



ECONOMICS DEVELOPMENT
- Part 4

Human Capital Formation in India

- Human capital is needed for economic growth. People working and earning are human capital of the nation. Person who is able to generate more income will contribute more to economic growth.
- All people put together are called human resources. Human resources working and contributing in economic activity is generating economic value and thus is a human capital.
- Societies need sufficient human capital. Competent people, professors, and professionals are good human capital, they are able to produce other human capital. We need investment in human capital to produce more human capital out of human resources.

How to create Human Capital

- Investment in education is considered as one of the main sources of human capital. Investments in health, on-the -job training, information are the other sources of human capital formation.
- Spending on education is similar to spending on capital goods by companies with the objective of increasing future profits over a period of time.
- Like education, health is also considered as an important input for the development of a nation as much as it is important for the development of an individual.
- Health expenditure directly increases the supply of healthy labour force and is, thus, a source of human capital formation.
- On the job training to workers make a better worker, more productive worker

Migration of People- source of Human Capital Formation

- Migration of people in search of a job and higher salaries involves cost of transportation, higher cost of living in the migrated places and even there is a psychic cost of living in a strange socio-cultural setup.
- The enhanced earnings in the new place outweigh the costs of migration: hence, expenditure on migration is also a source of human capital formation.
- People spend to acquire information relating to the labour market and other markets like education and health. Information is necessary to make decisions regarding investments in human capital as well as for efficient utilization of the acquired human capital stock.
- Expenditure incurred for acquiring information relating to the labour market and other markets is also a source of human capital formation.

Human Capital is Intangible

- Human capital is intangible; it is endogenously built in the body and mind of its owner.
- Human capital is not sold in the market; only the services of the human capital are sold, hence there arises the necessity of the owner of the human capital to be present in the place of production.
- Human capital is inseparable from its owner.
- Nature of benefits flowing from human capital are different from that of physical capital.
- for the product and services produced by it.

Human Capital

- Human capital benefits not only the owner but also the society in general.
- This is called external benefit.
- An educated person can effectively take part in a democratic process and contribute to the socio-economic progress of a nation.
- A healthy person, by maintaining personal hygiene and sanitation, stops the spread of contagious diseases and epidemics.
- Human capital creates both positive and social benefits, whereas physical capital creates only private benefit. That is, benefits from a capital good flow to those who pay the price for the product and services produced

Human Capital and Economic Growth

- Human capital creates both positive and social benefits, whereas physical capital creates only private benefit.
- That is, benefits from a capital good flow to those who pay the price for the product and services produced by it.
- Economic growth means the increase in real national income of a country.
- The contribution of the educated person to economic growth is more than that of an illiterate person

Human Capital and Economic Growth

- This enhanced productivity of human beings or human capital contributes substantially not only towards increasing labour productivity but also stimulates innovations and creates ability to absorb new technologies.
- Education provides knowledge to understand changes in society and scientific advancements, thus facilitate inventions and innovations.

Growth of Human Capital

Particular	1951	1981	2001	2010
Per capita	5708	8594	16172	38037
Death rate	25.1	12.5	8.1	7.2
Infant mortality	146	110	63	47
Life expectancy	37.2	54	63	64
Literacy rate	17	43	62	74

Expenditure on Education

- Human capital formation is the outcome of investments in education, health, on-the-job training, migration and information. Of these education and health are very important sources of human capital formation. NCERT, UGC, AICTE are working in education sector with a aim to improve the standard of education in India. ICMR facilitate institutions which come under the health sector.
- GOI is providing education and health care free to needy section of the society.
- In 2009, the GOI enacted the Right of Education Act to make free education a fundamental right of all children in the age group of 6-14 years.

Rural Development

- Rural development is a comprehensive overall development of the village economy along with the development of human capital.
- Development of human resources including: literacy of all, skill development, improving health
- Land reforms
- Development of productive resources
- Infrastructure development
- Alleviation of poverty improving the living conditions
- Improving the productivity

Credit in Rural Areas

- Growth of rural economy depends primarily on infusion of capital from time to time, to realise higher productivity in agriculture and non-agriculture sectors.
- As the time gestation between crop sowing and realization of income after production is quite long, farmers borrow from various sources to meet their initial investment on seeds, fertilizers, implements and other family needs.
- Rapid expansion of the banking system had a positive effect on rural farm and non-farm output, income and employment.

NABARD

- NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT(NABARD) was set up in 1982 as an apex body to coordinate the activities of all institutions involved in the rural financing system.
- The institutional structure of rural banking today consists of a set of multi-agency institutions, namely commercial banks, regional rural banks (RRBs) cooperatives and land development banks.
- They are expected to disburse adequate credit at cheaper rates.

