

Key Success in Fostering Human Development Index at the Local Level

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Received: 30 April 2022; Revised: 20 July 2022; Accepted: 18 August 2022

Abstract

Human Development Index (HDI) determines human prosperity in different countries using value assets. In general, the primary measurement includes the three basic indices, namely education, health, and a decent standard of living. HDI is a measure of development and governance success in terms of economic growth and human development. Generally, studies on HDI take place at the national and regional levels, and comparisons of its achievements between countries, while those at the municipal level are limited. Studies on the determinants of the success of increasing HDI tend to focus on local governments' fiscal capacity and political will and rarely touch the capacity of public administration in managing government, specifically in the development planning stage. This study examined the increased success of the Malang City's HDI by adopting a logical framework (log-frame) analysis with secondary data from the Malang bureau of statistics. The results showed an 80.89 increase in HDI from 2014 to 2018, including the education and health indexes, with a decent standard of living. The increased success is shown by the Regional Medium Term Development Plan (RPJMD), including basic education development program, regional public hospital service programs, and food security program for education, health, and purchasing power indices. Therefore, the local government needs to maintain and enhance the HDI in both medium- and long-term plans. The novelty of this study lies in the use of a logical framework in preparing regional development plans that support efforts to increase HDI consistently in the medium term. This reinforces the need to strengthen the perspective of how to achieve development goals compared to other studies that focus more on the perspective of the substance of development.

Keywords: Development Plan; Human Development Index; Local Government; Logical Framework

How to Cite: Muluk, M. R. K., & Wahyudi, L. E. (2022). Key Success in Fostering Human Development Index at the Local Level. *Otoritas : Jurnal Ilmu Pemerintahan*, 12(2), 128-141.

Permalink/DOI: <https://doi.org/10.26618/ojip.v12i2.7665>

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INTRODUCTION

The international development program considers human growth an interesting aspect of national growth (A. Khan, Chatterjee, Mistri, & Das, 2015; Zaman, Imran, & Asif, 2019). According to the United Nations Development Program (UNDP), Human Development Index (HDI) is the progression of enlarging people's choices, permitting them to live a long and healthy life with education, decent living standard, and political freedom (UNDP, 1990). It focuses on economic growth and social justice, which enlarges people's choices (A. Khan et al., 2015; Kinunen, Androniceanu, & Georgescu, 2019; Lind, 2019; Scherbov & Gietel-Basten, 2020). In general, HDI determines the level of welfare (Jin, Qian, Chin, & Zhang, 2020; Yoantika & Susiswo, 2021).

It was established to highlight important criteria to examine a country's development as a human with numerous competencies. United Nations developed HDI to measure various countries' social and economic development levels and investigate their policy choices. It plays two major roles in economic development. Firstly, it is a tool to popularize human development as a new understanding of welfare. Secondly, it is an alternative method to introducing gross domestic product (GDP) per capita as a measurement of development levels between countries (Asadi & Marin, 2019; Bhowmik, 2018). HDI enables policy-makers worldwide to measure human development progress and strengthen public policies to adapt to the current and future social trends based on its multiple measurement indicators. Furthermore, it is an important parameter for administrators, bureaucrats, policy developers, legislators, and health professionals (Jin et al., 2020; Vasthare, Dhaundiyal, & Puri, 2019; Zaman et al., 2019).

The three basic dimensional approaches used by HDI to measure the

quality of life are long-healthy life, education, and a decent standard of living. In general, HDI measures the health index based on life during birth and the Education index according to the average age when a child starts school and the country's population mean years of schooling. It also focuses on the decent standard of living index measured by the Gross National Index (GNI) per capita (Sarda, Karmarkar, Lakhotia, & Sharma, 2019). This is also based on the purchasing power parity (PPP), a metric for representing average income. Higher HDI means the ability of a country to provide decent health facilities, better education, a high standard of living, and maintain foreign exchange (Dasic et al., 2020; Lind, 2019).

The global HDI value increased from 0.728 in 1990 to 21.7% in 2017. This meant that people had a longer life, greater education, and significant access to opportunities. The HDI global rate values have been rising at varying rates across all regions from 1990 to 2017. During this period, the leading region was South Asia, followed by East Asia and the Pacific, Sub-Saharan Africa, Arab States, Latin America, and the Caribbean, as well as Europe and Central Asia. By 2019, Indonesia ranked 107th out of 189 countries with a value of 0.718 to 0.86% from 2018 (HDRO, 2018; Kaukab & Surwandon, 2021). Kaukab & Surwandon (2021) conducted a study on a narrower HDI in Southeast Asia. More focused HDI studies within the Indonesian national scope have also been carried out by Hasanah, Bahri, & Fitriyani (2021) and Haseeb, Suryanto, Hartani, & Jermsittiparsert (2020). Meanwhile, studies in various regions in Indonesia have also been conducted by Ansyar, Padjung, & Salam (2021), Candradewini & Nirmalasari (2018), and Tjolli, Karuniasa, Rehiara, Jance, & Lestari (2021).

