



## Assistance in Planning Wirogunan Village Land Assets as a Progressive Village Tourism Destination in Sukoharjo Regency

Kuswaji Dwi Priyono<sup>1\*</sup>, Wisnu Setiawan<sup>2</sup>, Dewi Novita Sari<sup>1</sup>

Department of Geography, Universitas Muhammadiyah Surakarta, Indonesia<sup>1</sup>

Department of Architecture, Universitas Muhammadiyah Surakarta, Indonesia<sup>1</sup>

Corresponding Email\* : [kdp130@ums.ac.id](mailto:kdp130@ums.ac.id)

### Article Info:

Submitted: 30 March 2024

Revised: 15 April 2024

Accepted: 25 April 2024

Publisher: 30 April 2024

**Keywords:** village assets;  
tourism destination;  
masterplan; Wirogunan; Web.

### Abstract

The assets of Wirogunan village in Kartasura District in the form of 5 plots of land covering an area of 3.5 ha have not been utilized optimally, so it looks dirty with the growth of weeds and strewn with unmanaged rubbish. The Community service Team at Muhammadiyah University of Surakarta has agreed with BUMDes Wirogunan Village officials on the importance of planning the use of the village's assets with the main aim of being a Village Tourism Destination based on a study of the toponymy of the origin of the name Wirogunan. The potential and development plans are divided into 5 main areas (clusters), consisting of: cluster 1 (village government center area, meeting hall, culinary market and sports), cluster 2 (area of the historical grave of the Duke of Wiroguno and his spring), cluster 3 (fruit garden, waste management and sports), cluster 4 (new Kartasura terminal supporting interconnection of tourist destinations), and cluster 5 (main road to the cemetery and interconnection terminal for tourist destinations). Assistance is provided regarding the potential for developing Web-based tourist destinations and their supporters and waste management as a requirement for Green Tourism. The results of assisting village officials understand the importance of a master plan for village tourism destinations connected to the Village Web and village waste management towards a Progressive Tourism Village.

## 1. Introduction

The community service activity is motivated by a letter of request from the Head of Wirogunan Village to LPMPP (Institute for Community Service and Development of the Association) Muhammadiyah Surakarta University with Letter Number 140/75/XI/2023 dated November 7, 2023. The collaboration of the Faculty of Geography and Architectural Engineering Lecturer Team is ready to carry out a community service program in assisting Village-Owned Enterprise (BUMDes) Wirogunan Village, Kartasura District, Sukoharjo Regency in modern Village Asset management in the Green Tourism Destination interconnection. The last 1 year BUMDes has been losing business because the business unit

is limited to providing groceries and photocopies, while there are village assets that are "stalled" or poorly maintained. There are 5 village assets spread 1-2 km apart covering an area of 3.5 ha with an asset value of IDR 3,255,000,000.00 that have the potential to become tourist destinations. The choice is based on the distinctiveness of the village name in toponymy studies, that Wirogunan Village is related to the tomb of Senopati Kraton Kartasura in the past before it was separated into the Kingdom of Surakarta Sunanate and Yogyakarta Sultanate named Tumenggung Senopati Wiroguno (Setiawan, W., & Amar, 2021). The tomb is adjacent to the Sendang (Lake) area which has a unique and religious value that can be used as an icon of the Wirogunan Village Green Tourism Destination (Sholihah, A. B., et al., 2019). Furthermore, other village assets can support tourist destinations branded as interconnected Wirogunan green tourism destinations.

