

VOL. 3 - NO. 1 - 2023 E-ISSN : 2809-3992

# PROCEEDING

## INFLERNATIONAL OORFERINGES ON HOSPHALLRY & TOURISM STUDIES



TOURISM DIPLOMA PROGRAM UNIVERSITY OF MERDEKA MALANG EAST JAVA-INDONESIA



#### TABLE OF CONTENT

#### FOREWORD

#### PREFACE

KI	EYNOTE SPEAKER	
٠	Prof. Dr. Diena M. Lemy, A.Par., M.M., CHE	1
٠	Assistant Prof. Dr. Noppadol Dharawanij.	
٠	Dr. Andini Risfandini, S.E., M.Sc.	
•	Assoc. Prof. Rodolfo E. Cabardo,	4
	OPTIMIZING TRADITIONAL SPORTS TOWARDS AN ECOEDU SPORT TOURISM	
	DESTINATION IN MUNCAR VILLAGE, SEMARANG REGENCY	5
	Khoiril Anam, Fajar Awang Irawan, Nurdian Susilowati, Muhammad Muhibbi.	
	THE EFFECT OF SERVICES, OBJECTS AND TOURISM ATTRACTION AND	
	FACILITIES ON TOURIST SATISFACTION IN UMBUL SIGENDANG KAPILALER	18
	DIFFERENCES IN HEALTHY LIFESTYLE AND HEALTHY FOOD CONSUMPTION	
	AMONG MILLENIALS AND GENERATION Z IN JAKARTA	31
	Baskoro Harwindito , Nafitri Eka Lestari, Vera Fortuna.	
	TRAVEL EXPERIENCE USING GOOGLE MAPS IN SEMARANG CITY TOURISM	
	DESTINATIONS	45
	Anies Nor Kholidah, Shofif Sobaruddin Akbar, Inayatur Rosidah, Fitriya Anwar.	
	EVALUATING INTER-TOURISM FACILITY ACCESSIBILITY USING ISOCHRONE IN	
	BATU CITY	52
	Rizal Brilliant Nugraha, Faris Daffa Dzulfiqar, Ayu Fitriatul 'Ulya.	
	DEVELOPMENT OF BATUKAANG TOURISM VILLAGE BASED ON AGROEDUHERITAG	ΞE
	THROUGH CULTURAL HERITAGE DOCUMENTATION, STRENGTHENING TOURISM	-
	AWARENESS AND ORGANIC FARMING TRAINING I GD Yudha Partama, I Ketut Widnyana, Putu Edi Yastika, Gusti Ngurah Yoga Semadi.	59
	KAYUTANGAN HERITAGE MALANG DISABILITY FRIENDLY TOURISM	71
	DEVELOPMENT USING TECHNIQUES SWOT ANALYSIS APPROACH	/1
	THE EFFECT OF BRAND SATISFACTION TO BRAND LOYALITY AT HOTEL	• •
	BOROBUDUR JAKARTA	83
	Valentina Happy Vanesa, Novida Juniaty.	
	PROMOTION OF CITY SPORTS AND TOURISM BRANDS THROUGH DIGITAL	
	MARKETING STRATEGIES IN BOGOR REGENCY	94
	Almas Nabili Imanina, Muchammad Satrio Wibowo.	