Each region was expected to examine its HDI value to plan, program, and evaluate current development and its dis-

tribution in the human sector due to the country's regional autonomy (Amaluddin, Payapo, Laitupa, & Serang, 2018; Yulianti, Widyaningsih, & Nurrohmah, 2021). The central government authorized the local government to administer and develop regions through regional autonomy. This means that it had the power to utilize all the region's potential, such as human resources, to improve living standards and welfare. Furthermore, the local governments hold an important position in planning and managing programs and activities to support the achievement of HDI (Arwildayanto, 2019; Khusaini, 2020; Putra, 2015; Tasrin & Putri, 2012).

Several studies on how local governments at the regency/city level were able to increase HDI consistently tend to examine factors outside of public administration, such as fiscal capacity (Khusaini, 2020; Rizki & Saputra, 2018) and the political will (Amaluddin et al., 2018). Meanwhile, the study of public administration factors that support the achievement of HDI is still limited to public services in the health sector (Candradewini & Nirmalasari, 2018). It excludes the ability to prepare good development plans as the key to consistent success. The HDI in Malang City showed significant progress yearly, as reported in a previous study (Agoesdijanto & Suciati, 2018). Each component increased from 2010 to 2014, though there was still a decrease in some indices. The development continued until the 2015-2018 and 2019-2021 periods (BPS Kota Malang, 2022). This indicates it is important to maintain the HDI value by improving and adding the intensity of existing programs. The components that experienced a decline require improvement in the programs and strategies executed by local government to improve the human development in the city. Therefore, this study examines key success in boosting and maintaining the HDI in Malang City through a logical framework approach.

RESEARCH METHODS

This study was conducted in Malang, the second-largest city in East Java. Malang is considered a study site because of the consistent progress in improving HDI since the previous Regional Medium Term Development Plan (RPJMD), therefore this consistency can be a lesson for other regions. The HDI secondary data was collected from the Malang Central Bureau of Statistics (BPS) from 2014 to 2018. This timeframe was selected because it considers one term of the Regional Medium Term Development Plan (RPJMD) that has been completed, namely 2013-2018. Meanwhile, the next period, 2018-2023, ratified in 2019, cannot be assessed because its achievement has not yet been completed. The progress of achieving HDI is very difficult if the achievement period is insufficient. The success in the RPJMD period is also the basis for the achievement of HDI. The difficult period in achieving the current RPJMD, was during the Covid-19 pandemic, which occurred in various countries (Arriani & Chotib, 2021; Troumbis, 2021). The HDI data used to conduct this study were collected from three parameters (Dasic et al., 2020; Lind, 2019), namely education (Expected Years of Schooling (EYS) and Mean Years of Schooling (MYS)), health (life expectancy at birth), and decent living standard (per capita expenditure). Detailed information can be accessed at Website of the Central Statistics Agency of Malang, Indonesia.

Logical framework or log-frame analysis approach was employed to plan and manage the project to achieve the goal. The basic log frame is divided into a four-by-four matrix where the four rows consist of a hierarchy of project objectives (Grove & Zwi, 2008). These are goal (overall objectives), Outcome (what will be achieved, who will benefit, and the project period), Output (project results that will be generated), and Activities (the tasks to be done to achieve the output).

The four columns used to measure and approve the logical framework from left to right are the project summary (objectives explanation), verifiable indicators (measurement of the achievements), means of verification (how information is collected), as well as risks and assumptions (external conditions to get results).

RESULTS AND DISCUSSION

HDI in Malang increased significantly from 2014 to 2018, followed by a rise in the health, education, and purchasing power parity index, as shown in Figure 1. In 2018, the HDI point and its components were observed with 80.89 points, whereas the health and education index had 81.4 and 77.0, respectively. However, the purchasing power parity index was 84.6, the highest compared to other indices.

In 2018 (as shown in Table 1), newborns had a chance to live up to 72.93 years, an increase of 0.16 years from 2017. Children aged 7 years had the opportunity to attend school for 15.4 years, a rise of 0.01 years. Furthermore, the population aged 25 years and above had a mean of 10.16 years of education, an increase of 0.01 years. The per capita expenditure reached Rp. 16.15 million, a rise of 219 thousand rupiahs compared to the previous year. Malang City HDI was

ranked second in East Java Province with a value of 80,89 points in 2019 by the Central Bureau of Statistics. This implies that HDI is in the very high category.

The success of Education, Health, and purchasing power parity programs requires the provision of facilities and infrastructure for easy accessibility by the community. The realization of this program needed government policy support. Therefore, various programs were planned to meet the goals to maintain the value of HDI in Malang City from 2019 to 2023 according to Regional Medium-Term Development Plan (RPJMD), as shown in Table 2.