The distance of the location from the Kartasura District Government Center is 2 km, from the center of Solo City is 15 km, and from the Sukoharjo Regency Government is 30 km, as well as 1 km from the Kartasura toll road connecting Semarang-Solo-Yogyakarta-Surabaya. The consequence of this choice as a Tourism Destination is the importance of recreating a tourist destination master plan and strengthening BUMDes in tourism businesses and marketing applications for tourist objects through online applications, as well as strengthening young people/youth and mothers in the introduction of local product packaging through strengthening MSMEs and waste management which is the feasibility of a green tourism village (Hidayati, R., & Setiawan, W., 2020). This green tourism alternative has the potential to relieve the fatigue of traveling far from the west of Jakarta, Semarang, Bandung, and from the east of Surabaya and Malang before entering Solo. Figure 1 below shows the strategic location of Wirugunan Village on the Solo-Semarang road.

The purpose of the community service program is to accelerate the utilization of the land assets of Wirugunan Village and capture opportunities as an exit route for the Yogyakarta-Surakarta-Semarang-Surabaya toll road as well as to achieve Key Performance Indicators (KPI) 2, 3 and 5. KPI 2 is related to students getting off-campus experience and recognition, KPI 3 is related to lecturers doing off-campus activities, and KPI 5 is that the work of lecturers in regional planning can be used by the community.

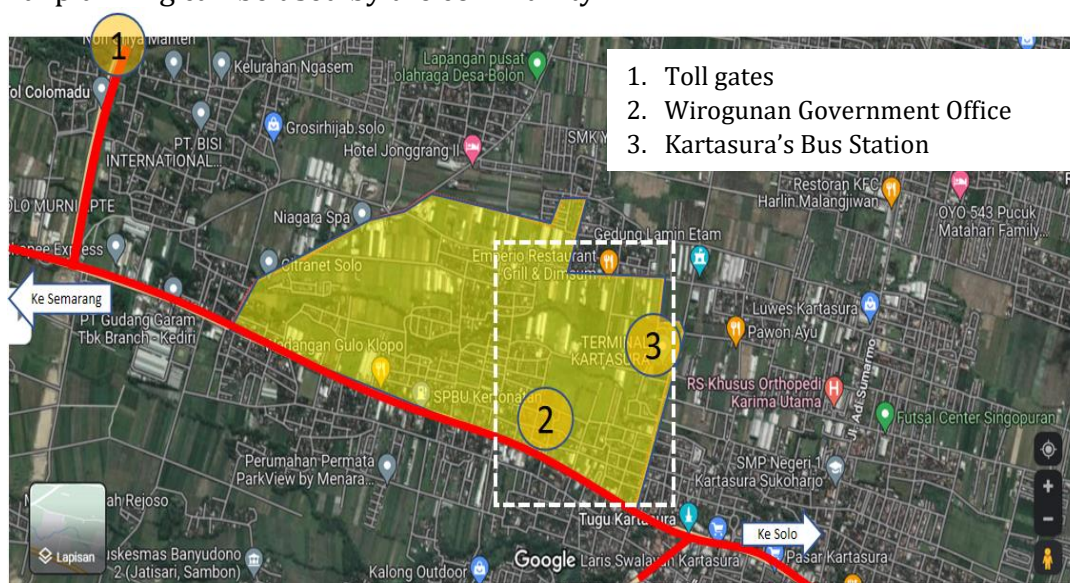


Figure 1. Wirogunan Village's strategic location on the Solo-Semarang road network.

Furthermore, the community service implementation Team has agreed with Partners to create a map the potential distribution of village assets, that there are assets that have been utilized and assets that have not been optimal in their utilization and even stalled. The distinctiveness of Wirogunan village is based on a geographical toponymic study, the name of which is taken from the word *wiro* or *wira* means officer or knight, while *guno* or *guna* means useful or beneficial. Thus, Wirogunan can be interpreted as a useful officer or knight. The origin of Wirogunan's naming comes from the story of Wiroguno, one of the Senopati of Kartasura Palace. According to Babad Giyanti, Prince Wiroguno was a confidant of Sunan Pakubuwono II, Wiroguno was given an area as a residence in the west of the Kartasura Palace. After the Giyanti agreement, Prince Wiroguno joined Prince Mangkubumi or Sultan Hamengkubuwono I to establish the Yogyakarta Sultanate Palace. Prince Wiroguno's residence in the west of the Kartasura Palace was then called Wirogunan with its memorial in the form of his residence which became the Wirogunan Tomb and *Sendang Wirogunan* is very interesting to be promoted as an Integrated Destination Area. An overview of the potential and activity plan is shown in Figure 2 below.

