

Research Article

The Development Model of Educational Tourism Interpretation in Pondoknongko Village

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The process of providing information in tourism activities is an effort to provide knowledge or education for tourists, known as tourism interpretation. Pondoknongko, village in Banyuwangi Regency, Indonesia has a food security development program through integrated agricultural and animal husbandry as an educational tourist attraction. This study aims to describe the form of interpretation and analyze the steps in an effort to realize Pondoknongko village as an educational tourism destination through the concept of tourism interpretation. This study used a qualitative method with data collection techniques through observation, interviews, and focus group discussions. The results showed that two models could be applied to develop educational tourism interpretations: 1) a personal interpretation model by encouraging the role of the community as interpreters or local tour guides and the preparation of tourist interpretation guidebooks for a local tour guide for optimizing the learning experience of tourists. 2) A non-personal interpretation model by preparing interpretation media in the form of an interpretation board and educational tourism profile book of Pondoknongko village in an effort to realize the interpretation of educational tourism in Pondoknongko village.

Keywords: tourism interpretation, educational tourism, Pondoknongko Village

1. Introduction

Tourism is a travel activity carried out by a person or group of people by visiting certain places for the purpose of recreation, personal development, or learning the uniqueness of the tourist attraction visited within a temporary period [1]. In an effort to fulfill visitors' purpose to learn the uniqueness of the tourist attraction, the development of educational tourism has become a trend.

Educational tourism is a tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary or secondary part of their trip [2]. In educational tourism activities

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education and learning can become the main motivation (while the second motivation is recreation/leisure) or second motivation (while the main motivation is recreation/leisure) on their trip. Education and learning in the educational tourism activities is delivered through a process called tourism interpretation.

Pondoknongko Village is a village in Banyuwangi Regency, Indonesia which has a variety of potential culture-based and nature-based tourism attraction such as the Sapar-saparan & Culinary Jenang Sapar Tradition, Barikan Tradition, Paddy Field Agriculture & Palawija, and Urban Farming Karangmangun (Utilization of Home Yards with Productive Plants) [3]. In 2023, Pondoknongko village government has been implementing food security program through the development of integrated agricultural and animal husbandry.

Based on the result of initial interview with the Pondoknongko Village head in pre-research activities, the development of integrated agricultural and animal husbandry is intended as an educational center not only for the local community but also for visitors or tourists so that it can be packaged as an educational tourism activity. There have been visitors from the kindergarten students in Pondoknongko Village to get to know and learn about agricultural and animal husbandry. However, there is no educational tourism interpretation available for visitors, either in the form of personal interpretation or non-personal interpretation.

Interpretations is very important in the development of tourism, especially educational tourism, where can help visitors to understand about the uniqueness of the attraction. Interpretation communicates an idea or a concept of what is being seen, heard, or experienced by audiences at an informal learning setting [4]. Interpretation in the tourism context or known as “tourism interpretation” is the process of providing information, knowledge, and education for visitors in tourism activities. Everything that can be seen, heard, and done at a tourist attraction will become more interesting and more memorable when there is tourism interpretation.

Therefore, in order to develop the educational tourism in Pondoknongko Village, it is necessary to carry out research regarding “The Development Model of Educational Tourism Interpretation in Pondoknongko Village”. The educational tourism interpretation is need to be develop especially for packaging the educational tourism activities at the integrated agricultural and animal husbandry as an educational tourist attraction.

2. Literature Review

2.1. Tourism interpretation

Interpretation in the tourism context or known as “tourism interpretation” is the process of providing information, knowledge, and education for visitors in tourism activities. Everything that can be seen, heard, and done at a tourist attraction will become more interesting and more memorable when there is tourism interpretation. Therefore, tourism interpretation is very important in the development of educational tourism activities.

Interpretation communicates an idea or a concept of what is being seen, heard, or experienced by audiences (in the tourism context is by visitors) at an informal learning setting and for most commercial operators, interpretation is communication with visitors in entertaining and creative ways that add value to the tourism activities. Interpretation attempts to make a personal meaning for visitors and help them make connections with an object or process to interpret them in an easily understandable and enjoyable way, so that the visitors can appreciate the meaning and value inherent in it [4,5].

Interpretation is a tool for providing “edutainment” where not only a tool for providing education but also for entertaining the visitors whilst traveling to enjoy meaningful time at the tourist attraction [4,6]. Moreover, interpretation can change or modify visitor behavior by increasing the awareness and intention to conserve an environment, preserve the culture, and build peace by toleration and understanding each other [6–8]. In the tourism development, interpretation can also become a tool for promoting tourism destinations to visitors and for gaining feed back from visitors to improve the tourism interpretation [6].

