



DOI : <https://doi.org/10.36733/agrimeta.v15i2.13365>

## DEVELOPMENT STRATEGY OF SUBAK BULUH AS AN AGRO-TOURISM DESTINATION IN BATURITI VILLAGE, KERAMBITAN DISTRICT, TABANAN REGENCY

Ida Bagus Putu Suryawan, Putu Fajar Kartika Lestari\*, Ni Gst. Ag.Gde Eka Martiningsih  
Universitas Mahasaraswati Denpasar, Denpasar, Indonesia

\*) Corresponding author: [pfajarkartika@unmas.ac.id](mailto:pfajarkartika@unmas.ac.id)

### ABSTRACT

*This study aims to formulate development strategies for Subak Buluh as an agro-tourism destination in Baturiti Village, Kerambitan District, Tabanan Regency. Subak, as a traditional Balinese irrigation institution with strong socio-cultural values, plays a vital role in water management and agricultural sustainability. In response to contemporary challenges, subak must be developed not only as an agricultural institution but also as an alternative tourism attraction. Data were collected using purposive sampling from 78 respondents, consisting of 39 internal respondents (farmers and subak members) and 39 external respondents (tourists and local residents). Respondents exhibited diverse characteristics in terms of education level and occupation. SWOT analysis was employed to identify internal strengths and weaknesses as well as external opportunities and threats in the development of Subak Buluh agro-tourism. The results indicate that Subak Buluh's main strengths include its natural landscape, cultural traditions and ceremonies, and fertile agricultural land. However, limitations such as insufficient internal funding and limited promotional activities remain key challenges. Promising development opportunities arise from village tourism programs and the growing global trend toward alternative tourism, while threats include tourist congestion and infrastructure degradation. This study provides strategic recommendations to support the sustainable development of Subak Buluh as an agro-tourism destination, contributing to local community welfare while preserving environmental and cultural sustainability.*

**Keywords :** Subak Buluh, Agrotourism, SWOT Analysis.

### INTRODUCTION

The agricultural sector plays a vital role and must always be sustained, as it provides food, clothing, and shelter for society. This role has become increasingly important since the government launched the Food Security Program. Law No. 7 of 1996 on Food defines food security as the fulfillment of food needs for every household, reflected in the availability of sufficient food in terms of both quantity and quality, that is safe, evenly distributed, and affordable (Anonymous, 2011).

In Bali, agricultural land is managed by farmers who are organized in a traditional institution known as subak. According to Windia (2008), subak in Bali has existed for more than ten centuries and continues to function by providing services to its members. This demonstrates that subak has been able to sustainably operate as an irrigation system with strong socio-cultural characteristics. The subak in

Baturiti Village is known as Subak Buluh, covering an area of approximately 87 hectares and led by a subak leader (pekaseh), I Wayan Sadia.

According to Windia (2008), subak currently faces numerous challenges and is experiencing a process of marginalization. Limited land ownership in this sector has resulted in low farmer incomes. This situation is further exacerbated by increasing living costs and rising land taxes, which place a heavy burden on farmers and lead many of them to sell their agricultural land. The reduction in rice fields will ultimately have a negative impact on Bali's tourism sector. Therefore, the existence of subak is crucial for tourism development, as Bali's tourism would lose its identity without it. The agricultural and tourism sectors can be described as having a symbiotic, mutually beneficial relationship. However, creating synergy between these two sectors

is not an easy task and requires careful planning and appropriate strategies to ensure mutual benefits. For this reason, research on subak development strategies deserves further investigation.

Agro-tourism is a form of tourism that utilizes agricultural activities as its main attraction (Pramusita & Sarinastiti, 2018). The primary objectives of agro-tourism are to enhance knowledge, broaden perspectives, and provide recreational experiences, while simultaneously fostering business relationships within the agricultural tourism sector (Lubis et al., 2020). The growing popularity of agriculture-based tourism has created new opportunities in the agricultural industry and can serve as an effective medium for disseminating innovation and technology, particularly in agriculture. In addition to serving as a recreational destination during holidays, agro-tourism also provides opportunities for relaxation and refreshment (Mayasari & Ramdhan, 2013).

Agro-tourism development strategies require top-level management decisions to support business development and have long-term implications, typically spanning at least five years. Therefore, such strategies are inherently future-oriented. Development strategies also play a crucial role in formulating organizational direction by considering both internal and external factors faced by the organization (David, 2004).

