



Indexing Human Development- With Respect to India

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Abstract

In the radically opposite trends of India's economic growth and Human Development Index are raising question on the dichotomy. In one hand small and economically less developed countries are ranking high on Human Development Index. Introduction of the new method of calculation of preferring PPP over GDP. In addition to it three parameters are such as life, education and income are only considered as the base for the calculation of HDI. This paper reviewed the performance of India in the scale called Human Development Index.

Key words: HDI: Human Development Index, PPP: Purchasing Power Parity, GDP: Gross Domestic Product.

Introduction

The economy of India is the seventh largest in the world by nominal Gross Domestic Product (GDP) and the third-largest by purchasing power parity (PPP) India is one of the G-20 major economies, a member of BRICS and a developing economy among the top 20 global traders according to the WTO^[1]

On the other hand in a different scenario India has ranked 135 in Human Development Index, whereas countries like Norway and Australia have ranked 1st and 2nd respectively. As reported by UNDP^[2]. The human development index (HDI), a measure derived from some development indicators like life expectancy, education levels and income.

A well-prepared index can greatly enhance the usefulness to the theme or subject to its users. An index may be described as something which should be considerably more than an outline or an



expanded table of contents and considerably less than a concordance of words and phrases. A good index records every pertinent statement made within the body of the text. Making an index consists of assembling, analyzing, and arranging into the basic developmental issue affecting the mankind, in case of the human development^[3]. It acts as a parameter which can assess growth. Like students measured their performance every year through exams and they are given their performance report assessing their written content in exams. Similarly Human Development Index (HDI) is to track the growth and filling the gaps or loopholes and correcting mistakes and try to develop further. A nation is also in the same approach need to be assessed and track its growth and perform well by providing welfare to its people. Countries have chalked out plans and come to take national overall production per year as a measure to calculate the performance. Gross Domestic Product (GDP) may not be taken as the proper index to assess the development since it does not completely cover welfare of the people and turned towards economic growth. The academicians and researchers have prepared a measurement to upgrade the present system, which is known as “Human development Index”. This system of calculation is not an ultimate measurement but a better index to assess the nation's performance.

United Nations Development Programme reports consist of these human development reports. Pakistani economist Mahbub ul Haq prepared it with the help of various economists. Nobel Laureate Amartya Sen of India played a prominent role in the preparation of the Human Development Index (HDI). These reports are seen from 1990 in UNDP reports^[4].

The Human Development Index (HDI) may be defined as a statistical tool used to measure a country's overall achievement in its social and economic dimensions. It is based on the health of people, their level of education attainment and their standard of living (UNDP)^[5]

The Human Development Index (HDI) has gone through changes and modification. There are changes in HDI in order to improve the assessment. The recent change in HDI occurred in 2010 report. Changes are necessary to keep updated with time and also to maintain the quality. This article analyze HDI of India with respect to the new methodology. It consists of three parameters to assess the quality of life which is referred as the core of human development and required to improve the quality of life. These are

1. Life-expectancy
2. Education or Knowledge availability
3. Per capita income of the concerned people of a country.[6]

$$HDI = \sqrt[3]{(\text{Life} \times \text{Education} \times \text{Income})}$$

New Life Index calculation has come out with changing its focal point (minimum and maximum of the life expectancy). For life expectancy, it has taken 1980-2010 as years which are



considered to form these values. Minimum value for life expectancy is fixed at 20 years in new calculation. Maximum value for life index is kept at 83.2 years. To calculate Life Expectancy Index (LEI) as per new HDI calculation is based upon (LEI) = Life Expectancy of a country - 20 / 83.2 - 20

Education Index assessment as per new HDI calculation method:- Education Index (EI) assessment is composite of two indices. They are
1. Mean Years of Schooling Index (MYSI)

2. Expected Years of Schooling Index (EYSI)[6]

In order to calculate Mean Years of Schooling Index (MYSI) as per new HDI, it is the years spent by a 25 years or older person in school. The low value was fixed at 0 and the maximum value for mean years of schooling is fixed at 13.2. These values are taken after observation of various countries in the time of 1980-2010.^[7]

Formula to calculate Mean Years of Schooling Index (MYSI) = Mean years of schooling - 0 / 13.2 - 0. Mean value of Expected Years of Schooling Index (EYSI) is calculated as per new HDI by calculating the expected Years of Schooling by a 5 year old boy in a particular country. This assessment of goal posts (Minimum and maximum values) for expected years of schooling is also based on 1980 - 2010 in various countries. Low value for expected years of schooling is fixed at 0 and high value is fixed at 20.6.

Formula to calculate Expected Years of Schooling Index (EYSI) = Expected Years of Schooling - 0 / 20.6 - 0.

