



## **AVAILABILITY OF SPORTS HUMAN RESOURCES REVIEWED FROM SPORTS DEVELOPMENT INDEX IN SAMARINDA CITY**

**Muhammad Ramli Buhari<sup>1</sup>, Nurjamal<sup>2</sup>, Didik Cahyono<sup>3</sup>, Naheria<sup>4</sup>,**

<sup>1</sup> Physical Education, Faculty of Teacher Training and Education, Mulawarman University, Samarinda City, Indonesia

<sup>2</sup> Physical Education, Faculty of Teacher Training and Education, Mulawarman University, Samarinda City, Indonesia

<sup>3</sup> Physical Education, Faculty of Teacher Training and Education, Mulawarman University, Samarinda City, Indonesia

<sup>4</sup> Physical Education, Faculty of Teacher Training and Education, Mulawarman University, Samarinda City, Indonesia

<sup>5</sup> Physical Education, Faculty of Teacher Training and Education, Mulawarman University, Samarinda City, Indonesia

<sup>1</sup> m.ramli@fkip.unmul.co.id, <sup>2</sup> nurjamal.unmul@gmail.com, <sup>3</sup> didikcahyono86@gmail.com, <sup>4</sup> naheria@fkip.unmul.ac.id,

### **ABSTRACT**

The sports development index is one way to measure the improvement of sports development in a region. This research aims to determine the availability of sports human resources in Samarinda City, reviewed from the Sports Development Index (SDI). The study was conducted in five sub-districts in Samarinda City, taking data from three institutions as a scope of research, including the Education Department, the KONI/DIASPORA of Samarinda City, and other Non-Formal Institutions. Research methods use a survey method approach with a quantitative descriptive approach reviewed from SDI. The research instruments used are observation, interview, and analysis of documents. The data obtained is further analyzed using SDI analysis to investigate sports human resources (HR) availability. The results of this study show; The sports HR Index in the Education Department 0.00062 falls into the low category. The HR Index of the KONI/DIASPORA 0.00035 belongs to the low-level category, and the Non-Formal Institutional HR Index 0.000062 belongs to the low-level category. Overall the sports resources index in five sub-districts in Samarinda City of 0.00080 belongs to the low-level category.

**Keywords:** human resources, sports development index

### **INTRODUCTION**

Human Resources (HR) is the most crucial asset in sports development. Teachers, coaches, instructors and referees are significant components in the sports coaching system (Arifin, 2017; Bangun, 2019). The availability of physical education teachers in each school inadequate numbers will encourage sports education activities in schools. This condition will stimulate interest and sporting talent in students—similarly, the role of coaches, instructors and referees in extracurricular activities or sports clubs.

The development of sports will largely depend on the quantity and quality of its human resources. Therefore, the ratio of teachers, coaches, instructors and referees is an essential indicator of sports development in an area. In the sports development index (SDI) study, the sports HR in question relates to the number of coaches/instructors/referees/physical education teachers owned by a sub-district/district/city (Adiyudha Permana, 2016). The availability of the HR component of the sport in adequate quantities can impact sports activities in the community both regarding quality and quantity.

In-Law No. 3 of 2005 on the National Sports System mentioned that the pillar of sports concerns sports achievement, educational sports, and recreational sports. According to Muthohir and Maksum (2007:45), the fundamental nature of the existence of sports HR is to ensure that all sports activities are supported by sports personnel who have competencies that can be accounted for ethically and professionally academic foundation. The quality and competence of HR tackling sport should be empowered to support sports coaching and development at regional, national and international levels.

Therefore, the HR intended in this study was the availability of coaches for sports achievement, instructors for recreational sports, and physical education teachers for sports education. With a conducive system and policies from local governments by utilizing the three HR, both in terms of quantity and quality, it is believed that sports development in the area will increase.

Based on users' needs, the type of HR that must be developed and improved in the quality and competence in this study is related to the number of coaches, sports instructors, referees and physical education teachers owned by a province/district/city/sub-district. The existence of the sports HR component in adequate quantities can impact sports activities in the community regarding quality and quantity (Adiyudha Permana, 2016). To achieve this goal, the Samarinda City government is obliged to manage and develop and foster sports by their authority and responsibilities.

In Samarinda city, determining the level of progress of sports development has never been studied scientifically through in-depth research. During this time, the progress of sports tends to be based on the acquisition of medals in multi-events sports activities such as Pekan Olahraga Nasional (PON) or Pekan Olahraga Pelajar Daerah (POPDA). According to (Anang Ghony Rosyid; Sugiyanto; Agus K, 2019), measuring the level of community sports development is not only done with one indicator, namely the acquisition of medals but can be done by measuring the effect of Indonesian sports through SDI. SDI is an instrument to measure the results of sports development in an area (Hidayati, 2019). The availability of hr sports coaches/instructors/ physical education teachers in Samarinda City, both from quantity and quality, there is no accurate data.

