CHAPTER - 2

POPULATION VIS-A-VIS ECONOMIC DEVELOPMENT

Since population growth is an important factor affecting economic development of a country, it will be enlightening to know the impact of population growth on economic development and vice versa.

2.1 IMPACT OF POPULATION GROWTH ON ECONOMIC DEVELOPMENT

It is often argued that population pressure is a positive encouragement to economic development. Economists who take this line admit that the process of economic development involves a great deal of sacrifice. A country already hardpressed to feed its population has to sacrifice some present food consumption in order to provide capital equipment to increase future output. J.B. Clark and Hirschman have, however, argued that given the large sacrifices that need to be made, no country will undertake such a programme unless it is forced. This argument still accepts that a higher rate of population growth calls for a higher rate of investment for every given rate of output growth. But, it is argued, a country is moved to attempt to achieve a higher output growth because of the pressure of population growth. By arguing, however, that population pressure is the main spur to the desire to achieve economic development eventhough it makes development harder to

to achieve, clark and Hirschman's argument comes out in favour of stimulating population growth in low density areas. The tensions of population growth to bring about economic development will be related to the people's level of skills, motivation, expectations and resourcefulness. Because, these factors determine to a large extent, whether people really feel the impact of population growth and effect changes in the economy. Another look at this idea reveals that the tension of population growth can be adequately measured in terms of level of economic expectations and action. The action is perhaps the surest indicator of the needs or motivation, the expectation and the resourcefulness. Therefore, this discussion will now focus on level of expectations and action as an influential factor in determining the relationship between population and economic development in any economy.

Economic expectation in this regard can be interpreted as the level of living and achievement which individuals, a group of people or a society consider appropriate for them. This can be scaled as high or low or intermediate between these two on the scale of measurement. However, regarded as a dynamic concept, it can be taken to mean in effect, higher economic expectation in the sense of people always aiming at attaining higher standards of income and living than their present levels.

Population growth, particularly at the level of households, will lead to increased felt needs because of

increased household budgets. For them, this will constitute a motivation for venturesome economic decision and action—making for economic development. This is especially because they will expect and endeavour to achieve high levels of living as well as of social and economic status for themselves and members of their household. Therefore, any increase in the size of household will constitute felt needs which will make greater demands on the peoples' efforts to satisfy them. This can be looked at on the basis of the familiar economic principle of people as earners, consumers, savers and investors in their economic operations and behaviour. These have brought about relative increase in production indicating economic development.

For people of high economic expectation and action, population growth could augur well for, or it could be a very potent danger to, the economy of an area. What happends will depend largely on the rate of the population growth in relation to the type and efficiency of skills introduced, the amount of actual or potential resources available and the nature of the balance between the earning, consuming, saving and investing function of that population. These latter will influence the rate of economic development to sustain the increases in population, while the addition to the population of people of high economic expectation and action will make for increased economic development.

There is other more familiar line of thinking that the pressure of population restrains the tempo of economic development. The process of economic development involves the utilisation of physical resources of a nation by the labour force of a country so that the productive potential in a country is realised. In this effort of development there is no doubt that the labour force of the country makes a positive contribution; but it is equally true that rapidly growing population retards the process of economic development. The impact of rising population as a drag on economic resources is felt in a variety of ways. It would be of interest to examine the problem in Indian setting.

2.1.1 POPULATION AND GROWTH OF NATIONAL INCOME

During 1960-61 to 1973-74 the national income of India rose by 48.7 percent but on account of the rise in population by 33.6 percent per capita income rose by only 11.3 percent. The annual average growth rate of national income works out to be 3.3 percent and of per capita income less than 1 percent. If population continues to increase at the rate of about 2.5 percent the overall increase in per capita income will be significantly retarded.

2.1.2 POPULATION AND FOOD SUPPLY

Ever since Malthus wrote his celebrated 'Essay on Population' attention was focused on the problem of population versus food supply. In India, between 1921 and 1971 the cultivated area per capita dropped from 1.11 acres

to 0.62 acres, indicating a fall of 44 percent. Between 1956 and 1974, output of foodgrains increased from 62.6 to 96.9 million tonnes, signifying an increase of 54.8 percent. But during the same period, population increased from 397 to 562 million, i.e., by 50.1 percent. However, per capita availability of foodgrains declined from 453 grams in 1974 to 418 grams in 1975, a fall of 8.3 percent. The demand for foodgrains is, therefore, likely to outgrow the increase in their production due to fast increasing population of the country.

