Tourism Transformation In Canggu: Impacts On Socio-Cultural, Economic, And Environmental Dimensions With Sustainable Development Strategies

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Abstract

This study examines the socio-cultural, economic, and environmental impacts of tourism development in Canggu, Bali, while exploring effective strategies for mitigating these adverse effects to support sustainable tourism growth. Using a qualitative approach and library research methodology, the study analyzes secondary sources, including academic literature, government publications, and tourism reports on Bali. Through a variable analysis paradigm, it assesses the socio-cultural, economic, and environmental dimensions of tourism's impact in Canggu from 2010 to 2024, and proposes strategies for sustainable management. Findings reveal that, while tourism has contributed positively to local economic growth by fostering entrepreneurship and employment opportunities, it has also led to significant challenges, such as the erosion of agricultural heritage, shifts in cultural practices, and environmental degradation. Key strategies for mitigating these impacts involve active community engagement in tourism decision-making, preservation of cultural practices, and sustainable agricultural and environmental policies. The study provides actionable insights for policymakers, tourism businesses, and local communities, emphasizing the importance of collaborative efforts in promoting sustainable tourism. Recommended strategies, including cultural education for tourists, environmental impact assessments, and community-based tourism management, are essential for balancing economic benefits with cultural and environmental preservation. This research contributes to the understanding of tourism's multifaceted impacts on Canggu and offers a comprehensive framework for sustainable tourism practices, providing a balanced perspective that is crucial for stakeholders aiming to foster sustainable development in rapidly growing destinations.

Keyword : tourism development; tourism impact; tourism transformation; mitigation strategies; canggu

INTRODUCTION

Bali Island is a prominent tourist attraction in Indonesia that has gained international recognition over a significant period of time. The island of Bali offers a diverse range of tourist attractions, including natural tourism, cultural experiences, and art, which may be visited at the convenience of tourists during their spare time (Ramadhan et. al., 2020).

Canggu Village is a village in the North Kuta District of the Badung Regency in the Bali Province. Canggu village spans an area of 418.52 square kilometres, which accounts for approximately 7.43% of the total land area of Bali Island. This village was formerly renowned for its exquisite Subak farms. The subak system is a traditional irrigation system in Bali that plays a crucial role in maintaining agricultural sustainability in the region (Budiasa, 2010). The principle of "Tri Hita Karana" serves as the basis for Subak members to engage in sustainable

agriculture, with a focus on the significance of Subak culture and environment in promoting sustainable agricultural methods (Risna et al., 2022).

In the early stages of development in the 1980s, the village received few tourists, primarily surfing aficionados who frequented the Canggu beach. Due to the community's fervour and favourable response, Canggu Village and the Canggu Surf Community organised a surfing event (Wahyundaria & Sunarta, 2021). The tourism industry in Canggu has experienced significant commercialization, evident by the presence of 177 tourist hotels. Between 2010 and 2013, Canggu experienced a significant surge in popularity due to its inclusion of 39 out of the top 100 most stunning beaches, as recognised by CNN (Wahyundaria & Sunarta, 2021). It is evident that the community acknowledges and regards tourists as consumers of services.

Over the last 14 years, tourism growth in Canggu has led to a marked transformation in

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practices, land use, socio-cultural economic structures. From 2010 to 2024, the number of tourist accommodations, such as increased hotels villas, has and 20%, replacing approximately traditional agricultural areas, particularly Subak rice fields (Sunarta, 2015; Wahyundaria & Sunarta, 2021). This rapid development has also resulted in shifts in local cultural practices, such as the traditional morning offerinas (ngaturang canang) evolving into service-based routines (ngaturang breakfast) to cater to foreign visitors, as illustrated in Mulyana et al. (2020). Investors are actively enhancing tourism infrastructure in Canggu support tourism to activities (Prabawati, 2021). This is a comparison between the Canggu shortcut, a route that links Canggu Village and Tibubeneng, in the years 2016 and 2023



Source: Instagram Punapi Bali (2023)
Figure 1 illustrates a comparison of Canggu shortcuts between the years 2016 and 2023

LITERATURE REVIEW

Impact is commonly understood as the outcome or consequence of an event or activity that brings about a modification in a condition or situation. (Thesalonika & Arent, 2023). Within the realm of tourism, the term "tourism impact" encompasses a range of factors, such as economic, socio-cultural, and environmental impacts.

