
CURRENT SCIENCE—50 YEARS AGO

Over-Population in India*

IN an extensive note recently published in the press, the Public Health Commissioner with the Government of India was reported to be contemplating a discussion of the problem of over-population in India in an article about to appear in the *Indian Medical Gazette*, and also as making a suggestion, that the Federal Administration should deal with the issue of family limitation as a remedy for combating the baleful consequences, resulting from an uncontrollable increase of population. In many provinces large masses are at the level of bare subsistence, with hardly any clothing or house furnishings but possessing quite a remarkable power of fecundity. Few will fail to be impressed by the prevailing misery, squalor and poverty of the Indian people, and among the numerous public matters with which the Government of India will shortly be confronted, the subject of raising the economic level of the country and improving the standard of living of the common people must necessarily occupy the foremost place.

Modern civilisation is full of paradoxes. In the midst of plenty people are allowed to suffer. The banks are embarrassed by a plethora of money, but are unable to release the funds for providing relief to the unemployed. Gold always regarded as an incorruptible standard of currency, has been deflected from its appointed task, with the inevitable effects of discouragement and arrest of business involving human unhappiness. Increase of population considered a sign of public prosperity in the past, has now become a menace. These strange and alarming phenomena in human affairs must inevitably puzzle the ingenuity of all Governments, and perturb the hearts of public leaders. It seems to us that at the root of all these troubles lies the currency problem. The recent policy of sovereign governments of hoarding gold and silver is obviously due to the apprehension of a shrinkage in their supply, and their immobilisation paralyses trade and increases unemployment. If the world would adopt a form of currency, incapable of maldistribution or of being cornered, which could be used purely as a counter or a cheque between services and commodities, perhaps the other social problems might

admit of easy solution. It is the inefficient system of world economics that has made some of the existing population superfluous, and the remedies suggested for restricting the increase are in the nature of an experiment in human biology.

We know that the humanitarian measures, which governments and voluntary public services have adopted for the promotion of the peoples' health and happiness, provided also the causes leading to an absolute increase of population. But no one can seriously suggest the suspension or repeal of all attempts at sanitation and the prevention of disease, the provision of famine relief measures or the protection of the person and property of the people as one of the remedies for over-population. It may be possible to absorb the superfluous population by an extension of irrigation, improved methods of agriculture, emigration and closer settlement of sparsely inhabited lands and by developments in industry and commerce. The limits of what can be done in these directions must be reached sooner or later, and possibly in most parts of the world they must have been already reached. It is legitimate therefore for public leaders to suggest the popularisation of contraceptive technique as an infallible remedy for limiting the number of births, and every child knows that population of manageable dimensions can have more food, better accommodation, higher expectation of life and greater facilities for racial improvement.

* * *

The population of India is about 19 per cent. of the total population of the world, and the rate of increment from 1872 has been 23.2, 13.2, 2.5, 7.1, 1.2 and 10.6 per cent. The actual increase, according to the latest Census Report, since 1921 is 33,895,293 which represents 10.6 per cent. at the last census, and more than 39 per cent. on the population of India fifty years ago, and an increase of 12 persons per square mile in 50 years, during which time the increase in area has been principally, if not entirely, confined to comparatively thinly-populated areas, amounting to 426,055 square miles. During this period the birth rates of various European countries have fallen, England and Wales 36.3 to 17.8; Germany 40.9 to 20.7; Italy 39.2 to 27.8 and Sweden 30.8 to 16.9. There are many interesting subtleties regarding the statistics of population, and according to the computations of American autho-

* Published in *Curr. Sci.*, Vol. IV, November 1935, p. 293.

rites the total optimum population of the world is 350 millions, which is less than the population of India. The optimum population of any country must depend largely on the standard of life, and as there is every need for raising this standard in India, it is obvious that its present population is far above the optimum. India is passing through the opening phase of rapid multiplication, fostered by modern industrialism such as occurred in the European countries from the first appearance of factory manufacture in the eighteenth century upto the seventies of the nineteenth. Indian leaders are of opinion that her prosperity depends upon industrial expansion more than on her agricultural pursuits, and that the country should cease sooner or later to import foreign manufactured articles. This decision involves the reproducing in all factory centres the identical conditions which led in the European countries to the enormous increase of their population. We have to add to such conditions the elimination of all natural checks upon the numbers of a less organised community with little education and a poor standard of living. The minds of people are not troubled by what is known as the rapid multiplication of the unfit and by their own relative poverty. The message of birth-control is a far cry to them, and their education and religious principles have not sufficiently fortified their minds to practise abstinence and self-control. Judged by the gross conditions in which the poorer communities live, a further increase in the total population of India seems inevitable.

* * *

Those who have investigated the population problem point out that this inevitable increase need not necessarily bring misery in its train, since "the orderly evolution of human knowledge justifies us in assuming that science will keep pace in discovering means of expanding opportunities of happy human existence", and the human organism is endowed with the power of adapting itself to an extent not yet imagined. Even if the existence of any community is threatened by an uncontrollable multiplication of its numbers beyond the means of subsistence, Nature has sufficient reserves in maintaining the balance by governing the ratio of fertility unassisted by any extraneous intervention. That Nature has not relinquished her laws of maintaining a definite relation between the maximum desirable population and the means of subsistence is illustrated in the case of the Arab population of Algiers, who show both a decrease in the birth rate, which could not be ascribed to any voluntary practice of contraceptive technique, and a decrease in the death

rate which equally could not be ascribed to improvements in public health measures. Attempts to effect a retardation of the rate of increase by voluntary limitation of the birth rate because of the diminution of returns from the land require closer investigation, before any scientific conclusions can be formulated.

The second argument that repeated child bearing involves misery to one section of the Indian population which, it is only human to relieve, is a powerful one, and apparently justifies the wide-spread practice of family limitation by artificial methods. In one of her recent papers published in India, Dr. Marie Stopes has pointed out that the apparatus required by the general masses will cost practical nothing and the means of prevention of conception are available in the poorest houses. The argument that man lives in an artificial society, and that his productivity must be governed by artificial means is generally acceptable, but his bodily functions remain natural and obey the simple laws of metabolism. He retains sufficient plasticity to be affected by the environment he has created for himself. It is well known that the researches of American authors on the reproduction rates of social groups have produced evidence of a negative relationship between educational advance and fertility; further it is almost a demonstrable fact that full-time paid occupations of women are found incompatible with effective reproduction in any large community. Unhealthy crowding in slums seems to raise fertility, but the rural developments which the Government of India and provincial authorities have inaugurated with the object of ensuring decent environment and attractive housing for the poorer classes, and the campaign against congested areas in populous towns must counteract forces conducive to high fertility among families least equipped for this responsibility.

We are not arguing against the new doctrine of family limitation. Its object is, however, gradually realised by the operation of those social phenomena which we have noticed. It is established by the American school of investigators with a fair measure of probability that education, occupation, better housing and a higher standard of life have individually the power of affecting more or less permanently the rate of fertility. The hope of restricting the population of India seems to lie more in the rapid and energetic promotion of those social developments which must inevitably effect fertility rate, than in the promotion of the artificial methods to which sentiment and custom are hard to be reconciled. The results in the latter case are spectacular, but those arising from the former must be progressive and slow.