

Human Capital Formation in India

- Human Capital It refers to the stock of 'skill and expertise' of a nation at a point of time. It is the sum total of skill and expertise.
- Human Capital Formation It is the process of adding to the stock of human capital over time.
- Physical Capital It refers to the stock of produced means of production. It consists of machines, production plants etc.
- Financial Capital It refers to the stocks/shares of the companies or these are simple financial claims against assets of the companies.

Sources of Human Capital Formation

- Expenditure on Education
- Expenditure on Health
- On-the-Job Training
- Study Programmes for Adults
- Migration
- Expenditure on Information

Human Capital Formation and Economic Growth

- Higher Productivity of Physical Capital Human capital formation increases productivity of physical capital specialised engineers and skilled workers can certainly handle machines better than the other.
- Innovative Skills It facilitates the use and growth of innovative skills. Innovation is the life line of growth.
- Higher Rate of Participation and Equality By enhancing productive capacities of the labour force, human capital formation induces greater employment.

Thus, there is a cause and effect relationship between human capital formation and economic growth.

Problems Facing by Human Capital Formation in India

- Rising population
- Brain drain
- Desicient man power planning
- Low academic standards

Human Capital and Human Development

Human capital and human development are related concepts, but certainly not identical. Human capital is a means to an end. Human development is an end itself.

Education as an Essential Element of Human Resource Development

It implies the process of teaching training and learning especially in schools or colleges, to improve knowledge and develop skills.

Growth of Education Sector in India

Following observations highlight the growth of education sector in India

- Expansion of general education
- Primary education
- Secondary education
- Higher education
- Vocationalisation of secondary education
- Technical, medical and agricultural education
- Rural education
- Adult and female education
- Total literacy campaign

Education Still a Challenging Proposition

Education system of the country which along with the following facts makes education still challenging proposition in India.

Large Number of Illiterates

- Inadequate vocationalisation
- Gender bias
- Low rural access level
- Privatisation
- Low government expenditure on education

Right to Education (RTE)

In the year 2012, the Government of India has brought about an Act, called RTE. It promises education to all. It makes education a matter of right to all children in the age group of 6-14 years.

The concept of human capital formation, source of human capital and its growth is revealed in the chapter. It also deals with the relationship among human capital, economic growth and human development.

Concepts and Sources of Human Capital Formation

Just as a country can turn physical resources like land into physical capital like factories, similarly it can also turn human resources like students into engineers and doctors. There by increasing their productivity and efficiency. So, human capital formation aims at converting human resources into human assets.

Human Capital and Physical Capital

- Human Capital It refers to the stock of skill, ability, expertise, education and knowledge in a nation at a point of time.
- Physical Capital All inputs which are required for further production such as machine, tools and implements, factory buildings, etc are called physical capital.

Difference between Physical and Human Capital

Basis	Physical Capital	Human Capital
Nature	It is tangible and can be easily sold in the market like any other commodity.	It is intangible, built in the body and mind of its owner. It is not sold in the market, only its services are sold.
Ownership	It is separable from its owner.	It is inseparable from its owner.
Mobility	It is completely mobile between countries except some artificial trade restrictions.	It is not perfectly mobile between countries as movement is restricted by nationality and culture.
Formation	It can be built even through imports.	It is to be done through conscious policy formulations.
Benefit	It creates only private benefit.	It creates both private and social benefits.

Human Capital Formation

It is the process of acquiring and increasing the number of people who* have the skills, education and experience which are critical for the economic and political development of a country.

In other words, human capital formation is the process of adding to the stock of human capital over time.

G.M. Meier defines human capital formation as, "human capital formation is the process of acquiring and increasing the number of persons who have the skiff education and experience which are essential for the economic and political development of a country".

Sources of Human Capital Formation

Investment in education is considered as one of the most important sources of human capital formation. There are several other sources as well. Investment in health, on-the-job training, migration and information are the other sources of human capital formation.

These sources are discussed below

1. Expenditure on Education

The education expenditure is an important source of human capital formation as it is the most effective way on enhancing and enlarging a productive workforce in the country.

Nations and individuals invest in education with the objective

- increasing their future income.
- generating technical skills and creating manpower, well suited for improving labour productivity and thus, sustaining rapid economic development.
- tending to bring down birth rate which in turn, brings decline in population growth rate. It makes more resources available per person.
- education also results in social benefits since, it also spreads to others.

2. Expenditure on Health

Health is another important source of human capital formation. A sick labourer without access to medical facilities is compelled to abstain from work and there is a loss of productivity. The various forms of health expenditure are preventive medicine, curative medicine, social medicine, provision of clean drinking water, etc.

3. On-the-job Training

Expenditure regarding on-the-job training is a source of human capital formation as the return of such expenditure in the form of enhanced labour productivity is more than the cost of it.

