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RESEARCH ARTICLE

HUMAN RESOURCES DEVELOPMENT IN ASEAN: CONCEPT AND MEASUREMENT

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Abstract

Indonesia has the largest population in ASEAN, but its human development index and human capital index are lower than those of Singapore, Malaysia, and Thailand. This study aims to develop a human resource development model based on the global human development index and human capital index. Several indicators are used to measure human resource development, including education, skills, income, and health. This study is qualitative research that utilizes secondary data sourced from the Indonesian Central Bureau of Statistics (BPS RI) and the World Bank. This study will show progress and an overview of human resource development in ASEAN through its indicators. The results show that there has been an increase in the human development index and human capital index, but the increase is very slow. This indicates that the quality of human resources in Indonesia is still low. Therefore, it is recommended that the Indonesian government develop human resources by improving formal and/or informal education and improving the health of its population through educational scholarship programs and health assistance for the poor. Indonesia needs to increase the number of educational institutions and job training centers to improve knowledge and skills for human resource development.

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Introduction:-

Development is widely recognized as a fundamental indicator of societal well-being and serves as a key benchmark for assessing the welfare of a population. Accordingly, every country strives to enhance the quality of life of its citizens through a continuous process of transformation across economic, social, and institutional dimensions. In this context, development can be understood as a sustained progression toward a better and more humane society, grounded in three fundamental core values: sustenance, self-esteem, and freedom. A clear distinction should be made between the concepts of economic development and economic growth, as these terms are frequently used interchangeably despite representing different phenomena. According to Okun and Richardson (1961), economic development refers to a long-term and continuous effort to improve material well-being, as reflected in the efficient production and equitable distribution of goods and services. Todaro (1994) further argues that the primary objectives of economic development are to reduce or eliminate poverty, address income inequality, and create employment

opportunities within an expanding economy. In contrast, economic growth primarily refers to the long-run increase in an economy's productive capacity and output. Schumpeter (1934) describes economic growth as a gradual and sustained process driven by factors such as capital accumulation through increased savings and population growth, resulting in a steady expansion of economic activity over time.

Indonesia's progress toward becoming an advanced nation has been reflected in several key development indicators, including sustained investment growth, stable inflation, and a resilient labor market. Between 2005 and 2019, the country maintained relatively stable economic growth at approximately 5% annually. During the same period, Indonesia's gross domestic product (GDP) per capita increased to approximately US\$3,109, while the national poverty rate declined to 9.4%, demonstrating significant improvements in overall economic performance and living standards.

To realize its vision of a Superior Indonesia, the government has prioritized both physical infrastructure development and human capital development. Under the medium-term national development plan (2015–2020), strategic priorities included expanding infrastructure and strengthening social assistance programs, particularly in education and healthcare. Major infrastructure initiatives encompassed the construction of mass rapid transportation, toll roads, high-speed railways, seaports, and airports across various regions of the country to improve national connectivity and support long-term economic growth.

Beyond physical infrastructure, the Indonesian government recognizes that sustainable development depends equally on the quality of its human resources. This commitment was underscored by President Joko Widodo during his address at the Annual Session of the People's Consultative Assembly (MPR-RI) on August 16, 2018, in which he emphasized that human development represents a long-term investment essential for realizing the vision of an advanced and globally competitive Indonesia.

Literature Review:-

Human Resource Development:-

Empirical evidence consistently indicates that the labor force is a major contributor to Indonesia's economic development. As the world's fourth most populous country and the largest in the ASEAN region, Indonesia possesses substantial demographic potential that could support robust economic performance. Nevertheless, despite this demographic advantage, Indonesia's economic growth continues to lag behind several neighboring countries, including Singapore, Malaysia, and Thailand.

From a development perspective, the emphasis has increasingly shifted toward human resource development, which seeks to enhance individuals' knowledge and skills to improve productivity and, ultimately, contribute to societal welfare and national prosperity. A broad consensus among economists recognizes that human resources—particularly the accumulation of knowledge and skills—represent the most critical determinant of economic growth, as well as the nature and pace of a country's social and economic development (Todaro, 1994; Kuznets, 1966).

