A STUDY OF HUMAN DEVELOPMENT IN HARYANA AFTER ECONOMIC REFORM 1991

Ajad Singh*1

*1Associate Professor, Economics Department, Motilal Nehru College Delhi University, New Delhi, India.

DOI: https://www.doi.org/10.56726/IRJMETS30848

ABSTRACT

The State was primarily agricultural and industrially underdeveloped when it was founded on 1st November 1966. Although only 1.37 per cent of the nation’s total land area and home to less than 2 per cent of the people, Haryana possesses a remarkable communication network and infrastructure. Two developing cities, Gurgaon and Faridabad, which are adjacent to Delhi and serve as important hubs for the information technology (IT) and software industries, are included in the National Capital Region (NCR), which encompasses a sizable portion of the State.

The process of increasing a population's freedom, opportunity, and well-being is known as human development. Human development is the improvement of human capital, which is acknowledged as one of the key components of a country's true riches. It is the definition of how people's capacities, knowledge, skills, abilities, and health evolve and how that development can enhance their economic performances. The advancement of these capabilities is crucial to a nation's economic prosperity. Economic growth is the gradual increase in the amount of commodities and services generated. As population capacities increase, labour productivity increases and favourably affects economic growth.

Human development is measured using the human development index (HDI), which was created by Dr. Mahbub ul Haq in 1980 and the UNDP in 1990. To assess human well-being, HDI uses proxy variables including life expectancy, gross national income (GNI), and education levels. The HDI score can be between 0 and 1, with 0 representing the lowest level of human development and 1 representing the highest.

I. INTRODUCTION

After the fiscal crisis of 1991, the Indian economy started along the path of economic reforms to transform the slow-growing economy into a market-driven economy with the best possible resource use. The Indian government implemented substantial trade and other reforms in 1991 to lower controls and reduce regulations to gain deeper integration with the global economy and spur economic growth.

With impressive GSDP growth over the past few years, Haryana's economy has become one of the nation's fastest-growing states. The State was primarily agricultural and industrially underdeveloped when it was founded on 1st November 1966. Although only 1.37 per cent of the nation’s total land area and home to less than 2 per cent of the people, Haryana possesses a remarkable communication network and infrastructure. The study found that Haryana has improved human development in the last three decades. But much to achieve yet. In the health and education sector, progress is not yet satisfactory.

Keywords: HDI, Human Development, Economic Growth, Haryana, Life Expectancy.

II. REVIEW OF LITERATURE

The development of its people is one of the principal objectives of an economy. To the extent that greater capabilities and opportunities will improve the productivity of people, human development is also expected to positively influence economic growth (Rahman, Raja, and Ryan (2020)). The ultimate purpose of economic growth is to provide a better quality of life to the people. However, economists have proposed that the resulting human development also plays a crucial role in enhancing economic growth (Ranis (2004)).
Ramirez, Rani, and Stewart (1997)'s paper explored the links between economic growth and human development, identifying two chains, one from economic growth to human development and the other from human development to economic growth. Cross-country statistics for the years 1970 to 1992 are used to empirically analyse the relative value of the various links in each chain. Public investments in female education and health are particularly important in determining how strongly economic growth and human development are related. The relationship between investment and income distribution and economic growth is strongly influenced by both of these factors. These two-way links can produce virtuous or vicious cycles of development, as well as lopsided performers. Over time, we discover that lopsided development rarely endures: initially supportive of economic expansion, countries fall into the vicious group, whereas supportive of human development, countries rise into the virtuous category. This finding implies that human development and economic growth should be jointly promoted, and human development should be given sequential priority.

Boozer et al. (2003) investigated the reciprocal relationship between economic expansion and human advancement. To gauge the strength of these linkages, they created panel data techniques and discovered that human development is a crucial factor in determining sustained growth. Human Development is an integral component of Economic Growth as well as a final result in that it gauges fundamental human well-being. Their results support threshold effect theories and demonstrate the empirical applicability of endogenous growth. The findings of their analysis suggest that effective policy involves an early focus on human development, both for its direct impact and for its feedback on economic growth.

De and Pal (2011)'s paper outlined how globalisation was intended to lessen regional poverty and inequality, encourage sustainability, and raise standard of living worldwide. Regarding the impact of globalisation on GDP growth, inequality reduction, poverty reduction, environmental sustainability, and eventually human development, a number of studies have produced different findings. This study aimed to investigate the pattern of globalisation among nations, as well as how it affected both GDP growth and the human development index. The relationships between these factors demonstrate how the concept of globalisation is growing in significance. Globalisation is also thought to only affect current and relatively recent future values.

Elistia and Syahzuni (2018) investigated the impact of HDI on GDP per capita growth in 10 (ten) ASEAN member nations between 2010 and 2016: Indonesia, Singapore, Malaysia, Thailand, Brunei Darussalam, Philippines, Laos, Vietnam, Myanmar, and Cambodia. The findings of this study showed that each nation's HDI and GDP are strongly and significantly correlated. The study came to the conclusion that the GDP per capita could be impacted by HDI levels. It is feasible to achieve a high level of human development thanks to economic progress. On the one hand, prospects for economic expansion increase as human development levels rise. The causal link between economic expansion and human development shifts to one of reciprocal influence. So it is clear that human development of a country affects economic growth of the country.