The tourist development can have a considerable impact on several socio-cultural aspects. The impact of tourism on local culture is evident in alterations to social dynamics between tourists and local people, as well as modifications to cultural values and traditions resulting from the assimilation of external cultural elements (Widari, 2022). In addition, tourism development can have an impact on the social dynamics of local communities, leading to decrease in social interaction, social cohesion. and social regulation, simultaneously fostering the preservation and proliferation of traditional arts (Gunawan et al., 2015). The sociocultural effects of tourism might also manifest in the diversification of local residents' livelihoods (Gunawan et al., 2015).

Furthermore, tourism development has the potential to impact the economic situations of local communities, consequently affecting the social and cultural components of the community as well (Wibowo et al., 2019).

Tourism development typically exerts a favourable influence on society's economic well-being. Tourism development has the capacity to serve as a catalyst for economic growth and advancement in local communities (Wibowo et al., 2019). The expansion of tourism can stimulate an increase in tourist expenditure, hence influencing the economic development of the respective area (Muryani & Siswahto, 2020). The rise of tourism can also exert an influence on the fluctuations in land values and the zoning regulations of areas surrounding tourist sites (Nuharta et al., 2020). Tourism development also impacts the livelihoods of local communities, leading to increased diversity as a result of tourism (Muryani & Siswahto, 2020).

Environmental consequences typically have an adverse effect. Tourism development can also influence alterations in the utilisation of agricultural land in tourist regions, potentially leading to adverse effects on the environment and the quality of life for local inhabitants (Sugiama, 2021). Poorly regulated tourism development can have adverse effects on the local environment, including compromised sanitation standards in the neighbouring community (Nopianti et al., 2018; Harefa, 2020).

RESEARCH METHOD

To comprehensively examine tourism phenomena, it is important to analyse them through a specific perspective or paradigm (Ahimsa-Putra, 2023). A paradigm is a collection of interconnected concepts that create a cognitive framework used to comprehend, interpret, and elucidate the observed facts (Ahimsa-Putra, 2009). This study uses a variable analysis paradigm to develop theoretical frameworks. The factors employed encompass socio-cultural dimensions. economic dimensions. environmental dimensions. Once the data has been classified, a numerical value is assigned to quantify the observed impact. In order to formulate strategies for the forthcoming consequences.

This study employs a qualitative library research method, gathering data from various secondary sources, including academic journals, books, government publications, and reports on tourism impact in Bali. The research adopts a variable analysis paradigm focusing

on socio-cultural, economic, and environmental dimensions. Relevant literature and historical records from 2010 to 2024 are analyzed to identify and quantify tourism's impacts on these three dimensions. This approach enables a thorough evaluation of tourism's impact and allows the study to propose actionable strategies based on documented evidence

This study seeks to address two primary research questions: "How has tourism influenced socio-cultural practices in Canggu?" and "What are the effective strategies for mitigating the negative impacts of tourism development in Canggu?" To answer the first question, this study uses library data from various sources that explore socio-cultural shifts in Canggu's tourism landscape since 2010, focusing on changes in traditional practices and the local community's adaptation to tourist demands. In response to the second question, the research examines proposed implemented and mitigation strategies through a review of relevant literature, while also identifying the roles of local stakeholders, such as the community, government, and tourism businesses, in promoting sustainable tourism. Through this literature analysis, the study aims to provide a comprehensive framework for assessing tourism impacts and actionable steps to mitigate negative consequences in Canggu.

RESULTS AND DISCUSSION

Projected Effects Resulting from Tourism Operations in Canggu

Tourism has numerous interrelated impacts, as tourists are unable to travel independently and rely on the infrastructure and services provided by the tourism industry. The growth of tourism has various effects, such as the influence of constructing tourism infrastructure, the influence of transportation, and the influence of tourism industry operations (Richardson & Fluker, 2004). Canggu has witnessed the construction of numerous hotels and resorts, transforming several Subak agricultural lands into tourist-oriented amenities. A significant shift has occurred in land utilisation, with a transition from agricultural purposes to the development of tourism accommodations. (Sunarta, 2015). Between 2010 and 2015, there was a decline in the amount of agricultural land, which decreased 281 hectares to 253 hectares from (Wahyundaria & Sunarta, 2021).