Subak is a traditional agricultural irrigation institution in Bali that has existed since ancient times. Based on Bali Provincial Regulation No. 9 of 2012, subak is defined as a traditional organization involved in water management and/or cropping systems at the farm level within Balinese indigenous communities, characterized by socio-agrarian, religious, and economic values that have historically continued to grow and develop. According to Wardha (1989) and Arfian (1989), as cited in Windia (2006), SWOT is an acronym for strengths, weaknesses, opportunities, and threats derived from both internal and external environments. Abdillah and Jogiyanto (2015) explain that SWOT analysis is used to assess organizational strengths and weaknesses, as well as external opportunities and challenges. Furthermore, Fahmi (2012) emphasizes that a comprehensive SWOT analysis requires careful consideration of both internal and external factors.

## RESEARCH METHODS

This research was conducted at Subak Buluh, located in Baturiti Kaje Hamlet, Baturiti

Village, Kerambitan District, Tabanan Regency. The research location was selected using a purposive method, in which the site was deliberately chosen based on several considerations: (1) the location is strategically situated, and (2) there have been few or no previous studies that specifically examine this site. The study was carried out over a two-month period, from August to September 2024.

The data sources used in this study consisted of primary and secondary data. According to Hasnan (2012), primary data are data obtained directly from the field. In this study, primary data included information collected from respondents, as well as data on the strengths, weaknesses, opportunities, and threats of Subak Buluh. Secondary data are data obtained indirectly from respondents and are derived from existing sources. The secondary data used in this study were obtained from village profile documents, Central Bureau of Statistics (BPS) data, and records from the Kerambitan District Office.

Both qualitative and quantitative data were used in this study. Qualitative data included information on the organizational structure and ideas for developing Subak Buluh as an agro-tourism destination. Quantitative data included the total land area and the number of subak members.

A total of 78 respondents were involved in this study and were selected using purposive sampling, in which respondents were chosen based on specific criteria. These respondents consisted of 39 internal respondents (village heads, pekaseh, and subak members) and 39 external respondents (local residents and tourists visiting Subak Buluh).

Data analysis was conducted using Internal Factor Analysis Summary (IFAS), External Factor Analysis Summary (EFAS), the Internal-External (IE) matrix, and the SWOT matrix to identify alternative development strategies. According to Rangkuti (2018), IFAS was used to identify internal factors, namely strengths and weaknesses, of Subak Buluh, while EFAS was used to analyze external factors, including opportunities and threats. After completing the IFAS and EFAS analyses, the IE matrix was applied to determine the most appropriate strategy for developing Subak Buluh as an agro-tourism destination.

The collected data were processed and analyzed using SWOT analysis to formulate development strategies for Subak Buluh as an agro-tourism destination.

<b>INTERNAL</b>	<b>STRENGTHS (S)</b> Determine 5-10 internal strength factors	<b>WEAKNESSES (W)</b> Determine 5-10 internal weakness factors
<b>EXTERNAL</b>		
<b>OPPORTUNITIES (O)</b> Determine 5-10 external opportunity factors	<b>Strategi S-O</b> Create strategies that use strengths to take advantage of opportunities	<b>Strategi W-O</b> Create a strategy that uses weaknesses to exploit opportunities
<b>TREATHS (Y)</b> Determine 5-10 external threat factors	<b>Strategi S-T</b> Create a strategy that uses strengths to overcome threats.n	<b>Strategi W-T</b> Create strategies that minimize weaknesses and avoid threats

## RESULTS AND DISCUSSION

### Internal Factor Analysis Matrix Summary (IFAS)

The internal strategy matrix from the research results on Subak Buluh's development strategy as an agrotourism can be seen in Table 1 below:

**Table 1. Internal Strategy Matrix of Factor Analysis System (IFAS)**

INTERNAL FACTORS (STENGTHS & WEAKNESSES)				
No	Strength	Weight	Rating	Score
1	The natural beauty of Subak	0.21	4	0.84
2	tracking lines along the Subak	0.14	4	0.56
3	Fertility of rice fields	0.06	3	0.18
4	Subak culture and ceremonies	0.09	4	0.36
5	Cleanliness of the Subak environment	0.07	4	0.28
<b>Amount</b>		<b>0.57</b>		<b>2.22</b>
No	Weakness	Weight	Rating	Score
1	Subak's internal funding sources	0.09	4	0.36
2	Tourist attractions are not yet developed	0.08	3	0.24
3	Promotional activities for tourist villages are still limited	0.10	4	0.4
4	No public transportation is operating	0.09	3	0.27
5	There has been no outreach regarding Subak tourism	0.07	4	0.28
<b>Amount</b>		<b>0.43</b>		<b>1.55</b>
<b>Total</b>		<b>1</b>		<b>3.77</b>

