Integrating tea and tourism: a potential sustainable livelihood approach for Indonesia tea producer central area

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Abstract. The social changes within society with regard to tea are widespread in Indonesia and today are experienced as tourism, where a part of many tourist activities, whereby local tea traditions, cultures, services and attractions are experienced. Indonesia as both tea-producing and tea-consuming country has high potential to integrate with tourism to increase the sustainability of community livelihood. This study used a sustainable livelihood approach in a systematic framework to examine the relationships between tea and tourism, as well as enriched the interviews of tourist actors and 203 tourists with experiences of visiting the tea tourism destinations. This study finding that there has been an increase of diversity of livelihoods of the people around the tea plantations where have been developed into tourism. Corporate social responsibility provides a further opportunity in sustainable tea tourism development. Increasing services satisfaction of the tea tourists is one of the most important ways to increase the revisit intention. Creating a mutual partnership synergy can cover the lack of resources and competencies in tea and tourism integration development. For practical implications in the future are the important to enlarge integration between tea and tourism, build partnership, stimulate more local participation, and increase local benefits as their ways of life.

1. Introduction
As we know, tea plantation subsector in Indonesia at present struggles to earn profit and sustainability of the sector with the managing high cost production and other unique problem of the sector, while increasing land efficiency and labor productivity. Although this industry has given attention for value addition to final product and marketing process, but it may not address the problem faced by tea plantation sector. Based on statistic data of Indonesia crop on 2019–2021 from Director General of Estate Crops, tea producing areas centered on two islands, namely Java and Sumatra. The largest of tea producer area is in West Java with 78,75% of the total national tea area, followed by Central Java, North Sumatra and West Sumatra. In 10 years, the tea area growth decreased by -1,17% as well as tea production also decreased by -2,08%.

Nowadays, the society in Indonesia has more or less experienced social changes with the various experiences regard to tea. Tea is a part of many tourist activities, whereby local tea traditions, cultures, services and attractions are experienced [1]. These conditions allow tea tourism can be the significant industrial diversification opportunity both product and service industries to ensure the sustainable development of Indonesia economy, especially economic growth in tea producing centers. As the world’s 7th tea producer and 10th tea consuming country in 2019 based on International Tea Committee
2020, Indonesia have high potential to be integrated with tourism sectors to increase the sustainability of community livelihood of society around plantation.

The sustainable livelihoods approach is a way of thinking about the objectives, scope, and priorities for development activities. It evolving thinking about the way the poor and vulnerable live and the importance of policies and institutions, by brings attention to bear on the inherent potential of people in terms of their skills, social networks, access to physical and financial resources, and ability to influence core institutions [2]. In Raja and Mithili study [3], the sustainability standards still have not had an impact upon tea workers income. The improvement for community livelihood sustainability in tea plantation not only identified by the wages or incentives but also the enhancement of livelihood diversity and choices of various assets owned [4]. One of these approaches is tourism as sustainable livelihood strategy on tea plantation. Through the adoption of a sustainable livelihoods approach can explore the relationships between the community and tourism development [4] and offers a way forward [5]. This approach can analyze not only the benefit of economy and social of tea plantation, but also ecology and cultural aspect. Tea has strong ecological function and cultural carrier. These ecology and cultural assets are two important resources to integrate with other assets to form new livelihood strategies.

Jolliffe [1] defined tea tourism as “motivated by an interest in the history, traditions and consumption of tea.” Tea and its production and consumption embedded with the historical, cultural and environmental context of a place. These can be potentially supply the attractive tourism experiences to diverse audiences, including appreciating experiences to the tea landscape, visiting tea shops and museums, tea tasting, demonstrations of tea production, participating in tea ceremonies and cultural events, tea featured accommodations, tea infused cuisine, and many more (Figure 1) [1,6,7].

![Figure 1. Variety of tea tourism product](image)

When incorporating tea production and related cultural practices and culinary experiences, tea tourism can supply a variety of income generating opportunities and can be a development tool to promote the tea industry, revitalize local culture and reinforce the local identity of rural areas [6]. Linkages of tea plantation and tourism integration can be constructed between different types of actors in the tea industry, including tea farmers, producers, retailers, and manufacturers which associated accessories or souvenirs where give more tourism experiences. The implications of these benefits are not restricted to those directly involved with tea, but could flow to local agriculture, culture, arts, and handicrafts from local small enterprises to cater to tourists’ demands at tea destinations. It can give more impact in generating of wide variety of employment opportunities where can be the potential to enhance the sustainability of rural communities (Figure 2). This study tries to examine the relationships between tea and tourism by used sustainable livelihood approach in a systematic framework as well as enriched with field survey to tourist with experiences of visiting the tea tourism destinations.
2. Materials and methods
This study used a systematic conceptual review of existing relevant literature as the starting point for the analysis. In social sciences, systematic review is to identify existing research themes that relevance to the topic and identify future research needs through document analysis that requires a methodical procedure of examination and interpretations [9]. The literatures are following main themes correlated with sustainable livelihood approach, such as tea and tourism, tea and ecotourism, tea and gastronomy tourism, tea tourism and marketing, tea and sustainable livelihood by using Google Scholar search.

