

POPULATION EXPLOSION AND IMPLOSION – AN OVERVIEW

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ABSTRACT

This Article brings out the basic fact that overpopulation in India is the cause for lower per capita income and high poverty. And poverty is the cause for increasing the fertility rate as well as the population. Thus, to increase the per capita income and to remove the poverty in India we have to necessarily bring down the population growth rate. Otherwise any amount of increase in GDP will be neutralized by increase in population and all development efforts will go a waste. When we analyze the world in which we live in, we find that in the poor nations, there is population explosion, but whereas in advanced countries there is population implosion, ie. The advanced countries face the falling fertility rates, zero growth rates of population. It is shocking to see that the Japanese race will be extinct in the next 1000 years, according to the latest research in Japan which is elaborated in this Article. India's density of population is going up every year, resulting in overcrowding and its associated problems. India's sex-ratio remains stuck-up at 930 in the last 25 years and therefore if it falls below 930 in future India will face new dimensional problems in the population front. Also, nearly 50 % of India's Population is concentrated in a few states namely the five backward states of Bihar, UP, Rajasthan, MP, etc., where women's literacy rate is lower than the national average. These five states require special attention like launching literacy drive for the women in the backward states and opening much relaxation centre for these men in this region to bring down the population rate which will go a long way in curtailing the population in the entire nation.

REV.MATHUS AND HIS THEORY OF POPULATION :-

A) The first Economic Analysis of Population was made by Reverend Thomas Robert Malthus when he published his magnum opus, “An Essay on the Principles of Population” in 1798. He developed his Population Theory while arguing against his father’s perfectionist opinion that the human race was always improving.

Rev. T.R.Malthus postulates that population tends to outstrip the Food supply and doubles every 25 years.

According to Rev. T.R.Malthus, Population grows at an exponential series or in Geometric Progression ie., in multiples of a constant factor like 1,2,4,8... etc., whereas Food production grows at slower rate at Arithmetic Progression, ie., Additions of a constant factor like 1,2,3,4... etc.,

Now, if you compare the growth rate of Food supply in Arithmetic Series with the Growth rate of population is Geometric series, Rev. T.R.Malthus comes to the following Conclusions:

1. First, Population doubles & redoubles in every 25 years.
2. Second, with the fixed supply of Land, the Globe will shrink so much that Food Production is far below the level necessary to support the ever-expanding population.
3. Third, Population always outstrips Food Production in this world, leading to an Imbalance between these two.

B) The above conclusions of Rev.T.R.Mathus is based on his 2 premises:

i) The 1st is that Land in this world is a fixed factor which is fixed in supply, and is subject to the Law of Diminishing Returns i.e., he believes that if you till the constant factor Land, with all other variable factors like seeds, fertilizers, water etc., the food production will increase initially, but eventually will increase at a diminishing rate. This is called the Law of Diminishing Returns. Therefore, Food Production grows slower when compared to the growth-rate of Population. Eventually, Food-production lags behind the ever-increasing growth of population. In other words, Population outstrips Food Production in this world, leading to an Imbalance and all its attendant consequences like poverty, hunger, misery, starvation, deprivation, lower per-capita-income (pci), Lower standards of Living etc.,

ii) Rev. T.R. Malthus believed, that the population grows at an alarming rate in Geometric series and if unchecked, it will double every 25 years in this world.

iii) To curtail the population, he suggests “celibacy” or permanent bachelorhood or postponement of marriages etc., to be adopted by all human beings, which he calls “Preventive checks”. If man fails to curtail population by adopting these “Preventive Checks”, then, God will punish man and bring in the “Positive Checks” in the form of natural disasters like plague, pestilence, war, Famine, Flood, Inundation, storms, Tempests etc., These “Positive Checks” of God will increase the “Death-rates” of human beings in this world, and thus will check the ever-expanding population. Rev. T.R.Malthus proves himself as a Theologian when he imposes his faith in God’s Positive checks to curtail population.

Malthus also believes that if the Government increases the incomes of poor laboring class, it will only cause the poor workers to reproduce more until all the increase in income is totally neutralized and reduced to a bare subsistence level due to their lower levels of education. Therefore, Rev. T.R.Malthus says that the worker himself is the “Author of his own misery or poverty” at subsistence level due to his multiplication of population.

