Chapter 43

POPULATION GROWTH AND ECONOMIC DEVELOPMENT

EFFECTS OF POPULATION GROWTH ON ECONOMIC DEVELOPMENT

The consequences of population growth on economic development have attracted the attention of economists ever since Adam Smith wrote his *Wealth of Nations*. Adam Smith wrote, "The annual labour of every nation is the fund which originally supply it with all the necessaries and conveniences of life." It was only Malthus and Ricardo who created an alarm about the effects of population growth on the economy. But their fears have proved unfounded because the growth of population in Western Europe has led to its rapid industrialization. Population growth has helped the growth of such economies because they are wealthy, have abundant capital and scarcity of labour. In such countries, the supply curve of labour is elastic to the industrial sector so that even a high growth rate of population has led to a rapid increase in productivity. In fact, every increase in population has led to a more than proportionate increase in the gross national product.

Population and Economic Development. However, the consequences of population growth on the development of LDCs are not the same because the conditions prevailing in these countries are quite different from those the developed economies. These economies are poor, capital-scarce and labour-abundant. Population growth adversely affects their economic development in the following ways. *First*, faster population growth makes the choice more scarce between higher consumption now and the investment needed to bring higher consumption in the future. Economic development depends upon investment. In LDCs the resources available for investment are limited. Therefore, rapid population growth retards investment needed for higher future consumption. *Second*, rapid population growth tends to over use the country's natural resources. This is particularly the case where the majority of people are dependent on agriculture for their livelihood. With rapidly rising population, agricultural holdings become smaller and unremunerative to cultivate. ~~There is~~ no possibility of increasing farm production through the use of new land ~~(extensive cultivation)~~. Consequently, many households continue to live in poverty. In fact, rapid population growth leads to the overuse of the land thereby unemployment and underemployment increase. A rapidly increasing population reduces incomes, savings and investment. Thus capital formation is retarded and job opportunities are reduced, thereby increasing unemployment. Moreover, as the labour force increases in relation to land, capital and other resources, complementary factors available per worker decline, and as a result unemployment and underemployment increase. LDCs have a backlog of unemployment which keeps on growing with a rapidly increasing population. This tends to raise the level of unemployment manifold as compared with the actual increase in labour force.

Population and Social Infrastructure. Rapidly growing population necessitates large investments in social infrastructure and diverts resources from directly productive assets. Due to scarcity of resources, it is not possible to provide educational, health, medical, transport and housing facilities to the entire population. There is over-crowding everywhere. As a result, the quality of these services goes down. "Larger numbers mitigate against an improvement in the quality of the population as productive agents. The rapid increase in school-age population and the expanding number of labour force entrants put ever-greater pressure on educational and training facilities and retard improvement in the quality of education. Similarly, too dense a population or a rapid rate of increase of population aggravates the problem of improving the health of population." All this entails colossal investment.

Population and Labour Force. The labour force in an economy is the ratio of working population to total population. Assuming 50 years as the average life-expectancy in an underdeveloped country, the labour force is in effect the number of people in the age-group of 15-50 years. During the demographic transitional phase, the birth rate is high and the death rate is on the decline. The result is that a larger percentage of the total population is in the lower age-group of 1-15 years, and hence a smaller percentage comprises the labour force. A large percentage of children in the labour force is a heavy burden on the economy. On the other hand, a small labour force implies that comparatively there are few persons to participate in productive employment. Even if the birth rate starts declining, the labour force available for productive employment during the short run would be the same. However, the number of children would decline and this would have the effect of increasing the national income because the number of consumers would also fall. But this is only possible after the demographic transition stage is overcome which is not possible till the LDCs bring down their fertility rates. It does not mean that with their present high birth rates and low death rates, the labour force is not increasing in such countries It simply means that the addition to the lower age-group is larger than in the working age-group. Thus the labour force tends to increase with the increase in population. It will grow even faster, if more women seek paid employment. Since it is not possible to increase capital per worker (i.e., capital deepening) with growing labour force, each worker will produce less than before. This will reduce productivity and incomes. Wages will fall in relation to profits and rents, thereby increasing income inequalities. Besides, rapid growth in the labour force increases both open unemployment and underemployment in urban and rural areas.

