

Sustainable Ecotourism Development Strategy Based on Tri Hita Karana Local Wisdom with SWOT Hybrid (Case Study: Jatiluwih - Bali)

I Putu Putra Astawa¹, I Gusti Ayu Wimba², Ida Bagus Purwa Sidemen³

^{1, 2, 3}Faculty of Economics, Business and Tourism, Hindu University of Indonesia, Bali, Indonesia
Email address: ¹putuastawa(at)unhi.ac.id, ²igawimba179(at)gmail.com, ³purwasidemen69(at)gmail.com

Abstract— Bali as one of the world's tourist destinations, makes the tourism sector a leading sector. The tourism sector has a multi-sectoral impact in driving the economy to improve people's welfare. However, in the midst of the Covid-19 pandemic situation and conditions, it has slowed down various sectors, including the tourism sector. In this study, to answer this problem, a sustainable ecotourism development strategy based on tri Hita Karana's local wisdom was designed using the SWOT Hybrid method. The initial stage of this research is collecting data by conducting observations on the object of research, in-depth interviews with resource persons/experts from the Pentahelix element, namely: government, academics, tourism practitioners, local communities and the media. The number of experts interviewed was 15 people. Data was also collected by distributing questionnaires to 100 respondents from the general public online. The results of determining the value of weights and criteria are used to determine the value of the Hybrid SWOT score. This value is then used for Hybrid SWOT analysis. Based on the results of the Hybrid SWOT analysis, it shows that the number of weaknesses and opportunities has the largest value of 9.495, so that it becomes the chosen strategy, namely minimizing weaknesses to take advantage of opportunities or Turn Around strategy. The strategic position diagram is formulated with the X-axis coordinates of the IFAS (Strength -Weakness) of $4,000 - 4.495 = -0.495$; Y-axis coordinate formulation of EFAS (Opportunity -Threat) is $5,000 - 4,000 = 1,000$.

Keyword— SWOT Hybrid, Sustainable Ecotourism, Tri Hita Karana, Local Wisdom.

I. INTRODUCTION

The tourism sector as the leading sector of the Balinese economy is greatly affected by the COVID-19 pandemic which has caused various restrictions to be imposed so that it paralyzes tourism activities. This impact has even been felt for the Balinese economy since the first quarter of 2020 which recorded negative growth of -1.20 percent (y-on-y). Then the decline until the fourth quarter of 2020 recorded a negative growth (contracted) as deep as -12.21 percent (Bali Province BPS, 2021). On the other hand, tourism development has an impact in promoting, developing peace, prosperity, establishing national and international relations with sustainable development goals (UNWTO, 2017).

The development of tourism by involving the government, academia, the community (community), business actors and the media has the goal of developing sustainable tourism. Ecotourism is one of the sustainable tourism products that focuses on three main things, namely: the existence of natural or ecological sustainability, socio-cultural and economic local

communities, not only for the current generation but also for future generations (WTO, 2002). Ecotourism is defined as a nature-oriented tourism activity by preserving the environment, social culture and increasing the economic welfare of local communities (Fennell, 2008). Ecotourism is used as economic and business development while maintaining the sustainability of tourist destinations and environmental sustainability (Palmer & Chuamuangphan, 2018). However, some research results mention that ecological sustainability has been degraded (Ceron & Dubois, 2003; Buckley, 2012; Mika, 2015) because sometimes tourism development has changed land use.

Other research results related to sustainable tourism, namely tourism in Bali, which so rapidly has damaged the environment both physically and socially, includes the conversion of agricultural land, water pollution, beach abrasion and garbage (Budiarta, 2018). Ecotourism development is constrained in developing supporting infrastructure for ecotourism activities and has not involved optimal community participation (Astawa, 2019). If this problem is left unchecked, it will have a negative impact on the sustainability of Balinese tourism based on culture and the preservation of nature and the environment.

Based on the problems above, the researcher aims to introduce a Strategy Model for the development of Sustainable Ecotourism based on the local wisdom of Tri Hita Karana. This model integrates the concept of ecotourism with the universal wisdom of Balinese local culture which is the heritage of the Balinese ancestors, namely Tri Hita Karana. Tri Hita Karana is defined as the three causes of happiness, through a harmonious relationship and togetherness between humans and God Almighty (parhyangan); humans with others (pawongan), and humans with their natural environment (palemahan) (Windia & Dewi, 2011).