I. THE FALLACY OF THE PROPHECY OF MALTHUS :

- a) The basic Fallacy in his theory is that he under-estimated the role of science & Technology which are always advancing in this world.
- b) Subsequent upon his theory, Science and Technology have advanced so much that it had discovered High-yielding variety seeds (HYV Seeds), highly advanced agricultural implements which have replaced the ancient Plough of man, Harvesters, improved manures & fertilizers, etc., which have substantially improved the yield of land, and therefore, Food production always increased never lagged behind population.
Thus, Malthusian belief on the operation of the Law of Diminishing returns had been disproved subsequently.
- c) Second, celibacy is not the only preventive check to curtail the population as Rev.Malthus Wrongly presumed. Later development of Science had brought in a host of contraceptives and birth control measures like morning pills, French Leather, Tubectomy, Vasectomy, etc., to avoid pregnancies in women, literacy campaigns to improve the literacy rate of women, Awareness to have small families etc.,
- d) History has proved across the world that whenever “Women’s Literacy Rate” is more, the child births have been low. Therefore, in advanced countries where women have very high levels of literacy rates, their population is proved as Low, when compared to the poor nations where the population is more due to low level of literacy among women.

e) Moreover, in advanced countries like Western Europe & North America, Russia & Japan, the Rate of Growth of population is either “Zero” or “Negative”, whereas in poor countries like India & China, the Growth rate of population is very high & therefore, they have very high population and consequently, very low per capita incomes, and therefore very low standards of living.

The following table illustrates the fact that the population & its growth rate is less in advanced countries, where the women's Literacy rate is very high. On the contrary, poor nations like India & China, the population and its growth-rate is more due to low literacy rate of women.

Countries	Population in 2006 (in millions)	Growth- rate of population 2000-06 (% per year)	Adult Illiteracy Percentage (15 years and Above)	Per capita GDP in 2006
Eastern Europe, Russia, Poland etc.,	460	Zero %	2%	9660
Latin America Brazil, Mexico, etc.,	556	1.3%	10%	8800
Middle East Egypt, Iran, Etc.,	311	1.8%	27%	6450
South Asia India, Pakistan, etc.,.	1493	1.7%	42%	3440
Africa Nations Nigeria, Ethiopia, etc.,	770	2.3%	41%	2030
China, Indonesia, etc.,	1900	0.9%	9%	6820

Source: World Bank, World Development Report and data at www.worldbank.org.

- e) It is interesting to note that China and India's Population of 1.4 billion and 1.2 billion respectively, If combined together, accounts for 37% of the Total World's population today, which is likely to be the same percentage in 2040 also, according to Demographers.
- f) The United Nations had projected that by 2030, India & China will have a population in the range of 1.4 to 1.5 billion each, and in the population race, India will be marginally ahead of

China in 2030. China's population growth rate will reduce to "Zero" by 2030. By then, China will make no longer "net addition" to population.

By then, the no. of deaths will be more than the no. of births, pushing China into "Negative growth-rate of population" beyond 2030, when India will have a population Growth-rate of 0.6% p.a.

NOTE:

By 2040, India will have a population of 1.6 billions, when compared to China's population of 1.4 billion only. Thus India will overtake China in population by the year 2040. Indian population will be at its peak at 1.72 billion in 2060, after which, it will decline. It is projected that the world's population will touch 9.31 billion in 2050.

II. In advanced countries like Japan, USA & UK, the Life expectancy of both sexes is more, when compared to poor nations of the world, due to the obvious reasons like higher nutritious food, higher medical attention, health clubs, exercise, etc.,

Countries	Literacy percentage	Life Expectancy (in years)As on 2009	P.C.I. In USD	Population as on 2012 (in Crores)
Japan	99.0	83.0	33828	12.80
USA	99.0	78.2	47123	31.11
UK	99.0	79.4	35053	06.02
Sri Lanka	90.8	71.0	5103	02.04
Thailand	94.1	70.0	8643	06.70
Nepal	56.5	67.0	1250	02.86
India	74.4	65.0	3290	121.02
China	93.3	74.0	7518	134.10
Pakistan	54.2	63.0	2789	17.56
Myanmar	89.9	62.1	1246	05.04
Afghanistan	28.0	43.8	998	02.91
Sweden	99.0	80.9	37775	00.95
Singapore	94.4	80.0	57238	00.51
France	99.0	80.7	34092	06.06
Russia	99.5	65.5	15807	14.29
Malaysia	91.9	74.2	14603	02.75
Germany	99.0	79.4	35930	08.18

(Source: World Health Statistics 2011 and Manorama Year book 2012)

NOTE:

1. Japan has only 1/10 th of India's population
2. USA has only 1/4 th of India's population.
3. India's per capita Income is nearly 10 times lower than Japan's Per-capita Income.

