Study of Education Leverage Factors to Improve Sampang Human Development Index

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ABSTRACT

Education contributes to improving human quality, which is highly related to the development of a regency. In general, the HDI or IPM in Sampang Regency has increased, according to data from BPS, the Human Development Index (HDI) of Sampang Regency in 2022 reached 63.39, an increase of 0.59 points (0.94 percent) compared to the previous year's achievement (62.80). During 2010-2022, the HDI of Sampang Regency increased by an average of 1.36 per cent per year from 54.49 in 2010 to 63.39 in 2022. This study aims to analyze the IPM in Sampang in order to find out what leverage factors can be used as a basis for factors that can increase HDI in Sampang Regency. The Central Bureau of Statistics (BPS) only counts students who continue their studies in the Sampang Regency area as IPM data in the education sector. This problem makes the Expected Years of Schooling (HLS) numbers low in Sampang Regency. Meanwhile, the issue of Average Years of Schooling (RLS) will be expected to increase with the Paket C program. The results of this study are expected to be a reference for various parties who will analyze the Human Development Index (IPM) in the field of education. In particular, it is expected to be a reference for parties involved in the formulation of IPM in the field of education in Sampang Regency.

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INTRODUCTION

The Human Development Index (HDI) was created to emphasize that people and their capabilities, not just economic growth, should be the ultimate criterion for assessing a country’s development as described by Arisman (Arisman, 2018). The HDI is a modern indicator of overall human development success. The index compiled by UNDP combines social and economic data and provides a more comprehensive measure of UNDP's development performance (Rani, 2004). Development is also a process of change and is always aimed at improving the welfare of local communities (Alkhoiriyah & Sa’roni, 2021). Meanwhile the word "development" according to (Badan Pusat Statistik Sidoarjo, 2018) can be defined as change or development from one era to the next. Development in all regions carried out by the government in cooperation with the community has brought great progress to Indonesian.
Development takes place to bring the country to a process of change for the better and sustainable, according to Laode M (Laode et al., 2020). Every country must engage in development to ensure its survival (Ramadhan & Siwi, 2022). However, development itself also brings new problems and demands, including social and economic inequality, quality of life, employment opportunities, law enforcement, and the environment. Development must be carried out with precision and precise objectives in order to approach the goal at each stage. Furthermore, development will be carried out in an integrated manner over the long term, tailored to the interests and needs of each region (Siti Amrina Hasibuan, 2022). HDI also has benefits, one of HDI’s benefits is that it shows that countries can actually achieve much better performance even at lower income levels (Nasution, 2020).

Education is one of the most important things in a human's life. It determines and guides the future and course of every person. However, although not everyone may think so, education remains the most important human need. A person's talents and abilities are formed and refined through education. Education is also commonly used as a measure of the quality of each individual. In countries where health conditions are improving and crime rates are declining, education has a major impact on people's lives. Therefore, education plays an important role in the development of a country (Yusuf, 2020). Furthermore, Darwin mentioned that education serves an important role in shaping a developing country (Darwin Lie, 2022). Therefore, education can also be seen as a vital component of growth and development as an input to the aggregate production function. The purpose of education is to develop human resources of quality and character, have a wide vision of the future to achieve the desired goals and be able to adapt quickly and appropriately to various environments. Because education itself motivates us to be better in all aspects of life. Basically, the definition of education based on SIDIKNAS number 20, 2003 that a learning atmosphere and learning environment that allows students to actively develop their spiritual strength, self-control, character, and intellectual potential to make a process of noble morals and skills which they and society need (SIDIKNAS, 2003). On the other hand, the definition of education according to H. Horn is a continuous (eternal) process of higher adaptation for people who are physically and mentally developed, independent and conscious of God; It manifests itself in the intellectual and emotional and humanitarian spheres of human beings (Horne, 1942). Based on the definition of education described above, it states that education contributes to improving human quality, which is closely related to the development of a region of the Regency. The Education Development course must be able to form a foundation related to the Human Development Index. In the Human Development Index, the focus and expectation of educational development is the emergence of a qualified, competent and competitive workforce (Herdiansyah & Kurniati, 2020).

