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PLACE-MAKING APPROACH IN TRANSFORMING COMMUNITY GARDENS INTO TOURIST ATTRACTIONS IN GUWOSARI, BANTUL, YOGYAKARTA

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Abstract:

Urban farming in community gardens has been increasingly recognized as spaces that support various activities, from environmental sustainability, community resilience, to food security. Now, these spaces have gotten more attention due to their potential as tourist destinations, providing chances for cultural, educational, and experiential tourism activities. This study examines the potential of the community garden in Guwosari, especially Iroyudan, Bantul, as a tourist attraction using the role of space in sustainable tourism, place-making, and tourism geography. The possibility of a community garden as a tourist attraction is assessed using a qualitative approach to highlight the role of placemaking and particularly explores the key factors for integrating agritourism within urban tourism frameworks. Findings indicate that Iroyudan Community Garden offers rich experiential tourism opportunities, including educational farm tours, farm-to-table experiences, direct agricultural workshops, and cultural heritage integration. However, challenges such as infrastructure limitations, community readiness, and policy support must be addressed to ensure sustainable development.

Keywords: Agritourism, Community Garden, Placemaking, Sustainable Tourism, Urban Farming

INTRODUCTION

A key component of place-making strategy, which includes community gardens, is turning a space into a place (Akbar & Edelenbos, 2021; Cumbers et al., 2018; Wesener et al., 2020). A place that is initially unattractive as a place of activity turns into one that people want to visit and engage in. A location that was formerly only a physical object becomes a social object (Akbar & Edelenbos, 2021; Friedmann, 2010). As a result, when it comes to community gardens, the garden, which was just a piece of land, becomes a place for social interaction, creating connections, collaborative work, and learning experiences. It means the community garden is not only a physical space for agricultural plantation activities, but also a social and cultural space. Participation is more likely when there are more activities taking place, which indicates that the community garden will play a significant role in social interactions and learning opportunities (Datta, 2016; Ghallab, 2024; Ohmer et al., 2009; Rogge et al., 2018, 2020).

Regarding the idea of a sense of place, another question arises, which is how space transformation attracts people to come voluntarily. To make the community garden the third space for the community after home and work or school, a physical and non-physical strategy is needed (Dolley, 2020; Kanosvamaha, 2024). For instance, creating a welcoming environment for



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conversation and learning in an open space, such as a community garden. The five senses - smell, hearing, taste, touch, and sight - as well as physical spaces and activities can be used to foster this sense of connectedness (Asmal & Latief, 2023; Jennings & Bamkole, 2019; Sakhaeifar & Ghoddusifar, 2016; Ujang et al., 2018; Wray et al., 2020). Furthermore, there are opportunities for interaction, the exchange of knowledge, or the creation of safe spaces for every community group (Datta, 2016; Ohmer et al., 2009).

Practically, community gardens already serve as an example of place-making, where people interact with one another and feel a sense of belonging. This might be because of the process of community garden formation, which involves the movement of social interaction and learning from one location to another (Datta, 2016; Gray et al., 2022; Kusumanagari & Ellisa, 2021; Ramos et al., 2019). There has not been much research, though, that also examines community gardens from a place-making approach to enhance elements of tourist attractions that the community may plan. This study identified how community gardens, which may have been created for internal communities, can be expanded to serve a wider audience, such as becoming a tourist destination, by using the place-making framework.

Urban farming is an agricultural practice used by the local community to produce and grow crops in urban areas, and it has transformed from a necessity to a strategy for food security, environmental sustainability, and community wellbeing (Heriwibowo & Budiana, 2015; Nasruddin et al., 2022; Teoh et al., 2024; Wulandari et al., 2021). To address the availability of urban land, create jobs, and tackle poverty, it applies a variety of techniques, such as rooftop farms and community gardens. Urban farming is becoming increasingly popular in cities across the world as a way of addressing climate change, boosting local economies, and repurposing unused space. In practice, the product can be distributed or consumed locally in the neighborhood. Yogyakarta itself has a long history of community farming for food security, even though this practice has recently become a local system for food security and a tourism trend. Nowadays, a program called Lumbung Mataraman (Mataraman Barn) has grown significantly to support community food security through the practice of community farming. Lumbung Mataraman was managed using the Crop Livestock System (CLS), a combination of livestock farming in multiple locations (Mukhlis et al., 2018; Wicaksono, 2023; Widadie & Agustono, 2015). It implies that Lumbung Mataraman's network members can collaborate to meet their needs for agricultural supply and demand. The location for this practice is Guwosari's Lumbung Mataraman Banjaran. This barn is an example of a community garden practice that has been transformed into a tourist destination.