- Agricultural marketing is a process that involves the assembling, storage, processing, transportation, packaging, grading and distribution of different agricultural commodities across the country. It is estimated that 10% of the total produce is wasted due to lack of storage. The current infrastructure facilities are quite inadequate to meet the growing demand and need to be improved. Cooperative marketing is encouraged.
- If farmers directly sell their produce directly to consumers their income is better. Some markets have been created for this;
Apni Mandi - Punjab Haryana and Rajasthan
Hadapsar Mandi- Pune
Rythu Bazars- Andhra Pradesh
Uzhavar Sandhai- Tamil Nadu

Animal Husbandry

- The farming community uses the mixed crop-livestock farming system- cattle, goats, fowl are the widely held species. Livestock production provides increased stability in income, food security, transport, fuel and nutrition for the family without disrupting other food-producing activities.
- Livestock sector alone provides alternate livelihood options to 70 million small and marginal farmers including landless Labourers.
- Poultry accounts for the largest share with 55%.
- India had about 304 million cattle, including 105 million buffaloes.

Animal Husbandry

- Milk production in the country has increased by more than five times between 1960-2009. This was due to successful implementation of 'Operation Flood'.
- It is a system whereby all the farmers can pool their milk produced according to different grading (Quality) and the same is processed and marketed through cooperatives.
- In this system the farmers are assured of a fair price and income from the supply to the urban markets.

Fisheries

- Presently, fish production from inland sources contributes about 61% to the total fish production and balance 39% comes from marine sector.
- Total fish production accounts for 0.7 per cent of the total GDP. Among states, Kerala, Gujarat, Maharashtra and Tamil Nadu are the major producers of marine products. Fish workers are generally poor.
- There is a need to increase credit facilities through cooperatives and SHGs for fisherwomen to meet the working capital requirements for marketing.

Horticulture

- India has adopted growing of diverse horticultural crops such as fruits, vegetables, tuber crops, flowers, medicinal and aromatic plants, spices and plantation crops.
- These crops play a vital role in providing food and nutrition, besides addressing employment concerns. The period between 1991-2003 is also called 'Golden Revolution'
- India has emerged as a world leader in producing a variety of fruits like mangoes, bananas, coconuts, cashew nuts and a number of spices and is the second largest producer of fruits and vegetables.
- Flower harvesting nursery maintenance, hybrid seed production and tissue culture, propagation of fruits and flowers and food processing are highly remunerative employment options for women in rural areas.

Sustainable Development and Organic Farming

- The harmful effect of chemical-based fertilizers and pesticides on our health.
- Efforts in evolving technologies which are eco-friendly are essential for sustainable development. Organic farming is the alternative.
- Organic agriculture is a whole system of farming that restores, maintains and enhances the ecological balance.
- Organic food is growing in popularity across the world. Many countries have around 10+% of their food system under organic farming.
- Organic foods command higher price of around 10-100 per cent than conventional ones. Organic farming generates good returns. Organically grown food has more nutritional value than chemical farming thus providing us with healthy foods.

Workers and Employment

- All those who are engaged in economic activities are workers. Workers also include all those who help the main workers in these activities. Those who are self-employed are also workers.
- During 2004-05 India had about a 460 million strong workforce.
- The proportion of workforce residing in villages is higher. The rural workers constitute about three-fourth of this 460 million. Men form the majority of workforce in India.
- About 70 % of the workers are men and the rest are women.
- Women workers account for one-third of the rural workforce whereas in urban areas, they are just one-fifth.

Worker-Population Ratio

- Worker-population ratio is an indicator which is used for analyzing the employment situation in the country.

Gender	Worker-Population Ratio		
	Total	Rural	Urban
Men	54.6	54.7	54.3
Women	22.8	26.1	13.8
Total	39.2	40.8	35.0

Distribution of workers by Industry

2009-10

Industrial Category	Place of Residence		Gender		Total
	Rural	Urban	Male	Female	
Primary sector	68	8	47	69	53
Secondary sector	17	34	34	16	22
Tertiary sector	15	58	19	15	25
Total	100	100	100	100	100

Infrastructure

- Infrastructure provides supporting services in the main areas of industrial and agricultural production, domestic and foreign trade and commerce.
- These services include roads, railways, ports, airports, dams, power stations, oil and gas pipelines, telecommunication facilities, the country's educational system including schools and colleges, health system including hospitals, sanitary system including clean drinking water facilities and the monetary system including banks, insurance and other financial institutions.
- Economic infrastructure: infrastructure associated with energy, transportation and communication
- Social infrastructure: Infrastructure related to education, health and housing

Energy

- Energy is a critical aspect of the development process of a nation. It is essential for industries. Energy is used on a large scale in agriculture and related areas like production and transportation of fertilizers, pesticides and farm equipment.
- SOURCES: There are commercial and non-commercial sources of energy. Commercial sources are coal, petroleum and electricity as they are bought and sold.
- Non-commercial sources of energy are firewood, agricultural waste and dried dung. These are non-commercial as they are found in nature/forests.
- More than 60% of Indian households depend on traditional sources of energy for meeting their regular cooking and heating needs.

