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**5th INTERNATIONAL SEMINAR
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PREFACE

International Seminar on Sustainable Urban Development (ISoSUD) is an International Seminar held by the Faculty of Landscape Architecture and Environmental Technology, Universitas Trisakti, Jakarta Indonesia. The 5th ISoSUD in 2020 carried the theme “**THE SUSTAINABLE DEVELOPMENT GOALS: INNOVATIONS IN ENVIRONMENTAL SUSTAINABILITY FOR BETTER WORLD**”. The ISoSUD has been conducted regularly every 3 years since 2008, and this year is very special because even though we are all facing a global pandemic, the enthusiasm of researchers and academics in Indonesia and around the world to participate is still high so that this seminar could be carried out virtually.

Due to the Covid-19 pandemic condition since early 2020 that does not allow the committee to gather many people in one place, this year ISoSUD could not be conducted like the four previous ISoSUD in the auditorium for 1-2 days. Thus the 5th ISoSUD was held virtually in 1 day, on Wednesday, August 5, 2020, using the zoom meeting facility. Although virtually, there were 200 participants in the plenary session. The call paper system that has been used since the first ISoSUD in 2008 succeeded in inviting 150 papers that selected into 100 papers were presented using digital technology via video recording. Those 100 papers were selected further to be published in IOP Proceedings Indexed by Scopus. As for the papers that do not pass the selection, they will be published in a national journal.

5th ISoSUD was also special because it involved co-hosting universities consist of eight from within the country and three from abroad: Universitas Tridinanti Palembang; STT Pekanbaru Baru; Universitas Fajar, Makasar; IT Del, Sitoulama, Sumatra Utara; Universitas Pasundan, Bandung; Universitas Negeri Manado; IT PLN, Jakarta; Universitas Pembangunan Jaya; Institute for Spatial Planning and Environment Research, India; University Putra Malaysia and University of Baghdad. Besides that, it was supported as well by professional association Ikatan Ahli Teknik Penyehatan Indonesia (IATPI), study program cooperation body (Badan Kerja Sama Teknik Lingkungan, BAKERMA-TL) and Global Water Partnership Southeast Asia (GWP-SEA).

The advisory board consists of prominent people in the 5th ISoSUD filed. The advisory board acts as ambassadors for the 5th ISoSUD. To some extent the quality of the 5th ISoSUD is approved by the members and academic credentials of its advisory boards.

In the plenary session, there were main speakers who delivered more focused seminar themes, they were:

Welcoming Speaker:

Prof. Dr. Agus Setyo Budi, M.Sc – Head of Service Institutions of Higher Education 3rd Region, Jakarta

Keynote speaker:



Prof. dr. Ali Ghuftron Mukti M.Sc., Ph.D. – Rector of Universitas Trisakti, Jakarta

Invited speakers:

1. Fany Wedahuditama ST, MT, MA – Regional Coordinator of Global Water Partnership Southeast Asia
2. Prof. Madya Lar. Dr. Suhardi Maulan – Dean of Faculty of Architectural Design of Universiti Putra Malaysia, Malaysia
3. Prof. Dr. Kareem Hasan Alwan – Centre of Urban Regional Planning University of Baghdad, Iraq

While during the class presentation session, a presentation from the participants representing the 5th ISOsUD co-host was carried out. The number of seminar participants was around 200 people consist of academics, researchers, professionals that are from universities, government, private sector, industrial practitioner and other related institutions. The origin of seminar participants came from New Delhi-India, Baghdad-Iraq, Malaysia, Japan, USA and several provinces in Indonesia.

There were increasing in number of participants and speakers from various countries every time the ISOsUD was held. Several papers were co-authored by authors from Indonesia and other countries.

Hopefully the Covid-19 pandemic will pass soon. The committee hopes that the 6th ISOsUD in 2023 could be carried out under normal conditions, involving more speakers from different countries interact each other in the seminar room. In addition, the network for conducting seminars between several universities in Indonesia and abroad as co-hosts could also be improved.

Until we meet again in the 6th ISOsUD in 2023.

Jakarta, September, 2020

Chair person

5th International Seminar on Urban and Sustainable Development 2020

Dr. Ir. Diana Irvindiaty Hendrawan, MSi

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All papers published in this volume of IOP Conference Series: Earth and Environmental Science have been peer reviewed through processes administered by the Editors. Reviews were conducted by expert referees to the professional and scientific standards expected of a proceedings journal published by IOP Publishing.

- **Type of peer review:** Triple-blind
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- **Number of submissions received:** 92
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- **Number of submissions accepted:** 34
- **Acceptance Rate (Number of Submissions Accepted / Number of Submissions Received X 100):**36.9%
- **Average number of reviews per paper:** 3
- **Total number of reviewers involved:** 73
- **Any additional info on review process:** there are 26 papers were received for publishing in the Journal of the Urban and Regional Planning Center, and 92 papers for publishing in the IOP, so the total paper submitted in the conference are 118 papers.
- **Contact person for queries:**
Name :Dr. amer shakir alkinani
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Jl Kyai Tapa No 1, Sunday, 28 June 2020

Letter of Acceptance

Dear Authors: Shafira Dwijaya Febriani¹, Etty Indrawati^{2*} and Silia Yuslim³

We are pleased to inform you that your abstract (ABT-470 Oral Presentation), entitled:

"People preception on Carik Injeman area optimization as agro-ecotourism area ini Cibodas Village"

has been reviewed and accepted to be presented at The 5th International Seminar on Sustainable Urban Development conference to be held on 5th August 2020 in Indonesia

Please submit your full paper not more than 7th July 2020. We will send an invoice registration fee after the paper is reviewed and the conference series indexed by scopus or publication journal is determined
Thank You.

Best regards,

Dr. Ir. Diana Irvindiaty Hendrawan, MS.
5th ISoSUD 2020 Chairperson



International Seminar on
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Faculty of Landscape Architecture and Environmental Technology
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Certificate

Awarded to:

Shafira Dwijaya Febriani, Etty Indrawati, and Silia Yuslim

We express our sincerest gratitude for your contribution as

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People perception on Carik Injeman area optimization as agro-ecotourism area in Cibodas Village

S D Febriani, E Indrawati* and S Yuslim

Department of Landscape Architecture, Faculty of Landscape Architecture and Environmental Engineering, Universitas Trisakti, Jakarta, Indonesia

*etty.indrawati@trisakti.ac.id

Abstract. The Carik Injeman Area is a land owned by Cibodas Village, with an extent of 20 Ha, which is yet to be optimized until today. The potentials contained its surrounding areas are highly potential to be developed as an agro-ecotourism area. One of these potentials identified in the Carik Injeman area is the application of the Integrated Farming System, which is also a part of the cultural aspect found in Cibodas Village society. The other potentials that support the initialization of agro-ecotourism in this area are the cultivation of 110 forest trees species, various types of vegetables, and coffee plantation. This research aims to measure the people's perception of Carik Injeman area optimization as an agro-ecotourism area. This research is conducted using a descriptive-qualitative method with observation, interview, and focus group discussion (FGD) as data collection methods. The people in Cibodas are divided into 14 RW. The sampling technique in this research is a random sampling technique with the heads of the family as samples. The result of this research reveals that the Carik Injeman area is highly likely to be developed into agro-ecotourism by adding numerous supportive attractions, which will improve the prosperity of the people in Cibodas Village.

1. Introduction

The Carik Injeman area possesses numerous potentials to be developed into an agro-ecotourism area. For example, the area is located on a high-level altitude with a comfortable temperature. This area also offers an attractive view, fitted with vegetable farms, cow farms, pine forest with collections of forest trees, coffee plantation. Agro-tourism is a sequence of tourism activities that benefit agricultural potential as a tourist attraction, either the potential of its beautiful view, agricultural production and technology activities, product diversity and uniqueness, and the culture of the farming society. Agro-tourism is an activity that offers knowledge and experience expansion, and also agriculture, plantation, forestry and fishery recreations [1].

Carik Injeman area is included in the regional boundaries of Cibodas Village, a village located in Pasir Jambu Sub-District, Bandung Regency. The population number of Cibodas Village is 8,591 people that consist of like mention in Table 1.