## Potensi dan Rencana

Potensi dan rencana pengembangan terbagi menjadi 5 Kawasan Utama (Kluster).

### Kluster 1:

Ekisting: kawasan pusat pemerintahan desa, gedung pertemuan, pasar kuliner, dan olahraga.

### Kluster 2:

Ekisting: Kawasan makam bersejarah Adipati Wiroguno dan sendang.

### Kluster 3:

Ekisting: Kawasan Taman Buah, pengelolaan sampah, dan olahraga.

### Kluster 4:

Ekisting: Terminal Baru Kartasura pendukung Interkoneksi Destinasi Wisata.

### Kluster 5:

Ekisting: jalan utama Kawasan menuju makam dan terminal interkoneksi destinasi wisata.



Figure 2. Potential and Plan of the Main Area of Interconnection of Tourism Destinations.

It is expected that after the village has a distinctive identity, the next important step is to promote the uniqueness of the village through social media. Promotion in general is an effort to increase the attractiveness of products to potential consumers. Village promotion is an important BUMDes activity so that the uniqueness of the village can be recognized by the wider community (Maulana, M. A., & Sari, D. N, 2023). Currently, village promotion can be more massive with the utilization of information technology such as websites (Sari, D. N et al, 2024).

The use of YouTube media argues that this media is widely used because it is more interactive for its users. Similar to the website, promotion using YouTube can be done at any time without being limited by time and space (Hidayati, R., & Setiawan, W, 2020). In addition to shaping people's perceptions, village branding activities can also build people's confidence as villagers, which in turn will increase people's love for their village. The view of the village



that seems shabby as shown in Figure 3 below will become a very attractive view for potential investors in the tourism sector after being conveyed online as a result of this Community service, ultimately attracting tourists later.

Many further benefits are obtained if Wirogunan Village through the Community service program has succeeded in branding, such as the ease of promotion that will increase the attractiveness of a village, so that it has a place in the hearts of the outside community, especially in the current era of advances in information and communication technology (Maulana, M. A., & Sari, D. N, 2023). In the end, branding and promotion can also be useful for building a positive image of the village in the successful development of Wirogunan Village. Branding and promotion will be carried out by strengthening BUMDes in tourism promotion activities and related businesses online, as well as assisting community activities (teenagers, young people, and mothers). The main problem of the absence of a master plan for the utilization of village assets has been carried out by the team by making the master plan and has discussed the importance of submitting it online on the village web. Additional problems are related to the mutual understanding of all village stakeholders, especially Partners (BUMDes, PKK driving mothers, and young people of Wirogunan Village in readiness to welcome the development of Wirogunan Green Tourism Village, Kartasura towards *Sukoharjo Berkemajuan*.