International Conference on Hospitality and Tourism Studies (ICONHOSTS) 2023



DEVELOPMENT STRATEGY FOR BOON PRING TOURISM WITH SNOWBALL SAMPLING ANALYSIS APPROACH	6
Ayu Fitriatul 'Ulya, Gilang Sandhubaya, M. Danang Setioko.	-
EFFECT OF MENU VARIATIONS, PRICES AND THE ATMOSPHERE OF THE PLACE ON CUSTOMER LOYALTY	5
Reny Puspitasari, Ani Puspawigati, Aprilia Rachmadian.	5
IMPLEMENTATION OF LUNPIA APPLICATION AND PENTAHELIX COLLABORATION	
IN SMART TOURISM DESTINATION OF SEMARANG CITY 127	7
Mukhammad Rio Adi Mansyah, Shofif Sobaruddin Akbar, Dinar Krismaretya, Tessa Adrian Valrostama.	
"ARCHITECTURE AS A TOURIST ATTRACTION: EXPLORING ICONIC BUILDINGS WORLDWIDE"	5
Adisti Safrilia, Muhammad Danang Setioko, Gilang Sandhubaya, Alwin Lasarudin, Rulli Krisnanda.	
TOURITS INTEREST IN VISITING THE "LEUWI HEJO" TOURISM ATTRACTION SENTUL BOGOR	5
Nicko Gana Saputra <sup>1</sup> , Reni Sulistiyowati <sup>2,</sup> Kezia Roselin Teresa <sup>3</sup>	
STAKEHOLDER COLLABORATION MODEL FOR SUSTAINABILITY OF "PEKARANGAN PANGAN LESTARI (P2L)" PROGRAM	0
THE ROLE OF QUADRUPLE HELIX IN IMPROVING INNOVATION OF CULINARY BUSINESS	
GENZ TOURIST BEHAVIOUR TOWARDS THE SELECTION OF INSTAGRAMABLE TOURISM OBJECTS IN MALANG166	6
Irwan Yulianto <sup>1</sup> , Anisa Zuhria Sugeha <sup>2</sup> , Atyanta Rahma Mahiru <sup>3</sup>	



#### FOREWORD

Assalamualaikum wr.wb.

International Conference on Hospitality and Tourism Studies ICONHOST 3 held by Diploma of Tourism Universitas Merdeka Malang. It is an absolute privilege to stand before you today as we embark on this exciting journey of knowledge sharing, collaboration, and innovation.

ICONHOST 3 brings together brilliant minds from Indonesia, Thailand, and the Philippines, all driven by a common goal – to explore, discuss, and advance the frontiers of hospitality, sustainable tourism, and innovation. In a rapidly changing global landscape, where the way we travel, explore, and provide hospitality services is evolving at an unprecedented pace, our collective efforts become more crucial than ever. From sustainable practices that protect our planet to cutting-edge technologies that enhance guest experiences, this conference promises to be a catalyst for transformation.

ICONHOST 3 isn't just about information exchange; it's about forging connections and fostering collaboration. We encourage you to engage in lively discussions, network with your peers, and take advantage of the platform to share your own insights and experiences.

I would like to express my heartfelt gratitude to organizing committee, speakers, and participants for making this event possible. Together, we will chart the course towards a more sustainable, innovative, and inclusive future for the hospitality and tourism industry.

So, without further ado, let's embark on this incredible journey together at ICONHOST 3. I wish you all an enriching and inspiring experience.

Thank you, and let the conference begin!

Wassalamualaikum wr wb.

International Conference on Hospitality and Tourism Studies (ICONHOSTS) 2023



#### PREFACE

Tourism today is an organized activity, which serves a variety of travelers entertainment needs, but at the same time brings financial resources to the places that receive visitors. Therefore, the process of tourism development is largely related to what a place has to offer in terms of natural and cultural resources and services, and is a positive economic process which brings financial resources to the place that develops it. Given the definitions above, it is understandable that many people struggle to see much of a distinction between the tourism industry.

Indeed, there is clearly a significant overlap between the two, and many of the businesses and services that cater to tourists also cater to travelers more generally. Nevertheless, there are some notable differences. Essentially, the tourism industry is concerned with people traveling for business or pleasure purposes, staying at their destination for at least one night, and returning. By contrast, tour and activities industry has a wider scope, covering more travel purposes and durations.