Human resources represent the primary source of a nation's wealth, whereas physical capital and natural resources function merely as passive factors of production. As argued by Fredrick H. Harbison (1973), a country that fails to develop the knowledge and competencies of its population and to effectively utilize these capabilities in the development and management of its economy will be unable to achieve sustainable national progress. The enhancement of human knowledge and skills can be accomplished through the formal education system (Todaro, 1984). In this context, human capital formation refers to the process of acquiring and expanding a population equipped with the education, skills, and experience necessary to drive a country's economic and political development (Jhingan, 1975).

Given its strategic importance, the human dimension should be regarded as a central component of the development process. The quality of human resources is commonly assessed using two widely recognized indicators: the Human Development Index (HDI) and the Human Capital Index (HCI). The HDI, introduced by the United Nations Development Programme (UNDP) in 1990 and published annually in the Human Development Report (HDR), evaluates the extent to which people benefit from development through access to income, healthcare, education, and other essential dimensions of well-being. Accordingly, the HDI measures the overall quality of human life using three core dimensions: income, health, and education.

Since its inception in 1990, the HDR has introduced the HDI as a multidimensional measure of development that extends beyond conventional economic indicators such as Gross Domestic Product (GDP). The UNDP defines human development as a process of enlarging people's choices and expanding their opportunities to achieve a better quality of life (HDR, 2014). From this perspective, the ultimate objective of development is to enhance human well-being by enabling individuals to adapt to and shape their social and economic environments. Achieving this objective requires not only a sufficient population but also improvements in the quality of human resources.

The HDI is designed to assess the level of human development using three fundamental dimensions: health, education, and standard of living. These dimensions are represented by life expectancy at birth, educational attainment—measured through literacy and average years of schooling—and a decent standard of living, respectively. The three dimension-specific indices are aggregated using a simple average to generate the overall HDI score. This standardized measure is applied globally to evaluate and compare the level of human development across countries, facilitating their classification into developed, developing, or underdeveloped economies. Moreover, the HDI serves as an important indicator for assessing the effectiveness of development policies aimed at improving the quality of human life at both the national and regional levels. It also provides a valuable framework for evaluating the extent to which economic policies contribute to broader improvements in societal well-being.

Contemporary development theory increasingly recognizes human beings as both the central objective and the primary agents of development. In this context, the UNDP conceptualizes human development as a process of expanding people's choices and opportunities to achieve a better quality of life. The development process seeks to fulfill human needs through improvements across multiple dimensions, including the provision of adequate infrastructure and public services. Accordingly, the goal of development is to enhance human well-being by enabling individuals to adapt to and actively shape their social and economic environments. Achieving this objective depends not only on population size but, more importantly, on the quality of human resources, underscoring the close relationship between human resource development and overall human development.

In general, countries participating in the HDI assessment are classified into three broad categories based on their HDI scores: low human development (0.00–0.50), medium human development (0.51–0.79), and high human development (0.80–1.00). It is important to note that the HDI provides a relative rather than an absolute measure of human development, enabling meaningful comparisons across countries. Figure 1 presents the distribution of HDI scores among countries within the United Nations (UN) member states.

Life expectancy at birth is a key indicator used to assess the health dimension of human development and is derived from population welfare statistics. The life expectancy index (lei) is calculated using two demographic indicators: the number of live births and the number of surviving children. In accordance with the methodology established by the UNDP, the minimum and maximum benchmark values for life expectancy are set at 25 and 85 years, respectively.

The education dimension is measured using two indicators: the adult literacy rate and mean years of schooling (mys). The adult literacy rate represents the proportion of the population aged 15 years and above who can read and write using the Latin alphabet or other recognized writing systems. Meanwhile, mean years of schooling reflects the average number of years of formal education completed by individuals aged 15 years and older and is estimated based on the highest level of education attained and the highest grade completed.

For both educational indicators, the standardized index is calculated using benchmark values agreed upon by participating countries, with a minimum value of 0 and a maximum value of 100. A value of 100 indicates that the entire population aged 15 years and above is literate, whereas a value of 0 represents the complete absence of literacy within the population.