Table 1. Village population number.

Population Category	Total
a. Male	4,270 people
b. Female	4,321 people
c. Family Head Population	2,319 people
d. Labor Force Population	2,144 people
e. Unemployed Population	1,706 people

Source: Cibodas Village, 2018.

The working people of Cibodas Village are generally working as vegetable farmers; meanwhile, more than 50% of the populations do not have a permanent job. Carik Injeman area is an area in Cibodas Village that possesses high economic potential if the land can be optimally managed. Currently, the Carik area is planted with numbers of forest plants as a land conservation effort and also to improve tree collection. The area is also utilized as animal farm, vegetable farming, and animal feed areas, a part of businesses owned by Village-Owned Business Entity to improve village income level. In parallel with the regulation of Regional Tourism Development Master Plan Eight, mentioned in Bandung Regency Regional Regulation No. 18 the Year 2012 Verse 8 which states that one of Bandung Regency tourism development plannings is to “develop unique and high quality natural agro-tourism areas through creative agro-product diversification, supported by responsible management, effective marketing strategy, conducted by high quality human resource”.

The extensive area and the existence of various potentials in Carik area location are yet to be optimally utilized. Besides that, there are also several problems occur in Cibodas Village, which concerns the livelihood of the people, namely: 1) most people do not have adequate knowledge regarding Carik area, 2) most people in Cibodas Village do not have permanent livelihood 3) the main profession of the people is cow farmers, but the sector often experiences deescalation due to difficulties in finding high quality animal feed, especially during the dry season.

The realization of the Carik Injeman area transformation into the agro-ecotourism area requires support and active participation from the people. Active participation will occur when the people can cultivate a sense of belonging to preserve the Carik Injeman area's existence. Support and active participation of the people are highly influenced by people's perception of the Carik Injeman area development.

The objective of this research is to acknowledge the people perception of Carik Injeman area optimization as agro-ecotourism area to help improve the prosperity of people in Cibodas Village.

2. Methods

This research is conducted in the Carik Injeman area at Cibodas Village, Pasir Jambu Sub-District, from January to May 2020. Data collection was conducted through surveys, questionnaire interviews, and focus group discussion (FGD). Data utilized in this research are primary and secondary data. Primary data was collected from the survey the site condition along with its potentials and obstacles. Questionnaires are distributed to the people around the area and related institutions and the farmers who conduct their daily activities in the area. Secondary data were obtained from the literature review and related institutions such as the village office. Secondary data was also obtained from institutions outside the village, especially those regarding the climate, land, and type of farming commodity. Besides that, secondary data regarding the social condition of the people around the area is also required.

This research utilizes a descriptive qualitative method. The method is strengthened by quantified questionnaire data with the scoring method based on a Likert scale on a valuation range of highly disagree (1), disagree (2), doubtful (3), agree (4), and highly agree (5) [2].

The sample is taken from 2,319 family heads in 14 Citizens Association (CA) was conducted with a simple random sampling method, where the respondent has chosen are family heads. In ensuring the

sample that the sample took in this research can represent the total population, Slovin formulation was utilized to determine questionnaire distribution activity [3].

$$n = \frac{N}{1+N\alpha^2} \quad (1)$$

Where: n is the size of sample; N is the population size; α is significance rate.

In this research, we acknowledge that N is as much as 2319 family heads, e is predetermined at 10%. Based on that, the sample taken is 95.87 family heads rounded into 96 family heads. The number of samples will be randomly taken from all 14 CA. Every CA will be represented by 6 to 7 respondents. Focus group discussion (FGD) is conducted to capture Cibodas Village public figures' perception as a base to form a facility or activity plannings in the Carik area as an agro-ecotourism area. These public figures consist of the local government, Village-owned business entity, the chairman of Walatra (Wana Lestari Anak Nusantara), and other public figures.

Variables examined in this research are people perception on Carik Injeman area potential description, the meanings and interpretation of agro-ecotourism as an effort to optimize Carik Injeman area from the following perspectives: 1) ecological variable: natural potential inside or around Carik area, 2) social variable: allowing the opening of new job opportunity and the realization of people life expectations.

3. Results and discussion

The Carik Injeman area is an area owned by Cibodas Village with an extent of 20 Ha. The area is located in Cibodas Village, Pasir Jambu Sub-District Bandung Regency is located at an altitude of 1000 to 1200 from sea level. Carik area is bordered by Transportation Department Character Building Center on the northern part, pine forest on the eastern part, RW 12 settlement on the southern part, and pine forest managed by Perhutani on the western part.



Figure 1. Carik Injeman area location.

Carik Injeman area potential is shown by the application of an integrated agriculture system consists of cow farming, various vegetable plantation, animal feed silages, and also compost and biogas processing using cow dung as material. An environmentally-friendly agricultural system seen from an ecologic perspective is an activity that focused on natural resource and biodiversity preservations effort, which supported by various types of activities that produce numbers of positive impacts on the ecosystem [4]. Combining cattle and farming activities in a single area requires complex management to ensure that both sectors can be balanced and benefit each other.

The cultivation of 110 types of forest trees such as *Aganthis alba* Foxw. (Resin tree) *Altingia excelsa* Noronha (Rasamala tree), *Antocephalus macrophyllus* (Red Jabon tree), can be transformed into an arboretum. The cultivation of these trees was initiated in 2012 to conserve the land because, at that moment, Carik area is undeveloped and covered with shrubs. The comfortable temperature condition between 17°C and 24°C with a humidity level of 70 to 78% made it ideal for this area to be transformed into agro-ecotourism. An interesting view around the Carik area (Figure 2) is formed by the existence of pine forest and rice fields. The Area is located in Bandung- Ciwidey tourism lane. Natural resources and the environment around the Carik area are potential as tourism object. Because of that, an effort to preserve natural sustainability and beauty of this area is highly required to ensure a sustainable agro-tourism formation. Agro-tourism can be judged based on attraction condition and the existence of agriculture area, natural scenery, tourism resource availability, and access condition [5].

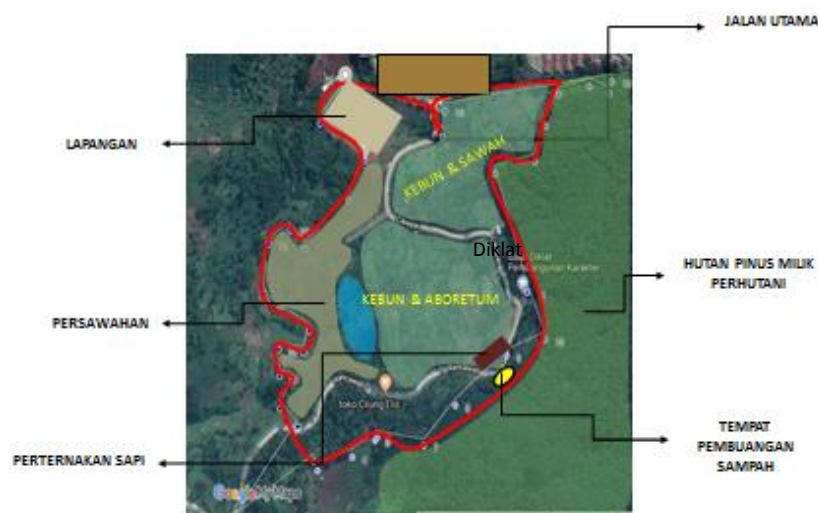


Figure 2. The existing condition of Carik Injeman area.

Farmers and cow breeder dominate the people in Cibodas Village. Nowadays, most of them are panting various types of vegetables such as chayote, broccoli, chilly, and mustard greens, either as landowners or workers. Cibodas Village is one of the areas with the highest milk production in Pasir Jambu Sub-District. The high unemployment level of 70% pushes the village head and his officials to optimize the Carik area as a natural tourism location. Integrated agriculture is a farming system that integrates agriculture sub-sectors (plants, cattle, and fish) to improve land resource productivity, farmers' independency, and prosperity.

