Chapter 15: HUMAN CAPITAL FORMATION

Learning Objectives:

- Introduction
- Physical Capital & Human Capital
- Meaning of human capital formation
- Sources of human capital formation
- Importance/Role of human capital formation
- Reasons for poor human capital formation in India
- Human capital and Human Development
- Growth of Education sector in India
- Weaknesses of the Educational sector

1 MARKS QUESTIONS

1) What is meant by physical capital?
   **Ans:** Physical capital refers to all those inputs which are required for further production, like plant and machinery, factory, buildings, raw materials, etc.

2) What are the two major sources of human capital in a country?
   **Ans:** The two major sources of human capital are
   1) Investment in Education
   2) Investment in health
3) What are the various forms of health expenditure?
   **Ans:** Preventive medicine, curative medicine, social medicine, provision of clean drinking water and good sanitation are the various forms of health expenditure.

4) Give the meaning of human capital.
   **Ans:** Human capital refers to the stock of skill, ability, expertise, education and knowledge involved in the people.

5) Why do we observer regional differences in Educational attainment in India?
   **Ans:** Regional differences in educational attainment in Indian can be due to regional inequality in incomes and expenditure of government on development of educational facilities.

6) Why has India not been able to achieve 100% literacy even till today?
   **Ans:** India has not been able to achieve 100% literacy because of its failure to provide free & compulsory education for all children up to the age of 14 years.

7) What is meant by human capital formation?
   **Ans:** Human Capital formation implies the development of abilities and skills among the population of the country.

8) Why do we need to invest in human capital?
   **Ans:** We need to invest in human capital to make effective use of physical capital and to increase productive capacity of the country.

9) Mention two government organizations each, that regulate the health and education sectors.
   **Ans:** Indian Council for Medical Research (ICMR) and National AIDS control Organization regulates health. National Council of Educational Research and Training (NCERT) and University Grants Commission (UGC)

10) Why there is a need to promote women’s education in India.
    **Ans:** Women’s Education need to be promoted because:
        a) They can become economically independent
        b) Women education makes favorable impact on fertility rate & health care of women and children.

11) Why do people migrate?
    **Ans:** people migrate from one place to another in search of jobs that fetch them higher salaries.

12) Why there is need for acquiring information relating to health & education expenditure from the effective utilization of human resources.
    **Ans:** Such information helps in making decision regarding investments in human capital as well as for effective utilization of acquired human capital stock.

13) How is on-the-job training a source of human Capital formation?
    **Ans:** It is a source of human capital formation as it increases the skill & efficiency of the workers & leads to an increase in production & productivity.

14) Why are workers required to work for a certain period after the on-the-job training?
    **Ans:** Workers are required to work for a certain period after the on-the-job training so that firm can recover the benefits of the enhanced productivity owing to the training.

15) What do the differences in male & female literacy rates indicate?
    **Ans:** The differences in male & female
Comparison between ‘Physical capital’ and ‘Human Capital’.

<table>
<thead>
<tr>
<th>Physical Capital</th>
<th>Human Capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Physical capital is tangible and can be easily sold in the market.</td>
<td>a) Human capital is intangible and cannot be sold in the market.</td>
</tr>
<tr>
<td>b) It depreciates with the passage of time.</td>
<td>b) Depreciation in human capital (due to again) can be reduced by making continuous investment in education &amp; health.</td>
</tr>
<tr>
<td>c) It is more mobile between countries</td>
<td>c) Human capital is less mobile between countries as compared to physical capital.</td>
</tr>
<tr>
<td>d) Physical capital (like machinery) separated from its owners.</td>
<td>d) Human capital (like skills of a person) cannot be separated from the own.</td>
</tr>
<tr>
<td>e) Physical capital is the outcome of the conscious decision of the owner and is mainly an economic and technical process.</td>
<td>e) Formation of human capital is partly a social process by partly a conscious decision of the possessor of the human capital.</td>
</tr>
<tr>
<td>f) It can be fault through inspects.</td>
<td>f) Human capital formation is to be done through conscious policy formulations.</td>
</tr>
</tbody>
</table>

**Meaning of Human Capital formation:** Human capital formation means the development of abilities and skills among the population of the country.