#### Social Value Tourism Through Sustainable Tourism

#### Prof. Dr. Diena M. Lemy, A.Par., M.M., CHE

Social values are defined as standards, which individuals and social groups employ to define personal goals and essentially shape the nature and form of social order in a collective i.e., what is acceptable and not acceptable, what ought or not to be, what is desirable or nondesirable. Social Value refer to socially collective beliefs and systems of beliefs that operate as guiding principles in life. Social Value is not just about creating projects that have a big impact but also looking at what we can do individually day to day; for example how we treat the people we come in contact with, how we look after all living things (animals, insects and trees/plants) and what we can do to lower carbon emissions which contribute to climate change etc.



#### Tourism Trends 2023 "Sustainable Tourism"

#### Assistant Prof. Dr. Noppadol Dharawanij

Sustainable tourism has become an essential part of our industry, and tour operators are at the forefront of this movement. In a recent expedia survey, 90% of consumers said they look for sustainable options when vacationing. This means there is significant demand for sustainable travel providers. Furthermore, euro-monitor international reports that "73.8% of travel executives see increased interest in sustainability from their customers in 2022." As an added bonus, people who want to travel sustainably are also inclined to visit off-the-beaten-path destinations for a more authentic and sustainable experience, which can be an incredible opportunity for companies operating inemerging destinations. All around the world, mass tourism has been linked to environmental degradation, the depletion of natural resources and an increase in pollution. Many destinations have chosen to implement various kinds of taxes to help offset the negative impacts of over-tourism, while travel companies and hotels have looked at ways to reduce emissions associated with overnight stays and food consumption.



#### Sustainable Tourism in Malang, Indonesia: Challenges and Opportunities

#### Dr. Andini Risfandini, S.E., M.Sc

Sustainable tourism implementation in Indonesia is a topic of great importance due to the country's rich natural and cultural resources. The government of Indonesia has recognized the potential of tourism as a major economic sector and has made efforts to promote sustainable tourism development (Anele, 2021). Sustainable tourism aims to balance the environmental, social, and economic aspects of tourism to ensure long-term benefits for local communities and the preservation of natural resources (Uchiyama et al., 2022). Sustainable tourism definition can be sum up as a tourism that has a responsibility to maintain and to preserve the natural environment and at the same time to gain economic advantage for local community and its various stakeholders (Risfandini & Sunardi, 2017).



#### Update on Sustainable Tourism Development in the Food Service Sector in the Philippines

#### Assoc. Prof. Rodolfo E. Cabardo

Update on sustainable tourism development in the food service sector in the philippines needs to be considered is the importance of sustaiable tourism in the food service sector, paying attention to key initiatives and recommendations for further development in the food service sector can be seen from key reasons, crucial sustanable food service, climate change mitigation, cultural preservation, local communities and long term economic viability.

Therefore, collaboration between all food service and environmental stakeholders is needed, education and training related to sustainable tourism and incentives for those who prioritize sustainability in every food service activity.



#### Development of Batukaang Tourism Village Based on Agroeduheritage Through Cultural Heritage Documentation, Strengthening Tourism Awareness and Organic Farming Training

I GD Yudha Partama<sup>1</sup>, I Ketut Widnyana<sup>2</sup>, Putu Edi Yastika<sup>3</sup>, Gusti Ngurah Yoga Semadi<sup>4</sup> Universitas Mahasaraswati Denpasar Institut Pariwisata dan Bisnis Internasional yudhapartama@unmas.ac.id