Source: Primary Data Analysis 2024

Table 1 shows that the internal factors of the 5 strengths and 5 weaknesses from the calculation results obtained a total IFAS score for Subak Buluh of 3.77, which means it has a good ability to anticipate weaknesses. The highest score for strength is 0.84, namely the natural beauty of the Subak, and the lowest score for weakness is 0.18, Subak land fertility. Meanwhile, the highest score for weakness is 0.36, Subak's internal funding sources, and the

lowest score for weakness is 0.24, tourist attractions are not yet developed.

### External Matrix Factor Analysis Summary (EFAS)

The external strategy matrix from the research results on Subak Buluh's development strategy as an agrotourism can be seen in the following table 2:

**Table 2.** External Strategy Matrix of System Analysis Factors (EFAS)

EXTERNAL FACTORS (OPPORTUNITIES & THREATS)				
No	Opportunity	Weight	Rating	Score
1	Tourist visits to Tabanan Regency	0.17	4	0.68
2	The existence of a Tourism Village Program in Baturiti Village	0.10	4	0.4
3	The shift in global tourism trends from mass tourism to alternative tourism	0.05	3	0.15
4	Located in the agrotourism development area	0.09	4	0.36
5	Support from local communities	0.19	4	0.76
<b>Amount</b>		<b>0.6</b>		<b>2.35</b>
No	Threat	Weight	Rating	Score
1	No accommodation available	0.10	4	0.4
2	Lack of government support in the Subak development process	0.05	3	0.15
3	The occurrence of tourist density	0.09	4	0.36
4	Road damage occurred	0.09	4	0.36
5	The occurrence of environmental pollution	0.07	4	0.28
<b>Amount</b>		<b>0.4</b>		<b>1.55</b>
<b>Total</b>		<b>1</b>		<b>3.9</b>

Source: Primary Data Analysis 2024

Table 2 shows that external factors include 5 opportunities and 5 threats in Subak Buluh. The highest score for opportunities is 0.76 support from the local community and the lowest score for opportunities is 0.15 Shifting global tourism trends from mass tourism to alternative tourism. While the highest score for threats is 0.36 road damage and the lowest score for threats is 0.15 Lack of government support in the Subak development process External factors of opportunities and threats are arranged based on weight with the most important impact so that a total score of 3.9 is obtained. This shows that the external factors of Subak Buluh are able to take advantage of opportunities and avoid threats.

#### Internal and External Matrix

After obtaining the IFAS score for strengths and weaknesses and the EFAS score for opportunities and threats, the Internal and External matrix can be seen in Figure 1.

Figure 1 shows that Subak Buluh's position is at coordinates (3.77 and 3.6) in quadrant I, indicating that Subak Buluh has strengths and opportunities, allowing it to capitalize on existing opportunities using its strengths. Therefore, it is suitable for using the SO ( Strength) strategy. Opportunities to develop the Buluh Subak and supported by an aggressive development strategy or Growth Oriented Strategy .