Based on the questionnaire analysis result, we acknowledged that out of 96 samples, 72% of them are already aware of agro-ecotourism, and 78.9% agree that Carik Injeman should be optimized agro-ecotourism area. 92.4% of the respondents agree that the main system implemented in this agro-ecotourism is an integrated agricultural system. Integrated agriculture can improve the farmers' earnings and health level by utilizing horticulture plants and animal farms [6]. 84% agree that integrated agricultural system management and development implemented in the Carik area should be handed over to the community. 74.2% agree that products produce by the agro-ecotourism activity should be marketed in the Carik area by building kiosks. 71.6% agree that the type of trees planted in agro-ecotourism will follow tree collection examples according to their functions. 87.2% agree that animals developed in agro-ecotourism animal farms consist of cows and other types of cattle that would support an integrated farming system.

Table 2. Questionnaire recapitulation data regarding the people perception on Carik Injeman area optimization.

Agro-ecotourism		Indicator (%)	
Question 1	The people are aware of Agro-ecotourism concept	People opinion on Agro-ecotourism	72
		People opinion on village plan to develop Carik area as agro-ecotourism area	78
		People opinion on Agro-ecotourism which is generally an activity to expand knowledge	92.4
Question 2	Integrated agricultural system in Agro-ecotourism	People opinion on integrated agricultural system as characteristic of agro-ecotourism	78
		People opinion on an issue that the farms in agro-ecotourism area should be managed and developed by the people of Cibodas Village, Pasir Jambu Sub-District.	84
Question 3	Distribution of Agro-ecotourism products in the village	People opinion on Agro-ecotourism products distribution in Cibodas Village, Pasir Jambu Sub-District, Bandung Regency.	72.4
		People opinion on plantation development in Carik area as a product of agro-ecotourism	71.6
		People opinion on animal farms included in agro-ecotourism is dairy farm which will be developed into other type of animal farms.	87.2
Average percentage		80.58%	

The people concern the disappearance of natural resources, the lack of skills in the management activity, and the lack of sense of belonging from the society are the challenges for the sustainability of agro-ecotourism [7]. The result of questionnaire, focus group discussion, and interview analyses are as follows:

Table 3. Comparison of questionnaire, focus group discussion, and interview results.

Questionnaire analysis result	FGD analysis result	Public figure interview result
The average index values that show the people's perception of agro-ecotourism, landscape element, and landscape support elements existing in the Carik area that would support Agro-ecotourism as tourism area and every available activity are at 80,58%. It means that the people are "HIGHLY AGREE."	We can conclude that based on the focus group discussion (FGD) result, the Carik Injeman area that will be allocated as an agro-ecotourism area in Cibodas Village has the potential to be developed into tourism area. Agro-ecotourism area will be divided into agribusiness, recreational agro-tourism, and education /training areas.	Based on an interview conducted in January 2020 with Mr. Dadang as representative of the farmer community, the people of Cibodas Village highly agreed with the development of the Carik area into agro-ecotourism. The people hope that with the development of Agro-ecotourism in the Carik area, new job opportunities, increased revenue, and life prosperity will be improved significantly.

Based on the three analyses above, we can conclude that both the people and the public figures agree with the idea of agro-ecotourism development in Carik area. People expect that with the soon-to-be-developed agro-ecotourism in the area will realize the people's expectation to provide agribusiness, recreational agro-tourism, and education/training. To improve dried land agro-ecosystem productivity and farming revenue, conventional agricultural pattern (monocultural) should be transformed into an integrated agriculture system by integrating crops, vegetables and green plantation, animal feed, and cow farming according to the area's existing potential [8].

4. Conclusion

The Carik Injeman area possesses potentials to be developed into the agro-ecotourism area with farming, cattle, and vegetable plantation management as an integrated agricultural system. Both the people and public figures agree to build an agro-ecotourism facility in the Carik Injeman area. The people hope that agro-ecotourism planning will include the people's demand for agribusiness, recreational agro-tourism, and education and training facilities. Besides, other attractions will be added as supports for tourism activity. The plan to build agro-ecotourism in Carik area is hoped to be able to provide new job opportunities, increase revenue level, and improve the prosperity of the people in Cibodas Village.

References

- [1] Ismayanti 2010 *Introduction to Tourism* (Jakarta: PT. Gramedia Widiasarana Indonesia)
- [2] Imaculata F 2017 Development of sustainable agriculture based agriculture in the Maurole sub-district *Agrica* **10**(2) 62-74
- [3] Sugiyono 2012 *Qualitative Research Methods and R&D* (Bandung: Alfabeta)
- [4] Aryanto A T and Effendi I 2015 Design of integrated crop-livestock and crop-fish integrated models in telo technology village, Riau *Jurnal Agronomi Indonesia (Indonesian Journal of Agronomy)* **43**(2) 168-78
- [5] Mulyani, Athaillah M, Asmuri A and Chatimatun N 2019 Community perception of agroecotourism for preservation of jaro reservoir function *Rawa Sains* **6**(2) 453-463
- [6] Siswati L and D Rini 2014 Farmers' Welfare Integrated Horticultural Crops and Livestock Patterns *XVII*(1) 10-14
- [7] Sebele L S 2010 Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana *Tourism Management* **31**(1) 136-146
- [8] Matheus R, Noldin A B, Basri, Salli M K and Jahemat A 2017 Implementation of the integrate farming system as an effort to increase land productivity in the West Timor Region *1st National Seminar of Politeknik Pertanian Negeri Kupang*

