

punjab a Journal of the Association of Punjab Geographers, India geographers and Geographers a

VOLUME 1 OCTOBER 2005

POPULATION-DEVELOPMENT DILEMMA AND THE INDIAN CONTEXT

D.N. Singh

Abstract

Rapid population growth is more often than not blamed for impeding variety of developmental efforts and causing fast depletion of resources and deterioration in environmental quality. Of late, quite a few scholars have questioned this type of biased observation and have tried to seek explanation for the deteriorating situation in factors other than population. In their opinion, population is not the sole culprit; it is rather a resource, and only one of several factors accountable for worsening conditions. In this paper, ironies and imperatives have been contextually brought to focus and it has been observed that the population control programs in India are dogged by deficiencies of policies, plan strategies and implementation. Also, the variations in parameters of population growth in different states of the country are yet to be tailored into the national framework. There is felt need to evolve an appropriate policy system which could effectively operate under wide range of conditions. It does require a shift from population to people, from the number game of targets and achievements to a more realistic and human approach in implementing the population program. Better, population factor is integrated into development planning so as to coordinate all population influencing activities carried out by the government. It would be in fitness of things to construct a more rational model around population growth-development syndrome wherein welfare and comfort of masses and respect to poor is given due weightage in right perspective and it is always kept in mind that people are not the problem; people are the solution

Introduction

Population-development dilemma and various issues related to it have been a matter of debates in various contexts but, more often than not, receiving a kind of casual treatment. There are divergent views expressed on the subject, but these are inconsistent and incoherent being difficult to be linked. This paper brings together a host of such views and arguments in some what systematic manner putting the same to logical examination that may lead to certain conclusions. Ecological issues, imperatives and ironies of the situations vis-a-vis explanations have been contextually brought to notice drawing examples from developing countries in general and India in particular. Its relevance lies in its being related to the population factor which has bearing on practically all the inputs of development planning.

The menacing growth of population on the one hand and miserable failure of population control measures on the other have rather led many to believe that the rapid population growth is the single most important factor impeding variety of developmental efforts and causing fast depletion of resources and deterioration in environmental quality. Also, inadequate provision of basic social facilities, low rate of child survival, slow rate of economic growth and poor performance of any policy or programme, etc. all are rather patently ascribed to it. Of late, quite a few scholars questioned the tenability of this kind of observations and tried to seek explanation for the deteriorating situations in the factors other than population. They derive inference from improvement in socio-economic conditions, substantial increase in rural income, reduction in infant mortality rates, enhancement in life expectancy, general fall in average family size, etc. in spite of so called alarming population growth. Thus, there is a case for critical review of the two sets of arguments, one holding population as the sole culprit and the other treating it as a resource.

Magnitude of the problem

The magnitude of the problem reflects in multi-faceted consequences of rapid population growth, such as excessive pressure on basic social

amenities, rise in unemployment, loss and degradation of natural resources, deterioration in environmental quality, etc. Obviously, the magnitude of all these problems is much higher in case of developing countries. To illustrate, in India, the population is increasing at a rate of 2.1 per cent per annum, which will account for its getting doubled every 35 years (reaching 174 crores by 2027 and 384 crores by 2062) leading to an unsustainable situation even in less than 25 years from now. Remarkably, here nearly 4 out of every 10 citizens are less than 15 years old and 4 per cent people are older than 65, which does speak of very high potential for future growth. On the global level too, the growth profile has been rather erratic. There, the addition of first billion took 75 years (1850-1925), whereas the second billion was added in 37 years (1925-1962) and the third billion in just 10 years (1962-1972). Such a phenomenon resulted in sweeping predictions like 'in a six and half century there would be one human-being standing on every square metre of land on the earth'. Of late, an eminent scientist, J.V. Narlikar (2000) calculated the world population by end of the 25th century to be more than 4374 billion (assuming the present rate of growth to continue in foreseeable future) leaving, thus, apparently only standing room for people on this planet. These are just a fantacy of horror that even the inferno will not match. No doubt, the projections, in many cases, remain basically statistical manipulations being deliberate, unreal, hypothetical and almost incomprehensible particularly in view of the fact that things are not expected to move so straight forward. However, the differences in the techniques and levels of projection do not minimise the enormity of the rapid population growth related problems.

Population-development dilemma

A perusal of the host of observations made by scholars, political leaders and the bureaucrats regarding population-development dilemma, in other words, population growth and its relationship with development, brings to the fore two categories of views which may be conveniently

grouped as positive and negative.

