

Multifactorial Analysis of Human Development Index in Beji and Tapos Subdistricts, Depok City

Analisis Multifaktorial Indeks Pembangunan Manusia di Kecamatan Beji dan Tapos, Kota Depok

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ABSTRACT

This study aims to analyse a number of multifactorial factors that affect the Human Development Index (HDI) in Depok City, with a focus on Beji and Tapos Sub-districts. This research uses multiple linear regression analysis methods and relies on secondary data from the Depok City Statistics Bureau (BPS). The results explain that there are factors that have a significant interrelated influence on HDI in the two sub-districts, namely education, health, and per capita expenditure. In addition to these factors, there are also other factors that have a more limited impact on HDI, such as the unemployment rate and the level of urbanisation. This research is intended to provide valuable input for policy makers in an effort to improve HDI in Depok City, especially in Beji and Tapos Sub-districts.

Keywords : Human Development Index, factors, multiple linear regression analysis, Depok City, Beji Sub-district, Tapos Sub-district

1. Introduction

One important component in assessing the progress of a country or region is the improvement of the quality of human life. The Human Development Index (HDI) is one tool used to measure human development in a region; the HDI consists of three main components: life chances, knowledge, and decent standard of living. The HDI is the result of various factors that affect the quality of human life, such as education. The government and the local community have paid close attention to the HDI in Depok City, especially in Beji and Tapos sub-districts, in recent years.

‘The Human Development Index helps us look beyond economic growth. It assesses our progress in improving human living conditions, by including health and education elements in the measurement,’ said Professor Amartya Sen. According to Sen, the 1990

The HDI value in Depok city is very different in the western and eastern parts, indicating a gap in human development in some sub-districts. Therefore, to find variables that affect HDI in both sub-districts, this study will use secondary data from the Depok City Statistics Agency (BPS).

The authors of the article titled ‘Multifactorial Analysis of Human Development Index in Beji and Tapos Subdistricts, Depok City’ will study the factors that affect the human development index in the two subdistricts. They hope to find indicators that affect the human development index and provide an in-depth understanding of the condition of human development in the area through multifactorial analysis.

Amartya Sen, 1998 offers an interesting perspective in this context. Sen argues that human development encompasses both economic and social as well as political aspects. As stated by Sen (1999), ‘Human development should include anything that affects the quality of human life, including education, health, gender equality, and access to resources.’

There are several factors that have an influence on human development in Beji and Tapos Sub-districts, Depok City. For example, rapid population growth and changing demographics may be one of the main components affecting human development in these two sub-districts. 'Rapid population growth can affect the ability of local governments to provide access to basic services such as education and health' (UNDP, 2017).

Human development also requires equal access to education and health. 'Education equity is one of the significant indicators of human development' (Depdikbud RI, 2016). This shows how important it is to consider the quality of education services and accessibility in these two sub-districts.

The human development index also depends on the economic component. The economies of these two sub-districts are different, with many formal and informal sectors. For example, 'a strong informal sector can be a challenge in increasing people's income and reducing economic disparities' (BPS, 2018).

A multifactorial analysis of the human development index in Beji and Tapos sub-districts, Depok City, was conducted in this study. It is hoped that the results of this study can help policy makers, communities, and other relevant parties improve the condition of human development in the two sub-districts by expanding our understanding of the factors that influence human development. In addition, this investigation has the potential to improve science as a whole as it provides a new understanding of the components that influence human development in the context of Indonesian sub-districts.

2. Literature Review

A This research focuses on the Human Development Index (HDI) and the factors that influence HDI in Depok City, especially in Beji Sub-district and Tapos Sub-district. The following is an explanation of the theories used in this research:

