES schemes outlined by most literatures. Most PES schemes are implemented on single delineated terrestrial areas, with less heterogeneous local communities, and few stakeholder

organizations involved (Anyango-Van Zwieten et al., 2015; Clements et al., 2010; Gios and Rizio, 2013; Lamers et al., 2014b). Raja Ampat PES-like scheme is implemented in the whole Regency covering around 4 million hectares area of archipelago where 117 villages and 6 MPAs are scattered across the Regency. Although it is has only around 56,000 inhabitants, the local communities of Raja Ampat consist of four tribes. Each of the four tribes consists of several sub tribes (Arman, 2014). This raises different challenges in the implementation of the PES-like scheme compared to similar schemes in other settings.

3.3.2. Data collection and analysis

Fieldwork was carried out between October 2014 and January 2015. Three qualitative data collection techniques were used in this research, i.e. in-depth interviewing, participatory observation and document analysis (Kumar, 2011; Ritchie and Lewis, 2003). In-depth interviewing was used to obtain information regarding the ideas, roles, resources and experiences of actors involved in, as well as the rules and process that lead to, the entrance fee arrangements (Kumar, 2011; Ritchie and Lewis, 2003). Twenty two in-depth interviews were held with individuals and small groups, involving 19 respondents in total, identified by using the snowballing technique (Arnouts, 2010). Key players were approached first, in this case the head of the Tourism Office of Raja Ampat and the NGO representative who was involved deeply in conservation in Raja Ampat. They were asked to suggest other relevant individuals, which were then selected as respondents. Additional respondents were found in this way, until no new information was found from the last respondents. Respondents typically included those in leading positions in marine conservation tourism governance, both in the present and during the past two decades, such as government directors and staff (A), NGO officers and staff (B), community leaders (C) and tourism operators (D). Most interviews were recorded and subsequently transcribed verbatim. Second, during fieldwork the first author participated in a number of activities and meetings as participant observer, and functioned as a consulting expert in the redesign of the mechanism to disburse collected entrance fees. Observations of discussions and interactions between various actors during such meetings resulted in detailed notes and insight. Thirteen participants of different meetings were identified providing information and opinions relevant to this paper, hence they are also regarded as respondents (Table 3.1). Third, document analysis was conducted to obtain information from a range of secondary sources collected before and during the fieldwork, such as reports (published and unpublished), maps, minutes of meetings, meeting presentations and websites.

Table 3.1. List of Respondents

Respondent	Affiliation
A_1	Tourism office
A_2	Tourism office
A_3	Tourism office
B_1	NGO
B_2	NGO
B_3	NGO
B_4	NGO
B_5	NGO
B_6	NGO
C_1	Local community leader
C_2	Local community leader
C_3	Local community leader
C_4-C_7	Local community leader (FGD)
C_8-C_{10}	Local community leader (FGD)
C_{11}-C_{13}	Local community leader (FGD)
C_{14}	Member of provincial house of representative/Leader of local NGO
D_1-D_3	Board members of homestay association (FGD)
D_4	Homestay operator
D_5	Resort operator
D_6	Resort operator
D_7	Resort operator
D_8	Liveaboard operator
D_9	Liveaboard operator
D_{10}	Liveaboard operator
D_{11}	Liveaboard operator
D_{12}	Liveaboard operator
D_{13}	Speed boat operator
D_{14}	Speed boat operator
D_{15}	Speed boat operator

The interview data formed the starting point for the analysis. Interviews were coded with an eye on the governance challenges faced and the PES lessons presented in the introduction. The interview findings were further substantiated, cross-checked and triangulated using observation notes and documentation.

3.4. The Raja Ampat entrance fee

3.4.1. Establishment

The increasing involvement of foreign and non-indigenous people and organizations in the development of tourism and marine conservation fuelled the local perspective on outsiders benefitting more from marine resources than the local community of Raja Ampat (Larsen et al., 2011). This has encouraged local communities holding customary rights over marine resources in popular tourism sites to collect visitor fees from tourists and tourism business to access these sites. While these informal local entrance fees made sense from a community perspective, this practice was seen as unfavourable by the conservation NGOs and tourism businesses ($B_2 - B_4$, $D_5 - D_{11}$).

In 2007, the Regency government of Raja Ampat passed a regulation that created the Raja Ampat entrance fee, partially to deal with the problem of communities collecting entrance fees to their sites, and also to generate revenue to cover the costs of marine conservation. Subject to the regulation were visiting tourists and researchers, both international and Indonesian, except Raja Ampat residents. An international visitor would pay Rp 500,000 (equivalent to US$ 40), while an Indonesian visitor paid Rp 250,000, for a one year permit to visit tourist sites or conduct research in Raja Ampat Regency. Visitors would be given a proof of payment and a souvenir. Rp 150,000 from each of international tourists and Rp 75,000 from each of domestic tourists (30% of entrance fee respectively) went to the general revenue of the Regency. The rest of the revenue was divided into three allocations: 20% to cover the operational cost of managing the revenue of the entrance fee system, 40% for the conservation fund, and the remaining 40% for the community fund.

The so-called non-retribution fund management team (fund management team hereafter) was established to manage the revenue of the entrance fee and was accountable directly to the Regent. The fund management team, led by the director of the tourism office, consisted of a conservation section and a creative economic section. The conservation section was led by a staff member of the COREMAP project, and further included managers of CI and TNC. It was appointed to develop proposals to the fund management team and organizing the disbursement of the fund for conservation efforts. The creative economic section, led by an officer of the tourism office and including a homestay operator and a liveaboard operator, was appointed with the task of advising the fund management team and organizing the disbursement of the fund for activities aimed at improving local livelihood. Revenue from the entrance fee was allocated to the general revenue of the Regency, to conservation efforts (e.g.

rule enforcement in MPAs, ecological monitoring of coral reefs), to a community fund to enhance local livelihood, and to the costs of the fund management team.

The fund management team was not guided by specific rules or any standard operating procedure (SOP) that would describe the working procedures of the fund management team and the disbursement mechanism of the revenue to the community or to conservation efforts (A_2). Interviews, however, revealed that the revenue of the entrance fee was initially used to provide food supplements for children under 5 years old in 75 villages, and was later on used for funding projects proposed by local communities or NGOs (A_1, A_2). Project proposals submitted by local communities were collected by the secretary, and subsequently analysed by the fund management team for approval.

3.4.2. Challenges

When analysing the Raja Ampat entrance fee in line with the PES principle, it becomes clear that the entrance fee was applied to international and domestic tourists and researchers, who can be identified as ecosystem service (ES) buyers (Raja Ampat Regency Regulation 64, 2007; 65, 2007). However, the supply side of the ecosystem service was not clear-cut (Figure 3.2). The supply side of the ecosystem service was identified by analyzing the role of actors in the field, both in interviews and in policy documentation (Regulation 65/2007). The Regency and local communities can be seen as principle ES sellers, as the payment granted access to environmental resources in their region and part of the revenue is accrued by community members whose community project proposals were approved. Further, the analysis of revenue disbursement revealed that some proposals were submitted by MPA staff who worked for TNC and CI for conservation efforts conducted in MPAs managed by CI and TNC. This positioned CI and TNC as ES sellers as well, because their conservation activities were partly financed by revenues from the entrance fee. At the same time, the members of the fund management team, including the NGOs and a local tourism operator, can be regarded as intermediaries in the ecosystem service purchasing process, as they disbursed the entrance fee to the recipients. It has been argued that this mixing of roles on the supply side has affected the transparency of the revenue distribution process.

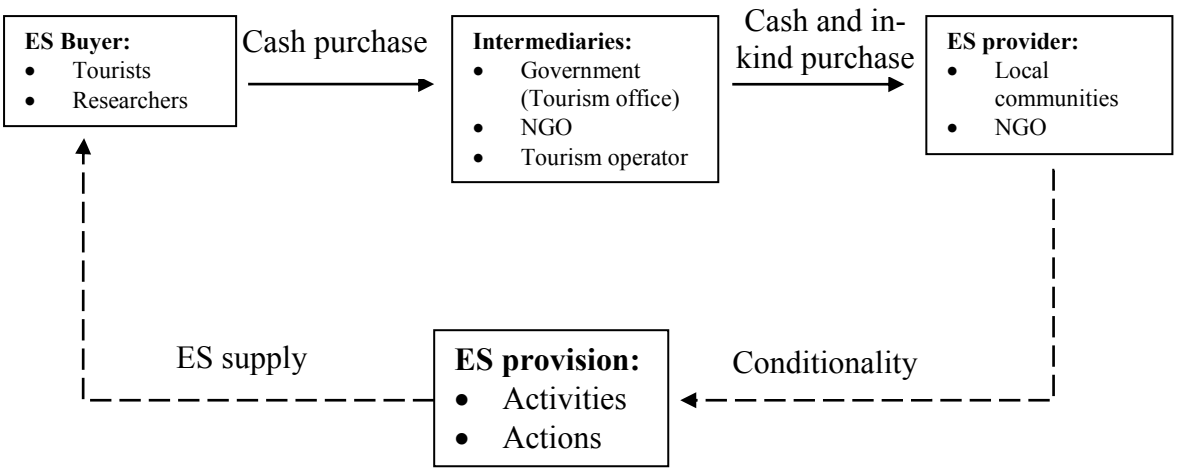

Figure 3.2. Overview of Raja Ampat Entrance Fee through PES framework.
⟶ = Clear arrangement; - - -► = Unclear arrangement;

As the entrance fee system and the fund management team were established through government regulation, the revenue collected was considered government funds, to be managed according to central government financial regulations and subjected to governmental financial audits. An interview with the secretary of the fund management team revealed that the lack of operating procedures and mechanisms for disbursement had made the team very cautious in money disbursement, in order to avoid violations of government regulation. This resulted in the accumulation of the funds in the account of the fund management team and a very low disbursement rate. Respondents from NGOs mentioned that with respect to the objective set during its establishment the entrance fee system was considered ineffective (B_3). This has led to disappointment among the local community who had refrained from illegal and destructive fishing. Furthermore, it turned out that the entrance fee system had not stopped some villages close to popular sites from collecting their own visitation fee from tourists and tourism operators. Two tourism liveaboard operator (D_1, D_1) pointed out that: "..it is as if the situation has been back to the beginning..". Two village officers (C_2, C_3) acknowledged that they have issued a Village Regulation to collect tourist fee, while a secretary of another village (C_1) implicitly acknowledged that they were also collecting fees from tourists by saying:"...we will stop asking fees if the community fund is distributed to our village."

Analysis of the disbursement mechanism of the revenues revealed that there was no specific ES provision required by the recipient through the fund management team. The idea was mentioned that payments to local communities were made in an attempt to encourage them to preserve the marine and coastal environment (A_1, A_2, B_1-B_4). Growth of local tourism businesses funded by revenue from the entrance fee was assumed to increase boat traffic that can help in stewardship of the surrounding environment (B_3). However, no arrangement

related the payment to actors that improve the environmental quality and to the kind of conduct necessary. In consequence, the conditionality of the PES could not be monitored or assured.

In an interview about the design and implementation plan of the new entrance fee system, a resort operator (A_1) voiced the disappointment of the local community:

> "There was disappointment in Misool on the disbursement of the community fund in the past by evenly distributing the fund to all villages. Tourist destination villages which were visited more by tourists disagree with the scheme and think it is illogical"

According to community fund distribution data, the first distribution of revenue from the entrance fee was made in 2010, in the form of healthy food supplements for children under 5 years old. The food supplements were distributed evenly to 75 villages. The implementation was made in collaboration with the health units of the respective villages. Since 2011, the fund was used to finance proposals submitted by local communities to develop tourism business and to conduct conservation activities in some villages. The distribution of healthy food supplements was discontinued. It is clear that the idea of resort operator A_1 mentioned above does not completely match the revenue distribution process, since the community and conservation fund were distributed based on proposals submitted to the fund management team instead of being evenly distributed among all villages. However, the distribution did reflect challenges in transparency, equity as well as conditionality.

3.4.3. Revisions

In 2014, changes in regulation from the Regency brought a range of modifications to the arrangement of the entrance fee system (Regent Regulation 18/2014). First, the responsibility for managing the tourist entrance fee was transferred from fund management team to UPTD-KKPD, a local authority under the Marine and Fishery Office, whose primary responsibility is the management of the MPA network. This meant that the Regency retained a prominent role in the management of the scheme. Second, the entrance fee system was officially renamed ecosystem service stewardship fee, called stewardship fee hereafter. Third, parallel with the transfer of responsibility changes in the annual entrance fee rates took place, increasing it to Rp 1,000,000 for international and Rp 500,000 for Indonesian visitors. Fourth, under the new scheme the largest share of the fund is allocated to cover operational and non-operational costs of managing the MPA network, while Rp 1.5 billion per year will be allocated for the community fund. The contribution of international tourists to the general revenue of the Regency was doubled to Rp 300,000 per visitor, while domestic tourists' contribution remained at Rp 75,000 per visitor. Hence, 70% of the revenue from international

tourists and 85% of the revenue from domestic tourists will be managed by UPT-KKPD to cover operational and non-operational costs, after deduction of Rp 1.5 billion for the community fund.

As more than 70% of the revenues from the stewardship fee will be used by UPTD-KKPD in managing the MPA network, UPTD-KKPD is identified as the central ES seller in the new arrangement. Since regulation on the establishment of UPTD-KKPD also incorporate NGOs as partners of the MPA network management, they also play a role as the ES sellers. The provision of Rp 1.5 billion per year for the community fund puts the community in a ES seller position as well.

The strategic business plan of UPTD-KKPD outlined four strategic programs, namely institutional enhancement, MPA network management, livelihood improvement of local communities around MPAs, and monitoring and evaluation. An important activity in the implementation plan of the strategic programs is stewardship patrol, which according to the business and budget plan absorbs 67% of on site management costs of MPAs. Minimum outputs of stewardship patrol, as well as activities of other strategic programs are clearly stated in the plan. Rangers of the MPA authority are required to conduct marine patrols in the MPAs twice a week, involving the community surveillance group consisting of four villagers. Standard operating procedures for implementation of planned activities were also developed. A supervisory and audit body was established in the organizational structure of UPTD-KKPD, to monitor revenue utilization from the stewardship fee. This arrangement shows a potentially strong conditionality of ES payment.

Standard operating procedures for disbursement of the community fund were also established. The process leading to the establishment of the standard operating procedures consisted of two main steps, conducted under auspices of CI, TNC and Starling Resources (SR), a management consultancy firm focused on conservation under Bird Head Seascape (BHS) partnership. The first step was a review of the previous entrance fee system and community consultancy. Community consultancy consisted of in-depth interviews with relevant government officers, tourism operators, as well as local leaders to obtain possible designs for allocation and disbursement. Three focus group discussions (FGD) were then conducted involving village community leaders of villages around MPAs to generate opinions and advice regarding the design of allocation and disbursement of the community fund. The selected design of allocation and disbursement of the community fund were then brought to the second step, a formal procedure for establishment of government regulation called public consultancy, involving relevant heads of governmental institutions, members of

the house of representatives of the Regency, and local community leaders. The approved allocation and disbursement mechanism was then communicated to the villages in a series of FGDs.

The steps taken to create the fairly complex design of the mechanism of community disbursement are expected to improve transparency. The community fund can only be disbursed based on proposals submitted by village governments or village community groups, and which are approved by the village head, village representatives and community leaders. However, the design of community fund allocation is also quite complex, since many factors have to be considered in the allocation. Village location within MPAs, tourist visitation, and customary rights over marine resources are important factors, according to community respondents (C_4 – C_{13}). It is common in Raja Ampat that tribes or sub-tribes with acknowledged customary rights may live in different villages away from the sites. Another issue frequently pointed out is that even though tourists are visiting particular areas, Raja Ampat itself is seen as trade mark meaning that all villages of Raja Ampat deserve community fund allocation. Local tourism operators, such as the homestay association, also requested involvement in the community fund allocation and disbursement. Based on the factors mentioned previously, the community fund is divided into two parts, i.e. Rp 75 million (5%) is allocated for small grants for Regency wide local NGOs, while the remaining part (Rp 1.425 billion) is allocated for the village-based community fund. According to Regency Regulation 18/2014, the community fund is eligible only for conservation activities, economic improvement and social affairs of village governments or community groups.

The allocation design of the village community fund is progressive, in the sense that villages with more attributes in relation to MPAs and more tourist visitation will receive more funding. To accommodate the customary rights issue, villages recognized as having customary rights of marine resources in MPAs and tourist destination villages are eligible for these categories. In order to encourage villages adjacent to MPAs to support conservation efforts, they are designated as buffer villages in the allocation design. The resulting village-based community fund allocation design is depicted in Table 3.2.

Table 3.2. Village-based community fund allocation per year (2015).

	Base allocation (Rp)	Tourism village allocation (Rp)	Conservation village allocation (Rp)	Buffer village allocation (Rp)	Total allocation (Rounded) (Rp)
Village within MPA	2,564,103	-	12,019,231	-	14,590,000
Tourist visited village	2,564,103	4,116,667	-	-	6,680,770
Buffer village	2,564,103	-	-	10,714,286	13,280,000
Village within MPA+ tourist visited village	2,564,103	4,116,667	12,019,231	-	18,750,000
Buffer village+ Tourists visited village	2,564,103	4,116,667	-	10,714,286	17,450,000
Other village	2,564,103	-	-	-	2,565,000

Among villages that have one or more attributes in relation to MPAs and tourist visitation, the tourist visited village category is allocated the smallest share of the community fund, while villages within MPAs that are also visited by tourists are allocated the highest share. However, there is no village recognized as being visited by tourists and located outside or not adjacent to an MPA. Therefore, the allocation of community funds to villages that have one or more attributes ranged from Rp 13,280,000 (a buffer village) to Rp 18,750,000 (village within MPA visited by tourists). While the allocated fund for villages that do not have any attribute in relation to MPA or tourists visitation is very small ('other villages'), the funds for other categories of villages are fairly similar.

Despite the clear allocation and disbursement mechanism of the community fund, the conditionality is less clear. The community fund disbursement is subject to the condition that proposals must be contributing to conservation or community livelihood. However, the extent to which activities funded by the community fund are actually contributing to ES supply is still unclear, as there is no contractual arrangement that requires ES provision upon ES payment. The idea that the community fund disbursement is expected to encourage community involvement in conservation efforts is adopted in the new scheme (see Figure 3.3 for a graphical overview of the stewardship fee).

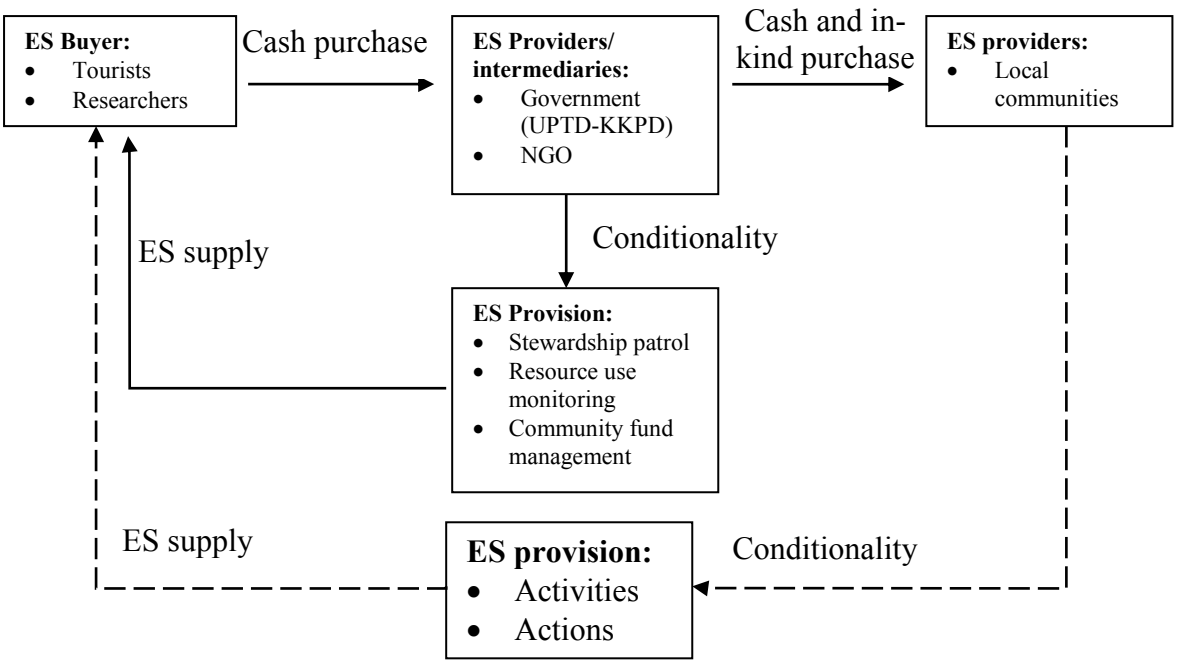

Figure 3.3. Overview of Raja Ampat Stewardship Fee using a PES framework.
⟶ = Clear arrangement; – – –▸ = Less clear arrangement;

3.4.4. Remaining challenges

Despite the increased clarity of the Raja Ampat stewardship fee in terms of the PES principle, also this arrangement still faces some challenges. First, although allocation of the community fund seemed to be equitable, the funds are very small for a village. Resort operators (D_6-D_7) mentioned in a meeting that the community of Selpele, recognized by other communities of having customary rights of Wayag island, even though Selpele is about one hour by speed boat, is still asking for Rp 1 million fee per boat presumably because it is the icon of Raja Ampat marine tourism. The revenue from this extra fee is expected to be much more than the community fund allocated to them. Saporkren village implemented village regulation asking for a retribution of Rp 50,000 per tourist and Rp 100,000 per boat (C_3). During a dissemination FGD (C_4-C_{13}), some community leaders asked for possibilities to pass regulation for collecting tourism retribution from tourists and boats visiting the village and tourism spots around the village. They saw this as an opportunity to benefit from tourism, as they have refrained from engaging in destructive fishing methods which have made the growth of marine conservation tourism possible.

Second, the concept of 'tourist visited village' is also quite unclear, as it is only based on expectation. Sales reports cannot be used for the designation of a tourist visited village because most tourists visit more than one village and dive/snorkelling spots. Liveaboards trips usually take seven to ten days, consisting of around 30 dives in different spots around

Raja Ampat. Disputes about the tourist visited village status may diminish the effectiveness of the arrangement.

Third, the community fund disbursement mechanism is designed in such a way that the in-kind payment, i.e. contributions in the form of goods and programs instead of cash, is delivered to villages so that the community receives the full amount of the fund allocated. Distributing the community fund to 117 villages in the vast marine area of Raja Ampat is costly. In some cases, the transaction costs involved in delivering the community fund distribution can be higher than the fund allocated to a particular village.

Fourth, concerns regarding the equity of the arrangement in relation to customary rights were also revealed during the dissemination meetings. For example, customary ownership of uninhabited tourism spots in an MPA are sometimes held by owners residing in a village outside the MPA. Also, villages often simply do not know whether or not their village is located within an MPA. In order to accommodate customary rights in the scheme, villages in which the customary owners of MPA resources reside is considered a village within an MPA for community fund disbursement purpose. Challenges still exists, however, as conflicts on customary ownership over natural resources is increasing since the emergence of marine tourism (Tafalas, 2010).

3.5. Conclusion

This paper explores the opportunities of using tourism for financing marine conservation from a PES perspective. More specifically, the paper analyses the governance challenges and implementation dynamics of the region-wide entrance fee system in Raja Ampat, Indonesia. The Raja Ampat entrance fee system can be seen as a state-run PES scheme because the government is the main actor in both arrangements. It is the first of its type and the only scheme currently in effect in Indonesia. In general, this paper concludes that the weaknesses of the previous entrance fee system, when analysed with the design principles of effective PES arrangements, were only partially addressed.

First, our analysis reveals how recent changes in the institutional arrangement of the Raja Ampat entrance fee system have improved participation and transparency. Community groups have been consulted in the process of revising the entrance fee system, and awareness of village communities increased about the opportunities and amounts of disbursement. Moreover, the organization of the entrance fee system has been clarified in terms of organization and procedure, leading to a more direct disbursement. Some interviewees mentioned that they were not aware of the revenue flow from tourism fees, and had no idea

on whether or not the tourism fee accrued to their village, even if they actually received community fund from the old entrance fee system. The improved participation and transparency improved the legitimacy of the fee system among various stakeholders. Hence, our study emphasizes and confirms the importance of participation and transparency in multi-actor conservation tourism arrangements, particularly when remote local communities are involved (see also Lamers et al., 2014b).

Second, the revised entrance fee system resulted in a more clear and equitable arrangement for disbursing community funds to villages in Raja Ampat, based on factors such as the location of the village in or adjacent to an MPA and tourist visitation. However, equity issues remain on the agenda as it is unclear for villages what constitutes a tourist village and tourist visitation is not distributed evenly across the Regency, even among MPAs. Many tourists visit the easy accessible tourism attractions in Selat Dampier MPA, while Ayau-Asia MPA receives almost no tourist visit and Teluk Mayalibit MPA is visited only by very small number of tourists. On the other hand, Piaynemo island, located outside any MPA, is visited by many tourists and has become the new icon of Raja Ampat. The resulting uneven distribution of funds will likely continue to stir equity debates among villages.