Interview with the questioner also was undertaken to 203 tourists (visitors) were conducted randomly during December 2020–January 2021, who have been experienced of visiting the tea tourism destinations, namely Rancabali, Pangalengan, and Pasirjambu where all located in Bandung District. Beside the tourist respondents, interview also conducted to other tourist actors, such as village community members and management staffs of tea tourism spot. Interviews conducted to gain information on the development status of tea and tourism, community livelihoods, and perspectives on tea and tourism integration. Quantitative data from respondents was analyzed descriptively percentage, while the qualitative data from depth interview with tourist actors was analyzed by triangulation methods.

The object of study areas for the interview method was located in three locations, namely Rancabali, Pangalengan, and Pasirjambu Subdistricts in Bandung District (Figure 3). These three locations are tea tourism spots where offer a specific tea tourism experience (Figure 4, Figure 5, Figure 6.). These three locations are close each other also have different kind of the ownership of tea plantation, i.e., PTPN VIII as state-owned tea plantation, private tea plantation and smallholder tea plantation. These three locations are at an altitude of above 800 m above sea level.

Figure 2. A tea tourism sustainable livelihood system [4,8].
3. Results and discussion
The characteristics of tourist or visitor respondents: mostly 58.3% women; 82% at the age 18–44 years old; 50% are permanent worker; 41.7% are graduated from high school; 52.8% have married, 36% have income >IDR 3 M; and 53% prefer to entrance ticket around IDR 15.000–IDR 25.000. The characteristic of tourist actors are 67% are man; 85% at the age 18–34 years old; 24% management staff of tourism and 54% local employment; income of local community mostly contribute as tea worker (47%), agriculture (10%), livestock (8%), and others 35% (include from tourism).

3.1 Tea and sustainable tourism
In Indonesia, policy about sustainable tourism regulated in Regulation of the Minister of Tourism, the Republic of Indonesia No. 14 of 2016 on Guidelines for Sustainable Tourism Destination. For local regulation in West Java, where the study undertaken may refer to regulation: 1) Governor’s Regulation of West Java No. 93 of 2017 on Standard of Development and Management Tourist Attraction and 2) Local Regulation of West Java Province No. 3 of 2018 on West Java provincial government capital participation in limited liability companies and tourism of West Java. Almost all the central of tea producer area in Indonesia are located in rural area. The development of tourism on tea plantation can be a sustainable strategy to improve the local economy if these developments can potentially provide employment to a large part of the population in tea tourism activities. Rural green tourism is a promising manifestation of entrepreneurial activity in rural areas [10] and can be strategy on climate change response [11]. On tea-green tourism, the tourist can participate from plucking to packaging including the manufacturing of tea [12].

The tea tourism activities where offers many job opportunities are the activity on promoting hospitality. Hospitality can boost economic & business concerned, with the main focus on to attract the tourist to a particular destination and fulfil their needs of pleasure, relaxation and experience, such as experience on tea plucking, tea tasting, making glamping tent, camping ground, also the beautiful view of tea carpet through tea walk. These tea tourism in Rancabali, Pangalengan, and Pasirjambu also have enhance various financial/non-financial benefit to local communities and it can potential as sustainable tourism destination in New Normal era where people more interested in natural tourism which they can
enjoy fresh air, feel healthy and can relaxing by seeing in beautiful natural view in COVID-19 protocol framework strictly.

3.2 Tea and ecotourism
Nowadays, ecotourism become popular in Indonesia. Ecotourism can be defined as a responsible travel to natural areas which conserves the environment, improves the welfare of the local people [13] and confers social, economic and environmental benefits of sustainable development pillars [14]. Considering the wide geographical and various biological diversity on three study areas, Rancabali that is surrounded by Patuha Mountain and its Nature Reserve, Pangalengan that is surrounded by Malabar Mountain and its Nature Reserve, and Pasirjambu-Gambung that is surrounded by Tilu Mountain its Nature Reserve, the scope of these ecotourism potential highly to developed.

In Rancabali tourism, namely Pinisi-Glamping lakeside utilize natural resources in the form of lakes as an attraction beside tea carpet surround it. In Pangalengan-Taman Langit take advantage of natural resources in the form of the highest stretch of hill as an attraction in addition to the expanse of tea that surrounds it to see the view of the city of Bandung from above. In Pasirjambu-Ranca Cangkuang Campground Gambung utilize natural resources in the form of rivers where water flows clearly in addition to the surrounding tea fields view as an outbound attraction and camping with family around the river.

