



## The Utilization of Green Open Spaces in Kudus Regency to Facilitate Community Sports Activities

Dani Indrianto<sup>1✉</sup>, Cahyo Yuwono<sup>2</sup>, Ranu Baskora Aji Putra<sup>3</sup>

Program Studi Pendidikan Olahraga, Fakultas Ilmu Keolahragaan, Universitas Negeri Semarang, Indonesia<sup>123</sup>

### History Article

Received July 2025

Approved July 2025

Published vol 12 no 1 2025

### Keywords

Sports Activities; Open Spaces; Public Facilities

### Abstract

Community participation in sports has grown significantly. However, the effectiveness of Green Open Spaces (GOS) in meeting the community's sports needs remains unclear. This study aims to analyze and examine the availability, planning, utilization, management of open spaces, and community participation in recreational sports activities in Kudus Regency. The research employed a qualitative approach using an ethnographic design. Data were obtained from informants across all sub-districts in Kudus Regency. Data collection methods included observation, interviews, and documentation studies. Data analysis involved data collection, data reduction, data presentation, and drawing/verifying conclusions. The results showed that: 1) The availability of open spaces for sports in Kudus Regency is well-distributed across all villages in the nine sub-districts; 2) Planning for sports open spaces is in progress; however, supporting infrastructure such as parking areas and standard sports facilities still needs improvement, especially in rural areas; 3) Utilization of open spaces at the village level remains suboptimal, with more sports activities taking place in indoor sports halls (GOR) and privately managed parks. Collaboration among the government, private sector, and the community is essential to promote a healthy lifestyle through sports; 4) Regulation and control of open space use in GORs and parks are well-maintained, but at the village level, many fields are neglected and poorly maintained; 5) Community participation in sports is generally positive, influenced by environmental, social factors, available facilities, and ease of access. It can therefore be concluded that the availability of sports open spaces in Kudus Regency has been sufficiently met with well-structured development planning. However, it would be more effective if the supporting facilities were further improved, the utilization of these spaces optimized down to the village level, and community participation in sports activities continued to increase.

### How to Cite

Indrianto, D., Yuwono, C., & Putra, R. B. A. (2025). The Utilization of Green Open Spaces in Kudus Regency to Facilitate Community Sports Activities. *Journal of Physical Education, Health and Sport*, 12 (1), 151-156.

## INTRODUCTION

Global awareness of the importance of a healthy lifestyle has encouraged many countries to promote physical activity, especially sports (Soegiyanto, 2013). Physical activity is highly required, but at a young age (Pramono et al., 2023). There was a significant relationship between age and VO<sub>2</sub> max, these results underscore the importance of considering age and duration of exercise in fitness programs (Pranata et al., 2024). Outdoor physical activities can improve physical performance and fitness in terms of strength, cardiovascular, and flexibility (Helmi et al., 2024). Recreational sports such as aerobics, running, and cycling are considered effective in preventing obesity and lifestyle-related diseases (Bedimo-Rung et al., 2005). According to Hanani (2017), recreational sports can become a lifestyle that balances physical, social, and spiritual needs, while also providing enjoyment (Priyono et al., 2017). Sports not only serve health purposes but also act as a medium for character building, moral education, and the intellectual development of a nation. MacPhail et al. (2009) state that recreational sports form the foundation of national sports development. This is further reinforced in Law No. 11 of 2022, which highlights the strategic role of recreational sports in producing high-quality human resources for national development.

However, the implementation of recreational sports still faces numerous challenges. Isnanta et al. (2011) identify nine major issues, including low levels of public fitness, inadequate facilities, and limited time for physical activity. These challenges suggest that recreational sports have yet to become a prioritized and optimally managed sector, warranting greater attention from all stakeholders. Sports should be viewed as a means for sustainable development. Additionally, logistical barriers, such as the high cost of equipment and limited access to underdeveloped regions, funding support for rural areas, are crucial steps (Hardovi et al., 2025). Eime et al. (2013) found that sports have a positive impact on self-esteem and social interaction and can help reduce depression. Access to open spaces is vital in supporting sporting activities (Maksum, 2004), and the presence of green spaces has been proven to enhance mood and promote physical activity (Kondo et al., 2018).

