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Achieving Sustainable and Resilient Tourism: Lessons Learned from Pandeglang Tourism Sector Recovery

D Azhari²; A Rosyidie¹; S Sagala^{1*}; A Ramadhani²; J F Karistie³

¹ School of Architecture, Planning and Policy Development, Bandung Institute of Technology (ITB), 40132, Bandung, Indonesia

² Resilience Development Initiative, 40135, Bandung, Indonesia

³ Diponegoro University, 50275, Semarang, Indonesia

Email: saut.sagala@sappk.itb.ac.id*

Abstract. After the 2018 Sunda Strait Tsunami, the hospitality and tourism industry has been severely impacted. Based on the Indonesia 2010-2025 National Tourism Development Master Plan, one of the visions is sustainable tourism. Sustainable tourism is expected to support the recovery from the tsunami impact on the hospitality industry, improving the current approach and enhance resilience of the tourism area. However, the research question is related to *how optimal has the relationship between the main components of sustainable tourism (ecology, socio-economy, and socio-culture) in Pandeglang?* Therefore, this study aims to create the sustainable tourism strategy to fill the gaps on the 2018 tsunami recovery and the COVID-19 pandemic on the tourism sector and hospitality industry policy in Pandeglang. The study uses the qualitative method to describe the main strategy for sustainable tourism based on in-depth interview and secondary data. The findings indicated that the relationship between the main components of sustainable tourism which are ecology, socio-economy, and socio-culture have not been integrated optimally in Pandeglang. Sustainable tourism can provide the preservation and conservation of the sanctity of tourism in Indonesia, especially Pandeglang.

1. Introduction

Nature-based tourism as one of the main attractions of tourism in Indonesia have to face the serious threat of natural disaster. This threat is present due to Indonesia's location within the 'ring of fire', where tourism destinations are in locations with high risk of potential disasters. Moreover, Indonesia also have a high vulnerability to climate change, specifically in its coastal areas [1]. A combination of these threats have placed Indonesia's tourism industry vulnerable to future risks, especially for those located in coastal areas—where most of the nature-based tourism sites are located.

Pandeglang regency has many nature-based tourism sites that are located in coastal areas. Moreover, the Government Regulation No.22/2012 has issued one of tourism zone in Pandeglang, Tanjung Lesung, as special economic zone (SEZ) since 2015. This plan was initiated to develop the regional development in Pandeglang. As stipulated in the 2020 Tanjung Lesung Master Plan document, it will become "The World's First Themed Resort City" with the construction of several hotels, resorts, and villas alongside other supporting facilities, all with international standards. However, Pandeglang Regency also has a high risk index, based on Indonesian Disaster Risk Index (*Indeks Risiko Bencana Indonesia/IRBI*) [2] and is highly prone to tsunamis, earthquakes and floods. In fact, in 2018 tsunami has taken place, and has affected the tourism sector in Pandeglang.

Tourism plays a critical role in many sectors regional development including hotels, restaurants, transportation, environment, and economy [3]. Hence, the hospitality industry as the main component



of tourism has been largely impacted in Pandeglang. The death toll reached 296 people died and one of the largest number of victims were tourists [4,5]. A variety of tourism attractions were also seriously affected by the tsunami, according to the Pandeglang Regional Disaster Management Agency (*Badan Penanggulangan Bencana* -BPBD). The pandeglang tsunami has also harmed the reputation of tourism attractions and environmental changes [6]. Moreover, the aftermath of the tsunami has also traumatized the locals and tourists alike, resulting in the decrease in the number of visitors. Afterwards, the tourism sector in Pandeglang has started to bounce back from the tsunami impact in the second half of 2019. However, in early 2020, the COVID-19 pandemic has taken place and affected the tourism sectors globally, including Indonesia. The current COVID-19 pandemic has twice the impact towards Pandeglang's tourism sector compared to the tsunami in 2018.