Beside tea eco-tour, the diverse special cultivars scientifically and reasonably can be develop into ecotourism object as a genetic and in situ conservation [15] such as in Gambung Tea Plantation-Pasirjambu where Ranca Cangkuang Campground located under Indonesia Research Institute for Tea and Cinchona ownership has many kinds of special tea cultivars. It can be a potential landscape design of ecotourism tea garden for tourism development in the future where ensures the sustainability of the environment and ecosystem. If government pays more attention towards ecotourism development, it may prove to be the backbone of the economy of rural area, such as by infrastructure development support.

3.3 Tea and gastronomy tourism
At present, gastronomy tourism which based on tea products are increasingly popular and growing. Gastronomy tourism is an alternative tourism type for rural areas for its ease of application and interesting nature [16] and not only offers food and beverages as the main objects in its attractions, but also everything related to food activities ranging from food ingredients, preparation, processing, serving, as well as the cultural and local values where can effects the whole tea tourism experiences and the experience of trip [17,18] also will take an important place in destination marketing management [19]. Though tea is the second drink after water, but the growth of gastronomy tourism still under coffee gastronomy. Tea house or tea café near from tea plantation can be complement of tea tourism destination packages. Tea mixology and tea blending as tea artisan now become popular in millennials not only to results unique of tea product but also as tea art. Integrating tea scenery and gastronomy based on tea food and beverages can give positive impact on economy and environment of tea destination and will increase the sustainability of the region [16].

From three study areas, Pinisi – Glamping Lakeside in Rancabali offers the special tea gastronomy tourism. Tourist can enjoy the tea food and beverages in resto or café called Pinisi ship while seeing the view of tea plantation carpet and Situ Patengan Lake or also they can make special tea serving in glamping tent. It is different from other two locations, Pangalengan-Taman Langit and Pasirjambu-Ranca Cangkuang Campground, still focused on ecotourism not yet in tea gastronomy tourism such as only build tea outlets. The experiences of tea gastronomy tourism mostly served in community stalls around tourist sites traditionally with a variety of traditional products from smallholder tea farmers or products from tea companies, such tea drink namely “teh gelang”, green tea chocolates, tea chips, milk tea, etc. Near from the tourist site in Pangalengan there is Malabar Tea House where offer the experience of tea processing and tea serving of the best tea from Malabar Tea Plantation, a stated-owned tea plantation. The improvement of tea gastronomy tourism especially must be done in these two locations
is building a good image for promotion materials through various media, especially social media. These locations have strength of the authenticity of the traditional or indigenous tea house that reflect the culture of tea plantation society. Through gastronomy tourism, it can educate the tourists to be more responsive to the tourist attractions which are environmental friendly, involving local communities [17] as well as potential give impact to sustainable livelihood.

3.4 Tourism and tea marketing
Tourism noticeably has the potential to enhance the brand image and marketing of tea-producing destinations [20]. Home stay tourism in tea gardens is a vast growing marketing segment in the upcountry region where usually tourist motivated by interest within the history, traditions and consumption of tea additionally [21]. Social media marketing, e-word of mouth, blogs and printed media as promotional techniques to popularize brand of tourist site [22]. From survey result of the study areas, both tea tourism in Pangalengan and Pasirjambu has massive promotion activities through social media marketing especially by Instagram in the form of the photo or video. They also try to make online connection to visitors by record, upload and share their experience in this official tea tourism Instagram. Besides that, they often make collaboration with local influencers to promote this tourist site. This way recognized as the right and the fastest strategy to attract visitor to come also increasing the subscribers of Instagram. This is because these two tourist sites are still new or have just introduced in early 2020. Different with Rancabali, this tourist site has been popular before 2020. The new concept “Noah Arc” namely Pinisi success boost curiosity of the people in Bandung and outside Bandung to come and experience this tourist offers.

3.5 Tourism and tea integration and its impacts on sustainable livelihood
Tea tourism helps to improve the economic conditions of the local community [4]. The variety of livelihood opportunities has generated by tourism community after integration tourism site in tea plantation area opened, recognized and operated. Culinary stall for both food and beverage, specialties store (tea and coffee), agriculture store (ex. strawberry garden/store), street vendors, parking area, home stay, toilet service or other accommodation, retail and transportation. Mostly, it has given positive impact for both tourist visitor and tourist actors. Benefit for tourist visitors, they got benefit for recreation with natural attraction in 93%, relaxation with nature in 89%, and good environment for body healing with their family in 53% or friends in 29%. Mostly the tourist chooses to spend at least one night in 50% at location with camping style. Their daily income also increased, which previously their livelihood was only from wage labor on tea plantation, livestock, or other local employment (horticulture/coffee farm worker, household assistant, etc.).