Education Index is calculated as $(MYSI \times EYSI)^{1/2} - 0 / 0.951 - 0$

Income Index assessment as per new HDI calculation method are done by setting of the goal posts as per observations during 1980 - 2010 in various countries. Gross National Income per capita is taken as measure to calculate new Income Index in new HDI. Minimum income is set as \$163 and maximum income is set as \$108,211.^[8] Income Index as per new HDI calculation formula is = $\text{Log}(\text{Country's GNIpc}) - \text{Log}(\$163) / \text{Log}(\$108,211) - \text{Log}(\$163)$

In order to calculate Human Development Index as per new method are Index (HDI) = $(\text{Life Expectancy Index} \times \text{Education Index} \times \text{Income Index})^{1/3}$

New Human Development Index (HDI) is geometric mean of Life Expectancy Index (LEI), Education Index (EI) and Income Index (II).

After this calculation total value will be between 0 and 1. As per the values gained, countries will be placed in the list of division of countries. They are divided into very high human development, high human development, medium high human development and low high human development countries.

The HDI of India barely grew from 0.700 in 2012 to 0.702 in 2013.(UNDP-2013).



Index	1980	1985	1990	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Very high human development	0.757	0.775	0.798	0.849	0.87	0.874	0.877	0.879	0.88	0.885	0.887	0.889	0.89
High human development	0.534	0.552	0.593	0.643	0.682	0.691	0.701	0.71	0.715	0.723	0.729	0.733	0.735
Medium human development	0.42	0.448	0.474	0.528	0.565	0.573	0.58	0.587	0.593	0.601	0.609	0.612	0.614
Low human development	0.345	0.365	0.367	0.403	0.444	0.456	0.465	0.471	0.478	0.479	0.486	0.49	0.493
India	0.369	0.404	0.431	0.483	0.527	0.537	0.547	0.554	0.56	0.57	0.581	0.583	0.586

Source: UNDP-2014

Rapid economic growth since 1991, has led to sharp reductions in extreme poverty in India.[9] However, those above poverty line live a fragile economic life. Lack of basic essentials of life such as safe drinking water, sanitation, housing, health infrastructure as well as malnutrition impact the lives of hundreds of millions.

The World Bank reviewed and proposed revisions in May 2014, to its poverty calculation methodology and purchasing power parity basis for measuring poverty worldwide, including India. According to this revised methodology, the world had 872.3 million people below the new poverty line, of which 179.6 million people lived in India. In other words, India with 17.5% of total world's population had 20.6% share of world's poorest in 2011.^[10]

There are several definitions of poverty, and scholars disagree as to which definition is appropriate for India. Inside India, both income-based poverty definition and consumption-based poverty statistics are in use. Outside India, the World Bank and institutions of the United Nations use a broader definition to compare poverty among nations, including India, based on purchasing power parity (PPP), as well as nominal relative basis.^[11] Each state in India has its own poverty threshold to determine how many people are below its poverty line and to reflect regional economic conditions. These differences in definition yield a complex and conflicting picture about poverty in India, both internally and when compared to other developing countries of the world.



Human Development is necessary because:

- Human Development is an end and economic growth is only a means to it
- It is a means to higher productivity
- Helps in lowering family size
- It is good for the physical environment
- It reduces poverty and contributes to a healthy civil society, increased democracy and greater social stability^[12]

Improvement in the quality of life while ensuring the future generation should have the same access to the resources of nature, if not more than that of the present generation enjoys.

Essential components of Human Development:

- Equity -People must enjoy equitable access to opportunities
- Sustainability –The next generation must enjoy the same well being that we enjoy
- Productivity – Requires investment in people and enabling micro-environment for them
- Empowerment –It means people are in a position to exercise their choice^[13]

There are a number of challenges and obstacles to implementing pro-equity policies, many of which themselves stem from inequities. In light of this, development agencies have a special role: by virtue of being external actors they may have more room for maneuver to help equalise life chances. To deliver on equity, agencies should incorporate a more systematic understanding of equity and inequity into their policy decisions, implement pro-equity policies and influence developing country governments to address inequity. More than this, equity should be embedded in decision-making tools and procedures^[15]

The interventions listed above have had a proven impact on poverty, inequity and human development indicators. More than this, some developing countries (e.g. Vietnam) have employed wide-ranging and coherent strategies to tackle inequity, which have promoted long-term and sustainable change in terms of growth as well as reducing poverty and inequality. Tackling inequity is crucial for developing country governments and development agencies: as well as being a valuable goal in itself, improving equity constitutes a central place in our understanding of beneficial change and development, driving poverty reduction in combination with growth. Moreover, the empirical evidence indicates that equity is instrumentally central to long-term change, through its causal ties to efficiency, growth, poverty reduction and social cohesion.