Indonesia has been execute the master plan of tourism development on both national and regional scale. Based on the Indonesia 2010-2025 National Tourism Development Master Plan, one of the visions is sustainable tourism. In addition, sustainable tourism has been implicitly stipulated in Pandeglang's master plan for tourism development, as stated on one of the tourism development principles in Pandeglang which is tourism sustainability. In practice, the main research problem occurs on the clarity of the elaboration used, as well as its application remains questionable. Even though sustainable tourism is expected to support the recovery and prevention of both past and future impact of the crisis or disaster on the tourism sectors, including the hospitality industry [7,8]. Still, the implementation of sustainable tourism in Pandeglang does not have a proper framework as a reference for each program. Spatial planning regulation in Pandeglang has also not covered the entire aspects related to tourism subjects in ecology, socio-economy, and social-culture. In addition, most of the programs rather focussing on location-based, than regional-based planning. By having sustainable framework and optimal development programs in whole Pandeglang tourism area, not only sustainable tourism can be achieved, but also resilience Pandeglang for both post-disaster and post pandemic are possible.

The concept of sustainable tourism and hospitality is suitable for inseparable figures of risk crises and disasters. Crisis intentionally refers to an internal action failure in the manageable human cause issues, when disaster refers to lack of self-control in the external and less predictable kind of situation [7]. In this situation, sustainable tourism enables community and actors to stay on the track of recovery plan and make tourism area post-disaster more resilient. Sustainable tourism defined by UNWTO and UNEP [9] as tourism development concept which requires comprehensive consideration of its current and future economic, social, and environmental implications. Including to provide needs of tourists, tourism business sector, and the local community. As tourism is one of the most susceptible and vulnerable industries [10], sustainable tourism is a concept that can support the recovery of the tourism sector post-disaster. Thus, this paper will elaborate the importance of sustainable tourism to fill the gaps in the recovery progress and tourism spatial planning policy in Pandeglang.

2. Literature Review

2.1. Pandeglang Tourism

Pandeglang Regency (Figure 1) has always had an incredible number of tourism attractions and natural parks sites, some of them notably Taman Nasional Ujung Kulon, Carita Beach, Situ Cikedal, and the significant Tanjung Lesung and Bama Beaches. Even in 2011, 1.433.481 tourists have visited Pandeglang, where 414.692 among them stayed in 60 accommodations that were provided in the tourism area. Few tourism attraction are organized and developed by the government funding, others by private or community foundations. On Sunday, 22nd December 2018, a tsunami as well as a 5-richter scale earthquake unavoidably hit Sunda Strait and Pandeglang coastal area, bring substantial damage to the settlement, infrastructures, and social-economic facilities. Pandeglang Agency for Regional Planning and Development (BAPPEDA), stated that around 368 victims died from this disaster, 675 people have serious or minor injuries, and 7.469 refugees have migrated to 20 sub-districts. The recapitulation of the economic costs for rehabilitation and reconstruction for post-tsunami Pandeglang accumulated roughly to US\$ 24.766.794,56 [11].

As Pandeglang has not yet fully recovered, it must again face another crisis, following the COVID-19 pandemic in early 2020 (around 1-year post-tsunami). The current condition in Pandeglang tourism

sector has undergone a significant drop since February until June 2020. As the government implemented the restriction of large-scale social restriction (PSBB) and new normal policies. Based on our in-depth interview, Association of The Indonesian Tours and Travel Agencies (ASITA) Banten stated that more than 50% tourism actors lost their jobs, billions of economic cost deprivation were incurred, and CHSE (Cleanliness, Health, Safety, and Environmental sustainability) protocol applied only for hotel, restaurant, and tourist attraction. This meant that sustainable tourism still only focus on the physical trait (accommodation and destination), but did not prepare for the worst scenario on the services sector (supplier, travel agent, tour operation). Adaptability and pliable sustainable tourism are the main key priorities for both in Pandeglang and Indonesia cities/regional areas.