An important consequence of the extensive tourism in Canggu is the erosion of agricultural traditions, particularly the Subak

Organisation which serves as a unifying force for farmers and a traditional irrigation system in Bali. In addition, the use of groundwater by tourism establishments and the expansion of surfaces due impermeable to tourism infrastructure may negatively impact groundwater resources. leading to disruptions in agricultural irrigation and the incursion of seawater in coastal regions like Canggu (Sudarmadji, 2023).

Canggu is renowned as a haven for nomadic tourists, contributing to changes in the local economy and culture. Mulyana et al. (2020) report that the influx of nomadic tourists has fostered a digital economy, creating opportunities for local services to adapt to their needs. However, Prabawati (2021) highlights challenges such as increased traffic and environmental strain, indicating a need for sustainable infrastructure planning to support both tourists and the local population. This brings about a shift in the routines of the local Canggu community, who traditionally begin their mornings with "ngaturang canang" as a kind of religious devotion, but now prioritise "ngaturang breakfast" to cater to morning guests. Nevertheless, as Canggu evolves as a hub for digital nomads, this tendency also fosters a greater reliance on technologies, complemented by the growth of services tailored to the needs of digital nomads (Mulyana et al., 2020).



Source: Google Images (2023)
Figure 2. "Ngaturang Canang" and "Ngaturang
Breakfast"

The recent surge in tourism has led to a rise in the number of visitors coming in and going out of Canggu. Undoubtedly, this is a boon for the economic well-being of the Canagu community. Nevertheless, the high population density frequently leads to adverse consequences, which can result in discomfort for both the general public and tourists. The high volume of traffic in Canggu frequently results in accidents, posing a risk to both tourists and local residents (Prabawati, 2021). Dishonest tourists, who frequently exhibit careless behaviour, disrupt both fellow tourists and the general public, while also posing a risk to other vehicles. Tourism activities in Canggu

can give rise to adverse effects, including congestion, noise pollution, and a deterioration in environmental conditions (Wahyundaria & Sunarta, 2021). This undoubtedly creates a negative perception among tourists originating from the individual's own country. Detrimental feedback was obtained from tourists who operated vehicles in Canggu (Prabawati, 2021).

The tourism industry in Canggu mostly caters to nomadic tourists, offering them the chance to engage in various activities and gain a sense of empowerment. The emerging phenomenon of nomadic visitors choosing to stay in Canggu, characterised by their adventurous spirit and limited financial resources, has the potential to positively impact the local economy (Suprani Gama et al., 2019). In addition, the presence of female tourist entrepreneurs in Bali plays a significant role in promoting the economic empowerment of women in the region (Tajeddini et al., 2017).

Evaluation of the Effects of Tourism Activities in Canggu

The impact of tourism development refers to the consequences, whether positive or negative, that arise as a result of the development of tourism. According to Spillane (1985), The tourist development process is a sector that is influenced by the impact of tourism. If anything possesses the capacity to exert a beneficial influence on society, hence fostering individuals' inclination to pursue their desires, it will be embraced. Conversely, if something yields a detrimental impact on society, people will shun it. Presented below is an impact evaluation matrix detailing the effects that occur during the process of tourism development in Canggu.

Table 1. Evaluation Matrix Socio-cultural Dimension of the Impacts of Tourism Development in Canggu

Socio-cultural Dimension		
Impacts	Value	Reference
The proliferation of	Negative	(Budiasa,
tourists is causing the		2010;
erosion of agricultural		Sunarta,
culture, hence		2015)
jeopardising the		
survival of the Subak		
Organisation, which		
serves as the		
cohesive force		
behind Balinese		
farmers and their		
time-honored		
irrigation system.		