4. India's per capita Income is nearly 15 times lower than USA's Per-capita Income.
5. Singapore's per capita Income is nearly 17 times higher than India, because Singapore's population is lower by 120 times when compared to India's population.
6. India & China's population put together forms nearly 40% of the Total population of the world.

III. THE PROBLEM OF “POPULATION IMPLOSION” IN ADVANCED COUNTRIES LIKE JAPAN

- A) We have heard of “Population-Explosion” ie., Ever-increasing growth of population in poor nations like India & China, where the growth rate of population per annum is more than 2%.
- B) The Advanced Countries like Japan, Western Europe, USA, Germany, etc., are facing a peculiar problem called “Population-Implosion” ie., These advanced nations have the strange problem of “Zero” or “negative” Growth-rate of population. The classic case is Japan whose fertility-rate already had fallen below 2% per annum in 1975 itself, and hence its population is always coming down.

RESEARCH FINDINGS ON JAPAN:

The Academics in the northern city of Sendai in Japan have revealed the following Research findings which remain a puzzle to the human mind.

- i) The Research reveals that in the next 1000 years, there won't exist a nation called Japan in the world map. It further reveals that the Japanese race will be extinct & disappear from the Earth in the next 1000 years due to the declining birth-rates in Japan.
- ii) According to Professor Hiroshi Yoshida, Prof. of Economics from Tohoku University there will be no children in Japan as on 5.5.3011. The extinction of Japanese population had already started in 1975 itself when Japan's fertility-rate fell below 2%.
- iii) Japan's population will shrink to 1/3rd of its current population of 12.8 crores, by the next century.
- iv) The “Life Expectancy” in Japan is already the highest in the world, due to their healthy food and healthy habits and high medical care. The Life expectancy of Japanese female which is 86.39 yrs as on 2010 will further go upto 90.93 yrs in 2060.

This will cause further economic crisis & further headache to the policy-framers in Japan. Japan had already got the highest proportion of the elderly population in the world, viz 20% of its population consists of elders above 65 years of Age. The working population is ever-dwindling in Japan. Therefore, the issue of who will support this ever-increasing elderly population of pensioners becomes acute.

v) To arrest this fall in the working population, some experts suggested opening up of the Japanese borders to the Immigrants. But this had met with strong reactions and provocations from the native Japanese.

(Source: The Hindu/ DC / Dt. 11.5.2012)

V. THE CAUSES AND CONSEQUENCES OF “OVER POPULATION” IN POOR COUNTRIES:

i) The Poor countries like India & China have very low per capita Incomes (Refer Table above) when compared to advanced countries. In the case of poor nations, even if the Total Income of the entire nation goes up, or remains static, the per-capita income will be very low because of the ever-expanding population. Very low per capita Income reflects the poverty & misery of the people in poor nations.

ii) Due to the above, the “density of population” goes up per sq.ft. With the Total availability of Land Area remaining constant, the no. of occupants per sq.ft. increases or in other words “density of population” is more, with its attendant problems like housing problems, high costs of Land & construction, Pollution problems, Drying up of water sources, “Over-Crowding” in public transports & the resultant crimes like pick-pocketing etc.,

iii) “Over – Population” in poor countries like India & China will cause poverty, poor health & sanitation, low level of literacy, extensive malnutrition, and little capital to work with.

iv) Almost all poor nations with over population will have weak markets, weak Government Institutions, Corruption & Civil Strife. Such nations also suffer from “Out-migration” esp. among skilled or specialized workers.

v) Rev. Malthus held that Food Production will be limited by the Law Diminishing Returns. But today's Growth-Economists argue that the Growth is limited by the “absorptive capacity of the Environment”, i.e., the people in the nation can burn only a limited amount of fossil fuel on earth. Else, the entire earth will face the dangerous threats of “Climate Change”, Ozone-layer depletion, acid-rain, deforestation and other hosts of ecological imbalance or ecological disasters.