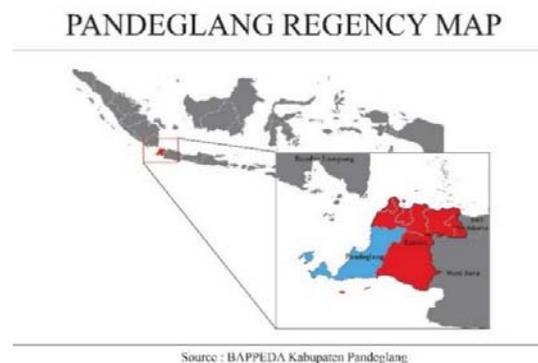


Figure 1. Pandeglang Regency Map. Map made by authors based on BAPPEDA Pandeglang's Shape file

2.2. Sustainable Tourism

The inception of the term “sustainability” has evolved since late 1980s as one important consideration for tourism and hospitality enterprises, following on the adaptation of global climate change in 1990s which has often resulted in climate-induced natural disaster and environmental damage [12–14]. Understanding the quality-of-life post-disaster occurrences is necessary to address sustainable tourism planning and community's self-management. Community disaster prevention is inevitable, as survival at the fittest is a key element in the first moment during and post-disaster. Hence, various aspects of resilience and adaptive capacity are the main means to be prioritised [15]. The nuisance of disaster and crisis occurrence continually plays a role in the behavioural change of visitors, and bring negative image to the tourism destination development [16,17]. Innovation concept such as sustainable tourism might contribute to the recovery process of destination deficiency, especially on the supplier/logistic/services side that is often being neglected and does not have enough collaboration and investment. Paradoxically, the COVID-19 pandemic requires strong collaboration on the regional and national level with government, organisation, and community. On the neighbourhood level, it obliges businesses to shorten its operational time, enforce social distancing rules, and exercise individual precaution [18].

The entire process of reducing in and out impact is often referred to the ‘triple bottom line’ concept (Figure 2). Substantially, it consists of ecology, socio-economic, and socio-cultural consideration indicating the solution and decision making among profit, planet, and people of the tourism disaster area [19–22]. According to Richins [23], ecology described as a capability to maintain the essential aspects of ecological processes, biodiversity, and biological resources (e.g. climate, natural resources). Adapting from Tobin [24], Ecology is also linked to the environmental disservices (understanding on conservation and preservation issues). Meanwhile, the socio-economic aspect described as sustainable tourism that is economically efficient (e.g. income, monetary cost). It also refers to either local opportunity and collaboration (employment opportunities, new tourism initiative, seminar/workshop/training) or economic dimension (customer satisfaction, local purchases, guest preferences). Lastly, socio-cultural linked to the ability of self-help mechanisms (sustainable education and disaster risk behaviour) and research/knowledge experiences (local sharing, market research, traditional activity, and social interaction). Understanding the comprehensive concept of sustainable tourism means capability on

identifying strategies with policy makers or practitioners. Any useful tools that link to the sustainable tourism three main pillars can contribute the greatest benefits for the future generations [25].



Figure 2. Principles of Sustainable Tourism adapted from ILO [26]

Sustainable tourism in Pandeglang has been mentioned several times in academic researches, even though it only focuses on selected-area development. Kismartini and Pujiyono [33] briefly mentioned that Tanjung Lesung (special economic zone of Pandeglang) needs to improve their stakeholders (government, community, private sector) interaction. Tourism management model should become the main priority as a reference for the tourism development (responsibility awareness, improve coordination, visitors' engagement, or progressive plans). Sulistyadi, et al., [34] also stated how it is important to overcome sustainable tourism in nature park Carita Beach by addressing the stakeholder management system completely. They noticed availability of tourism management forum will sharpen tourism development strategies. The differentiation with this article is the scope of the research, not only will address issues related to sustainable tourism in selected area (i.e. Tanjung Lesung and Carita Beach), but also cover a whole tourism area across Pandeglang. The analysis will focus on how Pandeglang tourism can achieve resilience in addition to sustainability by providing environment and man-made ability to renew the tourism area post-disaster or crisis. By focusing on the whole issues and link together sustainability and resilience, the greatest outcome and conservation efforts are possible to accomplish.

3. Methodology

The research was conducted using the qualitative method to describe the main component of sustainable tourism in Pandeglang. Qualitative method seek and recognize the realities of person, community or social issues [27]. Pandeglang Tourism Recovery Plan (disaster risk management plans and supporting tourism industry plans) and Ujung Kulon Geopark Master Plan (national geo-site strategic plan) that related to Pandeglang Regional Spatial Plan/RTRW, Mid-Term Regional Development Plan/RPJMD, and Tourism Development Plan/RIPPDA regulations become the main references. The documents consist of relevant information and tourism prioritise development in 2020-2022 to determine the gaps upon the ideal practices of 3 main pillars of sustainable tourism.

