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R. A. Gopalaswami's 1951 Census Report Revisited

AT THIS momentous time when India's galloping population crosses the 100 crore mark, it will be educative and interesting to revisit the first post-independence census report of 1951 in which the then Registrar General and Census Commissioner of India R. A. Gopalaswami had brilliantly delineated India's population problem, the prospects and the solution which would have stabilized the population at 45 crores, and to contemplate the issue in the context of the latest National Population Policy 2000.

"If we draw the moral correctly from the many unmistakable signs which go to show that the law of diminishing returns (in regard to the efforts to increase agricultural production) is in effective operation, we should make up our mind to face the fact that our effort to keep pace with unchecked growth of population is bound to fail at some point. We should be able to go one step further and fix this point by saying that it is the time at which our total number reaches and passes 45 crores", wrote R. A. Gopalaswami, Registrar General & Census Commissioner of India in his celebrated 1951 Census Report. Of course it was the pre-green revolution era and based on the then prevailing scientific knowledge he estimated that increase of agricultural productivity will be just about sufficient to meet our growing food needs until the population reached 45 crores.

Gopalaswami estimated that foodgrains production could be increased from the then level of 70 million tons per year to a maximum of 94 million tons: but this would still fall short of the estimated needs of the population size projected.

He had not reckoned with the possibility of the 'green revolution' which saw foodgrains production grow by leaps and bounds reaching the present level of 200 million tons. Nevertheless, Gopalaswami had sufficient foresight to add the rider that "Of course, there will never be a point of time at which it can be said that the last improvement has been effected".

Where do we stand now in regard to population size? The expert committee headed by the Registrar General, India in 1996 when I was occupying that Office had projected India's population for the coming twenty years. From these projections I had worked out that we

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would be 100 crores on 11th may 2000 which is a major milestone and, therefore, have been advocating the observance of that day as India's Own Population Day to highlight our grave population problem, on the lines of the World Population Day observed on the date when world population crossed 5 billion. We would be 101 crores on 4th January 2001 and 101.24 crores on the next census date viz. 1 st March 2001 when this estimate can be replaced with the actuals. If the 2001 census enumeration is accurately done, the above projection is likely to prove an underestimate by two to three crores and the actual population netted is likely to be in the vicinity of 103 to 104 crores.

It may be a fact that even with such a population burden increased food production has kept famine and starvation deaths at bay. But hunger and malnutrition are still a fact of life for a large part of our mammoth population. M. S. Swaminathan says that in the United States, citizens spending over 33 per cent of their income on food are considered poor and eligible for assistance under the Food Stamps Programme, and by this yardstick nearly 90 per cent of all households in India are "poor". According to the UN Commission on the Nutrition Challenges of 21st century, there will be 300 million stunted children in India who will grow up with impaired mental development by 2020. According to UNICEF, 53 per cent of under four-year-olds in India are moderately or severely malnourished and in terms of numbers this amounts to 60 million children. Malnutrition is costing the Indian economy dearly and the UNICEF has put it at between $ 10 billions and $ 28 billions in terms of lost productivity, illness and death.

While water through irrigation is vital to meet the incremental food needs of the growing population, even that is becoming scarcer by the day. It takes about 1000 tons of water to produce one ton of grain. The number of tubewells in India has increased from 360,000 in the sixties to over six million now. Experts say that a quarter of India's grain harvest could be in jeopardy from groundwater depletion. Moreover, it is said that irrigation-based societies fail because river water used for irrigation is much more mineralized than rain water causing the land to ultimately become saline and infertile; seven million acres of land in India have already been so damaged. There is not much cultivable land left to be harnessed in the country which currently produces 200 million tons of foodgrains for its 100 crore population. The magnitude of the effort required can be gauged from the fact China is expected to produce a grain out put of at least 500 million tons from a land mass three times bigger than India to meet the needs of its population of 130 crores in 2000.

Thus while it can hardly be claimed that the green revolution has permanently solved our population-food needs conundrum, it has perhaps lulled the country into a false sence of self-sufficiency and complacency on the population front which bodes ill for the conutry's future. With remarkable pre-science, Gopalaswami had observed "It would be idle to maintain that there is any solution for our population-land-food problem which does not call for difficult, costly and sustained effort over an extended period of a type for which no precedent exists in history".

m order to concretize the needed practical measures for population stabilization, Gopalaswami advanced the concept of "improvident maternity" so that "every one may perceive his or her own share of the collective objective". The concept of improvident maternity was explained

thus. "The birth rate is something for which responsibility can be fastened on no one. But the number of births which occur to a married couple are, ex hypothesi, controllable by them". The maximum number of child-births which every married couple can have without creating a national problem regarding the future of their offspring was regarded as three. Hence 'improvident maternity' was defined as a child-birth occurring to a mother who has already given birth to three or more children of whom at least one is alive. It was also hypothesized that if improvident maternity can be put to an end or its incidence reduced drastically, the excess of births over deaths will be reduced to a negligible number and a stationary population achieved.