#### ABSTRACT

Batukaang Village is an ancient cultural village (Bali Aga) that has a variety of tourism potential such as statue relics and megalithic buildings, arts, coffee and orange plantations, waterfalls, mountains, and valleys. However, until now this potential has not been well cultivated, the community is more focused on developing coffee, orange, and cattle farms. Based on these various potentials and problems, the purpose of this community service is to realize Agro Edu Heritage-Based Village Tourism through increasing the capacity of group human resources and fulfilling supporting facilities. The implementation method has several stages: 1) digital documentation of cultural heritage buildings is carried out by taking close aerial photographs to produce photogrammetry-based 3D models; 2) Strengthening tourism awareness is carried out by providing socialization and strengthening community understanding of tourism villages and tourism awareness groups (definition, governance, management, and branding); 3) Training and mentoring in organic farming based on local potential. The service activities produced several technology application products, including a map of village tourism attractions, a 3-dimensional model of the Puseh Basang ambu temple building, POC plus, and organic pesticides, and compost fermenters. In addition, this community service also increases the knowledge and skills of human resources, such as increasing the knowledge of tourism awareness groups about tourism villages and their governance, increasing partners' knowledge of the tourism potential of their village, as well as the knowledge and skills of partners, especially farmer / livestock groups in making POC plus, organic pesticides, fermenters, and livestock waste compost.

#### Keyword: Batukaang Village, agroeduheritage, tourism awareness, organic farming

Introduction

Background



#### E-ISSN: 2809-3992

Batukaang village is a Bali Aga village with an indigenous Balinese population known as Bali Mula, who have a unique culture that is different from the villages in southern Bali. The village is located on the riverbank and is home to several archaeological sites. These sites, located deep within the local community, include centuries-old places of worship that continue to emanate a sacred energy for the locals. Despite the potential for natural and ancient site tourism, the community has not yet tapped into this opportunity due to various constraints. This could be due to the fact that the community is mainly engaged in agriculture and cattle raising, with the main crops being coffee, oranges, avocados and various vegetables, which are sufficient to meet the needs of the local population.

Kintamani sub-district and Batukaang village in Bali are known for being the largest coffee producing areas in the region. The majority of coffee grown by the community is Arabica coffee, which has a unique flavour and distinct characteristics. Due to its exceptional quality, the government has issued a Geographical Indication Certificate to the Arabica Coffee commodity, acknowledging its importance, and encouraging its development. Alongside coffee, the area also cultivates other commodities such as horticulture, including vegetables, fruits, and dryland crops. In particular, Kintamani oranges are the prominent fruit commodity in Batukaang village. Interestingly, the cultivation in Batukaang involves intercropping, where the land is not strictly divided between citrus and coffee plants, resulting in a distinct flavour for each commodity. Arabica coffee from Kintamani is known for its tart taste, whereas Kintamani oranges have a bitter taste. The potential for developing citrus crops is similar to that of Arabica coffee in the area.

The Batukaang village community engages in both gardening and livestock farming to meet their economic and nutritional needs. The livestock farming focuses on increasing population and production through diversification and intensification. The community raises large livestock such as cattle, as well as small livestock including goats, pigs, and native chickens. However, they face a challenge in effectively managing the waste generated by cattle and pigs, which has not been utilized as fertilizer. As a result, farmers often have to purchase organic fertilizer from other villages, leading to a significant cost. The farmer group is seeking assistance in implementing simple technology to convert livestock waste into fertilizer, thereby addressing the needs of local farmers. Additionally, there is a need to address the cleanliness and health of the livestock cages.



#### **Research Objectives**

Based on the various potentials and problems of Batukaang village described above, the aim of the assisted village empowerment in Batukaang Village in realising Agro Edu Heritage Based Village Tourism is to increase the capacity of Batukaang village community groups in utilising the village's potential to increase village income through strengthening Pokdarwis, Farmer Groups, Livestock Groups, PKK Women's Groups, and Youth Organisations.

#### Literature Review

#### Agrotourism

Agrotourism is a system of tourism and agriculture related to environmental conservation and improving the welfare of the community, especially farmers<sup>1</sup>. In addition, agritourism is one of the businesses that can be done by farmers who are able to provide a source of income and increase the income of the surrounding community<sup>2</sup>. In developing an area into a tourism area including the Agrotourism area there are five elements that must be fulfilled, namely: a) Attractions; b) b) Facilities; c) Infrastructure; d) Transportation; and e) hospitality<sup>3</sup>.

