



[Academic Script]

Population and Development

Subject:	Business Economics
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Unit No. & Title:	Unit – 3 Human Capital education, Intellectual Capital & Poverty
Lecture No. & Title:	Lecture – 1 Population and Development

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1. Introduction

Friends, having understood the meaning of growth and development and having seen the characteristics of economic development in the earlier lectures, let us now proceed to understand the issues of population, and human development in the developing countries.

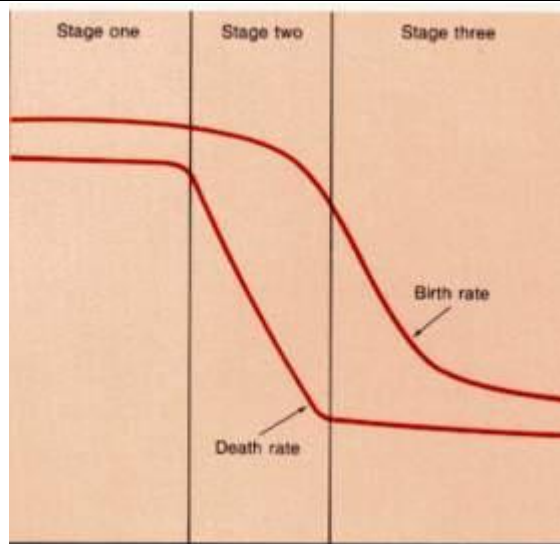
Objectives

1. To understand the growth patterns of population in developing countries.
2. To understand the linkages between population and economic development.
3. To evaluate factors that help to convert human beings into human capital.
4. To ponder upon measures that can improve the quality of human capital.
5. To understand the role of education in human development and in economic development.

Population Growth and need for developing Human Capital in the developing countries.

Developing countries experience population explosion as they pass through the second stage of demographic transition.

Check the figure here



First stage of demographic transition is a phase of extremely low development (sometimes called underdevelopment phase) where birth rates and death rates both remain very high. Since death rates are higher along with birth rates, there is relatively lesser increase in population. (Population growth is the difference between birth rates and death rates.)

In this stage, birth rates are higher owing to lower levels of literacy, prevalence of superstition and lack of awareness in the society, predominance of agriculture where having more children means having more working hands, high infant mortality rates which becomes a reason for families to have more children and other such reasons.

Death rates are also higher owing to the same reasons. There is lower literacy, lower scientific awareness, lesser medical facilities, the nation is at a lower level of income and hence death rates are higher.

Second stage is the stage where the nation has started attaining higher levels of income and large scale industrialization is undertaken. Owing to increasing incomes, availability of food and increasing medical facilities, the death rates start declining. However, with rising incomes, people can afford more children and birth rates do not fall immediately. Besides, the deep rooted

beliefs in favour of having more children do not easily change with increasing incomes. In other words, the endogenous factors (deep rooted beliefs) in the society do not change easily. Hence, birth rates remain higher. While the factors exogenous to the society's beliefs change easily and start impacting the death rates.

Hence in the second stage, the distance between birth rates and death rates becomes high and population growth is very high. This is a stage of transition from slow growing population to rapidly rising population.