High-quality open spaces are especially important for vulnerable groups such as children and the elderly. Lestan et al. (2014) emphasize that open spaces support children's psychological

and physical development. Green Open Spaces (GOS) also function as urban infrastructure that promotes public health and well-being (Shuda et al., 2020), and governments are responsible for providing sports facilities that meet established standards. The availability of proper open spaces encourages more active participation in sports (Setiawan et al., 2017). In Kudus Regency, despite a high interest in sports, challenges remain—such as overlapping land use and inadequate facilities (Faza & Setyawati, 2024).

Efforts to provide GOS in Kudus Regency remain limited, comprising only 1.88% of the total regional area in 2024 (Badan Pusat Statistik Kabupaten Kudus, 2024). According to Chamid et al. (2018), the effectiveness of sports open spaces depends on environmental feasibility and ecological support. Therefore, policies and management strategies for green spaces must support widespread community participation. The objective of this study is to examine the availability, planning, utilization, management, and community participation in open sports spaces, particularly within Kudus Regency.

## METHOD

This study employed a qualitative approach, deemed suitable for exploring and analyzing issues related to the utilization of open spaces for facilitating community sports activities in Kudus Regency. The research design used was critical ethnography, a specific type of qualitative research design. The primary focus of this study is to examine how the availability of open sports spaces can support physical activity among the community in Kudus Regency. Additionally, the study investigates aspects of planning and management of these open spaces, including their utilization by the community in accordance with minimum service standards in the field of sports, as well as their role in increasing community participation in sports.

The study relied on both primary and secondary data. Primary data were obtained through observation and interviews, while secondary data came from documentation. Informants were selected using purposive sampling and snowball sampling techniques. Data sources included relevant institutions such as the Department of Environment and Spatial Planning (PKPLH), the Department of Youth and Sports (DISDIKPORA), Regional Development Planning Agency (BAPPEDA), Statistics Indonesia (BPS), sub-district/village officials, and members of the public involved in recreational sports.

The research covered all districts in Kudus Regency, specifically: Bae, Dawe, Gebog, Jekulo, Kaliwungu, Jati, Undaan, Mejobo, and Kota Kudus.

Three techniques were used to collect data: direct observation of community participation and the condition of sports spaces; semi-structured interviews with relevant stakeholders; and a documentation study of official records. The instruments used included interview guides, observation checklists, and documentation forms—all designed to gather relevant and in-depth data in line with the study's problem formulation.

To ensure data validity, triangulation techniques were applied—both methodological triangulation and source triangulation. Methodological triangulation involved comparing data gathered through observation, interviews, and documentation. Source triangulation was done by comparing information from different institutions and informants to ensure the accuracy and consistency of the data obtained.

Data analysis followed the interactive model by Miles and Huberman, which consists of four main stages: data collection, data reduction, data display, and conclusion drawing/verification. This approach ensured that the analysis process was systematic and that the collected data were interrelated throughout the research stages.

## RESULTS AND DISCUSSION

### Availability of Open Spaces in Kudus Regency

The availability of open sports spaces in Kudus Regency, based on field observations and research, is as follows:

Bae District, there are 24 open sports spaces, dominated by 10 football fields, followed by 4 volleyball courts, 3 basketball courts, 3 badminton courts, 2 table tennis facilities, 1 privately-owned gymnasium (GOR) by Djarum, and 1 privately-owned park.

Dawe District, there are 44 open sports spaces, consisting of 13 football fields, 11 volleyball courts, 9 basketball courts, 5 badminton courts, 2 futsal courts, and 4 parks.

Gebog District has 82 open sports facilities, led by 24 badminton courts, followed by 23 volleyball courts, 12 basketball courts, 11 football fields, 2 table tennis facilities, 5 futsal courts, and 5 parks (4 village-owned and 1 private owned by PT Sukun).

Jati District has 81 open sports spaces, with 20 volleyball courts, 19 badminton courts, 18 table tennis locations, 15 football fields, 3 tennis courts, 1 futsal court, 1 basketball

court, and 4 parks.