Third, this paper argues that conditionality is not only important in relation to environmental service buyers, but also with respect to environmental service sellers. Wunder (2015, 2005) argues that conditionality, when environmental service sellers are paid only if provision of environmental services by environmental service sellers is secured, is considered an important but difficult criterion to meet in PES schemes. This paper shows how a number of governance challenges that remain unsettled are particularly related to the conditionality of sellers. For example, one condition for customary right owners to receive community funds would be to stop collecting fees from tourists and tour operators, but not all seem to abide by this rule. The case of Selpele shows that the mandate - given to the government by customary resource owners - to manage the marine resource does not automatically transfer all rights along with it. The Dutch colonial period and the precolonial era under the Tidore Sultanate have created a complex and dynamic structure of customary ownership rights over natural resources. Raja Ampat community consists of different ethnicities (Arman, 2014), each with a different status of rights and ownership in relation to natural resources. From an institutional perspective, property and user rights are important elements in the market of environmental services, as those who hold property or user rights can control the use of natural resources that are incorporated in a PES scheme (Suyanto et al., 2016; Vatn, 2010).

Further, and related, this study has demonstrated that scale matters in PES arrangements, in multiple ways. Contrary to most PES arrangements that work in a relatively small delineated area, the Raja Ampat entrance fee system is a region-wide arrangement implemented to finance a network of six MPAs scattered across the Regency. While this delineation makes sense from a regional institutional perspective, the previous paragraph shows that due to differences in visitation, location and customary rights of local communities it makes more sense to settled payments on a local scale. Hence, various factors should be included in carefully considering scale in PES arrangements.

Finally, as in many PES initiatives (Wunder, 2005), payments in Raja Ampat are up front (as prescribed in Regulation 64/2007 and its successor Regulation 18/2014). Monitoring is then necessary to ensure that the recipient of the entrance fee would undertake actions to secure the provision of the environmental service. In order to be able to monitor the extent to which environmental service provision matches the payments, well-defined environmental service and contractual arrangements have to be available. However, the Raja Ampat entrance fee system lacks a directive (working manual or SOP) by which environmental services provided by sellers can be measured. But it is not unique in this. A review of 72 market schemes for biodiversity conservation revealed that an agreed upon measurement of biodiversity was absent and that the environmental service resulting from biodiversity conservation is mostly intangible (Landell-Mills et al., 2002). If the wider definition of conditionality is applied, which is that any payment should encourage the provision of environmental services, the entrance fee system cannot be considered a PES arrangement, as there was and is no rule under this scheme that requires environmental service sellers to perform conservation or community livelihood improvement actions in order to be eligible to receive payment. A way forward would be to revise the directive for the distribution of community funds in such a way that community are required to sign a contractual agreement with conservation oriented condition and actions, for example to replant mangroves, or to provide mooring buoys for liveaboard or speedboat, on submitting proposals for community funds. Mooring buoys will not only protect the surrounding coral reefs, as liveaboards and speedboats do not have to release anchors or keep drifting, but can also generate income for the village by applying a mooring fee.

Chapter 4: The role of resource rights in community-based tourism: Analysing the proliferation of homestays in Raja Ampat, Indonesia[4]

Abstract

Community-based tourism has been promoted to allow community participation in tourism development. The regional government of Raja Ampat, Indonesia, has developed a policy to promote homestays exclusively by the local community to derive livelihood from tourism in this emerging tourism destination. However, the homestays are developing rapidly and largely uncontrolled in the context of marine conservation. Homestay business groups are initiated and financially assisted by the government, while collective business venture is uncommon in the community. This means that the homestay business is developing as private business instead of community-owned and operated business, with business revenues captured by the owners of customary rights of the land on which the homestay is built. The customary resource rights regime drives the growth of homestay business as only those who are entitled to customary rights for land suitable for developing a homestay can have the business. We argue that these implementation challenges can be explained by the incongruence between the community-based policy and the customary rights regime. We suggest that a diversification of local economic activities in relation to tourism can help to redistribute tourism benefit as well as slow down the growth of homestays to a more sustainable rate.

Keywords: community-based tourism, homestays, customary rights, West Papua, Indonesia

[4] This chapter is submitted as: Atmodjo, E., Lamers, M., 2020. The role of resource rights in community-based tourism: Analysing the proliferation of homestay in Raja Ampat, Indonesia. *Current Issues in Tourism.*

4.1. Introduction

Since its inception in the 1970s and 80s, community-based natural resource management (CBNRM) has spread across the world as a way to fight poverty and natural resource exploitation by developing economic activities for local communities based on different natural resources, including forestry, fisheries and tourism (Ayoo, 2007; Clarke and Jupiter, 2010; Dirhamsyah, 2013; Hillers et al., 2017; Koppen et al., 2007; Paudyal et al., 2017; Rantala et al., 2012). Community-based tourism, as a sub-set of CBNRM, has been developed and promoted widely by governments, development agencies and NGOs (Zapata et al., 2011), to overcome negative impacts of mass tourism and other unsustainable forms of natural resource uses (Lamers et al., 2014a; Ndivo et al., 2016; Shahwahid et al., 2013; Zapata et al., 2011).

The literature holds various definitions and concepts of CBT, but basically targets a participatory role of the community in nature-based tourism or cultural tourism, the promotion of socio-economic benefits for the local community, and the consideration of sustainability in terms of social, environmental and economic issues. CBT aims at promoting the role of local communities, with regard to both procedural and distributive equity (Ismail et al., 2016; Reggers et al., 2016). Local community participation during the establishment and implementation of tourism makes that this development model is considered a bottom-up approach (Ernawati et al., 2017; Lindström and Larson, 2016; Reggers et al., 2016). CBT initiatives and projects are manifested in the provision of various tourism services delivered by local communities, either in collaboration with tourism companies or completely independent. It is usually developed in rural areas, offering local culture and natural or scenic beauty as attractions (Ismail et al., 2016; Mtapuri and Giampiccoli, 2013). Tourism products developed according to the CBT approach can take different forms, including canoeing (Kontogeorgopoulos, 2005), homestay accommodation (Ismail et al., 2016), nature tracking (Reggers et al., 2016) and photographic safari (Moswete and Thapa, 2015).

Despite its popularity, the community-based tourism approach, as the CBNRM approach more widely (e.g., Dressler et al., 2010), has been criticized for not being effective, for multiple reasons (Moswete and Thapa, 2015). CBT is claimed to not live up to its expected potential to generate significant economic benefit to the poor in destination areas due to its focus on collective benefits, i.e. to meet social, environmental and wider community needs, as opposed to individual financial benefits (Ndivo et al., 2016). In addition, the feasibility of CBT as a business model has been considered challenging due to the lack of cost-revenue trade-off, the high dependency on external funding, weak market linkages, vulnerability for

social unrest, problems with local decision-making, lack of local tourism business skills and knowledge, and the appropriation of tourism benefits by local elites (Ndivo et al., 2016; Zapata et al., 2011). Another criticism is that despite its feature as bottom-up approach (Lindström and Larson, 2016; Zapata et al., 2011), in many regions CBT is largely dependent on project funding of national or international NGOs. Finally, in the case of CBT based on natural resources, communities without a clear entitlement to these natural resources lack the means to participate in tourism operations; governance challenges have been claimed to be resulting from contested customary rights to natural resources (Ndivo et al., 2016; Van Wijk et al., 2015). In other words, in order to develop effective institutional arrangements for CBT the aims, rules and resources have to be congruent with the wider institutional environment, including property right regimes (Lamers et al., 2014b; Pellis et al., 2015). Lack of congruency with such local conditions hinders the implementation of CBT itself (Sebele, 2010), and unclear resource rights may lead to uncertain or ambiguous outcomes (Beza, 2017; Eshetu, 2014; Ketema, 2015).

This article examines the current challenges of implementing CBT in the context of diverse and conflicting property rights regimes in Raja Ampat, Indonesia. Raja Ampat is an archipelago in West Papua Province, Indonesia, consisting of four large islands and more than 600 small islands and atolls. Dutch colonialization and its aftermath, as well as the more recent decentralization politics of the Indonesian state, during which Raja Ampat was established as a new regency, have created a complex and dynamic structure of property rights over natural resources (Arman, 2014; Deda and Mofu, 2014). As a new regency, marine tourism is regarded and developed as key sector of Raja Ampat. Being located at the heart of The Coral Triangle (Agostini et al., 2012), the area draws global attention because of its richness in marine biodiversity (Agostini et al., 2012; McLeod et al., 2009). Parallel to international conservation initiatives to protect marine biodiversity, the marine tourism sector has been growing significantly (Atmodjo et al., 2017). The strategic plan of the Tourism Office of the Regency explicitly mentions community-based tourism, pro-poor tourism and ecotourism as key approaches chosen in developing homestays (Dinas Budpar Raja Ampat, 2011). While the first homestay emerged in 2009, data compiled from various sources, such as official statistics and unpublished NGO's reports, show that since then the number of homestays have first increased steadily to 45 homestays in 2015, and then jumped to 150 homestays in 2017 (BPS Kabupaten Raja Ampat, 2018). Most of the homestays are concentrated in villages around Dampier Strait (See Figure 4.1). The growth of the number of homestays in Raja Ampat over the last ten years has been an important contribution to

tourism development and is considered the principle way for members of the local community of Raja Ampat to participate in tourism development.

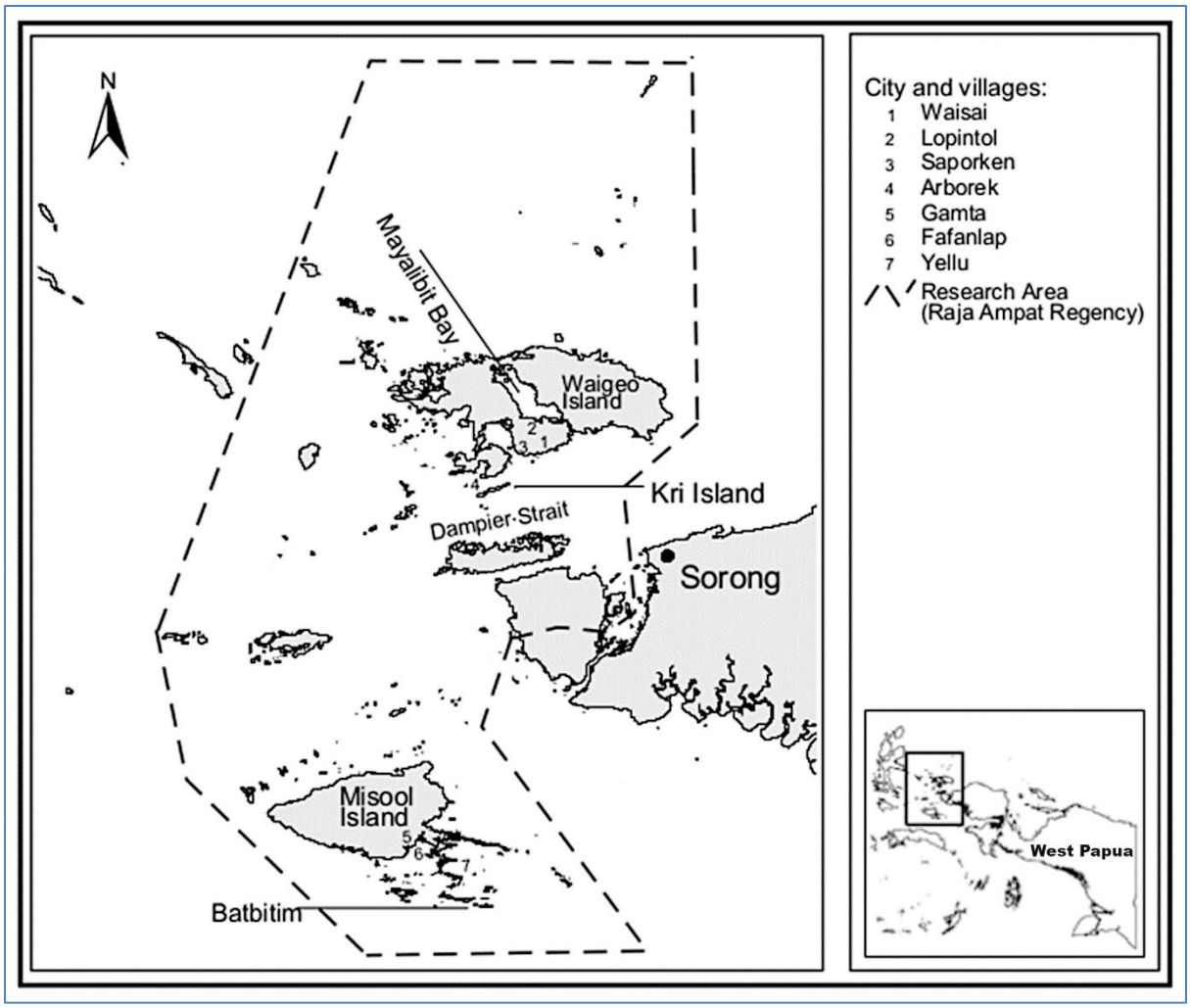

Figure 4.1. Map of the study area.

The paper aims to analyse the congruency in the institutional arrangement governing the development of homestays in Raja Ampat. We argue that in implementing CBT the objective and the rules of the game of the regional policy arrangement have to be consistent with the customary rights regime related to land on which the homestays are built. In the following section we present the conceptual framework, followed by the methodology. The findings section first presents the context of customary rights over natural resources in Raja Ampat, followed by the dynamic relation between regional policies and resource rights in the development of homestays. We will conclude with a discussion of the implications of our findings for the ongoing debate on implementation challenges of CBT and the sustainability of tourism development in Raja Ampat.

4.2. Conceptual framework

The literature suggest that community participation is key to successful CBT implementation (Bittar Rodrigues and Prideaux, 2018; Kontogeorgopoulos et al., 2014; Orozco-Quintero and Davidson-Hunt, 2010; Sebele, 2010). Successful implementation of homestays as CBT therefore requires understanding the role of the community. A community is always never a homogenous unit and often consists of a number of sub-groups along with respective values, attitude and rights, which affect participation in CBT ventures (Bittar Rodrigues and Prideaux, 2018; Farrelly, 2011). While conflict among community members hinders community participation in CBNRM (Farrelly, 2011), social cohesion would foster the implementation of CBT (Foucat, 2002).

In many developing countries, property rights regimes over natural resources are unclear, insecure and contested as a result of colonial legacies, in which colonizing states have seized control over land and natural resources regardless of local communities and their customary rights. The presence of multiple or contested property rights over natural resources are a key factor in explaining the challenges of CBT implementation (Beza, 2017; Ketema, 2015; Tesfaye, 2017; Wanitzek and Sippel, 1998). Tourism is considered a sector that inflates the value of natural resources in many emerging destinations and thereby creates an incentive for powerful actors to extend their control over these resources at the expense of local communities (Nelson, 2012). Clear resource rights are found to positively relate to conservation results, as it reduces conflicts and provides an incentive for local communities to invest in a resource (Meinzen-Dick and Nkonya, 2007; Rantala et al., 2012). The literature on CBT assumes that recognition, devolution and securitization of resource use rights back to the local level benefits local communities as well as conservation efforts (Nelson, 2012; Robinson et al., 2018; Spenceley, 2008).

In their framework of nested property rights regimes of natural resources, Sikor et al. (2017) make a distinction between use rights, control rights and authoritative rights. Use rights refer to the rights of actors to enjoy benefits from natural resources, including direct benefits (i.e. collecting, harvesting, experiencing) and indirect benefits associated with a resource (i.e. payments for ecosystem services). Control rights determine the scope of use rights, including establishing management rules, excluding use, handling transaction and monitoring the state of the resource and the use of benefits. Authoritative rights define control rights, including the right to assign control rights to particular actors and define the measures for exercising control. Sikor et al. (2017) argue that as contemporary natural resource governance involves a wider range of actors, including local communities, private companies, non-governmental

organizations and public authorities at various levels, this framework is useful in "examining who is holding a more diverse array or property rights" (Sikor et al., 2017: 340) within a given governance arrangement. The framework also assists in understanding changes in customary rights regimes due to economic or political changes (Cotula and Cissé, 2006; Doolittle, 2001; Greiner, 2017). Complexity and ambiguity introduced with these changes may lead to confusion, stemming from different views of resource rights and ownership, which may further lead to conflict and the disintegration of customary communities (Murti and Boydell, 2008).

Property rights form an important part of the governance arrangements that make CBT possible. It has been acknowledged that a governance arrangement's capacity to perform is dependent on the congruence of the components of the arrangement (e.g., Lamers et al., 2014b; Ostrom, 2005; Young, 2002). Governance arrangements are congruent when the rules of the game, the actors involved, and the resources available demonstrate a high level of coherence with the wider institutional environment in which they are embedded (Arts and Goverde, 2006; Van Gossum et al., 2011). A lack of congruence or a mismatch between different institutional settings, results in institutional ambiguity. As a result, uncertainty and confusion will arise about rules of the game, e.g. the way in which policy making will take place and who is involved.

4.3. Methodology

To obtain an in-depth understanding of the implementation challenges of CBT in Raja Ampat, a qualitative case study design was chosen (Kumar, 2011). Three qualitative data collection techniques were used in this research, i.e. in-depth interviewing, participant observation and document analysis (Kumar, 2011; Ritchie and Lewis, 2003). In-depth interviews were conducted to obtain information regarding the growth of the homestay businesses, the structure of the homestay businesses, and the homestay entrepreneurs' position with regard to resource rights (Kumar, 2011; Ritchie and Lewis, 2003). 58 individual interviews were conducted, as well as two focus group interviews, involving a total of 64 respondents. Interviewees included homestay entrepreneurs, officials of the Raja Ampat Regency government, representatives of NGO's involved in promoting homestay tourism, heads of villages and board members of the Raja Ampat Homestay Association. Most interviews were recorded and subsequently transcribed verbatim. Second, during fieldwork the lead author managed to participate in a number of activities and meetings as observer and acted as a consulting expert in the development of mechanisms for the distribution of a tourism entrance fee scheme (Atmodjo et al., 2017). Homestay entrepreneurs

also participated in these events and processes. Observations during such meetings of discussions and interactions between various actors related to the homestay business resulted in detailed notes and insights. The two authors also participated as homestay visitors. Field notes were made related to the challenges, sustainability and management of the homestay business. Third, document analysis was conducted to obtain information from a range of secondary sources collected before and during the fieldwork, such as reports (published and unpublished), maps, minutes of meetings, meeting presentations and websites. Profiles of interviewees are listed in Table 4.1.

Table 4.1. Interviews and profile of interviewees

Interview codes	Modes of interview	Interviewee
H1-H40	Individuals	Homestay entrepreneurs
F1	Focus group	NGO representative and two former COREMAP field coordinators
F2	Focus group	Board members (3) of the Raja Ampat Homestay Association
N1	Individual	NGO's representative
R1	Individual	Resort entrepreneur
O1-O5	Individuals	Government officials
V1-V4	Individuals	Head of villages
HA1-HA2	Individual	Board member of the Raja Ampat Homestay Association
CL1-CL3	Individual	Community leaders
CM1-CM2	Individual	Community members

The interview data formed the starting point for the analysis. Interviews were analysed by means of open coding into groups of relevant issues, such as property rights, customary laws, homestay ownership and operation, and government policies. The interview findings were further substantiated, cross-checked and triangulated using observation notes and documentation.

4.4. Findings

4.4.1. Homestay policy in Raja Ampat

In accordance with the pro-poor tourism and CBT approach narrated in the Raja Ampat Regency policy on tourism development (Dinas Budpar Raja Ampat, 2011), the local

government has set a regulation that recognizes homestays as accommodation businesses owned and operated by the local community. Accommodation businesses owned by non-local entrepreneurs are categorized as resort or liveaboard. Interestingly, the Regency has set a cap of 20 resort and 40 liveaboard permits, while no limit was set for the number of homestays operating in the regency. At the same time, while the ASEAN homestay standard (ASEAN Secretariat, 2016) defines a homestay as a resident's home being used for accommodation business, and sets a maximum number of four bedrooms equipped with standard beds made available for guests, there are no specific rules or requirements for homestays in Raja Ampat's regulation. While not stipulated in any regulation, in practice homestay operators are encouraged by the government to build a separate construction outside the village to be operated as homestay (F1; O1; V4). Poor settlements' and villagers' housing conditions are said to be the reason for this, next to reasons of avoiding demonstration effects or cultural conflict (Lew, 1999) between villagers and tourists (O1; F1; N1). In order to minimize such effects, signs reminding tourist to 'dress appropriately' are placed at the entrance or jetty of some villages, including Arborek and Friwen. The fact that homestays are located outside villages, makes homestays in Raja Ampat resemble resorts or lodges, rather than the typical homestay as defined in the ASEAN standard. It is also inconsistent with the definition in the Regency's policy that homestays are a type of accommodation business that allows tourists to interact with the owners' daily life. Most homestays are constructed in traditional fashion for low end accommodation, but some new homestays are quite luxurious in design and equipment. Field observations reveal that the capacity of homestays also varies, from a single bungalow of two rooms for four visitors to a small compound of bungalows capable of accommodating up to 64 visitors. The average homestay capacity hosts eight to ten guests.

The pioneers of the homestay business were former resort workers who recognized their capacity to operate a similar business utilizing their knowledge, skills and their natural resources (Tafalas, 2010; Waimbo, 2012). To support the development of locally owned and operated accommodation businesses, the local government developed the Tourism Village program, as a basis for providing financial assistance to homestay businesses and other tourism related activities conducted by local communities, such as traditional dance and music groups, and handicraft groups. The kind of support to homestay operators is diverse, from funding improvements or extending facilities or equipment, such as water tanks, pumps, small electric generators, snorkeling equipment and bedding, to funding the construction of complete homestays. Being framed in the CBT logic, only groups of local people are eligible to receive financial assistance from the government. As tourism is a new economic activity in

Raja Ampat, new community groups in predefined official tourism villages were formed as recipients of grants from the government.

In order to stimulate collaboration among homestay operators, the Raja Ampat Homestay Association was established in 2012. Government and NGOs played important roles in the establishment of the association, such as mobilizing the operators and designing the organization itself. Promotion of the homestay business and improvement of operators' skills and knowledge in hospitality are organized through the association. Since 2013 SeventyThree, a consultancy company funded by the Walton Family Foundation, has been involved in mentoring and training the skills of homestay operators. A homestay standard for membership, online promotion, as well as an online reservation system has also been developed under the auspices of SeventyThree. Regular audits against the standard are conducted under their supervision, and the online promotion and reservation system are completely run by the consultancy company. Many homestay operators claim that the online promotion and reservation system are key factors that attracted them to join the association (H1-H37).

Despite the group-based requirement for government grants, which is in line with the community-based approach, in practice government grants for homestays are captured by individuals or individual families. Interviews revealed that the reason for this is because loosely defined local community groups did (and do) not have sufficient coherence to collaborate on the longer term. The groups disappear gradually, letting the homestays be claimed by individuals or individual families, as often other people in the proposals were no longer participating when the grant was received (O4; V1). To explain this tendency it is important to note that locals of Raja Ampat are not known to engage in group ventures. There is also no visible indication of influence of customary rules that help guide the local community on how to share benefits from homestays business equitably. This is consistent with findings by Holle (2015) in Marind community claiming that the people are accustomed to harvest sago and hunt individually. Interviews revealed that extended family members or other community members participate in homestay business as external labour paid on daily or job order basis.

Realizing that customary land right entitlements affect homestay operations significantly, the local government of Raja Ampat required that only homestay proposals with clear land right entitlements will be considered (O1, F1). Observations and interviews revealed that the individuals who appropriate the homestays from the groups are those who are entitled to the customary right of the land on which the homestays are built (V4, H5, H10). One homestay

business pioneer (H1) initially built a homestay on borrowed land from another group, reasoning that the location of the property in the vicinity of the Kri Eco Resort would enable him to offer the same marine experience to tourists as the resort. The land owners did not mind and initially did not see the economic potential. However, as his business proved to be successful, and increases in tourist visits translated into increasing demand for accommodation, he was asked to leave the homestay by the customary rights holders. He currently has a new homestay on land to which his father holds management rights.

4.4.2. Dynamics of customary rights in Raja Ampat

Property rights regimes in Raja Ampat are dynamic, overlapping and contested. As in any place in the world, and in parts of the developing world particularly (e.g., Robinson et al., 2018), the property right regimes of Raja Ampat evolved over time with changes introduced by ruling administrations. Like in other part of West Papua, the property rights regime in Raja Ampat followed a different path compared to other parts of Indonesia. While other parts of Indonesia were under the Dutch Indies administration, West Papua was under the Dutch Netherlands New Guinea administration. Agrarian Law and Agrarian Decree were the formal natural resources rights regimes implemented in other part of Indonesia, while Papuan Property Rights were implemented in West Papua. Land without evidence of ownership, including those owned by customary communities, automatically belonged to the government under the Agrarian Law (Ayamiseba and Giay, 2010; Mahfud, 2017; Ubbe, 2009), while natural resources remained the property rights of Papuan customary rights owners (Ayamiseba and Giay, 2010). Customary rights owners would receive compensation for land or natural resources utilized by the government of that time (Ayamiseba and Giay, 2010). This is why customary rights over natural resources is more prominent in Raja Ampat compared to other parts outside West Papua.

Historically and traditionally, Raja Ampat Islands has been part of several kingdoms (Mansoben, 1995). These kingdoms, which were known to exist before the sixteenth century and ceased to exist around 1898, are the source of the current customary rights system in Raja Ampat (Mansoben, 1995). According to a community leader of Fafanlaf village (CL1), the centre of a historical kingdom on Misool island, natural resources in the kingdom's territory were property of the kingdom. The king, through a meeting of leaders, would grant the right to manage natural resources to a particular clan. Natural resources, like marine life or forests, were basically communal, whereby access was granted to the members of the community to harvest the products to sustain their livelihood. Particular management rules of resource utilization to allow for the harvesting of, and access to, immobile resources both from particular terrestrial resources (like fruit grown by itself in the wood) and marine resources

(such as clams, sea cucumbers), are known as sasi (McLeod, 2007; McLeod et al., 2009). Through sasi, leaders would regulate the collective harvesting of these natural products to particular periods to avoid a tragedy of the commons. The kingdom would also grant individual property right of a particular piece of land to individuals for agricultural purposes, without the right to transfer the property right. This implies that farmland and all other improvements in the area are basically the individual property right of users assigned use rights (Sikor et al., 2017), while marine and forest products are basically common properties governed by collective-choice rules of customary laws, where the king had authoritative rights. Over time, as the family expanded to sub-clans, individual use rights held by a family to obtain direct benefit by cultivating farmland changed to control rights of group property of a respective sub-clan.

