



Research Paper

Human Development Index.

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I. INTRODUCTION

The term "**human development**" entered the lexicon of development economics in 1990 through the first *Human Development Report* (HDR) published by the United Nations Development Programme (UNDP). The concept, developed by **Mahbub ul Haq and Amartya Sen**, was originally defined as 'the process of enlarging people's choices.

In 2010, the definition was refined as "*Human development is the expansion of people's freedoms to live long, healthy and creative lives; to advance other goals they have reason to value, and to engage actively in shaping development equitably and sustainably on a shared planet*".

As per the post-2010 HDR, HDI can be defined as *the measure of the average level of human development that a country has achieved in the three HDI dimensions, given the existing inequality in the distribution of achievements, and the level of aversion to inequality*.

Economic growth is considered only a means for expanding capacity and not an end in itself. The Human Development Index (HDI), used in the HDRs to compare countries in the world, has been designed as an **alternative** to per capita gross domestic product (GDP).

The index includes three important choices:

1. To lead a long and healthy life,
2. To acquire knowledge and
3. To have a decent standard of living.

The distinguishing feature of HDI is that while developed as an alternative to the use of per capita income for evaluating development outcomes, it does not ignore the income dimension itself.

Some essential features of HDI as laid down by Mahbub ul Haq and Amartya Sen are

1. It should **reflect** human capabilities.
2. It should include only a limited number of variables to keep it '**simple and manageable**.'
3. A **composite index** rather than several separate indices would be prepared.
4. It would cover both **social and economic** aspects.
5. The coverage and methodology of HDI would be kept **flexible**.

Three features of HDI- **its simplicity, universality, and plurality**- have contributed to the emergence of HDI as a strong alternative evaluative measure of development outcomes.

The HDI currently ranks countries into four groups:

1. Low human development (0.0 to 0.535),
2. Middle human development (0.536 to 0.711),
3. High human development (0.712 to 0.799), and
4. Very high human development (0.8 to 1.0).

COMPONENTS:

DIMENSIONS AND INDICATORS:

❖ 1990-2010:

- It focused on attainments in the realms of education, health and real GDP per capita.
- Longevity is measured by **life expectancy at birth**.
- The dimension of knowledge is measured using two indicators:

■ **Adult literacy rate**, which is a crude reflection of access to education. Functional literacy is generally lower than the reported numbers. It is the fraction of the adult population reported or estimated to have basic abilities to read and write.

■ **Combined primary, secondary and tertiary enrolment** (Combined Gross Enrolment).

- The third dimension, command over resources needed for a decent living, is represented by **per capita GDP**.
 - The total final output of goods and services produced by the country's economy within the country's territory by residents and non-residents, regardless of its allocation between domestic and foreign claims.
 - All three dimensions are given **equal weights** as they are considered equally valuable in ensuring well-being.
 - To enable **cross-country comparisons**, per capita income is adjusted for **purchasing power parity (PPP)** reflecting the relative purchasing power of the currency; this is expressed in US dollars.
 - PPP is defined as *the number of units of a foreign country's currency required to purchase the identical quantity of goods and services in the local developing country market as \$1 would buy in the United States.*
 - Generally, prices of nontraded services are much lower in developing countries because wages are so much lower.
 - **For eg:** as per official exchange rates income of a person in the USA is 242 times that of a person in the DRC but as per PPP it is around 135 times and not 242.
 - The income indicator represents a bundle of goods and services needed for the best use of human capabilities.
 - ❖ **2010-:**
 - While the basic dimensions used in the index have remained unchanged since 1990, some of the indicators underwent refinements in 2010.
 - Longevity continues to be measured in terms of **life expectancy at birth**.
 - Knowledge is now measured in terms of
 - **Mean years of adult education**, which is the average number of years of education received by people aged 25 years and above, and
 - **Expected years of schooling** for children of school-entrance age, which is the total number of schooling that a child of school-entrance age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life.
 - **The change** was necessary as the **discriminatory power** of the indicators used in the earlier approach had diminished, as countries at the higher end of the HDI spectrum had achieved high levels of combined gross enrolment ratios and adult literacy rates.
 - Standard of living or command over resources is now measured by **Gross National Income (GNI)** per capita in PPP US dollars instead of the erstwhile GDP per capita.
 - It is the total domestic and foreign output claimed by residents of a country, consisting of GDP **plus** factor incomes earned by foreign residents, **minus** income earned in the domestic economy by non-residents.
 - GNI is a better measure in a globalised economy as it accounts for in-income flows, such as remittances across countries.