The Human Development Index (HDI) measures human development achievements based on a number of basic qualities of life components (Badan Pusat Statistik, 2023). As a measure of quality of life, the HDI is constructed through a three-dimensional approach. These dimensions include a long and healthy life, knowledge, and a proper life. These three dimensions have a very wide understanding because they are related to many factors. To measure the health dimension, life expectancy at birth is used. Furthermore, to measure the knowledge dimension, a combination of indicators of expected years of schooling (HLS) and average years of schooling (RLS) is utilized. Meanwhile, to measure the dimension of a decent life, an indicator of the purchasing power of the community towards a number of basic needs is utilized, which is seen from the average amount of expenditure per capita as an income approach that represents the achievement of development for a proper life.

For many years, Madura in general has suffered a low HDI score compared to other regions in East Java. The local government has been making efforts to uplift their HDI score by elevating the factors that contribute to the score as mentioned in the previous paragraph. Sampang, as one of the
regions in Madura has the lowest HDI score compared to other 3 regions. The local government has struggled with its education challenges. Overall, the Human Development Index (HDI) of Sampang Regency has increased over the years, and according to BPS data, the Human Development Index (HDI) of Sampang Regency in 2022 reached 63.39, an increase of 0.59 points (0.94 percent) compared to the previous year (62.80). From 2010 to 2022, the HDI of Sampang Regency increased by an average of 1.36% per year, from 54.49 in 2010 to 63.39 in 2022. However, the increase seen above is felt by related parties to have not increased significantly and Sampang Regency is still the lowest region in the Human Development Index figure. Through this research, researchers will analyze the Human Development Index (HDI) in the education sector in Sampang Regency in order to find out what are the leverage factors in the education sector that can be used as a basis for factors that can increase the HDI in Sampang Regency. Thus, the purpose of this research is to be able to present an analysis of data that can be used as a basis for related parties in Sampang Regency in increasing HDI in the education sector.

This research is needed and is at the utmost importance to be executed on Human Development Index (HDI) is underscored by several key factors: (a) Global Importance of HDI: The HDI is a widely recognized measure of human well-being, encompassing factors such as education, health, and income. Understanding the specific influence of education on the HDI is crucial for policymakers, educators, and development practitioners aiming to enhance overall human development. (b) Educational Disparities: Educational disparities persist globally, affecting access, quality, and outcomes. Investigating how education contributes to the HDI in Sampang specifically can shed light on the role of education in reducing inequalities and promoting inclusive development that will lead to the government initiatives. (c) Economic and Social Implications: Education has far-reaching implications for economic growth, social stability, and individual well-being. Research in this area can provide insights into how investments in education can positively impact various aspects of human development, including poverty reduction, employment, and social cohesion. (d) Policy Relevance: Policymakers require evidence-based insights to formulate effective education policies. Understanding the relationship between education and the HDI can inform the development of policies that prioritize education as a key driver of overall human development. Especially when it comes to how rigid local government discussion can get and how the bureaucracy in Indonesia is complex and needs scientific data to prove its urgency.

**RESEARCH METHOD**

This research used a Qualitative research method with a qualitative descriptive approach which is a research method that uses qualitative data and explains it descriptively. This type of qualitative descriptive data analysis is often used to analyze events, phenomena, or social situations. It is also a combination of descriptive and qualitative data analysis techniques. The explanation above was supported by M. Ramadhan (Muhammad Ramdhan, 2021) explaining that descriptive research is research that uses methods to describe research findings. The purpose of this type of research is to provide explanation, explanation, and validation of the phenomenon under investigation. Given the usefulness of this type of research, the problems formulated must be of scientific value and must not have a broad scope. Meanwhile, from M. Miles, the stages of qualitative research include the following steps: 1) Building a Conceptual Framework; 2) Formulating Research Problems; 3) Sample Selection and Research Limitations; 4) Instrumentation; 5) Data Collection; 6) Data Analysis; 7) Matrix and Conclusion Testing (M. B. Miles & Huberman, 1992).

This research used interviews in its data collection techniques. An interview is a conversation with a specific purpose. The conversation is conducted by two parties, which is the interviewer (interviewer) asking questions and the interviewee (interviewer) answering questions (Lexy J. Moleong, 2019). Through this interview, the researcher will get data from the formulation of the problem that has been determined. While the research instruments used to support interview
techniques in this study are using recording devices and documentation. The presence of researchers with interviews is a situation involving human interaction that cannot be understood only with knowledge. To understand it, we often have to feel it, immerse ourselves in it based on our knowledge (Sugiyono, 2016). To obtain valid results in the research data analysis technique, the researcher used the qualitative data interactive analysis model presented by Miles & Huberman (M. Miles et al., 2014), by observing the following data analysis steps: (1) Recording important points found in the field by considering field observations; (2) the results of interviews and documentation; (3) selecting sources that are in accordance with research needs; (4) being careful in the field process in order to make the results valid, according to Arikunto, validity is “a measure that shows the levels of validity or validity of an instrument (Arikunto, 2020). Meanwhile, the limitation of this research is only to analyze what leverage factors exist in the education sector for the Human Development Index (HDI) in Sampang Regency in 2022.