A community leader of Waigeo Island (CL2) explained that those who open primary forest for the first time have the authoritative rights over the natural resources. Existence of cultivated crops (such as coconut) on a piece of land is an indication that it is the property of an individual or a sub-clan. Individual property rights over land evolved to group property along with the expansion of the family into sub-clans (Ayamiseba and Giay, 2010).

Based on the claim that farm crops on Batbitim Island were grown by an ancestor, a clan in Yellu village claimed property right over the island and waters surrounding Misool island. This is relevant because based on this claim, in 2005 the clan leader of Yellu Village signed a concession agreement with the private entrepreneur of Misool Eco Resort to obtain the benefits for members of the clan. However, the clan leader failed to defend the claim of the property right after 10 years of concession, when the customary community of Gamta village challenged the claim at the district court and won the case. The court case provided evidence that actually Batbitim Island is considered group property of the clan of Yellu village, with use rights only. The clan from Ganta village is acknowledged to hold the authoritative rights over Batbitim Island. The concession contract of common property should benefit wider communities beyond the clan of Yellu village. Seen from Sikor et al.'s (2017) framework, the clan from Yellu village was allowed to execute transaction rights (signing a concession contract over Batbitim Island and surrounding water) but the indirect benefit should be distributed to the wider communities.

Analogous to disputes over customary rights in Misool, also on Kri Island there have been disputes over property rights. Raja Ampat's local community consist of four ethnicities: Maya, Amber, Moi and Beser. While all four ethnic groups are native Papuan, Beser People are not indigenous to Raja Ampat's islands. Beser people are migrants from Biak Numrof

island at Cenderawasih Bay of North Papua, who have been inhabiting Raja Ampat Islands before the 15th century (Mansoben, 1995). Beser people of Kri Island claim transaction rights to lease land at Kri Island to a resort entrepreneur. However, Wauyai people (a sub-group of Maya people) claim the authoritative rights, including transaction rights over Kri Island, based on the claim that they are indigenous people of Waigeo Island in the vicinity of Kri Island. The resort operator who obtained a concession to establish a resort on Kri Island was challenged by the Beser community who claimed customary rights over the island (O3; CL3; V4). The resort operator was accused of signing a contractual agreement with a community who do not hold property right over the island. Arborek people living on Kri Island claim customary rights based on coconut trees grown by their ancestors. The head of Arborek Village (V2) acknowledged that lately disputes over customary rights among communities have increased.

The Dutch colonial administration, which gradually eliminated the traditional system of the Tidore Sultanate after 1889 (Mansoben, 1995), also influenced the dynamics of the property rights. During the Dutch administration, customary rights were regarded as inferior to the laws imposed by the Dutch colonisers. This is confirmed by the community leader of Lopintol (V3) village on Waigeo island, who claims that the village was established by the Dutch Administration in the 1940s to facilitate a civil administration by merging small compounds into a relocation area. The ruling kingdom subsidized land resources and granted the newly established community of Lopintol communal rights over natural resources to sustain their livelihood.

Disputes over natural resources in Raja Ampat also resulted from unilateral decisions to derail from agreements over customary rights among communities previously agreed upon by respective ancestors of customary communities. In the establishment of Lopintol village in the 1940s, the customary leader of Mayalibit Bay allocated an area of land for settlement and subsistence (i.e. farmland and collecting forest products) to villagers in the relocation area. In 1980, however, the customary leader of Mayalibit Bay allocated a timber concession to a timber company which included part of the communal rights of Lopintol village (V3). The dispute was solved by transferring the rights back to the community that initially held the customary right. This shows that the influence of economic activities on resource rights regimes (see also Greiner, 2017). Further, disputes over customary rights are typically sensitive issues, whereby details of the dispute are not openly disclosed by the parties involved.

4.4.3. Homestays and contested resource right in Raja Ampat

Successful pioneering homestay businesses and the growth of tourist visitation motivated villagers to participate in tourism. Instead of developing homestays collectively owned and managed by communities, they were built by individuals or individual families on land to which they or their parents hold customary rights. Some groups of brothers of the same parents initially established homestays on their parents' property to be managed together. For example, one homestay owner (H2) in Kri island explained that he and his two brothers did not agree with each other about the way the homestay was managed; it made him decide to leave the group to build his own homestay on another piece of his father's land property. One other example is a homestay business in Saporkren Village, which was built by one local in collaboration with his two brothers on the property to which their father holds the authoritative right. The owner of the homestay (H5) ceased the brotherly collaboration when he invited an outsider to help him promote and manage the homestay. In both cases, eventually collaborations ceased.

The dynamic described above has resulted in that all homestays examined are now owned and operated by single family households, as opposed to groups of extended family or local community members. The head of the Tourism Office (O1) explained that currently, an individual family is considered a community group in developing community-based tourism in Raja Ampat. An NGO representative (F1) suggested that local community members do not trust each other and often envy each other's achievement, which causes group ventures to fail. In order to fulfil the formal administration requirements for applying for a government grant, members of the family are listed as members of a group owning and operating a homestay grant. The head of the Village Empowerment Bureau of Raja Ampat claims that in some cases, groups are made up to fulfil the formal administration requirements, whereby only an individual or a single family captures the grant. Observations by the first author while conducting consultations to develop a community fund (Atmodjo et al., 2017) revealed that typically five to ten adults are listed as group members in proposals for grants. Financial support provided by the local government to the locals operating the homestay then cannot be seen as community-based tourism, as government grants are received by individuals instead of community groups.

Most homestay owners interviewed claim that their families or sub-clans hold the management rights over the land on which they built their homestays. Only one homestay entrepreneur in Kri island, acknowledged that his homestay (named 'Byuk Beya' meaning 'borrow' in the local language) was built on the land of another clan. The owner of this homestay was granted use rights from the clan who holding management rights. Another clan

aimed to avoid conflict among the heirs of a particular piece of land by dividing the land among the members (V4) to ensure that the ownership of a homestay will not be challenged by other members in the future. Previously communal control rights are thereby reduced to a private right held by a household.

4.5. Conclusion

This paper aimed to analyse the congruency of the governance arrangement underlying the implementation of CBT in Raja Ampat. This current case is relevant for CBT developments worldwide as it demonstrates how the driving role of customary rights to land ownership starts to mismatch the principles of CBT over time. We echo Sikor et al. (2017) in arguing that clarity over resource rights is critical and argue that for longer term effectiveness of tourism development the governance arrangement does not only need to be internally coherent in terms of its aims, rules of the game and resources, but should also be congruent with local contextual factors, particularly the resource rights situation. In the final paragraphs we will specify this argument and discuss its relevance.

Customary property rights regime is playing an important, but ambiguous, role in the development of tourism in Raja Ampat. Those clans holding customary rights over land resources for agricultural purposes can now benefit by using their plots for developing homestays. The customary rights regime thereby drives a process of privatization that mismatches with the community-based objectives, rules and resources of the policy arrangement. Similar to experiences elsewhere (Tafalas, 2010), in Raja Ampat the development of tourism at local community level contributes to natural resource rights disputes. The establishment of individual homestay businesses seems to be the solution for avoiding conflict over shared management and unstable business organization due to disputes over resource ownership. For example, while in some East African conservation-tourism enterprises are developed using communal or group owned resources (Lamers et al., 2014a), the strategy in Raja Ampat is to divide inherited land resources and allocate them to the heirs in order to match individually owned homestays.

This strategy raises equity issues as some individuals benefit from a scheme that is clearly meant for larger groups, and it also allows those holding property rights to exclude others from using the resource. The current development of homestays in Raja Ampat does not match the community-based approach as each of the homestays is owned and operated for individual benefit, instead of being owned and operated by a group of community members for the benefit of the wider village community. It has also led to a rapid growth and concentration in the villages of Arborek, Yenbuba and Sawinggrai, where the entire coast

have been occupied by homestays. This may threaten the marine environment and the image of Raja Ampat as pristine environment on the longer term.

It appears that different paradigms to the sustainability of tourism development have been adopted in Raja Ampat (Dinas Budpar Raja Ampat, 2011; Pemerintah Kabupaten Raja Ampat, 2014). While limits to growth have been set to the numbers of resorts and liveaboards operating in Raja Ampat mainly for environmental consideration, there is no specific restriction imposed to the development of homestays. Numbers are increasing rapidly and limits to their growth are determined by the capacity of community members to identify suitable locations, by the customary rights regime and by the subsidies provided by the government. In other words, community members in possession of customary rights over land suitable for developing homestays will try to get involved as long as tourism is growing and their financial capacity allows them to do so.

The development of tourism in Raja Ampat is driven considerably by the unbridled growth of homestays, which on their turn contribute to livelihood in local communities. In general, this reflects the principles of CBT as local community members are given opportunities to participate, government policy and financial support, and collaboration with NGOs (Sproule, 1996). For example, sustainability standards have been adopted by the Raja Ampat Homestay Association by means of the Global Sustainable Tourism Criteria (GSTC) in their standard for diving, hospitality and transportation (Elson et al., 2016). However, by leaving the limits to the growth of homestay business to be governed largely by the customary rights regime, only those with customary rights over suitable places, close to diving or snorkelling spots, are able to participate in the homestay business. Locals without these assets are deprived of opportunities to participate in tourism development, resulting in an inequitable distribution of tourism benefits within the local community. It thereby contributes to the fragmentation of already culturally heterogeneous communities. The emergence of tourism has raised awareness of the economic value of both terrestrial and coastal resources, which leads to disputes on which community groups are entitled the control over natural resources or the right to engage in business deals with external parties. Homestays operated practically function as private business instead of community-based business. Furthermore, distributing the benefits of concession contracts to some sub-groups, while the rest of the community assumes to hold customary rights, is building friction within the community. Commercial tourism activities have led to a weakening of the customary tradition to cooperate among members of the community (Deda and Mofu, 2014; Mansoben, 1995).

Considering that customary rights over natural resources play an important role in driving tourism in Raja Ampat and beyond, clarifying contested customary rights and enhancing its congruence with tourism development policies are an important first step towards avoiding conflicts among community members and groups. This can be achieved by participatory customary rights mapping, involving all stakeholders, including local governments, customary leaders and NGOs with experience in working in local communities. Second, it would be important to diversify opportunities for local communities to be involved in tourism besides providing accommodation services so that benefits of tourism development can trickle down further into the community and help reduce the growth of homestay to a sustainable rate.

Chapter 5: Marine conservation tourism benefits for local communities in Indonesia[5]

Abstract

Marine protected area (MPA) quantity worldwide is growing in attempts to address degradation of marine environment due to overfishing and destructive fishing. While the main objective of MPA is to conserve marine biodiversity, tourism activities are often developed in MPA. Marine tourism is considered potential in supporting MPA, especially in financing MPA management activities. In order to obtain support from local for MPA, marine tourism is often adopted as a measure to provide MPA benefit to local communities. This research aimed to capture general picture of the flow of benefit of marine tourism to local communities of Raja Ampat. Community-based and pro-poor approaches are adopted in policies developed by local government of Raja Ampat, in effort to direct marine tourism benefit flow to local communities living in and close to MPAs. The local communities of Raja Ampat access marine tourism benefit mainly by directly participating in core activities of tourism, homestay business in particular, which is mushrooming owing to the policies. Despite increasing benefit stream of marine tourism to local communities, external operators still obtain larger benefit share as more tourists go with them, indicating tourism leakage and lack of equitable benefit distribution. Unequitable marine tourism benefit share among local communities also revealed, because those who have rights over land resource suitable for homestay obtain more benefit. There is almost no linkage between marine tourism industry with other economic sector such as fishery and agriculture which limit marine tourism potential to deliver economic benefit to local communities.

Keyword: marine conservation tourism, marine tourism benefit, marine protected area, Raja Ampat, Indonesia

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5.1. Introduction

In response to degradation of marine environments due to overexploitation of fisheries, illegal extraction of marine resources and marine pollution, several international agreements and conventions were established targeted at the development of Marine Protected Areas (MPA) (Edgar et al., 2014; McCauley et al., 2015; UNEP-WCMC and IUCN, 2012). Globally, Marine Protected Areas (MPAs onwards) have grown in quantity from approximately 5,880 in 2010 (Toropova et al., 2011), to more than 15,334 in 2018 (Maestro et al., 2019). While the principle objective of developing MPAs is to conserve marine biodiversity and to restore marine productivity (Kelleher, 1999), MPA regulations also allow economic activities that align with conservation objectives in order to generate livelihood for local communities living inside or adjacent to MPAs. Particularly tourism is considered to hold potential benefits to local communities from MPAs, by creating demand for local products and services, such as snorkelling, diving or guiding services, employment in tourism enterprises, agricultural and fishery products and handicrafts (Bolwell et al., 2008; Roe et al., 2004; Truong, 2014).

Generating local support for MPAs is considered crucial for effectively governing MPAs on the longer term and strongly associated with the benefits derived from MPAs by local communities (Bennett and Dearden, 2014a). Local support for MPAs is assumed to work if local communities benefit sufficiently from conservation (Heck et al., 2012; Pollnac and Pomeroy, 2005). Development and management of MPAs are therefore generally designed to include participation (Day et al., 2012) and to deliver social and economic benefit to local communities (Bennett and Dearden, 2014b), particularly in cases where the establishment of the MPA entails restrictions with regard to fishing or other forms of conventional livelihood activities. It is claimed that an MPA will receive support when benefits to users outweigh costs to users (Sanchirico, 2000). This can be achieved when spill-over income, catch value effects and revenues from tourism are greater than increases in costs due to displacement to other fishing ground, use conflicts and enforcement related to keeping out ineligible users or illegitimate fishing practices (Sanchirico et al., 2002). Typically, zoning systems are implemented in MPA management to allow for multiple goals of protection and sustainable use of marine resources (Thuy, 2016). Except for the most restrictive regimes, marine tourism, such as scuba diving or snorkeling, is considered a key alternative livelihood strategy in most MPAs (Bennett and Dearden, 2014b; Russ et al., 2004; Stewart, 1993; UP-MSI et al., 2002; Zimmerhackel et al., 2018).

Despite reported achievements in realizing biological objectives in some MPAs (Bennett and Dearden, 2014a; White, 1986), the literature reports mixed net effects of marine conservation tourism on local communities (Bennett and Dearden, 2014b; Stewart, 1993). Positive impacts of marine conservation tourism on local communities include income generation activities that reduce hunting and fishing pressure on marine living resources and contribute to the local economy (Asafu-Adjaye and Tapsuwan, 2008; Russ et al., 2004). Some conservation tourism efforts provide no or little benefit to local communities or local economies (Ross and Wall, 1999; Yacob et al., 2017), due to economic 'leakage' to international tourism operators, leading to conflicts within communities (Lamers et al., 2014b; Ochieng et al., 2018). Tourism development is also reported to increase prices of land, real estate and goods, as well as create sociocultural impacts within local communities (Ahmad Kamil et al., 2017). Failure to share benefits within local communities might restrict potential community development derived from marine conservation tourism (Su et al., 2016) and hinder local motivation to support effective management of MPAs (Mohammed, 2013).

The extent to which the potential benefits of marine conservation tourism can be realized optimally is affected by opportunities for community members to connect and tap into the tourism value chain. How tourism value chains generate benefits in emerging marine conservation tourism destinations remains unclear. Understanding how different value chain structures provide opportunities for local participation opens possibilities for benefit flows to local community members, which can be promoted through tourism value chain governance (Bennet, 2010; Mitchell, 2012; Rajashekariah and Chandan, 2013; Steck et al., 2010; Vignati and Laumans, 2010)

Raja Ampat is an emerging marine conservation tourism destination in the Province of West-Papua, Indonesia. The area draws global attention for its richness in marine biodiversity (Agostini et al., 2012; Mangubhai et al., 2012; McLeod et al., 2009) and the establishment of MPAs over the last decades to deal with threats to marine biodiversity (Mangubhai et al., 2012). A network of six MPAs was designated under the auspices of two international conservation NGOs, covering a total of 1.113 million hectares, scattered across Raja Ampat (Rudyanto et al., 2016). In addition, from 2005 till 2015 the World Bank coral reef rehabilitation and management program (COREMAP II) funded and implemented various marine conservation projects in the area.

Tourism accommodations and marine tourism activities emerged approximately at the same time with the establishment of Raja Ampat Regency, mostly concentrated in the Dampier Strait MPA (see Figure 5.1), due to its accessibility (Atmodjo et al., 2017; Tafalas, 2010).

Marine conservation tourism has become an important economic sector for the Raja Ampat government. The sector represents the second leading economic sector after fisheries (Rudyanto et al., 2016). The strategic plan of the Tourism Office of the Regency explicitly mentions community-based tourism, pro-poor tourism and ecotourism as key approaches chosen in developing tourism (Dinas Budpar Raja Ampat, 2011). Investment, outreach and education programs conducted by stakeholders are reported to have increased positive local community attitudes towards the MPA network (Leisher et al., 2012). Furthermore, the currently appointed regent has the vision to "develop tourism and community's livelihood" (Pemerintah Kabupaten Raja Ampat, 2016), reflecting the importance of the marine tourism sector for the local community. The objective of this vision would be to accelerate growth in the tourism sector and to empower and involve the local community as much as possible. However, the extent to which marine conservation tourism in Raja Ampat provide benefits to local communities of Raja Ampat is unclear.

The objective of this paper is to analyse how and to what extent benefits of marine conservation tourism for the local community are linked to the structure of the tourism value chain. To meet this objective we will study the extent to and the way in which socioeconomic benefits from marine conservation tourism reach the local community of Raja Ampat. To capture the flows and magnitude of marine conservation tourism benefit to local communities, a value chain approach is used. While tourist expenditure analysis is usually carried out to explain tourist spending (Rosenbaum and Spears, 2006) for marketing purpose (Nickerson et al., 2016), value chain analysis is conducted to assess the provision of tourism services and products in different nodes of the production chains so that income generated to tourists operators producing services and products as well as other agents producing supports to tourism can be examined.

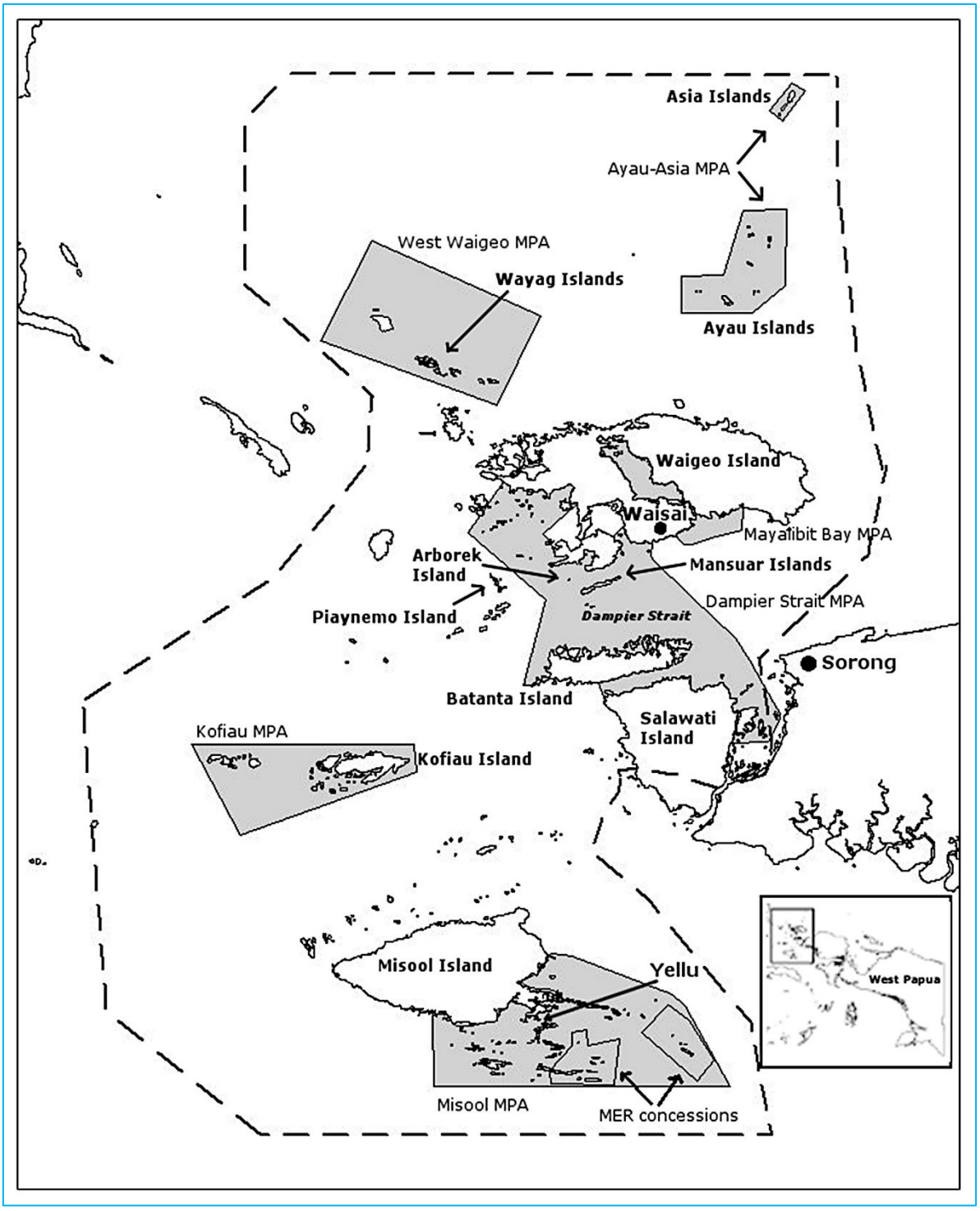

Figure 5.1. Map of study area

The next section will introduce the value chain approach, followed by the research methods used to capture the flow of benefits of marine conservation tourism toward stakeholders. The paper continues by presenting its key findings and discussing the equitable distribution of benefits of marine conservation tourism in Raja Ampat.

5.2. Tourism value chain

The concept of value chain originates from the manufacturing industry, but has gained interest and has been applied to service industries, including tourism (Freeman and Liedtka, 1997; Song et al., 2013; Tejada et al., 2011). From the perspective of the manufacturing industry, a value chain represents a sequence of activities from design, production and delivery of a product to the consumer, whereby value is added in each step of the chain. This definition basically reflects a production process of different divisions of a single firm, but value adding activities are often carried out by different firms. Song et al. (2013) refer to the former as micro concept and to the latter as macro concept of value chain. In the micro concept of value chain, input is moving along the chain to the customer/consumer to create value, while in the macro concept the product is moving from one firm to another along the value chain towards the customer/consumer. The concept of value chain emerged along with the division of labor and specialization of firms, which made it possible for a product to be produced by a number of firms, each of them producing a component of the product (Song et al., 2013). Globalization enables the fragmentation of the production process to be performed by companies located in different countries, with which the concept of global value chain (GVC) emerged (Romero and Tejada, 2011).

The tourism industry is different compared to the manufacturing industry, for instance in relation to the customers who move to the destination for consuming products and services provided by tourism operators working along the value chain. Each of the operators along the value chain provides input into products and services provided to the customers. The full range of activities constituting a tourism product or service may be provided by a single firm or by a number of firms along the value chain (Hjalager et al., 2016). When the provision of products and services along the value chain is performed by different operators, then the operators are said to work together to co-create and co-deliver value to the customer while generating income for themselves (Romero and Tejada, 2011; Song et al., 2013). Hjalager et al. (2016) proposed two different ways for analysing the tourism value chain, i.e. a destination logic and a supply chain logic. In exercising the destination logic, researchers follow the movement of the tourists in the destination and subsequently assess the value to tourists and benefit to providers along this movement. In this logic, tourists will consume a range of different products and services provided by different operators, in which the consumption is assumed to take place in a particular order. Supply chain logic, on the other hand, resembles more the original value chain concept, where production consists of a chain of steps, including bookings and travelling to and from the destination. Here the focus of researchers is on the production steps where (material and immaterial) inputs are added to

products. In this study the destination logic is applied to discover the value chain structure in the destination, i.e. in Raja Ampat's marine protected areas.

By adopting this concept, the tourism value chain is fragmented if the collection of activities required to deliver value to tourists in the destination are carried out separately by a number of firms specialized in the production of a particular service (the macro concept of value chain). When most or all activities are performed by a single firm then the tourism value chain is said to be integrated (micro concept). The value chain structure in this study refers to the continuum of all possible arrangements in the value chain from fragmented to integrated.

As this study is aimed at analysing how tourism benefits accrue to local communities, the tourism value chain structure is used to identify local community engagement (Vignati and Laumans, 2010). The tourism benefit pathways concept of Mitchell and Ashley (2010) is adopted in this study to analyse the distribution of socio-economic benefits of marine conservation tourism to local communities, by identifying the flow and allocation of benefits accrued to the local community who supplies inputs to the production process of tourism products and services. In this framework, the flow of marine conservation tourism benefits is assumed to distribute to the community through three pathways, i.e. direct effects, indirect effects, and dynamic effects (Figure 5.2). Direct effects are benefits derived by local communities immediately from the tourism sector, such as employment of locals by tourism enterprises. Tourism enterprises may opt to hire local community members in the provision of services (i.e. input outsourcing) or to purchase tourism services from community suppliers (i.e. product outsourcing), such as marine transportation. Local communities can also own and operate tourism SME to supply tourism products and services directly to tourists. Benefits derived to local community by selling goods and materials used by tourism enterprises are categorized as indirect effects, including building materials or food. Dynamic effects are ways in which local communities benefit from sociocultural changes, investments in infrastructure aimed at providing facilities to tourists, other government expenditure from tourism taxes and levies (e.g. healthcare, education), money circulation by tourism employees, and philanthropic contributions from tourism enterprises and tourists to local communities.