**Sources of Human Capital Formation:**

1) **Expenditure on education:** (It is one of the most important sources of human capital formation) proper utility of man power depends on the system of education, training and industrial experience of the people. Spending on education by individuals is similar to spending on capital goods by companies with the objective of increasing future profits once a period of time. This increase the income of the people and their standard of living. Investment in education is not only highly productive but also it yields increasing return and accelerates economic growth of all the resources education receives most importance because it gives maximum contribution to the development of the country.

2) **Expenditure on Health:** Health is an important input for a development of a nation. Expenditure on health is needed in the following areas.
   a. A preventive medicine known as vaccination curative medicines, i.e., medical intervention during the time of illness is very important.
   b. Provision of clean drinking water and good sanitation is very important for improvement of health. Health expenditure directly increases the physical capacity of human being and it raises the supply of healthy labor force.
   c. On the job training: productivity of physical capital is substantially increased with the improvement in human capital. Due to this reason many firms provide on the job training to their workers. Such training has the advantage that it can be provided fast and
without much cost. It increases the skill and efficiency of the workers and leads to an increase in production by productivity. Expenditure regarding on the job training is the source of human capital formation because it increase labor productivity than its cost.

d. Expenditure on migration: - people migrate to one place to another that gives them higher salaries. Unemployment people from rural migrate to urban areas technically qualified people migrate to other countries for higher salaries. Though it results in cost of migration and higher cost of living due to migration in migrated place it enhances earning that their cost of migration. Hence it is a source of human capital formation.

e. Expenditure on Information:- Expenditure is incurred to acquire information relating to labour market and other market. It involves amount spent on seeking information about educational institutions, education standard their educational needs and cost of education. This information is necessary to make decisions regarding investment in human capital as well as for efficient utilization of the acquired human capital stock.

Importance of Human capital formation

1. Human Capital formation is very important for the growth of an economy.
   (i) Effective use of physical capital: Its growth and productivity depends on human capital formation.
   (ii) Human capital formation raises the productivity and production as knowledgeable and skilled worker makes the better (use of the resources). Increase in productivity and quality production depends on technical skill of the people which can be acquired only by education or training and maintaining health of the people.

2. Inventions, innovations and technological improvement are all due to the extra knowledge acquired during education which provides lot of innovations and inventions.

3. The knowledgeable, skilled and physically fit people help in the human capital formation.

4. Increases life expectancy: Formation of human capital raises life expectancy of the people. Health facilities and availability of nutritive food enable people to live a healthy and long life. This in turn, adds to the quality of life.

5. Improves Quality of life: The quality of population depends upon the level of education health of a person and skill formation acquired by the people. Human capital formation not only makes people productive and creative but also transforms the lives of the people.

6. Control of population growth: It has been observed that educated persons have smaller families as compared to illiterate families, So, spread of education is necessary to control the population growth rate.

Reasons for poor Human Capital formations are:

1) **Insufficient Resources**: The resources allocated to the formation of human capital have been much less than the resources required for meeting the educational & health needs of the country. Due to this reason, the facilities for the formation of human capital have remained grossly inadequate.

2) **Serious Inefficiencies**: There are a lot of wastages of society’s resources as capabilities of educated people are either not made use of (in case of unemployment or are underutilized in case of unemployment). Massive literacy, non-education of many
children, poor health facilities are other inefficiencies, which have not been attended to adequately & properly.

3) **High Growth of population**: The continuous rise in population has adversely affected the quality of human capital.

4) **Lack of proper manpower planning**: There is an imbalance between the demands for the supply of human resources of various categories, especially in case of highly skilled personnel. The absence of such balancing has resulted in the wastage of resources.