According to Priasukmana & Mulyadin (2001), a tourist village must have: (a) good accessibility; (b) nature, art, and local food attractions; (c) community support, security, and amenities. In Iroyudan, the current tourist attraction, aside from the heritage trail object related to the history of the Mataram Kingdom, it has a culinary spot that provides locally based food. With this beginning, the development of tourism in this village can be diversified with the development of new tourist attractions. Tourist attractions are defined by (Ćorluka et al., 2021) as the tourist activities that are always available and have a physical form that tourists can visit, such as parks, historic buildings, and others. The development of tourism can be achieved by increasing the number of tourist activities, enhancing the quality of the products, and enlarging the area accessible to visitors.

In Iroyudan, the community asset that could be transformed into a tourist attraction is its community garden. Currently, the community garden has been managed by the community as an initial phase of a strategic approach to food security. Interested women farmer groups rent and



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manage the village’s land for community-based food crop farming. It is necessary to comprehend the current state of the community garden’s governance to understand the transformation process. For example, how the community garden might change from being a physical location to a place where social interaction has been fostered. This study aims to identify the place-making principles for these community gardens using the 4A in tourism framework: attraction, accessibility, amenities, and ancillary.

The scope of the discussion will be on the evaluation of 4A components in the tourism framework: Accessibility, Attractions, Amenities, and Ancillary services. It aims to understand the possibility that certain destinations can attract tourists. Since this research focuses on the early stages of tourism development, the 4A components are used instead of the 6A components, which are Attractions, Accessibility, Amenities, Ancillary services, Available packages, and Activities (Arif et al., 2019).

Table 1. Basis of Assessment for the Four Main Components

Components	Descriptions
Attractions	Fish feeding experience, gardening/ farming experience, aquaponic learning experience, farm-to-table experiences, cultural events, and performances
Accessibility	Accessible by public transport, pedestrian facilities, walkable to/from a transport hub, and has disabled facilities.
Amenities	Toilet, rest places, dining places, praying area, first-aid facilities, souvenir shop,
Ancillary	Tourist information center, tour guide, signage, parking zone

METHODS

This research employs a qualitative descriptive approach to explore how the existing community garden as an urban farming practice in Iroyudan, Guwosari, has potentially transformed into a tourism attraction. Data acquired from a combination of primary and secondary data, such as field observations and interviews, and literature review from various documents and reports. The observation is a process that begins with field visits to study sites, followed by systematic, logical, objective, and rational recording of various phenomena in actual or artificial situations (Kristanto, 2018). The field observation was conducted directly at the location and analyzed the place-making indicators (physical and social indicators) using the 4A components in tourism: attraction, accessibility, amenities, and ancillary services, aiming to understand the potential for the transformation into a tourist attraction. For more detailed information, secondary data analysis is also conducted. Data analysis began with a full data review, defining themes, and generating findings. The information was collected and discussed through repeated reading and noting of field observation notes and secondary sources.

This research observed the community garden and its governance in Iroyudan, Guwosari. The village, a peri-urban area near urban Bantul located in Kapanewon Pajangan, has a total area of 830 Ha and a total population of 14,075 people, consisting of 7,062 men, 7,013 women, with a total of 4,813 heads of families in 2023 (Laman Resmi Kalurahan Guwosari, n.d.). It is divided into 15 hamlets and 79 RTs, with the following boundaries: Bangunjiwo (North), Ringinharjo (East), Wijirejo and Sendangsari (South), and Sendangsari (West). The community garden is one of this village’s various assets and resources to support tourism activities. It ranges from agricultural activities, historical and cultural educational tourism with Diponegoro Heritage tourism, culinary and gastrotourism, which has 15 Javanese ingkung styles (traditional chicken stew), craft-based tourism



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with batik textile and coconut craft, to adventure-based tourism such as Bedog riverbank tourism, outbound and camping ground, bike downhill track, etc.