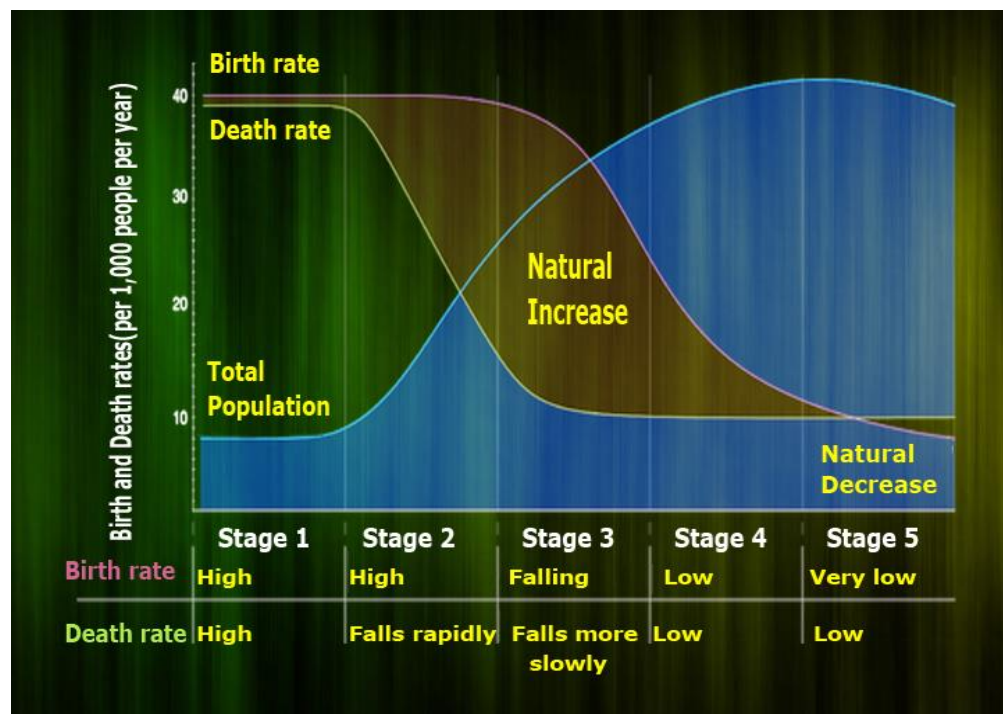
In this stage, after some years, birth rates do start declining as the society starts breaking out from the shackles of conventional beliefs and starts adopting more progressive life styles. However, this decline is slower and birth rates are still much higher than death rates.

(However, there might be some third world countries which experience the fall in death rates in the second stage but after the second stage, the death rates do not fall further and the birth rates do not fall much owing to wide spread absolute poverty and low levels of living. Thus these countries are trapped in a high population stage).

The third stage of demographic transition occurs when countries have reached an advanced stage of development, literacy levels are high, with industrialization the cost of living rises and size of families becomes smaller, awareness is higher and hence birth rates tend to fall sharply along with death rates and when both are lower, the population growth slows down.

These three stages were identified for developed nations before they modernized.

With various countries of the world showing differing trends of birth rates and death rates, some experts now show five stages of demographic transition.



The figure here explains the five stages of demographic transition.

- We can see that in the first stage, both birth and death rates are higher and there is a stable growth of population.
- In the second stage we see a fall in death rates; the birth rates reach a maximum point in this stage before showing some signs of declining.

We observe that the distance between birth rates and death rates is very wide in this stage indicating a stage of population explosion.

- After some years, the death rates start declining faster and the birth rates start declining significantly but are still at a higher level. This is the third stage.

- In the fourth stage, we see that both birth rates and death rates are falling but are also at a very low level and the growth of population is almost nil.
- Experts identify the fifth stage as one where the death rates are low but the birth rates are even lower.

2. The stages of demographic transition in India

- 1891-1921: Stage of stagnant population
- 1921-1951: Stage of steady growth of population
- 1951-1981: Stage of rapid/high growth of population
- 1981-2011: Stage of high growth of population with definite signs of slowing down

Thomas Robert Malthus explained a similar 'population trap' in 1789 when he postulated a universal tendency of population that, *unless checked by dwindling food supplies, population grows in geometric progression, doubling every 30-40 years. But, owing to diminishing returns in productivity of land and other fixed factors of production, food supplies rise roughly at an arithmetic rate.*

This postulate ignored technological advances which help to increase food production at a faster rate.

Population explosion in the developing world became a matter of concern for world organizations and for the governments of these countries, as, very high growth rate of population in countries with lesser capital and slower pace of technological advancement resulted in vicious circle of poverty and unemployment. The process of development is hindered by the existence of such vicious circle.

While, a higher population should mean a higher labour supply and hence if these countries focus on the quality of population,

the higher number of people can be converted into *human capital* from just human beings.

3. What is Human Development?

The concept of human development can relate to the idea of physical, mental, social, economic and spiritual welfare of individuals. In the discussion of economic development, we often mention these areas of human well-being.