2.2. Educational tourism and agricultural tourism

Educational tourism can be defined as tourist activity undertaken by those who are undertaking an overnight vacation and those who are undertaking an excursion for whom education and learning is a primary or secondary part of their trip [2]. It explains that the duration of educational tourism activities can be more than one day (overnight tour) or less than one day (one day tour or half day tour). It also emphasizes that in educational tourism activities, education and learning are the main motivation (while the second motivation is recreation/leisure) or second motivation (while the main motivation is recreation/leisure).

Educational tourism is delivered through an educational program and seeks to change the visitors' cognitive, participatory knowledge, skill and behavior. Through educational tourism, the visitors travel to a location engaging learning experience directly related to tourism [9]. One form of educational tourism in the village or rural areas is agricultural tourism (agritourism) or farm tourism.

Agritourism is an incredible educational tool with varied expected effects on the educational plan. Pupils, students, teenagers and adults understand better: the rural traditional culture, the production and the distribution processes of the agricultural products, the importance of healthy food in people's lives, the preservation of the environment, etc. [10]. Based on previous research, the good combination (well-managed) of tourism and farming was able to support the competitiveness, viability and sustainability of farming household and can increase the nature and environmental awareness of visitor also has significant influence on visitors' green consumption intentions later in life [11–14]. Another research enhanced the urgency of interpretation in supporting education-based tourism [15].

2.3. Tourism interpretive planning model

Interpretive planning is a strategic process or the decision-making process that blends management needs and resource considerations with visitors' desire and ability to pay (with time, interest, and/or money) to determine the most effective way to communicate the message or education to the visitors by facilitating meaningful connections between visitors and park resources or tourist attraction's resource [16,17].

Visitor response to tourism interpretation is influenced by interpretation content and interpretation media. Interpretation content should use a value-based approach that can include knowledge, responsibility and emotion content. Interpretation media can be presented in two types of personal and non-personal interpretations. Personal interpretations are face-to-face tour-guided while non-personal interpretations delivered through printed media or another range of media such as printed materials, signs, exhibits, self-guided walks, pre-recorded tour commentaries on cassettes or videos, virtual tours, and other electronic media [5,8,18–21].

Interpretation can and should make a difference in three ways: 1) interpretation can enhance audience experience; 2) interpretation can impact attitudes toward and promote appreciation of a place, thing, or concept; 3) interpretation can strengthen protection of important, rare, or fragile resources by influencing how audiences behave

with respect to them. Interpretation content and interpretation media play a key role to make those differences where can reveal the meaning and values of aspects of environmental, cultural, and historical heritage also can help the audiences make a personal connection with the tourism resources that they experience [4,22].

Tourism interpretive planning can include following step: 1) management goals and objectives; 2) significant resources inventory; 3) visitor experience; 4) message elements; 5) visitor profiles; 6) media descriptions; 7) recommendations; and 8) evaluation (see Figure 1) [4].

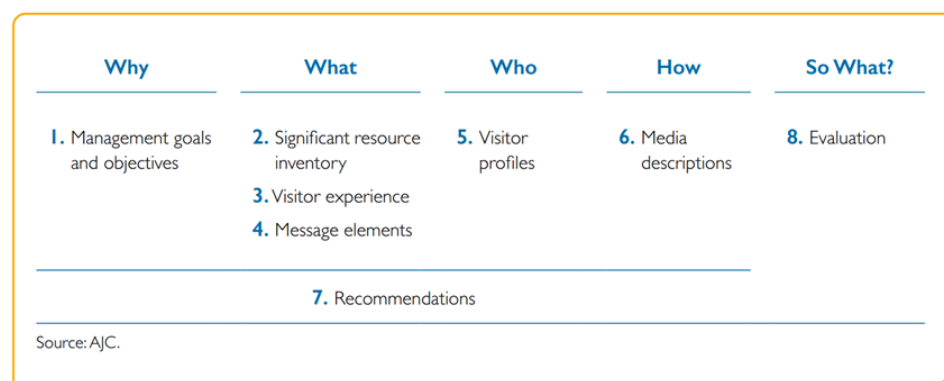


Figure 1: Tourism interpretive planning model [4].

3. Methodology

This study used a qualitative method with data collection methods through observation, interviews, and focus group discussions. Observations were conducted by directly observing the management activities of educational tourism activities in Pondoknongko Village. The aim was to obtain an overview of the current conditions of educational tourism in the village. Interviews were conducted with informants to gather data regarding educational tourism activities taking place in Pondoknongko Village and focus group discussions were conducted to discuss the recommendations about The Development Model of Educational Tourism Interpretation in Pondoknongko Village.