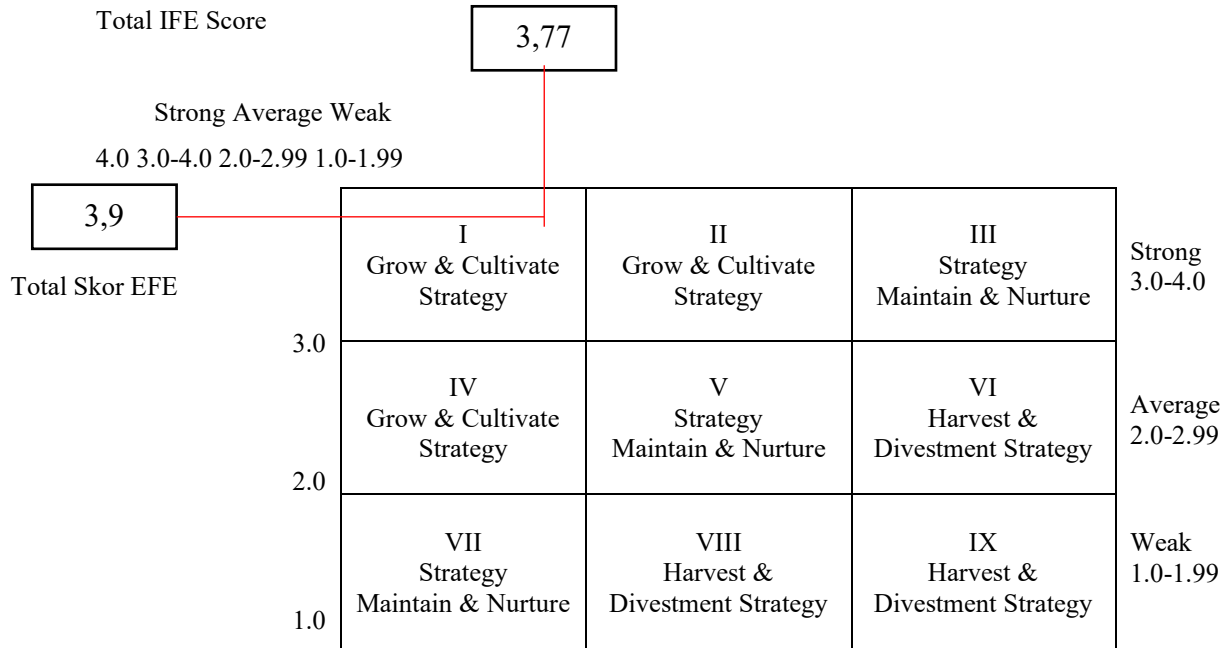


Figure 1. Position Matrix of Subak Buluh, Baturiti Village

<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">INTERNAL</div> <div style="width: 60%;">EXTERNAL</div> </div>	<b>STRENGTHS (S)</b>	<b>WEAKNESSES (W)</b>
	1. The natural beauty of Subak. 2. Availability of tracking routes along the Subak. 3. Fertility of rice fields. Subak culture and ceremonies . 5. Cleanliness of the Subak environment.	1. Internal funding sources of subak. 2. Tourist attractions are not yet developed. 3. Tourism Village promotional activities are still limited. 4. No public transportation is operating. 5. There has been no outreach regarding Subak tourism.
<b>OPPORTUNITIES (O)</b>	<b>SO Strategy</b>	<b>WO Strategy</b>
1. Tourist visits to Tabanan Regency. 2. There is a Tourism Village program in Baturiti Village 3. Shifting trends in global tourism from mass tourism to alternative tourism. 4. Located in an agrotourism development area . 5. Support from local communities.	1. Maintain the natural beauty of Subak to become a tourist attraction.	1. Collaborate with the government to promote Subak Buluh, and to receive further education regarding the development of Subak as agrotourism.
<b>TREATHS (T)</b>	<b>ST Strategy</b>	<b>WT Strategy</b>
1. No accommodation available. 2. Lack of government support in the subak development process. 3. There is a density of tourists. 4. Road damage occurs. 5. Environmental pollution occurs.	1. Improve facilities in the Subak area , such as building public toilets and providing stalls along the tracking route . 2. Provide trash bins in the Subak area to minimize environmental pollution.	1. Promote Subak Buluh through social media such as Instagram , Facebook, and Tiktok .



The SWOT matrix is a combination of internal factors, namely strengths and weaknesses, with external factors, namely opportunities and threats, so that it will find four alternative strategies and a combination of the two, namely the SO strategy ( *Strengths and Weaknesses* ), *Opportunities* ), ST ( *Strength Threats* ), WO ( *Weakness Opportunities* ) and WT ( *Weakness Threats* ) (Rangkuti 2001) below is the SWOT Matrix, among others.

### Frozen Strawberry Business Development Strategy

Table 3 shows the SWOT matrix of the Subak Buluh development strategy as agrotourism, namely:

- 1) SO Strategy ( Strengths-Opportunities )  
A strategy that uses strengths to capitalize on opportunities involves preserving the natural beauty of the Subak to attract tourists. This strategy aims to ensure that Subak Buluh has its own unique appeal to offer .
- 2) ST ( Strengths-Threats ) Strategy  
The strategy uses strengths to overcome threats by improving facilities in the Subak area, such as providing public toilets and stalls along the trail . Providing trash receptacles in the Subak area to minimize environmental pollution. This strategy is excellent for Subak Buluh's development as an agrotourism destination.
- 3) WO Strategy ( Weakness-Opportunities )  
A strategy that minimizes weaknesses by capitalizing on existing opportunities. The strategy used is to collaborate with the government to promote Subak Buluh and to receive further education on developing Subak as an agrotourism destination, thereby further enhancing opportunities. Collaborating with the government will facilitate promotion, and farmers who have previously not received education on developing Subak as an agrotourism destination will receive education on Subak as an agrotourism destination.
- 4) WT Strategy ( Weaknesses-Threats )  
A strategy to minimize weaknesses and anticipate threats is to promote Subak Buluh through social media platforms like Instagram , Facebook, and TikTok . This is because social media promotion is easier and faster, and tourists can quickly learn about Subak Buluh as an agrotourism destination.

