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SPORT DEVELOPMENT INDEX (SDI) IN LANGKAT DISTRICT

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Abstract The objective of this study is to assess the degree of community engagement, physical fitness, and sports advancement in the Langkat District, using the community involvement index and physical fitness index for the year 2020. This study employed a descriptive evaluation strategy, survey research, and quantitative methods. The research sample comprised a total of ninety individuals from Langkat District. Questionnaires and evaluation processes were utilised as data gathering approaches. The precision of the measuring device is one of the factors that make up the Sport Development Index (SDI). The subsequent passage provides a concise overview of the discoveries made in this investigation. (1) The community participation index was computed to be 0.388. (2) The community's physical fitness score of 0.351 suggests that the degree of sports engagement in the community is at a low level. This is evident from the community engagement index, which indicates that the degree of community fitness is insufficient. The community's fitness level is low, as seen by the community physical fitness index. Moreover, the indicator of 0.369 signifies a low level of sports growth in relation to community involvement and physical well-being. Ultimately, the indicators for community involvement, physical well-being, and athletic advancement in Langkat District are all significantly deficient.

Keywords: *Sport Development Index, Community Participation, Physical Fitness*



INTRODUCTION

The sport domain, encompassing instructional sport, recreational sport, and competitive sport, is a crucial consideration in the development of sport contexts. As stated by (Cahyo Wibowo, Alwin Praitama Hulu, and Dennys Christovel Dese 2023), the present situation deviates from the conventional perspective of environmental development, which just emphasises environmental performance. Currently, the most notable ongoing progress is the possibility of global cooperation in multiple places. According to a survey done by (Li et al. 2023), the most prominent opportunity in the contemporary world is the ability to engage in global sports.

Moreover, as stated by (Basterfield et al. 2021), the Sport Development Index (SDI) is a specialised instrument crafted to evaluate the existing consequences of sport development in a certain area. Therefore, the establishment of a competitive atmosphere to attain success in sports competitions would lead to the establishment of athletic benchmarks, which are regularly assessed through the accumulation of numerous medals (Ek, Kowalski, and Jacobsson 2022).

As stated by (Ordiñana-Bellver et al. 2024), the IPO index is a comprehensive measure used to assess the profitability of initial public offerings (IPOs) by considering key aspects of the business. The highlighted characteristics are: (1) the presence of adequate space for recreation; (2) the use of human or animal resources in recreational activities; (3) the involvement of the community in the recreation process; and (4) the provision of resources for recreational purposes (Bellver et al. 2022).

According to expert opinion (Lemes et al. 2021), medals are not the sole determinant that may be utilised to enhance the total population growth rate. Alternatively, the Sport Development Index (SDI) can be employed to gauge the magnitude of the athletics industry in Indonesia. (Teunissen et al. 2021) propose that the Sport Development Index is a useful instrument for assessing research findings related to sport development in a certain location. The United Nations Development Programme (UNDP), the leading agency in the development sector, has established a new idea called the Sport Development Index (SDI) after spreading the human development

agenda to other countries. (Galle et al. 2023) provide a definition of the Human Development Index (HDI) as a precise measure that may be utilised to gather data on the extent of development achieved in a nation. Langkat Regency has the potential to achieve a high index of community participation in sports. This is evident from the various sports marketing activities organised by the Tourism, Youth, and Sports Office of Langkat Regency in the past 3 years. These activities include Volleyball Matches, Futsal Matches, Running Competitions, Sport Tourism, and the Commemoration of National Sports Day in both 2018 and 2019. The pinnacle of the scheduled events was reached when the National Sports Day celebration attracted a total of 3700 people.

The growth of sports development in Kabupaten Langkat will undeniably rely on the degree of physical fitness and involvement of the population. Conducting an evaluation study is crucial in order to ascertain the degree to which community engagement and physical fitness levels in sport have been enhanced in Kabupaten Langkat. Developing strategic policies for sports in Kabupaten Langkat is crucial, and it should be done by assessing the

community's involvement and physical condition. This would enhance the execution of sports activities in this district. The Langkat District Government has implemented diverse initiatives to promote the advancement of sports.

The Langkat District Government has developed a range of steps to encourage community involvement, improve physical well-being, and promote sports marketing activities as part of the 'nurturing sport and nurturing the community' strategy. The objective of this effort is to enhance community engagement and enhance levels of physical fitness.

These actions are carried out as a component of the program's initiation. The aforementioned remark aligns with the provisions of Law No. 3 of 2005, which especially pertains to the National Sports System. It is a legal requirement that all individuals are granted equal opportunities to engage in sports without encountering any form of discrimination. The right to choose and engage in any chosen sport, as well as the right to access sports services in order to achieve a desired level of physical fitness and well-being, is ensured (Galle et al. 2023).