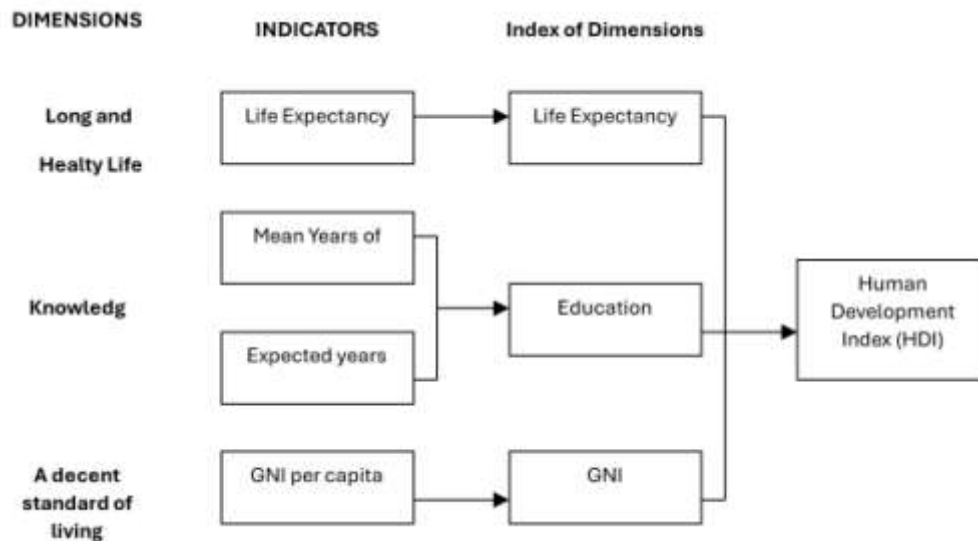


Figure 1. Dimension and Indicators of HDI.

The standard of living dimension is measured using an indicator of adjusted real per capita consumption, which serves as a proxy for individual economic well-being. In international comparisons, however, the UNDP employs adjusted real GDP per capita as the principal indicator for this dimension, primarily because of the limited availability of more comprehensive and internationally comparable measures across countries. In the Indonesian context, Regulation of the Minister of Manpower and Transmigration No. 13 of 2012 defines Decent Living Needs (DLN) as the standard level of needs required for a single worker to maintain a physically decent standard of living for one month. The regulation further specifies the components that constitute the DLN as the basis for determining an adequate standard of living.

Research Method:-

This study employed a descriptive research design to compare the level of human resource development in Indonesia with that of other members of the Association of Southeast Asian Nations (ASEAN). Human resource development was examined through three key dimensions: human development, human capital, and global human capital. For each dimension, the corresponding index was calculated based on its respective indicators, enabling a comparative assessment of Indonesia's performance relative to other ASEAN member states. The analysis was based on secondary data obtained from the Indonesian Central Bureau of Statistics (BPS RI) and the World Bank. The collected data were processed using the prescribed calculation formulas, and the results were subsequently presented in graphical form to facilitate comparison and interpretation.

Results and Discussion:-

Human Development Index:-

Comparisons of the HDI provide valuable insights into a country's level of development and help identify areas requiring improvement to support future development efforts. Such comparisons are commonly conducted among countries with similar levels of development, within the same geographical region, or across global rankings to evaluate relative development performance. Within the ASEAN region, Indonesia's HDI performance declined in the global ranking, falling from an HDI value of 0.728 (107th place) to 0.629 (122nd place) between 2010 and 2019. During this period, Indonesia ranked fifth among ASEAN countries, behind Singapore, Malaysia, Thailand, and the Philippines. Overall, most ASEAN countries experienced declines in their global HDI rankings, with Singapore being the only exception, improving its position from 25th in 2010 to 18th in 2019.