In order to collect data and information, this research conducted in-depth interviews with the respective tourism and hospitality stakeholder's in Pandeglang, such as Pandeglang Tourism Agency, Pandeglang Agency for Regional development (BAPPEDA), *Generasi Pesona Indonesia* (Genpi), and etc. Interviews data obtained from questions related to current tourism condition and sustainable tourism plan in Pandeglang. Secondary data has been analysed using qualitative descriptive analysis which results to the relationship between the main pillars of sustainable tourism (ecology, socio-economy, and socio-culture) in Pandeglang's tourism development. The analysis will take on the comparison between interviews and secondary data, related to disaster prevention and COVID-19 pandemic effects. The value of the gaps will answer whether sustainable tourism has effectively implemented or not.

4. Result and Discussion

4.1. Government Plans on Tourism in Pandeglang

The basis of the government plans is mainly focus to strengthen the conceptual frameworks of eco-tourism, agrotourism, and maritime tourism. It is also a defining pathway to improve community and human resources development in the regional area. Pandeglang’s Regional Tourism Development Master Plan (*Rencana Induk Pengembangan Pariwisata Daerah/RIPPDA*), Pandeglang’s Regional Spatial Plan (RTRW) 2011-2031, and Pandeglang’s Strategic Regional Mid-Term Development Plan (Renstra RPJMD) 2016-2021 are all of Pandeglang government’s references, in terms of abiding with the action programs relevant with its tourism sector and disaster risk management. Pandeglang Regional Spatial Plan transform the action plans into zoning and regional planning that connects with tourism attributes. Whilst RIPPDA Pandeglang defines the detail of the conceptual and strategic spatial planning for the tourism sector including destinations network and conservation area. Pandeglang Strategic Regional Mid-Term Development Plan detailing all the tourism plans based on the disaster risk management. These regulations and policies are practically adapted into several main tourism programs and activities that will be elaborated in Table 1.

a. Pandeglang Tsunami Recovery Plan

According to Tsunami 2018 recovery plan, Pandeglang government and its tourism sector have strived to fulfil the resource management and disaster risk management since 2017. Until now, a step-by-step implementation of the programs is still in progress in terms of the staff training and the programs investment. The Action Plan for tourism in Pandeglang also includes tourism activities in the spirit of going “back to normal”. Those activities are implemented under economic considerations, as well as natural, cultural, and human resources aspects, followed by publications and promotion aspects.

b. Ujung Kulon Geopark Plan

The status of Ujung Kulon as a national geopark was established with the main aim to develop the tourism area for environment and cultural conservation, as well as biodiversity. The program also aims to make Ujung Kulon as an innovation of man-made tourism to support the green tourism concept. There are 3 main pillars that will be developed in Ujung Kulon, which includes: Geo-Diversity (natural conservation), Cultural Diversity (Geo-Heritage), and Geo-Site (geological site). Following the benefits from geopark establishment in Batur Geopark, Bali, the previous research work [28] determined that mutual linkage between tourism development and social-economic aspects will enhance community tourism sustainability and resilience.

Table 1. Pandeglang Government Action Programs and Gaps modified from Pandeglang Recovery Plan (Support from Province - Regional Budget/APBD and Ministry of Tourism), 2019

Sector	Program	Location	Gaps
Pandeglang Disaster Recovery Plan			
Disaster Prevention Action Programs	Education and staff training on management and disaster prevention	Pandeglang, especially in its coastal areas (West and South Coast Beaches)	In readiness, especially in main destination such as geoparks and coastal areas
	Disaster management simulation		Banyuwangi best practice for hotel industry
	Resilient village and ‘sister’ village		Not fully implemented, but the program implemented in tourism village (independently or collaboration with <i>Badan Usaha Milik Desa Bersama/Bumdesma</i>)
	Infrastructure improvement on disaster prevention (evacuation route)		In readiness under responsibility of Ministry of Public Works, except in hotel industry owned by its ownership
	Operational facilitation and SATGAS/ volunteer/disaster TRC preparedness		Get support from BPBD, each sub-district is responsible for disaster basis data
	Pre and post disaster logistic preparedness and distribution		HUNTAP and HUNTARA as evacuation shelter
Post disaster rehabilitation and reconstruction assessment	In readiness with appeal for no built-up area in coastal area. Collaboration with the		