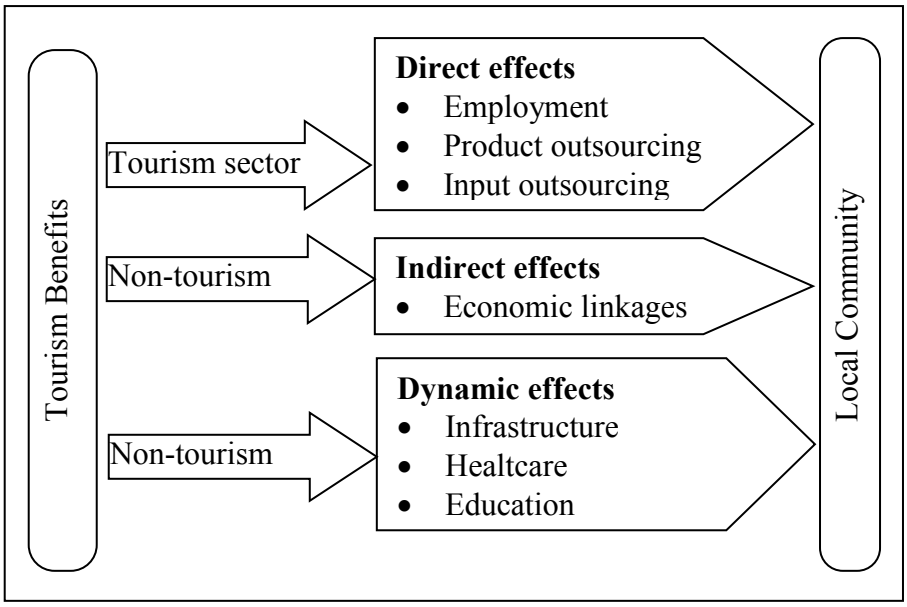

Figure 5.2. Pathways of tourism benefit to local community (adapted from Mitchell and Ashley, 2010)

5.3. Methodology

This study employs a multi-method approach to analyse the distribution of marine conservation tourism benefits to local communities living in and around MPAs in Raja Ampat. Qualitative case study research (Kumar, 2011) is used as the main methodology in this study. Document analysis was used to obtain the general picture of marine conservation tourism policy as well as to obtain data on tourism operators engaging in Raja Ampat. Published and unpublished government and NGO reports, research reports, minutes of meetings, meeting presentations as well as websites were used as sources for document analysis.

In-depth interviews with individuals were conducted to develop a tourism value chain map, and to obtain data required to estimate tourism benefits flowing to the community, and for understanding challenges in efforts to bring about equitable marine conservation benefits to stakeholders. Respondents were chosen using a snowball method (Arnouts et al., 2012), where key informants were approached first, i.e. head of tourism office and staff of NGOs. Theoretical sampling (Glaser and Strauss, 2009) was used to determine sufficiency of data. Structured interviews (Kumar, 2011) with tourism operators were carried out to collect quantitative data of the benefits and their distribution among marine conservation tourism stakeholders. Respondents of the structured interviews were selected using purposive sampling (Kumar, 2011). In total, eighty one respondents with different roles in marine conservation tourism were interviewed (listed in Table 5.1).

Table 5.1. List of respondents

Code	Type of respondent
A_{1-3}	NGO representative
B_{1-3}	Tourism office official
C_{1-2}	Agriculture and animal husbandry office staff
D_{1-40}	Homestay operators
E_{1-10}	Liveaboard operators
F_{1-3}	Resort operators
G_{1-5}	Speedboat operators
H_1	Tour guide association representative
I_1	Speedboat operator association representative
J_{1-4}	Village leaders
K_1	Head of district (sub-regency)
L_1	Traditional dancing group member
M_1	Member of Arborek women group
N_1	Local tour guide
O_{1-2}	Craftsman and handy craft group member
P_{1-2}	Customary community's leaders
Q_{1-5}	Saporkren women group members

Marine conservation tourism operators in Raja Ampat are either mobile or scattered over the vast area of Raja Ampat, which makes obtaining quantitative data through probability sampling for all types of operators very difficult due to poor transport infrastructure. This study applied different methods of data collection in order to assess the general picture of the flow, magnitude and distribution of benefits of marine conservation to local communities. For example, in examining the stream of revenues of homestays, visitors of homestays are approached by entrance fee sales data provided by MPA authority as most of homestays interviewed do not have a visitors log book, while interviews to recall yearly numbers of visitors did not result in reliable data. Entrance fee sales data is used as it is assumed to have better proximity to the number of tourists stays in homestays. Room rates and average duration of stays are obtained from interviews. Revenue streams accrued to speedboat operators are obtained from in-depth interviews with some operators and the secretary of speedboat association. These different approaches in data collection from different sources of revenues have resulted in rough estimations. Interpolation to regency wide averages of revenue has been carried out as appraisal to facilitate comparison of the magnitude of benefits for local communities rather than as a detailed analysis of the revenue stream.

In-depth interview data were recorded and transcribed verbatim. Qualitative data were coded and categorized, compared and triangulated in the analysis using thematic method (Dierckx de Casterlé et al., 2012) to capture patterns in relation to equitable benefit distribution of marine conservation benefit to stakeholders. Descriptive statistics were used to analyse the quantitative data. For the sake of clarity and consistency monetary values will be reported in US$ equivalents.

5.4. Findings

5.4.1. Marine conservation tourism value chain structure

Analysis of the value chain structure revealed that Raja Ampat's core tourism products and services are accommodation, meals, transports, diving/snorkelling, excursions, traditional dance performances and handcrafts. Raja Ampat can be reached via Sorong, which can be seen as the gateway to Raja Ampat as the nearest large airport is located in this city. Concentration of tourism attractions in Raja Ampat can be divided into two regions, i.e. around Dampier Strait MPA in the north and Misool MPA in the south (see Figure 5.1). Tourists travelling to resorts in Dampier would be picked up in Sorong by the resorts, while tourists going to other accommodation providers would typically take the ferry from Sorong to Waisai before continuing to the destination. There are two ferry trips each day from Sorong to Waisai and vice versa. Tourists staying with homestays are usually picked up by homestay operators by speedboat or boats with outboard motor. Tourists going to the resort in Misool would be picked up in Sorong by the speedboat of the resort, those staying with homestays in Misool would first go by ferry, and then by speedboat of the homestay or by independent speedboat operators. Misool is only connected to Waisai with three ferry trips per week. A ferry trip to Waisai takes two hours (four hours by slower boats) and forms the first stop to Dampier Strait MPA, while it takes eight hours to reach Yellu, the first stop to Misool MPA (southern Raja Ampat). Liveaboards are mostly harboured in Sorong, and typically leave on the same day their guests arrive at the airport in Sorong.

The majority of the tourism operators working in the MPAs produce all tourism products and services themselves (see Figure 5.3). The tourism value chain structure shows a strong segmentation according to market segment, whereby liveaboards and resorts represent the higher end and the other operators the lower end of the market. This segmentation is governed by local government policy, as homestays can only be owned by local community members, while resorts and liveaboard can also be owned by others from outside the community/region. As a consequence, the segmentation also determines the flow of benefits to the local community. The tourism value chain in Raja Ampat MPAs reflects an integrated

structure, with the key accommodation providers delivering most services and leaving only some services for local operators, such as guides, speedboat and homestay operators, and local art performers.

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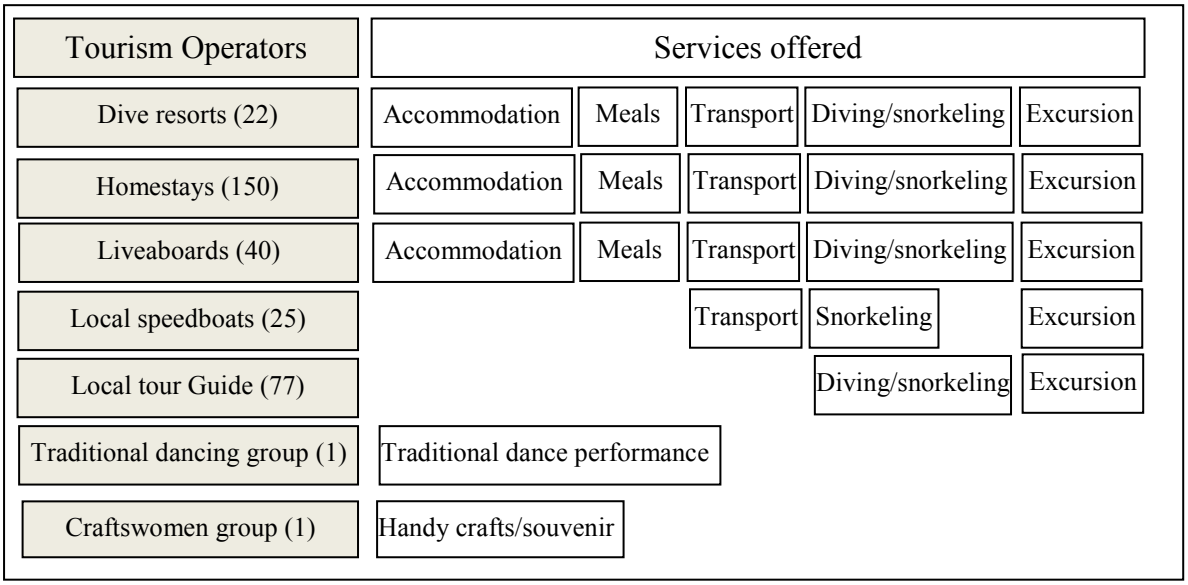

Figure 5.3. Tourism value chain structure of Raja Ampat marine conservation tourism

The first resort and liveaboard to operate in Raja Ampat started in the 1990s, and the first homestay was built in 2009. In 2014, the number of resorts operating within and adjacent to MPAs reached 18, the number of homestays reached 40, while the liveaboard yearly permit quota of 40 vessels had been completely reached. In 2017, both the quotas for liveaboards (40) and resorts (20) were fully used, while the number of homestays had increased to 150. Half of the liveaboards are owned by Indonesian companies, while the other half are owned by foreign companies. Meanwhile, seven resorts are owned by foreign investors. Pioneers of the resort and liveaboard business are two foreign entrepreneurs that started their business before the establishment of Raja Ampat as Regency. Cultural tourism products and services, such as cultural performances and handicrafts, are very limited. At the time of the research, only one traditional dancing group and a group of craftswomen are operating out of Arborek

5.4.2. Benefit distribution of marine conservation tourism

The number of tourists flowing through the value chain reflects the income generated by respective operators. Tourist visitation to Raja Ampat has grown sharply during the last decade, from around 1,000 tourists in 2007 to 28,000 tourists in 2018, representing an approximate annual growth rate of 35.38%. The market share in relation to the three key

accommodation types has been changing over time. As the homestay business is growing, so has their market share in number of tourists, from less than a half percent in 2009 (0.31%) to 10% in 2017. Despite this dramatic increase in sales, around 60% of the tourists are still travelling on liveaboards and to resorts (Figure 5.4). In combination with the higher priced rates of resorts and liveaboards this implies a larger tourist spending on accommodation captured by liveaboards and resorts.

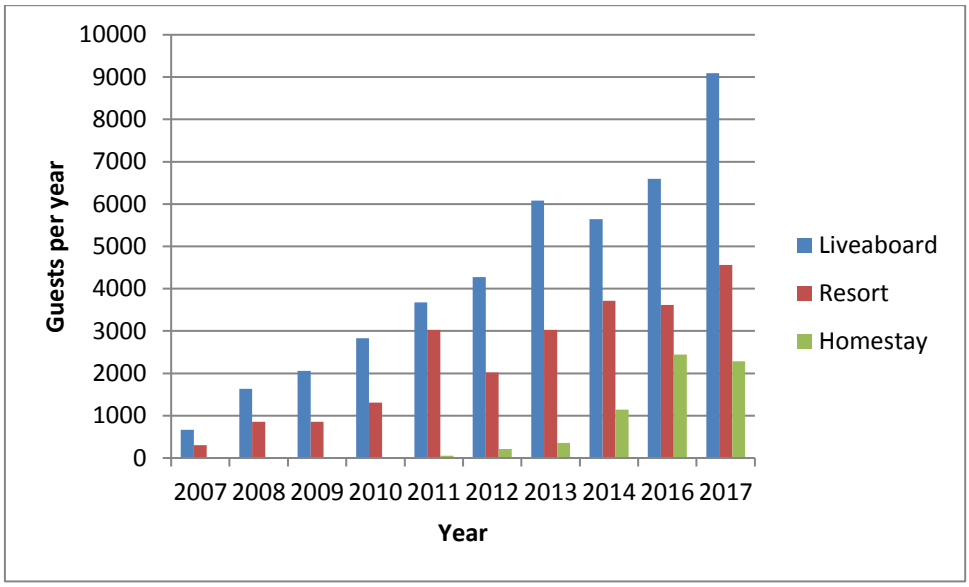

Figure 5.4. Guests by operators (source: MPA authority)

A typical homestay in Raja Ampat is a bungalow constructed on land or on poles above water, consisting of one or more rooms for a maximum of two guests in each room. Several homestays contain facilities to accommodate groups of 10 guests. Some homestays have more than one bungalow. In average a homestay business can accommodate 10 guests at a time. Visitors data shows remarkable seasonality, where the period of tourists season is around 8 months (around 240 days) from September to May, highly affected by weather. It can be assumed therefore that homestay average sales capacity, i.e. homestay capacity to hosts guests during tourist season, is 2,400 guests-nights per year. Meanwhile, visitor data reveals that homestay get on average 36 tourists per year with average length of stay of 6 days per guests. Average sales of homestays is therefore 216 guests-nights per year. However, Figure 5.5 shows an unequal distribution of both the sales capacity as well as the yearly sales of homestays. The sales capacity of homestays is ranging from one bungalow for 480 guests-nights per year to several bungalows for 14,400 guests-nights per year, while the yearly sales of homestays is ranging from 24 guests-nights per year to 1,824 guests-nights per

year. With an average room rate of US$ 34 per guest per night, an average of six nights duration of stay, and a total of 2,500 tourists visiting homestays in 2017, an estimated US$ 510,000 income to homestay operators was generated in 2017. Around US$ 340,000 revenue was generated by 10% of the homestays (seven homestays), while the remaining US$ 170,000 was distributed over the remaining homestays. Interviews and field observation revealed that key factors contributing to a larger share of tourism income are: non-local managers, collaboration with external (international) parties, better facilities and longer experience in the homestay business. Besides lodging and meal services, homestays earn additional revenue by providing additional services, such as transportation, excursions and diving. Small homestays on average make US$ 830 revenue per year from excursions, while larger homestays in possession of diving equipment earn US$ 1,500 a year. The homestay business is estimated to make yearly revenue of US$ 210,000 from excursions. With transporting guests from and to Waisai, small homestays on average make US$ 670 a year, while larger homestays can make US$ 5,840 a year. An estimated total of US$ 84,000 per year is generated by homestays from transporting guests.

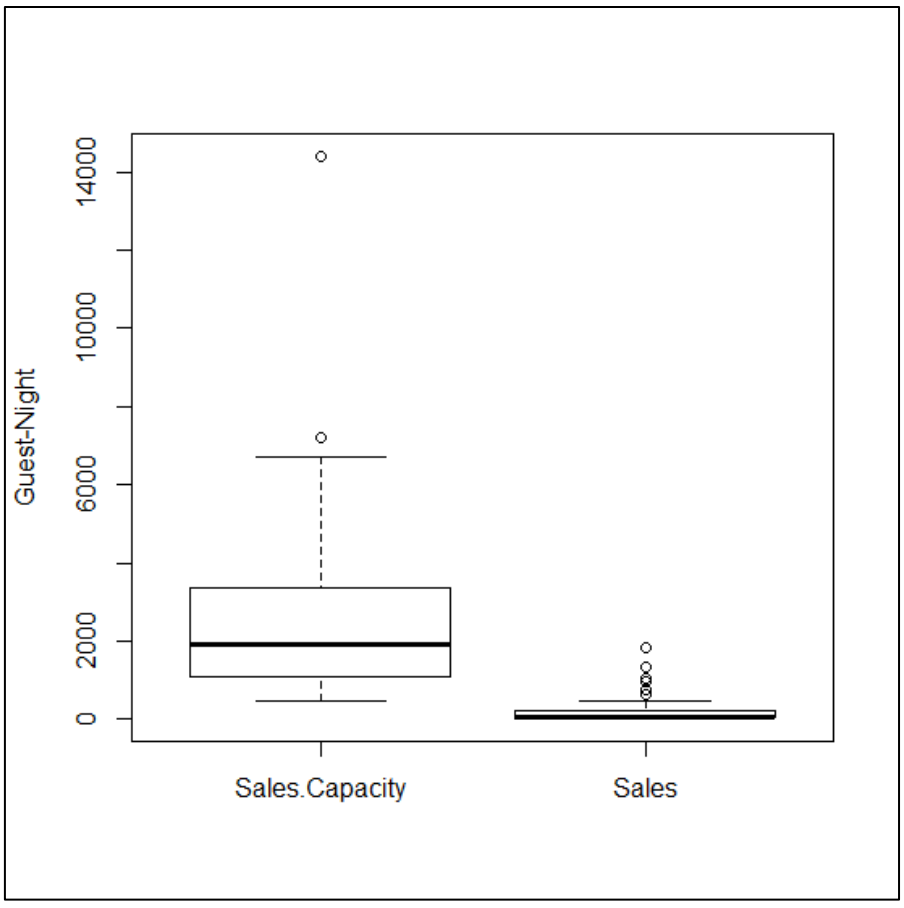

Figure 5.5. Size of homestays in Raja Ampat and guests hosted

5.4.3. Geographical distribution of marine conservation tourism

As local communities are scattered over the whole area of Raja Ampat archipelago, the geographical distribution of benefits of marine conservation tourism among local communities reflects the distribution of marine tourism activities. The icon of Raja Ampat tourism is Wayag island, a karst island located at West Waigeo MPA where tourists go for excursions (hiking) to enjoy the scenery. The spot is quite far from Waisai, the capital city of Raja Ampat, and transport is relatively expensive. The local customary community asks for an additional fee (see Atmodjo et al., 2017) of US$ 80 per boat per visit to visit the island, because they claim ownership of the spot and recognize its touristic value. Another karst island, Piaynemo island, recently became a new landmark competing with Wayag. Piaynemo is located adjacent to the Selat Dampier MPA, closer to Waisai and cheaper with an additional fee of US$ 25 per boat. Marine conservation tourism activities are not distributed equally over the MPA network of Raja Ampat, as they are mostly concentrated in or adjacent to Selat Dampier MPA, especially in the Mansuar islands (Table 5.2). Liveaboard operators interviewed revealed that their favourite spots are in Misool MPA and Selat Dampier MPA.

Table 5.2. Distribution of Tourism activities across MPA network in Raja Ampat, 2017

MPA	Tourism village	Homestay	Resort	Traditional dancing group	Craftswomen group
Ayau Asia	-	4	-	-	-
Mayalibit Bay	-	5	-	-	-
Dampier Strait	13	125	19	1	1
West Waigeo	6	4	1	-	-
Kofiau	-	1	-	-	-
South Misool	5	12	1	-	-

Source: BPS Kabupaten Raja Ampat, 2018

5.4.4. Pathways to local livelihoods

Figure 5.6 shows the flow of marine conservation benefit to local communities of Raja Ampat through direct, indirect, and dynamic effects in terms of yearly financial streams. The next paragraphs will discuss these results.

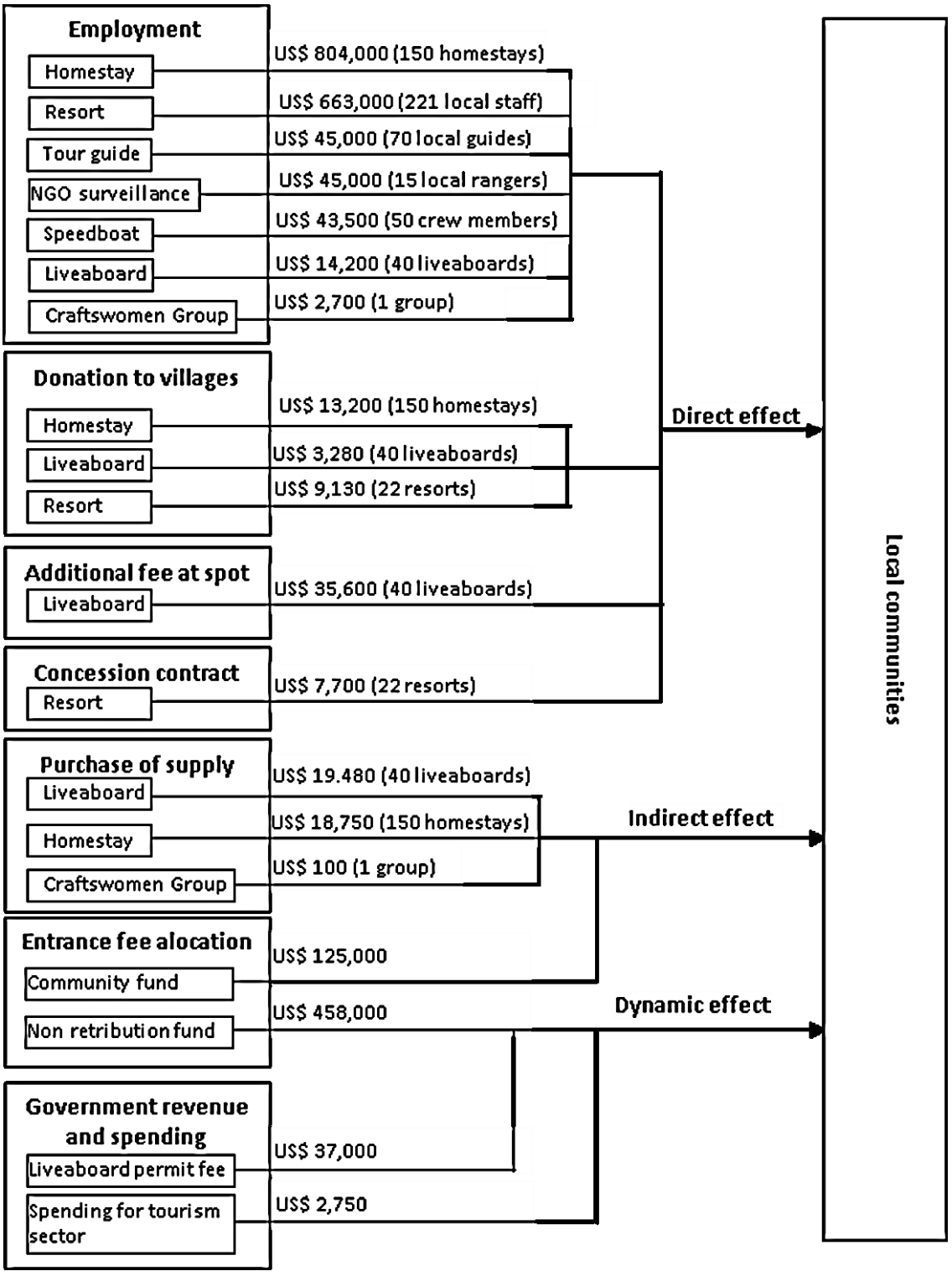

Figure 5.6. Estimated annual flow and magnitude of marine conservation benefit from different sources

Local involvement in tourism business (direct effects)

Interviews and field observations suggested that most of the homestays in Raja Ampat are owned and operated by a single family. Only two out of 40 homestays interviewed are owned

and operated by extended families. Family size of homestay owners ranged from three to eight adults, with an average of five adults. Some homestay owners also host extended family members as dependents who usually also help them in homestay business. Families of homestay owners perform all tourism services while employing family members as much as possible. Additional irregular labour from the village is typically needed, such as cooks, to help the owners to provide services to visitors when a homestay has more visitors than normal.

Interviews with twelve liveaboard operators revealed that a total of eight local dive guides are employed as non-permanent crew members by four of the liveaboards, but only one dive guide is on board during each trip of the four ships. Only one of the liveaboards employs local staff as permanent room keeper. The liveaboard operator suggested that it is difficult to find certified dive guides or local community members who are willing to be employed as crew. Local dive guides prefer non-permanent employment as they are not bound to the job and may choose not to join a trip. In addition, a non-permanent dive guide earns more income when paid on a per trip basis. Roughly a total of US$ 14,200 revenue per year was made by locals employed by the four liveaboards.

Twenty five speedboat operators employ 50 local community members as crew, generating around US$ 43,500 of revenue a year. Local tourist guides, cultural attractions and the souvenir industry develop quite slow. Seventy seven local tourist guides, working freelance or with travel agents, take part in four to five trip days a month per person, earning about US$ 45,000 revenue in total per year. Only one dancing group was found in the study area providing performances to tourists in Arborek village. The traditional dancing group makes US$ 830 a year. Similarly, only one handcraft group was found in the study area, also in Arborek village. The group consists of 23 women, who also engage in handling waste at the jetty and in the village. The group makes about US$ 2,250 a year from selling souvenirs, like hats, mats and traditional bags made of *pandanus* leaves, as well as US$ 410 from the donation box at the jetty from tourists for waste handling.