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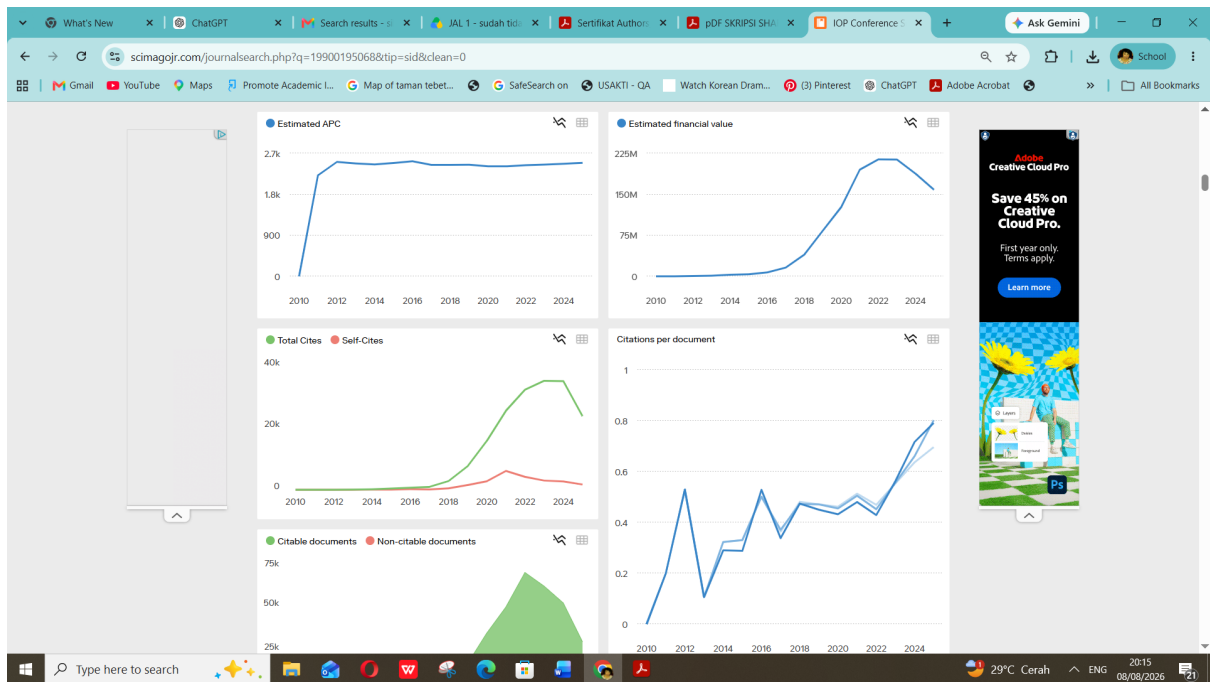
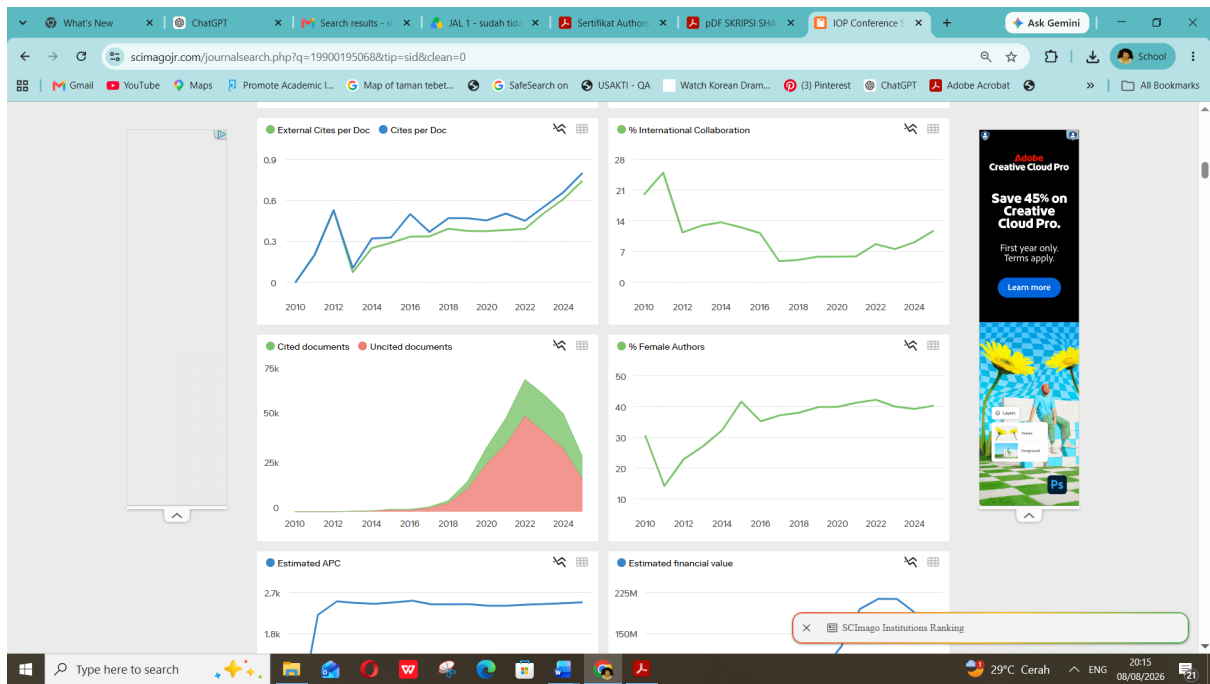
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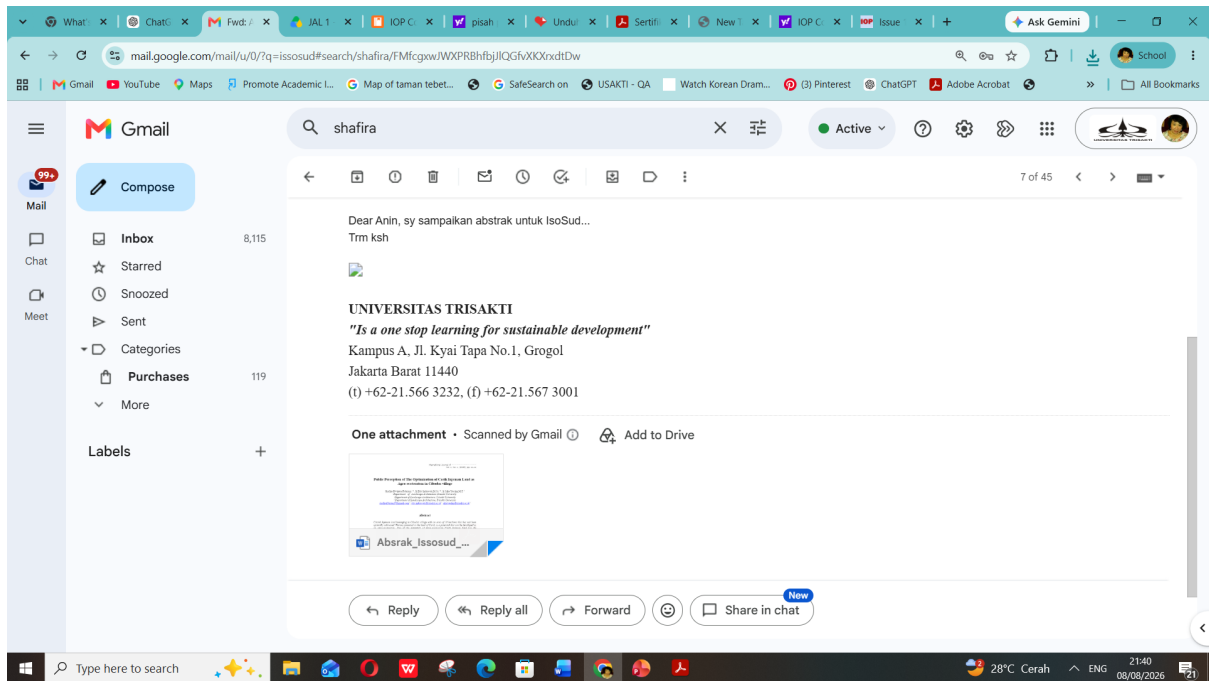
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Proses Review

Review Abstrak



Public Perception of The Optimization of Carik Injeman Land as Agro-ecotourism in Cibodas village

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Abstract

Citarik Injeman land belonging to Cibodas village with an area of 20 hectares that has not been optimally cultivated. Various potential in the land of Carik, is a potential that can be developed as an agro-ecotourism. One of the potentials of Agro-ecotourism Carik Injeman land has the characteristics of an integrated farming system (SISTANDU), which has become the culture of Cibodas village community. Other potential to support the realization of Agro-ecotourism including planting 110 species of green trees, planting various types of vegetables, the existence of coffee plantation is a special attraction that supports the realization of an Agro-ecotourism. The purpose of this research is to see public perception of the optimization of Injeman's land as agro-ecotourism area. The study used a method of qualitative, using methods of data collection: Observation, interviews, focus group discussion (FGD), and questionnaires and using Linkert scales. The analysis of this study, where the community of Cibodas village consisting of 14 RW selected in random sampling, ie a simple random retrieval, where the respondent chosen is the head of the family (KK). Data analysis techniques are data reduction to test the validity of data from interviews to research objects. Analysis of the results of respondents intended to know the perception of people on land owned considerations Cibodas Village in the design proposal Agrotourism. The results show that Carik Injeman land is very potential to be a Agro-ecotourism with the addition of various attractions that can support various activities and can improve the welfare of the people of Cibodas village.

Keyword: sub-urban landscape, agrotourism, integrated farming system

Review Naskah Jurnal

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People Perception on Carik Injeman Area Optimization as Agro-Ecotourism Area in Cibodas Village

Shafira Dwijaya Febriani¹, Etty Indrawati^{1,2} dan Silia Yuslim¹

¹Departement Landscape Architecture, Universitas Trisakti, Jakarta-Indonesia

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Abstract The Carik Injeman Area is a land owned by Cibodas Village, with an extent of 20 Ha, which is yet to be optimized until today. The potentials contained its surrounding areas are highly potential to be developed as an agro-ecotourism area. One of these potentials identified in the Carik Injeman area is the application of the Integrated Farming Sistem, which is also a part of the cultural aspect found in Cibodas Village society. The other potentials that support the initialization of agro-ecotourism in this area are the cultivation of 110 forest trees species, various types of vegetables, and coffee plantation. This research aims to measure the people's perception of Carik Injeman area optimization as an agro-ecotourism area. This research is conducted using a descriptive-qualitative method with observation, interview, and focus group discussion (FGD) as data collection methods. The people in Cibodas are divided into 14 RW. The sampling technique in this research is a random sampling technique with the heads of the family as samples. The result of this research reveals that the Carik Injeman area is highly likely to be developed into agro-ecotourism by adding numerous supportive attractions, which will improve the prosperity of the people in Cibodas Village.