As under Article 6 of Law No. 3 of 2005, which governs the National Sports System, every citizen is entitled to: a) participate in athletic competitions; b) partake in sporting activities; and c) engage in athletic competitions. b) acquire services pertaining to physical fitness activities. c) Identify and actively participate in the activity or discipline that aligns most with their interests and abilities, and then persistently pursue the sport over time. Obtaining guidance, assistance, education, and growth is especially crucial in the field of athletics. b) Participate in the development or engagement in a sport. f) Promote the expansion of the recreation business.

The values delineated in article 6 of the National Sport System are therefore fundamental entitlements of every individual, encompassing the duty to participate in athletic endeavors and the need to support the preservation of facilities and the environment. As stated by (Vidal-Vilaplana et al. 2022), it is mandatory for national and municipal governments to set aside designated open spaces for the sole purpose of sports activities. This rule is only applicable to community-oriented sporting activities that are particularly tailored for that purpose.

According to expert opinion (Sales and Reimer 2023) assert that athletics is not only a fundamental entitlement but also an essential requirement for anyone seeking to improve their lives. There are numerous additional methods to enhance an individual's quality of life, outside than engaging in sports. To attain success, a person must possess a substantial level of education. An appropriate economy is necessary to meet the fundamental needs of existence. Nevertheless, the absence of both physical and spiritual well-being, which holds significant importance in the realm of sports, renders it utterly devoid of significance (Ek, Kowalski, and Jacobsson 2022).

The Sport Development Index (SDI) is a comprehensive metric that evaluates the effectiveness of sport development by considering four fundamental factors: participation, accessibility of open spaces, fitness levels, and human capital. The SDI is a holistic statistic that integrates multiple indicators. The author (Singh, Zopf, and Howden 2022) assert that this index measure is a dependable metric for evaluating the effectiveness of a region's efforts in fostering the development of sports.

According to expert opinion (Chan, Jang, and Ho 2022) ascribes the origin of the Sports Development Index to diverse intellectual underpinnings. Specifically, each person possesses the entitlement to engage in athletic activities. A comprehensive curriculum will be developed by sports education, with the goal of aligning with this philosophical framework. Furthermore, the coaching system not only emphasizes enhancing physical abilities, but also places a high importance on inclusivity, guaranteeing equal opportunities for all individuals to engage and maximizing the involvement of as many people as possible.

Physical activity, in the context of the human body, encompasses any movement generated by skeletal muscles that results in a greater metabolic rate than the energy expended during periods of inactivity (Armstrong et al. 2021). When examining this extensive concept, it is crucial to take into account a range of activities, including leisure-time physical activity, exercise, sports, transportation, employment, and commitments (Ordinana-Bellver et al. 2024).

According to expert opinion (Bellver et al. 2022) did study that

identified four crucial factors contributing to the expansion of sports: open space, human resources (HR), participation, and physical fitness. These elements are intimately interconnected for multiple reasons. According to the study conducted by (Liu, Xie, and Ahmed 2021), the integration of these two elements leads to the emergence of highly exceptional players in the sports sector.

SDI measures encompass the increase in the number of individuals actively participating in sports activities and the accessibility of authorized sports facilities within a specific area. These venues are public spaces specifically designated for sporting activity. They might exist as open areas, structures, or parcels of land (Tapia-Serrano et al. 2022).

METHODS

Investigations were conducted in Langkat, Kebonagung, and Pringkuku sub-districts. The research was conducted in Langkat District. This research focused on quantitative research. The analysis used a combination of survey research and descriptive evaluation methodology. This research examined the level of

physical fitness and community engagement in Langkat District. The Sport Development Index guidelines were used to evaluate the index or numerical value that represents the results of this study, which are then described in detail.

Participants in this study were residents of Kecamatan Langkat, Kecamatan Kebonagung, and Kecamatan Pringkuku in Kabupaten Langkat. In addition, they were also categorised by gender and age. Each sub-district consisted of 15 individuals, consisting of 10 children (5 boys and 5 girls) aged 7-14 years, 10 adolescents (5 boys and 5 girls) aged 15-24 years, and 10 adults (5 boys and 5 girls) aged 25-40 years. This experiment consisted of a sample size of ninety participants.

In this quantitative research framework, data analysis methods can be obtained from various sources using various data collection tactics, such as primary and secondary data. Primary data refers to information specifically collected regarding human capital, fitness, open space, and engagement. Secondary data includes information such as population, area, and sports potential.

RESEARCH RESULTS

The community engagement score in Kecamatan Stabat was 0.33, indicating a relatively low level of participation compared to the standards established in the Sport Development score (SDI). Nevertheless, the Community Physical Fitness Index of Kecamatan Stabat, which scored 0.446, exceeded the indices of Kecamatan Tanjung Pura and Kecamatan Bahorok.

This assessment is derived on the comprehensive state of Kecamatan Stabat. Out of the thirty individuals who were selected for research at Kecamatan Stabat, 10 of them were engaged in athletics. These ten individuals were classified as active in athletic activities due to their engagement in physical exercise at least three times each week. The absence of engagement in Kecamatan Stabat can be considered a legitimate point of contention.