Jekulo District has 46 open sports spaces, comprising 12 football fields, 12 volleyball courts, 10 badminton courts, 7 table tennis facilities, 3 futsal courts, and 2 parks.

Kaliwungu District has 70 open sports spaces, including 26 volleyball courts, 18 table tennis locations, 12 football fields, 11 badminton courts, 2 tennis courts, and 1 futsal court.

Mejobo District has 43 open sports facilities, with 13 badminton courts, 11 football fields, 8 volleyball courts, 8 table tennis facilities, 2 tennis courts, and 1 park.

Undaan District has 72 open sports spaces, comprising 25 volleyball courts, 16 football fields, 15 table tennis locations, 13 badminton courts, and 3 futsal courts.

Kota Kudus District has 44 open sports spaces, with 15 table tennis facilities, 11 badminton courts, 6 volleyball courts, 4 football fields, 1 tennis court, the town square (alun-alun), 2 GORs, and 4 parks.

### General Availability of Open Sports Spaces

Open sports spaces in Kudus are generally adequate but still face several issues such as lack of maintenance, unsustainable management, and safety concerns, limiting their use to certain locations. Public interest in sports is greatly influenced by the quality and accessibility of facilities. Availability of infrastructure and individual awareness are both crucial to support recreational sports.

Inadequate planning and insufficient attention to local culture have led to suboptimal use of these facilities. The government could boost public interest through policies like sports apps and sufficient infrastructure. Community participation is vital for the overall development of sports.

A breakdown by district shows:

Bae: Mostly outdoor facilities; some are private like GOR and Taman Oasis Djarum. BPS 2024 lists 21 facilities, mostly football fields, but recent data shows 24 with table tennis included. Private facilities are not counted in official data.

Dawe: Mostly outdoor, with one indoor basketball court. BPS lists 42, including school-owned; actual number is 44 after adding two futsal courts.

Gebog: Mainly outdoor; includes private ones like Taman Kidangan and GOR by PT Sukun. BPS lists 76, but latest data shows 83 due to private indoor futsal courts.

Jati: Outdoor facilities plus private ones from PT Jambu Kudus and local government.

From 78 (BPS) to 81 including new futsal, basketball, and parks.

Jekulo: Outdoor-dominated. BPS lists 42; updated to 46 with added futsal courts and a district-owned park.

Kaliwungu: Mostly outdoor, includes indoor tennis. BPS data is 69; updated to 70 with an indoor futsal court.

Mejobo: Generally outdoor with some indoor. BPS data shows 42; updated to 43 with a district-owned park.

Undaan: Mostly outdoor with some indoor. Initially 69 (BPS); now 72 after adding futsal courts. Table tennis often community-managed.

Kota Kudus: Includes village, district, municipal, and private spaces. BPS 2024 lists 41; increased to 44 with new parks and fields. GORs excluded from official counts.

### Planning of Open Sports Spaces

Planning efforts for open sports spaces in Kudus have aligned with regional regulations, though implementation remains suboptimal. While quantitative availability is adequate, quality and supporting infrastructure remain lacking. Issues include the use of fields for non-sport events and government focus on economic growth, tourism, and job creation rather than sports space development.

Development mechanisms start at the village level and proceed to approval by the Regional House of Representatives (DPRD), with the Department of Environment and Spatial Planning (PKPLH) involved in the master planning. Recent efforts include converting unused village and sub-district buildings into spaces for sports such as badminton and volleyball for public use.

Many open spaces have multipurpose potential, but uncontrolled repurposing for non-sport activities is common (Indrianingrum et al., 2015). Most village-level sports fields do not meet sport-specific standards, with basic surfaces (dirt, grass, concrete) and poor comfort/safety conditions. However, surrounding environments are generally supportive—safe, clean, and accessible due to proximity to residential areas.

As Imansari & Khadiyanta (2015) note, public open spaces should also serve recreational, aesthetic, and educational functions. It's important to reassess whether existing spaces meet comfort, safety, and accessibility needs.