### Human Capital & Human Development

<table>
<thead>
<tr>
<th>S.No</th>
<th>Human Capital</th>
<th>Human Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Human Capital consider education &amp; health as a means to increase labour productivity</td>
<td>Human Development is leased on the Idea that education &amp; health are integral to human well being</td>
</tr>
<tr>
<td>2.</td>
<td>In Human capital, investment in education and health is considered to be unproductive, if it does not increase output of goods &amp; services</td>
<td>In case of human development, investments in education and health is taken to be productive, even if it does not leads to higher output</td>
</tr>
<tr>
<td>3.</td>
<td>Human capital treats human beings as a means to an end; the end being the increase in productivity</td>
<td>In the human development perspective, human welfare should be increased through investment in education &amp; health as every individual &amp; health as every individual has a right to be literate &amp; lead a healthy life</td>
</tr>
</tbody>
</table>

### Growth of Education Sector in India

There has been considerable growth in the field of Education. The number of schools increased from 230.7 thousands (1950-51) to 1,215.8 thousands (2005-06). The no. of teachers in the same period increased from 751 thousand to 6010 thousands & no of students from 23,800 thousands to 2,22,700 thousands.

### Gross Environment Ratio

Gross Enrollment Ratio (GER) is the total enrolment of pupil in grade or cycle or level of education, regardless of age, expressed as percentage of the corresponding eligible official age group population in a given school year. GER in elementary education increased steadily from 82% in 1950-51 to 94.85% in 2005-06.

### Literacy Rate

The literacy rate has increased from 18.33% to in 1951 to 64.84% in 2001.

### Elementary Education in India

Elementary Education in India means eight years of schooling from the age of six i.e., primary & middle school education together, is called Elementary Education. Elementary Education, therefore, is the foundation on which the development of every citizens and the nation
As a whole hinges. The government has made elementary education compulsory and free. But, the goal of universal elementary education in India has been very difficult to achieve till now.

In December 2002, the government of India made free and compulsory education, a fundamental right of all children in the age group of 6-14 years.

Primary Education Schemes
Government has made number of schemes to make “Education for all”
The following are the few schemes

Sarva Shiksha Abhiyan (SSA)
It was launched in 2001 to universalize & improve the quality of Elementary Education in India through community ownership of Elementary Education. The SSA is being implemented in partnership with states to address the needs of children in age group of 6-14 years. The achievements under SSA up to September 30, 2007, include constructions of 7, 13,179 additional classrooms, 1, 72,381 drinking water facilities, construction of 2, 18,075 toilets. Supply of free textbooks of 6.64 crore children & appointment of 8.10 lakh teacher’s besides opening of 1, 86,985 (till 31.3.07) new schools.

National Programme for Education of Girls at Elementary Education (NPEGEL):
The programme is aimed at enhancing girl’s education by providing additional support for development of a model girl child friendly school. In every cluster with more intense community mobilization and supervision of girls enrolment in schools. Under NPEGEL, 35,252 models schools have been opened. In addition to supporting 25,537 Early Childhood Care & Education (ECCE) centers. Besides, 24,837 additional classrooms have been constructed and 18.75 lakh teachers have been given training on gender sensitization.

Kasturba Gandhi Balika Vidyalaya (KGBV)
The Kasturba Gandhi Balika Vidyalaya (KGBV) scheme was launched in July 2004 for setting up residential schools at upper primary level, for girls belonging predominantly to the SC, ST, OBC & minority community. The scheme ran as separate scheme for two years but was merged with Sarva Siksha Abhiyan w.e.f April 1, 2007.

Secondary Education
Secondary Education, which starts with classes IX and X leads to senior secondary classes XI and XII aims to in cooperate basic skills & analytical abilities. It provides a stepping stone to higher professional and technical education.

Higher Education
The Higher Education System comprises both general and technical education. The higher education has undergone a manifold expansion since Independence. The no. of universities in the country has increased from 27 in 1950-51 to 350 in 2005-06
University Grants Commission (UGC) takes measures for promotion and coordination of university education and determination and maintenance of standards in teaching, examination and research in universities and allocation and disbursement of grants to them.

Technical Education

Technical Education plays a vital role in human resources development of the country by creating skilled manpower, enhancing Industrial productivity and improving the quality of life. Since independence, there has been a phenomenal expansion of Technical Education Sector in the country. With 43 diploma level polytechnic at the time of independence, the no. increased to 1,231 in 2000-01. Similarly, the no. of degree level engineering institutions rose from 38 in 1947 to 1265 in 2001-02. All India Council for Technical Education (AICTE) is the apex body in the field of Technical Education.