INDEX CONSTRUCTION:

- In order to combine the three indicators, a dimension index is prepared for each indicator using maximum and minimum values.
 - Dimension index = $[\text{actual value} - \text{minimum value}] / [\text{maximum value} - \text{minimum value}]$
- HDI is then calculated as a simple average of the dimension indices. The values of HDI vary between 0 and 1.
 - HDR 2010 presented HDI with a **different methodology**,
 - the index used **observed** minimum and maximum values for all the indicators.
 - There was also a **change** in the **method of aggregation**.
 - HDI was previously calculated as an **arithmetic mean** of the dimension indices.
 - In 2010, a multiplicative method of aggregation using **geometric mean** was used to construct the index. This methodology is superior to the previous one as it **reduces** the **substitutability** between the dimensions.
 - Geometric mean ensures that poor performance in any dimension directly affects the overall index.
 - For example, previously deprivation in one dimension could be **compensated** for in HDI calculations by high achievement in the other dimension; the new methodology ensures that this will not happen.
 - In order to account for inequalities in achievements across the various HDI dimensions, the 2010 HDR introduced an **inequality-adjusted HDI** which takes into account inequality in all three dimensions of HDI by '**discounting**' each dimension's average value according to its level of inequality.
 - Another minor difference is that rather than using the common logarithm(log) to reflect the diminishing marginal benefit of income, the NHDI now uses the natural log (ln).
 - **NHDI = $H^{1/3} E^{1/3} I^{1/3}$** .
 - Where H stands for health index, E stands for the education index, and I stands for the income index.

CRITICAL ANALYSIS:

- The index is simple to compute and has a strong appeal as it advocates the cause of 'well-being' rather than only income. However, the index has been subjected to some criticism both on conceptual and methodological grounds.
 - **Conceptually**, the very simplicity of the index, which has made it so successful, is its failure as it is **not able to fully capture the concept of human development**.
 - **Important indicators** like political and social freedom, participation in community life, environmental concerns, and crime and violence that could jeopardize the quest for sustainable development are **excluded from HDI**.
 - It is also criticised for **including both stock variables**, such as adult literacy rate and life expectancy and **flow variables**, such as income per capita and gross enrolment ratios rendering difficult the evaluation of the impact of policies on attainments within a short period.
- Though it is positioned as an alternative approach, the focus continues to be on average levels of attainment, and **distributional concerns are bypassed**.
 - This has been remedied to an extent in HDR 2010 with the introduction of better averaging techniques like geometric mean, and the use of new indexes like the Inequality Adjusted Human Development Index.
- It has also been observed that there is a high correlation between the three components with per capita income, HDI is less useful as a replacement for GDP Per capita.
 - However, it has been observed that this applies only to middle-income countries where the differential between the economic and social attainments is higher than in either the high-income or low-income countries.
- Despite its limitations,
 - HDI has proved to be very useful as a **tool for policy analysis**.
 - It has enabled several developing countries in Asia, Africa, and Latin America to take **explicit cognizance** of human development issues and enabled a move away from excessively growth-centred strategies.
 - HDI has governed resource allocation strategies in countries, For example, in Egypt, in states of MP and Maharastra in India, etc.
 - It has enabled examination of inter- and intra-country disparities with respect to HDI rankings.
 - It has given rise to support for social sectors.
 - It has shown that income predicts rather weakly how countries will perform in education and health.
- **For eg:** countries like UAE, Pakistan, and Turkey perform more poorly on the New HDI than what would be predicted from their income level. While the reverse is true for nations like South Korea, Cuba, etc.
 - HDI has also been a powerful advocacy tool and has provided the required impetus for dialogue and debate regarding the multi-dimensional nature of development.
 - It has **majorly contributed** to improving our understanding of what constitutes development. By combining social and economic data, the NHDI allows nations to take a **broader measure** for their development performance, both relatively and absolutely.
 - By certain modifications to a country's NHDI to reflect income distribution, gender, regional and ethnic differentials, as presented in recent HDRs, we are now able to identify not only whether a country is developing but also whether various significant groups within that country are participating in that development.
- According to Amartya Sen, "*the real merit of the human development approach lies in the plural attention it brings to bear on development evaluation, not in the aggregative measures it presents as an aid to diverse statistics.*"

II. CONCLUSION:

In a nutshell, we can say that HDI is an index measuring national socio-economic development, based on combining measures of education, health, and adjusted real income per capita. The new HDI (post-2010) has many notable changes like the introduction of GNI, observed maximum and minimum values, use of geometric mean instead of arithmetic mean, etc. All of these changes come with various strengths but also a few potential drawbacks. HDI has been criticised for ignoring various important indicators, being too simple, including both stock and flow variables, etc. But despite its limitations, it has emerged as an important tool for development evaluation and has provided a strong underpinning to the multi-dimensional nature of development.

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