Keywords : *Agro-ecotourism, landscape village, Carik Injeman area*

1. Introduction

The Carik Injeman area possesses numerous potentials to be developed into an agro-ecotourism area. For example, the area is located on a high-level altitude with a comfortable temperature. This area also offers an attractive view, fitted with vegetable farms, cow farms, pine forest with collections of forest trees, coffee plantation. Agro-tourism is a sequence of tourism activities that benefit agricultural potential as a tourist attraction, either the potential of its beautiful view, agricultural production and technology activities, product diversity and uniqueness, and the culture of the farming society. Agro-tourism is an activity that offers knowledge and experience expansion, and also agriculture, plantation, forestry and fishery recreations [5].

Carik Injeman area is included in the regional boundaries of Cibodas Village, a village located in Pasir Jambu Sub-District, Bandung Regency. The population number of Cibodas Village is 8,591 people that consist of:

Table 1. Village Population Number

Population Category	Total
a. Male	4,270 people
b. Female	4,321 people
c. Family Head Population	2,319 people
d. Labor Force Population	2,144 people
e. Unemployed Population	1,706 people

Source: Cibodas Village, 2018

The working people of Cibodas Village are generally working as vegetable farmers; meanwhile, more than 50% of the population do not have a permanent job. Carik Injeman area is an area in Cibodas Village that possesses high economic potential if the land can be optimally managed. Currently, the Carik area is planted with numbers of forest plants as a land conservation effort and also to improve tree collection. The area is also utilized as animal farm, vegetable farming, and animal feed areas, a part of businesses owned by Village-Owned Business Entity to improve village income level. In parallel with the regulation of Regional Tourism Development Master Plan Eight, mentioned in Bandung Regency Regional Regulation No. 18 the Year 2012 Verse 8 which states that one of Bandung Regency tourism development plannings is to “develop unique and high quality natural agro-tourism areas through creative agro-product diversification, supported by responsible management, effective marketing strategy, conducted by high quality human resource.”

The extensive area and the existence of various potentials in Carik area location are yet to be optimally utilized. Besides that, there are also several problems occur in Cibodas Village, which concerns the livelihood of the people, namely: 1) most people do not have adequate knowledge regarding Carik area, 2) most people in Cibodas Village do not have permanent livelihood 3) the main profession of the people is cow farmers, but the sector often experiences deescalation due to difficulties in finding high quality animal feed, especially during the dry season.

The realization of the Carik Injeman area transformation into the agro-ecotourism area requires support and active participation from the people. Active participation will occur when the people can cultivate a sense of belonging to preserve the Carik Injeman area's existence. Support and active participation of the people are highly influenced by people's perception of the Carik Injeman area development.

The objective of this research is to acknowledge the people perception of Carik Injeman area optimization as agro-ecotourism area to help improve the prosperity of people in Cibodas Village.

2. Method

This research is conducted in the Carik Injeman area at Cibodas Village, Pasir Jambu Sub-District, from January to May 2020. Data collection was conducted through surveys, questionnaire interviews, and focus group discussion (FGD). Data utilized in this research are primary and secondary data. Primary data was collected from the survey the site condition along with its potentials and obstacles. Questionnaires are distributed to the people around the area and related institutions and the farmers who conduct their daily activities in the area. Secondary data were obtained from the literature review and related institutions such as the village office. Secondary data was also obtained from institutions outside the village, especially those regarding the climate, land, and type of farming commodity. Besides that, secondary data regarding the social condition of the people around the area is also required.

This research utilizes a descriptive qualitative method. The method is strengthened by quantified questionnaire data with the scoring method based on a Likert scale on a valuation range of highly disagree (1), disagree (2), doubtful (3), agree (4), and highly agree (5) [4].

The sample is taken from 2,319 family heads in 14 Citizens Association (CA) was conducted with a simple random sampling method, where the respondent has chosen are family heads. In ensuring the sample that the sample took in this research can represent the total population, Slovin formulation was utilized to determine questionnaire distribution activity. [15]

$$n = \frac{N}{1 + N \alpha^2}$$

Where: n is the size of sample; N is the population size; α is significance rate

In this research, we acknowledge that N is as much as 2319 family heads, α is predetermined at 10%. Based on that, the sample taken is 95.87 family heads rounded into 96 family heads. The number of samples will be randomly taken from all 14 CA. Every CA will be represented by 6 to 7 respondents. Focus group discussion

(FGD) is conducted to capture Cibodas Village public figures' perception as a base to form a facility or activity plan in the Carik area as an agro-ecotourism area. These public figures consist of the local government, Village-owned business entity, the chairman of Walatra (Wana Lestari Anak Nusantara), and other public figures.

Variables examined in this research are people perception on Carik Injeman area potential description, the meanings and interpretation of agro-ecotourism as an effort to optimize Carik Injeman area from the following perspectives: 1) ecological variable: natural potential inside or around Carik area, 2) social variable: allowing the opening of new job opportunity and the realization of people life expectations.

3. Results and discussion

The Carik Injeman area is an area owned by Cibodas Village with an extent of 20 Ha. The area is located in Cibodas Village, Pasir Jambu Sub-District Bandung Regency is located at an altitude of 1000 to 1200 from sea level. Carik area is bordered by Transportation Department Character Building Center on the northern part, pine forest on the eastern part, RW 12 settlement on the southern part, and pine forest managed by Perhutani on the western part.

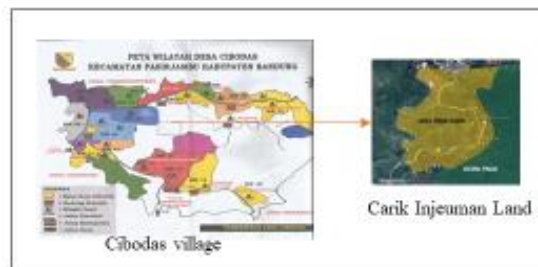


Figure 2. Carik Injeman Area Location

Carik Injeman area potential is shown by the application of an integrated agriculture system consists of cow farming, various vegetable plantation, animal feed silages, and also compost and biogas processing using cow dung as material.

An environmentally-friendly agricultural system seen from an ecologic perspective is an activity that focused on natural resource and biodiversity preservations effort, which supported by various types of activities that produce numbers of positive impacts on the ecosystem [1]. Combining cattle and farming activities in a single area requires complex management to ensure that both sectors can be balanced and benefit each other.

The cultivation of 110 types of forest trees such as *Aganthis alba* Foxw. (Resin tree) *Altingia excelsa* Noronha (Rasamala tree), *Antocephalus macrophyllus* (Red Jabon tree), can be transformed into an arboretum. The cultivation of these trees was initiated in 2012 to conserve the land because, at that moment, Carik area is undeveloped and covered with shrubs. The comfortable temperature condition between 17°C and 24°C with a humidity level of 70 to 78% made it ideal for this area to be transformed into agro-ecotourism. An interesting view around the Carik area (Figure 3) is formed by the existence of pine forest and rice fields. The Area are located in Bandung – Ciwidey tourism lane. Natural resources and the environment around the Carik area are potential as tourism object. Because of that, an effort to preserve natural sustainability and beauty of this area is highly required to ensure a sustainable agro-tourism formation. Agro-tourism can be judged based on

attraction condition and the existence of agriculture area, natural scenery, tourism resource availability, and access condition [7]

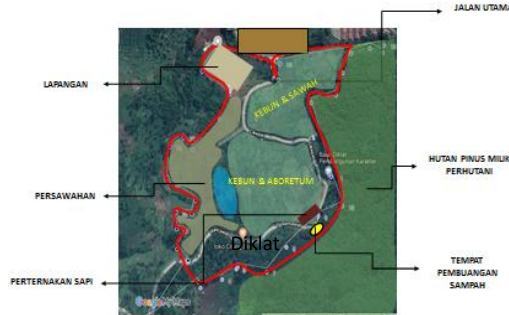


Figure 3. The Existing Condition of Carik Injeman Area

Farmers and cow breeder dominate the people in Cibodas Village. Nowadays, most of them are planting various types of vegetables such as chayote, broccoli, chilly, and mustard greens, either as landowners or workers. Cibodas Village is one of the areas with the highest milk production in Pasir Jambu Sub-District. The high unemployment level of 70% pushes the village head and his officials to optimize the Carik area as a natural tourism location. Integrated agriculture is a farming system that integrates agriculture sub-sectors (plants, cattle, and fish) to improve land resource productivity, farmers' independency, and prosperity.