The development of a sustainable ecotourism strategy based on the local wisdom of Tri Hita Karana in Bali is considered feasible and important because tourism development so far still leaves problems such as environmental pollution, waste, land conversion and has not optimally involved local community participation in tourism activities. This problem will have a negative impact on people's welfare, cultural and environmental sustainability. With the formation of an ecotourism Grand Design based on the local wisdom of Tri Hita Karana, it is hoped that a comprehensive strategy and understanding of the development of sustainable ecotourism in Bali will be obtained.

II. THEORETICAL BACKGROUND

A. Strategy

Strategy is the science and art of using all the nation's resources to implement certain policies in war and peace (KKBI, 2021). According to David, strategy is a unified, broad and integrated plan that links the company's strategic advantages with environmental challenges, designed to ensure that the main objectives of the company can be achieved through proper implementation by the organization (David, Concept Strategy Management, (Jakarta: Selemba Empat). , 2004), p. 14.)

B. Sustainable Tourism Development

The concept of sustainable tourism development is defined as: "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities". UNWTO and UNEP (2005). The definition of sustainable tourism above explicitly views that tourism must fully consider the various impacts on the current and future economic, social and environmental dimensions, without neglecting the needs of tourists, industry, the environment and local communities.

The United Nations Development Programs (UNDP, 2010), concludes that it is necessary to examine the three pillars of tourism, namely the carrying capacity of the environment, the tourism industry and the local population to be integrated in order to build sustainable tourism. One model that is widely discussed in the context of sustainable tourism is the ecotourism-based tourism destination development model. The tourism development model is in line with the environmental conditions of the Bali region which has a tourism culture base as the foundation for Bali tourism development.

According to Suwena (2010), categorizing a tourism activity is considered sustainable if it meets the following requirements.

- 1) Ecologically sustainable, namely tourism development does not cause negative effects on the local ecosystem. In addition, conservation is a necessity that must be pursued to protect natural resources from the environment and the negative effects of tourism activities.
- 2) Socially acceptable, which refers to the ability of local residents to absorb tourism, industry and tourists. without causing social conflict
- 3) Culturally acceptable, i.e. the local community is able to adapt to the tourist culture which is quite different from the tourist culture
- 4) Economically profitable, namely the benefits obtained from tourism activities can improve the welfare of the community

C. Ecotourism Concept Based on Tri Hita Karana (THK)

Tri Hita Karana is defined as the three causes of happiness. Tri Hita Karana is defined as the three causes of happiness, through a harmonious relationship and togetherness between humans and God Almighty (parhyangan); humans with others (pawongan), and humans with their natural environment (palemahan) (Windia & Dewi, 2011). Furthermore, the purpose of the THK is greatly influenced by the environment. This

means that the natural environment, the human/society environment, and the mindset/concept/value environment that develops in society will be able to influence the final goals to be achieved by the THK philosophy (Windia & Dewi, 2011).

Harmony and togetherness which is the universal essence of the concept of Tri Hita Karana basically belongs to all human beings with various ethnicities and religions they adhere to. However, only in Bali the concept of Tri Hita Karana is actually implemented by a certain social system, namely the subak system and the customary village system (Arif, 1999). Tri Hita Karana which contains elements of parhyangan, pawongan, and palemahan is basically analogous to the cultural system. According to Koentjaraningrat (1993), states that the form of culture as a system has elements/sub-systems of thought patterns/concepts/values, social sub-systems and sub-systems of artifacts or materials. In this regard, it can be stated that parhyangan is analogous to the sub-system of thought patterns/concepts/values, pawongan is analogous to the social sub-system, and palemahan is analogous to the sub-system of artifacts/materials.

The principle of ecotourism development is to maintain a harmonious relationship from three components, namely ecological sustainability, economic improvement of local communities and preservation of nature and culture. With the fulfillment of the three principles of ecotourism development, ensuring ecological friendly development from community based development. This is in line with the goal of THK, which is to achieve happiness in life through a process of harmony and togetherness.