RESULT AND DISCUSSION

Agriculture in Guwosari has traditionally focused on agricultural food production and environmental sustainability. It has started with the food safety program with the establishment of the Food Safety Team. The team was formed in 2023 as part of the Safe Food Village, an intervention managed by the Food Safety Centre (BPPOM) Yogyakarta (BBPOM DI Yogyakarta, 2024). This program began with the establishment of a team and the safe food certification for micro food business owners. Additionally, various empowerment programs involving the community are available, including technical guidance on food safety for the communities. Aside from that, there is a mobile laboratory car for food product testing. Later, the Food Safety Team in communities and schools has been independently supervising the food safety program in the area. Related to the Food Safety Team, some innovations have been carried out (BBPOM DI Yogyakarta, 2024):

- SIGAP PANGAN (Siap Jaga Pangan Aman Guwosari) Innovation aims to educate and socialize programs through creative posters for raising public awareness regarding food safety. The program is implemented by the Food Safety Team with the tagline: Safe foods, Healthy Citizens.
- Pangan CERDAS Innovation tries to increase food safety awareness. The program focuses on the campaigns with integrated education and daily practice in food safety, waste management, and governance based on village information systems that are carried out through pilot studies.
- HARAPAN (Hasil Olahan Organik untuk Pangan yang Aman dan Berkelanjutan) Innovation is a food security-based program for waste management using Green Economy Model approach.).

Attraction. First, an attraction is a component of tourism that is predicated on the distinctiveness of the activities that tourists engage in at a particular place or destination (Anggraeni, n.d.; Ćulić et al., 2021; Ginting et al., 2017; Leiper, 1990). Traditionally, community gardens are viewed as open green spaces and a component of food production. For potentially transformed community gardens, such as in Iroyudan, the place-based attraction strategy in place-making approaches is required. It aims to create areas that are not only bustling with visitors but also are rooted in culture, ecology, and authenticity. Iroyudan Community Garden can offer several activities, including a slow walking tour to enjoy nature, gardening experiences like watering plants, planting, harvesting, fish feeding, and taking pictures with several different garden beds (Fig.1). Most importantly, since the community garden has an aquaponic section, visitors can learn all about aquaponics and how it can support growing plants and fish simultaneously (Fig.2). In addition, guests can take advantage of the farm-to-table experience, where they can savor regional cuisine prepared by the community.



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Source: Author documentation during field visit (2025)

Figure 1. Various Plantations and Garden Beds at the Community Garden of Iroyudan

Since the aquaponic area can assist the community in producing two commodities - fish and plants/vegetables - it has the potential to become the main attraction. Aquaponics is a hybrid of hydroponic farming (soilless plant/vegetable farming) and aquaculture (fish farming). According to Sasro (2019), this system mimics the ecological system found in the natural environment, where fish and plants have a symbiotic mutualism relationship.



Source: Author documentation during field visit (2025)

Figure 2. The Aquaponic pool is one of the main commodities in the Iroyudan Community Garden

After physical activities, such as walking and gardening, visitors can rest and enjoy nature while sitting in the gazebo (Fig.3). The gazebo can be an interesting design point where visitors can enjoy traditional food available and talk to each other, while they can also enjoy the natural view surrounding the community garden. Here, the visitors can enjoy the farm-to-table dishes that are served by the local community. Further, these attractions can expand into cooking experiences, such as experiential tourism. These attractions highlight activities that can be combined with guided walking tours led by the local guides who weave narratives from the local stories, traditional knowledge, and community values.



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Source: Author documentation during field visit (2025)

Figure 3. Pavilion in Iroyudan Community Garden

These various activities will help visitors experience the authenticity and place-identity of the community garden. Attractions in the context of transforming the community garden into a tourist attraction are not merely physical changes to the garden's design but rather a layered place-making strategy combining physical aspects, cultural narratives, and human engagement to introduce a destination experience for visitors.