Table 2. Questionnaire Recapitulation Data
Regarding The People Perception on Carik Injeman Area Optimization

Agro-ecotourism		Indicator (%)	
Question 1	The people are aware of Agro-ecotourism concept	People opinion on Agro-ecotourism	72
		People opinion on village plan to develop Carik area as agro-ecotourism area	78.4
		People opinion on Agro-ecotourism which is generally an activity to expand knowledge	92.4
Question 2	Integrated agricultural system in Agro-ecotourism	People opinion on integrated agricultural system as characteristic of agro-ecotourism	78
		People opinion on an issue that the farms in agro-ecotourism area should be managed and developed by the people of Cibodas Village, Pasir Jambu Sub-District.	84
Question 3	Distribution of Agro-ecotourism products in the village	People opinion on Agro-ecotourism products distribution in Cibodas Village, Pasir Jambu Sub-District, Bandung Regency.	72.4
		People opinion on plantation development in Carik area as a product of agro-ecotourism	71.6
		People opinion on animal farms included in agro-ecotourism is dairy farm which will be developed into other type of animal farms.	87.2
Average percentage		80.58%.	

Based on the questionnaire analysis result, we acknowledged that out of 96 samples, 72% of them are already aware of agro-ecotourism, and 78.9% agree that Carik Injeman should be optimized agro-ecotourism area. 92.4% of the respondents agree that the main system implemented in this agro-ecotourism is an integrated agricultural system. Integrated agriculture can improve the farmers' earnings and health level by utilizing horticulture plants and animal farms [13]. 84% agree that integrated agricultural system management and development implemented in the Carik area should be handed over to the community. 74.2% agree that products produce by the agro-ecotourism activity should be marketed in the Carik area by building kiosks. 71.6% agree that the type of trees planted in agro-ecotourism will follow tree collection examples according to their functions. 87.2% agree that animals developed in agro-ecotourism animal farms consist of cows and other types of cattle that would support an integrated farming system.

The people concern the disappearance of natural resources, the lack of skills in the management activity, and the lack of sense of belonging from the society are the challenges for the sustainability of agro-ecotourism [12]. The result of questionnaire, focus group discussion, and interview analyses are as follows:

Table 3. Comparison of Questionnaire, Focus Group Discussion, and Interview Results

Questionnaire analysis result	FGD analysis result	Public figure interview result
The average index values that show the people's perception of agro-ecotourism, landscape element, and landscape support elements existing in the Carik area that would support Agro-ecotourism as tourism area and every available activity are at 80,58%. It means that the people are "HIGHLY AGREE."	We can conclude that based on the focus group discussion (FGD) result, the Carik Injeman area that will be allocated as an agro-ecotourism area in Cibodas Village has the potential to be developed into tourism area. Agro-ecotourism area will be divided into agribusiness, recreational agro-tourism, and education /training areas.	Based on an interview conducted in January 2020 with Mr. Dadang as representative of the farmer community, the people of Cibodas Village highly agreed with the development of the Carik area into agro-ecotourism. The people hope that with the development of Agro-ecotourism in the Carik area, new job opportunities, increased revenue, and life prosperity will be improved significantly.

Based on the three analyses above, we can conclude that both the people and the public figures agree with the idea of agro-ecotourism development in Carik area. People expect that with the soon-to-be-developed agro-ecotourism in the area will realize the people's expectation to provide agribusiness, recreational agro-tourism, and education/training. To improve dried land agro-ecosystem productivity and farming revenue, conventional agricultural pattern (monocultural) should be transformed into an integrated agriculture system by integrating crops, vegetables and green plantation, animal feed, and cow farming according to the area's existing potential [6].

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The Carik Injeman area possesses potentials to be developed into the agro-ecotourism area with farming, cattle, and vegetable plantation management as an integrated agricultural system. Both the people and public figures agree to build an agro-ecotourism facility in the Carik Injeman area. The people hope that agro-ecotourism planning will include the people's demand for agribusiness, recreational agro-tourism, and education and training facilities. Besides, other attractions will be added as supports for tourism activity. The plan to build agro-ecotourism in Carik area is hoped to be able to provide new job opportunities, increase revenue level, and improve the prosperity of the people in Cibodas Village.

5. Reference

- [1] Aryanto, AT and Effendi, I 2015, “Design of Integrated Crop-Livestock and Crop-Fish Integrated Models in Telo Technology Village, Riau”, *Jurnal Agronomi Indonesia* (Indonesian Journal of Agronomy), vol. 43, no. 2, pp. 168-78
- [2] E.Ranjaya A.F Gunawan. W Mugningsyah. 2013. Integrated agricultural landscape design as a vehicle for education and gricultural tourism. *Jurnal lanskap Indonesia* vol 5: 7-15
- [4] Imaculata, F. (2017). Development of sustainable agriculture based agriculture in the Maurole sub-district. *Agrica*, 10(2), 62–74.
- [5] Ismayanti. 2010. Introduction to Tourism. PT. Gramedia Widiasarana Indonesia, Jakarta.
- [6] Matheus,R., Noldin, A.B., Basri, Salli,M.K., dan Jahemat, A. 2017. Implementation of the Integrate Farming System as an Effort to Increase Land Productivity in the West Timor Region. Paper Presented in the 1st National Seminar of Politeknik Pertanian Negeri Kupang.
- [7] Mulyani, Athaillah, M., Asmuri, A., & Chatimatun, N. (2019). Community Perception of Agroecotourism for Preservation of Jaro Reservoir Function. *Rawa Sains*, 6(2), 453–463.
- [8] Palit, I. G., Talumingan, C., & Rumagit, G. A. J. (2017). Rurukan Agro Tourism Area Development Strategy. *Agri-Sosioekonomi*, 13(2A), 21.<https://doi.org/10.35791/agrsosek.13.2a.2017.16558>
- [9] Preston, Reg dan Lylian Rodríguez 2014 Food and Energy Production from Biomass in an Integrated Farming System *Sustainable Agriculture Reviews* 14, 23-51
- [10] Ruhiyat. R, Dwi Indrawati, Etty Indrawati, Lailatus Siami. 2018 “Partnership Program Community of Animal Manure Utilization Groups (Kohe) and Organic Farmers Groups (in Ciboas Village and Cisondari Village, Pasir Jambu District, Bandung Regency, West Java Province)” Empowerment: *Jurnal Pengabdian Masyarakat*, e-ISSN 2598-2052 Vol. 01 No 01. 2018.79-88.
- [11] Salamah A. (2015). Integrated Agricultural Agro Tourism Landscape Planning in Cikahuripan Village, Lembang District, West Bandung Regency. *Landscape Essay*, Study Program of Landscape Architecture of IPB.
- [12] Sebele LS. 2010. Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana. *Tourism Management*. 31(1): 136–146.
- [13] Siswati L and D. Rini, “Farmers' Welfare Integrated Horticultural Crops and Livestock Patterns” vol. XVII, no. 1, pp. 10–14, 2014.
- [14] Siswati, L., Zargustin, D., & Nizar, R. (2020). Integrated Agriculture as a Source of Income in Agro Tourism in Rumbai District, Pekanbaru City. *Jurnal Agribisnis*, 21(2), 135–141. <https://doi.org/10.31849/agr.v21i2.3675>.
- [15] Sugiyono 2012 Qualitative Quantitative Research Methods and R&D (Bandung: Alfabeta)
- [16] Utama.R.B.G. 2011. Agro Tourism as an Alternative Tourism. Andi: Yogyakarta
- [17] Utama dalam Imaculata, F. 2017. Development of sustainable agriculture based agriculture in the Maurole sub-district. *Agrica*, 10(2), 62–74.