However, this increasing of income did not occur for laid off migrant workers after the pandemic. The various of new job opportunities are by opened food or beverages/souvenir stalls, street vendors, parking man, and other accommodation services that are suitable for tourist needs, such us tent services, firewood, transportation, or tea garden tours. Especially in Rancabali tourism, the average share of income from tourism activities to household income higher than other two locations, that is 40%. Comparing with other locations, that is still about 20–25% depending on the season. It is normal because tourism activity in Rancabali already known to many people, while the other two tourist sites are still new, in the introduction and development stages. The impact for community, there is social cultural change where living standards, local pride, personal and community skill development for tourism services (service, communication, cooking) have been increased, mostly in living standards in 64% and skill development in 57%.

In other condition, tea tourism still not significant contribute to tea production increasing as main core of tea plantation sector, but tourism give other benefit of diversification income for tea company. It needs more effort to recognize and linkage tourism to tea production, tea history, tea culture, tea traditions as well as all about tea experiences in tea tour schema. If these other tea experiences can be packed and promoted more attractive and contemporary especially for millennials segmentation market demands, so it can be great opportunity for tea business recovery. Based on tourist interview, mostly or
66.7% promotion strategy for tea tourism through social media, especially Instagram. Other offline media that can used such as banners, brochure, or leaflet.

In environmental impact, from observation on study areas of three kinds of tea tourist sites, community and company become more concerned to better manage the internal natural potential by maintaining biodiversity on tea plantation also forestry behind these location, preservation of upstream rivers, managing waste, arranging toilets, arranging food courts, parking areas, off road roads, etc. It correlated with tourist desire about authenticity and amenity in 90%. The opening of new arenas or attractions in tea tourism previously can consider the economic impact but the environmental impact being the initial priority for consideration. This is because most of the tourist sites are located in the upstream area where they have social and environmental responsibility to the downstream community and environment. For the example, in a Ranca Cangkuang Campground, along the riverbanks, annual trees always planted to reduce soil erosion. In Rancabali, trees also planted and arranged to add more to the aesthetics of the tourist site. It efforts can reduce the negative environmental impact around tourist sites and downstream area.

Mutual partnership must be boost to develop between community villagers, company management and government in these tourist areas. From interview with the actors of tourism, the much needed of the role of government is in infrastructure development in the tea areas, especially the road repair to tourism location also financial capital for small and medium enterprises to create economy creative business and product that suitable with these tea tourism. From the tourist interview, the accessibility to tourist location as decision consideration is about 69% and supported the information of road conditions and travel time. Tea mixology and tea blending product in tea house/tea café or tea store, was potential to integrated as tea gastronomy tourism in three tourist sites, it is like coffee house and coffee store where already more widely known and has become a millennial lifestyle. Integrating coffee and tourism has become sustainable livelihood approach to conservation and development [23]. From the interview, one of the attractions experience that tourist want is tasting the good quality of tea from tea masters (80%).

A sustainable livelihood approach can be potential developed through integrating tea and tourism in Indonesia tea central producer area. All potential experiences that tea tourism offers, such agro-educational tourism through tea tour, ecotourism of tea natural, tea gastronomy tourism include tea product, tea culture and its tradition can assist the sustainable livelihood around tea plantation. It required the emphasizing stronger linkages, strengthening synergy in mutual partnership between institutional structures or levels, i.e., government, tea companies, and local community, for empower and improve the accessibility of tea and tourism assets (natural, physical, human, financial, and social). So the better living of all levels from at household, local/village into community level include the tea plantation company can be sustainable improved. To be considered and anticipated is in the future, the availability of labor in tea plantation would be very competitiveness with other sector, also with tourism development, because at the present on tea plantation not only in Indonesia, but also in other tea producer countries face of labor shortage challenge. So, beside technology engineering and social engineering in tea plantation, a new tea business model need to developed in the central of tea producing area to make more sustainable livelihood by considering and responsive to local and global tea market demand, one of this strategy is integrating tea and tourism.

4. Conclusions
This study finds that there has the increasing of livelihoods diversity of the society around tea plantation where developed into tourism. The improvements in livelihood sustainability in three tea tourism sites are occurring at the community level with more diversity in household and community livelihood composition, grounded in enhanced economic and human assets, also concern to natural environment inside and outside tea plantation where tea tourism located. Integrating tea and ecology, agriculture, gastronomy, and culture tourism in tea plantation area can give whole tea experiences and various benefit for the visitors and give large impact for sustainable livelihood for tea plantation society, including tea companies. Corporate social responsibility provides a further opportunity in sustainable
tea tourism development. Increasing services satisfaction of the tea tourists is one of the most important ways to increase the revisit intention. Creating a mutual partnership synergy between all institutional levels can cover the lack of resources and competencies in tea and tourism integration development. For practical implications in the future are the important to enlarge tea and tourism integration, build partnership, stimulate more local participation, and increase local benefits as their ways of life.

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