The population in this research is the community of Pondoknongko Village who are involved in developing and managing the integrated agricultural and animal husbandry. The sample in this study was determined using purposive sampling technique, including (1) the head of Pondoknongko village; (2) the head of village council (BPD); (3) the head of family welfare empowerment (PKK); (4) the head of youth organization (Karang Taruna); (5) the head of joint business group (KUB); and those responsible for managing the

integrated agricultural and animal husbandry which includes (6) the person in charge of urban farming; (7) the person in charge of dairy goat farming, vannamei shrimp, and crayfish; and (8) the person in charge of maggot cultivation.

The qualitative method in this research is intended to explore various data and information about educational tourism interpretative planning in Pondoknongko Village, include: 1) management goals and objectives; 2) significant resources inventory; 3) visitor experience; 4) message elements; 5) visitor profiles; and 6) media descriptions. The results of collecting of these data and information will become the basis for formulating the recommendations about The Development Model of Educational Tourism Interpretation in Pondoknongko Village. The analysis technique used in this research is Miles and Huberman's interactive analysis included four stages: 1) data collection; 2) data condensation; 3) data presentation; and 4) drawing conclusions (see Figure 2).

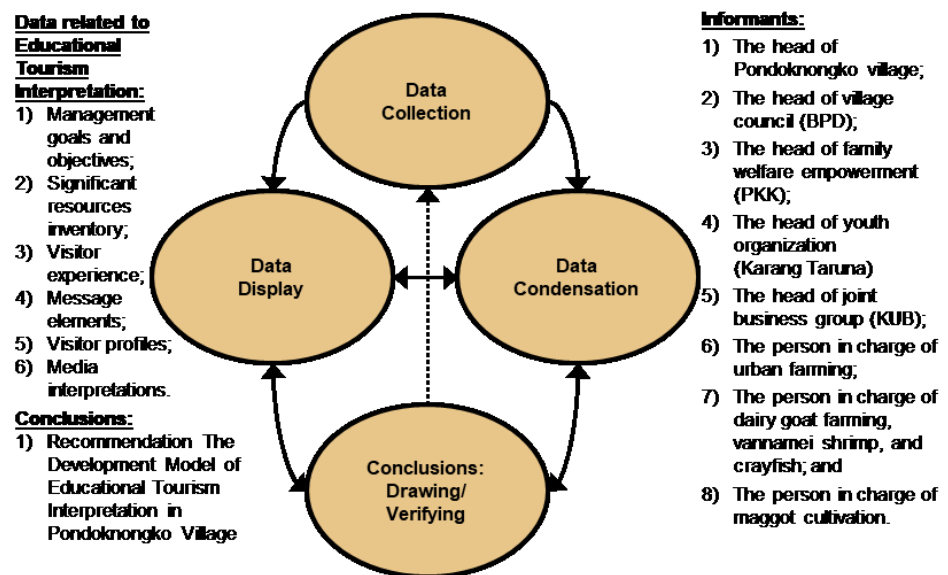


Figure 2: Adaptation of Miles and Huberman's interactive analysis technique in developing the model of educational tourism interpretation in Pondoknongko Village [4,23].

4. Results and Discussion

The Development Model of Educational Tourism Interpretation in Pondoknongko Village is carried out through the stages of identification: (1) management goals and objectives; (2) significant resource inventory; (3) visitor experience; (4) message elements; (5) visitor profiles; and (6) media interpretations.

4.1. Management goals and objectives

Identification and analysis of management goals and objectives is necessary for determining how educational tourism interpretation should reflect its purpose. The development of the Integrated Agricultural and Animal Husbandry Workshop is part of the Pondoknongko Village food security program. Its main goal is to provide learning and education to the community so that they can achieve independent and sustainable food production. Based on the processed informant interviews, the goals and objectives for the development of educational tourism in the Pondoknongko village are the following (Table 1):

TABLE 1: Management goals and objectives.