### Utilization of Open Sports Spaces

Utilization of open sports spaces in Kudus

varies by district. In Bae, facilities like Taman Oasis Djarum and GOR Djarum Kaliputu—though privately managed—are freely accessible and well-used. In contrast, village-level spaces remain underutilized. Similar patterns occur in Kota Kudus, where areas like Balai Jagong and Alun-Alun Simpang 7 are crowded on weekends and holidays, while surrounding villages show low activity.

Districts like Gebog, Jati, and Kaliwungu show moderate usage, with residents engaging in activities like aerobics, jogging, and recreation, though usage is uneven across villages. In Dawe, Jekulo, Mejobo, and Undaan, usage is generally low despite available facilities. Activities are mostly done on weekends and often limited to specific groups like women and the elderly.

Nevertheless, initiatives like tree planting, "Healthy Fridays," and planned developments (e.g., Gapuraja complex in Mejobo) suggest potential for fostering a stronger sports culture. Village government support and active community participation are crucial for maximizing these spaces' roles in health and social interaction.

Well-maintained open spaces offer both physical and social benefits, emphasizing the need for inclusive and sustainable management.

### Management of Open Sports Spaces

The use of open sports spaces in Kudus is governed by local regulations and regional policies. Government- and privately-managed spaces (e.g., GOR Bung Karno, Taman Oasis Djarum) are well-regulated, but at the district and village levels, management is less effective. Many village spaces lack specific policies and are often repurposed for events like night markets and weddings due to weak regulation.

Permits for government-owned open spaces are free for sports activities and subject to fees for other uses, in accordance with local tax and retribution laws. Village-level permits are handled independently by local officials without oversight, raising risks of misuse.

Although penalties for zoning violations are outlined in regional regulations, enforcement is uneven. Monitoring and sanctions are more prevalent at the regency level, with limited presence in villages. This contributes to low sports participation and the frequent repurposing of sports fields. As Sari & Khaidir (2019) note, lack of social oversight is a key factor in such misuse, highlighting the need for stronger policy enforcement and public engagement at all levels.

## Community Participation in Open Sports Spaces

Community participation in recreational sports in Kudus is relatively high, especially on weekends, holidays, and during free time. Activities are often done with family or friends in an enthusiastic and cheerful atmosphere. People report feeling healthier and in better moods from participating in sports. Activities include jogging, walking, cycling, aerobics, and team sports like football and volleyball. Sports are typically done in the morning (05:30–10:00) and evening (15:45–17:30).

Although participation is broad, teenagers tend to see sports more as a social activity, engaging less frequently than adults and the elderly, who prioritize health and social benefits. Many health organizations recommend that children ages 5-17 get at least 60 minutes of physical activity a day (Pramono et al., 2023).

The regional government, through DISDIKPORa, supports recreational sports, though the focus still leans toward competitive sports. Facilities like GOR Bung Karno, Alun-Alun Simpang 7, and Taman Oasis Djarum serve as community hubs, though supporting infrastructure remains insufficient.

Promoting a sports culture is essential for improving quality of life, as Ma'mun (2016) suggests that sports aim not only for achievement but also for overall life enhancement. However, village-level participation is low due to inadequate facilities, frequent non-sport use, and a lack of motivation or information.

Addressing disparities in physical activity participation requires a multidimensional approach, including public policy interventions, improved access to sports facilities, and community education (Wargama et al., 2024). According to Sipahutar et al. (2024), cost, facilities, and motivation are key factors affecting sports participation.

Three main factors influence how people choose where to exercise outdoors: social and physical environment, facility features, and accessibility. Shaded, clean, and pollution-free areas are preferred. Crowds and food vendors also create a lively social setting that encourages participation. Facilities such as security, toilets, trash bins, parking, and signage help people feel comfortable. Easy access—on foot, by bike, private vehicle, or public transport—also plays a critical role. These factors show that ideal outdoor sports spaces can promote healthy lifestyles and support local economic and tourism development.