The Local governments played an essential role in ensuring the implementation of regional development programs within a given period. The health, education, and purchasing power indexes are the responsibility of the regional health office, educational and cultural office, and industry and trade cooperative service, respectively. Health, education, and purchasing power parity indices require the highest funding consecutively. Detailed information, such as the objectives of the regional development program, component index, initial condition of RPJMD in 2018, performance achievements, and funding programs from 2019 to 2023 (IDR), can be accessed in RPJMD Kota Ma-

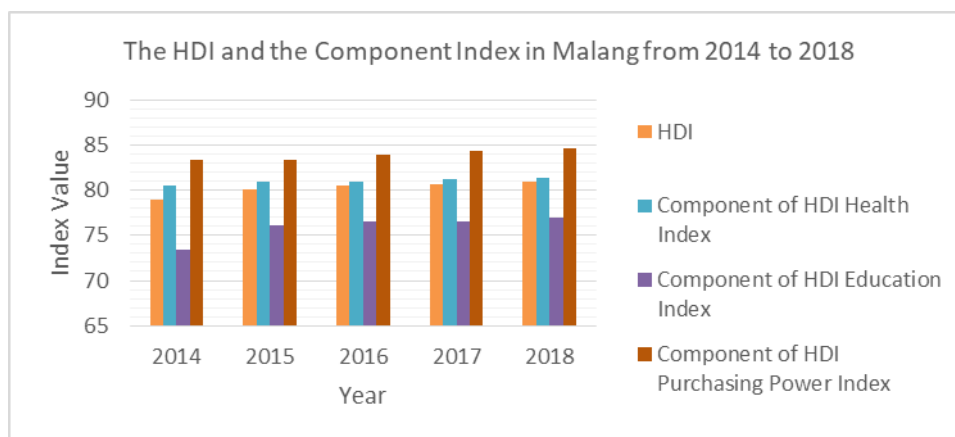


Figure 1. The HDI and the Component Index in Malang City
 Source: BPS Kota Malang (2019)

lang 2018-2023 (Malang, 2019). Others include local government response to executing the program.

The log-frame analysis concerned with the regional development program towards HDI in Malang City shows that the increased success was a reflection of the implementation of the development program. Therefore, to speed up the growth rate, the local government showed commitment to improving its citizens' quality lives by widening choices. Detail analysis of the development program regarding HDI in the city is illustrated in Table 3.

This study discovered continuous progress in human development in Malang, which is marked by the increase in HDI and its components. These include Expected and Mean Years of Schooling, life expectancy at birth, and per capita expenditure index. The regions with higher index scores are more developed than those with lower index scores. Regional program development provided by local governments through the RPJMD agenda facilitated the success of human development progress in the city. A regional development program was drafted to ensure even distribution and enhancement of education health quality and increase purchasing of non-food commodities.

HDI has been widely used as the key indicator to differentiate between developed and underdeveloped zones. There

was a significant increase in HDI of Malang City from the year 2010 to 2016, where the city surpassed the provincial and national HDI of East Java which is still below 70%. In 2017 and 2018, the city increased by 0.24 points, making it 80.89 in 2018. Increasing and maintaining economic growth and controlling the population growth rate are the two ways to maintain this position (Khusaini, 2020).

The education program in Malang City supports and guarantees the expected number of years of schooling and its yearly mean increment through the citizen partnership program for Elementary, Junior, and High School students. Excellent Human Resources must be enhanced through various efforts to achieve high-quality education. This can be achieved by implementing an integrated school-based education quality and improving a sustainable and contextual management program (Dasic et al., 2020; Lai & Chen, 2020; Pulungan, 2015). Safitri, Darsyah, & Utami (2014) used the ordinal logistic regression method to establish that a good population was taking education above middle school at a classification rate of 86.97%. Therefore, it can be seen as affecting HDI value in East Java (Safitri et al., 2014; Yoantika & Susiswo, 2021).

The basic education development program received the highest funding. Therefore, there was an increase in the

Table 1. Indicators Component of HDI in Malang City
 Source: BPS Kota Malang (2019)

Year	Life Expectancy at Birth (Year)	Expected Years of Schooling (EYS) (Year)	Mean Years of Schooling (MYS) (Year)	Per Capita Expenditure
2014	72.3	14.47	9.97	15398.97
2015	72.6	15.23	10.13	15419.88
2016	72.68	15.38	10.14	15732
2017	72.77	15.39	10.15	15939
2018	72.93	15.4	10.16	16158

Table 2. Development Program in Malang City from 2019 to 2023
 Source: Pemerintah Kota Malang (2019)