The study as mentioned earlier clearly shows that the human development index represents the overall development of the living standard of people. HDI and Economic growth are interdependent. Improving the Human development index shows not only the current living standard of people but future prospectus of economic development. So in this paper, to understand Haryana's progress in uplifting people's living standards and future prospectus, we are using the human development index as mentioned in the technical notes 2016 human development report.

The UNDP Human Development Index (HDI) is an effort to quantify and concisely express the essence of human progress across countries. The indicators that are taken into account include life expectancy at birth, educational achievement as a proxy for cognitive aptitude, and income as a measure of the resources required for a respectable level of living. These are all neighbourhood indicators built on the idea of averages. An average of these averages is the HDI. No average is perfect; the little and the huge can produce a median number, and the negatives and the positives can both add up to zero. The appropriateness of the indicators used to measure each HDI component is a further concern.

Objectives Of The Paper

1. To measure the progress of human development in Haryana since 1993-94.
2. To analysis the major factors that determining Human Development in Haryana.
Standard of Living and Human Development Index

It is appropriate to define development in terms of people because the core of economic development is on humans. Economic development is the increase in the amount or standard of commodities and services that are available to each individual in a community. The amount and quality of goods and services that are now more readily available must therefore be measured, as well as the actual standard of life (in terms of physical standards) of a region's population, in order to assess development.

The statistics used to measure current development can only very roughly predict changes in peoples’ actual standards of life. Although the living standard is at the core of the development problem, current development indicators like income per capita, the gross domestic product, and consumption indices do not accurately reflect the actual living standard. A statistical technique called the HDI is used to assess a nation's overall performance on social and economic fronts. By combining all the variables, statistical analysis can determine the standard of living.

“The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalised indices for each of the three dimensions.” - United Nations Development Programme, Human Development Report.

The Human Development Index (HDI) provides a single index measure to capture three critical dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. The HDI utilises four key metrics life expectancy at birth – to assess a long and healthy life expected years of schooling – to assess access to knowledge of the young generation’s average years of schooling – to assess access to knowledge of the older generation’s gross national income (GNI) per Capita – to assess the standard of living

III. DATA AND METHODOLOGY

The Human Development Index (HDI) is a summary measure of the average achievements made in the basic dimensions of human development:

- A long and healthy life, as measured by life expectancy at birth;
- Education as measured by expected years of schooling for children at school age and by the mean years of schooling that adults aged 25 and above have undertaken;
- A decent standard of living as measured by Gross National Income (GNI) per capita in terms of purchasing power parity (PPP) in US dollars.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Indicator</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Life expectancy (years)</td>
<td>20</td>
<td>85</td>
</tr>
<tr>
<td>Education</td>
<td>Expected years of schooling (years)</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Mean years of schooling (years)</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Standard of living</td>
<td>Gross national income per capita (2011 PPP $)</td>
<td>100</td>
<td>75000</td>
</tr>
</tbody>
</table>

Formula of Estimation

1. **Health Index**

   Health Index = \( \frac{\text{Life Expectancy at birth} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \)

2. **Education Index**

   - Mean years of schooling (MYS) index
     \( \text{MYS index} = \frac{\text{Mean Year of Schooling} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \)
   - Expected years of schooling (EYS) index
     \( \text{EYS index} = \frac{\text{Expected Year of Schooling} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \)

On the basis of MYS index EYS index, we can estimate Education index by following formula.
3. Income Index

\[ \text{Income Index} = \frac{\ln PCY (PPP) - \ln(\text{Minimum PCY})}{\ln(\text{Maximum PCY}) - \ln(\text{Minimum PCY})} \]

**Human Development Index (HDI)**

\[ \text{HDI} = [(\text{Health Index})(\text{Education Index})(\text{Income Index})]^{1/3} \]

**Data sources**

This paper is based on secondary data, which covers only Haryana. Life expectancy at birth: The Office of the Registrar General of India (ORGI) publish Sample Registration System (SRS) based Abridged Life Tables. This SRS data in India is considered the most reliable regarding death statistics. The latest publication of SRS-ABRIDGED LIFE TABLES 2015-2019. We are using data from various years of ORGI SRS–abridged life tables

Expected years of schooling and Mean years of schooling: Author self-estimation from various rounds of Employment and Unemployment survey of NSSO. To estimate the mean year of schooling, we estimate the average schooling year of the population of 24 years and above in Haryana. To estimate the expected year of schooling in Haryana, we have taken as average schooling years of 21-24 years old, assuming that the present education status continues. This shows that, on average, how many expected years in education would be devoted to young ones. However, choose the age group 21-24 for the expected years of schooling because this group person shows the total years of schooling. The logic is that those below 20 years are in education, and many still have not completed their education. We have not found any other source to get reliable data on the expected year of schooling.