Positive views

The advocates of the thesis that population contributes as a positive factor in the development process argue that population equipped with variety of skills is a great asset, and an appropriate investment in it may bring high returns. Contextually, Swamy (1971) observes, 'wherever there is possibility of increase in production through a demand-pull effect due to increase in size of labour force, the large population is rather a requirement'. True, almost all the inventions of today owe to demand-induced or costinduced motivations. And the sufficient population facilitates specialisation and division of labour. In a wider perspective, the political-cum-ideologue Mao-Tse-Tung described population as blessing under the shadow of nuclear war apart from being a greatest wealth and an stimulant to innovation and development. To him, a country with small population will be in disadvantageous position. In opinion of Sahay (1993), 'Financial capital will have to chase human capital and not the other way round'. He found the skilled and knowledgeable workforce to be more relevant to future.

The positive role of population is also brought to focus although with some 'ifs' and 'buts' by Boserup (1980) who postulated that population growth rather than being a hinderance to economic growth is actually a pre-requisite for development, the population-resource ratio being modified by outmigration. More or less similar are the views of Findlay (1987). He pleaded that over-population and population-resource imbalances are something that can be alleviated if there is permitted international flow of goods, ideas and technologies. Here, it may be pointed out that in case of several countries, the problem of ageing (increase in number of old people) and, in long-term, unproportionate reduction in population (eg. Russia*, Sweden) has accounted for shortage of manpower which has proved detrimental to economic growth. In fact, much of the West is sitting on a demographic time bomb and requires immigrant workers to keep the working

^{*} About 1700 leading doctor's conference at Moscow underlined that the Russia is losing its main asset-its population at the rate of about 150 million people every year basically due to death rate outstripping the birth rate by 1.6 times. Unfortunately, a third of those dying are still of working age (Reported in Hindu, June 7, 1997).

age population steady. Even some of them had to launch birth incentive programmes. Needless to mention that the developing countries lacking in necessary ability and technical skill in the relevant areas cannot manage manpower shortage through adoption of large scale automation devices. Hence still dependence on numerical strength of population.

The exponents of this group also plead their case bringing to focus the otherwise negative impacts of ambitious and drastic plan of population control as being practised in China, where introduction of one-child norm has resulted in a spurt in female foetecide and precariously unfavourable sex-ratio (117 girls per 1000 boys). Some states of India, e.g. Punjab also fall in this category (in zero to six age group). As referred to earlier, the problem of aging looms large particularly in countries with negative population growth or abrupt drastic curb on it. To top it all, the truth remains that there is seldom constant linear growth of population and the impact of slow check on growth is perceived over time. In the opinion of Barbara Valeja (2000), a demographer, the rate of increase of world population is supposed to have slowed down after 1999 in the light of the fact that the world population rose from 4 billion to 5 billion in 13 years (1974-1987) and would take 12 years (1987-1999) to increase from 5 billion to 6 billion. And after that 14, 15 and 26 years would be required for the world population to increase from 6 billion to 7 billion, from 7 billion to 8 billion and from 8 billion to 9 billion respectively. At this rate, at the end of 21st century, the world population would still be hovering around a single digit figure which is no where near the 54 billion predicted on the assumption of the present birth rate and fertility rate remaining constant in time to come. In the support of this view, there are quoted instances where prediction of the over population and consequent catastropies proved to be totally false.

Negative views

A number of rich and powerful nations, political leaders and their lackeys, bureaucrats, policy-makers and, surprisingly, also a group of intellectuals, grudgingly hold the large size and rapid growth of population as rather the sole culprit behind all sorts of retardation, degradation and

deterioration. In this perspective, the World Bank's Report (1990, p.81) underlines that the fast population growth-characteristic of poor nations, poor economies - does not allow any incremental gain offsetting the beneficial effect of economic growth. There the scarce resources and social services spread over a much larger proportion of population, as a rule, are not available to poor, last in the line.

Rapid population growth hinders development by raising the dependency ratio, reducing the amount of national income that might otherwise be available for saving and investment, and diverting a large proportion of new investment into replicating existing economic and social facilities for the benefit of large number rather than deepening and broadening the capital stock for the creation of higher per capita income. The worse is the situation wherein the population growth rates have outstripped the abilities of the countries to provide even basic necessities to their people (Coale and Hoover, 1985). In developing countries, overpopulation and rapid multiplication of people are found to be ultimately connected with most aspects of current human predicament (D' Souza, 1990). There overpopulation is one of the main consequences of, and simultaneously a fundamental pre-requisite for their economic under development (Horlacher, 1986).