Development Program	Program	Funding Framework (Working Conditions at the End of the 2019-2023 RPJMD Period) (USD)	Regional Apparatus Organization
Education index	Early childhood education and non-formal programs	4,200,000	Department of education and culture
	Basic education development program	59,926,923	
	Manpower development program	4,350,500	
	Health service improvement program	39,840,315	
Health index	Community health center (puskesmas) regional public service agency (BLUD) program	561,535	Public Health Departments
	Regional general hospital service program	12,985,000	
	Regional general hospital BLUD program	261,307,216	
	Disease prevention and control program	1,365,000	
	Public health improvement program	3,272,500	
	Program to improve human resources, pharmaceuticals, and medical devices	3,920,000	
	Population control and family planning programs	822,500	
Purchasing power parity index	Trade development program	525,000	Department of Industry and trade cooperative
	Food security improvement program	1,067,500	

quality of primary, tertiary, and secondary education, thereby boosting the education index. The World Bank reported that several components enhance the quality of basic education in the community. These include developing the training of principals, teachers, administrative staff, and supervisors. Others include reinforcing school management at all levels, strengthening supervision, improving construction, school renovation, and providing better teaching aids and school equipment (The World Bank, 2020).

The health index is reflected by child and adult health indicators (A. Khan et al., 2015), including maternal health (García-Tizón Larroca et al., 2020). Every year, the health index in Malang City shows significant progress influenced by life expectancy at birth and stillbirths. The provision of health resources, such as infrastructure, medicine, and health services, is helpful for maternity women. The health service unit's improvement, reliability, and timeliness are needed for effectiveness. The preliminary study by Putra (2012) recommended the increase in service delivery and the use of advanced technology in health services. The supporting facilities, such as the Public health center across all-sub districts in the city, played an essential role in meeting the health service community demand and increasing its index value (Candradewini & Nirmalasari, 2018; Prabawati, Wardhani, & Setyono, 2017).

The highest finance provision was given to the regional general hospital BLUD program. Its policy was integrated into regional hospitals to help in the provision of flexible health services to the needed communities. The hospital can plan health programs, medical equipment, and medicines according to their needs. Work procedures must implement the integration policy to ensure sufficient and adequate personnel resources, facilities, and finance (BLUD, 2018). Quality health services will reach the community's needs

and accelerate patients' recovery, thereby leading to satisfaction. In addition, the local government aims to promote a clean, comfortable, safe, and healthy environment by engaging the community. For instance, the community group in Gadingkasri Administrative Village formed a Gadingkasri forum to realize the government's goal (Sonalitha, Yudhistiro, & Soelaksono, 2019).

Purchasing power index contributed to HDI in Malang City with 0.22 points in 2018. Its success and increase are inseparable from the food security program provided by the local government. Food availability causes a rise or falls in inflation due to situational influence on consumption for everyone (Ogot, 2021; Zaman et al., 2019). Food expenditure is an indicator of food security in the region. The rise in individual welfare directly affects the local, regional, and national communities. An increase in welfare is likely to grow individual food consumption due to a rise in purchasing power parity (Ilham & Sinaga, 2007).

BPS Malang City (Statistics of Malang Municipality) reported that other expenditures dominated households consumption by IDR 1.022.372 than food expenditure at IDR 1.022.372 in 2018 (BPS Kota Malang, 2019). More developed societies tend to have higher non-food expenditures due to different factors, including higher education facilities, better health systems, accessible entertainment venues, and demographics (Bernard, Song, Hena, Ahmad, & Wang, 2022; Subarna, 2012). Similarly, the 2017 study found out the income factor affected the non-food consumption expenditure (Kassahun, Tessema, & Adbib, 2022; Nwosu, Ojonta, & Orji, 2018; Utami, 2017). Economic control is focused on fostering a productive culture where there is a need to understand factors affecting purchasing power parity towards HDI value (Barman, 2021; N. H. Khan, Ju, & Hassan, 2019; Zaman et al., 2019).

Table 3. Log-frame Analysis
 Source: Processed by the Authors (2020)

	Project Description	Key Indicators	Means of Verification	Assumption/ Risk
Goal	Increase in HDI and the rise in education, health, and purchasing power parity index.	HDI in Malang City continued to be classified in the high category.	Yearly comparison of HDI data from 2014 to 2018	N/A
Purpose	To ensure better accessibility and improved quality of education, health, and fundamental service outreach to all communities.	Guaranteed Access to Quality Education, Health, and Other Basic Services for All Citizens.	Yearly comparison of HDI data from 2014 to 2018 and Data observation through Malang City RPJMD	The HDI and education, health, and purchasing power parity index increased compared to the previous year.
Outputs	Increased life expectancy at birth, Expected and Mean Years of Schooling, and per capita expenditure.	The life expectancy at birth, Expected Years of Schooling, its mean, and per capita expenditure have increased compared to the previous year.	Data observation through Malang City RPJMD	The communities get better access to quality education, health, and fundamental service.
	<p>Education index Optimizing informal education through study groups and High School Equivalency, improve the facility and infrastructure to meet the standard and equal distribution of quality teachers.</p> <p>Health index Optimization of health facilities for pregnant women, infants, and toddlers. It also improves the facility and infrastructure to meet the standard.</p> <p>Purchasing power parity Optimization of food availability.</p>	<p>Number of students and teachers who get better facilities and infrastructure.</p> <p>Number of mothers, patients, and health workers who get better facilities and infrastructure.</p> <p>The increased purchasing power of food and non-food commodities.</p>	Data observation through regional program development in Malang City RPJMD report	The local communities significantly increase life expectancy at birth, Expected and Mean Years of Schooling, and per capita expenditure.