## 2. Methods of Implementation

The toponymy study conducted by the Head of the Community Service Team initiated the basic idea for this Community Service activity in Wirogunan Village. Toponymy refers to the naming of places that include geographical elements such as mountains, rivers, villages, and cities (Marine and Fisheries Research Agency, 2003). According to the study by the Yogyakarta Archaeological Center (2019), the distribution of toponymy in dukuhs and the relics of the Kasunan Kartasura consists of 45 places divided into two groups: those within the Baluwarti Kartasura Fort and those outside the Baluwarti Kartasura Fort. The group within the Baluwarti Kartasura Fort includes 18 toponyms such as Keraton, Setinggil, Masjid, Alun-Alun Kidul, Kandangmacan, Sayuran, Bale Kambang, Sanggrahan, Gedung Obat, Pasar, Keputren, Pagelaran, Alun-alun, Palembangtok, Sri Penganti, Manggisan, Krapyak, and Bakalan. The group outside the Baluwarti Kartasura Fort consists of 27 toponyms such as Ngabean, Indronatan, Wirogunan, Mangkubumen, Ngadijayan, Gandekan, Wirodigdan, Rojomenggalan, Kalitan, Kunden, Gowongan, Gerjen, Tisanan, Sayangan, Notosuman, Mangkuyudan, Bleteran, Kranggan, Singopuran, Purbayan, Rejoniten, Sraten, Kertonatan, Bakalan, Pandeyan, Kemas, and Gebyok. The study of dukuh toponymy is interesting to popularize to the public because it encompasses national identity, preserves language or cultural vitality, controls language erosion, and serves as a guardian of national history and spatial identity, as well as a cultural space differentiator (Mulyana, 2020) (Hidayati, R., & Setiawan, W., 2020). According to UNESCO (2009), to develop tourism activities in tourist destinations, certain components must be present: tourist attractions and appeal, transportation and infrastructure, accommodation (lodging), food and beverage services, and other supporting services (travel agencies, sale of souvenirs from village MSMEs, information, guide services, internet facilities, etc.) (Nabila, U.A., & Priyono, K.D., 2022). Interconnection within the tourism area needs to be developed to facilitate tourists in reaching various destinations. Furthermore, the airport should be integrated with other

intermodal transportation to make it easier to reach various tourist areas within the tourism region (Sukmasari, P. G., & Sari, D. N., 2024).

The partners collaborating on this Community Service program are BUMDes Wirogunan, Kartasura, Sukoharjo, ensuring that the management of this integrated area will be conducted professionally. The substance of this Community Service activity includes interconnecting green tourism destinations that combine religious/cultural tourism, sports, village markets, integrated terminals, and green environments with waste management, aiming to establish Green Tourism Destinations towards an Advanced Sukoharjo by 2025. To ensure the legal continuity of the collaboration between the two parties, BUMDes Wirogunan, which is legally established, has agreed with the Community Service Team-UMS to carry out joint activities until 2025, as outlined in the BUMDes Profile. The illustration of development as the implementation stages can be seen in Figure 3 below.



Figure 3. Illustration of the Integrated Tourism Destination Development of Wirogunan Village.

The implementation of this Community Service program includes the creation of a master plan for 5 clusters as illustrated in Figure 3, with the following details:

- Cluster 1** : Assembly and development of the central sports area with supporting commercial facilities, and the design of the area gate with a water tower icon.
- Cluster 2** : Strengthening the toponymy of Wirogunan based on historical context and developing the spring as a tourist attraction, as well as enhancing local industry MSMEs.
- Cluster 3** : Development of the TPS3R waste management area, landscaping, and football sports facilities.
- Cluster 4** : Revitalization of the terminal with a mixed-use and integrated approach.
- Cluster 5** : Development of pedestrian areas and village identity through the design of an integrated tourism area gate (interconnected tourist destinations). Since each cluster has different methods, the following sections will explain the implementation methods for each cluster.

### **2.1 Planning for sports center areas with supporting commercial areas**

The initial phase of this project, involving design, aims to produce the Master Plan and Working Drawings documents. This phase encompasses site surveys, existing condition mapping, conceptualization, design development, discussions, consultations, and finalization of planning documents. Professional architects will assist in ensuring compliance with Indonesian regulations, specifically the Architect Law (2017) and the Government Regulation on Architects (2021). The university faculty and students are responsible for developing the master plan, while the BUMDes partners provide the site. Furthermore, commercial aspects are supported through MSME training focused on local food product manufacturing and packaging.