Energy

- There are three other sources of energy which are commonly termed as non-conventional sources- solar energy, wind energy and tidal power.
- **COMMERCIAL PATTERN OF COMMERCIAL ENERGY:**
 - In India, commercial energy consumption makes up about 74% of the total energy consumed in India.
 - This includes coal with the largest share of 54% followed by oil at 33% natural gas at 9% and hydro energy at 3%.
 - Non- commercial energy sources consisting of firewood, cow dung and agricultural waste account for over 26% of the total energy consumption.

Major issue is India's import of oil.

Energy

- Trends in sectoral share of Commercial Energy Consumption in %

Sector	1954	1971	1991	2013
Household	10	12	12	22
Agriculture	01	03	08	18
Industries	40	50	45	45
Transport	44	28	22	2
Others	5	7	13	13
Total	100	100	100	100

Power/Electricity

- Electricity is the critical component of infrastructure that determines the economic development of a country. For 8% of GDP growth we need to grow around 12 % annually.
in 2011, In India Power Generation was:
Thermal 65%
- Hydel 32.5%
- Nuclear 2.5%
- Global average for Nuclear is 13%

Power loss during transmission is a big issue in India. Power is stolen too.

- India is adding every year 20,000 MW power

Health System in India

- Three-tier system; Primary, secondary and tertiary.
- Primary health care includes education concerning prevailing health problems and methods of identifying preventing and controlling them, promotion of food supply and proper nutrition and adequate supply of water and basic sanitation maternal and child health care, immunization against major infectious diseases and injuries, promotion of mental health and provision of essential drugs.
- Auxiliary Nursing Midwife (ANM) is the first person who provides primary healthcare in rural areas.

Health System in India

- Primary Health Centres and Community Health Centres have been set up in villages. When the condition of a patient is not managed by PHCs they are referred to secondary or tertiary hospitals.
- Secondary hospitals have facilities like X-ray, Electro Cardio Gram (ECG) and surgery.
- The tertiary sector also includes many premier institutes which not only impart quality medical education and conduct research but also provide specialized health care.

MEDICAL TOURISM: is a great opportunity. In 2004-05 as many as 1.5 lakh foreigners visited India for medical treatment. It has growth potential of 15% increase every year.

Health System in India

- Indicators of Health in India in Comparison with other Countries

Indicators	India	China	USA	Sri Lanka
Infant Mortality Rate/1000 live births	47	13	6.5	10.5
Under-5 mortality/1000 live births	61.3	14.6	7.5	12.2
Births by skilled attendants % of total	53	99	99	99
Fully immunized	72	99	99	99
Health expenditure as % of GDP	3.9	5.2	17.9	3.4
Government health spending to total government spending	4.4	10.3	18.7	7.9
Out of pocket expenditure as a % of private expenditure on health	86	79	21	83

Health System in India

- One study points out that India has about 17 per cent of the world's population but it bears 20% of global burden of diseases. (GBD).
- More than half of GBD is accounted for communicable diseases such as diarrhea, malaria and tuberculosis.
- Every year around 5 lakh children die of water-borne diseases.
- Malnutrition and inadequate supply of vaccines lead to the death of 2.2 million children every year.
- The poorest 20% of Indians living in both urban and rural areas spend 12 per cent of their income on health care while rich spend only 2 per cent.

Women's health

- Women constitute about half the total population in India.
- They suffer many disadvantages as compared to men in the areas of education, participation in economic activities and health care.
- The deterioration in the child sex ratio in the country from 927 in 2001 to 914, as revealed by the census of 2011, points to the growing incidence of female foeticide in the country.

Women's Health

- Close to 3 lakh girls under the age of 15 are not only married but have already borne children at least once.
- More than 50 per cent of married women between the age group of 15 and 49 have anemia and nutritional anemia caused by iron deficiency, which has contributed to 19 per cent of maternal deaths.
- Abortions are also a major cause of maternal morbidity and mortality in India.

- Thank You