Goal	Output Objectives	Outcome Objectives	Impact Objectives
Improving the community's ability to meet food needs independently and sustainably	Develop agriculture, livestock, and fisheries programs.	The number of individuals involved in agricultural, livestock, and fisheries activities is expected to rise in the upcoming year.	Communities engaged in agriculture, livestock, and fisheries activities have the potential to increase annually.
Educate the local community on agriculture, livestock and fisheries activities	Develop a pilot agriculture, livestock and fisheries activities in the Integrated Agriculture and Animal Husbandry Workshop.	The number of individuals who may effectively engage in farming, livestock, and fisheries activities for domestic consumption or commercial purposes may observe an increase within the upcoming year.	Communities can meet their food needs in a self-reliant and sustainable manner while earning supplementary revenue through the trade of agricultural, livestock, and fish farm commodities.
Provide fun tourism activities that offer educational opportunities for visitors to learn about agricultural, livestock, and fishery activities.	Packaged educational tourism activities at the Integrated Agriculture and Animal Husbandry Workshop.	The number of visitors who come with the main purpose of recreation and get to know about agriculture, livestock and fisheries activities may increase in the upcoming six months; The number of visitors who come with the main purpose of education and learning about agricultural, livestock and fishery activities may increase in the upcoming six months.	Visitors can enjoy a delightful recreational experience while learning about agricultural, livestock, and fishery practices; Visitors will be able to have an educational experience about the stages of the agricultural, livestock and fishery practices. Can increase the awareness of visitors to appreciate the profession of farmers Can help visitors understand the importance of agriculture, livestock and fisheries activities in supporting food security and generating additional income.

4.2. Significant resource inventory

Tourism interpretation should be able to contain a message for visitors that an object, ideas or understanding, and processes or activities that exist in a tourist attraction or tourist activities are special, important to be maintained or preserved, important to be managed properly, and important to get the attention of visitors. The message can be structured with reference to various significant resources owned by a tourist attraction or tourist activity. An inventory of significant resources was conducted to develop an educational tourism interpretation model for Pondoknongko Village. Results from interviews and observations revealed several resources available to support the interpretation model, including (see Figure 3 and Table 2):



Figure 3: Significant resource inventory in developing the educational tourism interpretation in Pondoknongko Village.

TABLE 2: Significant resource inventory.

Primary resource	Associated stories and values	Current conditions	Visitor behaviours affecting the resources	Desired future resources conditions
Urban farming (vegetables and fruits);	The main livelihood of the communities is farming; Optimizing the communities' home yards; Improving food security (fiber nutrition intake for residents); Capturing additional economic opportunities (from selling vegetables and fruits to market traders or peddlers);	The urban farming program has been in operation for nearly two years. The crops are consumed by local residents and sold to neighboring communities on a small scale, as they are not yet suitable for large-scale sales.	Visitors' understanding and experience with agricultural, livestock, and fisheries practices. Visitor behavior in purchasing agricultural, livestock, and fishery products from local farmers.	The bountiful and sustainable harvest can serve as a source of food consumption needs, in addition to generating economic income for locals. Visitors can purchase agricultural, livestock, and fishery products directly as souvenirs. Visitors not only receive education from the community, but they are also expected to share their knowledge and experience regarding agricultural, livestock, and fishery activities with the community.
Dairy goat farming	Plentiful availability of food resources, especially grass, is widespread in the village. Improving food security (milk nutrition intake for communities); Capturing additional economic opportunities (from selling goat milk and goat kids)	Communities are still in the learning/imprinting stage; Dairy goat farming operations have only been operational for approximately six months. The milk production remains low as the majority of goats have only recently given birth to their first offspring, resulting in smaller quantities of milk currently available. Goat milk from dairy goats is currently available only for residents to consume, as it has not yet been processed into more valuable products or made available for sale.		

TABLE 2: Continued.

Primary resource	Associated stories and values	Current conditions	Visitor behaviours affecting the resources	Desired future resources conditions
Crayfish aquaculture	Optimizing the communities' home yards; Improving food security (protein nutrition intake for communities). Capturing Additional Economic Opportunities from Lobster Sales for Culinary Tourism in Banyuwangi and Bali.	Communities are still in the learning/imprinting stage; No harvest has been conducted yet as cultivation activities have only been ongoing for five months. The plan is to carry out the harvest during the sixth or seventh month.		
Vannamei shrimp aquaculture	Learn from shrimp farms managed by large corporations in the village. Optimizing the communities' home yards; Improving food security (protein nutrition intake for communities). Capturing Additional Economic Opportunities from Vannamei shrimp Sales for Culinary Tourism in Banyuwangi and Bali.	Communities are still in the learning/imprinting stage; The harvest has not been successful. Communities tried shrimp farming for two months, but their efforts were unsuccessful yet and many shrimp died.		
Maggot cultivation	Utilizing Vegetable and Fruit Scraps from Farmers and Wholesalers Capturing additional economic opportunities (from maggot sales to animal feed factories) Supporting agriculture, livestock, and fisheries activities.	Communities are still in the learning/imprinting stage; The harvest remains limited in scope and has been sold to collectors. Unprocessed crops for fertilizer and chicken and fish feed		
Tilapia aquaculture	Optimizing the communities' home yards; Improving food security (protein nutrition intake for communities). Capturing Additional Economic Opportunities from Tilapia Sales for Culinary Tourism in Banyuwangi and Bali.	Communities are still in the learning/imprinting stage; There has never been a harvest. Cultivation activities have only been running for 5 months. The plan is to harvest in the 6th or 8th month.		