Socio-cultural Dimension		
Impacts	Value	Reference
The presence of tourists and digital nomads is altering the lifestyle of the local population. An instance of this is modifying the customary practice of "ngaturang canang" as a religious offering to "ngaturang breakfast" to cater to guests.	Negative	(Mulyana et al., 2020)
Canggu's reputation as a tourist attraction has been tarnished by bad feedback on online forums. This occurred as a result of the conduct of dishonest tourists who disrupted both fellow tourists and the local community.	Negative	(Prabawati, 2021)

Source: Author, 2023

In the Socio-cultural Dimension table, various impacts of tourism on the Balinese community are delineated. One significant negative impact is the proliferation of tourists leading to the erosion of agricultural culture, posing a threat to the survival of the Subak Organisation. The Subak Organisation plays a crucial role in maintaining the traditional irrigation system and serves as a cohesive force for Balinese farmers.

Another adverse effect involves the alteration of the local lifestyle due to the presence of tourists and digital nomads. An illustrative example is the transformation of the customary religious practice of "ngaturang "ngaturang canang" into breakfast" to accommodate the preferences of visitors. Furthermore, the tourist destination Canggu has suffered a blow to its reputation, attributed to negative feedback on online forums. This damage was caused by the disruptive behavior of dishonest tourists, negatively impacting both fellow travelers and the local community.

Table 2. Evaluation Matrix Economy Dimension of the Impacts of Tourism Development in Canggu

Ecocomy Dimension Impacts Value Reference Positive Tourism's rising (Wibowo et al., 2019; visitation rates directly contribute to Muryani & economic Siswahto. local expansion and foster 2020) novel prospects for entrepreneurship, particularly by means of the cash created independent by travellers. The implementation Positive (Wibowo et of tourism activities in al., 2019) Canggu facilitates the creation of additional employment prospects, thereby empowering the local community. The development of Negative (Sunarta, tourism infrastructure 2015: led to the Wahyundar transformation ia & of Subak agricultural Sunarta, land, resulting in a 2021) reduction agricultural land area from 281 hectares to 253 hectares between 2010 and 2015. This had a significant influence on the deteriorating agricultural economy.

Source: Author, 2023

The increase in tourism visitation rates directly contributes positively to the local economic expansion and opens new prospects for entrepreneurship, particularly through the cash generated by independent travelers. Another positive impact is that implementation of tourism activities in Canggu facilitates the creation of additional employment opportunities, thereby empowering the local community. However, the development of tourism infrastructure also brings negative consequences, such as the transformation of Subak agricultural land, leading to a reduction in agricultural land area from 281 hectares to 253 hectares between 2010 and 2015. This has had a significant influence on the deteriorating agricultural economy in the region.

Table 3. Evaluation Matrix Environment Dimension of the Impacts of Tourism Development in Canggu

Environment Dimension		
Impacts	Value	Reference
Tourism accommodation's	Negative	(Sudarmadji, 2023)
utilisation of		•
groundwater and the		
expansion of		
impermeable land might		
disturb agricultural		
irrigation, hence		
detrimentally impacting		
conventional farming		
systems.		
Tourism expansion in	Negative	(Wahyundari
coastal regions like		a & Sunarta,
Canggu can lead to the		2021)
seawater intrusion,		
resulting in detrimental		
environmental		
consequences,		
particularly in coastal		
districts.	Negatif	(Namionti -t
The concentration of	Negatif	(Nopianti et
tourism leads to		al., 2018;
congestion, noise		Harefa,
pollution, and a decline in environmental		2020)
standards, so adversely affecting both the local		
residents and tourists.		
Source: Author 2023		

Source: Author, 2023

The utilization of groundwater by tourism accommodations and the expansion of impermeable land have the potential to disrupt agricultural irrigation, negatively affecting traditional farming systems. Additionally, tourism expansion in coastal areas, like Canggu, raises concerns about seawater intrusion, which could lead to detrimental environmental consequences, particularly in coastal districts. Furthermore, the concentration of tourism in the area contributes to issues such as congestion, noise pollution, and a decline in environmental standards, adversely affecting both the local residents and tourists.

Strategy for Mitigating the Adverse Impact of Tourism Development in Canggu

To mitigate negative consequences, comprehensive tourism planning encompass both social and economic dimensions, facilitating the active participation of local populations in the planning and development of the tourist destination (Kodyat, 1983). These impacts can have positive effects and should be maximised, while simultaneously being aware of their potential negative consequences and minimising them as much as feasible (Utama, 2014). Below is a comprehensive table outlining strategies for mitigating the adverse effects of tourism in Canggu.