For example, Odisha, an economically back bencher state of India has its own bottlenecks. In line with India's rank on HDI, Odisha ranked 22 out of 23 states within the bracket of Low HDI of 0.362 and at par with Chad. State like Kerela and Delhi have ranked 1st and 2nd with high HDI Index of 0.790 and 0.750 respectively. Odisha, comparable with only Chad, a country ranked 184 out of 187 countries indexed in the HDI^[16]



A composite index measuring average achievement of the developmental indicators in its basic dimensions, such as long and healthy life, knowledge and a decent standard of living. Which can further be simplified as:

- 1- The life expectancy at birth: Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life.
- 2- Mean years of schooling: Average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level.
- 3- Expected years of schooling: Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life.
- 4- Gross national income (GNI) per capita: Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population^[17]

Grossly HDI is calculated by on the basis of three basic dimension of development are Healthy life, Literacy rate and Income of the average people. These three parameters are not only inter dependant but inter related as well.

Once a year, the United Nations Development Programme releases its Human Development Report. This puts out a country-wise Human Development Index, which is constructed by using a combination of years of schooling, life expectancy and income indicators. Like its predecessors, the 2014 report allows one to compare India's performance with other countries. The country's overall rank is 135, which puts it nearly three-quarters of the way down the list. Just over 100 of the total list of 187 countries are in the 'High' or 'Very High' human development category. India is bracketed with over 40 other countries in the Medium Human Development category (index ranging from 0.550 to 0.700). India's score for 2013, at 0.586, places it near the bottom of the Medium category -- which is understandable since it crossed from Low to Medium only six or seven years ago. The list bears out once again that human development is linked closely to income. The richest countries have the best human development index, and the poorest have the worst. Only 10 countries with a lower per capita income than India have a better index; and four countries with higher income have a lower index. So incomes and human development tend to go together. This is intuitive, indeed obvious,. The second finding, again not new but worth mentioning, is that India has done better than the average in terms of the rate at which it has improved its score on the index. The annual increase in 2000-13 has been 1.49, against a Medium category average of 1.17. However, quite a few countries have managed to improve their index faster than India, for example Bangladesh, which now has a better index than Pakistan despite being much poorer (both countries are ranked somewhat lower



than India). At India's present rate of progress on human development, it may take some 15 years for India to get to where China is today, (in the High development category, with an index of 0.719).

That said, there is a lot of grim news buried in the details. For instance, India accounts for a mammoth 40 per cent of those who suffer from 'multi-dimensional poverty' (UNDP's term for deprivation). The country also does poorly on many indicators of inequality, in both absolute as well as relative terms.^[18] Gender inequality is a weak spot. On education, the numbers are poor and India does particularly poorly on the equality front. But the country seems to be catching up. Enrolment ratios at primary, secondary and tertiary levels are now comparable with the average for the Medium category. But on both education and health, the country spends somewhat less (in relation to gross domestic product or GDP) than Medium category countries as a whole.

Two factors are particularly worrisome, and both relate to the environment.^[19] One is that India suffers from natural resource depletion at a rate that equals 4.9 per cent of gross national income -- which must be placed against annual GDP growth in the last three years of 5.3 per cent. It does not help that the figure for China is 6.1 per cent, and that the average for Medium category countries is 7.7 per cent. It is a matter of concern that the picture on water. India draws 33.9 per cent of its renewal water resources each year, compared to a Medium category average of 13.9 per cent, and China's figure of 19.5 per cent. It should be clear that growth achieved while doing damage to the environment is not sustainable. If one factor in the additional point that the people who suffer the most on account of environmental damage are the poor, then it should be clear that a growth process that is environmentally harmful is also anti-poor.

The World Bank's international poverty line definition is based on purchasing power parity basis, at \$1.25 per day. This definition is inspired by the reality that the price of same goods, and services such as a haircut, are quite different in local currencies around the world. A realistic definition and comparison of poverty must consider these differences in costs of living, or must be on purchasing power parity (PPP) basis. On this basis, currency fluctuations and nominal numbers become less important, the definition is based on the local costs of a basket of essential goods and services that people can purchase. By World Bank's 2014 PPP definition, India's poverty rate is significantly lower than previously believed.^[20] India's HDI constantly lies in between Medium Human Development Index and Low Human Development Index.



Conclusion

Human Development Index is not the ultimate index to calculate and assess human development, it is better than other indices in more ways than one. Hence HDI is being used by various countries. Now, there can be assessment as per the new HDI which can better assess than old HDI. There can be a lot of improvement in deciding HDI, since growth is a natural process but development require deliberate intervention.

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