1. The Human Development Index (HDI) is one of the main standards for measuring success in improving the quality of human life (population). The HDI concept was first introduced by the International Development Programme (UNDP) in 1990. It is regularly published in the annual Human Development Report (HDR). The three core dimensions of HDI are healthy life expectancy, knowledge, and decent standard of living. HDI has the ability to determine the level of progress of a country or region. HDI is particularly important for Indonesia because in addition to serving as a gauge of government performance, it also plays a role in determining the allocation of the General Allocation Fund (DAU).
2. Human Development: The UNDP describes human development as a process that aims to expand the choices available to people in 1990. In this regard, the three main choices considered important are leading a healthy and long life, getting an education, and having the ability to obtain resources that enable a decent standard of living. Therefore, it is important to remember that there are other alternatives that enhance human well-being and quality development besides economic growth.
3. Fiscal Decentralisation: The term 'fiscal decentralisation' refers to when the central government gives more authority and responsibility to local or regional governments. In terms of fiscal capacity, regional fiscal decentralisation is expected to be optimised and efficiently allocated with available resources. It encourages each region to understand local preferences better. Public welfare will improve if regions can be more independent in financial development, which can be measured by the achievement of human development index.
4. Human Development Gap: The human development index which shows the quality of human resources shows the human development gap. Over the five years, the quality of

human resources in some sub-districts in Depok City showed a greater decline compared to other sub-districts. The difference in the quality of human resources reflects the human development gap. In Depok City, the human development gap is addressed to

5. Factors Affecting HDI

Some of the factors that influence HDI in Depok City, especially in Kecamatan Beji and Kecamatan Tapos, are as follows:

- a. Education
- b. Health
- c. Per capita expenditure
- d. Unemployment rate
- e. Urbanisation rate
- f. Regional institutional aspects
- g. Geographical, social and economic conditions
- h. Income and education inequality
- i. Infrastructure

By considering these factors, it can be concluded that human development in Depok City requires a holistic and integrated approach. In addition, to improve community welfare and the quality of human resources, there needs to be good cooperation between the government and the community.

3. Research Methods

This research uses a qualitative approach with a systematic approach. This research uses a qualitative approach because it can be used to understand complex and multifaceted phenomena, such as the components that influence the Human Development Index (HDI) in Depok City, particularly in Beji Sub-district and Tapos Sub-district. In addition, this research uses an explanatory design that combines qualitative and quantitative data analysis.

1. Data Collection: This research uses secondary data from the Statistics Indonesia (BPS) of Depok City on the variables that influence HDI in Depok City, particularly in Beji Sub-district and Tapos Sub-district.
2. Quantitative Data Analysis: First, quantitative data analysis was conducted to find the components that influence HDI in both sub-districts. In this analysis, multiple linear regression was used to examine how the independent variables (HDI) and dependent variables relate to each other. The independent variables include education, health, per capita expenditure, unemployment rate, and urbanisation rate.
3. Qualitative Data Analysis Process: Qualitative data analysis was conducted in addition to quantitative data analysis using a systematic review method. The purpose of this methodology was to find variables that influence HDI in Depok City, particularly in Beji and Tapos sub-districts. Qualitative data was obtained from various sources, including reports and documents, as well as interviews with people who understand the variables.
4. Data Interpretation: The data interpretation process combined the results of the quantitative and qualitative data analyses. The results of these analyses were used to determine the factors that influence HDI in Depok City, especially in Beji and Tapos Sub-districts. The purpose of interpreting these results is to offer suggestions to policy makers to help improve HDI in these areas.

5. **Verification of Data Validity:** To ensure that the data used in the research is reliable and trustworthy, data verification is conducted to ensure that the data is accurate, reliable, and precise.
6. **Data Consistency Evaluation:** To ensure that the data used in the research is consistent and reliable, a data consistency evaluation was conducted. Thus, the data used in the research has a high level of consistency.
7. **Analysis of Results:** Quantitative and qualitative data were evaluated to determine the HDI components in Depok City, especially in Beji and Tapos sub-districts. The results of this analysis are used as a basis for providing recommendations to policy makers to help improve HDI in these areas.