VI. POPULATION PROJECTIONS OF THE WORLD :

- a) In 2007, the World's Population was estimated to be 6.6 billion people. The UNO had projected the world population to be around 9.2 billion by the year 2050.
- b) The world's population will finally reach the maximum of 11 billion by 2200 beyond which it will taper-off.
- c) As far as India is concerned, India will have a population of 1.6 billion in 2040 and will overtake China in 2040 where, China will have the population of 1.4 billion only. By 2030, China's growth-rate of population will become Zero or negative, but, India still will have a growth-rate of population @ 0.6% per annum.
- d) BY 2060, India's population will touch a peak figure of 1.72 billion, beyond which its population growth will decline.

VII. FUTURE PROJECTION OF POPULATION IN INDIA AND ITS RELATED PROBLEMS :

- a) The following Table illustrates the future population projection in India, and also explains what the future problems are relating to population.

Year	India's Population(in crores)	Sex Ratio	Population density Per sq.km.
2001	102.9	933	313
2006	111.2	932	338
2011	119.2	932	363
2016	126.9	931	386
2021	134.0	930	408
2026	140.0	930	426

Source: Report of the Technical Group on population Projection for India & States, 2001-2026, revised December 2006

A Careful scrutiny of the above table reveals the following startling facts:

- i) Over the next 25 years (ie. from 2001 to 2026), the sex-ratio is almost stuck-up with 930 only. That is, only 930 females are available per 1000 Males in India. The cause for it is obvious. In many corners of India, “Female infanticide” prevails. Still, Female children are not welcome in many parts of India. This attitude should go first. Has not India given world-class women leader like Smt. Indira Gandhi? When Saina Nehwal was born in her family, her parents disliked her because she is born as a female. But today, she is world’s No.3 in badminton.
- ii) Research minds fail to find out an answer as to how to improve the female population in India or in another words, how to bring up the sex ratio to 1000. If the sex ratio falls below 930, still it will be worse, may lead to situations like polyandry among Indian women, as it prevailed some 1000’s of years ago. When the sex ratio falls below 930, (already struck up at 930 in the last 25 years), then we may have to import women from countries wherever they are available in plenty like Austria or Scientists may come out with an answer like cloning of women, but all these remedies will be presented to. The remedy may be worse than the malady itself.
- iii) Another consequence of the ever-expanding population of India is “Over-Crowding” i.e., the density of population per sq.km. Keeps on increasing along with the increase in population.
- iv) The worst consequence of population explosion in India is that it leads to lower per-capita-incomes reflecting lower standards of living, poverty and misery.

Even if the GDP grows, unless the population is curtailed, the per-capita-income will be lower only. Thus, India’s per capita Income is 3290 USD only, as against our neighboring countries like Srilanka whose PCI is 5103 USD, Thailand has 8643 USD, Singapore has 57238 USD and even China’s PCI is better at 7518 USD.

Robert Cassen, in his “Development and Population”, Economic & Political weekly Special number 1976 PP 1173 - 85 comes to the following conclusion :-

- i) In UDC’s, output per worker fails to grow as their population grows.
- ii) Continuing growth of population and labor-force is an Impediment to the raising of Incomes and alleviation of poverty.

VIII. ANOTHER DIMENSION IN INDIA RELATING TO POPULATION :

Look at the Table below. All these five states put together constitute 46% of India's total population. In other words, India's population is concentrated in these 5 states only. Why is it that in these states alone, more and more population exists? The reason is Low literacy percentage of women in these states, which are reflected in the following table:

TABLE –A

States	Female Literacy(in percentage)	Population in Crores
Bihar	53.33	10.38
U.P.	59.26	19.96
Rajasthan	52.66	06.90
M.P.	60.02	07.30
Maharashtra	75.48	11.24
TOTAL		55.78

(Constituting 46% of India's Total Population)

- i) India's Total Population as of now : 121.01 Crores
- ii) National Average of Female literacy percentage : 65.46 %

TABLE –B

States	Population	Female Literacy Percentage
Kerala	3.33 Crores only	91.98% - the Highest in India

In these backward states namely Bihar, UP, Rajasthan, MP, etc., the female literacy percentage is lower than the national average. Due to the low literacy rate of women in these 3 states viz. Bihar, U.P. & Rajasthan, the population is more. Whereas, you look at the highest literacy percent of women in Kerala, viz. 92%, and therefore, this state Kerala has less population of 3.33 Cr. only, which is not even 50% of Tamilnadu's population.