D. SWOT Hybrid

Hybrid SWOT is a combination method of two decision-making tools, namely SWOT and AHP. Its application in a joint process is intended to optimize their respective advantages, as well as support multi-criteria decision making (Kangas et al., 2003; Yuksel and Dagdeviren, 2007). With the Hybrid SWOT approach, the intensity of strengths, weaknesses, opportunities, and threats can be quantified, and therefore more realistic and effective decisions can be made compared to SWOT alone or AHP alone (Ho 2008). The Hybrid SWOT approach has been applied in various fields (Leskinen et al. 2006; Masozera et al. 2006; Ho 2008; Taleai et al., 2009; Gorener et al., 2012; Hoseini et al., 2013;

III. METHODOLOGY

The initial stage of this research is collecting data by conducting observations on the object of research, in-depth interviews with resource persons/experts from the Pentahelix element, namely: government, academics, tourism practitioners, local communities and the media. The number of interviewees/experts was fifteen people. The purpose of conducting in-depth interviews with experts is to formulate Hybrid SWOT items and assign a weight value to each Hybrid SWOT item. Data was also collected by distributing questionnaires to 100 respondents from the general public online. The purpose of filling out the questionnaire for respondents is to provide an assessment of the criteria for the SWOT Hybrid items that are compiled. The results of

determining the value of weights and criteria are used to determine the value of the Hybrid SWOT score. This value is then used for Hybrid SWOT analysis.

IV. RESULTS & DISCUSSIONS

With Hybrid SWOT analysis, all aspects related to sustainable ecotourism development strategies based on local wisdom Tri Hita Karana are grouped into two, namely internal factors in the form of S (strength) and W (weackness); external factors in the form of O (opportunity) and T (Threats). The details of the Hybrid SWOT components are: 1) Streangth consists of 4 statement items; 2) Weaknesses (Weackness consists of 4 statement items; 3) Opportunities (Opportunity) consists of 3 statement items; and the challenge (Threat) consists of 3 statement items. The details of the Hybrid SWOT components are as shown in Table I.

TABLE I. Internal and External SWOT Hybrid Factors

Var	Description
S ₁	The natural beauty of the mountains and panoramic views of rice terraces with fresh air such as the tourist destination of Jatiluwih, Penebel.
S ₂	There is community participation in maintaining the rice field ecosystem and the environment is maintained sustainably, by incorporating the rules for managing rice fields and preserving the environment into the traditional village awig-awig.
S ₃	As a center for studies and research on cultural customs, traditions, irrigation systems, cropping patterns and traditional management of paddy fields, with the subak system.
S ₄	Forest conservation which maintains the availability of water for rice fields, necessities of life and beautiful rice fields can be a source of attraction for tourists to visit Jatiluwih/Penebel ecotourism.
W ₁	Lack of supporting facilities in developing Jatiluwih/Penebel ecotourism such as parking areas, toilets and other supporting facilities.
W ₂	Lack of economic impact for local communities in tourism development in their area
W ₃	W3 Local community involvement is still lacking in tourism development in their area.
W ₄	Many similar tourist attractions are developing.
O ₁	In the current era of Digital Technology, it helps the tourism sector in governance, management, promotion of tourism widely and integrated with the help of digital technology such as digital social media available in tourism promotion.
O ₂	Trends in health tourism in the new normal era. The tendency of tourists is starting to lead to health tourism, which prioritizes comfort, health
O ₃	The current trend of tourists to choose natural tourism (still natural and beautiful/beautiful).
T ₁	An unexpected disaster has occurred caused by nature or humans, such as the Covid -19 pandemic, which disturbs the safety and comfort of traveling
T ₂	Protecting nature from various interests that only benefit certain circles and are temporary
T ₃	There is no comprehensive Grand Design yet regarding the Ecotourism Concept Based on Local Wisdom. the concept of ecotourism has been contaminated by various cultures, politics and several local authorities who design their own strategies in the name of tourism development and increasing Gross Domestic Product so that ecotourism is only a concept and theory, this gives rise to a world of tourism without direction (Grand Design).

