

Deepanshu Dabas

Kee High School

Lansing, Iowa

India, Population

India's population problem

Population explosion problem in India is huge. Almost every 6th person on this planet is Indian. With an astounding 1.3 billion population, Indians comprise 17% of the world's population, second only to China. In fact according to UN studies, if the current trend continues, India will surpass China and will become the world's most populated country by 2027. This rapid growth of population in India is accompanied by low per capita income, low purchasing power, lack of health services, illiteracy and pollution problems. All of these issues has made the self-sufficiency goals of India's people very difficult.

The core challenges for achieving Food Security:

With the number of 195 million, India is home to a quarter of all undernourished people worldwide, making the country a key focus for tackling hunger on a global scale. India ranks 74 out of 113 major countries in terms of Food Security. The challenge to produce more and more food for the growing population is becoming increasingly hard. Being a developing country, urbanization is on the peak and land resources in India are shrinking for agriculture. The food security problem is multi-dimensional: socio-demographic dimension - which includes illiteracy rates, unemployment, poor environmental conditions and political dimension which comprise the factors like political will, maintaining national nutrition programs and inefficient Public Food Distribution System.

- **Population vs. Environment vs. Food Security**

Increasing population drives more demand for food, which results in more use of arable land and water. Population growth means expansion of cropland, which involves destruction of crucial forest covers. According to Indian State of Forest Report (ISFR), the total forest and tree cover of India is spread across 24.39 % of the geographical area, which is far below the national target of 33%. The issue of increasing demand of food might resolve by more subsidies and investment in rural infrastructure such as transportation, irrigation, encouraging use of fertilizers and technology, using HYV Seeds etc. If this investment is made it could have serious implications on the environment.

Another big problem is water. Water crisis is no longer a mere prediction, it is now a reality in many states of India. According to the Asian Development Bank forecast, water supply in India may fall 50 percent below demand by 2030. The rivers, which were the backbone for most of the primitive subsistence farmers are now showing a gloomy picture because of high contamination levels. River like Ganga and Yamuna bear the burden of meeting the needs of millions It's not shocking they are among the most polluted rivers in the world. If the current pollution trend continues, the river water could no longer be used due to pollution. Falling ground water levels is also a topic of concern. The present practice of

ground water use cannot sustained due to the speed with which the depth of ground water level is dropping in India. Groundwater supplies are predicted to run out for 100 million people in the northern half of India by 2020. The food security of the huge population of India depends on the water security and this is something which cannot be taken for granted.

Climate change has altered the meteorological pattern and farmers are struggling to adapt to the changes in growing seasons and irregular rainfall levels. This is particularly true of major drought-prone regions such as southern and eastern Maharashtra, northern Karnataka, Andhra Pradesh, Odisha, Gujarat, Telangana and Rajasthan.

- **Unemployment and poverty**

According to the survey of NSSO, the unemployment rate of India was 6.1% (2017-18) and nearly 22% of the population is below poverty line. The Employment and financial status indirectly decides what quantity and quality of food one can buy. As Amartya Sen (1981) points out, the poor do not have adequate means or entitlements to secure food, even when the food is locally available. Unemployment and poverty are definitely one of the integral challenges to combat food insecurity.

- **Social Problems**

The social composition along with the inability to buy food is an important factor of food insecurity. The food insecure people are disproportionately large in some regions of the country, like Uttar Pradesh and Bihar, which are also the most populated states. This shows us the co-relation of population and food security. Some lower castes and tribes (SCs and STs) whom have either poor land-base or very low land productivity are prone to food insecurity. Apart of lower social groups, women and children, particularly pregnant and breastfeeding women and infants and most severely affected by lack of food. According to the National Health and Family Survey (NHFS) 1998–99, the number of such women and children was approximately 110 million.

Government's Initiatives

Right after independence, Indian policy makers adopted all measures to achieve self-sufficiency in food grains. India adopted a new strategy in agriculture, which resulted in the 'Green Revolution' in 1960s.

Government has started various poverty alleviation programs, which comprised a component of food security. Some of these programs are: Public Distribution System (PDS), Integrated Child Development Services (ICDS); Food-for-Work (FFW); Mid-Day Meals; Antyodaya Anna Yojana (AAY) etc. In 2013, In order to provide the Right to Food to every citizen of the country, Indian Parliament enacted National Food Security Act, 2013. In addition to the role of the government in ensuring food security, there are various cooperatives and NGOs also working intensively towards this direction.

Though all the government initiatives show remarkable results ensuring the availability, affordability, and accessibility of food these policies are out dated and still not capable to fulfill the growing demand. PDS dealers are sometimes found resorting to malpractices like diverting the grains to open market to get better margin, selling poor quality grains at ration shops, irregular opening of the shops, etc. It is common to find that ration shops regularly have unsold stocks of poor quality grains left. This has proved to be a

big problem. When ration shops are unable to sell, a massive stock of food grains piles up. The government's policy of providing food at cheaper prices through the Public Distribution System has resulted in a huge subsidy burden. The current policy of pampering farmers with subsidies will get us nowhere in terms of improving productivity. It is difficult to estimate how long these policies can sustain with the infinitely increasing demand. It is imperative for the government to incorporate demographic projections into their future policies to improve agricultural production and greater food security.

Possible Solutions and Conclusion

Could a one child policy, two child policy, or forced sterilization be an option? The solution does not need to be that drastic. It could be as simple as... Education.

More investment in education is probably the most realistic solution of overpopulation. This is true because of the fact fertility rates and literacy rates are surprisingly interdependent. The higher the literacy rate, the lower the fertility rate. For an instance, Kerala, which has one of the highest literacy rates (92%) has a very low fertility rate (1.8). On the other hand, the fertility rate of the states with high illiteracy, like Bihar and Uttar Pradesh, are still far away from the ideal replacement fertility rate. An educated society is aware of the benefits of a small family and readily understands the repercussions of a high population. Therefore, without education most measures for food security will prove to be insufficient and pointless. Sex education is important too. It makes youth more responsible and thus they will take the decision of having **sex** with full knowledge of the possible outcome. Investment in family planning and reproductive health will enhance the wellbeing of families and ultimately the nation. India is a vast country. Naturally, it will take time to make the government efforts bear fruits. It is not possible to reduce the existing size of population. But it is, of course, possible to slowdown the rate at which population is increasing.

Nearly half of India's population is under 25. The demographic dividend is in its favor. It's a crucial time for India to make careful decisions and convert the population problem from bane to boon.

In order to achieve the desired goals, India has to develop integrated development approaches that could simultaneously address population factor, food security, environment preservation and economic growth. Yes, it is a difficult task! But the only thing which is required is social and political will.

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