2.1.3 POPULATION AND THE BURDEN OF UNPRODUCTIVE CONSUMERS

India's population can be broadly divided into productive consumers and unproductive consumers. The term productive consumers is being used for that part of the population which contributes to national income. Unproductive consumers comprise of persons who are not engaged in employment. Productive and unproductive consumers in India constituted 43 percent and 57 percent as per 1961 census and 38 percent and 62 percent as per 1981 census indicating the trend of increasing proportion of unproductive consumers caused mainly by larger proportion of child population. A high and increasing population of children increases the burden of the care of the young through nutrition, medical care, public health and education.

2.1.4 POPULATION AND UNEMPLOYMENT

Rapidly rising population is accompanied by a rise in the labour force in the community. Hence it makes the solution of the problem of unemployment more difficult. The total number of unemployed in India was 5.3 million in 1956 and it shot up to about 22 million persons by 1982. The problem of unemployment will become far more difficult in the future. Obviously, a significant proportion of the national resources will have to be used to expand employment opportunities to absorb the increasing labour force and the backlog of unemployed left over due to the continuous pressure of a rapidly growing population.

2.1.5 POPULATION AND THE BURDEN OF EDUCATION, MEDICAL CARE AND HOUSING

Rising population increases the number of children and hence demands higher expenditure on education. In addition to this, expenditure on medical care and public health will also call forth further investment. Not only that, the additional population has to be provided housing accommodation. All this will lead to heavy demands on national resources.

2.1.6 POPULATION AND CAPITAL FORMATION

It is quite necessary that national income should grow at least at the same rate at which population is growing so that the existing level of per capita income can be maintained. The present rate of growth of population

in India is 2.5 percent per annum. To maintain a constant per capita real income, national income must rise at least at the rate of 2.5 percent per annum. To achieve this, heavy capital investment is necessary. For example, the capital-output ratio for the Indian economy was estimated at 5.5 for the second Plan period which implies that about 5.5 units of capital were needed to bring about an increase of one unit of output. Thus, in order to bring about an increase of national income at the rate of 2.5 percent capital accumulation of the order of about 13.8 percent (2.5 x 5.5) was necessary at that time.

In an underdeveloped economy with very little capital per person, a high rate of population growth makes it even more difficult to step up the rate of saving which, in turn, largely determines the possibility of achieving higher productivity and incomes. In India, in spite of nearly 22 to 24 percent saving rate at present, it has been found difficult to maintain an annual average growth in national income at 5 percent envisaged for the economy's rapid strides.

All these factors lead us to the conclusion that the fruits of economic development do not reach to the people of India in larger proportions mainly due to rapidly increasing population of the country. To conclude, the high rate of population growth has been working as a drag on the goal of rapid economic *development of India.

2.2 EFFECTS OF ECONOMIC DEVELOPMENT ON POPULATION GROWTH

In surveying relations between two complex sets of changes, it \$i\$natural to begin with the influence of one set on the other and then to consider influences operating in the opposite direction. This influence must operate through one or more of the three determinants of population growth, namely, (i) births, (ii) deaths and (iii) migration. In this context, the "theory of demographic transition" postulates a three-stage sequence of birth and death rates as typically associated with economic development.

(i) High birth and high death rates

According to this theory, death rates are high in the first stage of an agrarian economy on account of poor diets, primitive sanitation and absence of effective medical aid. Birth rates are also high as a consequence of widespread prevalence of illiteracy, absence of knowledge about family planning techniques, early age of marriage, deep-rooted social beliefs and customs about the size of the family, attitude towards children, etc. In such a society the actual rate of growth of population is not high since the high birth rate is balanced by the high death rate. It is a stage of high growth potential but of low actual growth of population.

(ii) High birth rate and rapidly declining death rate

Rise in income levels enables the people to improve their diet. Economic development also brings about

all-round improvement including the improvement in transport which makes the supply of food regular.

Improved hygiene and medical facilities pull down the mortality rate. All these factors tend to reduce death rate. In the second stage, birth rate falls slowly due to continuing impact of traditional forces but death rate begins to decline rapidly. This accelerates the growth of actual population. High growth potential of the first stage is realised in the high actual growth in the second stage as a consequence of rapid decline in death rate. High but slowly declining birth rate and falling death rate contribute to the growth of the average size of family in the second stage.