The four alternative strategies are: 1) SO (Strength-Opportunity) strategy, this strategy is in quadrant I, with a strategy of creating strengths to take advantage of existing opportunities. This strategy is aggressive; 2) WO (Weackness-

Opportunity) strategy, this strategy is in quadrant II, with a strategy of minimizing weaknesses and maximizing the use of existing opportunities or a Turn Around strategy; 3) WT Strategy (Weakness - Threat) This strategy is in quadrant III, with a strategy of minimizing weaknesses and avoiding challenges/threats. This strategy is defensive; 4) ST Strategy (Strength-Threat) This strategy is in quadrant IV, with a strategy of using strength to overcome challenges/challenges. This strategy is differentiation.

After the identification process regarding the strengths, weaknesses, opportunities and challenges, then determine the weighting, criteria and scores. Determination of the weight value of internal and external factors is carried out by experts by means of resource persons/experts filling out questionnaires. The weight value is calculated using a linear scale from 1 to 10. A value of 1 indicates that the statement item is not significant and on the other hand a value of 10 indicates a very significant value. The value of the criteria is determined by community respondents consisting of 100 respondents. The criteria values are calculated using the Likers scale, namely: Value 1 (strongly disagree); Value 2 (disagree); Value 3 (Neutral); value of 4 (agree); and value of 5 (strongly agree). Determination of the score by multiplying the weight value with the criterion value (Syarif Hidayat, 2016). The results of the IFAS and EFAS analysis of sustainable ecotourism development strategies based on local wisdom Tri Hita Karana are shown in Table II.

TABLE II. Results of IFAS and EFAS Analysis

IFAS				
Strengths (S)	SIG	weigth	Criteria	Score
S ₁	9,000	0,252	4	1,007
S ₂	8,750	0,245	4	0,979
S ₃	8,917	0,249	4	0,998
S ₄	9,083	0,254	4	1,016
TOTAL	35,750	1,000	16	4,000
Weaknesses(W)				
Weaknesses(W)	SIG	Weight	Criteria	Score
W ₁	7,917	0,254	4	1,016
W ₂	7,833	0,251	4	1,005
W ₃	7,75	0,249	5	1,243
W ₄	7,667	0,246	5	1,230
TOTAL	31,167	1,000	18	4,495
EFAS				
Opportunities (O)	SIG	Weight	Criteria	Score
O ₁	8,021	0,3398	5	1,699
O ₂	7,833	0,3319	5	1,659
O ₃	7,750	0,3283	5	1,642
TOTAL	23,6	1	15	5,000
Threats (T)				
Threats (T)	SIG	Weight	Criteria	Score
T ₁	8,833	0,3464	4	1,386
T ₂	7,667	0,3007	4	1,203
T ₃	9,000	0,3529	4	1,412
TOTAL	25,5	1	12	4,000

Source: Data processed, (2021)

Furthermore, based on IFAS and EFAS calculations are carried out by adding up the four alternative strategies to determine the chosen alternative strategy. The strategy chosen is the strategy that has the greatest value (Sharif Hidayat, 2016). The value of the strategy results is shown in Table III.

TABLE III. Hybrid SWOT Matrix

SWOT Hybrid Matrix	Score
S + O (Strength + Opportunity)	9,000
W + O (Weakness + Opportunity)	9,495
W + T (Weakness + Threat)	8,495
S + T (Strength + Threat)	8,000

Source: Data processed, (2021)

The calculation results show that the number of weaknesses and opportunities gets the largest value, namely 9.495, so that it becomes the chosen strategy, namely minimizing weaknesses to take advantage of opportunities or Turn Around strategy. The strategic position diagram is formulated with the X-axis coordinates of the IFAS (Strength – Weakness) of $4,000 - 4.495 = -0.495$; The formulation of Y-axis coordinates from EFAS (Opportunity – Threat) is $5,000 - 4,000 = 1,000$. In Figure 1. It is clear that the strategic position of sustainable ecotourism development based on local wisdom Tri Hita Karana is in quadrant II position with point coordinates (-0.495; 1,000). In quadrant II, the strategy developed is to minimize the weaknesses they have and take full advantage of existing opportunities or the Turn Around strategy.

