

## Survey of Futsal Sports Facilities and Infrastructure in Poso Regency

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### ABSTRACT

This study aims to determine the condition of futsal sports facilities and infrastructure spread across Poso Regency. This research uses quantitative descriptive methods with survey techniques. The sample in this study amounted to 20 users of futsal facilities selected by a total sampling technique. The instrument used is an observation sheet that refers to the standards of the Ministry of Youth and Sports and FIFA. The data were analyzed descriptively with the help of average-based categories and standard deviations. The results showed that most of the futsal facilities in Poso District were in the "Very High" category, as much as 50%, followed by the "Very Low" category as much as 35%, 'Medium' as much as 10%, and "Low" as much as 5%. There were no facilities in the "High" category. This finding shows that there is an imbalance in the quality of facilities and infrastructure in various locations. Some facilities have met the standards well, but many still need to be improved so that they are suitable for use in coaching activities and matches. This research is expected to be an evaluation material for local governments and sports facility managers in an effort to equalize development and improve the quality of futsal sports facilities in Poso Regency.

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A. Conception and design of the study;  
B. Acquisition of data;  
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## INTRODUCTION

Futsal, a fast-paced variant of football played on smaller courts, has experienced significant global growth, especially in Indonesia, where urbanization and indoor sports popularity have fueled its rise (Widiyono et al., 2022; Nugroho et al., 2022). Facilities and infrastructure, such as court surfaces, lighting, seating, changing rooms, and parking, are essential for athlete performance, user safety, and the overall viability of futsal venues (Ariyanti & Narundana, 2025; Lutfhi et al., 2022). Quality facilities enhance user satisfaction and contribute to ongoing participation (Ariyanti & Narundana, 2025). Conversely, inadequate infrastructure can limit accessibility, reduce player performance, and undermine the sport's development (Khuddus et al., 2022).

Poso Regency, Central Sulawesi, is emerging as a hub for futsal among youth and recreational players. However, anecdotal reports from coaches and facility managers suggest that court conditions, lighting, and supporting infrastructure vary widely between venues. Studies in other Indonesian regions have shown that while some facilities are classified as “good” in overall condition, deficiencies frequently persist in areas like restrooms, safety nets, and athlete amenities (Widiyono et al., 2022; Khuddus et al., 2022). Meanwhile, in commercial futsal centres, well-equipped venues correlate strongly with higher customer satisfaction and repeat usage (Ariyanti & Narundana, 2025; Nugroho et al., 2022).

A comprehensive understanding of existing facilities, their distribution, usability, and impact on athletes and users is lacking in Poso. A detailed survey would allow identification of infrastructural gaps, benchmarking against standards, and guiding resource allocation for upgrades.

Inadequate infrastructure in sports facilities is a longstanding barrier to sustainable sports development in Indonesia (Khuddus et al., 2022). For futsal, poor-quality courts, such as those with uneven surfaces, insufficient lighting, or inadequate safety measures, can limit participation, lower skill development, and increase injury risk. Users and players in Poso report inconsistent court quality, with some venues lacking essential amenities like clean locker rooms or basic medical support. While researchers in Java have documented infrastructural variation in futsal centres (Ariyanti & Narundana, 2025; Nugroho et al., 2022), Poso has not been systematically studied. This lack of localised data complicates efforts by government bodies and sports organizations to direct improvements or support facility upgrades.

Although previous studies examined futsal facilities in urban or commercial contexts (Ariyanti & Narundana, 2025; Nugroho et al., 2022), rural or semi-urban districts like Poso have received limited attention. Existing research in Kebumen and East Java covered aspects of management, coaching, and usage patterns, but often overlooked detailed infrastructure assessments (Widiyono et al., 2022; Khuddus et al., 2022). Furthermore, assessments are typically conducted in commercial settings rather than educational or community arenas that serve youth players. As such, there is a clear need for a targeted survey of futsal facility conditions in Poso in terms of ownership, maintenance, distribution, and compliance with sports infrastructure standards.

This study will be the first systematic examination of futsal facilities and infrastructure in Poso Regency. It will include physical inspections, user satisfaction surveys, and compliance checks against government and sports federation facility standards. By combining objective facility audits with subjective user experiences, the study will provide a comprehensive local profile, highlighting inequalities between urban and rural venues and identifying priority improvement areas. These contextualized findings are not only significant for Poso but may also serve as a model for surveying sports infrastructure in similar Indonesian districts.

This study aims to: (1) Map the number, location, and types of futsal facilities (e.g., school, community, private) in Poso Regency, (2) Evaluate their physical condition,

equipment quality, and support infrastructure (e.g., lighting, changing rooms, safety nets), (3) Assess user satisfaction and facility usage patterns, (4) Compare findings against national standards for sports infrastructure, and (5) Recommend strategic improvements for facilities, stakeholder planning, and infrastructure policy.

What is the current status of futsal facilities and infrastructure in Poso Regency—regarding availability, quality, usability, and compliance with standards—and how does this affect stakeholders’ use and satisfaction?

Methodologically, the study involves a cross-sectional survey of facilities using observation checklists and geospatial mapping; questionnaires distributed to players, coaches, and facility managers; and comparative analysis with national benchmarks. Data will be analyzed descriptively and inferentially to identify key deficiencies and stakeholder concerns.