Malang City does not rely on non-food and food expenditure to increase power parity because it has 15 creative industry sectors. According to preliminary studies, creative industry-based development can escalate purchasing power index. Small and medium-sized enterprises (SMEs) in the culinary, craft, fashion, music, and interactive games sectors need to be synergized by both the government and the private sector. The city's Department of Cooperatives and SMEs responded by providing access through coaching and training, product promotion activities, expansion of product marketing sources, and the provision of facilities and infrastructure (Ananda & Susilowati, 2017). This alternative way is expected to promote the realization of SMEs as an economic power to enhance the standard of living (Anggraeni, Hardjanto, & Hayat, 2013; N. H. Khan et al., 2019), thereby allowing the local community to benefit by improving their income.

Despite criticisms, HDI is a powerful tool and indicator to measure human development in a region. For instance, it does not consider other factors, such as gender gap, racial inequality, and empowerment movement, to reflect the overall quality of life. Furthermore, the calculation and definition of life expectancy and years of schooling vary among countries (Dhannoon, 2021; Lind, 2019; Popkova, 2021). This study aims to determine a better approach free from HDI flaws.

This study shows that the effectiveness of consistently increasing HDI in the medium-term development plan can be extended with proper implementation. A logical framework can measure these capabilities, ensuring a link between goals, outcomes, outputs, and activities. This relationship is re-linked in a matrix with the project summary, success indicators, how to verify indicators, and assumed achievement conditions. With the clarity of this logical framework, the goal of increasing HDI will be achieved to increase economic

and human development. Furthermore, the finding is an alternative to the means in increasing HDI based on fiscal capacity (Khusaini, 2020; Rizki & Saputra, 2018), political will (Amaluddin et al., 2018), and public services in the health sector (Candradewini & Nirmalasari, 2018). This study emphasizes the importance of the perspective on the methods of achieving development goals rather than the content of development such as human development (Lind, 2019; Scherbov & Gietel-Basten, 2020), infrastructure development (Castro, Taleires, & Silveira, 2021), sustainable environment (Jin et al., 2020; Lai & Chen, 2020; Lima et al., 2022; Tjollie et al., 2021), information and communication technology (N. H. Khan et al., 2019; Zhang & Danish, 2019), globalization (Asadi & Marin, 2019), economic development (Bhowmik, 2018; Kinnunen et al., 2019), and democracy (Gruczyńska, 2018; Kinnunen et al., 2019).

CONCLUSION

In conclusion, this study shows the importance of strengthening the capacity for development. This capacity is in the form of the ability to utilize a logical framework in preparing development plans for it to become an instrument of control easily. It can also be used to strengthen the success of increasing HDI regardless of the selected development substance. Furthermore, Malang City proved its value increased from 2014 to 2018, with 80.89 in 2018, with a rise of 0.24 points in 2017. The key success increase in the city HDI can be referred to as the development program of RPJMD that involves several programs. These include basic education development, regional general hospital BLUD, food security for education, health, and purchasing power index. This study was conducted to assist the local government in preparing for the future development program to keep HDI in the city at a high-level position. However, it is limited to 1) focusing

only on Malang City HDI from 2014 to 2018, 2) secondary data obtained from Malang Central Bureau of Statistics, 3) inability to consider other factors, including household income, and 4) it only used three indices. This means there is a need to adopt an advanced statistical measurement for better HDI perspectives in future studies.

ACKNOWLEDGEMENT

The authors are grateful to the Government of Malang City, colleagues at the Centre for Policy and Development Studies (CPDS), and SmartID for facilitating and supporting this study. The gratitudes are also expressed to Researchers at the Governance Laboratory at the Faculty of Administrative Science, Universitas Brawijaya.