## CONCLUSION

The availability of open sports spaces in Kudus Regency is generally well-distributed across all nine districts and is sufficient to meet the community's sporting needs. While the planning and provision of these spaces have been effectively implemented, further development is needed in terms of supporting infrastructure—such as parking, security, and standardized sports facilities—particularly at the village level. Despite this progress, the utilization of open spaces in rural areas remains low, with sports activities still concentrated in government sports halls (GOR), town squares, and privately-owned parks. The management of open spaces is functioning adequately within municipal parks and GORs, but remains suboptimal at the village level, as evidenced by the frequent repurposing of sports fields. Community participation in recreational sports shows a positive trend, influenced by comfortable, well-maintained, and socially vibrant environments.

## REFERENCES

- Badan Pusat Statistik Kabupaten Kudus. (2024). Luas Administrasi Kabupaten Kudus.
- Bedimo-Rung, A. L., Mowen, A. J., & Cohen, D. A. (2005). The Significance of Parks to Physical Activity and Public Health : A Conceptual Model. *American Journal of Preventive Medicine*, 28(2), 159–167.
- Chamid, A., Setyowati, D. L., & Tukidi. (2018). Analisis Ketersediaan Pohon Sebagai Penyerap Emisi Karbon di Kampus Unnes. *Geo Image (Spatial-Ecological-Regional)*, 7(1), 1–10. <http://journal.unnes.ac.id/sju/index.php/geoimage>
- Eime, R., Young, J., Harvey, J., Charity, M., & Payne, W. (2013). A Systematic Review of The Psychological and Social Benefits of Participation in Sport for Children and Adolescents: Informing Development of A Conceptual Model of Health Through Sport. *Tional Journal of Behavioral Nutrition & Physical Activity*, 10(1), 98–135.
- Faza, R. U., & Setyawati, H. (2024). Kudus Regency Government Policy to Increase Sport Development Index. 4, 522–534.
- Hanani, E. S. (2017). The Study on Value of Recreational Sports Activity of Urban Communities. *Jurna Kesehatan Masyarakat*, 12(1), 97–101.
- Hardovi, B. H., Setyawati, H., Rumin, R., Yuwono, C., Pramono, H., Kusuma, D. W. Y., & Bausad, A. A. (2025). Technological Innovation in Pencak Silat Training as a Component of Indonesian Cultural Heritage: A Systematic Literature Review. *Physical Education Theory and Methodology*, 25(2), 434–443.
- Helmi, B., Hidayah, T., Pramono, H., Hartono, M.,