The residents of Kecamatan Stabat lack sufficient alternatives for leisure activities without cost. This is evidenced by the research findings, which showed that out of the thirty individuals examined, sixteen of them cited time scarcity as the primary reason for their lack of participation in sports.

Kecamatan Langkat achieved a Community Physical Fitness Index value of 0.446, which is somewhat more than the values of the other two kecamatan examined in this study. Nevertheless, in relation to the benchmarks established by the Sport Development Index (SDI), this value remains within the lower end of the spectrum. However, it surpasses the National Physical Fitness score in 2018 by a significant margin, as the latter was a mere 0.24.

The research findings indicated that a total of 17 individuals engaged in sports activities, with an average frequency of twice per week. Furthermore, there were a total of ten individuals who engaged in physical activity on a minimum of three occasions per week. Tanjung Pura is a subordinate administrative division situated within the Langkat Regency.

The Central Statistics Agency (BPS) reports that the population density of Kecamatan Tanjung Pura is 969.30 individuals per square kilometre. Kecamatan Tanjung Pura is situated to the east of Kecamatan Langkat. The distance separating Kecamatan Stabat and Kecamatan Tanjung Pura is around fifteen miles, facilitated by excellent

road connectivity resulting from the recent development of new roads.

The results of the Kecamatan Tanjung Pura Community Participation Index do not align with the results of the Kecamatan Tanjung Pura Community Physical Fitness Index. The Physical Fitness Index of Kecamatan Tanjung Pura is 0.364, which classifies it as low according to the Sport Development Index (SDI) standard. The degree of sports participation in the Tanjung Pura sub-district community does not correspond to the level of excellence.

The research findings indicate that the level of community engagement in Bahorok sub-district is much lower compared to that of Tanjung Pura and Stabat sub-districts. The community engagement index in Kecamatan Bahorok was 0.16, indicating a low level of community involvement compared to the standard set by the Sport Development Index (SDI).

Out of the thirty respondents, it was discovered that five individuals engaged in sports activities in Langkat or participated in a minimum of three sports every week, accounting for 0.16 of the total. This indicates that the community of Kecamatan Kebonagung has a lack of awareness on the need of maintaining

physical fitness through participation in sports activities.

The findings of the Community Participation Index and Physical Fitness for Kecamatan Stabat, Kecamatan Pangkalan Berandan, and Kecamatan Secanggang accurately reflect the overall situation in the 18 kecamatan of Kabupaten Langkat. The sub-districts chosen as examples are representative of high, medium, and low population density levels.

The Langkat Regency Community Participation Index has a score of 0.388, classifying it as Low in comparison to the Sports Development Index (SDI) norm. The SDI standard is a quantitative measure that is established within the range of 0 to 0.499. The Langkat Regency Community Physical Fitness Index is 0.351, indicating a low level. Additionally, the sports development results in the region are below average, with a score of 0.369, specifically in terms of community engagement and physical fitness.

DISCUSSION

In Kabupaten Langkat, sports development is still deficient in terms of community involvement and physical well-being. The district government in

Kabupaten Langkat must overcome a number of obstacles in order to promote the growth of sport there. To improve the participation index and physical fitness in sub-districts that are distant from the district center, the district government should work with the Langkat District Youth, Sports, and Tourism Office, the Langkat District Education Office, and the Langkat District Indonesian National Sports Committee to develop policies. This will guarantee parity in Kabupaten Langkat's subdistricts with regard to participation levels, both in terms of quantity and quality, and physical fitness.

In the event that basic outputs and activity levels are low, the government ought to carry out an unbiased and equitable evaluation of the fundamental elements of Human Resources in Sport and Open Space for Sport, using the Sport Development Index (SDI). Additional discussion can be determined by taking into account the research findings:

1. The community involvement index for sports in Langkat District is roughly 0.388. A community involvement index of 0.33 for the Stabat subdistrict, 0.66 for Tanjung Pura

subdistrict, and 0.16 for the Bahorok subdistrict was combined to create this index. Exercise involvement in the community is categorized as "less" by the Langkat District Community Engagement Index.

- 0.351 was chosen as the community physical fitness index. This index was calculated by summing the physical fitness indices from the sub-districts of Bahorok, Tanjung Pura, and Stabat, which were, respectively, 0.264, 0.364, and 0.446. According to the physical fitness index created for the residents of Kabupaten Langkat, their level of physical fitness is low.
- When it comes to the growth of sports, Kabupaten Langkat has low levels of involvement and a low physical fitness index. This is amply demonstrated by Kabupaten Langkat's index of 0.369, which was produced by combining the physical fitness and participation indices.

CONCLUSIONS

Both the level of community participation in Langkat District and the

physical fitness index are classified as low. Community members exhibited a below-average degree of physical fitness. Sport is classified as having a minimal degree of advancement.

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