Firms spend huge amounts on giving on-the-job training to their workers. It may be in different forms like a worker may be trained in the firm itself or under the supervision of a skilled worker or can be sent for off campus training.

The firms then insist that workers should work for at least some time in the company so that they can recover the benefits of the enhanced productivity owing to the training.

4. Migration

People sometimes migrate from one place to the other in search of better jobs that fetch them higher salaries than what they may get in their native places. It includes migration of people from rural areas to urban areas in India. Unemployment is the reason for the rural urban migration in India and technically qualified people migrate from one country to another in order to get high salaries.

5. Expenditure on Information

People spend to acquire information relating to the labour market and other markets like education, health, etc.

For example, people seek information regarding salaries and other facilities available in different labour markets, so that they can choose the right job. Expenditure incurred for acquiring information regarding labour markets and other markets like education and health have also become an important source of human capital formation.

Economic Growth and State of Human Capital Formation in India

Human Capital and Economic Growth

India recognised the importance of human capital in economic growth long ago. The Seventh Five Year Plan says, 'Human resources development has necessarily to be

assigned a key role in any development strategy, particularly in a country with a large population’.

The following points show clearly the interdependence among the two

- Higher Productivity of Physical Capital Human capital increases productivity of physical capital as specialised and skilled workers can handle machines or techniques better than the unskilled works. This increased productivity and hence production in leads to economic growth.
- Innovative Skills Human capital facilitates innovation of new methods of production and this increase the rate of economic growth in the form of increase in GDP.
- Higher Rate of Participation and Equality Human capital formation leads to a higher employment rate. With increase in employment, the productivity rises. Also, increase in employment opportunities also increases the level of income and this helps in reducing inequalities of wealth.
Both, increase in employment rate and decrease in income inequalities are pointers of economic development.
- Brings Positive Outlook The process of human capital formation bring in a positive outlook to the society which is different from orthodox and traditional ways of thinking, and hence increases the rate of participation in the workforce causes increase in level of production.

India as a Knowledge Economy

The Indian software industry has been showing an Impressive record over the past decade. Entrepreneurs, bureaucrats and politicians are now advancing views about how India can transform itself into a knowledge-based economy by using Information Technology (IT).

There have been some instances of villagers using e-mail which are cited as examples of such transformation. Likewise, e-governance is being projected as the way of the future.

The value of IT depends greatly on the existing level of economic development.

Human Capital and Human Development

Human development is the broader term than human capital.

Human capital considers education and health as a means to increase labour productivity. Human development is based on the idea that education and health are integral to human well-being because when people have the ability to read and write and the ability to lead a long and healthy life, they will be able to make other choices they value.

In human capital view, any investment in education and health is unproductive, if it does not enhance output of goods and services. In the human development perspective, human beings are ends in themselves. Therefore, basic education and

basic health are important in themselves, irrespective of their contribution to labour productivity. Deutsche Bank and World Bank Report on Indian Economy.

- According to two independent reports one from Deutsche and other from World Bank have identified that India would grow faster due to its strength in human capital formation.
- According to Deutsche Bank (a German Bank)'s report on Global Growth Centres, it has been identified that India will emerge as one among four major growth Centres in the world by 2020. This report also says that between 2005 to 2020, we expect a 40% rise in the average years of education in India, to just above 7 years.
- World's Bank report India and the Knowledge Economy-Leveraging Strengths and Opportunities states that India should make a transition to the knowledge economy and if it uses its knowledge as much as Ireland does, then the per capita income of India will increase from a little over US \$1000 in 2002 to US \$3000 in 2020.
- It further states that the Indian economy has all the key ingredients for making this transition such as a critical mass of skilled workers, a well functioning democracy and a diversified science and technology infrastructure. Thus two reports point out the fact that further human capital formation in India will move its economy to a higher growth.

Problems of Human Capital Formation in India

The main problems of human capital formation in India are

- **Rising Population** Rapidly rising population adversely affects the quality of human capital in under developed and developing countries like India. It reduces per head availability of existing facilities like sanitation, employment, drainage, water system, housing, hospitals, education, food supply, nutrition, roads, electricity, etc.
- **Brain Drain** Migration of highly skilled labour termed as 'brain drain'. This slows down the process of human capital formation in the domestic economy.
- **Inefficient of Manpower Planning** There is inefficient manpower planning in less developed countries where no efforts have been made either to raise the standard of education at different stages or to maintain the demand and supply of technical labour force. It is a sad reflection on the wastage of human power and human skill.
- **Long-term Process** The process of human development is a long-term policy because skill formation takes time. The process which produces skilled manpower is thus, slow. This also lowers our competitiveness in the international market of human capital.
- **High Poverty Levels** A large proportion of the population lives below poverty line and do not have access to basic health and educational facilities. A large section of society cannot afford to get higher education or expensive medical treatment for major disease.