It was envisaged that the people who have got rid of improvident maternity will have acquired effective control over child-bearing and mothers will limit themselves, on their own accord, to two children. This will ensure achievement of replacement fertility. The incidence of improvident maternity was to be reduced from the level of 40 per cent to under 5 per cent within 15 years so as to stabilize the population which would have become 45 crores by 1969.

While the incidence of 'improvident maternity' at that time as quoted by Gopalaswami was 42.8 per cent in India, as compared to 33.9 in Japan, 19.2 in USA, 14.3 in UK, 19.7 in France and 12.3 in German Federal Republic, it is interesting to look at the present situation. Europe has reached zero population growth, while Japan which had a high incidence of improvident maternity then has stabilized its population at around 125 million with an annual growth of just 0.2 per cent.

As per the latest available data (1997, RGI) the percentage distribution of live births by order of birth for India is as follows: 1-31 percent, 2-27 per cent, 3-18 percent, and 4 and above - 24 per cent. Thus even after fifty years the incidence of improvident maternity as per the above definition of births above three, is as high as 24 per cent. If considering the present precarious position of the country on the population front, improvident maternity is redefined as child-births occurring to mothers having two or more children, the incidence rises to 42 per cent, which is the same level as prevailing fifty years ago. This shows our continued vulnerability on the population front. The latest National Population Policy 2000 recognizes this by stipulating that "It is imperative that the reproductive age group adopts without further delay or exception the small family norm, for the reason that about 45 per cent of population increase is contributed by births above two children per family".

The National Population Policy 2000 says that "it is based upon the need to simultaneously address issues of child survival, maternal health, and contraception, while increasing outreach and coverage of a comprehensive package of reproductive and child health services by Government, industry and the voluntary non-governmental sector, working in partnership". This has a familiar ring to it when we hark back to the prescription laid down fifty years ago by Gopalaswami for achieving the goal of population control. He said "It is first of all necessary that an adequate number of maternity and child welfare centers should be set up and they should be so sited as to establish practically complete coverage over all villages and towns. The centers should be developed as agencies which render practical help to mothers before, during and after childbirth. Before they begin to advice the avoidance of improvident maternity

they should win friendship and trust by rendering service which seem to save life and promote health and strength among mothers and children. In effect we are continuing to say the same thing as Gopalaswami had said five decade ago.

The average number of live births per mother after completion of her child-bearing period. which corresponds to the total fertility rate (TFR) in 1951 was 6.6 and it has now come down only to 3.3 after five decades of family planning. Mexico achieved a reduction from seven to 2.75 in 30 years, in Asia itself, China has brought down the TFR to 1.8, Indonesia to 2.6, Iran to 2.8, and Bangladesh to 3.1, all lower than India (UNFPA, The State of World Population 1999). The crucial importance of reducing this figure to the replacement level of two children or less can be gauged from the observation that the projected population for the world in the year 2050 will go up from 730 crores to 1070 crores if there is just one more child per mother. As per the latest TFR data available (1997, RGI), there are only a few States where the TFR has been reduced to replacement level or below viz. Goa (1.5), Nagaland (1.5), Kerala (1.8), Tamil Nadu (2.0) and Tripura (2.1) while the big high TFR States are Uttar Pradesh (4.8), Bihar (4.4), Rajasthan (4.2) and Madhya Pradesh (4.0). The downside is that the five States in the low-fertility category account for only 11 per cent of the total population of India whereas the four very high fertility States account for 41 per cent of the total population of India in the year 2000, and what is more alarming is that 89 per cent of the population has fertility rate above replacement level.

As per the present portents we are expected to fumble and bumble along with inadequate policy interventions and at the same time hurtle forward on the population growth path, leaving the periodically reset population policy objectives and goals unfulfilled. India's population is projected to grow to 150 crores by 2040 overtaking China as the most populous country in the world, and then go on to reach 200 crores by the end of the twenty first century accounting for one-fifth of the world population, up from the present one-sixth, in the same 2.4 per cent of the globe's land area, and far exceeding the carrying capacity of the land with millions living in poverty and squalor. One would wish that Gopalaswami's improvident maternity plan had been implemented stabilizing India's population at 45 crores, the right size for the country's carrying capacity and ecological balance. In that case India would now have been one of the prosperous nations of the world ranking, high in per capita income as well as human development indicators.