### **2.2 Wirogunan's toponymy is based on history and the development of spring as a tourist attraction**

According to the Kedaireka guidelines, the funding for the Community Service program activities focuses on procurement of production goods rather than buildings, land, and vehicles. Therefore, the activities are limited to the procurement of landscape (gardens) as production goods, while building procurement will be carried out by the BUMDes Wiragunan partner in the following years. Continuing from the first phase, the second phase involves the assembly of the designed outputs (specifically for landscaping work) on the existing site. The area of the landscape used is 2 hectares, out of a total development area of approximately 11 hectares. This second phase will be supported by UMS and BUMDes, ensuring that the designed landscape is implemented according to the master plan and working drawings.

### **2.3 Development of the TPS3R waste management area, landscape arrangement and football sports**

Unlike the physical nature of the first and second phases, the third phase is non-physical, focusing on training, courses, and mentoring activities. UMS, equipped with experts in IT, waste management, food, nutrition, and environment, will conduct various activities to enhance knowledge and skills among partners. Faculty members and students will also engage in research activities and case study lectures, thereby increasing the application of science and technology (IPTEKS) with practical field-based approaches.

### **2.4 Terminal revitalization with a mixed use and integrated approach**

Revitalization of the terminal with a mixed-use and integrated approach involves UMS providing faculty expertise, supported by students, in creating the master plan. Subsequently, BUMDes partners will promote this master plan through online social media channels, aiming to raise tourism awareness among the community and attract potential tourism business operators (DUDI) for implementation in the following year.

### **2.5 Development of pedestrians and village identity through designing integrated tourist area gates (tourist destination interconnection)**

Development of pedestrian paths and village identity through the design of an integrated tourism area gate (interconnected tourist destinations) is undertaken by faculty members

with the assistance of students in creating the master plan. Subsequently, BUMDes partners will promote this master plan through online social media channels, aiming to attract potential tourism business operators (DUDI) for implementation in the following year. The involvement of students will support the implementation of the 8 (eight) Merdeka Belajar Kampus Merdeka (MBKM) programs in the execution of the project and its expected impacts on beneficiaries (universities, DUDI, communities, and/or government).

### 3. Results and Discussion

Results from this Community Service activity provide an overview that Wirogunan Village covers an area of 5.67 km<sup>2</sup> with a population of 5,161 individuals (comprising 2,573 males and 2,588 females). The population density in Wirogunan is 3,859 people/km<sup>2</sup>, distributed across 2 hamlets with 6 neighborhoods (RW) and 22 blocks (RT) (BPS, 2023) (Nabila, U.A, & Priyono, K.D, 2022). Its boundaries are to the North with Bolon Village, Colomadu District, Karanganyar Regency; to the South with Kertonatan Village, Kartasura District, Sukoharjo Regency; to the West with Ngasem Village, Colomadu District, Karanganyar Regency; and to the East with Singopuran Village, Kartasura District, Sukoharjo Regency. The existing conditions of Wirogunan Village can be seen in Figure 4 below.



Figure 4. Existing Condition of Wirogunan Village, Kartasura District.

Wirogunan Village features a Traditional Market in Kranggan, serving as a crucial economic hub within the community. However, the current market faces infrastructure and architectural challenges such as aged buildings, irregular layout, and minimal facilities (Sholihah, A. B., et al., 2019). These issues impact visitor comfort, business operations within the market, and the historical and cultural value of the market itself. Therefore, a design study led by faculty members assisted by students from the Architecture program at UMS has designated the market as a focus of Community Service to provide appropriate solutions and recommendations for enhancing the quality and sustainability of Kranggan Market (Hidayati, R., & Setiawan, W., 2020).



One of the proposed ideas by the Community Service team in collaboration with partners involves the theme of adaptive reuse, positioning the village market as a form of economic activity at the village level that can positively impact the local community. Common issues observed with village markets include inadequate parking, insufficient cleanliness facilities, and sanitation. Guidance provided addresses the need for pricing information transparency, improving the quality of traditionally sold goods, and anticipating trends in online shopping behaviors. The existing conditions of Kranggan Market can be seen in the following photo (Figure 5a).