### CONCLUSION AND SUGGESTIONS

Based on the research results and discussion, the following conclusions can be drawn:

- 1) Internal factors influencing the Subak Buluh development strategy as an agrotourism destination are strengths and weaknesses. The strongest strength factor is 2.22, indicating good capabilities. The main weakness is the Subak's internal funding sources, indicated by a total score of 0.36. External factors consist of opportunities and threats, with the strongest opportunity being 0.76, indicating good opportunities. Meanwhile, the lowest threat factor is government support in the Subak development process, with a score of 0.15 .
- 2) Subak Buluh Development Strategy As an agrotourism Subak Buluh is in a very advantageous position because it has strengths and opportunities, which can be utilized optimally. The strategy for Subak Buluh is in quadrant I, namely the company must support an aggressive development policy. So the appropriate strategy is the SO strategy , namely maintaining the natural beauty of Subak to attract tourists. The ST strategy is to improve facilities in the Subak area such as providing public toilets and providing stalls along the tracking route . Providing trash cans in the Subak area to minimize environmental pollution. The WO strategy is to collaborate with the government to promote Subak Buluh and so that farmers receive further counseling regarding the development of Subak as an agrotourism. The WT strategy is to promote Subak Buluh through social media such as Instagram , Facebook, and Tiktok .

### SUGGESTION

- 1) For Farmers  
Farmers should address existing weaknesses by leveraging internal strengths, particularly by implementing ST strategies to improve facilities and environmental management.
- 2) For the Government  
Government institutions are encouraged to strengthen collaboration with farmers and local communities to support agro-tourism development and subak preservation.
- 3) For Further Researcher  
Future studies should integrate SWOT analysis with other strategic analysis methods to provide deeper insights into sustainable agro-tourism development, besides using the SWOT analysis method.