Sector	Program	Location	Gaps
	Social-economic coordination through disaster prevention building design		Agency for the Assessment and Application of Technology (<i>Badan Pengkajian dan Penerapan Teknologi/BPPT</i>) Serpong Depends on visitor willingness to pay. The Indonesian Hotel and Restaurant Association (<i>Perhimpunan Hotel dan Restoran Indonesia/PHRI</i>) has rights to propose investment
	Public socialisation on disaster mitigation through (<i>Kelompok Sadar Pariwisata/Pokdarwis</i>), homestay or coastal area organisation		In readiness, with appeals there is no for built up areas in coastal areas. Collaboration with BPPT Serpong also needs to be done.
	WERA tsunami radar implementation		Only in public areas, have not covered all tourism attractions
	Tsunami shelter and Tirta Tourist Safety Guide (BALAWISTA) watch tower provision		Tourism Crisis Center (TCC) provision is still not optimal
Tourism Industry Development	Advocation and standardisation of business and green hotels	Tanjung Lesung, Anyer, and Carita	Not informed
	Training on amenity/homestay management in coastal area and socialisation of tourism sustainability	Pandeglang	Provide by PHRI (especially health provision in COVID-19 pandemic)
	Association of State-Owned Banks (HIMBARA) funding through tourism Public Business Credit (KUR) for businesses post-disaster	Tanjung Lesung	Not informed
Human Resources	Tour guide training (certification) including diving, outbound, rafting	Carita	Shift system (3 times/week or once a week), 50% unemployed
	Aksi Sapta Pesona publication (include trauma healing)	Carita	Achieved, main program to attract visitor in Pandeglang
	Tourism stakeholder movement in Selat Sunda Beach	Tanjung lesung	'BISA' (Clean, Beautiful, Healthy, and Safe) movement, which brings community together to clean-up coastal area post-disaster
	Kang Nong Banten 2019	Anyer dan Carita	Achieved
	BALAWISTA, homestay owner, and Pokdarwis training	Pandeglang, Tanjung Lesung	In progress
Creative Economic	Culinary training	Pandeglang, Anyer	In pending, Kartu Prakerja (Pre-work card program) program is not efficient
	Souvenir making training	Anyer	
Traditional Tourism Market	Simparda digital application socialization	Anyer	Investment from telecommunication provider for wi-fi and transmission
Publication and Promotion	Community trip	Tanjung lesung	In pending, visitor fear of disaster and pandemic
	Pandeglang Local Choir	Pandeglang	
	<i>Pencak silat</i> , culinary, Gebyar Tari Religi, and Carita festivals (surfing contest, camping, music concert)	Carita	Twice a year event and collaboration with PHRI, private sector Mutiara Carita.
	Photography and Geopark Ujung Kulon logo design competition	Pandeglang	Contribution of visitors and local community is needed
	Pandeglang Culture Festival	Carita	
	Unimpacted destination promotion	Pandeglang	Collaboration with Kominfo (Ministry of Communication and Informatics), BPBD (Disaster Management Agency), and PHRI
	Digital market revitalization	Pasar Berbatik Cikadu	Internal problems exist, often difficult to get intervention from government or community
Ujung Kulon Geopark Plan			

Sector	Program	Location	Gaps
Geo-Diversity and Geo-Heritage	Flora-fauna biodiversity identification and its correlation with geological and cultural intangible heritage	Ujung Kulon National Park	In progress for feasibility study and socio-economic preparedness including marketplace and homestay for visitors. The development gets postponed due to the COVID-19 Pandemic
	Regional/village community potential identification for geo-product and tourism village development		
Geo-Site	Feasibility study and 3A (Accessibility, Attraction, and Amenities) provision		
	Master plan implementation		