Thus, the SDI research will provide a more adequate and comprehensive measure of progress in sports development compared to the medal measure alone. The general information revealed through SDI will benefit sports development policy-making in Samarinda City, especially related to efforts to create a fundamental and robust sports development structure supported by competent HR in sports.

## METHOD

The research was conducted in 5 sub-districts in Samarinda City; Samarinda Seberang District, Kunjang River District, Samarinda Ulu District, Samarinda Utara District, and Sambutan District. This research is included in this type of quantitative research. This research uses survey research methods with a descriptive approach to evaluation. This study examined the sports HR in Samarinda City, presented in an index further described by applicable SDI norms.

The samples in this study are the people of Samarinda City domiciled in Samarinda Seberang District, Sungai Kunjang District, Samarinda Ulu District, Samarinda Utara District, and Sambutan District. Data analysis techniques are obtained from primary data and secondary data. Preliminary data consists of HR data on teachers/lecturers, sports instructors, coaches, and referees, while secondary information consists of population, area, and sports potential.

After several sports, HR obtained further calculated the index. First, looking for the actual value is the value obtained from the division results between sports HR and the number of residents over seven years. The maximum value of the sports HR specified in SDI is 2.08, and the minimum value is 0.00. After all the numbers are obtained, it is then calculated using the formula:

$$\text{HR Indeks} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

Furthermore, after getting the index value, the last stage determines the category or norm of the index value obtained. The SDI norms used are:

Table 1. Criteria of Sports Development Index

No	Index Numbers	Norms/Categories
1	0.800 – 1.000	Tall
2	0.500 – 0.799	Intermediate
3	0.000 – 0.499	Low

Source: (Purwono et al., 2019)

Here is a diagram of the research flow:

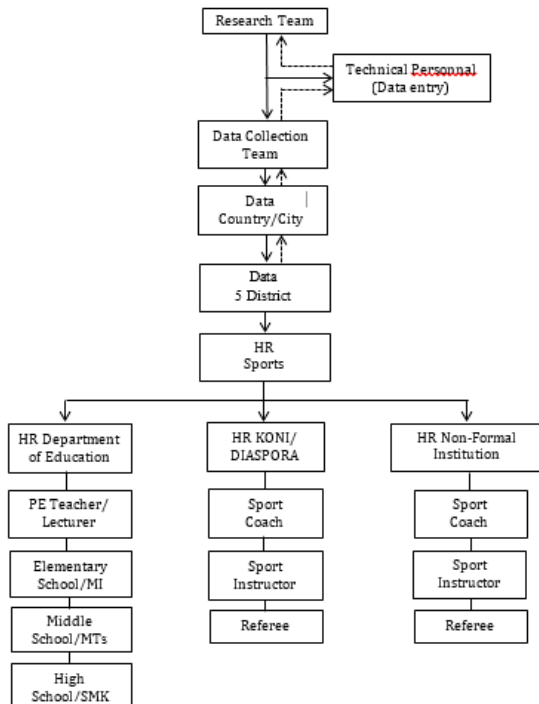


Figure 1. Research Flowchart

## RESULT AND DISCUSSION

The results of this study are obtained from the observation data on the availability of sports human resources spread across five sub-districts in Samarinda City, including; HR Department of Education HR, KONI/DIASPORA and Non-Formal Institution HR. Based on the results of these observations, the data is known as follows:

Table 1. The results of word of sports human resources per sub-district in Samarinda City

No	District	Population (>7 years)	Number of HR	Actual Value	Max Value	Min Value	HR Value	Criterion
1	Samarinda Seberang	57.642	108	0,0019	2.08	0.00	0.0009	Low
2	Sungai Kunjang	127.136	174	0,0014	2.08	0.00	0.0007	Low
3	Samarinda Ulu	123.399	184	0,0015	2.08	0.00	0.0007	Low
4	Samarinda Utara	100.335	198	0,0020	2.08	0.00	0.0010	Low
5	Sambutan	51.534	102	0,0020	2.08	0.00	0.0010	Low
Total		460.046	766					

Source: Author

Data from observations of five sub-district HR in Samarinda City showed low criteria.