Local connection with tourism business (indirect and dynamic effects)

Resorts located near Waisai purchase basic supplies in Waisai and Sorong, while other resorts purchase almost all basic supplies from Sorong (F1-3). Village leaders near the tourism spots confirm practically no significant transactions between resorts and locals (J1-4). Similarly, homestays also buy food in Waisai while picking up their guests. Some homestay operators fish themselves to provide seafood to their guests. Homestay operators in Arborek and Kapisawar even purchase fish from migrant fishermen living in the villages. Liveaboard

operators take their food supplies from Sorong, as they are anchored in the port of Sorong before and after tour trips. They purchase fish from locals when offered during tour trips, used for crew meals only. According to liveaboard operators interviewed, an estimated US$ 6,660 is spent on food supplies from local Raja Ampat suppliers per year. While most fish at the market in Waisai comes from local fishermen, almost all vegetables, fruits and other food ingredients are products of migrant farmers or imported from Sorong (C1).

There seems to be no regular or substantial business connection between the accommodations (resorts, liveaboards and homestays) and other local economic activities, such as agriculture or fishery. Neither direct connections (tourism products outsourcing) nor indirect connections (supporting supply) are mentioned in our data between the key accommodation providers with non-tourism sectors. Moreover, field observations in the major tourism villages, i.e. Harapan Jaya, Arborek, Sawinggrai, Yenwaupnor, Saporkren, Friwen and Yenbuba, revealed that no local production of goods or services has been developed. Basic supplies for daily life of people in villages as well as for tourism business are mostly from Waisai or Sorong.

Depending on the revenue, homestay operators donate US$ 4 to US$ 17 a month for the churches, and an average US$ 25 per year for national days, Christmas as well as New Year. Hence, a total of around US$ 4,160 is donated to churches by homestays operators, in addition to US$ 1,660 donated to villages for national days.

Liveaboards and resorts also donate to villages near dive spots on request of village leaders. Donations are given both in cash as well as in kind, such as diesel oil for electric generators in villages or ingredients for Christmas and New Year mass and festivities. As liveaboards are rarely in contact with villages, the total donation is around US$ 830 in kind and US$ 83 in cash. An estimated US$ 415 a year is donated by each of the resorts to villages nearby for similar purpose, mostly in in-kind form.

Tourism infrastructures developed by or with support from the government can also be used for other purposes by local people. Jetties to support tourism are also used by local communities for transportation or subsistence activities, like fishing. Thirty percent of the revenue from the tourism entrance fee (US$ 458,000 in 2016) is set aside as non-retribution fund which is stored to government revenue account and used for the development of Raja Ampat in general. The local government of Raja Ampat also collects permit fees from liveaboards, ranging from US$ 1,250 to US$ 417 to US$ 2,500 per year per liveaboard depending on the capacity of boats and the nationality of the owner. Annual government revenue from liveaboard permit fees is around US$ 37,500. In total, the annual government budget for tourism related spending from various income sources is around US$ 2,750 for

infrastructure and capacity building through the regency's development budget. In addition, a total of US$ 125,000 is designated to be directly distributed to villages according to the community fund scheme (Atmodjo et al., 2017). The community fund is aimed at creating community awareness in conservation. The fund is managed by the local MPA authority and spent according to proposals of village communities.

5.4.5. Local governance of marine conservation tourism benefits

In order to direct the benefits of tourism development to local communities, the regency government adopted a pro-poor and community-based tourism approach (Dinas Budpar Raja Ampat, 2011). Several villages were designated as tourism villages to create the legal base for providing financial assistance to villagers to operate tourism business (Waimbo, 2012). Four government decrees were issued to designate 24 tourism villages during the period of 2008 to 2014 (BPS Kabupaten Raja Ampat, 2018). The local government also issued regulations to limit operation permits for resorts to 20 and for liveaboards to 40 yearly. Homestays represent a category of accommodation business allowed exclusively for local community members, which are financially supported, unrestricted and tax free (Atmodjo et al., 2017).

A tourist entrance fee is applied since 2007 to tourists and researchers visiting Raja Ampat, valid for one year. The entrance fee for Indonesian tourists is appr. 20 US$ and for international tourists appr. 40 US$. The revenue from tourist fees is used for financing conservation activities, for government general development budget, and for providing financial assistance to local communities. The entrance fee scheme was changed and the rate doubled in 2014 (Atmodjo et al., 2017).

Various stakeholders take part in the governance of marine conservation tourism in Raja Ampat. In addition to promote and help to establish the MPA network in the area, the international NGOs Conservation International (CI) and The Nature Conservation (TNC), and Starling Resources (SR), a management consultant, also collaborate with the local government in promoting marine conservation tourism. These three non-state actors were funded by Walton Family Foundation and Lucille Packard (Atmodjo et al., 2017; Rudyanto et al., 2016). The two international NGOs were intensively involved in the design and implementation of both entrance fee schemes, while SR was involved only in the design and implementation of the new entrance fee scheme. Besides, SeventyThree, another management consultant, was involved in empowerment of homestay operators by providing training and mentoring especially in hospitality.

The regency office of tourism has aspired a program called "one liveaboard one village", in which a liveaboard would be charged with mentoring a tourism village (B_1). Despite the positive response by liveaboards operators, the program has not been realised as liveaboards operators have not seen a doable format and structure of the program (E_{1-10}). The homestay association has also experimented with a "women market" in Saporkren village, collaborating with a women group of Saporkren village created solely for this purpose: to provide agricultural products for homestay supply. The women group was disappointed as the market was not working (Q_{1-5}). In addition, the tourism office under auspice of CI also encouraged liveaboards to be based in Waisai in the hope that liveaboards will contribute to the local economy or Raja Ampat.

5.5. Discussion

Marine conservation tourism development in Raja Ampat undoubtedly has brought about benefits to local communities, both at micro and macro scales. It has raised local community awareness of alternative livelihood through which they can manage their own natural resources (Waimbo, 2012). The establishment of Raja Ampat regency has increased accessibility, making it easier for fishermen to sell their catch. Development of transportation infrastructure has increased transportation from and to various parts of Raja Ampat via Waisai. Fish collectors can access villages and transport the fish out of Raja Ampat more easily, so that income of fishermen increased. However, those who engage directly in tourism obtained a much higher increase in income (Tafalas, 2010). The tourism entrance fee also provides general revenue to the Raja Ampat government (Atmodjo et al., 2017). The contribution of tourism related sectors (accommodation and meals) to the local economy has also increased, but is still limited (BPS Kabupaten Raja Ampat, 2019). In spite of its positive financial impacts, there is room for improvement so that marine conservation tourism benefits can reach a larger share of the local communities of Raja Ampat.

5.5.1. Marine conservation tourism value chain structure

The value chain structure of Raja Ampat's three key marine conservation tourism segments can be characterized as integrated. Resorts, liveaboards and homestays in Raja Ampat provide all the necessary tourism services to their guests, i.e. transport, accommodation, catering, and core tourism activities, such as diving, snorkelling and excursions. Speedboat operators also provide similar services except for accommodation and catering. Coordination among operators to provide specialised and different types of services is not developed, which is claimed to be typical for island tourism destinations (Parra-López and Martínez-González, 2018).

Resorts and liveaboards differ from homestays in that they provide more high end tourism services to tourists, while homestays provide more basic services to tourists. Speedboat operators on the other hand offer the same day trips to a number of attractions. Liveaboards offer mobile accommodation that gives opportunity for tourists to undertake activities in a larger geographical area than resorts and homestays, moving from Misool MPA in the south to Wayag in the north of Raja Ampat. Tourists staying at resorts and homestays in the Dampier Strait MPA in northern Raja Ampat do not typically visit Misool MPA. Similarly, tourists of resort and homestays in Misool MPA do not usually visit Wayag. Contrary to resorts and liveaboards, homestays are typically owned by locals, which makes it easier for their guests to interact with locals even though most of homestays are located outside villages. In addition, resorts and liveaboards provide more luxury facilities and services compared to homestays.

The integrated structure of the three market segments may well obstruct new opportunities for community engagement with tourism. A fragmented value chain structure is claimed to open opportunities for leading firms to help upgrade local operators (Braun, 2005), and to improve their capacity to participate in tourism (Mustapha, 2013). The current growth and increasing capacity in hospitality, marketing and capital assets of homestay operators has little to do with resorts and liveaboards. Initially, pioneers in the homestay businesses in Dampier Strait MPA were employees of the pioneer resort in the area, which can be seen as functional upgrading (Daly and Gereffi, 2017). International NGOs (e.g. CI) and management consultants (Starling Resources and SeventyThree) play an important role in tourism capacity building and developing the online reservation system of homestays. The local government of Raja Ampat provides grants to locals to engage in the homestay business.

5.5.2. Inter-sector linkage

This study shows that opportunities for the local community to benefit from marine conservation tourism is mostly through direct effects (Mitchell and Ashley, 2010), i.e. employment in resorts and liveaboards and establishing a tourism businesses. In Raja Ampat, homestays are currently considered the key to local community participation in tourism. Despite local government efforts to connect local community members to the value chain of resorts and liveaboard market segment, for example through community partnerships, small business outsourcing and supply chain linkages (Adiyia and Vanneste, 2018), such connections are lacking.

Creating business linkages between core tourism businesses and local suppliers of goods and services, such as agricultural and fishery products, may help to keep tourism revenues in the region rather than leaking to other regions and countries (McEwen and Bennett, 2010; Meyer, 2007; Mitchell and Faal, 2008). When local communities are given more opportunities to supply goods and services to a particular tourism value chain, the value added will flow to the local community (Adiyia and Vanneste, 2018; Vignati and Laumans, 2010). In Raja Ampat, local farmers and fishermen are unable to supply agricultural and fishery product in the quality and quantity required by resorts and liveaboards. Even homestay operators largely purchase their supplies in Waisai, the capital city of Raja Ampat Regency, where most products are supplied by migrant traders or imported from outside Raja Ampat.

The case of Raja Ampat seems to confirm the claim that economic leakage in weak destination economies of island tourism tend to be high and result in a small multiplier effect (Meyer, 2007). Not only are supplies for the operation of tourism businesses bought outside the destination area, even basic goods needed by the rural inhabitants of Raja Ampat, except for fish, are largely from outside the Regency. The dynamic effect of conservation tourism is therefore very weak, as revenue from tourism businesses made by local communities are also spent outside villages.

5.5.3. Stakeholders' role in the governance of the marine conservation tourism value chain

Stakeholders can play a role in governing the tourism value chain through policy formulation so as to restructure the value chain to open opportunities for local communities (Adiyia et al., 2015). Stakeholders may include state and non-state actors placed outside the value chain, such as government institutions, tourism and non-tourism business associations, and local communities (Mitchell, 2012; Scheyvens and Momsen, 2008).

The local government of Raja Ampat has played an important role in governing the marine conservation tourism value chain. Entry barriers were set up by the local government of Raja Ampat, for instance by capping the number of resort and liveaboard licenses to operate in Raja Ampat, and by reserving the lower end segment of homestays exclusively for the local community. Such policies can be seen as affirmative action in a pro-poor tourism context (WTO, 2002). Efforts by the local government to connect local communities to the tourism value chain of liveaboards, however, have been unsuccessful, in spite of personal commitments of liveaboard operators to participate in these effort as part of their operating permit. Except for the voluntary role of resorts, such as Misool Foundation, there is no visible policy aimed at linking resorts better to the local economy. There is no integrated inter-sector government program involving wider government institutions beyond the tourism

office, such as the agriculture, fishery, infrastructure and transportation offices, to enhance the capacity of local communities to connect to tourism.

The role of different stakeholders in tourism value chain governance in Raja Ampat is not equal. The local government and CI play a dominant role, while resorts and liveaboard operators seem to be less visible. For example, there are no regional resort or liveaboard associations involved, while there is a liveaboard association at the national level. Liveaboard operators (E_{1-2}) stated that this national liveaboard association acts only as a communication channel between the operators and the tourism office, and not as a medium for operators to bargain with the Raja Ampat government regarding tourism development. There is also no clear structure of tourism destination management in Raja Ampat. NGO staff (A_{2-3}) were involved in the central tourism department's Destination Management Organization (DMO) project, but have no idea on the continuation of the project. The Raja Ampat tourism forum is said to have been established through the DMO project, but there is no document available describing the organization's structure, staff and mandate. In most developing countries, tourism value chain governance tends to be centralized, where the government plays a dominant role (Song et al., 2013). Raja Ampat Regency's government also plays important role resulted in current segmentation of conservation tourism value chain. However, tourism office efforts to establish linkage between non-local tourism businesses, especially liveaboards, to local communities still provide no results.

5.6. Conclusion

This study examined marine conservation tourism benefits to local communities by analysing the tourism value chain in and near marine protected areas in Raja Ampat, Indonesia. The three pathway framework was adopted to identify the ways in which the local community financially benefits from tourism. Based on the findings and discussion above, it is concluded that the main way in which local communities participate in tourism is through employment in resorts and locally owned homestays. Besides self-employment, homestay operators also employ their family members and close relatives. In spite of the increasing number of homestays and tourists staying with them, the majority of tourists stay with resorts and liveaboards. As homestays are cheap accommodation, even more revenues flows to resorts and liveaboards. The near absence of supply chain linkages to other economic sectors in the destination has three implications. Firstly, marine conservation tourism benefit flows to local community mainly through the direct effect, i.e. employment and direct participation in tourism business. Secondly, local community members who don't have sufficient capacity to participate in tourism business have little opportunity to benefit from marine conservation

tourism. Thirdly, the tendency for high tourism leakage means that the benefit of marine conservation tourism in Raja Ampat stays only to a limited extent in local communities.

Increasing indirect effects and reducing tourism leakage are potential strategies to further improve the financial benefits of marine conservation tourism for local communities. In this study challenges and opportunities for non-tourism sectors based in local communities have not been explored in detail, but might open ways to improve the benefit of marine conservation tourism to local communities. Identification of challenges and opportunities in connecting the fishery sector, one of the main sectors in Raja Ampat, to marine conservation tourism has potential for improving the benefit to local communities. Fishery is still very much a livelihood strategy for most local communities of Raja Ampat, but it also has the potential to tap into the tourism value chain. Identification of challenges and opportunities for connecting the agricultural sector is equally promising, as locally produced agricultural products can replace imported food.

Different actors have a role to play in enhancing local community benefits of marine conservation tourism. Local government needs to pay attention to the creation of supply chain linkages between tourism sectors and non-tourism sectors in the destination economy (Adiyia and Vanneste, 2018) to create opportunities for those who don't have assets to participate directly in tourism. This can also reduce tourism leakage. This, however, requires a coordinated program of different local government departments, such as tourism, fishery, agriculture and transportation, to empower local community to produce and deliver agricultural and fishery product that match the quality, quantity and timing required by tourism operators. Local government can also play a role in resolving entry barriers for local communities to participate in marine conservation business, for instance by defining a cheap accommodation market segment exclusively for local communities and by providing financial assistance to overcome financial barriers.

Tourism operators should also be given a role in this effort by creating cooperation platforms in which tourism stakeholders in destination areas can communicate and pilot ideas and measures to further insert local community stakeholder in the tourism value chain. Tourism operator associations can play their role as intermediates or 'private interest governments' (Mol, 1995), between government, private operators and local community groups.

Finally, conservation NGOs are important in human resource capacity building for local community engaged in tourism business.

Chapter 6: Conclusions

6.1. Introduction

Across the world marine protected areas (MPAs) have been established to overcome marine resources degradation from illegal and destructive activities, and over-exploitation. The number and coverage of MPAs worldwide is growing. Well implemented MPAs can provide ecosystem goods and services in terms of sustainable catches of fish, leading to improvement in food security, livelihood and income, as well as protection for coastal settlements against natural disasters (Ferrario et al., 2014; Lutchman et al., 2005). As poverty is a driver for destructive fishing and a reason for breaking MPA rules (Cinner, 2009; Tobey and Torell, 2006), especially in developing countries, breaking the poverty trap through alternative livelihood activities is an important strategy in MPA management. In many of these MPAs, marine tourism has been adopted as an alternative source of livelihood and as a way to generate funding for MPA management and conservation measures (Buckley, 2010). In this case, MPAs provide ecosystem services, e.g. nature and wildlife viewing and experiences (Leenhardt et al., 2015), and tourists pay for consuming these ecosystem services. In addition, marine tourism development in MPAs is considered to provide opportunities for alternative livelihoods for local communities living within and close to MPAs (Pham, 2020). Marine conservation tourism therefore is a type of tourism that has potential to contribute to the achievement of the dual objectives of marine conservation and local livelihood improvement. Marine conservation tourism should also avoid the potential negative impacts on the marine biophysical environment, as well as on the culture and socio-economic development of local communities (Cobbinah, 2015). The triangle of tourism, MPAs and local communities in marine conservation tourism is illustrated in Figure 6.1.

Raja Ampat in West-Papua Province Indonesia can be regarded as a special case of marine conservation tourism. It is regarded as the heart of the Coral Triangle (Larsen et al., 2018): the most species rich area of any ocean in the world, which reflects its important position with regard to conservation efforts within the Coral Triangle Initiative (CTI) (Asaad et al., 2018; Veron et al., 2009). Marine tourism activities have been deliberately deployed and promoted to support the management of a network of MPAs in Raja Ampat, as well as the local communities within these MPAs. Marine tourism in Raja Ampat has been growing rapidly during the last 20 years, in terms of number of tourists and tourism operators. Despite threats to its marine resources (Mangubhai et al., 2012), marine tourism in Raja Ampat archipelago is heavily promoted as the last paradise on earth (see for example AFP, n.d.; Cove Eco Resort, n.d.; Eco-Business, n.d.; King, 2017). Various actors are participating in the governance arrangements for marine conservation tourism in Raja Ampat (Atmodjo et al., 2019).

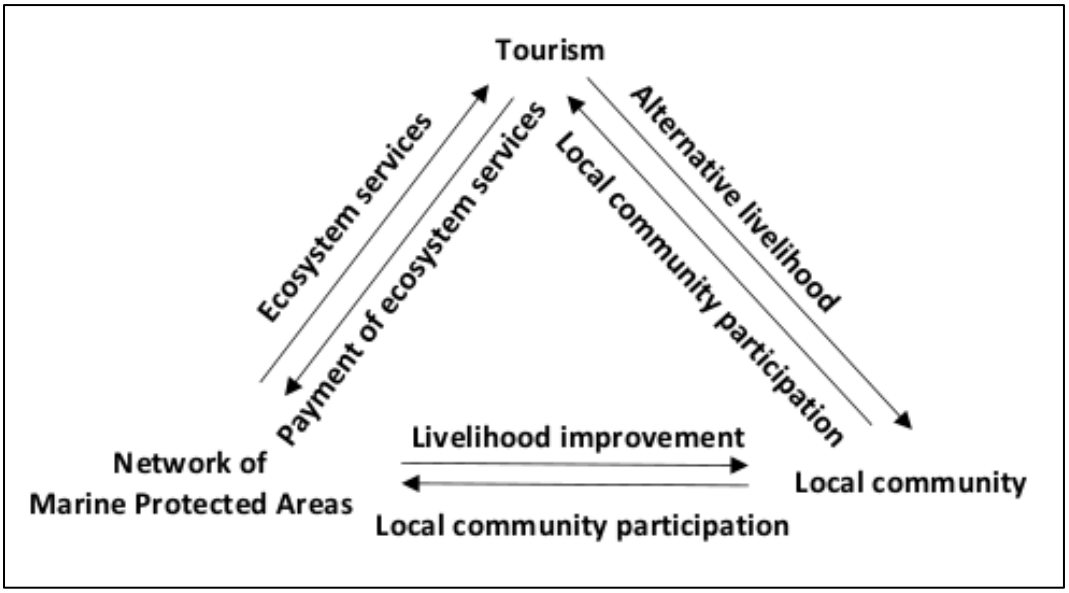

Figure 6.1. Marine conservation tourism concept

The objective of this thesis has been to analyse marine conservation tourism governance arrangements and the implications of marine conservation tourism for various stakeholders in Raja Ampat. More specifically it aims to understand the roles of non-state actors in the evolution of governance arrangements for marine tourism and conservation in Raja Ampat, as well as the impact of various policies aimed at shaping benefits of marine conservation tourism for local communities of Raja Ampat. For example, visitors are required to pay an entrance fee to visit Raja Ampat, which is unique when compared to other marine tourism destinations in Indonesia. In addition, while the numbers of resorts and liveaboards are capped, local community groups are supported to set up basic tourism accommodations. As Raja Ampat is part of wider marine conservation initiatives, i.e. BHS and CTI, it is important to learn from these experiences for managing marine tourism, conservation and community livelihood in other marine destinations. The following two research questions were defined to achieve the research objective:

1. How has marine conservation tourism in Raja Ampat been co-governed over the last decades, and what role have non-state actors played in the evolving governance arrangements?
2. How has the regional policy of community-based tourism in Raja Ampat been implemented in terms of its congruency with the customary right regime and its effect on local community engagement, as well as on tourism benefit distribution to the local community?

The first question, which focuses on marine conservation governance, was elaborated mainly in chapter 2, but also discussed to some extent in chapter 3. While chapter 2 analyzed and

discussed the evolvement and integration of various marine conservation tourism governance arrangements in the context of national decentralization policies, chapter 3 outlined and discussed the evolvement of the entrance fee scheme. The second research question focuses on marine conservation tourism policies and their implications for the delivery of benefits to local communities. This is mainly elaborated in chapter 3, chapter 4 and chapter 5. Chapter 3 and chapter 4 analyzed two distinct policies, namely the policy schemes for the entrance fee and the establishment of homestays, while chapter 5 contains an overall assessment of tourism benefits to the local community.

6.2. Main findings

6.2.1. The role of non-state actors in co-governance of marine conservation tourism

Marine conservation tourism development may involve diverse societal actors that form collaborative governance arrangements or partnerships to achieve the multiple objectives of marine conservation tourism, i.e. marine tourism experiences, nature conservation and alternative community livelihood. In fact, in this thesis we have demonstrated that a number of co-governance arrangements, with different governance modes, may co-exist in achieving part of these objectives.

The decentralization policy of the Indonesian government at the turn of the millennium opened opportunities for the development of marine conservation tourism governance arrangements by the newly established Regency of Raja Ampat. International awareness of the relatively healthy coral reef ecosystem in Raja Ampat and the importance of protection against threats leading to its degradation attracted a range of non-state actors, including private entrepreneurs, NGOs and philanthropists from across the world. We found that international conservation NGOs play a leading role among these non-state actors in the evolvement of marine conservation tourism governance arrangements. NGOs were involved in many governance processes. They collaborated, and even were leading, the establishment and management of MPAs with a relatively small role for the newly established regency government. Even in private-community governance arrangements, such as the Marine Conservation Agreement of Misool Eco Resort, TNC facilitated the resort and local community in the formation of the governance arrangement. High participation of local communities of Raja Ampat in marine conservation tourism business, especially homestay business, also resulted from NGOs helping the local government of Raja Ampat in formulating policies, which provided exclusive rights of local communities to own and run low-end accommodations. In addition to international NGOs, bilateral and multilateral agencies, i.e. USAID and the World Bank (WB), also engaged in the establishment of a

village institute for coral reef resource co-management through the COREMAP-II project. The major role of WB and USAID in this co-governance arrangement is in financing the project. On termination of the project the co-governance arrangement discontinued due to funding unavailability.

Marine conservation governance arrangements that evolved during the last decade showed a significant decrease in engagement of non-state actors. Due to limited project funding and ineligibility of NGOs to operate private MPAs, the MPA authority was forced to manage the MPA network of Raja Ampat, which was formerly run by NGOs and local communities. Currently, local community members that were involved in marine patrol and surveillance in previous governance arrangements, are now recruited as employees of the MPA authority, transforming their work from community action to government action. Representation of non-state actors in the tourism entrance fee management system has been reduced over time. The latest development revealed that the MPA and entrance fee governance network has evolved into a more regionally centralized and government-focused mode of governance, coordinated at the provincial level. The MPA authority, which used to be an organizational unit of the Raja Ampat Regency office of Marine and Fishery, currently has become an organizational unit of the West Papua Province Marine and Fishery office. Despite NGO support, this new arrangement is without any serious participation of non-state actors.

6.2.2. Community engagement in benefit distribution of marine conservation tourism.

There are different ways in which local communities benefit from marine conservation tourism. They can be engaged directly in core activities of marine tourism, either by operating their own tourism business selling tourism goods and services to tourists, such as foods and beverages, transports accommodations or performances, or by supplying labor or tourism goods and services to tourism businesses. Local community members can also supply raw materials, such as fish, agricultural products or other materials to tourism businesses. Government spending in tourism infrastructures utilized by wider community members beyond tourism sectors is also a benefit of marine conservation tourism to local communities. Another way in which marine conservation tourism benefits distribute to local communities is through household spending by tourism workers in villages. Local community also deserve the share of tourist entrance fee paid for their participation in marine conservation by refraining from illegal and destructive fishing, as well as their contribution in marine conservation management i.e. safeguarding the marine resources while providing marine tourism services to tourists.

Community-based and pro-poor approaches are adopted by Raja Ampat Regency aimed to direct marine conservation benefits to local communities. In Government's policy documents, accommodation businesses are separated into two categories, i.e. resorts and homestays. This categorization is based on ownership of the accommodation business. Regardless of property size and rates, accommodations owned by local community members are regarded as homestays, while those that are owned by outsiders are regarded as resorts. Liveaboards are regarded in government policy documents as a particular means of marine conservation tourism. The government's policy limits the number of resorts and liveaboards operating in Raja Ampat. In addition, resorts should have higher rates than homestays. On the other hand, there is no specific regulation regarding homestays. The local government provides subsidies to local communities to participate in homestay businesses, and NGOs provide hospitality capacity building for those engaged in the homestay business. This policy has led to a dramatic growth of homestays over the last decade. Homestays are rapidly gaining market share in the Raja Ampat tourism industry.