It is generally believed, particularly in the Western World, that population growth causes hunger and in the Third World the current population growth rates will outstrip not only their own but the entire world's capacity to provide food and other resources (Ram Prasad, 1992). As the apprehensions go, the enormous loss of resource base caused by rapid population growth will not only stagnate or hamper the economic growth but also account for ecological crisis of varied dimensions and intensities, ranging from soil erosion to global warming, ocean level rise, etc. In order to comprehend the issues raised in the foregoing, an attempt is made here to illustrate the arguments and counter-arguments related to rapid population growth-resource adequacy debate.

Population-resource adequacy debate

The mismatch between population and resources at different levels and in different forms

has emerged as a matter of grave concern, especially in view of host of social evils, famines and wars, perpetual vicious circle of poverty, etc., more often than not being ascribed to in equilibrium in population-resource situation. However, the explanations in this context have been advanced along two distinct streams of approaches, one pessimistic and the other optimistic. The pessimistic group highlights the concept of 'spaceship' underlining definite extent to which sustenance of population is possible. They believe, given a specific level of knowledge and form of social organisation there is limit to the number of people who can be supported directly by the resource available within a limited geographical region. So, if the growth is beyond the proportion, it may overwhelm the existing system and prevent positive changes being effected. The Club of Rome, a leading exponent of this idea, has observed that population growth has reduced the world food stocks to their lowest levels since the Second World War*, and mass starvation could be avoided only through radical changes in population growth rate. Similar but more strongly worded warning appeared in Population Bomb, 'Human race would breed itself into catastrophic crisis situation in which the finite resource of the earth would no longer be able to support the world's evergrowing human population'. Kenneth Boulding poetically described the situation as- 'The world is finite; resources are scarce; things are bad and would be worse; man is far too enterprising; soon we will have plundered planet'.

On the optimistic side, also, there is no dearth of examples. Against the general perception of the people, it is observed that the world production of grains and other key food items is in fact more than what is needed to feed the population. In the opinion of Moore and Lappe and FAO, right now there is really good enough food and world's grain production can give each human being a daily intake of more than 1600 calories, and 59 grams of protein or a diet equivalent

to that of the average North American. The fallacy is well exposed in the *Third World Guide* (1989-90) which reveals that annual median population growth in developing countries during 1973-84 was only 2.6 per cent against annual median growth in food production and that in agricultural production to the tune of 3.2 per cent and 3.0 per cent respectively. As a matter of fact, all available indicators point out that the world will support a much larger population than the present one, both quantitatively and qualitatively, at a higher level of consumption using potential of science and technology (Mishra, 2000). Further, the idea that hunger cannot be conquered because we are running out of land to support rapidly burgeoning population is contradicted by the fact that there is no correlation between population density and hunger at world level. To illustrate, China with only half as much available land per capita as India, provides 13 per cent more food grains per capita. Similarly, Taiwan and Republic of Korea have only half the farmland per capita of Bangla Desh, yet they produce 40 per cent more food per capita. More remarkably, tiny Netherlands with the highest population density in the world produces more than sufficient food to feed itself and remains as a large net food exporter (Swaminathan, 1995).

The population-food supply relationship is, however, not so straight. There is marked scarcity in spite of sufficiency/abundance at different levels which has been described by Lord Plum as 'paradoxical problem of plenty'. To exemplify, in India a third of population consumes less than 75 per cent of the calories it needs and there co-exists widespread under nourishment with sufficiency of good food supply. This kind of irony at global level is quite glaring in the fact that onethird of the world's population consumes half of the world's food and developed countries devote as much grains to animal feed as is consumed by India and China together. No wonder, each American child absorbs 50 times as many resources as Indian (Ehrlich, 1972). It is having been moved

^{*}Increasing population and rising demand for tood coupled with reduced per capita availability of arable land and water have led to tears that Malthusian predictions about widespread famines may come true. This view is also supported by FAO which predicted that developing countries may have to go in for large imports to balance their food budgets (Swaminathan, 1997).

by this kind of situation that Indira Gandhi stated loudly at U.N. conference (Stockholm, 1972): the world suffers much from excessive resource use by the West rather than excessive population in India and elsewhere. The adverse population- food availability ratio is explained by many in terms of political manoeuvering. To them, increase in food supply may not necessarily improve conditions of impoverished people, particularly where food is considered a political commodity with key people in the government controlling export of agricultural production and thereby determining the extent of dependency on foreign aid. In such cases, usually cash crop production is promoted for export to help pay the food imports rather than improvement in food productions. This results in emergence of many problems contributing to miseries of the poor and increase in poverty. Needless to mention, 'poverty anywhere is danger everywhere (Frenda, 1972 and 1975). It is in view of such intricacies that the problem of food is now deemed to be inextricably inter-twined with the problem of peace, political and social stability, and employment, and no comprehensive solution to one is possible without substantial progress on the other (Swaminathan, 1995).