By generating the first empirical dataset on Poso’s futsal infrastructure, this research seeks to inform local sports governance, promote equitable sports access, and improve community health through safer and more supportive futsal environments.

## METHODS

This research is a quantitative descriptive research with a survey method. Descriptive research aims to describe the phenomena that are happening without giving special treatment to the object under study (Arikunto, 2010). The survey method is used to obtain actual data about the condition of futsal sports facilities and infrastructure directly in the field.

This research was conducted in Poso District, Central Sulawesi, with a focus on futsal sports facilities located in sub-districts within the region. The research implementation time is planned from January to February in 2025.

The population in this study were all futsal facilities or places located in the Poso Regency area, whether managed by the government, the private sector, schools, or communities.

The sample was determined using the total sampling technique, namely, all members of the population were sampled because the number was limited and it was possible to study them all (Sugiyono, 2017).

The instrument used is an observation sheet containing a checklist of the condition of futsal facilities and infrastructure. This instrument was prepared based on the standard of sports facilities and infrastructure from Permenpora No. 1374 of 2020, as well as international standards from FIFA (2022) for futsal facilities.

The assessment indicators in the instrument include: (1) Infrastructure: field condition, field size, floor, lighting, changing room, toilet, and (2) Facilities: goal, ball, uniform, stopwatch, scoreboard, and other equipment.

Each item is given a score based on a quality scale: 1 = None, 2 = Very Unfit, 3 = Unfit, 4 = Fairly Fit, 5 = Fit. The instrument has gone through a content validation process by sports experts to ensure its relevance and suitability. Categorization is divided into five categories, namely, very high, high, low, and very low. Categorization based on Mean and Standard Deviation is as follows:

**Table 1.**

Categorization based on Mean and Standard Deviation

Very good	M + 1.5 SD and above
Good	M + 0.5 SD – M + 1.5 SD
Pretty good	M – 1.5 SD – M 0.5 SD
Not good	M – 1.5 SD – M 0.5 SD
Very less	Down – M – 1.5 SD

## RESULTS AND DISCUSSION

This study was conducted to determine the condition of futsal sports facilities and infrastructure in Poso Regency. Data collection was carried out through observation of 20 futsal field samples from various places. The aspects assessed include 10 facility indicators and 10 infrastructure indicators, with a maximum total score of 100.

Based on the observation results, a recapitulation of the total score and category of each sample was obtained, which was grouped according to the value range based on the standard deviation of the average (mean) of the overall score.

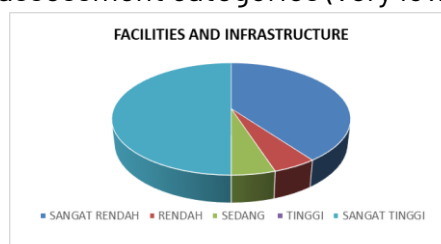
**Table 2.**

Sample distribution table

Value Range	Category	Frequency	Persen
$x < 53$	Very Low	8	40%
$53 < x \leq 61$	Low	1	5%
$61 < x \leq 70$	Currently	1	5%
$70 < x \leq 79$	High	0	0%
$79 > x$	Very High	10	50%
<b>Total</b>		<b>20</b>	<b>100%</b>

Most futsal facilities in Poso District (50%) fall into the “Very High” category, meaning that their total score of facilities and infrastructure is very good. This indicates that there are serious efforts from some futsal facility managers to provide a decent and complete field, both in terms of facilities such as balls, goals, lighting, as well as infrastructure such as changing rooms, toilets, and cleanliness.

A total of 35% of facilities are classified as “Very Low”, indicating that there are still imbalances in the provision and maintenance of futsal facilities. Some fields were found to lack basic facilities or to be in poor physical condition, which can interfere with user comfort and safety. The “Low” and ‘Medium’ categories account for only 15% of the total, and no facilities are in the “High” category ( $70 < x \leq 79$ ), indicating that most facilities are at the extreme ends of the assessment categories (very low or very high).



**Diagram 1.**

Percentage Control

## CONCLUSION

Based on the results of research on the condition of futsal sports facilities and infrastructure in Poso Regency conducted through a survey method of 20 samples of futsal facilities, the following conclusions were obtained: Most of the futsal facilities in Poso District are classified in the "Very High" category, as many as 10 out of 20 samples (50%). These facilities generally have complete and usable facilities and infrastructure, such as balls, goals, scoreboards, changing rooms, and toilets. A total of 7 facilities (35%) are classified in the "Very Low" category, indicating that these facilities have inadequate facilities and infrastructure conditions, both in terms of completeness and physical quality. The other categories consist of: "Low" as many as 1 facility (5%), 'Medium' as many as 2 facilities (10%), and no facilities fall into the "High" category (0%). The imbalance in the quality of facilities and infrastructure indicates the need for equitable development of sports facilities, as well as special attention to places that fall into the very low category.

Students' basic passing technique skills also tend to be low. From the observation results: 50% (6 students) are in the very low category, 25% (3 students) in the low category, 8% (1 student) in the medium category, 0% were in the high category, and 17% (2 students) in the very high category. This means that at least 75% of students still need further coaching to improve basic passing techniques.

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