RESULT AND DISCUSSION

In accordance with the type of research mentioned in the previous section, which uses qualitative research methods using a qualitative descriptive approach, the results of this study will be presented with corresponding characteristics. The delivery of graphical and statistical data in this research, which also served as the primary data, was obtained from the Central Bureau of Statistics (BPS) with reference to the Official Statistical News (Brs) No. 71/11/35/Thn. Xx, November 15, 2022 (Badan Pusat Statistik Jawa Timur, 2023), the results of interviews with the Sampang Education Office and the Sampang branch of the East Java Education Office.

The economic recovery of the community amid the COVID-19 pandemic has an impact on human development in East Java. This is evidenced by the high growth of the Human Development Index (HDI) in 2022 compared to the previous year. The HDI of East Java Province in 2022 was 72.75, an increase of 0.85 percent (an increase of 0.61 points) compared to the previous year's results. The above data can be seen in the figure below:

Figure 1. Miles and Huberman Interaction Analysis Model

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Helmy Sahirul Alim, Study of Education Leverage Factors to Improve Sampang Human Development Index
a. Effect of increasing HDI

The increase in the growth of the Human Development Index (HDI) in 2022 is influenced by the increase in all of its constituent indicators, including the health index, education index, and annual adjusted per capita expenditure index. In terms of health, babies born in 2022 have the expectation to live up to 71.74 years old, 0.36 years longer than those born in the previous year. While the education indicator, for the Expected Years of Schooling (HLS) component in 2022 was recorded at 13.37 years, 0.01 years higher than the 13.36 years previously, while the other education component, which is the Average Years of Schooling (RLS 25 years +) in 2022 reached 8.03 years, or an increase of 1.90 percent compared to the last year. The statistics below will explain how the above-mentioned data is delivered:

In the infographic presented earlier, it is known that Sampang has the lowest HDI in East Java and education is the dominant factor in this low HDI statistic. Many aspects contribute to why the HDI in Sampang and Madura in general is so low compared to other cities or regencies in East Java. In the sector of education, there are two dimensions of assessment, which are: (a) Expected Years of Schooling (HLS), (b) Average Years of Schooling (RLS), These two assessment dimensions can
basically be seen from the following data owned by both BPS:

![Table 1 Indeks Pembangunan Manusia (IPM) Kabupaten Sampang Menurut Komponen, 2010-2022](image)

<table>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Peningkatan</td>
<td>9,78</td>
<td>9,82</td>
<td>9,86</td>
<td>10,20</td>
<td>10,39</td>
<td>11,09</td>
<td>11,37</td>
<td>11,38</td>
<td>11,76</td>
<td>12,08</td>
<td>12,37</td>
<td>12,38</td>
<td>12,39</td>
</tr>
<tr>
<td>RLS</td>
<td>54,49</td>
<td>55,17</td>
<td>55,78</td>
<td>56,45</td>
<td>56,98</td>
<td>58,18</td>
<td>59,09</td>
<td>59,90</td>
<td>61,00</td>
<td>61,94</td>
<td>62,70</td>
<td>62,80</td>
<td>63,39</td>
</tr>
</tbody>
</table>

![Figure 4. Sampang Regency HDI Table by Component](image)

The data obtained above will be combined with the results of interviews with relevant parties in this research in order to answer the problem formulations that have arisen. The Human Development Index (HDI) in education has actually increased every year, but the increase is not very significant. This is perceived by the Sampang Branch Education Department and also the Sampang Branch of the East Java Education Department. The results of interviews with the two instances stated that the growth rate in the HDI in the education sector in Sampang Regency increased but not significantly. The growth rate still makes the position of Sampang Regency in its HDI in education the lowest position among the 4 regencies on the island of Madura and even the lowest in East Java Province. There are several things that are underlying this.

