Demographic Transition in India-Issues, Challenges and the Wav Ahead

Mrs. Jaimole Crossⁱ, Mrs. Ratna Srinivasanⁱⁱ

Abstract

The aspiration of every nation today is to attain the take off stage at the earliest and to be ranked among the developed economies. In this direction the impact of the demographic transition on the development of an economy is significant. The earliest civilization of Mohenjo-Daro and Harappa are a witness to the fact that the quality of the population was crucial in modulating and contributing to produce the greatest civilizations ever on the earth. It can be inferred that both the quantity and quality of the population may accelerate or apply brakes to the development. The United Nations Development Programme rightly assesses the development of the nation on human development index than merely on the monetary front. The human resources can be improved only when the population is optimum. Modern economist stated that an optimum population is vital for a high per-capita income. Over and under population will lower the percapita income. Thomas Robert Malthus, an English economist, warned his countrymen of dire consequences if the population galloped unchecked. The population can be controlled by man through preventive measures like late marriages and moral restrain. In the absence of it nature will take over with positive measures like natural calamities.

The population of India is presently 127crores growing annually at the rate of 1.5percent. India grows as much as one Australia every year. It is the second largest populated country after China. It has to support 17.5 percent of the world population. It has a total world land area of 2.4 percent and total world income of 1.4 percent. Incidentally every sixth person in the world is an Indian.

This paper is an attempt to analyze the demographic transition in India from pre-independence to the present day. The study seeks to understand the challenges of an overpopulated nation. This effort will eventually strive for a framework which can deliver only the positive impact deterring the negative effects of a massive population. In this direction the research will adopt three main scenarios analysis; the first scenario would be assessing the demographic transition over the years to the current scenario. A careful study to understand the consequences and challenges of a heavily growing nation would be made. This would be followed by a brief review of the policies adopted by the government to check the rate of the rapidly growing population. Then it would move beyond the fact and on to the speculative plain in what may be seen as alternative scenario with a stabilized population. This study would move ahead on a positive note that the country would eventually enter the third stage of demographic transition with a low birth and death rate. The population would then be regarded a demographic dividend.

Key Words: Demographic Dividend, iii Human Development Index iv, Optimum Population, Take- Off iand Third Stage of Demographic Transition iii

ⁱMrs. Jaimole Cross, lecturer in Statistics, St. Mary's College, Yousufguda, Hyderabad, Email-id:jaimole.cross@gmail.com.

ii Mrs. Ratna Srinivasan, lecturer in Economics, St. Mary's College, Yousufguda, Hyderabad, Email-id: ratna.srinivasan@gmail.com.

Demographic dividend arises due to an increase in the population in the working age group. If this population is properly utilized it can yield high production and growth for the economy.

¹iv Human Development Index is a measure for the quality of population. It is measured on the basis of life expectancy, literacy rate and standard of living

^vOptimum Population is the ideal population which a country can have considering its resources. At this the per capita income will be the highest.

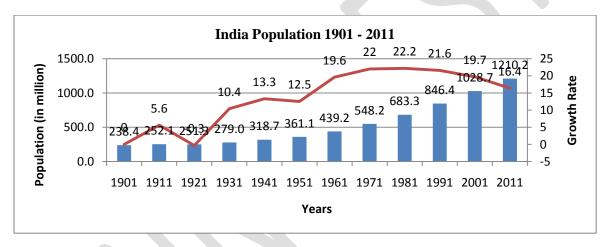
vi Take off is a brief intermediate period between the investment and the economy culminating into a self - sustaining and self- generating economy.

viiThird stage of demographic transition is a stage in which the birth and death rate is low and they balance each other.

Introduction

The aspiration of every nation today is to attain the take off stage at the earliest and be ranked among the developed economies. In this direction the impact of the demographic transition on the development of an economy is significant. The earliest civilization of Mohenjo-Daro and Harappa are a witness to the fact that the quality of the population was crucial in modulating and contributing to produce the greatest civilizations ever on the earth. It can be inferred that both the quantity and quality of the population may accelerate or apply brakes to the development. The United Nations Development Programme rightly assesses the development of the nation on human development index than merely on the monetary front.

India is the second largest populated country in the world after China. The population has increased from 238.4 million in 1901 to 1210.2 million in 2011 as the graph depicts. The graph shows the decadal growth rate increasing from 5.6 percent from 1901 to 1911 to a high of 22.2 percent and then declining to 16.4 percent in the decade of 2001 to 2011. India grows as much as one Australia every year. It has 2.4 percent of the total world land area and 1.4 percent of the total world income. Every sixth person in the world is an Indian.