(iii) Low birth and low death rates

character of the economy from an agrarian to a partially industrialised one. With the growth of industrialisation, population tends to shift away from rural areas towards industrial and commercial centres. Growth of urban population and the development of economic roles for women outside the home, tend to increase the possibility of economic mobility that can better be achieved with small families and tend to decrease the economic advantages of a large family. One of the features of economic development is typically increasing urbanisation and children are usually more of a burden and less of an asset in an

urban setting than the rural. Thus, the characteristics of the third stage are low birth rate, low death rate, small family size and low growth rate of population.

These three stages reveal the transformation of a primitive high birth and high death rate economy into a low birth and low death rate economy. When an economy shifts from the first stage to the second stage of demographic transition, an imbalance is created in the economy as a result of falling death rate relatively to gradually declining birth rate. Therefore, the second stage of demographic transition is manifest in what is commonly termed as 'population explosion'. This stage is the most dangerous period for a developing economy. During this period of transition, the demographic factors get out of harmony.

The case of India can be seen in this context.

India possesses about 2.4 percent of the total land of world but has to support about 14 percent of the world population. Upto the year 1921, her population rose at a very slow rate. In between 1891 and 1901, the growth rate of population was zero. Between 1911 and 1921, there was a small absolute decline of population. But after 1921 the population of India began to increase by rapid strides. Rate of growth of population is a function of birth rate and death rates. Consequently, variations in the

two can provide an explanation to the acceleration of population growth. But from 1921 onwards it has entered into the second stage of demographic transition in which the high growth potential of the population is being realised as a high actual growth of population. Rapid rise in the population of India since 1921, more so after Independence, is due to high birth rates and rapidly declining death rates.

The following factors are responsible for mortality declines:

- (a) development of antibiotics and insecticides;
- (b) evolution of effective public health organizations in low-income areas and
- (c) invention of suitable low cost methods of sanitation.

Europe and North America belong to the low growth potential regions of the world. In these regions death rates have fallen to the lowest possible levels and any improvement in public health measures will not reduce death rates. Coupled with this very low level of death rates, the birth rate has also slumped considerably as a result of industrialisation and urbanisation. In contrast with the low growth potential regions are the countries of Africa, Asia and Latin America which can be classified as high - growth potential regions. A notable case is that of Tiwan where under Japanese administration the crude death rate

declined from an average of 33.4 per thousand during the period 1906 to 1910 to 18.5 per thousand during the years 1941 to 1943. However, during this span of time birth rate remained essentially unaltered.

The course of the birth rate in Japan shows that the association between declining fertility and the rise of an urbanised industrial economy is not limited to Western European cultures. However, there are countries (notably, Egypt and India) where the differential fertility between city and country is slight or even nonexistent. In short, urbanisation alone is not always sufficient to cause a reduction in the birth rate. Nor is it certain that small changes in economic organisation or slight rise in per capita income will cause a reduction of fertility in low-income areas.

The level of economic development in European countries and in Japan prevailing at the time when fertility registered a significant decline might reasonably be regarded as representing the approximate "threshold of decline". It appears unlikely that this threshold will be crossed in the next two or three decades in, for example, Egypt, Pakistan, India, China, Malaya or Indonesia.

The demographic situation in areas in the incipient stages of economic development seems to differ from the pattern described by the theory of the demographic

transition in the following ways :

- (i) The decline of death rates from the high level typical of peasant agrarian economies is occurring or is likely to occur more rapidly than it did in regions which industrialised earlier.
- (ii) The growth rates established as mortality declines, are in excess of any observed in the records of areas industrialised earlier.
- (iii) The prospect of rapid growth itself, particularly in areas where the current per capita incomes are very low, contributes to uncertainty about the likely course of fertility.

Innovations in the field of public health seems to have made it possible for death rates to be substantially reduced in the absence of profound economic changes in low-income areas. The Malthusian argument makes it all too clear that low death rates cannot be maintained long in the absence of profound changes either in the economy (to achieve a rapid rate of growth in output) or in the birth rate (to keep the growth in population at moderate levels). The death rates achievable at low cost by modern public health methods, combined with the birth rate characteristic of such an economy, imply a doubling of the population every twenty or twenty five years. If economic development does not precede the decline in mortality, it must still

occur eventually if the decline is to be maintained.

2.3 CONCLUSION

As is said earlier, population growth has a strong influence on the rate of economic development. In underdeveloped countries like India the Hirschman and Clark approach is not likely to cause a favourable effect on the rate of economic development. In fact, the experience is that high rate of population growth has retarded India's economic growth. Presently India is passing through the second stage of the demographic transition. In order to increase the tempo of economic development in the country it is necessary to reach sooner to the third stage of demographic transition for which every effort should be made for a rapid reduction of birth rate.

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