

Population change and Development in India

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Abstract

The existing state of knowledge does not warrant any clear-cut generalization as to the effect of population growth on economic development in today's less developed areas. Some theoretical analyses argue that high population growth creates pressures on limited natural resources, reduces private and public capital formation, and diverts additions to capital resources to maintaining rather than increasing the stock of capital per worker.

Others point to positive effects such as economies of scale and specialization, the possible spur to favorable motivation caused by increased dependency, and the more favorable attitudes, capacities, and motivations of younger populations compared with older ones. The actual evidence on the association between growth rates of population and per capita income does not point to any uniform conclusion, though the true relationship may be obscured in a simple two-variable comparison.

Developing countries like India, population growth has to be checked if gains of development are not be nullified by it.

Key Words: population growth, capital formation, natural resources, gnp, percapita income.

Introduction:

India is the second most populous country in the world, with over 1.271 billion people (2015), more than a sixth of the world's population. Already containing 17.5% of the world's population, India is projected to be the world's most populous country by 2025, surpassing China, its population reaching 1.6 billion by 2050. Its population growth rate is 1.2%, ranking 94th in the world in 2013. The Indian population had reached the billion mark by 1998.

When population grows faster than GNP, the standard of living of the people does not improve. In fact rapid population growth has been obstructing economic growth in developing countries like India where since 1951 population has been growing at a relatively high rate.

In Table 41.1 we present population growth in India. It will be seen that since 1951, population has been growing at about 2 per cent or more. In other developing countries such as Pakistan Bangladesh, rate of population has been growing at about 2 per cent or more. In other developing countries such as Pakistan Bangladesh, rate of population has been greater than that of India.

Table: Population Growth in India since 1951

YEAR	POPULATION IN MILLIONS	ANNUAL AVERAGE GROWTHRATE
1951	369	-
1961	439	1.96
1971	548	2.20
1981	683	2.22
1991	843	2.14
2001	1028	1.93
2011	1210	1.6

A democratic country like India cannot adopt coercive methods to control population. But, to show how rapid population growth retards economic development, it is necessary to mention that by economic development we mean not only increase in national income (GNP) or per capita income, but also reduction in unemployment as a result of the growth of employment opportunities and reduction in poverty and inequalities of income. Since economic growth depends on rate of saving and investment and productivity of labour, we will discuss the impact of population growth on these factors.

It is important to note here that in the present day's industrialized countries, in spite of Malthus' view to the contrary population growth was beneficial for economic growth rather than retarding it. It has been argued that population growth leads to increase in labour force which is an essential productive resource. By increasing a productive resource population growth will help in producing more output.

It has remarked that population growth brings in more hands to work for production and therefore contributes to economic growth. Secondly, it has been pointed out that the increase in population leads to the increase in demand for goods.

Thus growing population means the growing market for goods is enlarged, they can be produced on a large scale and thus economies of large-scale production can be reaped. The economic history of USA and European countries shows that population growth in them contributed greatly to the increase in their national output.

But what has been true of USA and European countries may not be true in case of other countries. Whether or not the growth of population countries to economic growth depends on the existing size of population, the available supplies of natural and capital resources, and the prevailing technology.

In the United States, where supplies of natural and capital resources are comparatively abundant growth in labour force caused by increasing population raises national output. In India where supplies of other economic resources, especially capital equipment, are relatively scarce increase in population or labour force does not lead to the employment of all due to scarcity of capital resources.

Unemployed people do not add to national output. As for the argument that population growth leads to increase in demand or market for goods, it may be noted that the demand or market for goods increase if the real purchasing power in the hands of the people increases. The mere growth of unemployed or paupers cannot lead to greater demand for goods or expansion in their markets. Having ruled out the beneficial effects of population growth in the context of the Indian economy we discuss below how population growth in India retards economic development.

1. Population Growth and Rate of Saving and Investment:

Economic growth requires increasing supplies of capital goods. A higher rate of economic growth can be achieved by accelerating the rate of capital formation. Increasing supplies of capital goods become possible only with higher rate of investment and a higher rate of investment, of turn, is possible if the rate of savings is high.

Now, increase in population by adding to the number people whose requirements of "feeding and clothing" have to be met which tends to raise consumption and, therefore, lowers both saving and

investment. Coale and Hoover, in their famous work explained that saving rate was reduced by population growth because of increase in burden of dependency.

He argued that with high fertility rate among the younger persons and declining mortality (death) rate among the old-age people, in the growing population the proportion of non-working age groups which depend on the working or earning members of their families increases.

2. Investible Resources and Raising Per Capita Income:

While on the one hand rapid growth in population reduces investible resources for accelerating capital formation, it raises the requirements for investment to achieve a given target increase in per capita income. Suppose population of a country A is increasing at 1 per cent per annum and that of a country B at 3 per cent per annum.

Given that capital-output ratio is 4: 1, then country A would have to invest 4 per cent of its current income to maintain its per capita income, while country B would have to invest 12 per cent of its current income even to maintain its per capita output.

Thus, when the population is increasing at a rapid rate, comparatively larger investments are needed to maintain the current level of income. Thus, given the scarcity of investible resources adequate resource are not left to raise per capita income significantly.