Table 4. Strategy for Mitigating the adverse impacts of Tourism Development in Canggu

impacts of Tourisn		
Impact	Mitigation	Reference
The proliferation of tourists is causing a decline of agricultural culture, posing a significant threat to the survival of the Subak Organization, which serves as the unifying force for farmers and the traditional irrigation system in Bali.	Engaging the community in the process of making decisions related to tourism. Direct your attention on the cultivation and conservation of the indigenous culture, specifically Subak in this instance.	(Budiasa, 2010; Kodyat, 1983)
The presence of tourists and digital nomads is altering the lifestyle of the local population. An instance of this is modifying the customary practice of "ngaturang canang" (a form of religious offering) to "ngaturang breakfast" in order to cater to guests.	Offering specialized training sessions in local customs and cultural protocols for tourists and digital nomads. Ensure their active participation in local events and initiatives.	(Mulyana et al., 2020)
Canggu's reputation as a tourist attraction has been tarnished by bad feedback on online forums. This occurred due to the conduct of unethical tourists who disrupted	Establish a reputation management team to monitor and promptly address any negative feedback or criticism. Enhance visitor	(Prabawati, 2021)

Impact	Mitigation	Reference
both fellow tourists and the local population.	satisfaction and promote favorable evaluations. Public effort aimed at promoting tourist consciousness regarding proper conduct and moral principles.	
The development of tourism infrastructure led to the transformation of Subak agricultural land, resulting in a reduction in agricultural land area from 281 hectares to 253 hectares between 2010 and 2015. This had a significant influence on the deteriorating agricultural	Establish and enforce regulations on groundwater usage and adopt sustainable agricultural policies and practices to safeguard agricultural land.	(Sunarta, 2015; Wahyundaria & Sunarta, 2021)
economy. Tourism accommodation's utilization of groundwater and the expansion of impermeable land might interrupt agricultural irrigation, hence detrimentally impacting conventional farming systems.	Enact measures to safeguard the Subak irrigation system and guarantee the sustainable management of groundwater.	(Risna et al., 2022; Sudarmadji, 2023)

Impact	Mitigation	Reference
Tourism	Prior to	(Richardson
expansion in	constructing	& Fluker,
coastal regions	infrastructure,	2004)
like Canggu	conduct an	
can lead to the	environmental	
entry of	impact	
seawater,	assessment to	
resulting in	verify that the	
detrimental	infrastructure	
consequences	being	
for the	developed	
ecosystem,	adheres to	
particularly in	regulations	
coastal	and	
districts.	incorporates	
	sustainable	
	principles.	
The	Engaging the	(Nopianti et
concentration	community in	al., 2018;
of tourism	environmental	Harefa,
leads to	education	2020)
congestion,	initiatives and	
noise pollution,	enhancing	
and a decline	tourists'	
in	consciousness	
environmental	of the	
standards, so	environment.	
adversely		
affecting both		
the local		
residents and		
tourists.		

Source: Author, 2023

CONCLUSION

The community of Canggu in Bali has undergone a profound transformation, shifting from a traditional agricultural area with a subak irrigation system to a bustling tourist destination. Since 2010, the rapid rise in tourism has substantially impacted Canggu's socioeconomic. and cultural, environmental landscape. While tourism has driven local economic growth through increased visitor numbers and the creation of new business opportunities, it has also introduced challenges, such as the erosion of agricultural heritage, shifts in cultural practices, and environmental degradation.

Mitigating these adverse impacts requires an integrated approach that involves active community engagement in tourism-related decision-making, prioritizes cultural preservation, and adopts sustainable agricultural practices. A comprehensive

mitigation strategy is essential to address the negative effects of tourism in Canggu. This should include ethical training strategy programs for tourists, environmental impact assessments prior to infrastructure development, and educational initiatives to raise environmental awareness within the community. Additionally, proactive reputation management through traveler education on respectful conduct and cultural etiquette is necessary. Collaborative efforts between the government, local communities, and tourism enterprises are vital to fostering sustainable and balanced tourism growth that benefits both Canggu's residents and its natural heritage.

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