Data from word of the availability of sports HR spread across five sub-districts in Samarinda City includes; HR sports education, HR sports KONI Samarinda City, and HR Non-Formal Institutions can be seen from the following table:

Table 2. Observation of HR Department of Education Samarinda City

Type of Profession		Number by Gender		Numbers by Certification	
		Man	Woman	Certification	Non Certification
Teacher PE	Elementry School	153	125	214	64
	Middle School	81	75	101	55
	High School	68	60	82	46
Lecturer		28	3	6	25
Total		330	263	403	190

Source: Author

Table 2 shows that the number and quality of HR sports education spread across five sub-districts in Samarinda city as many as 593 people with a population above the age of seven years around 460,046 residents. Then obtained the actual value:  $593/460.046 = 0.00129$ . This means that the HR index of sports education in Samarinda City is as follows:

$$\text{HR Index} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

$$\text{HR Index} = \frac{(0,00129 - 0,00)}{(2,08 - 0,00)}$$

$$\text{HR Index} = 0.00062 \text{ (low criteria)}$$

Table 3. Observation of KONI/DIASPORA HR Samarinda City

Type of Profession		Number by Gender		Numbers by Certification	
		Man	Woman	Certification	Non Certification
Sports Coach		96	63	116	43
Sports Instructor		24	31	37	18
Referee		77	45	120	2
Total		197	139	273	63

Source: Author

Table 3 shows that the number and quality of KONI/DIASPORA sports HR spread across five sub-districts in Samarinda City as many as 336 people with a population over the age of seven years around 460,046 residents. Then obtained the actual value:  $336/460.046 = 0.00073$ . This means that the KONI/DIASPORA HR index in Samarinda City is a low category. Obtained from the formula:

$$\text{HR Indeks} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

$$\text{HR Indeks} = \frac{(0,00073 - 0,00)}{(2,08 - 0,00)}$$

$$\text{HR Indeks} = 0,00035 \text{ (low criteria)}$$

Table 4. The results of observations of HR Non-Formal Institutions of Samarinda City

Type of Profession		Number by Gender		Numbers by Certification	
		Man	Woman	Certification	Non Certification
Sports Coach		15	11	16	10

Sports Instructor	12	5	3	14
Referee	9	7	14	2
Total	36	23	33	26

Source: Author

Table 4 shows the number and quality of Non-Formal Instutusi sports across five sub-districts in Samarinda City as many as 59 people with a population over the age of seven years, around 460,046 residents. Then obtained the actual value:  $59/460.046 = 0.00013$ . This means that the Non-Formal Institutions HR index in Samarinda city is a low category. Obtained from the formula:

$$\text{HR Indeks} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

$$\text{HR Indeks} = \frac{(0,00013 - 0,00)}{(2,08 - 0,00)}$$

$$\text{HR Indeks} = 0,000062 \text{ (low criteria)}$$

Tables 2, 3, and 4 mentioned above show that the number and quality of sports HR spread across five sub-districts in Samarinda city as many as 766 people with a population above the age of seven years around 460,046 residents. Then obtained the actual value:  $766/460.046 = 0.00166$ . This means that the sports HR index in Samarinda City is a low category. Obtained from the formula:

$$\text{HR Indeks} = \frac{(\text{Actual Value} - \text{Minimum Value})}{(\text{Maximum Value} - \text{Minimum Value})}$$

$$\text{HR Indeks} = \frac{(0,00166 - 0,00)}{(2,08 - 0,00)}$$

$$\text{HR Indeks} = 0,00080 \text{ (low criteria)}$$

Using the formula above, an index from sports HR in Samarinda City of 0.00080, including the low category. Details can be seen in Table 5 below:

Table 5. The results of observations of HR sports Samarinda City

No	Agency	HR value	Category
1	HR Education Department	0,00062	Low
2	KONI/Dispura HR	0.00035	Low
3	Non-formal institutional HR	0.000062	Low
4	Samarinda City Sports HR Index	0.00080	Low

Source: Author

Sports Development Index (SDI) is an alternative that can determine the level of sports development in one region (Pradhana, 2016). The concept of SDI has a broader scope than other concepts, such as medals used as a single indicator of sports success. (Zalaff et al., 2017) stated that sports development cannot be measured by the number of awards achieved from National Sports Week and others. SDI is the answer to government policies related to sports development in a region, whether it has succeeded or failed.

Human Resources (HR) is the most strategic asset for a nation and country. The progress of a nation and state is determined by the availability of natural resources and the

quality of human resources (Yusutria, 2017). If the sports HR is in adequate condition, both quality and number are the prominent supporters in sports development (Arifin, 2017).

Suppose you look at the ratio of SDI calculations carried out in five sub-districts in Samarinda City, namely Samarinda Seberang District, Sungai Kunjang District, Samarinda Ulu District, Samarinda Utara District, and Sambutan District. In that case, it is found that it is still in the low category, around 0.00080. Sports human resources about teachers, coaches, referees, and sports instructors are still very lacking. It's become a chor for local governments to increase it.