3. Lowers Growth of Per Capita Income:

A high rate of increase in population swallows up a large part of the increase in national income so that per capita income or living standards of the people do not rise much. This is precisely what has happened during the planning era in India. Thus, while the aggregate national income of India went up by 3.6% per annum in the First Plan period and 4.1% per annum in the Second Plan period, per capita income rose by only 1.8 per cent and 2 per cent per annum respectively.

Average annual growth in national income and per capita income in various Five Year Plan Periods is given in Table 41.2. It will be seen from this table that the annual growth in per capita income has been much less than the annual growth rate in that national income. It is the population growing at 2 per cent per annum or more during the planning period that has caused per capita income to rise much less than the increase achieved in national income.

Table: Annual Average Growth Rate (at 2004-05):

Plan period	National income per cent	Per Capita income per cent
First plan(1951-56)	4.2	2.4
Second plan(1956-61)	4.2	2.2
Third plan(1961-66)	2.6	0.3
Forth plan(1969-74)	3.2	0.9
Fifth plan(1974-79)	4.9	2.6
Sixth plan(1980-85)	5.4	3.1
Seventh plan((1985-90)	5.5	3.3
Eighth plan(1992-97)	6.7	4.6
Ninth plan(1997-2002)	5.5	3.5
Tenth plan(2002-2007)	7.5	5.9
Eleventh plan(2007-2012)	7.7	6.3

However, since 1991 population growth rate has been less than 2 per cent, it was 1.93 per cent between 1991 to 2001 and 1.6 per cent between 2001-2011, on the one hand and growth rate of national income was much higher on the other (see Table 41.2).

It can be observed that the population growth prevents the rapid rise in per capita Income and therefore rise in living standards of the people can be expressed by the following growth formula

$$g = I\alpha - r$$

Where 'g' stands for the rate of growth of per capita income, 'I' represents rate of investment, 'α' stands for output-capital ratio (or productivity of capital) and 'r' represents rate of population growth.

4. Population Growth and Unemployment:

Economic development requires that employment should increase adequately so that unemployment should decrease. Explosive growth in population has caused serious unemployment and under-employment problem in India. Due to explosive growth in population in India labour force has been increasing rapidly since 1951.

In recent years labour force which was estimated at 309 million in 1983, went up to 333 million in 1988, to 382 million in 1994 and to 406 million in 1999-2000. As a result of this explosive increase in labour force demographic pressure on the economy has increased resulting in increase in backlog of

unemployment and under- unemployment at the beginning of each successive Five Year Plan. In view of this much of our investment efforts are directed at 'absorbing the growing labour force in productive employment, our ability to raise productivity of labour is severely constrained.

Since production processes in modern organized industrial sector is highly capital intensive, much of the growing labour force cannot be employed there. As a result, demographic pressure on land and agriculture increases resulting in the severe drop in the net sown area per capita.

In the absence of employment opportunities outside agriculture, much of the additional labour force is forced to remain in agriculture and allied activities. Agriculture performs the role of residual absorber. They share work in agriculture with other family members no matter how low the productivity per person becomes. Thus, with the fall in net sown area per person and increased Population pressure, disguised unemployment emerges in agriculture.

It follows from above that labour force consequences of population growth are to a good extent responsible for huge unemployment and underemployment prevailing in India.

7. Population Growth and Poverty:

Last but not the least the important consequence of rapid population growth is that it has made very difficult to make a significant dent into the problem of mass poverty prevailing in the country. This is clear from the fact that as large as about 18 million people over and above one billion populations estimated on March 1, 20.01 are being added to our population every year as per 2001 census. This gives rise to a huge problem of properly feeding and clothing them.

Prof. K. Sundaram rightly writes, "the size of increments to population is itself of some consequence. Thus is because the resource requirements of feeding and clothing even at the current low levels are such that the incremental population itself constraints the ability of the economy to raise the living standards of the existing population."

Demographic Changes in India and Population Dividend:

India is passing through a phase of unprecedented demographic changes. These demographic changes are likely to contribute to a substantially increased labour force in the country. The census projection report shows that the proportion of working age population between 15 and 59 years is likely to increase from approximately 58 per cent in 2001 to more than 64 per cent by 2021.

Population Control Policy:

Over-populated developing countries are currently facing the problem of population explosion. The check on the growth of population is therefore absolutely essential if we want to solve problems of mass poverty and widespread unemployment.

The various policies that may be adopted to control the growth of population are:

- (a) Family Planning Programme,
- (b) Sterilization,
- (c) Promotion of education,
- (d) Social and economic development, especially of the poor sections of the society.

In fact, the name of the ministry has been changed from Ministry for Family Planning to Ministry of Family Welfare. In so far as it goes, the new orientation may prove to be good but it needs to be stressed, as shall be brought out later, that the success of family planning programme depends heavily on the process of social and economic development.

Accordingly, if population is to be effectively checked not only the tempo of economic development. It should be speeded up but strategy of development should be such as will promote employment opportunities for the poor especially landless labour, marginal and small farmers.

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