REFERENCES

- Agoesdijanto, H., & Suciatty, S. E. (2018). ANALISIS INDEKS PEMBANGUNAN MANUSIA KOTA MALANG TAHUN ANGGARAN 2015. *PANGRIPTA*, 1(1), 66–74.
- Amaluddin, A., Payapo, R. W., Laitupa, A. A., & Serang, M. R. (2018). A modified human development index and poverty in the villages of west seram regency, Maluku province, Indonesia. *International Journal of Economics and Financial Issues*, 8(2), 325–330.
- Ananda, A. D., & Susilowati, D. (2017). Pengembangan Usaha Mikro Kecil Dan Menengah (UMKM) Berbasis Industri Kreatif Di Kota Malang. *Jurnal Ilmu Ekonomi*, 10(10), 120–142.
- Anggraeni, F. D., Hardjanto, I., & Hayat, A. (2013). Pengembangan Usaha Mikro, Kecil, Dan Menengah (Umkm) Melalui Fasilitas Pihak Eksternal Dan Potensi Internal (Studi Kasus Pada Kelompok Usaha “Emping Jagung” Di Kelurahan Pandanwangi Kecamatan Blimbing, Kota Malang). *Jurnal Administrasi Publik*, 1(6), 1286–1295.
- Ansyar, M. H., Padjung, R., & Salam, M. (2021). Analysis of the human development index to the development of the province of west Sulawesi. *IOP Conference Series: Earth and Environmental Science*, 921(1), 012041. <https://doi.org/10.1088/1755-1315/921/1/012041>
- Arriani, R. R., & Chotib, C. (2021). The Correlation of SDG 1 and 8 and Spatial Effect of Human Development Index in Central Java. *IOP Conference Series: Earth and Environmental Science*, 940(1), 012063. <https://doi.org/10.1088/1755-1315/940/1/012063>
- Arwildayanto, A. (2019). Examining the effectiveness of prodira policy on improving human development index at Province of Gorontalo. *IOP Conference Series: Earth and Environmental Science*, 314(1), 012074. <https://doi.org/10.1088/1755-1315/314/1/012074>
- Asadi, R., & Marin, G. O. (2019). How Globalization Influences the Developing Countries' Human Resources Strategic Policy. *Journal of Economic Development, Environment and People*, 8(3), 32. <https://doi.org/10.26458/jedep.v8i3.625>
- Barman, S. C. (2021). Indicator of Development: Per Capita Income to Human Development Index. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(13), 3505–3508.
- Bernard, B. M., Song, Y., Hena, S., Ahmad, F., & Wang, X. (2022). Assessing Africa's Agricultural TFP for Food Security and Effects on Human Development:

- Evidence from 35 Countries. *Sustainability*, 14(11), 6411. <https://doi.org/10.3390/su14116411>
- Bhowmik, D. (2018). Nexus between growth and human development index: Evidence from India and Indian States. *AU EJournal of Interdisciplinary Research*, 3(2).
- BLUD. (2018). Implementasi Kebijakan BLUD Puskesmas Dan Rumah Sakit Daerah. Retrieved from <https://blud.co.id/wp/implementasi-kebijakan-blud-puskesmas-dan-rumah-sakit-daerah/>
- BPS Kota Malang. (2019). Indeks Pembangunan Manusia 2018.
- BPS Kota Malang. (2022). Indeks Pembangunan Manusia (IPM) Kota Malang, Jawa Timur, dan Indonesia 2019-202. Retrieved from <https://malangkota.bps.go.id/indicator/26/282/1/indeks-pembangunan-manusia-ipm-kota-malang-jawa-timur-dan-indonesia.html>
- Candradewini, C., & Nirmalasari, H. (2018). The Public Service Management Capacity of Community Health Centers in Cimahi City and Its Contribution to Human Development Index (HDI) of the Health Sector. *Review of Integrative Business and Economics Research*, 7, 348–356.
- Castro, L. A., Taleires, F. C. da S. S., & Silveira, S. S. (2021). Índice de desenvolvimento humano em municípios que possuem sistema integrado de saneamento rural: uma análise comparativa. *Ciência & Saúde Coletiva*, 26(1), 351–357. <https://doi.org/10.1590/1413-81232020261.24452018>
- Dasic, B., Devic, Z., Denic, N., Zlatkovic, D., Ilic, I. D., Cao, Y., ... Le, H. Van. (2020). Human development index in a context of human development: Review on the western Balkans countries. *Brain and Behavior*, 10(9). <https://doi.org/10.1002/brb3.1755>
- Dhannoon, A. H. (2021). Indicators of human development in Iraq for the period (2004-2019). *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(12), 4479–4487.
- García-Tizón Larroca, S., Amor Valera, F., Ayuso Herrera, E., Cueto Hernandez, I., Cuñarro Lopez, Y., & De Leon-Luis, J. (2020). Human Development Index of the maternal country of origin and its relationship with maternal near miss: A systematic review of the literature. *BMC Pregnancy and Childbirth*, 20(1), 224. <https://doi.org/10.1186/s12884-020-02901-3>
- Grove, N. J., & Zwi, A. B. (2008). Beyond the log frame: A new tool for examining health and peacebuilding initiatives. *Development in Practice*, 18(1), 66–81. <https://doi.org/10.1080/09614520701778850>
- Gruczyńska, A. (2018). The Human Development Index as an Indicator of Economic Development. An Assessment Based on a Comparative Case Study of Five European Post-Socialist Countries. *Annales. Etyka w Życiu Gospodarczym*, 21(3). <https://doi.org/10.18778/1899-2226.21.3.03>
- Hasanah, N., Bahri, S., & Fitriyani, N. (2021). The Effect of Human Development Index on Poverty Model in Indonesia using Penalized Basis Spline Nonparametric Regression. *IOP Conference Series: Materials Science and Engineering*, 1115(1), 012055.