Surveys conducted by several sports coaches still exist who do not have essential coaching or have never followed the management of coaches and the like (certified). Whereas HR sports significantly affect the development of sports in the city of Samarinda. Of course, a lot of HR and quality are a basis for sports development in Samarinda City.

Human resources (HR) sports as a motor coaching sports achievement is undoubtedly the essential part of a program to continue to achieve. How can athletes get maximum results if the quality and quantity of coaches is low? How a football competition, for example, will run smoothly if the licensed referee's sports HR does not exist. Paying attention to HR in terms of quantity and quality needs to be improved.

As a unit, human resources should be viewed as a system in which each coach, teacher, and manager is a part that is interconnected with each other and together serves to achieve organizational goals. The success of sports development efforts is very evident in the capabilities and competencies of human resources (Paipe & José Carvalho, 2019).

Therefore, the Samarinda City government should immediately improve and start preparing sports hr that has competencies that can be accounted for ethically professionally and academic foundation by the demands of the law. Achieving the number of sports development index 0,800-1,000 is fought gradually and spread in every sub-district in Samarinda.

Physical education teachers are responsible for processing the body that can stimulate physical, spiritual, and social growth and development to improve the quality of sports HR.

A coach is a person who is an expert in his field who is responsible for helping and training athletes/athletes and teams in improving and improving the appearance and performance of athletes and sportspeople groups.

The task of sports instructors is responsible for leading and giving a stir to sports activities that are popular in the community. Sports instructors who teach sports activities are physical fitness gymnastics, aerobic gymnastics, and fitness instructors in fitness centres.

A sports referee is an HR whose job is to be aware and decision-making in a sports competition/match. A referee must have qualifications, licenses, refereeing certification from the appropriate parent sport, and lead battles fairly and impartially.

The four components of sports HR are in charge of each sports organization. Sports institutions must have qualifications and certificates of competence issued by the parent organization of the sport concerned and authorized government agencies. If appropriately managed will have an impact on sports activities in the community. The quality and competence of HR that handles sports should be empowered to support sports coaching and development. Thus the goal of sports development in Samarinda City can increase not only limited to dreams.

## CONCLUSION

Overall the index of sports human resources in 5 sub-districts in Samarinda city is as follows:

1. The sports HR index in Samarinda City of 0.00080 belongs to the low category.
2. The sports HR index in the Department of Education in Samarinda City of 0.00062 belongs to the low category.
3. The sports HR index in KONI/DIASPORA in Samarinda City of 0.00035 belongs to the low category.
4. The sports HR index in Non-Formal Institutions in Samarinda City of 0.000062 belongs to the low category.

## ACKNOWLEDGEMENT

This work is financially supported by unlimited research grants provided by the Faculty of Teacher Training and Education, Mulawarman University.

## REFERENCES

- Adiyudha Permana, P. S. B. (2016). Tingkat Partisipasi Olahraga dan Ketersediaan SDM Keolahragaan Kota Pontianak Provinsi Kalimantan Barat Ditinjau dari Sport Development Index (SDI). *Jurnal Pendidikan Olahraga*, 4(1), 9–19. <http://journal.ikipgriptk.ac.id/index.php/olahraga/article/view/26>
- Anang Ghony Rosyid; Sugiyanto; Agus K. (2019). Sports Development in Karanganyar Regency Indonesia in Terms Of Sports Development Indeks. *International Journal of Multicultural and Multireligious Understanding*, 6(1), 209–216. <http://dx.doi.org/10.18415/ijmmu.v6i1.560>
- Arifin, S. (2017). Peran Guru Pendidikan Jasmani Dalam Pembentukan Pendidikan Karakter Peserta Didik. *Multilateral Jurnal Pendidikan Jasmani Dan Olahraga*, 16(1). <https://doi.org/10.20527/multilateral.v16i1.3666>
- Bangun, S. Y. (2019). Peran Pelatih Olahraga Ekstrakurikuler Dalam Mengembangkan Bakat Dan Minat Olahraga Pada Peserta Didik. *Jurnal Prestasi*, 2(4), 29. <https://doi.org/10.24114/jp.v2i4.11913>
- Hidayati, R. A. (2019). Development Index of Village. *Journal of Social Science Studies*, 7(1), 19. <https://doi.org/10.5296/jsss.v7i1.15349>
- Purwono, E. P., Irsyada, R., Setiawan, I., & Abdulaziz, M. F. (2019). *Improvement Quality of Physical Education Reviewed by Sports Development in Pekalongan*. 362(Acpes), 192–195. <https://doi.org/10.2991/acpes-19.2019.43>