#### Digital documentation of cultural heritage buildings using photogrammetric techniques

The process of 3D model reconstruction using computer vision-based photogrammetry techniques involves two key algorithms: Structure from Motion (SfM) and Multi View Stereo (MVS). Initially, SfM is used to automatically detect feature points in a photograph. These feature points are then matched with corresponding points in other photos, creating a sparse point cloud. However, the actual geometry of the object is not reconstructed using these feature points alone. Instead, a dense point cloud is generated by projecting the pixels from each overlapping image into 3D space using the MVS algorithm. This process allows for a more accurate and detailed reconstruction of the object's geometry. Overall, this technique enables the creation of a virtual reconstruction of the set of photos, accurately positioning all matched feature points in 3D coordinates<sup>4</sup>.

#### **Biourine**

Cow urine can be used as an organic fertiliser and natural pesticide that can be used on agricultural land and is environmentally friendly. Urine can also be used as liquid organic



#### E-ISSN: 2809-3992

fertiliser (bio urine) and can be processed into natural pesticides<sup>5</sup>. The use of organic fertiliser and natural pesticide from cow urine shows that the plants look healthier and microorganisms (pests) that harm the plants are not visible or not around the plants. This proves that liquid fertilisers and natural pesticides work well<sup>6</sup>. On the other hand, various benefits are obtained from processing cow urine. Several other benefits of biourine, namely: (1) It stimulates plant root growth in seeds/seedlings, (2) As an organic foliar fertiliser, and (3). mixing organic pesticides can repair curly leaves caused by pest attacks<sup>7</sup>.

#### Methodology

#### 1. Inventory of potential tourist attractions (DTW)

Participatory mapping activities are carried out through field surveys and mapping of tourism potential in Batukaang village together with partners and the community. The survey was conducted by visiting the locations of DTWs and tourism support facilities, recording the coordinates of each DTW using a handheld GPS, and documenting each object by taking photographs. The coordinates of each DTW were also mapped using GIS, resulting in a DTW distribution map of Batukaang village. During this phase, interviews were also conducted with the management to gather information about the DTWs.

#### 2. Digital documentation of cultural heritage buildings and creation of virtual tours

The creation of the Virtual Reality Tour 360 is based on 3 entities, namely 3D model, virtual tour and supporting features (panoramic image, location map, etc.), which are then combined into a web-based interface feature. This phase begins with the digital documentation of the cultural heritage buildings, through the creation of 3D models of statues and temple sites using photogrammetric techniques based on the SfM-MVS algorithm. The second stage was to create a panoramic image of the object using a 360 camera. The final stage was to conduct literature studies and interviews with BPCB Bali to explore information on cultural heritage sites as supporting features in the virtual tour.

#### 3. Strengthening Public Understanding of Pokdarwis

The implementation of this program will involve resource persons who are experts in forming Pokdarwis. This program aims to provide an overview of the community and village government in forming Pokdarwis in accordance with existing regulations<sup>8</sup>. So it is hoped



that with this program, it can become a community foundation and strengthen understanding in forming Pokdarwis<sup>9</sup>. The implementation of this program will monitor and evaluate the programs that have been implemented by giving questionnaires to the Pokdarwis management that has been formed, such as their understanding of the important role of the Pokdarwis from the various materials that have been given along with their main tasks and functions<sup>10</sup>.

#### 4. Organic farming training and mentoring

- Knowledge transfer through structured advice and training on the environmental hazards of livestock waste, the importance of organic fertiliser and its benefits for different crops, and how to make compost.

- Technology transfer through the demonstration plot phase, in which the partners actively participated by preparing tools and materials and participating in the direct practice of making organic fertiliser and its application to several crops.

Evaluation of the activities based on: a) increased knowledge of the farmers measured using pre- and post-test instruments, b) observation of the success parameters of the final compost product, which are subjective, including: colour, smell, texture, and pH.

In addition, partner groups were given assistance and organic farming packages (Use of Trichoderma, sp as biological fertiliser and biofungicide) on citrus and coffee plants. Evaluation of activities based on increased knowledge of farmers measured using pre-test and post-test instruments.