TABLE 2: Continued.

Primary resource	Associated stories and values	Current conditions	Visitor behaviours affecting the resources	Desired future resources conditions
Mangrove crab aquaculture	Optimizing the potential of mangrove crabs in their natural habitat (capturing mangrove crab fingerlings in natural habitats then raising them in floating net cages). Improving food security (protein nutrition intake for communities). Capturing Additional Economic Opportunities from Tilapia Sales for Culinary Tourism in Banyuwangi and Bali.	Communities are still in the learning/imprinting stage; harvest has been done once. The harvest is still on a small scale, only for community consumption and sold to neighbors and local residents.		

4.3. Visitor experience

Tourism interpretation development planning should be able to consider the visitor experience offered or the visitor experience to be obtained. The experience can be related to aspects of cognition (understanding/intellectual), emotional (feelings), and physical (behavior) associated with the goals and objectives of the manager and the main resources owned. Based on the results of processed interviews, tourism activities should be available for visitors to realize the educational tourism experience are follows (Table 3):

4.4. Message elements

Interpretation is all about communicating messages that connect the visitor to the resources. The elements of message in the interpretation should include topic, theme, and sub-theme that can connect the tangible resources to larger intangible ideas, values, emotions, and process. The message elements in the development of educational tourism interpretation in Pondoknongko village are related to the farming, animal husbandry, and fisheries activities that include (see Table 4):

TABLE 3: Visitor experience.

How do you want the visitors to feel?	Enjoy farming, animal husbandry and fishing activities as fun activities; Appreciate the profession of farmers;
How do you want the visitors to think or learn?	Understand the significance of agriculture, livestock, and fisheries in providing food security and additional economic income for the community. Learn the stages of agriculture, livestock and fisheries activities in a fun way.
How do you want the visitors behave?	Start purchasing and consuming agricultural, livestock, and fishery products from nearby farmers. Start doing agriculture, livestock and fisheries activities as a hobby or for leisure.
In order to realize the experience, what opportunities should be available for visitors?	Packaging recreational activities for gaining familiarity with the farming profession, as well as agricultural, livestock, and fishery activities. For example: Get to know types of plants and livestock; Watering the plants; Harvesting vegetables or fruits; Feeding livestock; Explore farming, animal husbandry and fishery areas; Taste the processed products of agriculture, livestock and fisheries. Packaging fun educational activities to provide education and learning about the farming profession and getting involved in the stages of agriculture, livestock and fisheries activities. For example: Learn to make planting media; Learn to sow plant seeds; Learn to grow plants; Learn to take care of plants/livestock; Learn to harvest vegetables or fruits in the right way; Learn to milk goats the right way; Learn to process agricultural, livestock and fishery products.

TABLE 4: Message elements.

Topic	Theme	Subtheme
Farming, Animal Husbandry, and Fisheries (Urban farming, dairy goat farming, maggot cultivation, crayfish, vannamei shrimp, tilapia, & mangrove crab aquaculture)	History Types and life cycle Stages of activity Product processing Roles or benefits of the Farmer Profession	History of agricultural, livestock and fishery activities in Pondoknongko Village; Types, anatomy, and life cycles of agriculture, livestock, and fisheries Stages of agricultural, livestock, and fishery activities (preparation of planting media, seed sowing, planting, plant care, fertilizer application, harvesting) Processing of agricultural, livestock and fishery products Marketing, distribution, and sales of agricultural, livestock, and fishery products The role and benefits of agriculture, livestock and fisheries for the environment and society (food security and additional economic income).

4.5. Visitor profiles

The main target visitor of educational tourism in Pondoknongko Village is students, from kindergarten to university level, who wish to become familiar with and learn about agricultural, livestock, and fishery activities. A visitor profiles should describe the current visitors, non-visitors and future visitors, their characteristics and the interpretation that should be offered.

Tourists who have visited Pondoknongko village for educational tourism are kindergarten students who residing in Pondoknongko village with the main purpose for recreation activities to familiarize with agricultural and livestock area and recognize types of plants and farm animals. In addition, college students visited for the main

purpose of learning how to prepare planting media, sow seeds, plant, care for plants, apply fertilizer, and harvest plants. There are also local people and academics who are regularly come to study about the agricultural, livestock, and fishery practices. The profile of current visitor and non-visitor's profiles are include (see Table 5):

TABLE 5: Current visitor and non-visitors' profiles.