Data reported in the HDR (UNDP, 2013) and its accompanying indicators show that Indonesia's HDI improved steadily over the past several decades. Between 1980 and 1990, the HDI increased from 42.2 to 47.9, remaining within the low human development category, before rising further to 52.6, placing Indonesia in the medium human development category. As illustrated in Figure 4.1, Indonesia's HDI continued to increase gradually from 66.53 in 2010 to 79.62 in 2019, while remaining within the medium human development category. Over the 32-years,

Indonesia's HDI increased by 0.21, representing an overall improvement of approximately 49%, or an average annual growth rate of 1.53% between 1980 and 2012. Across the individual HDI dimensions, life expectancy increased by 12.2 years, mean years of schooling rose by 2.7 years, and expected years of schooling increased by 4.6 years. In addition, per capita income grew by approximately 225%, corresponding to an average annual increase of around 7%.

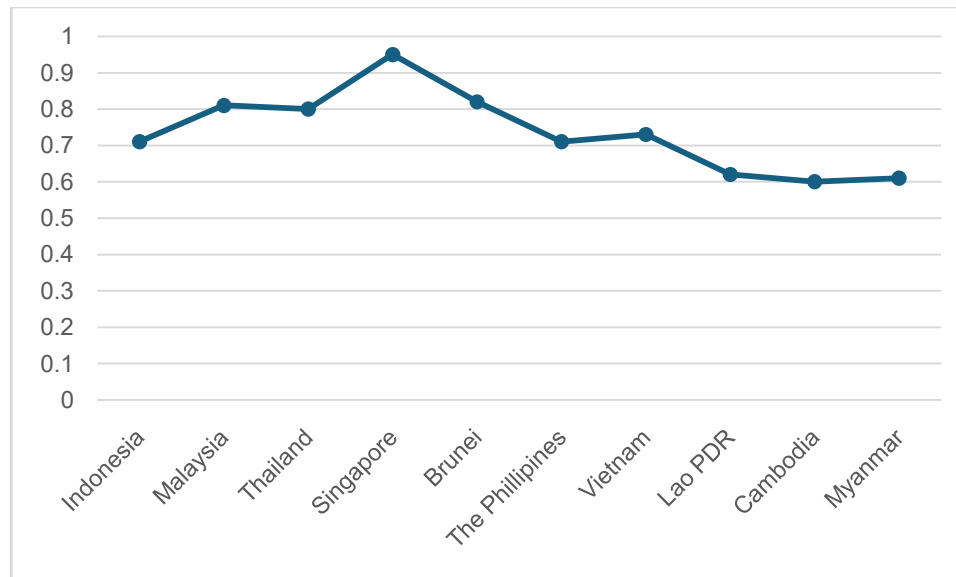


Figure 2. ASEAN HDI, 2024.

Human Capital Index:-

According to the World Bank, the HCI measures the quality of a country's human capital through key dimensions of health, knowledge, and skills among the productive-age population. More broadly, the HCI evaluates the extent to which government investments in education and healthcare enable individuals to achieve their full productive potential throughout their working lives. Consequently, the index serves as an important indicator of the quality of a country's human resources and their capacity to contribute to economic productivity and long-term economic development.

Based on the HCI, Indonesia recorded a score of 0.53, indicating that a child born today is expected to achieve only 53% of his or her potential lifetime productivity by the age of 18, relative to complete education and full health. This places Indonesia 87th out of 157 countries globally and sixth among ASEAN member states. These findings highlight the need for the Indonesian government to strengthen investments in education and healthcare in order to narrow the gap with other countries, particularly within ASEAN. Without substantial improvements in these areas, Indonesia may face increasing challenges in maintaining its competitiveness in an increasingly globalized and knowledge-based economy. The World Bank further suggests that Indonesia's relatively modest HCI performance reflects insufficient investment in human capital development in recent years, underscoring the importance of expanding investments in both education and health.

Indonesia continues to face challenges related to the relatively low skill level of its workforce (Bangun, 2022). This limitation constrains the country's capacity for innovation and reduces its ability to respond effectively to the rapidly evolving demands of digital technologies associated with the Fourth Industrial Revolution (Industry 4.0). If left unaddressed, these structural weaknesses may contribute to higher levels of poverty and widen socioeconomic disparities. Moreover, inadequate human capital development may increase Indonesia's vulnerability to unequal global economic competition, in which technologically advanced economies are better positioned to dominate markets and capture greater economic value than less-developed countries.