Accessibility. The second element is accessibility, which is the integration of two destinations through simple connectivity in terms of travel time, comfort, and safety (Anggraeni, n.d.). Physical accessibility can be interpreted as efforts to create pathways, signage, and connectivity to public transportation. At the same time, digital and information accessibility can enhance the storytelling process of the community garden as a tourist destination, for example, social media promotions, online maps, QR interactive tools, or even audio guides. Furthermore, social accessibility relates to the sense of belonging to a place through the presence of gates, welcome signs, or friendly local guides with high hospitality skills, which can be a determining factor for the visitors. These accessibility aspects within the place-making framework aimed at bridging how the local communities can utilize their local assets for tourism activity without causing harm, while still welcoming visitors warmly.

Since Iroyudan, Guwosari is located only 3 kilometers from Bantul City Center and 15 kilometers from Yogyakarta City, it is easily accessible from Yogyakarta. Guwosari village is easily accessible by private vehicle, considering that it is not that far away. However, it should be noted that there are not many direct public transportation options to Iroyudan. To get to Iroyudan, travelers can take the TransJogja to the Yogyakarta Ringroad, then continue with another public transport route, then finish with private or online sharing motor or car services.

In the Iroyudan Community Garden, there are still no proper signs welcoming visitors. Even so, the community garden is suitable for strolling around and inspecting the plants because some of the paths have been paved and cemented (Fig.4). However, these paths must be maintained because the presence of wild grass growing on the paving may compromise the safety and enjoyment of visitors as they stroll through the garden. Moreover, several attractions remain without a proper walking path for the visitors, such as the aquaponics zone in the center of the garden. It becomes very muddy and makes it hard for visitors to walk.



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Source: Author documentation during field visit (2025)

Figure 4. Several walking path conditions in the community garden

Lumbung Mataraman Banjaran, a community garden in the Iroyudan neighborhood, serves as an example of a well-maintained walking path for each section of the garden (**Fig.5**). Since walking is the primary attraction at the location, this factor is crucial for better tourism management. A clean, stable, and secure walking area is essential for a tourist destination, so Iroyudan needs to improve the walking route conditions, as a similar destination has a clear, stable walking route. This development can be implemented with minimal effort. It aligns with the concept of tactical place-making, where technical engineering is implemented through small-scale improvements with limited funding, even incorporating a do-it-yourself approach (Prathama & Idajati, 2024).



Source: Author documentation during field visit (2025)

Figure 5. The Walking route in Lumbung Mataraman Banjaran

Amenities. Like accessibility, the availability of amenities is related to the physical aspects that are beneficial to the local community and visitors. Since Iroyudan is intended to be an agritourism destination, which is the new attraction that includes walking activities to observe the plants in the community garden, field observations have revealed one area that needs improvement: the aquaponic areas. The walking route in this zone is rather muddy due to the poor water drainage system (Fig.6). Aside from that, the wild and tall grass surrounding the pavilion area also includes other issues for this community garden.



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Source: Author documentation during field visit (2025)

Figure 6. Muddy walking route in the aquaponic area

Improving public amenities like the water supply and restrooms is necessary to enhance the visitor experience in Iroyudan. There are restrooms available, but they need to be regularly cleaned because well-maintained public spaces are essential for the comfort of visitors. Additionally, there should be more clean water sources to wash their hands and feet because there is currently only one available. This is important because the area is muddy, so visitors need a way to wash their hands and feet. The muddy area needs to have its water flow improved and a walking route constructed so that visitors can walk around it more comfortably, especially around the aquaponic area.

The tall, untamed grass surrounding the pavilion could negatively impact its visitors' impression, so the pavilion area also needs more frequent maintenance. Since the pavilion serves as a place for visitors to relax and possibly eat, tall grass is not a good option because it can conceal hazards like tiny snakes or insects and is unsightly. Therefore, routine inspections and upkeep are required to ensure the comfort of visitors in the pavilion area.