Source: Census 2011, Govt. of India.

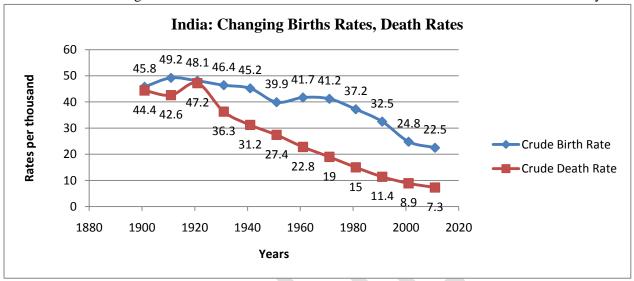
Demographic Transition

The Demographic Transition Theory states that as an economy develops it has an impact on the population. In this process it passes through three stages. A primitive society is found in the first stage of Demographic Transition. This stage shows pre-transitional and transitional stage. In this stage the birth rate is high due to illiteracy, early marriages, ignorance regarding family planning measures. The death rate tends to be high due to poor medical and sanitary facilities. The birth rate and death rate balance each other due to which the population growth is almost stagnant. India was in this stage of high stationary up to 1921 with a CBR at 48.1 and the CDR at 47.2 per 1000.

India moved from the first to the second stage of demographic transition in the year 1921 which is regarded the big divide. India experienced an early transitional stagewith a decliningdeath rate and after a lag a declining birth rate up to 1951.

As an economy progresses the income levels raise and the diet of the people improves. They become health conscious with literacy and education. Sanitary facilities also improve. Epidemics are controlled. There are better medical facilities. All these factors reduce the death rate tremendously. The birth rate continues to be high due to various factors. This results in population explosion which

adversely affects the economy. The year 1951 is regarded the small divide as India entered into the early transitional period with a declining birth rate but a continuing high birth rate. It is presently in the stage of middle transition with a declining birth rate at 22.5 and continuing decline in the death rate at 7.3 per 1000. Spread of literacy, urbanization and women empowerment have played a crucial role in the decline of the birth rates in the country. India is yet to reach the third stage which is the ideal stage with a low stationary.



Source: Registrar General of India, Census

Causes

(Malthus, 1798) an English economist, warned his countrymen of dire consequences if the population galloped unchecked. The population can be controlled through preventive measures like late marriages and moral restraint. In the absence of it nature will take over with positive measures like natural calamities. This theory was apt to the Indian conditions. The causative factors for the rapid growth of population in India have been a rapidly falling death rate due to an improvement in the medical, sanitary facilities, control of epidemics and famines. A slow decline in the birth rate was experienced due to various economic factors and social factors prime among them being universal marriage and illiteracy.

Consequences

The under lying warning of the Malthusian Theory was that overpopulation will eventually devour the planet. (Nahle,2003) exhibited similar ideas when he said that overpopulation is "a term that refers to a condition by which the population density enlarges to a limit that provokes the environmental deterioration, a remarkable decline in the quality of life, or a population collapse." People often ignore the subject of overpopulation, but this predicament will be the world's leading problem in the years to come with dire consequences.

Human overpopulation in India is among the most pressing environmental issues, silently encouraging the forces behind global warming, environmental pollution, and destruction of habitat and extinction of species. It has resulted in exhausting the renewable resources faster than their rate of regeneration. Over population has been instrumental in lowering the per-capita income and the ability to save. India has thus come to be regarded a capital poor economy. The shortage of capital has restricted investments and contributed to the slow economic growth of the country. Food problem which was

acute has been resolved due to GreenRevolution and the New Agricultural Strategy. There has been however a decrease in the per capita domestic availability of land. The pressure on land increased rural unemployment and aggravated disguised unemployment. Urban unemployment is also rampant. The quality of life has deteriorated with inadequate housing, education and healthcare. Overpopulation has resulted in price rise as a consequence of which many families have slipped below the poverty line. Povertyhas increased the crime rate and anti-social activities.