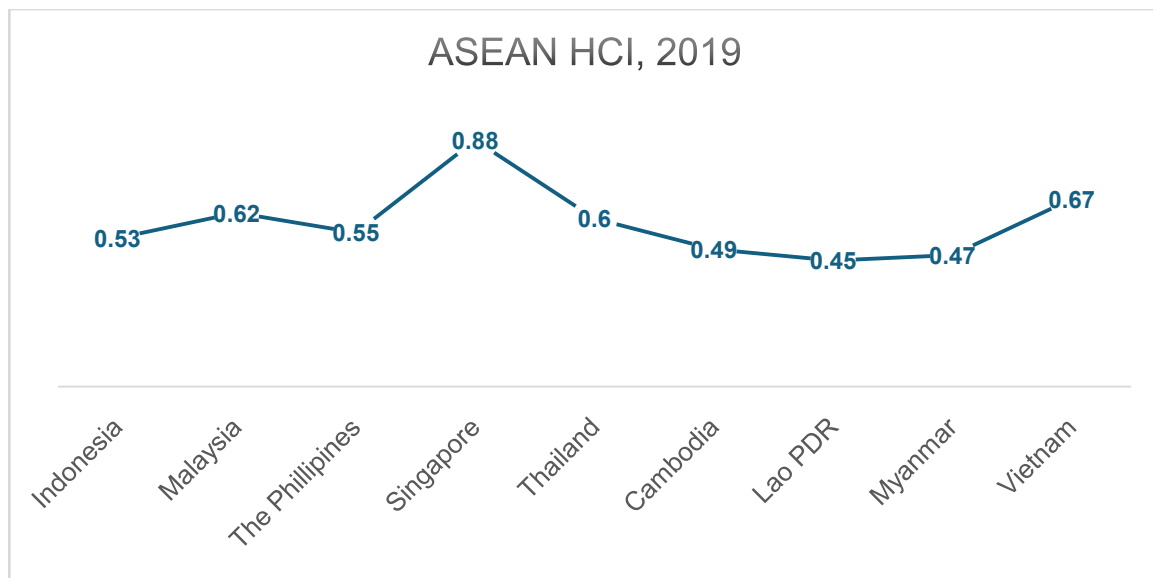


Figure 3. HCI of ASEAN, 2019.

Global Human Capital:-

An alternative framework for assessing the contribution of human resources to national development is provided by the World Economic Forum (WEF) through its Global Human Capital Report (GHCRC). Unlike other human capital measurement frameworks, the GHCRC evaluates the extent to which countries develop and utilize the knowledge, skills, and capabilities of their populations throughout different stages of life, thereby providing a broader perspective on human capital development. According to the Global Human Capital Index (GHCI), Indonesia is ranked 65th out of 130 countries. Consistent with the findings of the World Bank's HCI, Indonesia remains behind five ASEAN member states while outperforming three others within the region. However, the WEF assessment places Indonesia in a relatively stronger global position, ranking it above Brazil, one of the member countries of the Brazil, Russia, India, China, and South Africa (BRICS) grouping.

Conclusion:-

Human resources constitute the most valuable asset of a nation. According to Classical Economic theory, labor is a fundamental factor of production that plays a crucial role in driving economic growth. Empirical studies have consistently demonstrated that labor is a key contributor to Indonesia's economic performance. As the world's fourth most populous country and the largest in the ASEAN region, Indonesia possesses substantial demographic potential that could serve as a significant engine of economic development. However, despite this demographic advantage, Indonesia's economic performance continues to trail that of several neighboring countries, including Singapore, Malaysia, and Thailand.

These conditions underscore the strategic importance of the human dimension in the development process. In this context, human development represents a fundamental aspect of broader human resource development, emphasizing the enhancement of individuals' capabilities and well-being as a foundation for sustainable economic progress. To assess the quality of human resources, two internationally recognized indicators are widely employed: the HDI and the HCI. Together, these indices provide complementary perspectives for evaluating a country's human development achievements and its capacity to generate long-term economic growth through investments in health, education, and human capabilities.

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