An appropriate model of economic development would mean appropriate health and education opportunities. Such facilities enhance the physical and mental well being of people→which in turn improve the employment and earning capacity of people→higher earnings mean lower poverty as well as greater exposure and better social well being→better economic, social, educational and physical well being tend to enhance the spiritual wellbeing.

On the other hand social and spiritual wellbeing enhance the economic well being.

In development economics, the idea of development through accumulating capital prevailed for a long time. Capital is a factor which helps to increase wealth faster than any other factor. However, idea of development by merely accumulating physical capital waned. Human skills must be applied in order to generate the desired wealth from physical capital. Hence, development economics started emphasising upon improvement in the quality of people as productive factors. Hence, we believe that in the present times enhancement of human capabilities and welfare must be the central objective of development policies.

Quality of human life can be regarded as human capital.

And investment in human capital entails acquisition and maintenance costs.

It must be noted that two-thirds of the world population lives in developing countries and hence it is important to understand issues in human development.

Now the question arises, **while it is possible to measure human development, is it possible to measure the quality of human resources?**

We have noted the measures of human development in one of the earlier lectures. In this lecture, let us check some parameters which have an impact on quality of human resources which in turn have instrumental value in the development process.

4. Human Capital

Gerald M. Meier asserts that land per se is not a critical factor in poverty but the human agent is.

Poverty arises because of inability of human beings to make best use of land and capital.

In the words of Meier, *"investment in improving population quality can significantly enhance the economic prospects and welfare of poor people. Child care, home and work experience, the acquisition of information and skills through schooling and in other ways consisting primarily of investment in health and schooling can improve population quality."*

According to Meier, quality is a scarce resource and people and societies incur cost to attain it. The value of human capital depends upon the additional well-being that human beings derive from it.

5. Two primary areas of human quality which are health and education.

Let us focus on two primary areas of human quality which are health and education.

We shall first look at education

Education

Investment in education is one way of improving quality of human capital. By investing in education an individual gains by way of getting more opportunities for employment and migration, improved living and so on. The society gains in the form of increased production which is accrued with increasing education in a society. Education is treated as a stock as well as a flow concept. **Returns on Education**

Human beings invest in education as long as the returns exceed the cost of attaining it. Education is a durable scarce resource which is useful over a period of time and a demand – supply approach is applicable to investment in education.

Human capital contributes to labour productivity and to entrepreneurial ability.

Developing countries surely have increasing returns from such investments.

According to Gunnar Myrdal, education has an independent value in the sense that an individual benefits from the development of her faculties and enlarged opportunities of employment and participation in civic and social life. The instrumental value of education, that is, the value of education for the society lies in the creation of knowledge, skills and changed attitudes from which the entire society and nation may benefit.

Can education have visible tangible gains? Which are those?

What are the collateral gains from education?

Educational improvements should surely lead to an improvement in economic and social conditions. Benefits of education can be judged from,

- Improved farm and non-farm production
- Indigenous discoveries
- Improved exports
- Increase in employment
- Reduced birth rates in developing countries
- An important qualitative benefit comes in the form of changed attitudes.

How can we judge the quality of education?

- Quality of education can be evaluated in terms of the demand for education at the given cost of education. A continued demand for education would mean that employment and income generating opportunities are available with the existing state of education and hence the demand for education is preserved.
- If the drop-out rates are lower, the quality of education is said to be acceptable the society.
- If attitudes show a considerable change in favour of an inclusive, disciplined, secular, objective and egalitarian society and towards a more scientific living, the quality of education is said to be better.
- If corruption reduces, the quality of education is said to be good.
- If more sustainable growth processes are pursued, pollution is kept under control, wastages of resources are reduced then quality of education is good.

- If the society can increase leisure along with incomes, the quality of education is said to be better.

However, it is difficult to ascertain the exact effect of education in these areas.

Besides, education can be formal as well as informal. While formal education has more economic benefits, informal education has more non-economic benefits.