Figure 5a. The condition of Kranggan Market is that there is no parking space, no price tags for the goods sold, no cleaning/sanitation facilities, and the water tower is no longer functioning.

Currently, a 15-meter high water tower with a unique design in Wirogunan Village is no longer in use, as it has been replaced by piped water from the municipal water supply (PDAM). The Community Service team proposes an alternative to repurpose the market area into a Green Open Space (Ruang Terbuka Hijau or RTH), with the water tower serving as a landmark within the RTH. The traditional market vendors would transition to a mobile market model utilizing vehicles or pickup trucks, or temporary market stands during the morning hours (Nabila, U.A, & Priyono, K.D, 2022). This change in function aims to attract users and visitors to the area. The idea draws inspiration from a similar water tower landmark in Lamongan City, East Java, as depicted in Figure 5b below.



Figure 5b. The proposed changes relate to green open spaces, parks, mobile traders.

The branding of Wirogunan Village as a tourist destination is based on its toponymy, originating from the history of the tomb of Prince Wiroguna (Raden Mas Soebardjo), who was one of the military commanders of Keraton Kartasura and a trusted figure of Sunan Pakubuwono II. He was granted an area to reside west of Keraton Kartasura (now Wirogunan Village) after the Giyanti Agreement on February 13, 1755. Subsequently, Prince Wiroguna joined Prince Mangkubumi (Sultan Hamengkubuwono I) in establishing the Kasultanan Yogyakarta Palace. Prince Wiroguno passed away on October 6, 1863, and was buried near his residence. The tomb covers an area of 3,970 m<sup>2</sup>, while the spring (sendang) covers 1,039 m<sup>2</sup>, located on Jl. Kuncen, Wirogunan Hamlet. The land where Prince Wiroguna's former



residence stood is now owned by local residents, with no remaining inscriptions or artifacts other than the tomb. Currently, there is no designated parking area, forcing visitors to park along the roadside. Moreover, there is no specific footpath surrounding the tomb, and the sendang area is only accessible from its eastern side. Figure 8 provides an understanding of the current condition of the tomb and sendang area. The picture of the creation of the UMS Community Service Team regarding the development of the grave and spring area is as shown in Figure 5c.



Figure 5c. The concept of creation of Wiroguno spring's grave.

Bus Terminal Kartasura is a transportation hub located in Dukuh Argosuko, Wirogunan, Kartasura. Positioned along the Solo-Semarang-Jogja transit corridor, Kartasura's strategic location makes it a major convergence point for buses from various regions, attracting dozens of buses daily (Nabila, U.A, & Priyono, K.D, 2022). Currently, the terminal's infrastructure lacks organization as reported by users including visitors, drivers, and operators. Issues include the absence of stationed personnel, ineffective roof design for heat reduction during daytime, and significant structural damages.

Bus Terminal Kartasura holds potential for multifaceted development. Key potentials include: (1) Tourism Potential: serving as a gateway to nearby tourist attractions such as Prambanan Temple, Borobudur Temple, Taman Sari, Taman Kyai Langgeng, among others;

(2) Economic Potential: becoming a commercial hub with shopping centers, markets, and stores offering various daily necessities; (3) Educational Potential: proximity to universities like Universitas Sebelas Maret (UNS) and Universitas Muhammadiyah Surakarta (UMS), attracting students from diverse regions; (4) Healthcare Potential: nearby hospitals such as RSUD dr. Moewardi and RS Muhammadiyah providing healthcare services to the surrounding community; and (5) Transportation Potential: enhancing transport services with increased fleet and adequate facilities.