Visitor type	Characteristic	Currently interpretation offered
Current visitors		
Kindergarten Students	residing in Pondoknongko Village (local community) The main purpose is recreation	Familiarity with agricultural and livestock areas; Recognize types of plants and farm animals;
College students	Most individuals come from Banyuwangi and the encompassing regions (located in the province of East Java). A small portion from outside the eastern Java province area (Jakarta, Aceh) The main purpose is education	Familiarity with agricultural and livestock areas; Recognize types of plants and farm animals; Recognize the stages of agricultural, livestock, and fishery activities Watering plants, harvesting vegetables, and feeding farm animals; Learn to prepare planting media, sow seeds, plant, care for plants, apply fertilizer, and harvest the plants.
Non-visitors		
Local communities	Local communities of Pondoknongko Village The main purpose for learning	Learn about agriculture, livestock and fisheries activities
Academics (Lecturer/Student)	Most individuals come from Banyuwangi and the encompassing regions (located in the province of East Java). The main purpose is education	Conducting research, community service, and student service study.

The main target of future visitors is the student from kindergarten to university level in Pondoknongko Village and in the surrounding area. The potential target visitor segments for educational tourism in Pondoknongko village include domestic family travelers and individual or small group general travelers who visit the tourist attractions near the Pondoknongko Village, such as Cemara Beach. In addition, foreign tourist who visit Ijen Geopark is also become the potential target visitor. The future visitor profile of educational tourism in Pondoknongko village are include (see Table 6):

TABLE 6: Future visitor profiles.

Visitor type	Characteristic	Interpretation will be offered
Future visitors		
Students ranging from kindergarten, elementary school, junior high school, high school, to universities in Pondoknongko Village and surrounding areas	The main purpose is education	Know and learn the history, types and life cycles, stages of activities, product processing, sales of agricultural, livestock and fishery products and understand the role and benefits of the Farmer Profession.
Family and general travelers (individuals and small groups)	Coming from urban areas in Banyuwangi Regency and surrounding areas (East Java Province) Family tourists who visit the one of the top tourist attractions in Banyuwangi (Cemara Beach) The main purpose is recreation	Familiarity with agricultural and livestock areas; Get to know types of plants and farm animals; Get to know the stages of agricultural, livestock, and fishery activities Watering plants, harvesting vegetables, and feeding farm animals; Get to know the stages of agricultural, livestock, and fishery activities Tasting processed agricultural, livestock and fishery products
Foreign tourists	Tourists who visit the one of the top tourist attractions in Banyuwangi (Ijen Geopark) The main purpose is recreation	Know and learn the history, types and life cycles, stages of activities, product processing, sales of agricultural, livestock and fishery products and understand the role and benefits of the Farmer Profession.

4.6. Media interpretations

The current media interpretation of educational tourism in Pondoknongko Village is through personal service (local tour guide) that introduce and educate on the history, various types, life cycles, stages of activities, processing of products, sales of agricultural, livestock, and fishery products, and the significant roles and benefits of the Farmer Profession. By considering the profiles of current and potential visitors, the suitable interpretation media for supporting educational tourism in Pondoknongko village are as follows (Table 7).

4.7. The development model of educational tourism interpretation in Pondoknongko Village

According to the results of identification and analysis of management goals and objectives, significant resources inventory, visitor experience, message elements, visitor

TABLE 7: Future media for interpretation to be used.

Medium	Message	Visitors	Resources (to support media development)
Personal service: local tour guide	Introduce and educate on the history, various types, life cycles, stages of activities, processing of products, sales of agricultural, livestock, and fishery products, and the significant roles and benefits of the Farmer Profession.	Students, family traveler, general travelers (individuals and small groups) and foreign tourist.	Money, time, skill and efforts to increase the ability of local tour guide
Non-personal service: Interpretation board / signage	Introduce the history and management of agriculture, livestock, and fisheries activities. Introduce types of plants and farm animals; Introduce the stages of agricultural, livestock, and fisheries activities.	Students, family traveler, general travelers (individuals and small groups) and foreign tourist.	Money, time, skill and efforts to build the interpretation board / signage
Non-Personal service: publications (brochure, booklets, etc.)	Introducing and promoting educational tourism activities based on agriculture, animal husbandry, and fisheries in Pondoknongko Village	Students, family traveler, general travelers (individuals and small groups) and foreign tourist.	Money, time, skill and efforts to make the publications

profiles, and media description, the development model of educational tourism interpretation in Pondoknongko Village include three stage (see Figure 4): (1) Development of personal service: local tour guide which includes stages: (a) Training on tour guiding techniques; (b) Training on the preparation of educational tourism interpretation materials; (c) Preparation of a pocket book on tour guiding techniques and educational tourism interpretation materials (for local tour guides) in 2 languages/bilingual (Indonesian and English); (2) Development of non-personal services: interpretation board / signage which includes the stages of making tourism interpretation boards in 2 languages / bilingual (Indonesian and English); and (3) Non-personal service development: publications (brochures, booklets, etc.) which includes the stages of compiling an educational tourism profile book in Pondoknongko Village in 2 languages/bilingual (Indonesian and English).