## REFERENCES

- Anggara, I. G. M. D. C., & Wulandari, P. P. (2023). strategi pengembangan potensi desa yeh embang kangin sebagai desa wisata berbasis budaya di kecamatan mendoyo kabupaten jembrana. *journal of tourism and interdisciplinary studies*, 3(1), 28-36.
- Arsana, I. M. M., Mudhina, M., Waisnawa, I. G. N. S., & Sudiajeng, I. (2017). strategi pengembangan desa wisata berbasis agrowisata di desa belimbing kacamatan pupuan, kabupaten tabanan. *soshum: jurnal sosial dan humaniora*, 6(1), 46.
- Anggraeni, N. P. S., & Arida, I. N. S. problematika pengembangan potensi wisata subak sebagai agrowisata di subak anggabaya kelurahan penatih kota denpasar.
- Budiasa, I. W. (2011). konsep dan potensi pengembangan agrowisata di bali. *dwijenagro*, 2(1).
- Budhiarti, K. A. R., Windia, W. A. Y. A. N., & Astiti, N. W. S. (2016). strategi pengembangan subak menjadi lembaga berorientasi agribisnis di kabupaten badung (kasus subak sengempel, desa bongkasa, kecamatan abiansemal). *e-jurnal agribisnis dan agrowisata*.
- Choirunnisa, I. C., & Karmilah, M. (2022). strategi pengembangan pariwisata budaya. *jurnal kajian ruang*, 2(1), 89-109.
- Dewi, I. A. L., Wijayanti, P. U., & Djelantik, A. A. W. S. (2013). strategi pengembangan subak pulagan sebagawai kawasan agrowisata. *dwijenagro*, 3(2).
- Damayanti, I. A. K. W., Harisal, H., & Prayustika, P. A. (2023). strategi pengembangan potensi wisata desa batur tengah, kintamani, kabupaten bangli, bali. *budimas: jurnal pengabdian masyarakat*, 6(1).
- Damayanti, K. D., & Anggreni, I. A. I. (2022). persepsi pengunjung terhadap daya tarik wisata di agrowisata subak sembung pada era new normal. *jurnal agribisnis dan agrowisata issn*, 2685, 3809
- Febrianty, I. (2017). strategi pengembangan wisata pesisir pantai: studi kasus desa batu lima, kuala tambangan kabupaten tanah laut provinsi kalimantan selatan.
- Juniasa, I. D. N., Umbas, R., Sugiantiningsih, A. A. P., Merta, I. N., Yunita, I. M., & Mertaningrum, N. L. P. E. (2022). potensi, kendala, dan harapan petani terhadap subak anggabaya sebagai agrowisata. *jurnal ilmiah dinamika sosial*, 6(2), 207-215.
- Kurniasanti, S. A. (2019). analisis strategi pengembangan agrowisata. *journal of tourism and creativity*, 3(1).
- Mirayani, N. K. S., Paristha, N. P. T., & Octaviana, N. K. R. (2023). strategi pengembangan desa wisata kerta kabupaten gianyar provinsi bali dalam new normal era. *altasia jurnal pariwisata indonesia*, 5(1), 18-31.
- Ngago, N. D. (2022). *strategi pengembangan usahatani padi organik di subak lepuh desa baha kecamatan mengwi kabupaten badung* (doctoral dissertation, universitas mahasaraswati denpasar).
- Putri, N., Suryawardani, I., & Diarta, I. K. S. (2020). strategi perekayasaan subak sembung sebagai daya tarik wisata di perkotaan. *jurnal agribisnis dan agrowisata issn*, 2685, 3809.
- Pratiwi, N. M. W. T., & Diarta, I. K. S. (2022). analisis potensi pengembangan agrowisata di subak batan wani desa sading kecamatan mengwi kabupaten badung. *jurnal agribisnis dan agrowisata issn*, 2685, 3809.
- Pantiyasa, I. W., & Darsana, I. M. (2023). pengembangan wisata berkelanjutan di jatiluwih tabanan bali: analisis swot dan strategi pengelolaan. *media informasi penelitian kabupaten semarang*, 5(2), 62-77.
- Pandanan, S. S. (2019). *strategi pengembangan agribisnis kakao di desa meko kecamatan pamona barat, kabupaten poso* (doctoral dissertation, universitas bosowa).
- Parmadi, I. G. N. W., & Kusuma, P. (2016). perancangan karya ilustrasi guna pengenalan sistem irigasi subak kepada masyarakat muda di pulau bali. *kalatanda: jurnal desain dan media kreatif*, 1(1), 81-100.
- Pano, F. (2021). *strategi pengembangan agrowisata subak gaga di desa mekar buana kecamatan abiansemal* (doctoral dissertation, universitas mahasaraswati denpasar).
- Profil Desa Baturiti*. (2015, o7 26). retrieved from wordpress.com: <https://desabaturitikerambitan.wordpress.com/2015/07/26/subak-desa-baturiti/>
- Rohmah, S., Alviany, D., Noviana, N., Fatmawati, I., Safrudin, A. N., & Winarto, B. (2024). analisis potensi dan strategi pengembangan agrowisata sebagai alternatif pariwisata berkelanjutan di kabupaten gunungkidul. *prosiding hasil penelitian dan pengabdian bidang pendidikan*, 1(1), 75-92.



- Sunarsa, I. W. (2019). strategi pengembangan pantai purnama sukawati sebagai obyek dan daya tarik wisata. *jurnal kepariwisataan*, 18(2), 27-35.
- Sriningsih, E., & Effendi, T. K. (2022, june). strategi pengembangan kawasan wisata kesehatan jamu di kecamatan balapulang kabupaten tegal. in *prosiding seminar nasional hasil penelitian agribisnis* (vol. 6, no. 1, pp. 63-69).
- Sedana, G. (2010). analisis swot subak padangbulia berorientasi agribisnis. *dwijenagro*, 1(1).
- Wijaya, N. S., & Sudarmawan, I. W. E. (2019). community based tourism (cbt) sebagai strategi pengembangan pariwisata berkelanjutan di dtw ceking desa pekraman tegallalang. *jurnal ilmiah hospitality management*, 10(1), 77-98.
- Windia, W., Suamba, I. K., & Sudarta, W. (2010). model pengembangan agrowisata berbasis sistem subak di bali. *universitas udayana bukit jimbaran*.
- Waruwu, M. (2023). pendekatan penelitian pendidikan: metode penelitian kualitatif, metode penelitian kuantitatif dan metode penelitian kombinasi (mixed method). *jurnal pendidikan tambusai*, 7(1), 2896-2910.