4.2. Sustainable Tourism in Pandeglang

In terms sustainable tourism adaption in post-disaster recovery phase, Pandeglang Government has stipulated in *Rencana Induk Pengembangan Pariwisata Daerah* (RIPPDA) the importance of the concept and its indicators. The indicators are related to communities' well-being, local ownership, environmental conservation, as well as contributing to regional planning and minimise natural resources exploitation. Unfortunately, the implementation of sustainable tourism in Pandeglang is only exist in regional principle and plans but no clear implementation. The strategy framework which outlines the pillars of sustainable tourism in the location-based tourism is still not accessible. In contrast, the framework of disaster risk management in Pandeglang has overall includes its rehabilitation and reconstruction plans including for tourism area. Sendai Framework for Disaster Risk Reduction (SFDRR) became Pandeglang's main reference, it has already answered all the main issues in regard to ensuring community-centered build and resilient recovery (Table 1). Although in the interview session with Pandeglang respective stakeholders, some of the programs has not been effective on its application and management, and was worsened by the COVID-19 pandemic, in terms of on-site coordination.

Current Pandeglang regional spatial plan and place-based action programs (Spatial Plan/RTRW 2011-2031 and Mid-Term Regional Development Plan/RPJMD 2016-2021) have referred its tourism sector onto strategic zoning in natural conservation areas, coastal and small islands, and geological preservation. In 2020, it was specified into 3 sections including: Pandeglang disaster recovery plan, Pandeglang tourism post-disaster plan, and Ujung Kulon geopark. In terms of its disaster recovery plan, we can conclude that almost all of the programs are already implemented, especially in the tourism attractions or amenities that are close to Pandeglang West and South coast areas (the most impacted area by tsunami). Unfortunately, our respondents stated that there is frequently not enough coordination within the tourism sector (i.e. between hotel owners, village representatives, or members of the community), which has led to ineffective tourism network as a whole. *Generasi Pesona Indonesia* (Genpi) argued that there is actually good prospect in the Tourism Crisis Center (TCC) development, but the result of the on-site observation shows otherwise. Most of the reason comes from there is no two-way interaction between government and tourism actors who are responsible for the program. Post-tsunami disaster and the COVID-19 pandemic taught us better tourism publication preparedness for unaffected tourism area and other potential destination to distribute visitors across Pandeglang equally.

4.2.1. Ecology

On the Pandeglang regulation plan (RTRW, RPJMD, and RIPPDA), tourism main destinations in coastal areas and Ujung Kulon has set to become the main natural resources conservation. It is unfortunate that during its implementation, the government and tourism actors are often neglecting the importance of natural and environment conservation. *Pokdarwis* stated, coral areas and small islands which has been the worst impacted area from the tsunami is still yet to have a recovery plan. The abandoned marine ecosystem will lead to the damage towards coastal diversity. This needs to be addressed in accordance with the balance between tourism development and ecosystem protection to provide sustainable tourism [29].

In the correlation with business profitability (socio-cultural) and customer satisfaction (socio-economic), Pandeglang tourism has started to pay attention to ecological aspects implementation in the tourism conservation areas. The existence Ujung Kulon geopark basically based on the three main pillars

of Geo-Diversity (natural conservation), Cultural Diversity (Geo-Heritage), and Geo-Site (geological site). Moreover, based on the regulation documents (i.e. RTRW, RPJMD, or RIPPDA) and interview with tourism stakeholders, generally the implementation of the tourism business that considers the linkage of business profitability (ecology-socio-cultural aspects), as well as customer satisfaction (ecology-socio-economic aspects) is still very minimal in Pandeglang. Most tourism business focuses more on building private business profitability and customer satisfaction without considering ecology aspect. These aspects need to be improved for the better sustainable tourism development in Pandeglang. Furthermore, in accordance with Buckley [30], it is necessary to have optimal use of natural resources, proper environmental management processes and also respect for socio-cultural attitudes of the local community while meeting the customer need in order to fulfill ideal sustainable tourism.

4.2.2. Socio-Economic

Pandeglang Agency for Regional Development (BAPPEDA) has two main function on socio-economic aspect, as a leading sector on economic planning and social evaluation for long term period (i.e. through RTRW, RPJMD, RIPPDA). As we can see in Table 1. The tourism and disaster recovery plan are focusing on the human resources development, man-made attraction, and local creative economic. The gap on the socio-economic aspect is more on the national to local economic linkage and tourism supporting sector (destination, accommodation, information system, marketplace). Provision of accessibility and amenities are also only available in designated tourism priority areas. As stated by Genpi Banten, it is still difficult to visit unwell-known destination. This explains the lack of balancing the use of environmental resources and the economic benefits of tourism in Pandeglang, which will complicate the implementation of sustainable tourism [31].