The development of personal service and non-personal service of tourism interpretation in this research matched with previous study that enhances the urgency

of personal and non-personal interpretation in supporting education-based tourism that can carry out educational activities and experiential learning while traveling [15]. Personal interpretations had the ability to explain in their own local languages in addition to most interpreters (local tour guide) being able to speak foreign languages (English) as a second language [6]. This research also confirmed previous study that interpretative signage can modify tourist behavior to facilitate sustainable nature-based tourism and can address the different needs and response relevant to the nature of the tourist group visiting the tourist attraction [7]. Furthermore, the interpretation that incorporated visual sensory cues (in this research is the development of an educational tourism profile book) are more effective regarding visitors' perceived knowledge, attitudes, and behavioral intentions [18].

Why	What	Who	How
<p>1. Management goals and objectives</p> <p>a) Improving the community's ability to meet food needs independently and sustainably;</p> <p>b) Educate the local community on agriculture, livestock and fisheries activities;</p> <p>c) Provide fun tourism activities that offer educational opportunities for visitors to learn about agricultural, livestock, and fishery activities.</p>	<p>2. Significant resource inventory</p> <p>Urban farming (vegetables and fruits), dairy goat farming, maggot cultivation, crayfish, Vannamei shrimp, tilapia, and mangrove crab aquaculture</p> <p>3. Visitor experience</p> <p>a) Packaging of recreational activities to get to know the farming profession and the activities of agriculture, livestock and fisheries</p> <p>b) Packaging educational activities aimed at teaching about the farming profession and providing hands-on experience in agriculture, livestock, and fisheries.</p> <p>4. Message elements</p> <p>History, types and life cycle, stages of activities, product processing, product sales, role or benefits of the farmer profession</p>	<p>5. Visitor profiles</p> <p>Current visitors:</p> <p>Kindergarten students and college students</p> <p>Non-visitors:</p> <p>local communities and academics (lecturers & students conducting research, community service, and student service study/KKN)</p> <p>Future visitors:</p> <p>Students from schools in Pondoknongko Village and the surrounding areas, families and individuals traveling for leisure, and foreign tourists.</p>	<p>6. Media description</p> <p>Current media:</p> <p>Personal services: local tour guide</p> <p>Future media:</p> <p>a) Personal services: local tour guides</p> <p>b) Non-personal service: interpretation board / signage</p> <p>c) Non-personal service: publications (brochure, booklets, etc.)</p>
Recommendation			
<p>1) Development of personal service: local tour guide which includes stages: (a) Training on tour guiding techniques; (b) Training on the preparation of educational tourism interpretation materials; (c) Preparation of a pocket book on tour guiding techniques and educational tourism interpretation materials (for local tour guides) in 2 languages/bilingual (Indonesian and English);</p> <p>2) Development of non-personal services: interpretation board / signage which includes the stages of making tourism interpretation boards in 2 languages / bilingual (Indonesian and English);</p> <p>3) Non-personal service development: publications (brochures, booklets, etc.) which includes the stages of compiling an educational tourism profile book in Pondoknongko Village in 2 languages/bilingual (Indonesian and English).</p>			

Figure 4: The development model of educational tourism interpretation in Pondoknongko Village.

5. Conclusion

Two models that could be applied to develop educational tourism interpretations include a personal interpretation model by encouraging the role of the community as interpreters or local tour guides and the preparation of tourist interpretation guidebooks for local tour guide for optimizing the learning experience of tourists and a non-personal interpretation model by preparing interpretation media in the form of an interpretation board and educational tourism profile book of Pondoknongko village as an effort to realize the interpretation of educational tourism in Pondoknongko village.