#### **Results and Discussion**

#### Inventory and mapping of potential tourist attractions

The core of the Agroeduheritage-based village tourism concept is how to maximise the potential of Agriculture, Education, and Historical Tourism which is the main foundation of the entire movement of the wheels of life of the people in Batukaang Village. Figure 1 shows the Map of Potential Tourist Attractions in Batukaang Village. Based on the results of the analysis, the tourism potentials in Batukaang Village include: Coffee and Orange Farm Agrotourism; Historical tourism (there are several temples and cultural heritage buildings,



including 188 ancient statues); Nature tourism (waterfalls, hills and valleys); and adventure tourism (5 km of farm tracks have been constructed, allowing for traking and cycling).

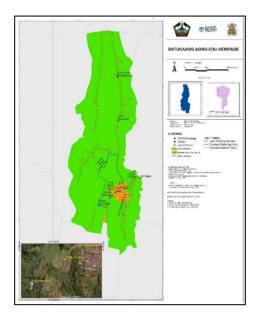


Figure 1. Map of potential Batukaang Village attractions

#### Digital documentation of cultural heritage

The protection and preservation of cultural heritage buildings is vital for historical restoration, education, tourism and Indonesia's national identity<sup>11</sup>. One method of protection is to document the physical aspects of the building, including its model and structure, to aid future reconstruction and renovation. Currently, the documentation of cultural heritage buildings is done through analogue design drawings, which can be difficult to manage in the event of damage or changes. This can be addressed by recording heritage buildings in a digital format based on three-dimensional objects. Batukaang Village, home to several megalithic relics including the Puseh Basang Ambu Temple, lacks proper documentation. The creation of a 3D model of this temple can not only aid in its protection, but also serve as a means to promote tourism in Batukaang Village through a virtual tour website. The process of creating the 3D model involves capturing aerial photo data using a drone and processing it using Agisoft Metashape software, resulting in a 3D model, DEM and orthomosaic (Figure 2).



Figure 2. 3D model of Pura Puseh Basang Ambu

### Socialization and strengthening community understanding of tourism villages and tourism awareness groups

In Batukaang Village, there is a lack of understanding of the definition, role and responsibilities of the Pokdarwis, a village institution for tourism. This is due to limited facilities and infrastructure, as well as a lack of awareness of the community's tourism potential. In order for Batukaang to develop into a tourism village, it needs support from various parties to identify, develop and market its tourism potential. Pokdarwis plays a crucial role in this process by receiving ideas, suggestions and criticism from the community and providing training to raise awareness of tourism and manage tourism facilities. However, the formation of this institution needs to be supported by community knowledge of its legal basis and functions. Universitas Mahasaraswati Denpasar conducted socialisation activities to inform the community about the mentoring programme and introduce them to Pokdarwis. Various materials were provided to the community to give an insight into the institution. The details of the materials and their contents can be seen in Table 1.

No	Material		Description				
1	Socialization of	Program	This material includes socialization of the program design				
	Design		to be implemented such as providing socialization and				
			initial understanding regarding Pokdarwis, assisting in the				
			formation of Pokdarwis, capacity building and program				
			evaluation				
2	Pokdarwis definition		This material contains the notion of tourism awareness				
			groups, the urgency of Pokdarwis for the development				

Table 1. Material for Understanding Pokdarwis to Communities in Batukaang Village



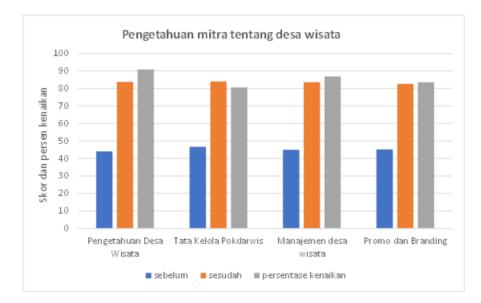
.. .