Weakness of the Education Sector

1. **High Illiteracy**: According to 2001 census, the literacy rate of 64.8 percent is still far off the 100 percent mark.
2. **Gender Bias**: Education in India is gender biased. The enrolment of girls in both primary and upper primary classes is much below the boys.
3. **Low Quality Education**: The quality of the education is fairly low.
4. **Lack of Vocational and Technical Training**: Too much emphasis on general education neglecting the Vocational and Technical Education.
5. **Low Level of Government Expenditure**: Actual level of expenditure is only 3.46% compared to the desired level of 6%
Worker: A worker is an individual who is involved in some productive activities to earn a living.

Who and all included in workers?

It is not only people those who are paid workers also includes self-employed people like shopkeepers, barbers, cobblers etc. Workers include all those people who are engaged in work whether for others (paid workers or self-employed)

Difference between labour force and work force?

Labour Force: All persons, who are working (who have a job) and though not working, are seeking and are available for work, are deemed to be in the labour force.

1 Mark Questions:-

Q 1) Who is worker?
A 1) A worker is an individual, who is involved in some productive activity, to earn a living.

Q 2) Why do people work?
A 2) People work for earning a living which helps them and their families to survive.

Q 3) Who all are included in labour force?
A 3) All persons, who are working (have job) and though not working, are seeking and are available for work, are deemed to be in the labour force.

Q 4) Give the meaning of work force.
A 4) The number of persons, who are actually employed at a particular time are known as work force.

Q 5) Define worker – population ratio.
A 5) Worker- population ration is the percentage of total population engaged in work.

Q 6) what is meant by labour force participation rate?
A 6) The ratio of labour force to total participation is called labour force participation rate.

Q 7) What is information of workforce?
A 7) Informalisation of workforce refers to a situation whereby the proportion of workforce in the informal sector to total workforce increases.

Q 8) Are the following workers- a beggar, a thief, a smuggler, a gambler? Why?
A 8) No, They are not workers because they are not doing any productive activity.

Q 9) Compared to urban women, more rural women are found working. Why?
A 9) More rural women are found working because of their poor economic condition as compared to urban women.
Q 10) Why does rural work force migrate to urban areas during some part of the year?
A 10) People in rural areas are engaged mostly in agriculture, which is a seasonal activity. So, rural workforce migrates to urban areas during some part of the year.

Q 11) Why are regular salaried employees more in urban areas than in rural areas?
A 11) Regular salaried employees are more in urban areas as considerable section of urban people are able to study in various educational institution and it enables them to look for an appropriate job to suit their qualifications and skills. However, in rural areas, most of the people are illiterate and lack skills, which are needed for regular Employment.

Q 12) What is meant by Employment?
A 12) Employment is an activity which enables a person to earn means of living.

Q 13) Who is a Casual Wage Labourer?
A 13) Workers who are not hired by their Employers on a regular or permanent basis (i.e. do not have job security) and do not get social security benefits, are termed as casual wage labour.

Q 14) Define jobless growth?
A 14) Jobless growth refers to a situation when the Economy is able to produce more goods and service without a proportionate increase in Employment opportunities.

Q 15) Who are regular workers?
A 15) Workers who are hired by their employers on a permanent basis and also get social security benefits (like pension, provident fund, etc.) are higher in regular workers.

Q 16) Why is the Self – Employed work force higher in rural areas?
A 16) In case of rural areas, Self Employed Workers are greater as majority of rural people are engaged in farming on their own plots of land.

Q 17) What is meant by Casualisation of work force?
A 17) The process of moving from Self- Employment and regular salaried employment to casual wage work is known as Casualisation of Workforce.

Q 18) Name the two kinds of urban unemployment.
A 18) 1. Industrial unemployment
    2. Educated unemployment.

Q 19) What do you mean by industrial unemployment?
A 19) It refers to the unemployment among the illiterates who wish to work in industrial establishment

Q 20) Give the meaning of educated unemployment.
A 20) Educated unemployment refers to the unemployment among the Educated people.