- & Iskandar, T. (2024). Using a Biomechanical Analysis Approach to the Accuracy of Shooting Throws in Petanque Sport: Literature Review. *Physical Education Theory and Methodology*, 24(1), 130-135.
- Imansari, N., & Khadiyanta, P. (2015). Penyediaan Hutan Kota dan Taman Kota sebagai Ruang Terbuka Hijau ( RTH ) Publik Menurut Preferensi Masyarakat di Kawasan Pusat Kota Tangerang. *Jurnal Ruang*, 1(3), 101-110. <https://doi.org/http://dx.doi.org/10.14710/ruang.1.4.101-110>
- Indrianingrum, L., Nur Azizah, A., Eko Prasetyo, G., & Hidayah, N. (2015). Pergeseran Peran Dan Fungsi Alun-Alun Kaliwungu Sebagai Ruang Terbuka Publik. *Jurnal Teknik Sipil Dan Perencanaan*, 17(1), 17-24. <https://doi.org/https://doi.org/10.15294/jtsp.v17i1.6887>
- Isnanta, R., Supono, T., Darmawan, P., Suratmin., & Soenyoto, T. (2011). Panduan Umum Sentra Olahraga Rekreasi. Jakarta: Asisten Deputi Sentra Keolahragaan, Deputi Bidang Pembudayaan Olahraga Kementerian Pemuda dan Olahraga.
- Kondo, M. C., Fluehr, J. M., McKeon, T., & Branas, C. C. (2018). Urban Green Space and its Impact on Human Health. *International Journal of Environmental Research and Public Health*, 15(3). <https://doi.org/10.3390/ijerph15030445>.
- Lestan, K. A., Eržen, I., & Golobič, M. (2014). The Role of Open Space in Urban Neighbourhoods for Health-Related Lifestyle. *International Journal of Environmental Research and Public Health*, 11(6), 6547-6570.
- Ma'mun, A. (2016). Pembudayaan Olahraga dalam Perspektif Pembangunan Nasional di Bidang Keolahragaan, 2015-2019: Konsep, Strategi, dan Implementasi Kebijakan. *Pendidikan Sains Sosial Dan Kemanusiaan*, 9(1), 65-88.
- MacPhail, A., Collier, C., & O'Sullivan, M. (2009). Lifestyles and Gendered Patterns of Leisure and Sporting Interests Among Irish Adolescents. *Journal Sport, Education and Society*, 14(3), 281-299.
- Maksum, A. (2004). Pengkajian Sport Development Index (SDI), Proyek Pengembangan dan Keresasian Kebijakan Olahraga (D. Olahraga (ed.)). Jakarta: Depdiknas dan Pusat Studi Olahraga Lembaga Penelitian Universitas Surabaya : Jakarta.
- Pramono, H., Rahayu, T., & Yudhistira, D. (2023). The effect of plyometrics exercise through agility ladder drill on improving physical abilities of 13-15-year-old volleyball players. *Physical Education Theory and Methodology*, 23(2), 199-206.
- Pramono, H., Nurafiati, S., Rahayu, T., & Sugiharto, S. (2023). The schools and physical education teachers' efforts in building the elementary students' character. *Jurnal Cakrawala Pendidikan*, 42(1), 220-231.
- Pranata, D. Y., Hidayatullah, M. F., Sulaiman, S., Sumartiningsih, S., Pramono, H., & Setyawati, H. (2024). Health and fitness study of Semarang soccer players: the role of VO2 max, body mass index, age and length of training. *Retos*, 61, 400-404.
- Priyono, B., Rohidi, T. R., & Soesilowati, E. (2017). Patterns of Public Spaces Based on 'Sport For All' and People's Adaptation Process in Semarang City. *The Journal of Educational Development*, 5(1), 59-71.
- Sari, A. N., & Khaidir, A. (2019). Pemanfaatan Ruang Publik di Kawasan Gelanggang Olahraga H. Agus Salim Padang. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 4(2), 135-138. <https://doi.org/https://10.29210/02018284>
- Setiawan, I., Purwono, E. P., Yuwono, C., & Dharmawan, D. B. (2017). Identification of Open Space Area Sport In Universitas Negeri Semarang. *Active: Journal of Physical Education, Sport, Health and Recreation*, 6(2), 133-139.
- Shuda, Q., Bougoulas, M. E., & Kass, R. (2020). Complementary Therapies in Medicine Effect of Nature Exposure on Perceived and Physiologic Stress : A Systematic Review. *Complementary Therapies in Medicine*, 53, 102514 Contents. <https://doi.org/10.1016/j.ctim.2020.102514>.
- Sipahutar, S., Makhsalmina, & Sultan. (2024). Dampak Positif dan Negatif yang Ditimbulkan dari Olahraga di Masyarakat : Literatur Review. *Seminar Nasional LPPM Ummat*, 13, 846-855.
- Soegiyanto, K. S. (2013). Keikutsertaan Masyarakat dalam Kegiatan Olahraga. *Jurnal Media Ilmu Keolahragaan Indonesia*, 3(1), 18-24.
- Undang-Undang. (2022). Undang-Undang Republik Indonesia Nomor 11 Tahun 2022 Tentang Sistem Keolahragaan Nasional. Jakarta: Peraturan Menteri Pemuda dan Olahraga.
- Wardana, M. U., & Pujiati, A. (2018). Strategi Meningkatkan Ruang Terbuka Hijau Publik di Kabupaten Semarang. *Indonesian Journal of Development Economics*, 1(1), 26-33.
- Wargama, I. M. D. S., Rahayu, T., Priyono, B., Mukarromah, S. B., Pramono, H., Setyawati, H., ... & Suryadi, D. (2024). What is the relationship between socioeconomics and physical activity?: Literature review. *Retos: nuevas tendencias en educación física, deporte y recreación*, (61), 148-155.