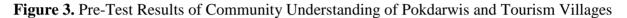
		of tourist villages, Pokdarwis management and possible
		constraints.
3	Main Duties and Functions of	This material contains an understanding of the main
	Pokdarwis	tasks and functions of Pokdarwis in managing tourist
		villages, growing andcreating tourism awareness in the
		community, management and marketing of tourist
		villages.
4	Pokdarwis Legal Basis	This material contains the legal basis for forming
		Pokdarwis which is regulated in the Regulation of the
		Governor.
5	Pokdarwis Formation Flow	This material contains the stages of the flow of forming
		Pokdarwis in accordance with applicable regulations
		through village meetings as a requirement to obtain a
		Village Head Decree which will later be submitted to the
		related Tourism SKPD

...

Based on the results of the questionnaire distributed during the pre-test phase before the implementation of the programme, it was found that the participants did not have a good understanding of Pokdarwis institutions, including the definition of Pokdarwis, the main tasks and functions of Pokdarwis, the legal basis of Pokdarwis and the way to establish Pokdarwis. After the implementation of the programme, a questionnaire was again distributed to see if the community's knowledge of pokdarwis had increased. The results of the questionnaire distribution or post-test showed that there had been a change marked by an increase in the community's understanding of Pokdarwis. The questionnaire contained the same questions as the pre-test questionnaire. This increase in community understanding can be seen from the processed post-test results in Figure 3.







#### Training and mentoring in organic farming

The cattle population in Simantri Batukaang village is 120 head, with 30 cattle kept in communal cages and the rest on each member's land. Most of the cattle waste from the members' land is not treated and is left to dry on the land. Meanwhile, livestock waste in the communal pens has been turned into organic fertiliser through a composting process. Previously, livestock waste was processed into biogas, but the equipment was damaged due to the high pressure generated by the manure fermentation process. Cow urine is also collected from the communal stables and processed into biourine. This shows that there is still a lot of potential waste that has not been properly processed. The following is a breakdown of the potential waste generation and the percentage of processing in Simantri Desa Batukaang with a livestock population of 30 heads, with an estimated cow producing 7 kg/day of dry manure, while the urine produced is 4 litres/day for adult cows (Table 2).

Table 2. Potential Cattle Waste Generation and Percentage of Processing

No	Type of	Total waste		ste Percentage of		Description			
	manure	generation		Processing					
		Volume	Unit	-					
1	Cow Dung	76.650	Kg/year	5 %	Processing	into	organic	fertiliser	
					through sin	mantri	processing	units as	



much as	3,833	kg/year
---------	-------	---------

2	Cattle	43.800 L	iter/yea	5 %	Processing into biourine is only for		
	urine		r		cattle kept in communal pens,		
					amounting to 2,190 litres/year.		

The results of the pre-test showed that most of the participants knew what organic fertiliser meant but only half knew the ingredients that could be used as organic fertiliser, and most did not know about biourin and vegetable pesticides. After socialisation and practice on the use of organic waste in making organic fertiliser and vegetable pesticides, all participants knew about organic fertiliser, biourin and vegetable pesticides (Table 3).

No	Question	Prete	Pretest (%)		Posttest (%)	
		Yes	No	Yes	No	
1	Do you know about organic fertilizer?	77.78	22.22	100	0	
2	Do you know the material to produce organic fertilizer?	44.44	55.56	100	0	
3	Do you know the process to make organic fertilizer?	22.22	77.78	100	0	
4	Do you know the process to make organic fertilizer by using cattle urine?	22.22	77.78	100	0	
5	Have you made organic liquid fertilizer by using cattle urine?	22.22	77.78	100	0	
6	Do you know the material to produce bio urine?	22.22	77.78	100	0	
7	Do you know the benfit of bio urine?	22.22	77.78	100	0	
8	Do you know about plant-based pesticide?	0	100	100	0	
9	Do you know about the material to make plant-based pesticide?	0	100	100	0	

10



Have you made plant-based pesticide? 0 100 100 0

#### Conclusion

1. Batukaang Village has several tourism potentials such as natural tourism (waterfalls and valley expanses), historical tourism (ancient temple relics and 188 megalithic statues), agrotourism (coffee, citrus, vegetable and cattle farms), adventure tourism (trekking and cycling) along the rural roads and village streets.