In accordance with the community-based approach, subsidies provided by the Regency of Raja Ampat are delivered in a group based scheme, i.e. not allowing individuals to receive subsidies. Through the tourism village program, homestay groups consisting of community members regardless of land ownership are usually created to capture the subsidies to build and operate homestays. Homestay groups often gradually dissolve and the customary owners of the land on which the homestays are built eventually claim these homestays. Currently homestays in Raja Ampat tend to be private business, owned and operated by individuals or single families, rather than community-based enterprises owned and operated by extended families, clans or villages. The tendency to run homestays as individual private business, rather than community-based business, has contributed to the mushrooming of homestays in order to capture the growth of tourist visits. By the same token, the homestay policy created unequal opportunities for community members to participate in homestay business, as only those who have land resources suitable for homestays ultimately profit from subsidies.

Tourism value chain analysis revealed that in absolute terms, of all tourism activities, homestay businesses deliver the highest economic benefit to local communities. The policy to protect homestay business exclusively for local communities and to provide subsidy for local communities has opened opportunities for local communities to engage in marine conservation tourism and generated a direct effect of tourism development through locally owned and operated accommodation business. Homestay businesses also deliver higher indirect benefits to local communities through donations to churches at religious and national occasions. Although the highest number of tourists visiting Raja Ampat is on liveaboards,

these mobile tourism operators provide the smallest benefit to local communities because they limit contacts with local communities. Rates of resorts and liveaboards are higher than homestays. The smaller share of benefit delivery of resorts and liveaboards to local communities can be an indication of tourism leakage.

Major marine conservation tourism attractions of Raja Ampat are concentrated in the Dampier Strait MPA. This has created inequitable distribution of tourism benefits, as local communities in other areas are not able to benefit to the same extend. In addition, not all community members may hold rights to land resources suitable for homestays (i.e. stretch of accessible sandy beach), this also plays a role in the inequitable distribution of benefits from tourism within local communities. We have argued that the lack of a linkage between the tourism sector and non-tourism sectors, such as fisheries and agriculture (e.g. pearl farms), have also prevented a more equitable benefit delivery among and within local communities.

Revenue from tourist entrance fee were allocated for subsidies to local communities to engage in marine tourism business (known as community fund) and participate in marine conservation activities (known as conservation fund), in addition to general revenue of Raja Ampat government and covering the cost of tourist entrance fee management. Marine conservation tourism benefit distribution to local communities through tourist entrance fee allocation can be seen as payment of ecosystem services (PES). The shift of tourist entrance fee management from the committee under Tourism office to MPA authority has made relationship between PES and ecosystem services provision more clear (conditionality), as MPA authority as the recipient of PES has the obligation of conducting marine resource stewardship. The new community fund distribution scheme however doesn't improve conditionality under PES perspective.

In sum, tourism development policies of the Raja Ampat Regency have a role in shaping the distribution of marine conservation tourism benefits. For example, homestays have been a key pathway by which local communities have been able to benefit from tourism, either by engaging directly in the business or by receiving a donation provided by homestay operators. However, the customary rights system and the geographic concentration of tourism are contributing to the relatively inequitable distribution of tourism benefits to local communities, as only those who hold land ownership in close proximity to key attractions can engage in the homestay business.

6.3. Implications of the findings

This study on marine conservation tourism governance in relation to local communities in Raja Ampat has implications for at least four issues: co-governance, policy incongruencies, benefit distribution pathways of tourism, and vulnerabilities.

6.3.1. Co-governance

Similar to other nature-based tourism destinations, non-state actors have played a central role in the development of tourism and nature conservation in Raja Ampat. Awareness that the coral reefs of Raja Ampat have potential for marine tourism was initially raised by the pioneer of marine tourism, a businessman who built the first resort in Raja Ampat and who can be considered the region's institutional entrepreneur (see Van Wijk et al., 2015). Later, scientists, working in Raja Ampat under auspices of international NGOs, recommended to establish a MPA network. Increasingly, more non-state actors became involved in marine conservation tourism in Raja Ampat, including international NGOs, private actors, as well as local communities. Indonesia's decentralization policy has facilitated the engagement of various local non-state actors in the co-governance of marine conservation tourism. Co-governance arrangements of marine conservation tourism emerged and evolved during the last decade under orchestration of several (international) conservation NGOs, but with the intention to step back and promote the local government to increase its role (Atmodjo et al., 2019).

Literature indicates that community participation in, and community control over, marine conservation tourism is a critical condition for community-based marine conservation tourism (Ait-Yahia Ghidouche and Ghidouche, 2019; Butcher, 2007; Giampiccoli and Saayman, 2018; Harwood, 2010). Compared to experiences in marine conservation tourism development in Fiji (Brunnschweile, 2010; Scheyvens and Russell, 2012a, 2012b), the participation of local communities in Raja Ampat marine conservation tourism is quite well established in terms of local operators and market share. The case of Raja Ampat marine conservation tourism shows how international conservation NGOs play a key role in facilitating local communities to participate in sustainable tourism co-governance, not only in the planning process but also in implementation (Lamers et al., 2014b; van Wijk et al., 2015). This is crucial to prevent local communities in continuously overexploiting their marine resources.

The case of Raja Ampat shows how international NGOs played multiple roles in multiple co-governance arrangements to achieve sustainable marine conservation tourism. The type of roles they played shifted from time to time, until eventually they stepped back almost

completely. This is consistent with the finding of Romero-Brito et al. (2016) that an NGO can play different roles in different phases of marine conservation tourism development, different roles in a particular co-governance arrangement or different roles in different co-governance arrangements simultaneously. Nelson (2007), for instance, categorized NGOs according to their main activities: advocacy, capacity building, and conflict resolution. NGOs can also be categorized according to their relationship with other actors: confrontation, communication, and consultation (Nelson, 2007). NGOs can be considered as a facilitator of conservation or tourism development, especially in helping to realize the wish of local communities (Butcher, 2007). Romero-Brito et al. (2016) identified 10 categories of NGOs roles in conservation tourism co-governance arrangements. In Raja Ampat, conservation NGOs have played multiple roles to achieve sustainable tourism and marine conservation: they communicate coral reef status to raise conservation awareness, they draft marine conservation tourism policy, they bring various stakeholders to the table to collaborate, they develop an MPA network in which they also engage in the management, they build local government and community capacity, and they promote local community participation and engagement. In the case of Misool Eco Resort, TNC was involved only in the preparation step of the co-governance arrangement. In the initial phase of Raja Ampat marine conservation tourism, the international NGO staff conducted scientific research, followed by lobbyist and campaigner roles. Next, they managed the MPAs, while maintaining their roles as scientists setting up and maintaining monitoring programs. Later on their roles changed to include intermediating different actors, capacity building of local government and communities as well as policy drafting.

As in other cases of conservation tourism (Kimbu, 2010; Kiss, 2004; Van Wijk et al., 2015), dependency of marine conservation to external actors and funding is also present in Raja Ampat marine conservation development. The need for sustainable financing for marine conservation tourism development, however, has been anticipated by international NGOs, which facilitated the local government to take control over marine conservation tourism of Raja Ampat once the project, funded by philanthropists, comes to an end. As a contrast, village institutions for coral reef resources management funded by WB and USAID have stopped working due to unsustainable funding.

International NGOs have also played coordinating roles in the co-governance arrangements to synchronize actions of different actors and compromise interests of different actors at different levels (regency to village levels). Brunnschweile, (2010) revealed the prominent role of NGOs in marine conservation tourism in Fiji, where NGO also played multiple roles along the evolvement of marine conservation tourism development. This coordinating role is

absent when international NGOs leave the co-governance arrangements and no government institution takes a leading position (Gan et al., 2019; Lamers et al., 2014b) to coordinate such decentralized marine conservation tourism co-governance arrangements. Their absence typically leads to competition between institutions over marine conservation tourism tasks and income (Kimbu and Ngoasong, 2013).

In Raja Ampat the dynamics and shifts in the co-governance of marine conservation tourism becomes evident when analysed on the longer term. For example, we saw that the transfer of the entrance fee management from a committee under the Tourism office of Raja Ampat Regency to the MPA authority has changed the co-governance mode in such a way that private actors are not engaged, while NGOs and local communities are embedded in the MPA authority organizational structure, which makes that communities act in the new co-governance arrangement more as governmental actor rather than as community. The following transfer of the MPA authority to the Marine and Fishery office of West Papua Province has shifted the co-governance of entrance fee income even further to a more closed arrangement (Arnouts et al., 2012). The governance of fees from tourists became more complicated with two government agencies each collecting different fees. The entrance fee became more centrally collected by the Provincial MPA Authority. While the MPA Authority doesn't collect the regency general revenue component of entrance fee any more, the Regency Tourism Office now collects the tourism retribution fee with a different scheme, i.e. different rates of fee for different tourism amenities visited by tourists. Private actors and local communities are no longer engaged in the distribution of the fees so that they have difficulty understanding and explaining to the tourists what the fees are meant for, while NGOs still provide some support to both subsequent governance arrangements. While marine tourism is still related to marine and tourism affairs and having two organizational units, i.e. the Provincial MPA Authority and the Regency Tourism Office responsible for both overlapping domains, provides complications. This also creates the perception among private entrepreneurs and local community members that both government institutions are competing for control over entrance fees. The division of the two fees over two agencies makes it complicated for tourists, but also complicates spending these fees in a coordinated way.

Contrary to political economy and ecology perspectives on the role of large conservation NGOs gaining control over natural resources through neoliberal arrangements with the private sector (Brockington, 2008; Sachedina, Hassan et al., 2010), the conservation NGOs active in Raja Ampat have been deliberately aiming to build capacity within the local and regional government to take back state control. In other words, the shifts in Raja Ampat's

governance arrangements from more open to closed modes of co-governance arrangement are the result of this strategy of the NGOs to hand over the management of the MPA network to the state. But it is also the result of a recentralization of marine conservation authority towards the Provincial level.

6.3.2. Policy incongruencies

Next to the longer term shifts in governance modes, the Raja Ampat case also points to a number of inconsistencies in policies aimed at reaching the multiple objectives of marine conservation, tourism development and community livelihood. When policy instruments used are incongruent and do not really match related institutional or social settings, the governance capacity of the arrangement is limited and outcomes expected through an implementation of a policy can fail or only partially be achieved (see also Ahebwa et al., 2012; Lamers et al., 2014). Disappointment of particular actors in a co-governance arrangement due to failure to achieve particular policy outcomes can lead to actions that shift the co-governance arrangement. In this thesis we have seen that incongruency of the previous entrance fee governance arrangement with characteristics of participating actors' working behavior and residency, as well as with central government regulation has a negative effect on the effectiveness of the co-governance arrangements. Unregulated growth of homestays also has potential incongruence with marine conservation objectives as it can have negative environmental impact, which can threaten the sustainability of marine conservation tourism in terms of sustainability of MPA as well as the sustainability of marine tourism. The latest developments revealed that the entrance fee scheme has now been split due to a recentralization policy of MPA management. The MPA authority of West Papua Province and Tourism office of Raja Ampat Regency are now competing for entrance fees. These recent shifts represent an example of how external policy change can lead to such policy incongruencies, which may affect the stability of governance arrangements. This makes marine conservation tourism a continuous effort since the external policy environment is always changing (Lamers et al., 2014b).

A second case of policy incongruency relates to the community-based tourism policy of the Raja Ampat Regency and the customary rights regime in the region. The group-based subsidy scheme of Raja Ampat Regency government to local communities indicated that in the policy formulated community is regarded as a collection of people. Homestay is one of the ways in which community-based tourism development programs have been implemented in Malaysia. Homestay businesses are organized as a communal business that delivers benefits to the wider community rather than to individuals (Kumar et al., 2012; Kuuder and Adongo, 2013; Leh and Hamzah, 2012; Strydom and Mangope, 2018). This implies that in Malaysia's

community-based tourism policy the term community is regarded as a collection of people. The literature on conservation tourism, sustainable tourism or ecotourism is full of cases in which the concept of community is defined in different ways. Community may refer to a group of people living in a particular area, a traditional society (Ernawati et al., 2017), local resident (Iorio and Corsale, 2014), affiliation to a particular place (Harwood, 2010), poor or marginalized members of community (Giampiccoli and Saayman, 2018), or a group of people who share commonality, such as culture, values and norms, interests, or social identity, and interact with each other based on these commonalities (Bittar Rodrigues and Prideaux, 2018). Even though the broader concept of community sees the community as a collection of people, a community is not necessarily homogenous. There are subgroups within the community with a diversity of interests, perceptions or other traits. In the case of Raja Ampat the customary rights regime leads to unequal power both between groups that hold customary rights to attractive and biodiverse reefs and those who do not, and within groups between members who own customary rights of land on which the homestay is built and others. Ultimately, customary groups will continue collecting their own fees from liveaboards and tourists, regardless of the arrangements made by the Regency. And homestays are ultimately individually-owned and operated businesses rather than community-owned and operated business. As we will see in the next section, this incongruency has induced inequality in marine conservation tourism benefit distribution.

The role of customary law of local community regarding resource rights ownership in shaping marine conservation tourism benefit implementing community-based and pro-poor approaches also appeared in Fiji (Brunnschweile, 2010; Scheyvens and Russell, 2012a, 2012b), where resource rights owners determine the flows of benefit of leased resources to wider local community members beyond the clan of resource rights owners. Very limited benefits of marine tourism reached those beyond owners of resource rights owners. Despite the communal nature of natural resource rights, this has led to unequitable benefit sharing of marine tourism within wider local communities. Inequality of benefit sharing of marine tourism among community members in the long term can disrupt social cohesion (Reggers et al., 2016).

A final example of policy incongruence in Raja Ampat relates to Regencies policy to cap resorts and liveaboards, but to support the development of homestays without strong restrictions. In other words, the tourism policies of Raja Ampat have focused on the community-based tradition of sustainability, while the limits to growth tradition has been implemented partially (see Saarinen, 2006). This has led to mushrooming of homestays in the region which may pose a threat to the ecological health of the reefs in the longer term.

Sewage discharge to water body due to poor sewage treatment may damage coral reef (Lachs et al., 2019; Silbiger et al., 2018; Yoshioka et al., 2016), the important asset of marine tourism. While the relatively small area clearance to build homestay doesn't really threaten biodiversity on land, erosion resulted from land clearing of farmland can lead to deterioration of coral reefs nearby, due to sedimentation and nitrification (Bartley et al., 2014; Bégin et al., 2014; Martínez-Castillo et al., 2020).

6.3.3. Community benefit pathways

The work of international NGOs in Raja Ampat resulted in quite a major achievement. In a relatively short period, the local communities refrained from illegal and destructive fishing, such as dynamite fishing and shark finning, and have adopted marine tourism as a key alternative livelihood. A larger proportion of marine tourism benefits accrued to local communities through locally owned tourism business, especially homestays. Homestay businesses rapidly gained market share in the value chain structure of Raja Ampat marine tourism. This local business provides more benefits to local communities compared to resorts and liveaboards in terms of money and local community employment and involvement. Compared to failures in community-based tourism efforts in Latin America (e.g. Mitchell and Muckosy, 2008), local tourism operators of Raja Ampat got financial support from local governments, and can have access to the international tourism market. Compared to marine conservation tourism in Fiji (Brunnschweile, 2010; Scheyvens and Russell, 2012a, 2012b), where most benefit accrued to the local community through profit sharing and concession fees, most marine conservation tourism benefits in Raja Ampat flow to local communities through participation in marine conservation business.

Marine conservation tourism in Raja Ampat shows potential for poverty alleviation, especially through homestay businesses owned and run by local community members. Also in Malaysia and Ghana, homestays and hotels owned by local community members play important roles in delivering conservation tourism benefits (Kumar et al., 2012; Kuuder and Adongo, 2013; Leh and Hamzah, 2012; Strydom and Mangope, 2018). However, in Bolivia facilities for tourism activities such as trail lines attract day tourism activities, which generate more income for local communities (Strydom and Mangope, 2018). In Africa exclusive conservation tourism services to wealthy tourists provided by conservation tourism entrepreneurs resulted in very large amounts of philanthropic funds which were then invested in the communities. This scheme proved more beneficial than the funds distributed from tourists-night fees (see also Lamers et al., 2014b).

Effective pathways in which the benefits of marine tourism reach local communities are mostly through direct effects, i.e. by providing core goods and services to tourists. Although a larger proportion of marine conservation tourism accrued to local communities via locally owned homestay accommodation business, private business, i.e. resorts, also provide a substantial amount of benefit to local communities through employment. However, marine tourism benefit to local communities through indirect effects is still underdeveloped. While local sourcing and procurement is an important strategy in delivering marine tourism benefit to local communities (Hall, 2007; Meyer, 2007; Schilcher, 2007), both locally owned homestays and investor owned resorts fulfil their need for supplies from outside instead of from local communities. Even though imported food supply does not destroy the agricultural sector of Raja Ampat, since this is not a leading sector where a large proportion of the population depends on, sourcing food locally has the potential to contribute to a more equitable distribution of marine tourism benefits to local communities. Meyer (2007) argues that conservation tourism can stimulate non-tourism sectors of the economy, especially agriculture (but also fisheries). Developing linkages between the tourism sector and non-tourism sectors to improve pro-poor effects of tourism, however, is a challenging task. Tourism development in some places failed to develop linkages with traditional agricultural production, but in other cases tourism did stimulate non-traditional agricultural production (Meyer, 2007). Capacity building in non-tourism sectors is also required to empower local communities to supply agricultural products to the tourism sector. Such a project was developed for instance in Cameroon, by training the local community in farming as part of conservation tourism development (Kimbu and Ngoasong, 2013). We can conclude that, so far, community empowerment in marine conservation tourism of Raja Ampat focuses on marine conservation and marine tourism activities, but ignores non-tourism sectors, such as fishery and agriculture.

In addition to social factors of local communities, value chain structures of Raja Ampat marine conservation tourism also reflect limitations of tourism in bringing marine conservation benefits to local communities. In spite of the increasing participation of local communities in tourism business, as well as the market share of homestays, most tourists still go with more expensive tourism operators, i.e. resorts and liveaboards. Poor tourism value chain linkages to local communities, who do not engage in tourism businesses, make the limitation even more obvious. This poor value chain linkage to non-tourism sectors can also imply tourism leakage. Lack of linkages between the tourism sector and non-tourism sectors as in Raja Ampat is considered a common phenomenon in small island development states (Sharpley and Ussi, 2014).

6.3.4. Vulnerabilities

Recent developments in Raja Ampat have emphasized the vulnerability of a growing dependency on tourism. The current Covid-19 pandemic has caused marine conservation tourism, as well as many types of tourism worldwide, to stagnate and stop. Park authorities are running out of funds necessary for management, and community livelihood is negatively affected economically by the pandemic (Hockings et al., 2020; Newsome, 2020). A possible positive effect to Raja Ampat's MPA network is that pressure to marine resources has decreased. However, no revenue from entrance fees are available to the MPA authority for surveillance. In addition, no revenues flow to local communities engaged in marine conservation tourism. This shows that marine conservation tourism is vulnerable to (these kinds of) external shocks.

Marine conservation tourism proves also vulnerable when customary rights holders are confronted with large scale natural resource exploitation, such as migrant lift-net fishers to catch anchovy, mining, or large scale tourism developments in the customary rights owner's territory. Such activities serve the interests of these particular customary communities but are not necessarily in line with the interests of Raja Ampat as a marine conservation tourism destination.

Engagement in marine tourism is a way for local communities to benefit from marine conservation in Raja Ampat. Increases in local community engagement in marine conservation imply that more marine tourism benefits would go to local communities. The case of Raja Ampat, however, shows that there are limitations of marine conservation tourism in delivering benefits to local communities, as suitable places to build homestays are limited. Wider local community members therefore do not benefit from marine conservation and tourism development. Further integration of marine conservation tourism in the local economy, especially in villages within and adjacent to MPAs, is required to distribute marine conservation tourism benefits more equitably to reach those who do not engage directly in core tourism activities.

Two global issues that can be linked with coral reefs vulnerability and therefore with marine tourism as well are climate change and plastic waste. Climate change may induce natural disasters that change land and marine environment as well as economy negatively (Bergholt and Lujala, 2012; Joerin et al., 2012). This in turn may disturb nature-based tourism on land as well in marine environments (Nyaupane and Chhetri, 2009; Scott et al., 2019; Wijaya and Furqan, 2018). Climate change can also lead to destruction of marine resources (Hoegh-Guldberg et al., 2007; Student et al., 2019) which has implications for vulnerability of marine

tourism. Monitoring the impact of climate change on coral reefs for mitigation and resilience of local communities of Raja Ampat is important.

The marine environment worldwide is under threat of severe plastic pollution (Katija et al., 2017; Villarrubia-Gómez et al., 2018; Vince and Hardesty, 2017), even in the deep sea (Van Cauwenberghe et al., 2013). Marine protected areas and wildlife are also affected by plastic pollution (Barnes et al., 2018; Germanov et al., 2019), which may threaten marine tourism. Domestic and industrial waste on land as well as shipping industries are among the sources of plastic pollution in marine environment (Li et al., 2016; Liubartseva et al., 2019), but marine tourism also contributes to plastic pollution in marine environment (Dunlop et al., 2020; Wilson and Verlis, 2017). The issue on plastic waste in Raja Ampat marine environment associated with the growth of marine tourism has been raised by the former regent of Raja Ampat at the meeting for dissemination of ecosystem services stewardship fee at Belagri Hotel Sorong in 2015. However, there is no policy or regulation in place to deal with the plastic pollution problem. A trash bank has been promoted by Misool Baseftin in Misool, but the effectiveness of the activities in reducing the threat of plastic pollution in the area is still unknown.

6.4. Reflection on methodology

A key limitation of doing fieldwork in Raja Ampat is that it is costly and time consuming. Making appointments with key informants in villages is challenging due to low quality of means of communication. In addition, travel between islands of Raja Ampat is very difficult during the wavy season. Field work for this study started in 2015, when the general election in the whole country was being held. This made the situation even more challenging because key informants are mobile, which made it difficult to make appointments. Informants from international NGOs engaged in marine conservation governance in Raja Ampat, especially the higher ranked officials, are not based in Raja Ampat. As this study also assessed the evolvement of governance arrangements, some of the informants engaged in governance processes in the past were not available in or near Raja Ampat. This all meant that identifying and catching key informants has been a challenge.

Despite these challenges, I was privileged to work with CI, TNC and Starling Resources and the MPA authority (UPT KKPD) in developing the scheme for distributing community funds allocated from the entrance fees. This collaboration provided the opportunity to meet stakeholders from villages and also make this scheme as one of the cases in this thesis. In order to avoid opinion bias, information from the two international NGOs are triangulated. I also explained my position to all interviewees as an independent researcher who provides

consultation for the MPA Authority in the development of community fund distribution scheme. I introduced myself to local communities as a researcher of University of Papua to convince them of my neutrality in the process.

Due to cost consideration and limited fieldwork budget, I was not able to visit all remote tourism attractions, such as Wayag, which is the landmark of Raja Ampat that may have different governance arrangements than reported in this research. These limitations may have led to some bias in the sampling. Analyses and conclusions drawn in this thesis may therefore not reflect all local conditions in Raja Ampat. As the study relied on purposive sampling, this may have also affected the results since the sample distribution of the survey does not represent the population distribution. To ensure internal validity in relation to the sampling of homestays, sample distribution in terms of size of property (number of room), information from the website of Homestay Association is used for comparison. Triangulation of interview and survey results with field observations helped to ensure internal validity.

Consultation with the wider literature was conducted to assess external validity. Three issues related to findings and their implications will be put forward here. First, this research has shown that incongruencies affect the stability of marine co-governance arrangements, which resulted from institutional settings, economic developments and particular policies. This is in line with conservation tourism in other settings, for instance in terrestrial Africa (e.g. Arnouts et al., 2012; Lamers et al., 2014b; Van Wijk et al., 2015). Second, this study found that wider local community members are unable to access marine conservation tourism benefits due to a lack of linkages between the tourism sector and other local economic sectors. The latter is considered typical for island regions and island tourism destination (Parra-López and Martínez-González, 2018), and hence we can expect that economic benefits of wider community members will also prevail in marine conservation tourism in other island locations/states.

The third issue raised here is that customary ownership rule over natural resources is found to have a considerable influence on equitable distribution on marine conservation benefits to local communities. This is also found in other areas with marine and terrestrial conservation tourism, for instance in Fiji, in Uganda and in the Philippines (Brunnschweile, 2010; Fabinyi, 2020; Ochieng et al., 2018; Scheyvens and Russell, 2012a). However, contrary to Raja Ampat, marine tourism projects in Fiji are reported to be successful in taking customary resource ownership rules into account in the governance arrangement and are thus able to provide a better benefit distribution (Brunnschweile, 2010; Scheyvens and Russell, 2012a). Further research in marine conservation tourism focusing on customary resource ownership

system is crucial (Fabinyi, 2020) to gain more understanding about its role in distribution of tourism benefit to local communities.

6.5. Recommendations

6.5.1. Policy Recommendations

While numerous small policy recommendations can be formulated following this study (see also individual chapters), at this place two main policy recommendation are highlighted.

The research findings reveal that marine conservation tourism is important for the MPA network of Raja Ampat, as well as for the regency's economic sector. Community-based and pro-poor tourism have been adopted as policy approaches in developing marine conservation tourism. Policies developed so far are focused on the marine tourism sector and marine conservation, which highlight a lack of integrated policy across different sectors of economy that focus to community livelihood, for example fishery, agriculture and livestock, and plantation. Business models that better distribute marine conservation tourism benefits to wider local communities based on local experience should be explored. An umbrella policy based on the acknowledgement of current conditions of marine conservation tourism aimed to attain objectives shared by different regency's department of local livelihood improvement through the development of marine conservation tourism need to be developed. This can help the sectoral departments to develop policy and program in their domain that facilitates business linkage between tourism and non-tourism sector. Business linkage between tourism and non-tourism sector can broaden marine conservation benefit to reach wider local community, including those who do not have the capacity to engage directly in tourism business. For example, this study revealed only one women group that does public work, i.e. cleaning the tourism village of Arborek regularly and collecting donations from tourists for doing this, and coordinating members to make and sell handycrafts. Social enterprise, like this women group in Arborek, can be an option to distribute marine conservation tourism more equitably. It will in turn increase equitable benefits of marine conservation tourism among local communities, and can help avoiding conflict among them.