Furthermore, eating spots and other support facilities must be upgraded. According to field observation, there is no eatery or food court in the area now. When the area is developed and turns into a tourist destination, the local community may be able to supply a food stall or area to enjoy the farm-to-table experiences. However, in Iroyudan, currently, there is a culinary spot which is located near the main road, around 500 m from the community garden, like what Lumbung Mataraman Banjaran, which is a culinary area, is right outside the gate. It is important that visitors can find the food court easily so they can enjoy food and the view of the community garden.

As such, these amenities, as part of place-making strategies, are intended as supporting features to enhance the main attractions, such as experiential tourism, where tourists are encouraged to participate in the activities rather than being passive observers.

Ancillary. The purpose of ancillary services is to guarantee the sustainability of the transformation process of community gardens into tourist attractions (Lee et al., 2025; Tyas et al., 2025). Strategic place-making in this aspect focuses on ensuring that destination operations are carried out and sustained. For example, enhancing the local tourist management in areas like hospitality, guiding, storytelling, or creating SMEs that support the existing transformation process. Aside from that, place-making facilitates cooperative management among various stakeholders, including finance support, technical aid, and promotion that maintain the local identity. It is an attempt to conserve the cultural values from deterioration and to ensure the sustainability of ecological components.



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In Iroyudan, the ancillary component, a tourist information center and tour guides are currently unavailable as ancillary services because the area has not yet established itself as a popular tourist destination. Additionally, there is currently no designated drop-off and pick-up area, nor is there a road sign for the Iroyudan Community Garden. The information that is currently available at the site is a road map that provides visitors with a general roadmap for the community garden, as well as directions for each garden section of the Woman Farmer Group members (Fig.7).



(a) Directions signage for the garden section of the women's farming group members



(b) Zoning Map for the Iroyudan Community Garden

Source: Author documentation during field visit (2025)

Figure 7. Example of Signage and Map in Iroyudan Community Garden

Managerial staff can make the visitor flow more comfortable by adding a signboard with more information and marker directions for each attraction. This way, visitors can follow the direction indicated by the arrow. Concurrently, ensure that each site is visited.

CONCLUSION

By evaluating the Iroyudan Community Garden's potential for development as an agricultural tourism destination, this study aims to determine the area's tourism potential. The four main components of tourist destinations - attractions, amenities, accessibility, and ancillary services - are covered by the conceptual framework that was used. According to analysis and discussion, the Iroyudan Community Garden has much potential to become a unique agricultural tourism destination in Yogyakarta because it has been running for quite some time and has the potential to become the main attraction with its aquaponic system. Since aquaponics are still relatively new in Guwosari and Yogyakarta overall, Iroyudan can provide its aquaponic garden as an educational opportunity for people looking to learn more about the technique. People may want to install an aquaponics system in their home because it offers many advantages, and they can learn how it operates in Iroyudan.

However, improvements are needed in many areas, ranging from attractions and accessibility, including the pedestrian walking path, the pavilion area's grass maintenance, water flow and drainage system management, road signs and signage, and public transportation access. Locals must



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also prepare themselves because they need to enhance their capacity and skills necessary to oversee the community garden and serve as tour guides for guests. Several stakeholders' support is required in this regard.