It is worth underlining here that our assessments of population-resource situation are, more often than not, vague and biased being based linear equation. Hence sweeping generalisations. Continued discoveries of vast resources in pioneer areas all over the world give us hope. Also, there is enormous scope for betterment of the situation if there is made cyclic and circular utilisation of resources and adoption of more egalitarian approach in production as well as sharing of resources at local, regional and global levels. Besides, there is a lot of expectation from technological and managemental revolution in solving the alarming problem of population explosion. Contextually, Kenneth Boulding, while focussing on man's terrific potential, observed that man has tremendous power of knowledge; sky is his limit, and he gets the food where he needs it. He believes that with coaxing of nature, advent of more resources and their artificial manipulation, it will be possible to support more population with higher standard of living.

Ecological Issues

An ecological perspective on population growth and its impact is important because large number of people are normally treated as synonym of poverty and pollution. What is emphasized, in this context, is man's cultural outfit which shapes, manipulates and changes natural as well as his own environment. Of late, there have been pointed out some ecological problems and their relationship with variety of human activities. As such, degradation and depletion of natural resources, accumulating earth warming, thinning of ozone, increase in 'greenhouse gases', chlorofluoro carbons, nitrous oxide, methane, carbon dioxide, etc. (Abraham, 1990) and more so imbalance in the chemical contents responsible for sustaining life on the earth have been brought to focus (Mitra, 1990). An emerging scenario of the changes in climate, and ozone depletion and its impact on habitability of the earth is discussed, with particular reference to developing countries.

There are two pertinent questions related to ecological issues: (a) who are really responsible for all sorts of deterioration in environment? and (b) can we afford to stop application of socalled anti-conservation technologies which have already proved their utility in solving multiple problems of rapidly growing population? Regarding the first question, it may be precisely observed that it is the human greed, rapist tendency (Capra, 1985), and destructive appetite and life style of the First World's inhabitants (Panandikar, 1990) that carries out perpetual degradation and deterioration in environmental quality and not the teeming millions of the poor South Asia and China. This view is similar to those expressed at Rio-conference (1992): 'The profligate lifestyle of industrialised countries has done more harm to the global environment than the destruction of the natural environment in poor countries to make way for infrastructure and other needs'. Obviously, it is too glaring to be ignored that the birth of a baby in U.S.A. imposes more than 100 times the stress on the world resources/ environment as the birth of a baby in poor developing countries (Ehrlich, 1972).

The Report of UNFPA (1990) also supports the same kind of view, 'the major responsibility for production of greenhouse gases lies with the

industrial rich countries which account for as much as five-sixths of world's chlorofluoro carbon's use and three..quarters of fossil fuel use'. Among developed world's residents each add 3.2 tonnes of carbon each year to the atmosphere, almost four times the amount added by their developing world's counterpart. The *State of the World*, 1997 has precisely brought out the status of nine environmental heavy weights (E-9) as given in Table1.

The foregoing reveals that the ecological consequences owe not as much to the masses as to the commercial, industrial and revenue interests of the few who are affluent and influencial in variety of ways. True, it is not the people as such but their alienation which generates wasted resources, degraded lands, an unproductive bureaucracy and the waste of man power. In this context, it is remarkable that over the centuries human beings have learnt to live in harmony with nature exercising their self regulating mechanism such as customs, traditions, religions and beliefs and other forms of social control. Here appropriate equilibrium between resource availability and human need is maintained through judicious utilisation of natural resources (Singh, 1991 and 1992). In fact, the situation got changed only after colonisation of the developing world by the developed West which resulted in a life-style that set in motion an overwhelming desire to appropriate natural resources as centres of profit. The industrial policy dependent on reckless use of natural (including forest) resources and growing need for foreign exchange contributed rather significantly to worsening of the situation. In case of forests, the timber export made way for ranches and plantation geared to further export trade. So, no wonder, as per F.A.O. report, merely 30 per cent of the population of the developed countries consumes 80 per cent of all wood processed for industrial purpose against 12 per cent that by Third World. Thus, no justification in blatantly blaming the poor masses whose simple life system has been dependent on these very resources. It is relevant to quote here Barry Commoner's views expressed in his book: Making Peace with the Earth, 'The poor countries while deprived of an equitable share of the world's wealth, suffer the environmental hazards generated by the creation of that wealth in developed nations' - a situation representing one of painful global ironies.