Conflict among local communities may result from disputes over resource ownership. This is important in Raja Ampat because it is common in Melanesian communities that rights to natural resources are owned by groups of customary communities. Poor definition of natural resources may lead to disputes over rights for direct benefit from natural resources. The Raja Ampat regency government as well as the West Papua provincial government should do

effort to clarify rights to natural resource ownership to avoid conflict among local community.

6.5.2. Recommendations for future research

Raja Ampat's local communities are quite diverse, and hold variation in cultural aspects, which implicates the natural resource regime. In general, Raja Ampat's local communities living in the northern part are indigenous Papuan, while those living in the southern part are a mix of indigenous Papuan and descendant of migrants that have assimilated with indigenous Papuans long ago. Analysis aimed at comparing natural resource regimes is important to make sure that tourism and conservation policy formulation is congruent with the natural resource regime.

In order to help the formulation of policy to link the tourism sector to non-tourism sectors, information on practices in livelihood strategy is required to identify opportunities to develop livelihood strategies outside the tourism sector that can be linked to tourism. Research on constraints faced by the agricultural and fishery sector to connect to the tourism sector could be useful to provide policy recommendations to respective government sectoral departments.

The marine conservation tourism concept, as illustrated in Figure 6.1, shows interdependencies between tourism and the marine resources for which the MPA is established. Disturbance of coral reefs on which tourism depends could also disturb tourism development. Research on the resilience of tourism development in relation to coral reefs and the MPA network of Raja Ampat is important. On the other hand, disturbance of tourism development could also disturb the effectiveness of MPA management which in turn threaten the quality of coral reefs. The Covid-19 outbreak represent an extreme shock to tourism development which has halted tourism activities completely. This means no tourism revenue for the MPA authority, as well as no income for local communities engaged in tourism during the pandemic. The coral reefs are then prone to threats by both local community members who need to sustain their lives, as well as outsiders fishing illegally and destructively. In other words, the pandemic amplifies the underlying tensions and threats, and underscores the importance of research on MPA network resilience and on local livelihood resilience in relation to tourism development. Further research could clarify such interdependencies and the resilience of marine conservation tourism systems.

Finally, this study has focused on the role of and benefits for local communities in marine conservation tourism in a very specific area: Raja Ampat, Indonesia. It would be interesting to carry out further comparative research, with similar research questions, in other areas of marine conservation tourism, both within the coral triangle region and beyond that. Not only

would it enhance our scientific knowledge of marine conservation tourism benefit distribution within and among local communities in distinct socio-economic and cultural settings, it could also gain ideas of improving policies and governance for Raja Ampat.

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Appendices

Appendix 1. List of topics for semi structured interviews

A. Government Officers :

1. Policies (including rules, regulations, programs and projects) regarding tourism and marine conservation.
2. Formulation process of the policies.
3. Consultations with higher government level, communities, business association or NGO in policies formulation.
4. Other stakeholder participation in policy formulation.
5. Conflict due to policies or rejection to policies formulated.
6. Main issues related to conflict or rejection. Technical, managerial, socio-cultural, economic, etc. Occurrence across the regency.
7. Responsibility delegated to communities, business association or NGO.
8. Communication channel for disseminating a policy.
9. Medium made available to communities to communicate their opinion on a policy to the government. It's effectiveness.
10. Monitoring and evaluation of particular policy.
11. Agreement made with other stakeholders in marine tourism and marine conservation.
12. Perceived effectiveness of policy. Measurement method of effectiveness.
13. Gender issue. Female participation. Opportunity, barrier and challenges.
14. Other important issues.

B. NGO Representatives:

1. Projects related to tourism and marine conservation.
   A) Objectives
   B) Location(s)
   C) Partners in government institutions
   D) Target communities
   E) Collaboration with other non-state actors
   F) Source of fund
2. Benefit of projects to livelihood of the local communities.
3. Strategies to achieve objectives.
4. Government support to projects.
5. Communities support to projects.
6. Support from other non-state actors
7. Perceived Project effectiveness. Measurement method for effectiveness.
8. Importance of marine tourism to objectives of projects.
9. Tourism business activities that derailed from NGO's objectives.
10. Community based tourism that derailed from NGO's objectives.

11. Authority awarded by government. Implementation effectiveness, obstacle and challenges.
12. Right acquire from communities to implement project.
13. Agreement with government, business, communities or other parties to implement a project.
14. Incorporation of government staff, business actors, communities in project implementation. Parties involved and method of involvement.
15. Resource made available to government, business actors, communities in project implementation. Types of resource and consequence to recipient.
16. Power owned to influence the formulation of regulation.
17. Gender issue. Female participation. Opportunity, barrier and challenges.
18. Other important issues.

C. Community leaders and members

1. Importance of marine protection area in terms of advantages and disadvantages.
2. Importance of marine tourism in terms of advantages and disadvantages.
3. Regulation formulated by village. Monitoring, effectiveness, barrier and challenges.
4. Benefit of tourism business to village.
5. Perception on government policy related to marine protected area. It's effect on livelihood.
6. Perception on government policy related to marine tourism. It's effect on livelihood.
7. Perception on NGO's conservation projects. It's effect on livelihood.
8. Emergence of marine tourism business. Resort, liveaboard, visiting tourist boat, home stay, other. Their effect on livelihood.
9. Customary right ceded to government project, NGO's project, business project. Mechanism of property right transfer.
10. Community activities in marine conservation. Organization, partnership, source of resources, institutionalization.
11. Community activities in marine tourism. Organization, partnership, source of fund.
12. Agreement made with other stakeholders in marine conservation program and marine tourism business.
13. Perceived government support on interests of communities in marine conservation and tourism. Empowerment, infrastructure, financial support.
14. Gender issue. Opportunity, barrier and challenges.
15. Other important issues.

D. Market actors:

1. Environment related regulations that affect business.
   A) National
   B) Local government
   C) Local communities
   D) Business association
   E) Business operator's regulation
2. Important government policies, in terms of either advantages or disadvantages.
3. Perceived conflict among regulations.
4. Communication channel available to express opinion on a regulation. Effectiveness of the channel.
5. Power owned to influence a formulation or change of a regulation. Why or why not.
6. Perception on is tourist fee. Distribution and usefulness.
7. Perception about government role in supporting tourism in Raja Ampat.
   A) Marketing/Promotion.
   B) Infrastructure development.
   C) Human resource development.
   D) Other.
8. Perception on regulation that limits the number of regular liveaboard and visiting tourist boat; It's basis and mechanism.
9. Property right acquisition. Mechanism and supporting regulation.
10. Agreement made with other stakeholders in marine conservation or marine tourism.
11. Other important issues.

Appendix 2. Questionnaire for homestay survey

A. General information

1. Name of respondent : […….]		
2. Name of homesay : […….]		
3. Location : village [.....] District [.....]		
4. Position of respondent		5. Date of questionnaire completion
(1) Owner..... ☐ (2) Manager ..... ☐ (3) Other ..... ☐ [……..]		[…….] – [……...] – [2015] dd- mm - yyyy
6. Begin operation		[…….] – […….] – [20…...] dd - mm - yyyy
7. Reasons for engaging in this business		
8. Reasons for selecting the location :		
9. Ownership	(1) Sole ownership of a family..... ☐ (2) Owned by an extended family..... ☐ of [.....] families/persons	
10. Management	(1) Managed by single owner..... ☐ (2) Managed together by extended family..... ☐ (3) Managed completely partner of (outsider)..... ☐ (4) Managed together with partner (outsider)..... ☐	
11. Homestay association membership	(1) Yes..... ☐ (2) No..... ☐	Reason for this:
12. Previous livelihood		
13. Other livelihood strategy		

B. Supply

14. Number of bungalow and room	15. Rates per person (Rp)		
(1) Bungalow : [……] unit (2) Room : [……] unit (3) Total capacity : [……] persons	Class	Single	Couple
	(1) Premium :	[……..]	[……..]
	(2) Standard :	[……..]	[……..]
	(3) Backpacker :	[……..]	[……..]
16. Product offered			
17. Collaboration with other actors			

18. Financial support obtained	Year	Source	Form	Value

C. Occupancy in 2014

1. Total guest	2. Average duration of guest
International : [.....] guests Local : [.....] guests Total : [.....] guests	International : [……] nights per guest. National : [.....] nights per guests

D. Value chain

1. Expenditure

Goods and services acquired from local third parties

Types of expenditures	Total Value (Rp)
Local tour guide	
Food raw materials	
Maintenance of equipments	
Part time labor	
Food and beverages	
Environmental related expenditure	
Local transport	
Donation	

Waged labor

Labor involved during 2014					
Activities	Male		Female		Remark
	Number of labor	Total spending (Rp)	Number of labor	Total spending (Rp)	

2. Utilisation of Revenue

E. Remarks or additional information

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Appendix 3. Questionnaire for resort survey

A. General information

1. Name of respondent : […….]		
2. Name of resort : […….]		
3. Location : village [.....] District [.....]		
4. Position of respondent		5. Date of questionnaire completion
(4) Owner..... ☐ (5) Manager ..... ☐ (6) Other ..... ☐ [……..]		[…….] – [……...] – [2015] dd- mm - yyyy
6. Begin operation in Raja Ampat on		[…….] – […….] – [20…...] dd - mm - yyyy
7. Reasons for engaging in this business in Raja Ampat		
8. Reasons for selecting the location :		

B. Supply

9. Room availability	10. Rates per night (Rp/US$/€/....)		
(4) Premium : […….] rooms/cabins (5) Special : […….] rooms/cabins (6) Standard : […….] rooms/cabins		High Season	Low Season
	(1) Premium :	[…….]	[…….]
	(2) Special :	[…….]	[…….]
	(3) Standard :	[…….]	[…….]

C. Occupancy in 201..

3. Total guest	4. Average duration of guest
High Season :[……] guests. Low season: [.....] guests.	High season: […….] nights per guest. Low season: [.....]

D. Value chain

3. Waged labor

Grade	Key task/ requirement/ qualification/ position	Local Raja Ampat Staff							
		Number of full time staff in High Season		Number of full time staff in Low Season		Average monthly salary (Rp)		Other benefits (Rp) (monthly/yearly average)	
		Male	Female	Male	Female	Male	Female	Male	Female
Managerial (skilled)									
Semi skilled									
Unskilled									

4. Expenditure

Good and services acquired from local people and government of Raja Ampat in 201..

Types of expenditures	Total Value (Rp)
Local tour guide	
Food raw materials	
Maintenance of equipments	
Other part time labor	
Food and beverages	
Environmental related expenditure	
VAT	
Concession contract	
Local transport	

E. Remarks or additional information

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Appendix 4. Questionnaire for liveaboard survey

Dear Liveboard Operators,

My name is Ery Atmodjo, I am a staff of The State Univesity of Papua, Manokwari, and currently doing a research for my PhD thesis. My research topic is "Impact of Co-Management Arrangement of Marine Conservation Tourism on Local Livelihood of Raja Ampat". In addition to answer the research questions, this research also try to contribute to marine tourism development in Raja Ampat by investigating the current arrangement and benefit to local people, and formulate appropriate recommendation. I am using multiple methods in doing the research, one of which is survey of tourism operators, such as liveboard, resort, homestay and speedboat.

The following questionnaire will require approximately 15 minutes to complete. All information will remain confidential, and I am the only one who will keep the completed questionnaires. If you choose to participate, please return the completed questionnaire to e.atmodjo@gmail.com.

Thank you very much for taking time to assist me in this research. The data collected will provide useful information regarding benefit of marine conservation tourism to the local people.

Sincerely Yours,

Ery Atmodjo

Liveboard Survey

A. General information

1. Name of respondent : [……]	
2. Name of liveboard : [……]	
3. Position of respondent	4. Date of questionnaire completion
(7) Owner ..... ☐ (8) Manager ..... ☐ (9) Other ..... ☐ [……..]	[……..] – [……...] – [2015] dd - mm - yyyy
5. Begin operation in Raja Ampat on	[…….] – […….] – [20…...] dd - mm - yyyy

6. Operate exclusively in Raja Ampat	7. Average operation time in Raja Ampat
(1) Yes .. ☐ (2) No.... ☐ ⇨	[……] months per year.
8. Reasons for engaging in liveboard business	
9. Reasons for engaging in marine tourism in Raja Ampat :	

B. Supply

10. Type of operation	11. Class of service
(1) Charter ..... ☐ (2) Scheduled cruise .... ☐ (3) Other ..... ☐ [……]	(4) High budget ..... ☐ (5) Medium budget ..... ☐ (6) Low budget..... ☐
12. Room/cabin availability	13. Rates per night/Rates per trip
(7) Premium : [……] rooms/cabins (8) Special : [……] rooms/cabins (9) Standard : [……] rooms/cabins	(1) Premium : Rp/US$/€ [……..] (2) Special : Rp/US$/€ [……..] (3) Standard : Rp/US$/€ [……..]
14. Maximum capacity	[……..] passengers.

C. Occupancy in Raja Ampat in 2014

5. Total passenger	6. Average duration in Raja Ampat
[……] passengers.	[……] nights per passenger.

D. Value chain

5. Waged labor

Grade	Key task/ requirement/ qualification/ position	Local Raja Ampat Staff							
		Number of full time staff in High Season		Number of full time staff in Low Season		Average monthly salary (Rp)		Other benefits (Rp) (monthly/yearly average)	
		Male	Female	Male	Female	Male	Female	Male	Female
Managerial (skilled)									
Semi skilled									
Unskilled									

6. Expenditure

Good and services acquired from local people of Raja Ampat in 2014

Types of expenditures	Total Value (Rp)	Types of expenditure	Total value (Rp)
Part time wage		Local transport	
Food raw materials		Local retribution at destination	
Maintenance of equipments		Liveboard registration fee	
Local tour guide			
Food and beverages			
Environmental related expenditure			
Local Attraction at destination			
Concession contract			

E. Remarks or additional information

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Appendix 5. List of individual interviews

Date of interview	Respondents	Affiliation at time of interview	Interview location
2015/01/10	Dani Mambrasar	Yengkwe homestay, owner	Saporkren
2015/01/12	Paulus Sauyai	Nudibranch homestay, owner	Sawinggrai
2015/01/15 and 2015/08/13 and 2016/01/30	Kristian Thebu	Raja Ampat Program Manager, CI; Community customary leader of Maya clan	Sorong
2015/01/17 and 2015/08/29	Alberth Nebore	Raja Ampat senior corridor manager, CI	Sorong Email
2015/01/19	Abdul Rahman Wairoy	Head of Regency planning bureau of Raja Ampat; former head of office of Agriculture and Animal Husbandry	Sorong
2015/01/20	Agus Maksum	Planning sub-division of Tourism office of Raja Ampat	Waisai
2015/01/21 and 2015/08/19	Sisca Wanma	Head of office of Village community empowerment of Raja Ampat	Waisai
2015/01/22	Fikri Loji	Tourism service infrastructure section, Tourism Office of Raja Ampat	Waisai
2015/01/24	Eli Dimara	Piaynemu homestay owner	Piaynemo
2015/01/26	Bun Rahawarin	Marine and Fishery office of Raja Ampat, former COREMAP facilitator	Waisai
2015/01/28	Luis Transwisata	Local speedboat operator	Waisai
2015/01/29	Alwin	Local speedboat operator	Waisai
2015/01/30	Sofian Alting	Tourism service development, Tourism Office of Raja Ampat	Waisai
2015/02/06	Ani	Tourism Information Center, MPA Authority Raja Ampat	Sorong
2015/02/07	Mat Saleo	Cemara Saleo Homestay owner	Saleo
2015/02/08	Engelina Dimara	Warimpuren Homestay, former COREMAP village motivator	Saporkren
2015/02/10 and 2015/03/09	Nico Ramandey	Tourism destination development division, Tourism office of Raja Ampat	Waisai
2015/02/13 and 2015/08/12	Yusdi Lamatenggo	Head of Tourism office of Raja Ampat	Waisai
2015/02/19	Inda Arfan	Vice Regent of Raja Ampat	Waisai
2015/02/20	Rico	Former Head of South Waigeo district	Waisai
2015/02/23	Warwick	Representative of Liveaboard association	Sorong
2015/03/03	Hadis Stibis	MPA Authority staff, former COREMAP facilitator	Waisai
2015/03/09	Ade	Waiwo Dive Resort, manager	Saporkren

Date of interview	Respondents	Affiliation at time of interview	Interview location
2015/03/23	Korneles Mambrasar	Former secretary of Tourism office of Raja Ampat	Sorong
2015/03/27	Agustian	WAOW liveaboard captain	Sorong
2015/03/27	Heri Junaidi	Sea Safari 8 liveaboard captain	Sorong
2015/03/27	I Gusti Gde Suwantara	El Aleph liveaboard captain	Sorong
2015/03/27	Medi	Manta Mae liveaboard captain	Sorong
2015/03/27	Suparman	Pindito liveaboard captain	Sorong
2015/03/28	Dining Duti Anggoro	Aurora liveaboard captain	Sorong
2015/03/28	Nus Souisa	Sea Safari 6 officer	Sorong
2015/03/28	Steff Morin	Aurora liveaboard officer	Sorong
2015/03/28	Yoyok Wardoyo	Sea Safari 6 captain	Sorong
2015/03/29 and 2015/08/27	Edi Frommenwiller	Pindito liveaboard owner	Sorong Phone
2015/03/30	Jeremias Jien	Indosiren liveaboard captain	Sorong
2015/03/30	Nugroho Arif Prabowo	Communication coordinator, TNC Raja Ampat field office	Sorong
2015/03/30	Tony	Tiger Blue liveaboard captain	Sorong
2015/04/07 and 2016/01/22	Lukas Rumetna	BHS manager, TNC	Sorong
2015/04/08	David Pahliari	Shakti liveaboard, owner	Sorong
2015/06/08	Meity Mongdong	BHS program director, CI	Waisai
2015/06/09 and 2016/11/03	Adrian Kaiba	Head of MPA Authority of Raja Ampat	Waisai
2015/06/13	Margareta Morin	Yengkangkanes homestay, former COREMAP village motivator	Saporkren
2015/06/16 and 2015/06/23	Origenes Dimara	Mandos homestay owner; Former head of board of village representative Saporkren	Saporkren
2015/06/21	A. Rumbiak	Local community member, Saporkren village	Saporkren
2015/06/21 and 2017/01/09	Agus Sauyai	Secretary of village Yenbuba	Saporkren
2015/06/21	B. Sauyai	Local community member, Saporkren village	Saporkren
2015/06/21	Hermanto Sauyai	Local community leader	Saporkren
2015/06/21	Laurens Dimara	Local community member, Saporkren village	Saporkren
2015/06/22	Levinus Dimara	Head of village Saporkren	Saporkren
2015/06/22	Martin Gonzalez	Raja Ampat Dive resort manager	Saporkren
2015/06/22	Ones Sauyai	Former COREMAP village motivator	Saporkren

Date of interview	Respondents	Affiliation at time of interview	Interview location
2015/06/23	Markus Dimara	Head of village board of representative Saporkren	Saporkren
2015/06/23	Origenes Dimara	Former head of board of village representative Saporkren	Saporkren
2015/06/23	Sekretaris Saporkren	Secretary of village Saporkren	Saporkren
2015/06/24	Bram Latupaerissa	Tour guide, Saporkren village	Saporkren
2015/06/24	Laurens Mambrasar	Tour guide, Saporkren village	Saporkren
2015/06/24	Samuel	Local community member, former CI employee	Saporkren
2015/06/27	Frans Sauyai	Vice head of village board of representative Saporkren	Saporkren
2015/06/27	Korneles Rumkorem	Local speedboat operator	Saporkren
2015/06/29	Frans Wawijai	Local community member	Friwen
2015/06/29	Yopi Mayor	Friwen homestay owner	Friwen
2015/7/01	Pak Haji Sontong	Board of village representative Friwen	Friwen
2015/08/11 and 2017/06/07	Dheny Setyawan	Governance and Policy coordinator, TNC	Sorong WhatsApp
2015/08/12	Abraham Goram Gaman	Yayasan Kalabia (local NGO), member of house of representative of West Papua province	Sorong
2015/08/20	Bartholomeus Rio	Head of Marine and Fishery office	Waisai
2015/08/20 and 2016/01/31	Syafrie Tuharea	Conservation division, Marine and Fishery office of Raja Ampat	Waisai
2015/08/21	Charles Imbir	Member of house of representative of Raja Ampat	Waisai
2015/08/28 and 2016/11/21	Andrew Miners	Misool Eco Resort owner	Email Batbitim (MER)
2015/08/28	John Maturbongs	BHS stakeholders engagement coordinator, TNC	Sorong
2015/12/02	Rajak Tamher	Misool Baseftin, secretary	Harapan Jaya
2015/12/05 and 2016/11/08	Ali Sapua	Head of village Harapan Jaya	Harapan Jaya
2015/12/05	Amir Soltief	Board of village house of representative, Yellu village	Yellu

Date of interview	Respondents	Affiliation at time of interview	Interview location
2015/12/05	Andi Darmawan	MPA ranger, former TNC field motivator	Harapan Jaya
2015/12/07	Habiba Macap	Tourism information center, staff, former Misool Baseftin employee	Sorong
2015/12/14	Mattew Fox	Senior advisor marine program, CI	Bali
2015/12/15	Ii Rosna Tarmidji	Former CI representative in tourism non-retribution fee commission	Bali
2016/01/06	Ina Rumbekwan	marketing and promotion division of Tourism office of Raja Ampat	Waisai
2016/01/09	Hernando	Hamu Eco Resort, manager	Saporkren
2016/01/10	Usiel Watem	MPA ranger, former TNC employee	Waisai
2016/01/14	Umar Arfan	MPA ranger, former CI ranger	Waisai
2016/01/20	Elvis Mambraku	MPA ranger, former CI ranger	Waisai
2016/01/22	Lukas Rumetna	BHS manager, TNC	Sorong
2016/01/23	Raja Tahir Arfan	King of Samate	Doom
2016/11/03	Asril Djunaidi	CI employee	Waisai
2016/11/03	Meity Mongdong	BHS program director, CI	Waisai
2016/11/08	Ali Oherenan	MPA ranger, former TNC village motivator	Harapan Jaya
2016/11/08	Selsten Sofian Tabolong	Harfat Jaya homestay manager	Harapan Jaya
2016/11/10	Enos Drimlol	Secretary of village Tomolol	Tomolol
2016/11/11	Felix Mom	Village customary community leader, Tomolol	Tomolol
2016/11/11	Paulus Falon	Village customary community customary leader, Tomolol	Tomolol
2016/11/12			
2016/11/12	Abdul Rahim Macap	head of village Usaha Jaya	Usaha Jaya
2016/11/12	Heder Alhamid	MPA ranger, head of village board of represenntative Usaha Jaya, former TNC village motivator	Usaha Jaya
2016/11/14	Muhammad Yasin Wainsaf	Head of village Fafanlap	Fafanlap
2016/11/15	Adam Loji	Local community member, Fafanlap village	Fafanlap
2016/11/15	H. Wainsaf	Local community member, Fafanlap village	Fafanlap
2016/11/15	Indra	Local community leader, fafanlap village	Fafanlap
2016/11/15	Satiri Loji	MER trash bank operator, Fafanlap village	Fafanlap
2016/11/16	Abdul Samad Wainsaf	Local community member, Fafanlap village	Fafanlap

Date of interview	Respondents	Affiliation at time of interview	Interview location
2016/11/16	Kadir Loji	Local community member, Fafanlap village	Fafanlap
2016/11/16	Kaidam Soltief	Local religious leader, Fafanlap village	Fafanlap
2016/11/18	Nawawi Mayor	Tour guide, Harapan Jaya village	Harapan Jaya
2016/11/21	Andi Logof	MPA ranger, South Misool	Harapan Jaya
2016/11/24	Bongso Loji	Yaganan Island homestay manager	Harapan Jaya
2016/11/25	Moikian Sapua	Yalapale homestay owner	Harapan Jaya
2016/11/26	Abdul Jalil Bahalle	Head of village, Head of customary community, Yellu	Yellu
2016/11/30	Halim Soltief	Panun Paradise homestay owner	Harapan Jaya
2016/12/30	Naftali Mambraku	Mawar homestay owner	Arborek
2016/12/30	Nomensen Mambraku	Manta homestay owner	Arborek
2016/12/31	Marlon Mambrasar	Lalosi homestay owner	Arborek
2017/01/01	Alfonsina Mandurun	Member of women handy craft group, Arborek village	Arborek
2017/01/01	Daud Mambrasar	Head of village Arborek	Arborek
2017/01/01	Eki Mambrasar	Kayafyof homestay owner	Arborek
2017/01/01	Kelli Mambrasar	Lumba-lumba homestay	Arborek
2017/01/01	Yance Mambrasa	Woritsun homestay owner	Arborek
2017/01/02	Buce Mambrasar	Indip homestay owner	Arborek
2017/01/02	Gita A. Natasya	Arborek diveshop, former Barefoot volunteer	Arborek
2017/01/02	John Latupaerisa	Traditional dance group, Arborek village	Arborek
2017/01/02	Mika Mambrasar	Local community member	Arborek
2017/01/02	Phillipus Mambrasar	Mambarayup homestay owner	Arborek
2017/01/02	Prawesti Wulandari	Barefoot, field assistance, volunteer	Arborek
2017/01/03	A. Mambrasar	Arboek homestay owner	Arborek
2017/01/03	Ari Manan	Keruindos homestay owner	Kapisawar
2017/01/03	Beni Mambraku	Local speedboat operator	Arborek
2017/01/03	Daniel Mambrasar	Korbekwan homestay owner	Kapisawar