The main problem in the HDI in the education sector of Kabupaten Sampang, according to the results of interviews from the three institutions mentioned above, is the sustainability of the studies of students who have completed their schooling from elementary to senior high school who have not continued their studies within the Sampang Regency area. Meanwhile, the Central Bureau of Statistics (BPS) only counts students who continue their studies in the Sampang Regency area as HDI data in the education sector. The Head of the Sampang Regency Education Department stated in an interview that it is very unfortunate when students who are native to Sampang Regency who continue their studies outside the Sampang Regency area are not counted by the Central Statistics Agency (BPS) as data in terms of increasing Sampang Regency’s HDI in the education sector, this causes the Expected Years of Schooling (HLS) figure to be low in its assessment. For the problem of Average Years of Schooling (RLS), the Sampang District Education Office has implemented a package program to increase the Average Years of Schooling (RLS). With this program, it is expected that in the next 3 years there will be a change in the number of RLS.

The Central Bureau of Statistics or BPS in its interview also mentioned several factors affecting HDI in the field of education in Sampang which are considered to be of significant concern. These are: (1) The condition of the Sampang community where the average is still only a high school graduate. This first factor is an illustration of where the average number of years of schooling (RLS) is low; (2) The Economic Condition of the Household, in this factor BPS explains that economic factors are one of the backgrounds where parents find it difficult to continue their children’s schooling because they are constrained by school fees; (3) Employment, in this factor BPS stated that the lack of employment opportunities in Kabupaten Sampang was one of the factors that students did not
continue their studies in the Sampang area; (4) Educational Facilities, in this last section BPS stated that the lack of Higher Education Institutions in the Sampang area was a factor that students did not continue their studies in the Sampang area.

CONCLUSION

In accordance with the statement of Dr. Darwin Lee which states that human development requires the availability of data analysis for planning and policy making to be perfectly directed (Darwin Lie, 2022). It is also necessary to assess the extent to which the development carried out has the opportunity to improve the quality of human life, so the results of this study are also expected to be one of the references for related parties. The main problem in the HDI on education sector in Kabupaten Sampang, according to the results of interviews from the three institutions mentioned above, is the sustainability of the studies of students who have completed the school period from elementary to senior high school and do not continue their studies within the Sampang Regency area. Meanwhile, the Central Bureau of Statistics (BPS) only counts students who continue their studies in the Sampang Regency area as HDI data in the education sector. This problem has caused the Expected Years of Schooling (HLS) rate to be low in Sampang Regency. Meanwhile, the Average Years of Schooling (RLS) problem is expected to increase with the existence of the Package program. The results of this research are expected to be a reference for various parties who will analyze the Human Development Index (HDI) in the education sector. It is also mentioned by (Rasdi Eko, 2008) that the success of education development requires the participation of all education stakeholders, both government and non-government, starting from the planning, implementation, monitoring and evaluation stages. Therefore, to achieve the objectives of the Education Index, all educators must be committed to fulfilling these expectations. In particular, it is expected to be a reference for parties involved in the formulation of HDI in the education sector in Sampang Regency. This research only discusses the education sector in the HDI index in Sampang Regency so that it is expected to be a reference by related parties. Furthermore, what the research team hopes is that there will be further discussion and analysis on how the education sector in the HDI of Sampang Regency can increase through various efforts by related parties in Sampang Regency. Further analysis can also be done through research on (1) institutional connections in the existence of data that can be analyzed on the education sector in the HDI; (2) analyzing the strengths and weaknesses of the education factor in Sampang Regency; (3) analyzing programs to improve the education factor in Sampang Regency.

The scientific contribution of this research lies in the generation of new knowledge and insights that advance our understanding of the complex interplay between education and overall human development. Some of these contributions are as follows: (a) Causal Relationships: Investigating the causal relationships between education and the components of the HDI (health, education, income) can contribute to a more nuanced understanding of how improvements in education directly impact human development outcomes. This could involve employing rigorous research methodologies to establish causal links. (b) Identification of Key Indicators: Identifying specific educational indicators that have the most significant influence on the HDI can enhance the precision of policy recommendations. This might involve isolating key variables within the education domain that strongly correlate with positive changes in the HDI particularly in the Sampang area. (c) Policy Recommendations: Drawing evidence-based conclusions, this research can provide actionable policy recommendations for improving education systems to enhance overall human development. This may include strategies for addressing disparities, improving access, and ensuring quality education. (d) Contribution to Theory: This research has the potential to contribute to existing theories or frameworks related to human development, education, or the interaction between various components of well-being. This theoretical contribution can help shape future research in the field in Sampang especially where such research is still lacking and needed.

The team hopes that this research can contribute to the academic understanding of the link between education and the Human Development Index, informing policy decisions, guiding future
research endeavors, and potentially influencing the implementation of interventions to enhance human development locally and nationally.

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