REFERENCES

- Akbar, P. N. G., & Edelenbos, J. (2021). Positioning place-making as a social process: A systematic literature review. *Cogent Social Sciences*, 7(1), 1905920. <https://doi.org/10.1080/23311886.2021.1905920>
- Anggraeni, Y. (n.d.). Analysis of Tourist Perceptions in Situ Bagendit based on the 6A Tourism Components. *SABA: Journal of Tourism Research*, 2(1), 43–66.
- Arif, Y. M., Nugroho, S. M. S., & Hariadi, M. (2019). Selection of Tourism Destinations Priority using 6AsTD Framework and TOPSIS. *2019 2nd International Seminar on Research of Information Technology and Intelligent Systems, ISRITI 2019*, 346–351. <https://doi.org/10.1109/ISRITI48646.2019.9034671>
- Asmal, I., & Latief, R. (2023). The presence of a family communal space as a form of local wisdom towards community cohesion and resilience in coastal settlements. *Sustainability*, 15(10), 8167.
- BBPOM DI Yogyakarta. (2024). *Profil Desa Pangan Aman Kalurahan Guwosari, Pajangan, Bantul, DIY*.
- Ćorluka, G., Vitezić, V., & Peronja, I. (2021). The temporal dimension of tourist attraction. *Tourism: An International Interdisciplinary Journal*, 69(3), 443–453.
- Ćulić, M., Vujičić, M. D., Kalinić, Č., Dunjić, M., Stankov, U., Kovačić, S., Vasiljević, Đ. A., & Anđelković, Ž. (2021). Rookie tourism destinations – the effects of attractiveness factors on destination image and revisit intention with the satisfaction mediation effect. *Sustainability*, 13(11), 5780.
- Cumbers, A., Shaw, D., Crossan, J., & McMaster, R. (2018). The work of community gardens: Reclaiming place for community in the city. *Work, Employment and Society*, 32(1), 133–149.
- Datta, R. (2016). Community garden: A bridging program between formal and informal learning. *Cogent Education*, 3(1), 1177154. <https://doi.org/10.1080/2331186X.2016.1177154>
- Dolley, J. (2020). Community gardens as third places. *Geographical Research*, 58(2), 141–153.
- Friedmann, J. (2010). Place and Place-Making in Cities: A Global Perspective. *Planning Theory & Practice*, 11(2), 149–165. <https://doi.org/10.1080/14649351003759573>
- Ghallab, R. (2024). *Cultivating connections: exploring the impact of community gardens on social cohesion*. SLU, Dept. of Urban and Rural Development.
- Ginting, N., Nasution, A. D., & Rahman, N. V. (2017). More Attractive, More Identified: Distinctiveness in Embedding Place Identity. *Procedia Environmental Sciences*, 37, 408–419. <https://doi.org/https://doi.org/10.1016/j.proenv.2017.03.006>
- Gray, T., Tracey, D., Truong, S., & Ward, K. (2022). Community gardens as local learning environments in social housing contexts: participant perceptions of enhanced wellbeing and community connection. *Local Environment*, 27(5), 570–585. <https://doi.org/10.1080/13549839.2022.2048255>
- Heriwibowo, K., & Budiana, N. S. (2015). *Hidroponik sayuran : untuk hobi dan bisnis*. Penebar Swadaya. <https://www.kikp-pertanian.id/pustaka/opac/detail-opac?id=70956>
- Jennings, V., & Bamkole, O. (2019). The relationship between social cohesion and urban green space: An avenue for health promotion. *International Journal of Environmental Research and Public Health*, 16(3), 452.