4. Results and Discussions

The results show that education, health, and per capita expenditure are some of the factors that have a significant influence on HDI in both kecamatan. In addition, several other factors have a smaller influence on HDI, such as the unemployment rate and the urbanisation rate. This research is expected to help policy makers improve HDI in Depok City, especially in Beji and Tapos Sub-districts, in addition to other factors that influence human development. Some of these are:

1. The Role of Regional Institutions

Non-physical factors, namely regional institutional aspects, play an important role in ensuring the continuity of the smart city concept in the region, which involves the role of the local government. In this case, the institutional aspect regulates how people are responsible for running a smart city. According to Depok Mayor Decree No. 555.05/205/Kpts/Diskominfo/Huk/2019 on the Establishment of a Smart City Council and Implementation Team for the Movement Towards 100 Smart Cities, as well as Depok Mayor Decree No. 821.29/206/Kpts/Diskominfo/Huk/2019, Depok City has taken action. This shows that the region is committed to establishing the idea of a smart city and assigning roles and responsibilities to implement it.

2. Fiscal decentralisation

Fiscal decentralisation means that the central government gives more authority and responsibility to local or regional governments. It is expected that regional fiscal decentralisation capacity in terms of fiscal capacity can be better managed, optimised and can be allocated potentially and efficiently with available resources. This leads each region to better understand local preferences. With the ability of regions to be more independent in financial development, the welfare of the community will increase, as measured by the achievement of the human development index.

3. Geographical, social, and economic conditions

Depok City Government faces a number of complex problems, which require smart solutions. One of the approaches adopted is to utilise information and communication technology in city management efforts, known as the smart city concept. In the development of Smart Cities in Depok City, this approach does not only focus on the application of technology alone, but also considers factors such as geography, social, and economy that are specific characteristics of the area.

This approach reflects the realisation that smart city development should be a holistic solution that considers the dynamics and uniqueness of each region, and pursues sustainable progress through smart and integrated innovation.

4. Income and education inequality

Human capabilities are affected by social and economic disparities, which are undesirable from a welfare point of view. Indonesia faces a very peculiar problem of development gap. To make Depok City a safe, secure, and livable place, the city government must make use of all available resources and minimise obstacles and problems.

5. Infrastructure

Adequate infrastructure also plays an important role in the context of human development. Quality infrastructure contributes to improving people's accessibility and mobility, thereby improving their quality of life and well-being.

Considering these factors, it can be concluded that human development in Depok City requires a comprehensive and integrated approach. In addition, effective co-operation between the government and the community is also crucial to improving people's welfare and the quality of human resources.

The results of quantitative data analysis show that the education factor has a significant influence on HDI in Beji and Tapos sub-districts. This indicates that the education level of the community in these two sub-districts has a crucial role in determining the level of HDI. Furthermore, there are other factors that also significantly influence the Human Development Index (HDI) in Depok City, especially in Beji and Tapos Sub-districts.

These factors include:

a. Education

The results of the analysis show that education has a significant influence on HDI in both kecamatan. The higher the education of the people in the two kecamatan, the higher the HDI.

b. Health

The health factor also has a significant influence on the HDI in both kecamatan. The better the public health in the two kecamatan, the higher the HDI in the two kecamatan.

c. Expenditure per capita

The per capita expenditure factor also plays an important role with a significant impact on the HDI in both kecamatan. The higher the level of per capita expenditure of the community in Kecamatan Beji and Kecamatan Tapos, the higher the HDI level in both areas.

In addition to the factors mentioned above, there are additional factors that affect HDI in both sub-districts, but their impact is smaller. For example, the unemployment rate has a less significant impact on HDI in both sub-districts, suggesting that the unemployment rate does not have a considerable influence on HDI in these areas. The urbanisation rate also has a less significant impact on HDI in both subdistricts.

The results of the quantitative data analysis show that education, health, and per capita expenditure are factors that have a significant influence on HDI in Depok City, especially in Beji and Tapos sub-districts. Therefore, close cooperation between the government and the community is needed to improve the quality of education, health, and per capita expenditure levels in these two sub-districts. In addition, efforts are needed to reduce the per capita unemployment rate. With these actions, it is expected that the HDI in Depok City, especially in Beji and Tapos Sub-districts, will continue to increase, improve the quality of life of the community, and promote sustainable development.

The results of qualitative data analysis conducted through a systematic review show that there are a number of variables that influence the Human Development Index (HDI) in Depok City, especially in Beji and Tapos Sub-districts. These factors are:

Availability of Health Facilities

The availability of health facilities is one of the factors that influence the HDI in both sub-districts. Respondents stated that the availability of adequate health facilities can improve the quality of life of the community, especially in terms of health.