The current condition of the neglected atmosphere at Bus Terminal Kartasura. The UMS Community Service Team proposes several enhancements, including the installation of gates at each entry and exit point of the terminal to serve as identifiers and guideposts within the terminal area. This recommendation aims to address the terminal's somewhat secluded location from the main road, ensuring clarity for visitors. Additionally, the proposal includes designated parking areas for drop-off and pick-up, addressing the current issue of haphazardly parked vehicles along bus arrival and departure lanes. The terminal layout is further detailed with the delineation of four passenger transfer zones: (1) ticketed passenger zone, (2) non-ticketed or mixed zone, (3) passenger transfer zone, and (4) vehicle parking zone. The layout scheme is illustrated in Figure 5d.

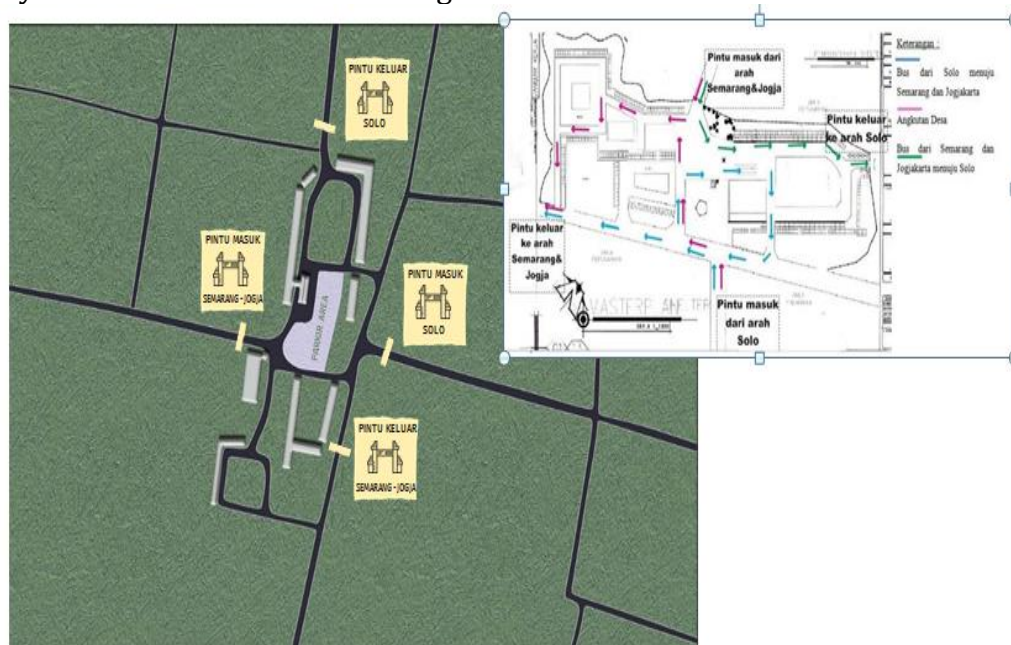


Figure 5d. Inter-City Bus Circulation and Kartasura Terminal Site-plan.

The design concept recommended for the bus terminal, in response to Kartasura's own potential and adopting the concept of adaptive reuse, involves establishing a culinary center as a focal point of Kartasura. This initiative aims to utilize local Micro, Small, and Medium Enterprises (MSMEs) to boost the economic growth of the surrounding community. Additionally, the design proposes leveraging the nearby market as a source for raw materials to support the planned culinary center. As part of this effort, the Community Service Team conducts training sessions on packaging various potential MSME products, involving local housewives and youth organizations in Wirogunan Village.

The rationale for selecting a culinary center stems from its popularity across all age groups and its potential to attract visitors. Moreover, its easy accessibility enhances its



viability within the Kartasura bus terminal development plan. The terminal design concept is illustrated in Figure 5e below. This formulation adheres to a scientific and grammatically correct structure suitable for academic or professional contexts, ensuring clarity and precision in presenting the recommended design concept for the Kartasura bus terminal.



Figure 5e. An idea of the atmosphere of the future Kartasura terminal.