Date of interview	Respondents	Affiliation at time of interview	Interview location
2017/01/4	David Wambrauw	Taporaikos homestay owner	Sawinggrai
2017/01/04	Lois Ferdinand Dimara	Nyanse homestay owner	Sawinggrai
2017/01/04	Nikolas Sauyai	Walking Shark homestay owner	Sawinggrai
2017/01/04	Teopelus Mambrasar	Ano homestay owner	Kapisawar
2017/01/04	Yesaya Mayor	Mambefor homestay owner	Sawinggrai
2017/01/04	Yohana Burdam	Beser Bay homestay, owner	Kapisawar
2017/01/05	Yusuf Alimin	Jellifish homestay owner	Kapisawar
2017/01/06	Luki Sauyai	Luki homestay owner	Yenbuba
2017/01/06	M. Sauyai	Secretary of district Meosmansar	Yenbuba
2017/01/08	Herman Mayor	Daroyen Village homestay, owner	Yenbuba
2017/01/08	Lisias Umpain	Byukbea homestay owner	Yenbuba
2017/01/08	Mariana Sauyai	Intum Homestay, owner's daughter	Yenbuba
2017/01/09	Isak Sauyai	Brar homestay owner	Yenbuba
2017/01/09	Laurens Sauyai	Nyampun Amber homestay owner	Yenbuba
2017/01/09	Roos	Yenbuba homestay manager	Yenbuba
2017/01/09	Yudas Sauyai	Mambetron homestay owner	Yenbuba
2017/01/15	Manuel Mofu	MPA ranger	Waisai
2017/01/16	Meidi Kasmidi	BHS Tourism and Capacitty Building manager, CI	Waisai
2017/01/18	Anshar Arfan	Former Head of District Yenbuba	Waisai
2017/01/18	Ediansyah	Raja Ampat local speedboat association, secretary	Waisai
2017/01/18	Rani	Raja Ampat tour guide association, secretary	Waisai
2017/01/19	Laura Resti Kalsum	Raja Ampat Homestay Association, Consultant	Saporkren
2017/01/20	Usman Sangadji	Raja Ampat dive guide association, secretary	Waisai
2017/10/10	Sadam Dailon	Head of village Lopintol	Lopintol
2017/10/11	Yakob Daam	Head of village Warsamdin	Warsamdin
2017/10/12	Dominggus Rumbiak	Local speedboat operator	Warsamdin
2017/12/17	Ayub Sauyai	Yendabon homestay owner; Head of village Yenbuba	Yenbuba

Appendix 6. List of group interviews

Date	Participants	Description	Location
2015/01/08	Meidi Kasmidi	BHS Capacity Building, CI	Waisai
	Bun Rahawarin	Marine and Fishery office; former COREMAP facilitator	
	Hadis Stibis	MPA Authority, finance staff; former COREMAP facilitator	
2015/02/20	Taufik Hidayat, Armiadi	Starling Resources consultant	Sorong
2015/06/21	S. Sauyai, A. Mambraku, M. Dimara, L. Dimara, K. Mambrasar	Women farmers group, Saporkren	Saporkren
2015/06/30	Hengky Wawijai	Head of village Friwen	Friwen
	Yopi Mayor	Former of head of village Friwen	
2015/12/05	Balief Wainsaf, James Drimlol, Ali Oherenan	Misool MPA rangers; former TNC motivator	Harapan Jaya
2015/12/18	Manuel Mofu, Vincencius Mudi Ritan, Catur	MPA authority staffs and rangers	Waisai
2016/11/10	Oktotolius Mom, Tommy Mom	Customary community leaders, Tomolol	Tomolol
2017/01/15	Saharudin Wihel, Usiel Watem	Misool MPA rangers	Harapan Jaya
2015/08/20	Ruben Sauyai, Enggelina Dimara, Ones Makusi	Board members of Raja Ampat homestay association	Waisai
2015/08/11	Ina Rumbekwan, Fikri Loji	Staffs of Tourism office	Sorong
2015/08/13	Balief Wainsaf, Catur, Manuel Mofu, Saharudin Wihel	MPA authority staffs and rangers	Waisai

Appendix 7. List of meetings

Date	Description	Participation	Location
2015/02/21	New Raja Ampat tourism entrance fee scheme meeting	Observer	Sorong
2015/08/10	Raja Ampat MPA transition team meeting	Observer	Sorong
2015-08/10 - 2015/08/12	Raja Ampat tourism entrance fee coordination meeting	Observer	Sorong
2015/09/09	FGD for community fund disbursement	Presenter	Waisai
2015/09/10	FGD for community fund disbursement	Presenter	Waisai
2015/09/17	FGD for community fund disbursement	Presenter	Harapan Jaya
2015/09/20	FGD for community fund disbursement	Presenter	Kofiau
2015/12/17	Dissemination of community fund disbursement mechanism	Presenter	Samate
2015/12/18	Dissemination of community fund disbursement mechanism	Presenter	Kalobo
2015/12/19	Dissemination of community fund disbursement mechanism	Presenter	Samate
2016/01/25 - /2016/01/30	Raja Ampat MPA mentors coordination meeting	Observer	Makassar
2016/11/02-2016/11/04	International conference on marine biodiversity and conservation of the Bird's Head Seascape (BHS	Oral presentation	Manokwari
2017/03/08	Wageningen-Indonesia scientific exposure (WISE) 2017	Poster presentation	Wageningen

Summary

Across the world, marine protected areas (MPAs) have been established to overcome degradation of marine resources from illegal and destructive activities, and overexploitation. Quantity and coverage of MPAs worldwide are growing. As poverty is one of the drivers for destructive fishing and breaking MPA rules, especially in developing countries, breaking the poverty trap through alternative livelihood activities is an important strategy in MPA management. In many of these MPAs marine tourism has been adopted as an alternative source of livelihood and a way to generate funding for MPA management and conservation measures. Marine conservation tourism is a type of tourism that has potential to contribute to achieving the dual objectives of conservation and local livelihood improvement. In this concept, MPAs provide ecosystem services e.g. nature and wildlife viewing and experiences, and tourists pay for consuming these ecosystem services. In addition, marine tourism in MPAs is considered to provide opportunities for alternative livelihoods for local communities living within and close to MPAs.

Raja Ampat in West-Papua Province Indonesia can be regarded as a special case of marine conservation tourism. It is regarded as the heart of the Coral Triangle: the most species rich area of any ocean in the world, which reflects its important position with regard to conservation within the Coral Triangle Initiative (CTI). Marine tourism activities have been deliberately deployed and promoted to support the management of a network of MPAs in Raja Ampat, as well as the local communities within these MPAs. Marine tourism in Raja Ampat has been growing rapidly during the last 20 years, in terms of number of tourists and tourism operators. Despite threats to its marine resources, marine tourism in Raja Ampat archipelago is heavily promoted, as it is considered 'the last paradise on earth'. State as well as non-state actors are participating in governance arrangements for marine conservation tourism in Raja Ampat.

The objective of this thesis has been to analyse marine conservation tourism governance arrangements and the implications of marine conservation tourism for especially local communities in Raja Ampat. More specifically it aims to understand the roles of non-state actors in the evolution of governance arrangements for marine tourism and conservation in Raja Ampat, as well as the impact of various policies aimed at shaping benefits of marine conservation tourism for local communities of Raja Ampat. As Raja Ampat is part of wider marine conservation initiatives, i.e. BHS and CTI, it is important to learn from these experiences for managing marine tourism, conservation and community livelihood in other

marine destinations. The following two research questions were defined to achieve the research objective:

1. How has marine conservation tourism in Raja Ampat been co-governed over the last decades, and what role have non-state actors played in the evolving governance arrangements?
2. How has the regional policy of community-based tourism in Raja Ampat been implemented in terms of its congruency with the customary right regime and its effect on local community engagement, as well as on tourism benefit distribution to the local community?

A case study using a multi-method approach was selected. The case study involves the collection of primary data from semi-structured interviews, (participatory) observations and surveys, and supplemented with secondary data from literature, policy documents, published and unpublished reports.

Chapter 2 illustrates shifts in co-governance arrangements for marine conservation tourism of Raja Ampat. During the last two decades different co-governance arrangements with different governance modes co-existed to achieve parts of marine conservation objectives. Indonesia's decentralization policy has opened opportunities for non-state actors, i.e. international NGOs, tourism entrepreneurs, international agencies, environmental philanthropists, and local communities, to participate in marine conservation tourism development of Raja Ampat. International NGOs have been playing leading roles in marine conservation tourism of Raja Ampat. They played multiple roles, e.g. in conservation campaigning, MPA establishment, coordinating actions with other actors, financing, and capacity building for local communities and local government. The main role of international NGOs changed over time until they stepped back to only provide scientific support due to project termination and regulations preventing NGOs from operating private MPA. Subsequently, state actors, i.e. the MPA authority, were forced to play an important role in marine conservation tourism of Raja Ampat. Co-governance arrangements shifted from open-decentralized governance to a more closed-centralized governance.

Chapter 3 investigates one of the co-governance arrangements of marine conservation tourism of Raja Ampat, i.e. the tourism entrance fee. Two successive entrance fee systems, i.e. Raja Ampat Entrance Fee and Raja Ampat Ecosystem Service Stewardship Fee respectively, were analysed using a payments for ecosystem services (PES) framework. The PES-like entrance fee system improved in term of participation, transparency, and equity.

However, connection between fund disbursement and environmental service provision (conditionality) has still not improved. In addition, challenges in equitable community fund disbursement still exists. While participation of local communities has improved in the design of the second entrance fee system, no local community members were involved in the management of the entrance fee. Private actor participation in the management of entrance fee also declined, while international NGOs were embedded in the MPA authority institution participating in the entrance fee system.

Chapter 4 analyses the role of customary law over resource ownership in the proliferation of homestays in Raja Ampat. Group-based policy in providing subsidies made by local government of Raja Ampat based on community-based and pro-poor tourism to direct benefit of tourism development to local communities is incongruent with the prevailing customary law over resource ownership. Tourism groups receiving government subsidies to build and operate homestays gradually decline, and homestays are recently predominantly claimed by those who own customary rights over the land where the homestays are built. Those who own customary rights over suitable land build homestays to receive benefits of increasing tourist visits and to obtain subsidies from the local government. The proliferation of homestays has the potential to endanger sustainability, both environmental as well as tourism sustainability.

Chapter 5 looks into the flow of marine tourism benefits to local stakeholders and communities of Raja Ampat. Pathways to prosperity and tourism value chain are used as conceptual frameworks in the analysis. A survey formed the principal data collection method, complemented by secondary data from the Tourism office and MPA authority, and (participant) observation. Tourism development policy of Raja Ampat has made local community member participation in core activities of marine tourism possible. Homestay business contributes the largest part to tourism benefit flow towards local communities in forms of streams of revenue and donations. While resort operators contribute the larger benefit to local communities in terms of job opportunity, liveaboard operators contribute the least benefit as the latter have very little contacts with local communities in villages. Lack of linkage between tourism and other economic sectors in the locality, such as fishery and agriculture, indicates tourism leakage as well as inequitable benefit distribution to the wider local community members.

Chapter 6 concludes that co-governance arrangements for marine conservation tourism in Raja Ampat will need to constantly evolve in order to remain effective in terms of conservation and livelihood contribution. International NGOs have played a constructive role

in marine conservation tourism development of Raja Ampat, which resulted in fairly great achievement in the form of local community participation in tourism. However, they have planned to step back from governance and push the government to play a more important role due to limits of project duration and ineligibility to operate private MPA. The marine conservation tourism co-governance arrangement appears to be incongruent resulting from misalignment of particular policies with the institutional settings, as well as the rate of economic development and its impacts. This chapter also concludes that inequitable benefit distribution especially in relation to lack of economic linkage between tourism and other local economic sectors is typical to island tourism, and hence one can expect similar tendencies at other islands with marine conservation tourism. Finally, the effects of customary ownership rights on marine tourism benefit distribution found in this research lacks consistency with research result at other locations, which calls for more similar research at other locations.

Ringkasan

Kawasan konservasi laut (KKL) dikembangkan di berbagai penjuru dunia untuk mengatasi kerusakan sumber daya laut yang diakibatkan oleh kegiatan ilegal dan destruktif, serta pemanfaatan yang berlebihan. Jumlah dan luasan KKL di seluruh dunia terus tumbuh. Karena kemiskinan dipandang sebagai salah satu sumber kegiatan perikanan destruktif dan pelanggaran terhadap aturan KKL, terutama di negara-negara berkembang, maka memutus jebakan kemiskinan melalui mata pencaharian alternatif merupakan strategi penting dalam pengelolaan KKL. Wisata bahari diadopsi oleh banyak KKL sebagai sumber mata pencaharian alternatif dan sarana untuk memperoleh pendanaan untuk pengelolaan KKL dan kegiatan konservasi. Wisata konservasi bahari merupakan salah satu jenis wisata yang berpotensi mendukung pencapaian tujuan ganda yaitu konservasi dan perbaikan penghidupan masyarakat lokal. Dalam konsep ini, KKL menyediakan jasa lingkungan, misalnya pemandangan alam dan pengalaman dengan satwa liar, dan wisatawan membayar untuk mengkonsumsi jasa lingkungan. Selain itu, wisata bahari di KKL dipandang dapat memberi peluang penciptaan mata pencaharian alternatif bagi masyarakat lokal yang tinggal di dalam dan sekitar KKL.

Raja Ampat di Provinsi Papua Barat, Indonesia, dapat dipandang sebagai kasus khusus wisata konservasi bahari. Kawasan ini dipandang sebagai jantung Segitiga Karang: kawasan yang paling kaya akan spesies di seluruh kawasan laut dunia, yang mencerminkan kedudukan penting kawasan ini dalam kaitannya dengan konservasi di dalam Inisiatif Segitiga Karang (CTI). Kegiatan wisata bahari diterapkan dan dikembangkan untuk mendukung pengelolaan jejaring KKL di Raja Ampat, dan mendukung masyarakat lokal dalam KKL tersebut. Wisata bahari di Raja Ampat telah tumbuh pesat dalam 20 tahun terakhir, ditinjau dari segi jumlah kunjungan wisatawan dan jumlah operator wisata. Meskipun ada ancaman terhadap sumber daya laut, wisata bahari di kepulauan Raja Ampat gencar dipromosikan sebagai ‘surga terakhir di bumi’. Aktor negara dan non-negara terlibat dalam tatakelola wisata konservasi bahari di Raja Ampat.

Tesis ini bertujuan untuk menganalisa tatakelola wisata konservasi bahari dan implikasi wisata konservasi bahari khususnya terhadap masyarakat lokal di Raja Ampat. Secara lebih khusus tesis ini bertujuan untuk memperoleh pemahaman mengenai peran aktor non-negara dalam tatakelola wisata bahari Raja Ampat yang mengalami pergeseran berkesinambungan, serta dampaknya terhadap berbagai kebijakan yang ditujukan untuk mengarahkan manfaat wisata konservasi bahari kepada masyarakat lokal Raja Ampat. Karena Raja Ampat merupakan bagian dari upaya konservasi bahari yang lebih luas, yakni BHS dan CTI,

pengalaman pengelolaan wisata bahari, konservasi, dan penghidupan masyarakat lokal merupakan pelajaran penting bagi kawasan tujuan wisata bahari lainnya. Dua pertanyaan penelitian berikut ditetapkan untuk mencapai tujuan penelitian:

1. Bagaimana wisata konservasi bahari di Raja Ampat telah dikelola bersama (*co-governed*) sepanjang decade terakhir, dan peran apa yang telah dijalankan oleh aktor non-negara dalam tatakelola bersama yang berubah berkesinambungan tersebut?
2. Bagaimana kebijakan wisata berbasis komunitas (*community-based tourism*) diimplementasikan, ditinjau dari segi kesesuaiannya (*congruency*) dengan hak ulayat dan pengaruhnya terhadap keterlibatan masyarakat lokal, serta terhadap manfaat pariwisata bagi masyarakat lokal?

Kajian ini dilakukan dengan menggunakan studi kasus dengan pendekatan metodea ganda (*multi-method*). Studi kasus meliputi pemilihan data primer dari wawancara semi struktural, pengamatan (partisipatif) dan survey, serta didukung dengan data sekunder yang berasal dari kajian pustaka, dokumen kebijakan, laporan-laporan baik yang dipublikasi maupun tidak.

Bab 2 memberikan gambaran mengenai pergeseran tatakelola bersama (*co-governance arrangements*) wisata konservasi bahari di Raja Ampat. Selama dua dekade terakhir berbagai tatakelola bersama yang memiliki moda tatakelola yang berbeda berjalan secara bersamaan untuk mencapai sebahagian dari tujuan-tujuan konservasi bahari. Kebijakan desentralisasi Indonesia telah membuka peluang bagi aktor-aktor non-negara, yaitu LSM-LSM internasional, pengusaha wisata, badan-badan internasional, lembaga derma lingkungan, dan masyarakat lokal, untuk terlibat dalam pengembangan wisata konservasi bahari di Raja Ampat. LSM-LSM internasional menjalankan peran terdepan dalam wisata konservasi di Raja Ampat. Mereka menjalankan peran ganda, misalnya berupa kampanye konservasi, pembangunan KKL, upaya-upaya kordinasi dengan aktor-aktor lainnya, pendanaan, dan pengembangan kapasitas masyarakat dan pemerintah lokal. Peran utama yang dijalankan oleh LSM-LSM internasional mengalami pergeseran sepanjang waktu, sampai mereka mengurangi peran dan hanya menjalankan dukungan informasi ilmiah, akibat berakhirnya proyek dan peraturan yang melarang LSM-LSM untuk mengelola KKL swasta. Selanjutnya, aktor-aktor negara, yakni UPTD KKLD, didorong untuk memainkan peran penting dalam wisata konservasi bahari Raja Ampat. Tatakelola bersama mengalami pergeseran dari tatakelola terbuka terdesentralisasi (*open-decentralized governance*) menjadi tatakelola yang lebih tertutup dan tersentralisasi (*closed-centralized governance*).

Bab 3 meneliti salah satu tatakelola bersama wisata konservasi bahari yang ada di Raja Ampat, yakni tarif masuk wisata. Dua skema tarif masuk wisata yang berkesinambungan, yakni Tarif Masuk Wisata Raja Ampat dan Tarif Pemeliharaan Jasa Lingkungan Raja Ampat, dianalisis dengan menggunakan kerangka pembayaran jasa lingkungan (PES). Perubahan skema tariff masuk wisata berdampak menigkatkan partisipasi, transparansi, dan keadilan. Namun demikian, belum ada perbaikan dalam hal hubungan antara penyaluran PES dengan kegiatan pemeliharaan lingkungan. Selain itu, masih terdapat tantangan dalam penyaluran dana masyarakat yang berasal dari tarif masuk wisata secara adil. Meskipun keterlibatan masyarakat lokal dalam perumusan skema tarif wisata mengalami peningkatan, yakni dalam perumusan Tarif Pemeliharaan Jasa Lingkungan, tidak ada anggota masyarakat lokal yang terlibat dalam pengelolaan tarif masuk tersebut. Keterlibatan aktor swasta dalam pengelolaan tarif masuk wisata juga mengalami penurunan. Sementara itu LSM-LSM internasional menyatu dengan lembaga UPTD KKLD sebagai mitra dan terlibat dalam pengelolaan tarif masuk wisata.

Bab 4 menganalisa peran hukum adat dalam kepemilikan sumber daya dan perkembangan homestay di Raja Ampat. Kebijakan berbasis kelompok dalam penyaluran bantuan dana oleh pemerintah Raja Ampat berdasarkan pendekatan wisata berbasis komunitas (*community-based*) dan wisata yang berpihak pada penduduk terpinggirkan (*pro-poor tourism*) dalam upaya mengarahkan manfaat langsung pengembangan wisata ternyata tidak sebangun (*incongruent*) dengan hukum adat yang berlaku mengenai pemilikan sumber daya. Kelompok wisata yang menerima bantuan pemerintah untuk membangun dan menjalankan usaha homestay berangsur-angsur memudar, dan saat ini usaha homestay umumnya dimiliki oleh pihak yang memiliki hak ulayat atas lahan tempat dibangunnya homestay. Mereka yang memiliki hak ulayat atas lahan yang cocok untuk homestay membangun homestay untuk menarik manfaat dari dari tumbuhnya kunjungan wisata dan untuk memperoleh bantuan dana dari pemerintah setempat. Menjamurnya homestay berpotensi mengancam keberlanjutan, baik keberlanjutan lingkungan maupun keberlanjutan pariwisata.

Bab 5 menyoroti aliran manffaat wisata bahari kepada pemangku kepentingan lokal dan masyarakat lokal Raja Ampat. Jalan menuju kemakmuran (*pathway to prosperity*) dan rantai nilai pariwisata (*tourism value chain*) digunakan sebagai kerangka konseptual dalam analisis ini. Survei merupakan metode utama pengumpulan data, didukung oleh data sekunder dari Dinas Kebudayaan dan Pariwisata serta UPTD KKLD, serta observasi (partisipatif). Kebijakan pengembangan wisata Raja Ampat telah membuka peluang bagi keterlibatan masyarakat lokal dalam usaha inti wisata bahari. Usaha homestay memberikan sumbangan terbasar dalam aliran manfaat wisata kepada masyarakat lokal berupa arus pendapatan dan

sumbangan (donasi). Usaha resort memberikan sumbangan terbesar dalam aliran manfaat wisata bagi masyarakat lokal berupa kesempatan kerja, sementara itu usaha liveaboard memberikan sumbangan yang sangat kecil dalam aliran manfaat wisata bagi masyarakat lokal karena mereka jarang bersentuhan dengan penduduk di kampung-kampung. Rendahnya keterkaitan ekonomi antara sektor wisata dengan sektor-sektor ekonomi lokal lainnya, seperti perikanan dan pertanian, mengindikasikan adanya kebocoran wisata serta distribusi manfaat wisata yang kurang adil di kalangan masyarakat lokal.

Bab 6 menyajikan kesimpulan bahwa tatakelola bersama wisata konservasi bahari di Raja Ampat akan senantiasa mengalami pergeseran agar tetap efektif mendukung konservasi dan penghidupan masyarakat lokal. LSM-LSM internasional telah menjalankan peran konstruktif dalam pengembangan wisata konservasi bahari Raja Ampat, yang menghasilkan pencapaian yang cukup berarti berupa keterlibatan masyarakat lokal dalam kegiatan pariwisata. Namun demikian, LSM-LSM internasional sejak awal telah menetapkan rencana untuk mengurangi peran dalam tatakelola tersebut dan mendorong pemerintah untuk menjalankan peran penting. Hal tersebut disebabkan oleh adanya batas jangka waktu proyek dan tidak adanya hak bagi LSM internasional untuk mengelola KKL secara swasta. Tatakelola bersama wisata konservasi bahari tidak sesuai dengan kondisi yang berlangsung akibat ketidaksesuaian kebijakan-kebijakan teretentu dengan kelembagaan, perkembangan ekonomi dan dampak perkembangan ekonomi. Dalam bab ini juga disimpulkan bahwa distribusi manfaat yang tidak adil khususnya akibat kurangnya keterkaitan ekonomi antara sektor wisata dengan sektor-sektor ekonomi lainnya merupakan situasi yang khas dalam wisata di kawasan kepulauan, dan oleh karenanya dapat diduga bahwa kecenderungan yang sama akan terjadi pada wisata konservasi bahari di kawasan-kawasan kepulauan lainnya. Temuan mengenai pengaruh hak ulayat terhadap distribusi manfaat wisata konservasi bahari dalam penelitian ini kurang konsisten dengan hasil penelitian di kawasan lain. Oleh karena itu diperlukan penelitian yang sama di kawasan lain.

Ery Atmodjo
Wageningen School of Social Sciences (WASS)
Completed Training and Supervision Plan

Wageningen School of Social Sciences

Name of the learning activity	Department/Institute	Year	ECTS*
A) Project related competences			
Quantitative Data Analysis, YRM60306	WUR	2013	2
Environmental Policy Evaluation, ENP34306	WUR	2013	6
Environment and Development, ENP33306	WUR	2014	6
Writing research proposal	WUR	2013	6
Qualitative Data Analysis	WASS	2017	2.5
Qualitative Data Analysis with Atlas.TI: a hand-on practical	WASS	2017	1
Systematic Literature Review	WASS	2017	4
B) General research related competences			
WASS Introduction course	WASS	2013	1
'Financing Marine Conservation Tourism: Governing entrance fees in Raja Ampat, Indonesia'	International Conference on Marine Biodiversity and Conservation of The Bird's Head Seascape (BHS). Manokwari, Indonesia	2016	1
C) Career related competences/personal development			
Techniques for Writing and Presenting a Scientific Paper	Wageningen Graduate School	2015	1.2
Total			**31.2**

*One credit according to ECTS is on average equivalent to 28 hours of study load

About the author

Ery Atmodjo was born in August 30th 1963 in Jakarta, Indonesia. He has a bachelor degree in socio-economics of agriculture from Cenderawasih University (1987) and obtained a master degree in accounting from Padjadjaran University (1996). He works at the Department of Socio-economics of Agriculture of the Faculty of Agriculture of Cenderawasih University since 1988 (now University of Papua). Establishment of Raja Ampat (as separation from Sorong regency following decentralization policy) intrigued the author to take Raja Ampat as study area, as 80% of its land is protected area. In September 2013 he started PhD research at the Environmental Policy Group at Wageningen University and Research.

Selected publications

Atmodjo, E., Lamers, M., Mol, A.P.J., 2019. Governing Dynamics in Marine Conservation Tourism in Raja Ampat, Indonesia. Tourism Planning & Development 16, 1–19. https://doi.org/10.1080/21568316.2019.1686652

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