References

- [1] Indonesia. Undang-Undang Nomor 10 Tahun 2009 tentang Kepariwisataaan [Internet]. Sekretariat Negara Indonesia; 2009. Available from: <https://peraturan.bpk.go.id/Details/38598/uu-no-10-tahun-2009>.
- [2] Ritchie BW. Managing Educational Tourism. Multilingual Matters; 2003.
- [3] Perdana MA, Rusmawan PN, Tyas IC, et al. The development of cultural event strategy: Swot analysis and QSPM approach. *Jurnal Inovasi Ilmu Sosial dan Politik (JISoP)*. 2023;5:64–76.
- [4] ASEAN-Japan Centre. Workbook on interpretive planning for ASEAN tourism and concept of interpretation [Internet]. 2020 [cited 2023 Sep 29]. Available from: <https://www.asean.or.jp/ja/wp-content/uploads/sites/2/ASEAN-Workbook-20200807-web-1.pdf>.
- [5] Ham SH, Weiler B. Development of a researcher-based tool for evaluating interpretation [Internet]. 2006 [cited 2023 Sep 29]. Available from: https://sustain.pata.org/wp-content/uploads/2015/02/Ham_ToolEvaInterp.pdf.
- [6] Muneenam U, Suwannattachote P, Mustikasari RS. Interpretation of shared culture of Baba and Nyonya for tourism linkage of four countries in the ASEAN community. *Kasetsart Journal of Social Sciences*. 2017;38:251–258.
- [7] Marschall S, Granquist SM, Burns GL. Interpretation in wildlife tourism: Assessing the effectiveness of signage on visitor behaviour at a seal watching site in Iceland. *Journal of Outdoor Recreation and Tourism*. 2017;17:11–19.
- [8] Jacobs MH, Harms M. Influence of interpretation on conservation intentions of whale tourists. *Tour Manag*. 2014;42:123–131.

- [9] Bhuiyan MdAH, Islam R, Siwar C, et al. Educational tourism and forest conservation: Diversification for child education. *Procedia Soc Behav Sci.* 2010;7:19–23.
- [10] Petroman C, Varga M, Constantin EC, et al. Agritourism: An educational tool for the students with agro-food profile. *Procedia Economics and Finance.* 2016;39:83–87.
- [11] Chen J, Huang Y, Wu EQ, et al. How does rural tourism experience affect green consumption in terms of memorable rural-based tourism experiences, connectedness to nature and environmental awareness? *Journal of Hospitality and Tourism Management.* 2023;54:166–177.
- [12] Wanner A, Pröbstl-Haider U, Feilhammer M. The future of Alpine pastures – Agricultural or tourism development? Experiences from the German Alps. *Journal of Outdoor Recreation and Tourism.* 2021;35:100405.
- [13] Koutsouris A, Gidarakou I, Grava F, et al. The phantom of (agri)tourism and agriculture symbiosis? A Greek case study. *Tour Manag Perspect.* 2014;12:94–103.
- [14] Park D-B, Doh K-R, Kim K-H. Successful managerial behaviour for farm-based tourism: A functional approach. *Tour Manag.* 2014;45:201–210.
- [15] Junaid I, Ilham MDM, Saharuna MY. Model Pengembangan Interpretasi Pariwisata Edukasi di Museum Kota Makassar. *Jurnal Kepariwisata Indonesia: Jurnal Penelitian dan Pengembangan Kepariwisata Indonesia.* 2022;16:216–236.
- [16] Brochu L. *Interpretive Planning: The 5-M model for successful planning projects.* InterpPress; 2014.
- [17] National Park Service. *Comprehensive interpretive planning: Interpretation and education guideline* [Internet]. 2000 [cited 2023 Oct 1]. Available from: <https://www.nps.gov/subjects/hfc/upload/cip-guideline.pdf#:~:text=This%20Comprehensive%20Interpretive%20Planning%20%28CIP%29%20process%20is%20now,mix%20of%20media%20and%20personal%20services%20to%20use.>
- [18] Huang Z, Weng L, Bao J. How do visitors respond to sustainable tourism interpretations? A further investigation into content and media format. *Tour Manag.* 2022;92:104535.
- [19] Ballantyne R, Hughes K, Lee J, et al. Facilitating zoo/aquarium visitors' adoption of environmentally sustainable behaviour: Developing a values-based interpretation matrix. *Tour Manag.* 2021;84:104243.
- [20] Ballantyne R, Hughes K, Lee J, et al. Visitors' values and environmental learning outcomes at wildlife attractions: Implications for interpretive practice. *Tour Manag.* 2018;64:190–201.
- [21] Knudson DM, Cable TT, Beck L. *Interpretation of cultural and natural resources* 2nd Edition. 2nd ed. Venture Publishing, Inc.; 2003.

- [22] Ham SH. Interpretation: Making a difference on purpose. Fulcrum Publishing; 2013.
- [23] Miles MB, Huberman AM, Saldana J. Qualitative data analysis: A methods sourcebook. 3rd ed. SAGE Publication, Inc.; 2014.