Human Development Index

The Human Development Index (HDI) is a composite statistic of life expectancy, education, and income indices rank countries into four tiers of human development.

It was created by economist Mahbub Ul Haq, followed by economist Amartya Sen in 1990, and published by the United Nations Development Programme. India has 136th position in the World Human Development Index.

Education Sector in India

Education implies the process of teaching, training and learning especially in schools or colleges, to improve knowledge and develop skills.

Following points explain the important or objective of education

- It produces good citizens.
- It develops science and technology.
- It facilitates use of natural and human resources of all regions of the country.
- It expands mental horizon of the people.

Growth in Government Expenditure on Education

Government expenditure on education can be expressed in two ways

- As a percentage of total government expenditure.
- As a percentage of Gross Domestic Product (GDP).

The percentage of 'education expenditure of total government expenditure' indicates the importance of education in the scheme of expenses before the government.

Expenditure on education out of our GDP shows how much we are committed towards the development of education in our country.

During 1952-2010, education expenditure as percentage of total government expenditure increased from 7.92% to 11.1% and as percentage of GDP increased from 0.64% to 3.25%. During this period expenditure on education was not constant. There was irregular rise and fall.

Expenditure on Elementary Education in India

Elementary education takes a major share of total education expenditure and the share of the higher/tertiary education is the least. But expenditure per student on tertiary education is higher than that of elementary.

As we expand school education, we need more teachers who are trained in the higher educational institutions, therefore, expenditure on all levels of education should be increased. The per capita education expenditure is as high as Rs. 2005 in Himachal Pradesh to as low as Rs. 515 in Bihar.

This leads to differences in educational opportunities across states.

Free and Compulsory Education

The Education Commission (1964-66) had recommended that atleast 6% of GDP to be spent on education so as to make a noticeable rate of growth in education.

In December 2002, the Government of India, through the 86th Amendment of the Constitution of India, made free and compulsory education a fundamental right of all children in the age group of 6-14 years. Government of India in year 1998 appointed. The Tapas Majumdar Committee, which estimated an expenditure of around 1.37 lakh crore over 10 years (1998-99 to 2006-07) to bring all Indian children in the age group of 6-14 years, under the purview of school education. Desired level of expenditure an education is 6% of GDP but the current level is little over 4% which is not inadequate. It is necessary to reach the level of 6% which is considered as must for coming years.

Recently, Government of India has started levying a 2% 'education cess' on all Union taxes. The revenues from education cess has been earmarked for spending on elementary education.

Educational Achievements in India Generally, educational achievements in a country are indicated in terms of

- Adult literacy level
- Primary education completion rate
- Youth literacy rate These statistics for the years 1990 to 2010 are given in the following table

Educational Attainment in India

Particulars		1990 (%)	2000 (%)	2005-10 (%)
Adult Literacy Rate	Male	61.9	68.4	76.7
	Female	37.9	45.4	54.9
Primary Completion Rate	Male	78	85	96
	Female	61	69	95
Youth Literacy Rate	Male	76.6	79.7	88
	Female	54.2	64.8	74

Future Prospects

India government considers education a key sector where considerable growth and development is required. Thus, it has set some future prospects for framing its policies.

These prospects are discussed below

Education for All : Still a Distant Dream

Although the education level in India has risen for both adults as well as for youth. Still the number of illiterates in India are as much as the population was at the time of Independence.

In 1950, when the Constitution of India was passed by the constituent assembly, it was noted in the directive principles of the constitution that the government should provide free and compulsory education for all children up to the age of 14 years within 10 years from the commencement of the constitution.

The following factors makes education still a distant dream

- Large number of illiterates
- Inadequate vocationalisation
- Gender bias
- Low rural access level
- Privatisation
- Low government expenditure on education

Gender Equity : Better than Before

The differences in literacy rates between males and females are narrowing, signifying a positive development in gender equity; still the need to promote education for women in India is imminent for various reasons, such as

- Improving economic independence.
- Social status of women.
- Healthcare of women and children.

Therefore, we cannot show the satisfaction about the upward movement in literacy rates as we have miles to go in achieving cent percent adult literacy.

In India, Mizoram, Kerala, Goa and Delhi are the states having high literacy rate, while Bihar, Uttar Pradesh, Rajasthan and Arunachal Pradesh are the educationally backward states. The educational backwardness is due to social and economic poverty of the people.

Higher Education : A Few Takers

The Indian education pyramid is steep, indicating lesser and lesser number of people reaching the higher education level.

As per NSSG (National Sample Survey Organization) data, in the year 2007-08, the rate of unemployment for youth with education up to secondary level and above was 18.1% whereas, the rate of unemployment for youth with education up to primary level was only 11.6%.

Therefore, the government should increase allocation for higher education and also improve the standard of higher education institutes, so that students are imparted employable skills in such institutions