Government Policies

"Many of the alleged deleterious consequences result more from inappropriate policies and institutions than from rapid population growth" (Srinivasan, 1988). Contrary to this India was the first countryin the world to establish the family planning department. The population policies have increased the minimum marriageable age of boys and girls successively. Incentives in the form of monetary compensations have been extended to sterilized couple. Efforts are on to reduce both maternal and child mortality rates. Literacy and education are the driving forces to put a break to the rapid growth of the population. Self Help Groups and immunization programmes are the order of the day. A National Population Committee headed by the Prime Minister is at the forefront to check the rapidly growing population. Pre-natal Diagnostic Techniques Act and Child Marriage Act are in the offing to restrict the ill effects of the demography. The government has been adopting newer ventures to check over population.

Demographic Dividend

These measures were the repercussions for a long standing deliberation on how the population growth affects the economies adversely. It was strongly believed that rapid increase in the population contributes to an increase in the dependency ratio. Somewhere along the line, economists discovered a silver lining that the dependency ratio was determined more by the age factor than the growth of population.(Ladusingh and Narayana, 2012)state that during the demographic transition from high fertility and high mortality to low fertility and low mortality, the age structure of the population undergoes unprecedented changes. It was keenly observed that world was aging, but India was growing younger. There was a "demographic dividend" that the country could hope for, and exploit. An IMF paper noted that "in many Asian countries, aging populations are now causing, or are about to cause, a decline in the working-age ratio. The Japanese workforce has been shrinking since 1995, and the Korean workforce will start to decline beginning 2015. China's working-age ratio will peak in 2013 and then decline by a substantial amount in the next few decades". India's demographic transition and the age structure of the population are likely to grow favorably over the next two to three decades. The following projection shows that by 2026, 64.3 percent of the population will be in the age group of working population. In this phase, due to a bulge in the working population, the country will experience migration, urbanization, industrialization and institutional transformation initially and high rate of avings coupled with a massive increase in per capita income in the latter part of transition

Demographic Projections for India

Age-group	2001	2011	2021	2026
0-14	35.5	29	25.1	23.4
15-59	57.8	62.7	64	64.3
60 +	6.9	8.2	10.7	12.5

ANNQUEST: 4(1): 44-49

Source: IMF working paper 2011

Suggestions

Research has revealed that restructuring the government measures by inducting disincentive measures would be helpful in checking the population growth. These measures should make it difficult to get health coverage for a large number of children or public housing assistance for big families. Demographic education, rapid industrialization and urbanization are critical for slowing the growth rate. Women empowerment is critical in slowing the population growth. Self- help groups should be more actively involved in encouraging innovative voluntary measures.

To take advantage of the demographic dividend policies that support employment and education should be adopted which will make absorption of workable population possible. Economic policies should be formulated such that they promote openness of trade, labour market flexibility with ample savings and investments. Provision and preparedness for the aging population in the future should be planned appropriately.

Conclusions

India is presently in the second stage of demographic transition with signs of slowing down. Malthusian theory was apt and applicable to Indian conditions. However recent studies have revealed that India has an opportunity of exploiting the demographic dividend. If we are able to think of appropriate measures to capture this dividend productively there will be no looking back. This should be combined with restructuring the government measures, with emphasis on disincentive measures, women empowerment and active involvement of the Self Help Group. Policies for taking advantage of demographic dividends should be planned. Perspective plans for the aging population should get priority.

References:

- 1. Aiyar,S and A Mody (2011). *The Demographic Dividend: Evidence from the Indian States*, IMF working paper 11/38.
- 2. International Monetary Fund. (2012). *Asia and the Pacific: Managing Spillovers and Advancing Economic Rebalancing*.IMF.
- 3. Ladusingh, L. and M.R. Narayana. (2012). *Demographic dividends for India:* Evidence and implications based on national transfer accounts. USA: Edward Elgar Publishing Inc.
- 4. Malthus, T. R.(1798) Essay on the Principle of Population, As It Affects the Future Improvement of Society with Remarks on the Speculation of Mr. Godwin, M. Condorcet, and Other Writers. Harmondsworth, Middlesex, UK: Penguin Classics (1982 edition).
- 5. Ministry of Statistics & Programme Implementation (2014) *Statistical Year Book*, New Delhi. Retrieved from http://mospi.nic.in
- 6. Nahle,N.(2003).Overpopulation. *Biology Cabinet Organization*. Retrieved from http://biocab.org/Overpopulation.html.
- 7. Office of Registrar General & Census Commissioner, India, Provisional Population Totals, Paper 1 of 2011 India. Retrieved from http://censusindia.gov.in

8. Srinivasan, T. N. (1988). Population Growth and Economic Development. *Journal of Policy Modeling*.10, (1) 7–28.