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- Kanosvamhira, T. P. (2024). Exploring urban community gardens as 'third places': fostering social interaction in distressed neighbourhoods of Cape Town, South Africa. *Leisure Studies*, 1–18. <https://doi.org/10.1080/02614367.2024.2383481>
- Kristanto, V. H. (2018). *Metodologi penelitian : pedoman penulisan karya tulis ilmiah (KTI)*. Penerbit Deepublish.
- Kusumanagari, I., & Ellisa, E. (2021). Community garden as a way to achieve neighborhood-scale food security. *IOP Conference Series: Earth and Environmental Science*, 716(1), 12064.
- Laman resmi Kalurahan Guwosari. (n.d.). <https://guwosari.desa.id/first/statistik/4>
- Lee, H.-J., Choi, H. C., & Jeong, C. (2025). Trails of Transformation: Balancing Sustainability, Security, and Culture in DMZ Walking Tourism. *Land*, 14(6), 1204.
- Leiper, N. (1990). Tourist attraction systems. *Annals of Tourism Research*, 17(3), 367–384.
- Mukhlis, M., Noer, M., Nofialdi, N., & Mahdi, M. (2018). The integrated farming system of crop and livestock: a review of rice and cattle integration farming. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 42(3), 68–82.
- Nasruddin, N., Dwiyantama, Y. D., Muhammad, B., Bowalaksono, A., Ayubi, D., & Pertiwi, S. I. (2022). Urban farming: empowerment to increase economic, education, and nutritional benefits for the suburban community. *ASEAN Journal of Community Engagement*, 6(2), 294–306.
- Ohmer, M. L., Meadowcroft, P., Freed, K., & Lewis, E. (2009). Community Gardening and Community Development: Individual, Social and Community Benefits of a Community Conservation Program. *Journal of Community Practice*, 17(4), 377–399. <https://doi.org/10.1080/10705420903299961>
- Prathama, D. W. A., & Idajati, H. (2024). Identification of Place Identity Characteristics in Walking Tour of Peneleh Heritage Kampong, Surabaya City, Indonesia. *Media Konservasi*, 29(3), 497. <https://doi.org/10.29244/MEDKON.29.3.497>
- Priasukmana, S., & Mulyadin, R. M. (2001). Pembangunan desa wisata: Pelaksanaan undang-undang otonomi daerah. *Info Sosial Ekonomi*, 2(1), 37–44.
- Ramos, A. K., Trinidad, N., Bickford, S. H., Bickford, N., Torquati, J., & Mushi, M. (2019). Engaging residents in planning a community garden: A strategy for enhancing participation through relevant messaging. *Collaborations: A Journal of Community-Based Research and Practice*, 2(2).
- Rogge, N., Theesfeld, I., & Strassner, C. (2018). Social sustainability through social interaction – A national survey on community gardens in Germany. *Sustainability*, 10(4), 1085.
- Rogge, N., Theesfeld, I., & Strassner, C. (2020). The potential of social learning in community gardens and the impact of community heterogeneity. *Learning, Culture and Social Interaction*, 24, 100351. <https://doi.org/https://doi.org/10.1016/j.lcsi.2019.100351>
- Sakhaeifar, A., & Ghoddusifar, S. H. (2016). Impact of location-behavior on sense of belonging to place. *Modern Applied Science*, 10(5), 1–57.
- Sasro, Y. (2019). *Teknologi Akuaponik Mendukung Pengembangan Urban Farming (II)*. Balai Pengkajian Teknologi Pertanian (BPTP) Jakarta. <http://jakarta.litbang.pertanian.go.id>
- Teoh, S. H., Wong, G. R., & Mazumdar, P. (2024). A review on urban farming: Potential, challenges and opportunities. *Innovations in Agriculture*, 7, 1–11.
- Tyas, H. S., Cininta, M., & Puspitasari, C. (2025). Mapping the potential of Kampung Balirejo to enhance local tourism destination initiation in Yogyakarta. *ARTEKS: Jurnal Teknik Arsitektur*, 10(1), 31–40.
- Ujang, N., Kozlowski, M., & Maulan, S. (2018). Linking place attachment and social interaction: towards meaningful public places. *Journal of Place Management and Development*, 11(1), 115–129.



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- Wesener, A., Fox-Kämper, R., Sondermann, M., & Münsterlein, D. (2020). Placemaking in action: Factors that support or obstruct the development of urban community gardens. *Sustainability*, 12(2), 657.
- Wicaksono, P. (2023). *Mengenal Lumbung Mataraman, Kearifan Lokal Yogyakarta Wujudkan Ketahanan Pangan* | *tempo.co*. <https://www.tempo.co/hiburan/mengenal-lumbung-mataraman-kearifan-lokal-yogyakarta-wujudkan-ketahanan-pangan-115351>
- Widadie, F., & Agustono, A. (2015). *Comparison of integrated crop-livestock and non-integrated farming systems for financial feasibility, technical efficiency and adoption (case of farmers in Gunung Kidul Regency, Yogyakarta, Indonesia)*.
- Wray, A., Martin, G., Ostermeier, E., Medeiros, A., Little, M., Reilly, K., & Gilliland, J. (2020). Physical activity and social connectedness interventions in outdoor spaces among children and youth: a rapid review. *Health Promotion and Chronic Disease Prevention in Canada : Research, Policy and Practice*, 40(4), 104–115. <https://doi.org/10.24095/hpcdp.40.4.02>
- Wulandari, R., Witjaksono, R., & Inekewati, R. (2021). Community participation in the development of urban farming in Yogyakarta City. *E3S Web of Conferences*, 232, 1024.



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