There was a joke on the usage of condom by these men in these Backward states. In the initial days, a few decades ago, when the condom was prescribed to males as a contraceptive device by the government, a Family planning officer visited a remote village in North India and demonstrated as how to use the condom. He fixed the condom ON HIS THUMB and told the crowded people, “Like this you must use the condom to avoid pregnancies in your wives. I will come next year to see the results.” With this he left the place and after one year he came to the same village to see the results for himself. He was astonished to see all the women in the village pregnant.

He started questioned all the men, “Did you use the condoms as I demonstrated?” They answered in chorus, “Yes Sir, We’ve fixed the condom on our THUMB as you demonstrated and had sex with our women. But, despite all these our women conceived.” This is the height of innocence of these men in these remote parts of India on the usage of condoms that prevailed years ago.

CORRELATION:

The following correlation exists between population & women’s education.

- i) First, where women are more educated, they get the awareness to have smaller families. Therefore, when women’s literacy percentage goes up, population growth-rate or fertility rate goes down.
- ii) Second, in the above backward states of Bihar, U.P. and Rajasthan, M.P. etc., male-chauvinism prevails and hence these males view their women as the “child-bearing machines” or sex-toys essentially, and hence they subjugate their women and impregnate their women very often.
- iii) Third, these males in these states of Bihar, UP & Rajasthan lack Recreation. Therefore, in the absence of recreation, “Procreation” becomes their only recreation. Therefore, to avert this, for these men, more entertainment centres like night clubs, cabarets etc., should be thrown open in all “Metros” in India as prevailing already in Metros like Delhi, Mumbai, etc.,

In all 4 star hotels and above, these entertainment centres should be opened (with tight security measures) due to the following reasons:-

- a) Such star hotels fetch tax revenues to their respective state governments. This revenue can be utilized for purchase of electricity, for example in states like Tamilnadu where the state is starved of electricity or energy.
- b) They release the mental tension of top businessmen and executives.
- c) They go a long way to help in reducing the population growth rates. (Example: France & Thailand have such centres where the population is proved as low). It is historically proved that whenever “sexual repressions” of human beings are released out, whenever recreations are more for men, there, the procreation (ie. multiplication or increase of population) always comes down.
- d) Last, but not the least, such entertainment centres give employment opportunities to the various Artists like dancers, musicians, Guitarists, singers, etc., In addition, the musician’s talents also will go up by their daily Practice.

CONCLUSION

Over population in India is the root cause for the poverty in India. And poverty is the root cause for increasing the fertility rate and thus population. Therefore poverty and over population are totally linked. Over population must be curtailed, in order to increase the per-capita income and thereby to lower the poverty of India. Any amount of increase in GDP will not help to improve the prosperity of India unless the denominator namely total population of India is also curtailed simultaneously along with the increase in GDP. Otherwise, the per-capita income and thus poverty will remain low for ever in India. Therefore, as explained in the earlier paras, nearly 50% of the total population of India is concentrated in the 5 backward states namely Bihar, UP, MP, Rajasthan and Maharashtra, etc., where the literacy rate of the women is very low and therefore there is the necessity to launch the literacy drive for these women in this backward belt. And also these men in these regions should be exposed to various centres of entertainment relaxation and recreation so that their procreation will come down.

The World Bank motto says “Poverty anywhere is the threat to the prosperity everywhere.” In the presence context, unfortunately the world in which we live comprises of only “Islands of prosperity “amidst “oceans of poverty.” Therefore, the World Bank motto needs amendment as below.

“Poverty EVERYWHERE is a threat to property anywhere”

Therefore, we must strive for higher PCI which will usher in higher living standard of our poor Indians by tackling the menace of overpopulation with the special attention on the five backward states in India and the special measures like launching literacy drive for these women in this backward region in India as explained above.

Already our rival China has brought down the population growth rate successfully to 0.6 per cent per annum, whereas in India the growth rate of population is continuous to be high around 2 per cent per annum, Therefore, we must bring down the rate on par with the China in order to lift India from the poverty trap.

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