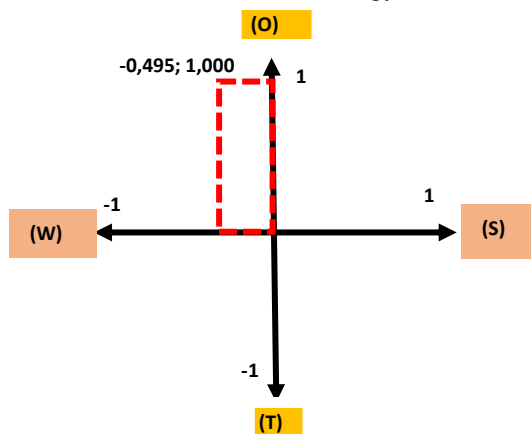


Fig. 1. Diagram of the strategic position of sustainable ecotourism development based on local wisdom Tri Hita Karana

V. CONCLUSION

Based on the results of the Hybrid SWOT analysis, the strategic position of sustainable ecotourism development based on local wisdom tri hita karana is in quadrant two, where the strategy developed is to increase opportunities to reduce existing weaknesses. The strategies developed are:

- 1) Jatiluwih as one of the world's cultural heritage by UNESCO with the subak system based on Tri Hita Karana, making the agricultural sector a source of income for the local community. This provides an opportunity that people with traditional rice cultivation need to develop organic agricultural products to be marketed to tourists in the form of souvenirs and direct presentations, marketed to local, national and international communities;
- 2) In developing the agricultural and tourism sectors, the local community is more involved, so that the increase in agricultural and tourism products can have a positive impact on improving the economy of the local community;

- 3) Required management, governance, promotion of tourism widely and integrated with the help of Information Technology;
- 4) In the New Normal Era in addition to organic agricultural products, there are opportunities to develop Health Tourism, because the tendency of tourists is starting to lead to Health Tourism which prioritizes, comfort, and health;

REFERENCES

1. Ardika, I. W. "Warisan Budaya Perspektif Masa Kini". Udayana University Press, Denpasar.,2015.
2. Arif, S. . "Applying Philosophy of Tri Hita Karana in Design and Management of Subak Irrigation System, dalam A Study of Subak as Indigenous Cultural Social, and Technological System to Establish a Culturally based Integrated Water Resources Management". Universitas Gadjah Mada,1999.
3. Astawa. Putra I Putu, "The Impact Of The Role Of The Government, Community Participation In The Development Of Tri Hita Karana-Based Ecowisata On Community Welfare In Bali", International Journal of Business, Economics and Law, Vol. 20, Issue 5, ISSN 2289-1552,2019
4. Dowling, R., & DA, F. "The Context of Ecotourism Policy and Planning". CAB International, Ontario, 2003.
5. Getz, D. "Models in tourism planning towards integration of theory and practice". Tourism Management, 7(1), 21-32, 1986
6. Koentjaraningrat. "Kebudayaan, Mentalitas, dan Pembangunan.". Gramedia Pustaka Utama, 1993.
7. Mathieson, Wall, Alister, & Geofrey. "Tourism: Economic, Physical, and Social Impacts". Longman Group Limited, London and New York, 1982.
8. Murphy, P. E.. "Tourism A Community Approach". Methuen, New York, 1985.
9. Parimartha, I. G.. "Silang Pandang Desa Adat dan Desa Dinas di Bali". In Udayana University Press, 2013
10. Rangkuti, Freddy. "Analisis SWOT teknik membedah kasus bisnis". Jakarta: Gramedia Pustaka Utama, 2017
11. Pitana, I. G., Diarta, & Surya, I. K. "Pengantar Ilmu Pariwisata". Penerbit Andi, 2009.
12. Suwena, I. K.."Format Pariwisata Masa Depan; dalam Pariwisata Berkelanjutan Dalam Pusaran Krisis Global". Udayana University Press, 2010.
13. Syarif Hidayat.. "Strategi pengembangan ekowisata di desa Kinarum kabupaten Tabalong", Jurnal Hutan Tropis, Volume 4,No.3; ISSN 2337-7771, 2016
14. Windia.. "Transformasi Sistem Irigasi Subak yang Berlandaskan Konsep Tri Hita Karana". Pustaka Bali Post., Denpasar., "2006"
15. Windia, I. W., & Dewi, R. K.. "Analisis Bisnis Berlandaskan Tri Hita Karana". Udayana University Press., 2011