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Abstract. The Carik Injeman Area is a land owned by Cibodas Village, with an extent of 20 Ha, which is yet to be optimized until today. The potentials contained its surrounding areas are highly potential to be developed as an agro-ecotourism area. One of these potentials identified in the Carik Injeman area is the application of the Integrated Farming System, which is also a part of the cultural aspect found in Cibodas Village society. The other potentials that support the initialization of agro-ecotourism in this area are the cultivation of 110 forest trees species, various types of vegetables, and coffee plantation. This research aims to measure the people's perception of Carik Injeman area optimization as an agro-ecotourism area. This research is conducted using a descriptive-qualitative method with observation, interview, and focus group discussion (FGD) as data collection methods. The people in Cibodas are divided into 14 RW. The sampling technique in this research is a random sampling technique with the heads of the family as samples. The result of this research reveals that the Carik Injeman area is highly likely to be developed into agro-ecotourism by adding numerous supportive attractions, which will improve the prosperity of the people in Cibodas Village.

1. Introduction

The Carik Injeman area possesses numerous potentials to be developed into an agro-ecotourism area. For example, the area is located on a high-level altitude with a comfortable temperature. This area also offers an attractive view, fitted with vegetable farms, cow farms, pine forest with collections of forest trees, coffee plantation. Agro-tourism is a sequence of tourism activities that benefit agricultural potential as a tourist attraction, either the potential of its beautiful view, agricultural production and technology activities, product diversity and uniqueness, and the culture of the farming society. Agro-tourism is an activity that offers knowledge and experience expansion, and also agriculture, plantation, forestry and fishery recreations [1].

Carik Injeman area is included in the regional boundaries of Cibodas Village, a village located in Pasir Jambu Sub-District, Bandung Regency. The population number of Cibodas Village is 8,591 people that consist of like mention in Table 1.



Table 1. Village population number.

Population Category	Total
a. Male	4,270 people
b. Female	4,321 people
c. Family Head Population	2,319 people
d. Labor Force Population	2,144 people
e. Unemployed Population	1,706 people

Source: Cibodas Village, 2018.

The working people of Cibodas Village are generally working as vegetable farmers; meanwhile, more than 50% of the populations do not have a permanent job. Carik Injeman area is an area in Cibodas Village that possesses high economic potential if the land can be optimally managed. Currently, the Carik area is planted with numbers of forest plants as a land conservation effort and also to improve tree collection. The area is also utilized as animal farm, vegetable farming, and animal feed areas, a part of businesses owned by Village-Owned Business Entity to improve village income level. In parallel with the regulation of Regional Tourism Development Master Plan Eight, mentioned in Bandung Regency Regional Regulation No. 18 the Year 2012 Verse 8 which states that one of Bandung Regency tourism development plannings is to “develop unique and high quality natural agro-tourism areas through creative agro-product diversification, supported by responsible management, effective marketing strategy, conducted by high quality human resource”.

The extensive area and the existence of various potentials in Carik area location are yet to be optimally utilized. Besides that, there are also several problems occur in Cibodas Village, which concerns the livelihood of the people, namely: 1) most people do not have adequate knowledge regarding Carik area, 2) most people in Cibodas Village do not have permanent livelihood 3) the main profession of the people is cow farmers, but the sector often experiences deescalation due to difficulties in finding high quality animal feed, especially during the dry season.

The realization of the Carik Injeman area transformation into the agro-ecotourism area requires support and active participation from the people. Active participation will occur when the people can cultivate a sense of belonging to preserve the Carik Injeman area's existence. Support and active participation of the people are highly influenced by people's perception of the Carik Injeman area development.

The objective of this research is to acknowledge the people perception of Carik Injeman area optimization as agro-ecotourism area to help improve the prosperity of people in Cibodas Village.

2. Methods

This research is conducted in the Carik Injeman area at Cibodas Village, Pasir Jambu Sub-District, from January to May 2020. Data collection was conducted through surveys, questionnaire interviews, and focus group discussion (FGD). Data utilized in this research are primary and secondary data. Primary data was collected from the survey the site condition along with its potentials and obstacles. Questionnaires are distributed to the people around the area and related institutions and the farmers who conduct their daily activities in the area. Secondary data were obtained from the literature review and related institutions such as the village office. Secondary data was also obtained from institutions outside the village, especially those regarding the climate, land, and type of farming commodity. Besides that, secondary data regarding the social condition of the people around the area is also required.

This research utilizes a descriptive qualitative method. The method is strengthened by quantified questionnaire data with the scoring method based on a Likert scale on a valuation range of highly disagree (1), disagree (2), doubtful (3), agree (4), and highly agree (5) [2].

The sample is taken from 2,319 family heads in 14 Citizens Association (CA) was conducted with a simple random sampling method, where the respondent has chosen are family heads. In ensuring the

sample that the sample took in this research can represent the total population, Slovin formulation was utilized to determine questionnaire distribution activity [3].

$$n = \frac{N}{1 + N\alpha^2} \quad (1)$$

Where: n is the size of sample; N is the population size; α is significance rate.

In this research, we acknowledge that N is as much as 2319 family heads, e is predetermined at 10%. Based on that, the sample taken is 95.87 family heads rounded into 96 family heads. The number of samples will be randomly taken from all 14 CA. Every CA will be represented by 6 to 7 respondents. Focus group discussion (FGD) is conducted to capture Cibodas Village public figures' perception as a base to form a facility or activity plannings in the Carik area as an agro-ecotourism area. These public figures consist of the local government, Village-owned business entity, the chairman of Walatra (Wana Lestari Anak Nusantara), and other public figures.

Variables examined in this research are people perception on Carik Injeman area potential description, the meanings and interpretation of agro-ecotourism as an effort to optimize Carik Injeman area from the following perspectives: 1) ecological variable: natural potential inside or around Carik area, 2) social variable: allowing the opening of new job opportunity and the realization of people life expectations.

3. Results and discussion

The Carik Injeman area is an area owned by Cibodas Village with an extent of 20 Ha. The area is located in Cibodas Village, Pasir Jambu Sub-District Bandung Regency is located at an altitude of 1000 to 1200 from sea level. Carik area is bordered by Transportation Department Character Building Center on the northern part, pine forest on the eastern part, RW 12 settlement on the southern part, and pine forest managed by Perhutani on the western part.

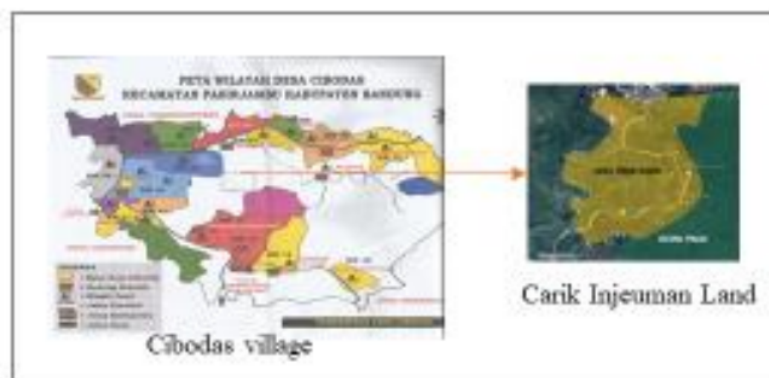


Figure 1. Carik Injeman area location.

Carik Injeman area potential is shown by the application of an integrated agriculture system consists of cow farming, various vegetable plantation, animal feed silages, and also compost and biogas processing using cow dung as material. An environmentally-friendly agricultural system seen from an ecologic perspective is an activity that focused on natural resource and biodiversity preservations effort, which supported by various types of activities that produce numbers of positive impacts on the ecosystem [4]. Combining cattle and farming activities in a single area requires complex management to ensure that both sectors can be balanced and benefit each other.