Q 21) What is meant by wage employment?
A 21) An arrangement in which a worker sells his labour and earns wages in return.
Q 22) Men are found in greater proportion than women in regular salaried employment. Why?
A 22) Rural unemployment is of two types:
1. Disguised unemployment
2. Seasonal unemployment

Q 23) What is meant by seasonal unemployment?
A 23) Unemployment that occurs at certain seasons of the year is known as Seasonal unemployment.

Q 24) Give the meaning of disguised unemployment.
A 24) Disguised unemployment refers to a state in which more people are engaged in work than are really needed.

Q 25) What do you mean by full employment?
A 25) Full employment refers to a situation in which all the workers who are capable of working and willing to work get an Employment in prevailing wage rates.

Q 26) Why do we differentiate between Economic activity and production activity?
A 26) We differentiate between Economic activity and production activity to calculate the number of workers. People engaged only in production Economic activities are to be included in the category of workers.

Q 27) Give the meaning of self-employment.
A 27) An arrangement in which a worker used his own resources, to make a living is knowing as self-employment.

Q 28) What do you mean by formal sector establishment?
A 28) All the public enterprises and private establishments, which Employ 10 or more hired workers are called formal sector establishments.

Q 29) What do you mean by Informal sector Establishment?
A 29) All those private enterprises which hire less than 10 workers are called Informal sectors. Eg: Workers who work in farms, owners of Small Enterprises, Agriculture labourers. Here they do not get regular income. No protection or regulation by government can be dismissed at any time. Live in slums, use outdated technology, do not maintain accounts.

Q 30) What is meant by frictional unemployment?
A 30) Temporary unemployment, which exists during the period, wherein. Workers leave one role and join some other, are called frictional unemployment. People those who are not working and are neither seeking nor available for work are consider to be outside the labour force.

Labour force = Person’s working + Persons seeking & available for work.

After 66 years & below 15 years not included labour force. A handicapped person not included. People those who are not interested not included. People are not available not included.
Work forces: The number of persons who are actually employed at a particular time are known as work force.

- What is the labour force participation rate?
  The ratio of labour force to total population is called labour force participation rate.

- How can we calculate the number of unemployed people?
  Unemployed people = labour force – Work force.

**Meaning of Employment**

Employment is an activity which enables a person to earn his means of living.

**Full employment**

Full employment is a situation in which all the workers who are capable of working and willing to work get an employment at a prevailing wage rate.

**Self-employment**

When the worker uses his own resources to work and make a living then we call it as Self Employment.

Q.31) What is worker population ratio? How do we calculate Worker population ratio? What is its use?

Ans: WPR refers to participation of people in the employment. It is measured by calculating

\[
WPR = \frac{\text{Total number of workers in India}}{\text{No. of work population in India}} \times 100
\]

It helps in knowing the proportion of population that is actively contributing to the production of goods and services of a country.
Causes of Inflation

1. Increase in Money Supply
2. Deficit Financing
3. Rise in Population
4. Fall in Production
5. Increase in Wages
6. Administrated Prices
7. Inflation Across the Border’s
8. Indirect Tax
9. Credit Expansion
10. Black Money

Effect of Inflation or Problems related to inflation

1. Inflation Hinders the process of growth
2. Adverse effect on the people with fixed Income
3. Increase in the cost of Projects
4. Adverse Impact on Balance of Payments
5. Wage-Price spiral
6. Inequality
7. Economic Stagnation
8. Impact on FDI
9. Speculation and Hoarding

Government Policies to check Inflation

Price Policy

1. Price Control of Essential Goods
2. Procurement Price and Support Price

Monetary Policy

1. A Check on the supply of Money
2. Increase in rate of Interest
3. Decrease in the supply of Credit

Fiscal Policy

1. A check on public Expenditure
2. Public Debt
3. Increase in Taxes
4. Surplus Budget Policy

Some General Suggestions to Control Inflation

1. Check on Supply of Money
2. Check on Deficit Financing
3. Increase in agricultural Output
4. Tax on Agricultural Income
5. Distribution through fair Price Shops
6. Check on Hoarding