Population and Capital Formation. Population growth retards capital formation. As population increases, per capita available income declines. People are required to feed more children with the same income. It means more expenditure on consumption and a further fall in the already low savings and consequently in the level of investment.

First, we study the effect of population growth on private savings. Rapid population growth adversely affects private savings by causing consumption to rise and savings per capita to fall. On the other hand, rapid population growth increases tne demand for savings. In fact, it leads to "capital deepening" (*i.e.*, spreading resources over more and more people). To maintain income, capital per person must be raised in the form of expenditure on a person's education, health and skills. So the rapid increase in population leads to the diversion of capital investments from directly productive activities to social overhead capital. The rapidly increasing population will have to be provided more basic facilities in the form of schools, roads, hospitals, water, etc., which do not add to the national product directly and immediately, with the result that the growth rate of the economy remains at a lower level. The return on capital invested is high in directly productive activities as against social overhead capital. So capital formation is adversely affected with the diversion of governmental resources from their more productive uses to current uses to provide the people for their more urgent needs. Public savings and capital formation will decline in another way as a result of a rapidly growing population. When incomes decline and consumption expenditures increase, it is difficult for the government to levy taxes on the people. Certain exemptions from taxes have to be given to people. As a result, state revenues decline which reduce investment and capital formation unless some other alternative measures are adopted by the government.

Lastly, a rapidly growing population by lowering incomes, savings and investment compels the people to use a low level technology which further retards capital formation.

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Population and Environment. Rapid population growth leads to environmental damage. Scarcity of land due to rapidly increasing population pushes large number of people to ecologically sensitive areas such as hillsides and tropical forests. It leads to overgrazing and cutting of forests for cultivation leading to severe environmental damage. Moreover, the pressures of rapid growth of population force people to obtain more food for themselves and their livestock. As a result, they over cultivate the semi-arid areas. This leads to desertification over the long run when land stops yielding anything. Besides, rapid population growth leads to the migration of large numbers to urban areas with industrialization. This results in severe air, water and noise pollution in cities and towns.

Population and World Economy. Rapid population growth also affects the LDCs in relation to the world economy in a number of ways. *First*, rapid population growth tends to increase income disparities between LDCs and developed countries because the per capita incomes decline with growth in numbers in the former. *Second*, rapid population growth encourages international migration. But these are limited only to the Middle East countries where there is a dearth of skilled and unskilled labour. But the developed countries place restrictions on immigration because labour from poor countries adversely affects the wages of native workers and also creates social and political tensions. *Third*, emigration tends to increase wages of workers substantially at home. *Fourth*, another beneficial effect of this is that emigrants remit large sums of money back home. This increases family incomes and their living standards at home. Such families spend more on food, clothing and on modern household gadgets. Thus they lead more comfortable lives. Some repay family debts, while others invest in agricultural land and urban real estate. On their return, some enterprising persons start new ventures and others expand family-owned commercial and manufacturing businesses. Further, remittances by emigrants help finance the countries balance of payments deficit. But the LDCs are great losers because of the 'brain drain' when professional and technical workers emigrate to other countries. They subsidise the educational costs of such personnel but are unable to tax their incomes. The money they remit is insignificant as compared with the above two types of losses. Often the best of the brains are allowed to settle permanently in the employing country which is a permanent loss to the home country. *Lastly*, with rapid population growth the domestic consumption of even exportable goods increases. Consequently, there is a decline in the exportable surplus. On the other hand, to meet the demand of rapidly increasing population, more food and other consumer goods are required. It leads to an increase in imports of such goods alongwith those of capital goods needed for development. Reduction in exports and increase in imports lead to deterioration in the balance of payments position of the country. This may force the state to curtail the importation of capital goods which will adversely affect economic development of the country.

To conclude, the consequences of a rapidly increasing population are to retard all development effort in an underdeveloped country unless accompanied by high rates of capital accumulation, and technological progress. But these counteracting factors are not available and the result is that population explosion leads to declining agricultural productivity, low per capita income, low living standards, mass unemployment, and low rate of capital formation.[3]

THE THEORY OF DEMOGRAPHIC TRANSITION

The theory of demographic transition or population cycle is based on the actual population trends of the advanced countries of the world. According to this theory, every country passes through five different ... of population development. According to C.P. Blacker, they are: ... and mortality rates;