The cultivation of 110 types of forest trees such as *Aganthis alba* Foxw. (Resin tree) *Altingia excelsa* Noronha (Rasamala tree), *Antocephalus macrophyllus* (Red Jabon tree), can be transformed into an arboretum. The cultivation of these trees was initiated in 2012 to conserve the land because, at that moment, Carik area is undeveloped and covered with shrubs. The comfortable temperature condition between 17°C and 24°C with a humidity level of 70 to 78% made it ideal for this area to be transformed into agro-ecotourism. An interesting view around the Carik area (Figure 2) is formed by the existence of pine forest and rice fields. The Area is located in Bandung- Ciwidey tourism lane. Natural resources and the environment around the Carik area are potential as tourism object. Because of that, an effort to preserve natural sustainability and beauty of this area is highly required to ensure a sustainable agro-tourism formation. Agro-tourism can be judged based on attraction condition and the existence of agriculture area, natural scenery, tourism resource availability, and access condition [5].

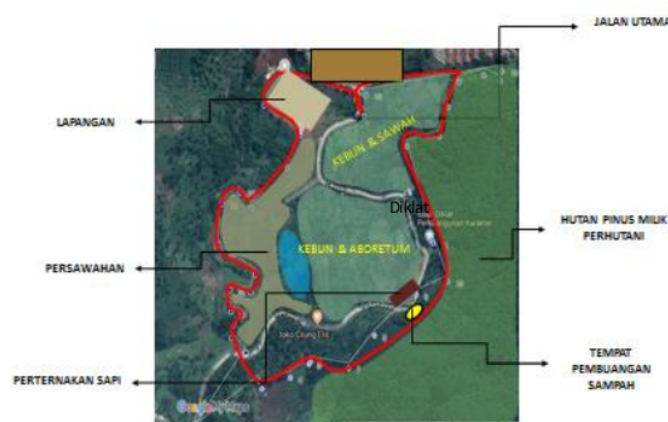


Figure 2. The existing condition of Carik Injeman area.

Farmers and cow breeder dominate the people in Cibodas Village. Nowadays, most of them are panting various types of vegetables such as chayote, broccoli, chilly, and mustard greens, either as landowners or workers. Cibodas Village is one of the areas with the highest milk production in Pasir Jambu Sub-District. The high unemployment level of 70% pushes the village head and his officials to optimize the Carik area as a natural tourism location. Integrated agriculture is a farming system that integrates agriculture sub-sectors (plants, cattle, and fish) to improve land resource productivity, farmers' independency, and prosperity.

Based on the questionnaire analysis result, we acknowledged that out of 96 samples, 72% of them are already aware of agro-ecotourism, and 78.9% agree that Carik Injeman should be optimized agro-ecotourism area. 92.4% of the respondents agree that the main system implemented in this agro-ecotourism is an integrated agricultural system. Integrated agriculture can improve the farmers' earnings and health level by utilizing horticulture plants and animal farms [6]. 84% agree that integrated agricultural system management and development implemented in the Carik area should be handed over to the community. 74.2% agree that products produce by the agro-ecotourism activity should be marketed in the Carik area by building kiosks. 71.6% agree that the type of trees planted in agro-ecotourism will follow tree collection examples according to their functions. 87.2% agree that animals developed in agro-ecotourism animal farms consist of cows and other types of cattle that would support an integrated farming system.

Table 2. Questionnaire recapitulation data regarding the people perception on Carik Injeman area optimization.

Agro-ecotourism		Indicator (%)	
Question 1	The people are aware of Agro-ecotourism concept	People opinion on Agro-ecotourism	72
		People opinion on village plan to develop Carik area as agro-ecotourism area	78
		People opinion on Agro-ecotourism which is generally an activity to expand knowledge	92.4
Question 2	Integrated agricultural system in Agro-ecotourism	People opinion on integrated agricultural system as characteristic of agro-ecotourism	78
		People opinion on an issue that the farms in agro-ecotourism area should be managed and developed by the people of Cibodas Village, Pasir Jambu Sub-District.	84
Question 3	Distribution of Agro-ecotourism products in the village	People opinion on Agro-ecotourism products distribution in Cibodas Village, Pasir Jambu Sub-District, Bandung Regency.	72.4
		People opinion on plantation development in Carik area as a product of agro-ecotourism	71.6
		People opinion on animal farms included in agro-ecotourism is dairy farm which will be developed into other type of animal farms.	87.2
Average percentage		80.58%	

The people concern the disappearance of natural resources, the lack of skills in the management activity, and the lack of sense of belonging from the society are the challenges for the sustainability of agro-ecotourism [7]. The result of questionnaire, focus group discussion, and interview analyses are as follows:

Table 3. Comparison of questionnaire, focus group discussion, and interview results.

Questionnaire analysis result	FGD analysis result	Public figure interview result
The average index values that show the people's perception of agro-ecotourism, landscape element, and landscape support elements existing in the Carik area that would support Agro-ecotourism as tourism area and every available activity are at 80,58%. It means that the people are "HIGHLY AGREE."	We can conclude that based on the focus group discussion (FGD) result, the Carik Injeman area that will be allocated as an agro-ecotourism area in Cibodas Village has the potential to be developed into tourism area. Agro-ecotourism area will be divided into agribusiness, recreational agro-tourism, and education /training areas.	Based on an interview conducted in January 2020 with Mr. Dadang as representative of the farmer community, the people of Cibodas Village highly agreed with the development of the Carik area into agro-ecotourism. The people hope that with the development of Agro-ecotourism in the Carik area, new job opportunities, increased revenue, and life prosperity will be improved significantly.

Based on the three analyses above, we can conclude that both the people and the public figures agree with the idea of agro-ecotourism development in Carik area. People expect that with the soon-to-be-developed agro-ecotourism in the area will realize the people's expectation to provide agribusiness, recreational agro-tourism, and education/training. To improve dried land agro-ecosystem productivity and farming revenue, conventional agricultural pattern (monocultural) should be transformed into an integrated agriculture system by integrating crops, vegetables and green plantation, animal feed, and cow farming according to the area's existing potential [8].

4. Conclusion

The Carik Injeman area possesses potentials to be developed into the agro-ecotourism area with farming, cattle, and vegetable plantation management as an integrated agricultural system. Both the people and public figures agree to build an agro-ecotourism facility in the Carik Injeman area. The people hope that agro-ecotourism planning will include the people's demand for agribusiness, recreational agro-tourism, and education and training facilities. Besides, other attractions will be added as supports for tourism activity. The plan to build agro-ecotourism in Carik area is hoped to be able to provide new job opportunities, increase revenue level, and improve the prosperity of the people in Cibodas Village.

References

- [1] Ismayanti 2010 *Introduction to Tourism* (Jakarta: PT. Gramedia Widiasarana Indonesia)
- [2] Imaculata F 2017 Development of sustainable agriculture based agriculture in the Maurole sub-district *Agrica* **10**(2) 62-74
- [3] Sugiyono 2012 *Qualitative Quantitative Research Methods and R&D* (Bandung: Alfabeta)
- [4] Aryanto A T and Effendi I 2015 Design of integrated crop-livestock and crop-fish integrated models in telo technology village, Riau *Jurnal Agronomi Indonesia (Indonesian Journal of Agronomy)* **43**(2) 168-78
- [5] Mulyani, Athaillah M, Asmuri A and Chatimatun N 2019 Community perception of agroecotourism for preservation of jaro reservoir function *Rawa Sains* **6**(2) 453-463
- [6] Siswati L and D Rini 2014 Farmers' Welfare Integrated Horticultural Crops and Livestock Patterns **XVII**(1) 10-14
- [7] Sebele L S 2010 Community-based tourism ventures, benefits and challenges: Khama Rhino Sanctuary Trust, Central District, Botswana *Tourism Management* **31**(1) 136-146
- [8] Matheus R, Noldin A B, Basri, Salli M K and Jahemat A 2017 Implementation of the integrate farming system as an effort to increase land productivity in the West Timor Region *1st National Seminar of Politeknik Pertanian Negeri Kupang*

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