Per Capita Income PPP based: First of all, we get Per Capita Income data on current price from Various Economic and Statistical issues of Haryana and other sources. After that, we convert the PCY data into international currency by purchasing power parity. Most economists used the World Bank estimates of PPP for all the countries https://data.worldbank.org/indicator/PA.NUS.PPP?locations=IN. However, PPP data required for such conversion are not available for India, not for States. To get Haryana PCY data in international currency, we used the PPP exchange rate of India estimated by the World Bank for different years, assuming no difference between Haryana and India. A drawback of using the same conversion factor for the State is that the inter-state differences in the purchasing power of the rupee if any, do not get due weightage. No data are available to support or refute the presence of such differentials.

**HDI Estimation of Haryana**

Haryana Human Development Data

<table>
<thead>
<tr>
<th>Year</th>
<th>PCY based on PPP</th>
<th>Life Expectancy</th>
<th>MYS</th>
<th>Exp Years of Schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1993-94</td>
<td>1956.2</td>
<td>67.6</td>
<td>4.2</td>
</tr>
<tr>
<td>2</td>
<td>1999-2k</td>
<td>2693.1</td>
<td>69.0</td>
<td>5.0</td>
</tr>
<tr>
<td>3</td>
<td>2004-05</td>
<td>4017.7</td>
<td>70.7</td>
<td>5.8</td>
</tr>
<tr>
<td>4</td>
<td>2011-12</td>
<td>7486.3</td>
<td>70.9</td>
<td>7.1</td>
</tr>
<tr>
<td>5</td>
<td>2017-18</td>
<td>11124.9</td>
<td>71.5</td>
<td>7.7</td>
</tr>
</tbody>
</table>

The above table shows changes in PCY (PPP), life expectancy at birth, mean year of schooling and expected year of schooling. Per Capita income significantly improved from $1956 in 1993-94 to $11125 in 2017-18. Life expectancy, which indicates society's health situation, has improved from 66.7 to 71.5 years. MYS has also significantly increased from an average of 4.2 years in 1993-94 to 7.7 years in 2018-18. It is almost 83 percentage point growth in MYS. Approximately 100%age point growth in EYS is noticed from 1993-94 to 2017-18. With the help of the PCY, life expectancy, MYS and EYS data, we have developed the following HDI-related index to measure human development in Haryana.

Haryana Human Development Index
In Table 3, we have estimated three main indexes Health Index, Education Index and PCY index as per their methodology. The Education index of Haryana explains that Education improvement in the study period is very significant. In 1993-94, the Education index value was 0.283, which improved to 0.536 by 2017-18. The primary reason behind this success is the unique education programme of the State. The prominent programme, i.e. Mid-day Meal, Beti Bachao Beti Padhao etc., are very successful programmes to popularise education to every household. It should be necessary to mention that as per international standards, Haryana is far behind, and many more steps are needed to improve the education area. The below graph shows the consistent growth in Education in Haryana.

The second component of HDI is a health-related component, the life expectancy Index. The longevity of the average person has not improved very much in Haryana. In 1993-94, the Life expectancy index was 0.732, which increased to 0.792 in 2017-18. It shows that the government efforts and private sector role have not benefitted people’s health-related issues very much. However, child mortality and maternal mortality rate have declined very much. Even then, there is not much success in life expectancy. People’s less attention regarding health, the deterioration quality of food items, heart-related diseases and pollution were significant barriers to the progress of life expectancy. An urgent need for govt attention is required to control the issues.
The third and most prominent part of HDI is the PCY index which explains the progress in the expansion of resources. Economic reforms in India have benefitted Haryana greatly in raising Per Capita Income. As we know, Haryana lies near the national capital. Because of this, many international companies have set up their plant in Haryana, i.e. Maruti, and Hero Honda in Gurugram. In the last 30 years, Haryana’s $PCY based on PPP has increased 5.7 times from 1993-94 to 2017-18.

Based on the abovementioned three indexes, we created the Human Development index value. The estimated value of HDI of the different periods shows improvement in Haryana. The estimated value of HDI in 1993-94 was 0.453. In 2017-18 it increased to 0.671. This shows that in Haryana, Human development has improved by 0.22 points. The main factors behind its improvement in education and GSDP. However, Haryana's HDI level has not increased to the level of some other states, such as Kerala, Tamilnadu etc. The reason behind this is lagging in health and educational factors. More govt attention is needed in this area.

IV. CONCLUSION

- Haryana has improved quality of life after economic reform of 1991. This is shown by change in HDI from 0.453 in 1993-94 to 0.671 in 2017-18.
- Government intensive efforts in health and education are required to accelerate the process of human development.
- The component primarily responsible for slow progress in HDI is health and education sector.
- However Life expectancy index in Haryana is better than the other two components of HDI.
- In our opinion, growth in Educational index can be achieved by opening more schools in rural area and minimise dropout rate regions and by better management of the schools.
- Life Expectancy also can be improved by providing general awareness about modern disease, creating more infrastructure in health sector, controlling pollution and improving quality of food items.
V. REFERENCES