#### 4. Conclusion

Utilizing village assets consisting of 5 land areas that have not been optimally used (neglected) to create interconnected (integrated) green tourism destinations. The main icon is the Religious Tourism (Adipati Wiroguno's Tomb with its pond), connected with Sports Tourism (tennis courts, football field, badminton), Agricultural and Bird Watching Tourism, Artificial Tourism with a shopping center marketing village MSME products, and Green Waste Management Tourism. The master plan proposed by the Community Service Team of Universitas Muhammadiyah Surakarta includes support for uploading on social media applications featuring the Green Tourism Destination Profile of Wirogunan, which will attract business actors (DUDI). Businesses in the fields of Tourism, Sports Services, and Shopping Centers. Transparent profit-sharing management with business actors, with reporting controlled and accessible to all community elements through a Village Cooperative system in the management of BUM-Desa towards an Advanced Sukoharjo.

#### 5. Acknowledgements

The community service team expresses its gratitude to the Rector of UMS, represented by the Head of LPMPP-UMS, for providing the funding for this activity. The authors would also like to extend their thanks to the partners of BUM-Desa Wirogunan and all the student team members who have collaborated to ensure the smooth implementation of this community service. We hope that this community service activity can continue in future endeavors for the development of the Green Tourism Village.

#### 6. References

- Badan Riset Kelautan dan Perikanan (BRKP), 2003, Buku Panduan Survei Toponimi PulauPulau di Indonesi, Jakarta
- Hidayati, R., & Setiawan, W. (2020). The architectural transformation of historic mosques in Javanese rural settlements. *IOP Conference Series. Earth and Environmental Science*, 447(1), 012043. doi:10.1088/1755-1315/447/1/012043
- Maulana, M. A., & Sari, D. N. (2023). Analisis Dampak Pembangunan Gerbang Tol Salatiga terhadap Kondisi Sosial Ekonomi Masyarakat Kelurahan Tingkir Tengah,



- Kecamatan Tingkir, Kota Salatiga (Doctoral dissertation, Universitas Muhammadiyah Surakarta).
- Nabila, U.A, & Priyono, K.D. (2022). "Pengembangan Desa Wisata Sumbur Suma Pemenang Barat Kabupaten Lombok Utara Oleh Mahasiswa KKN Muhammadiyah Aisiyah." *Abdi Geomedisains* 3(1):42–49.
- Priyono, K.D, Danardono, Ambarwati, & Kun Harisma. (2022). "Edukasi Budidaya Tanaman Jamu Bagi Siswa SMPN 3 Tawang Sari , Kabupaten Sukoharjo Dalam Upaya Mendukung Kemandirian Bahan Baku Jamu." *Abdi Geomedisains* 3(1):66–76.
- Sari, D. N., Utomo, T. C., & Doriski, M. (2024). Utilization of Geographic Information System Based on Unmanned Aerial Vehicle (UAV) for Detailed Mapping of Sriwedari Cultural Heritage Complex in Surakarta City. *International Journal of Remote Sensing and Earth Sciences (IJReSES)*, 21(1), 28-36.
- Setiawan, W., & Amar. (2021). Spatial perception towards social conflicts and the built environment in Indonesia. *International Review for Spatial Planning and Sustainable Development*, 9(2), 134–150. doi:10.14246/irspsdc.9.2\_134
- Sholihah, A. B., Agustiananda, P. A., Junanah, J., & Setiawan, W. (2019). Traditional architecture: The role of traditional festival in Islamic historic district to achieve local community wellbeing. *Journal of Design and Built Environment*, 19(3), 13–23. doi:10.22452/jdbe.vol19no3.2
- Sukmasari, P. G., & Sari, D. N. (2024). Analisis Kesesuaian Penggunaan Lahan Terhadap Rencana Pola Ruang Tahun 2023-2043 di Kawasan Perkotaan Jatynom Kabupaten Klaten (Doctoral dissertation, Universitas Muhammadiyah Surakarta).