The main issue is also regarding job creation. Post-tsunami disaster makes it difficult for tourism actors back to their normal activities as a supplier, travel agent, tour guide, or even hotelier. Association of The Indonesia Tours and Travel Agencies (*Asosiasi Perusahaan Perjalanan Wisata Indonesia /ASITA*) of Pandeglang stated that even after a year post-disaster, tourism sector can only create job vacancy for Ujung Kulon geopark which still yet to begin. COVID-19 pandemic has made it worse, many of tourism actors getting cut off permanently or temporary. ASITA also mentioned their salary was cut off approximately 50%, even most of the tour guide choose to work on others sector. Adding to that, the working condition on this pandemic have made it difficult to provide safety, health, and education training. Safety and health protocol are only bringing advantage for tourism destination, hotel industry, and restaurants, but it is still not available for travel agents and tour operations. Social development for local community and decent work for tourism actors is what they need in this difficult situation that we are currently facing to implement sustainable tourism [32].

4.2.3. Socio-Cultural

Tourism plans that relate to socio-cultural activities is not clearly mentioned in any regulation documents (i.e. RTRW, RPJMD, or RIPPDA). Any festivals or tourism events are mainly part of tourism area activities. It is important to consider its existence and preference in the regulation to strengthen socio-cultural pillar in sustainable tourism. Festival or events will give benefits to promote cultural heritage and to maximize social interaction in ethnic or indigenous groups. These efforts is part of balancing economic growth and the impacts on social values for the local community [31]. Nowadays, Pandeglang festival and events are being postponed as due to the pandemic, but it could become the main attraction for visitors beside the development of monument or landmark post the pandemic in the future.

Pandeglang tourism also needs to work on the business profitability for small-medium enterprises in tourism sector. Pandeglang Tourism Agency has attempted to optimise local products by providing a marketplace on the destination area. It is important to introduce local culinary (dry-fish, fish-meat, cassava/*melinjo kripik*) and local craft (*batik cikadung*, rhino minifigures) to fulfill customer satisfaction. At the same time, full support from government and community for crafter and artist is also crucial. Even now, local products are still cannot be the main commodity for economic activities. As stated by *Pokdarwis*, uneven community participation on the tourism program will result in social discontent. They are the one who should need to involve to bring the best services for tourism sectors.

5. Conclusion

The findings indicate that the relationship between the three main pillars of sustainable tourism which are ecology, socio-economy, and socio-cultural have not been integrated optimally in Pandeglang. The right implementation of the main pillars will facilitate sustainable and resilience tourism area. Sustainable tourism can provide tourism preservation and conservation in Indonesia, especially in Pandeglang. The limitation of this study is the formulation of the sustainable tourism strategy made in accordance with the government plan. Hence, the results have largely put emphasis on the government's actions and can only be used optimally by the government.

Theoretically, there are three implications from this study which relates to sustainable tourism main pillars. Firstly, tourism actors' awareness of coastal and small islands preservation will support natural resources management. It is important to make sure that the coordination between government and tourism actors in the tourism sector is achievable and possible to maintain sea living creature diversity. As Richins [23] stated, active collaboration is essential to maintain natural assets, also will prevent environmental deterioration post-disaster or crisis and achieve human sustainability. Secondly, equal support for local crafter and artists in terms of safety measure, health, and education training will ensure socio-economy efficiency and become push factor for sustainable community. As Tobin [24] stated, equal distribution for community involvement will prevent social discontent ensure tourism economic efficiency. Lastly, community empowerment through festival or events will become an adaptable strategy to assure equal socio-cultural distribution for unwell-known tourism sites. As Richins [23] stated, the most important thing of social-cultural sustainability is well-being for all community and tourism actors in viable sustainable tourism. The implication of this research can also bring out recommendation to regulation or policy decision-making, by supporting Pandeglang tourism planning as a whole.

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