<https://doi.org/10.1088/1757-899X/1115/1/012055>

- Haseeb, M., Suryanto, T., Hartani, N. H., & Jermisittiparsert, K. (2020). Nexus Between Globalization, Income Inequality and Human Development in Indonesian Economy: Evidence from Application of Partial and Multiple Wavelet Coherence. *Social Indicators Research*, 147(3), 723–745. <https://doi.org/10.1007/s11205-019-02178-w>
- HDRO. (2018). Human Development Indices and Indicators: 2018 Statistical Update.
- Ilham, N., & Sinaga, B. M. (2007). Penggunaan Pangsa Pengeluaran Pangan Sebagai Indikator Komposit Ketahanan Pangan. *SOCA (Socio-Economic of Agriculture and Agribusiness)*, 7(3), 1–22.
- Jin, H., Qian, X., Chin, T., & Zhang, H. (2020). A Global Assessment of Sustainable Development Based on Modification of the Human Development Index via the Entropy Method. *Sustainability*, 12(8), 3251. <https://doi.org/10.3390/su12083251>
- Kassahun, T., Tessema, A., & Adbib, K. (2022). Analysis of rural household food and non-food poverty status in Ethiopia: The Case Study from Meskan District. *Food and Energy Security*, 11(2). <https://doi.org/10.1002/fes3.363>
- Kaukab, M. E., & Surwandon, S. (2021). CONVERGENCE OF HUMAN DEVELOPMENT INDEX: CASE STUDY OF FOREIGN DIRECT INVESTMENT IN ASEAN. *Business: Theory and Practice*, 22(1), 12–17. <https://doi.org/10.3846/btp.2021.12153>
- Khan, A., Chatterjee, S., Mistri, K., & Das, A. (2015). Level and Pattern of Human Development in Paschim Medinipur District, West Bengal, India. *Journal of Human Ecology*, 49(3), 219–229. <https://doi.org/10.1080/09709274.2015.11906840>
- Khan, N. H., Ju, Y., & Hassan, S. T. (2019). Investigating the determinants of human development index in Pakistan: an empirical analysis. *Environmental Science and Pollution Research*, 26(19), 19294–19304. <https://doi.org/10.1007/s11356-019-05271-2>
- Khusaini, M. (2020). Increasing the Fiscal Capacity and Human Development of East Java: What Should a Regional Government Do? *Review of Integrative Business and Economics Research*, 9(4), 99–113.
- Kinnunen, J., Androniceanu, A., & Georgescu, I. (2019). The role of economic and political features in classification of countries in transition by Human Development Index. *Informatica Economică*, 23(4), 26–40.
- Lai, S. L., & Chen, D.-N. (2020). A Research on the Relationship between Environmental Sustainability Management and Human Development. *Sustainability*, 12(21), 9001. <https://doi.org/10.3390/su12219001>
- Lima, P. A. B., Paião Júnior, G. D., Santos, T. L., Furlan, M., Battistelle, R. A. G., Silva, G. H. R., ... Mariano, E. B. (2022). Sustainable Human Development at the Municipal Level: A Data Envelopment Analysis Index. *Infrastructures*, 7(2), 12. <https://doi.org/10.3390/infrastructures7020012>
- Lind, N. (2019). A Development of the Human Development Index. *Social Indica-*