Some issues pertaining to education in the developing countries:

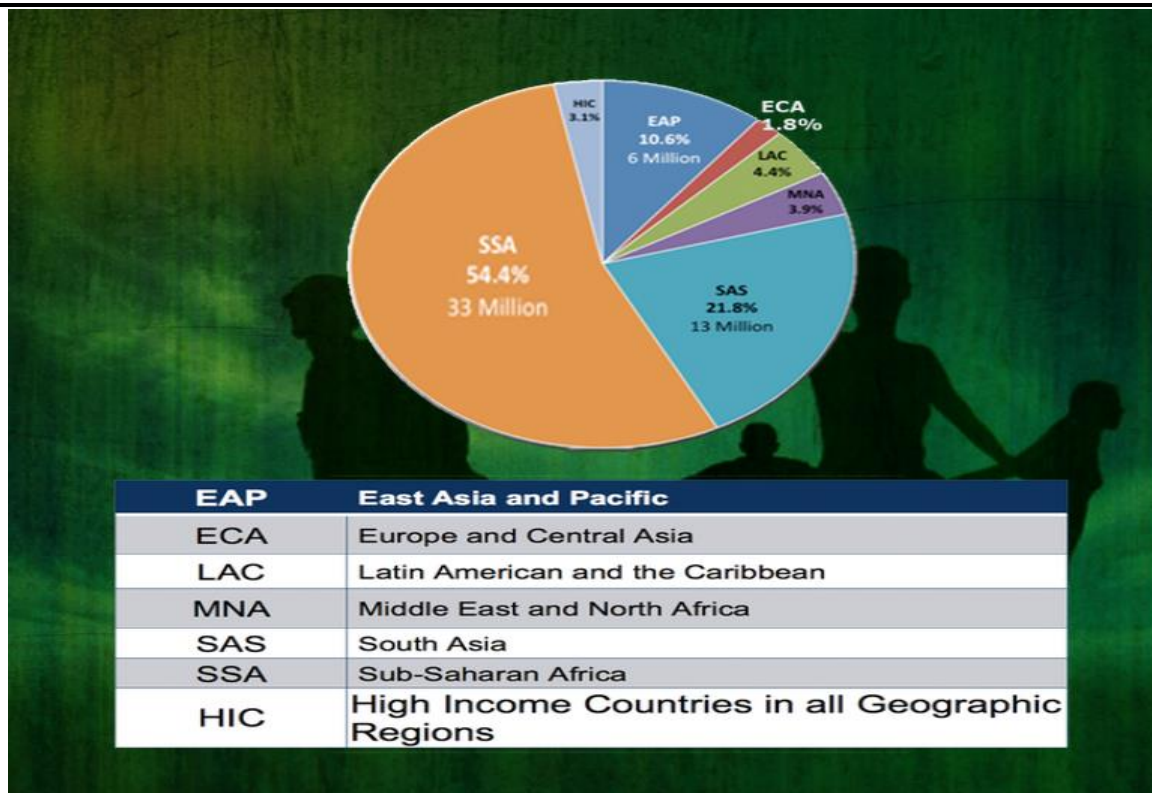
- A large majority of children in developing countries live and attend school in the rural areas.
- From all children attending school in the rural areas almost 80% are likely to spend their lives earning a living from land or from the unorganized sector.

Schools fail to impart them skills which would help them work better or to provide knowledge which is necessary to develop them.

Some of these students while attending school also work and earn for their parents; as child labour.

- Primary schools typically prepare them to either go to high school or to simply make them literate. They teach them to recite and memorise rather than prepare them in problem solving.

As a result, many of them will drop out after the first year of schooling.



Source: <http://datatopics.worldbank.org/education/>

- Out of those who go to secondary school few are likely to complete the course.
- The probability of finding a job in the modern sectors for those who complete secondary school but do not go to university; is very low.
- Gender equality in higher education is not attained. As a matter of fact, higher education for women can reduce the fertility rates.

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- In most developing countries, secondary schools are also known only to prepare students to enter a local university. They seldom make students competitive and employable.
- Besides, the performance of students in secondary schools depends upon (1) family environment (2) peer group interactions (3) personality and (4) early nutrition and health.

In the next lecture we shall learn more about the demand for education.

6. Summary

Dear friends, let us summarize what we have learnt so far. We understood that growth of population in developing countries creates issues pertaining to quality of human resources. When quality of human resources is enhanced to give a boost to economic development, human resources become human capital. Education contributes significantly to human development.