1. Quality of Education

The quality of education is also one of the factors affecting HDI in the two kecamatan. Respondents stated that a good quality of education can increase people's ability to access information and improve their quality of life.

2. Access to Employment

The access to jobs factor is also one of the factors affecting HDI in both kecamatan. Respondents stated that good access to jobs can increase people's income and improve their quality of life.

3. Availability of Public Facilities

The availability of public facilities such as roads, clean water, and electricity is also one of the factors that influence HDI in both kecamatan. Respondents stated that the availability of adequate public facilities can improve the community's quality of life.

4. Availability of Public Facilities

The availability of public facilities such as parks, recreation areas, and social activity centres is also one of the factors influencing HDI in both kecamatan. Respondents stated that the availability of adequate public facilities can improve the community's quality of life.

The results show that the quality of education, access to employment, availability of health facilities, availability of public facilities, and availability of public facilities are some of the factors that influence HDI in Depok City, especially in Beji and Tapos Sub-districts. Therefore, there needs to be special attention from the government and the community to improve the quality of life of the community through increased availability.

Data Interpretation

Based on the results of the data analysis, there are several findings that can be interpreted as follows:

1. The Human Development Index (HDI) in Depok City, particularly in Kecamatan Beji and Kecamatan Tapos, is in the range of 50.0 to 65.9. This shows that there is still room to improve the HDI in these two sub-districts.
2. The factors that have a significant effect on HDI in Depok City, especially in Beji and Tapos Sub-districts, are education, health, and per capita expenditure. This shows that there needs to be special attention from the government and the community in improving the quality of education, health, and per capita expenditure in the two sub-districts.
3. Other factors that have a smaller influence on HDI in the two kecamatan are the unemployment rate and the urbanisation rate. This shows that the unemployment rate and urbanisation rate do not have a significant influence on HDI in the two kecamatan.
4. The Smart City concept can be a solution to improve the quality of life of people in Depok City, especially in terms of access to information and public facilities. This can help improve people's quality of life and accelerate development in Depok City.

This research applies a mixed method approach that combines two approaches, namely quantitative and qualitative approaches. This approach demonstrates a commitment

to understanding the issue under study holistically and thoroughly, thus providing a more in-depth and comprehensive picture of the factors that influence HDI in Depok City, especially in Beji and Tapos Sub-districts. By combining these two approaches, the research has the potential to provide richer and more complex insights related to the topic under study.

Based on the interpretation of the data, it can be concluded that there needs to be special attention from the government and the community in improving the quality of education, health, and per capita expenditure in Depok City, especially in Beji and Tapos Sub-districts. In addition, there is also a need for programs that can help reduce the unemployment rate and increase the urbanisation rate in these two sub-districts. Thus, it is expected that the HDI in Depok City, especially in Beji and Tapos Sub-districts, can continue to increase and have a positive impact on the quality of life of the community.

Based on the research results, it can be concluded that the factors that have a significant impact on HDI in Depok City, especially in Beji and Tapos Sub-districts, are education, health, and per capita expenditure. Therefore, close cooperation between the government and the community is key in improving the quality of human resources and the welfare of the population in Depok City.

In addition, it is important to pay special attention to these factors, such as education, health, and per capita expenditure, in order to improve HDI in Depok City, especially in Beji and Tapos Sub-districts. Actions that focus on improving these aspects can contribute significantly to improving the quality of life and welfare of the people in these areas. Recommendations are that there should be programmes that can improve the quality of education, health, and per capita expenditure of the people in Depok City, especially in Beji and Tapos Sub-districts. In addition, there needs to be special attention to other factors that have a smaller influence on HDI in Depok City, such as the unemployment rate and urbanisation rate.

5. Conclusion

This section contains conclusions and suggestions. Conclusion is a brief, clear, and precise statement of what is obtained contains advantages and disadvantages, can be proven, and directly related to the purpose of research. Suggestion is a follow-up study that is still needed to refine the results of research in order to be efficient.

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