- tors Research, 146(3), 409–423. <https://doi.org/10.1007/s11205-019-02133-9>
- Malang, P. K. (2019). RPJMD Kota Malang 2018-2023. Retrieved from <https://malangkota.go.id/download/rpjmd-2018-2023/>
- Nwosu, E. O., Ojonta, O., & Orji, A. (2018). Household consumption expenditure and inequality: evidence from Nigerian data. *International Journal of Development Issues*, 17(3), 266–287. <https://doi.org/10.1108/IJDI-06-2017-0113>
- Ogot, N. (2021). Metrics for identifying food security status. In *Food Security and Nutrition* (pp. 147–179). Elsevier. <https://doi.org/10.1016/B978-0-12-820521-1.00007-1>
- Popkova, E. (2021). The social management of human capital: basic principles and methodological approaches. *International Journal of Sociology and Social Policy*, 41(1/2), 24–36. <https://doi.org/10.1108/IJSSP-03-2020-0062>
- Prabawati, D., Wardhani, D. K., & Setyono, D. A. (2017). Supply Dan Demand Fasilitas Kesehatan Di Kota Malang (Puskesmas Dan Puskesmas Pembantu). *Jurnal Perencanaan Wilayah Dan Kota*, 9(2), 85–94.
- Pulungan, M. (2015). Kajian Evaluasi Tenaga Pendidikan dalam Rangka Peningkatan Kualitas Pendidikan di Kutai Kartanegara Provinsi Kaltim. *Jurnal Bina Praja*, 07(01), 51–62. <https://doi.org/10.21787/JBP.07.2015.51-62>
- Putra, I. (2015). Pembangunan Manusia Kabupaten Kepulauan Anambas. *Jurnal Bina Praja*, 07(02), 173–184. <https://doi.org/10.21787/JBP.07.2015.173-184>
- Rizki, R. A., & Saputra, R. (2018). *THE YOUTH RESPONSE TOWARDS SOCIAL MARKETING CAMPAIGN OF "INDONESIA PLASTIC BAG DIET MOVEMENT."* The International Institute of Knowledge Management (TIKM). <https://doi.org/10.17501/medcom.2018.4107>
- Safitri, D. W., Darsyah, M. Y., & Utami, T. W. (2014). Pemodelan Spatial Error Model (SEM) untuk Indeks Pembangunan Manusia (IPM) di Provinsi Jawa Tengah. *Jurnal Statistika Universitas Muhammadiyah Semarang*, 2(2).
- Sarda, V., Karmarkar, Y., Lakhota, N., & Sharma, S. (2019). AN INSIGHT INTO THE STAGE OF GLOBAL HUMAN DEVELOPMENT USING HUMAN DEVELOPMENT INDICES. *Prestige International Journal of Management and Research*, 12(1/2), 82–87.
- Scherbov, S., & Gietel-Basten, S. (2020). Measuring inequalities of development at the sub-national level: From the human development index to the human life indicator. *PLOS ONE*, 15(4), e0232014. <https://doi.org/10.1371/journal.pone.0232014>
- Sonalitha, E., Yudhistiro, K., & Soelaksono, A. G. (2019). Kota Sehat Kelurahan Gadingkasri Kota Malang. *Jurnal Masyarakat Merdeka*, 2(2), 8–13.
- Subarna, T. (2012). Analisis Kemiskinan Dan Pengeluaran Non-Pangan Penduduk Jawa Barat. *Jurnal Bina Praja*, 4(4), 243–250.
- Tasrin, K., & Putri, W. (2012). KAJIAN PENGARUH KEBIJAKAN DESENTRALISASI PADA PENINGKATAN KESEJAHTERAAN MASYARAKAT (Studi Kasus: Kabupaten/Kota di Provinsi Jawa

- Barat). *Jurnal Borneo Administrator*, 8 (2). <https://doi.org/10.24258/jba.v8i2.90>
- The World Bank. (2020). Basic Education Development Project.
- Tjolle, I., Karuniasa, M., Rehiara, A. B., Jance, S., & Lestari, I. (2021). Development of the sustainable human development index model in West Papua. *IOP Conference Series: Earth and Environmental Science*, 716(1), 012106. <https://doi.org/10.1088/1755-1315/716/1/012106>
- Troumbis, A. Y. (2021). Testing the socio-economic determinants of COVID-19 pandemic hypothesis with aggregated Human Development Index. *Journal of Epidemiology and Community Health*, 75(4), 414–415. <https://doi.org/10.1136/jech-2020-215986>
- UNDP. (1990). Concept and measurement of human development. *Human Development Report 1990*.
- Utami, J. P. (2017). *Pengeluaran Konsumsi Pangan Dan Non Pangan Rumah Tangga Di Kota Medan Dan Faktor Yang Mempengaruhinya (Studi Kasus Suku Jawa Dan Batak)*.
- Vasthare, R., Dhaundiyal, S., & Puri, S. (2019). Measures Of Human Development: A Narrative. *International Journal Of Community Medicine And Public Health*, 6(2), 889–894.
- Yoantika, A. F., & Susiswo. (2021). Comparing the Principal Regression Analysis Method with Ridge Regression Analysis in Overcoming Multicollinearity on Human Development Index (HDI) Data in Regency/City of East Java in 2018. *Journal of Physics: Conference Series*, 1872(1), 012024. <https://doi.org/10.1088/1742-6596/1872/1/012024>
- Yulianti, S., Widyaningsih, Y., & Nurrohmah, S. (2021). Spatial panel data model on human development index at Central Java. *Journal of Physics: Conference Series*, 1722(1), 012090. <https://doi.org/10.1088/1742-6596/1722/1/012090>
- Zaman, K., Imran, M., & Asif, M. (2019). Extended Version of Human Development Index with Millennium Development Goals: A Case Study of Pakistan. *EuroEconomica*, 38(1).
- Zhang, J., & Danish. (2019). The dynamic linkage between information and communication technology, human development index, and economic growth: evidence from Asian economies. *Environmental Science and Pollution Research*, 26(26), 26982–26990. <https://doi.org/10.1007/s11356-019-05926-0>