2. The service activities produced several technology application products, including a map of village tourism attractions, a 3-dimensional model of the Puseh Basang Ambu temple building, and POC plus vegetable pesticides and compost fermenters.

3. This service also increases human resource knowledge and skills, such as increasing partners' knowledge about tourism villages and Pokdarwis governance, increasing partners' knowledge about the tourism potential of their village, as well as increasing partners' knowledge and skills, especially farmer/livestock groups' knowledge and skills in the production of POC plus, vegetable pesticides, fermenters, and livestock waste composting.

#### Acknowledgement

This work was supported by The Ministry of Education, Culture, Research, and Technology of Indonesia (Grant Number: 072/E5/PG.02.00.PM/2023)

#### References

- [1] Hapsari, B. A. (2008). Perencanaan Lanskap Bagi Pengembangan Agrowisata di Kawasan Agropolitan Merapi-Merbabu Kabupaten Magelang (skripsi). Bogor: Fakultas Pertanian, Institut Pertanian Bogor.
- [2] Muchlis, S. (2017). Arahan Pengembangan Agrowisata Berdasarkan Potensi Sumber daya Lokal di Kecamatan Sukapura Kabupaten Probolinggo. Surabaya: ITS.
- [3] Rai Utama, I. G. B. (2012). Agrowisata Sebagai Pariwisata Alternatif di Indonesia. Solusi Masif Pengentasan Kemiskinan.
- [4] Ma, D., Fang, H., Wang, N., Pang, G., Li, B., Dong, J., & Jiang, X. (2023). A low-cost 3D reconstruction and measurement system based on structure-from-motion (SFM) and



multi-view stereo (MVS) for sewer pipelines. *Tunnelling and Underground Space Technology*, 141, 105345.

- [5] Isroi, I., & Yuliarti, Y. (2009). Kompos Cara Mudah, Murah dan Cepat Menghasikan Kompos. Yogyakarta: Lily Publisher.
- Irawan, R., Asroh, A., Intansari, K., Meisani, N. D., Patimah, T., & Atabany, A. (2021).
  Pemanfaatan Urine Domba dalam Pembuatan Pupuk Organik Cair dan Pestisida Nabati.
  Jurnal Pusat Inovasi Masyarat, 2 (Edisi Khusus), 101-105.
- [7] Maspary, M. (2010). Cara Mudah Fermentasi Urine Sapi. http:// www. gerbangpertanian. com/2010/04/cara-mudah-fermentasi-urine-sapi untuk.html.
- [8] Hamuna, B., & Tanjung, R. H, (2018), Deteksi perubahan luasan mangrove Teluk Youtefa Kota Jayapura menggunakan citra landsat multitemporal. *Majalah Geografi Indonesia.*, 32(2), 115-122.
- [9] Yulianah, Y. (2021). Mengembangkan Sumber Daya Manusia Untuk Pariwisata Berbasis Komunitas Di Pedesaan. Komitmen: *Jurnal Ilmiah Manajemen*, 2(1), 1–9. <u>https://doi.org/10.15575/jim.v2i1.12472</u>
- [10] Pakpahan, R. (2018). Implementasi Prinsip Pariwisata Berbasis Komunitas Dalam Pengembangan Desa Wisata Nglinggo Yogyakarta. *Barista: Jurnal Kajian Bahasa dan Pariwisata*, 5(1), 103-116.
- [11] Taylor, K. (2004). Cultural heritage management: A possible role for charters and principles in Asia. *International Journal of Heritage Studies*, 10(5), 417-433.