Imperatives and Ironies

There are certain imperatives and ironies which need to be explained for better understanding of some complexities of population-development syndrome. To illustrate, the developing countries are not in a position to spend as much on human resource as on agriculture, industry, power, transport, communication and the like because they do not have enough money to go around. Obviously, their cutting back expenditure on infrastructure of development involves risk of their

Table 1
Status of Environmental Heavy Weights

Country	Share of World Population 1996 (per cent)	Share of World Carbon Products 1994 (per cent)	Share of World Carbon Emissions 1995 (per cent)	Share of World Forest Area 1990 (per cent)
China	21.1	2.4	13.3	3.9
India	16.5	1.1	3.8	1.9
U.S.A.	4.6	26.1	22.9	6.1
Indonesia	3.5	0.7	0.9	3.4
Brazil	2.8	2.1	1.0	16.4
Russia	2.6	1.5	7.2	21.9
Japan	2.2	16.8	5.0	0.7
Germany	1.4	8.1	3.8	0.3
South Africa	0.8	0.5	1.5	0.2
E-9 Total	55.4	59.3	59.4	54.8

economies stagnating which in turn will mean that less money is available for human resource development. Thus, if they accord low priority to human resource, as they are doing, most of their economic gains are likely to be neutralised by disproportionate population growth, low levels of literacy, poor health care, low women's status, scarcity of valuable skills and so on (Population Report, 1983). As reported by UNICEF, only 10 per cent of the national budget as well as that of the foreign aid in these countries is allocated for basic social services with resultant high rate of under five deaths and malnutritioned children, India topping the list. True, economic development has distinctly disproportionate nature and is accompanied by aggravated social contradictions even in the countries marked by extreme relative overpopulation (Horlacher, 1986).

There are a few other mutually inconsistent pulls which elicit careful consideration. For example, the developing countries are faced with difficult choice: either to lay emphasis on the growth rate of their gross national product (GNP) disregarding the growth of employment or to spend the scanty national resources on expanding employment to the detriment of its economic development. There is prevalent feeling among the masses that the large number of thriving children is a great good on many counts, e.g, increase in pooled income, old age security, whereas the government and the rich section of the society lay stress on limiting the family as the sole option to serve the interest of the nation. Ironically, the fertility control measures meant for the masses are being adopted basically by the economically and socially betteroff people who expect population control coupled with self-discipline in consumption and hard toil from the masses without themselves adopting selfdiscipline in resource ownership, conspicuous consumerism, possession of wealth and power and other levers of elitism. As opined by Banthia (2000), the Registrar General of India, it was a paradox that a society claiming to be votary of non-violence saw female foetecide spreading like cancer. The falling sex-ratio in Rajasthan, Orissa, etc is nothing but indicator of the same. So, also ironical is the slogan-'growth for justice' without permitting the trickle down process to operate (Plum, 1977), and call for

egalitarian society through check on consumerism allowing just 6 per cent of world population (USA) to consume as much as one-third of the global resources. The shortage of specific size of manpower in spite of explosion in the number of unemployeds (Premi, 1990), dearth of productive job opportunities despite availability of a large number of people in working age-group (Rao, 1990), virtual enslaving of three-quarters of populations by thriving illiteracy, malnutrition, lack of hygiene, shelter, high infant and maternal mortality, low productivity caused by poor health, low nutrition, lack of knowledge and skill, etc (Mitra, 1990) in a democratic set-up of India are among other ironical situations.

In ecological perspective, as the trend suggests, while the poor countries will continue to demand funds and also a change in the North's life style, the latter will press for punitive measures to restrict the poor countries from depleting their natural resources. So will continue the ironical approaches to the problems.

Some pertinent questions vis-a-vis clarifications

There may be raised scores of pertinent questions concerning common belief that the rapid population growth is the major, if not the sole, cause of unsustainable and low level of development (Singh, 1992). To illustrate, (a) is it conceptually proved that rapid growth in population leads to proportionate decline or retardation in the process of development, and there is established correlation between the rate of growth and decline in population and increase and decrease in the rate of development?, (b) is there any yardstick or barometer by which the minimum-optimum population-development equation can be measured?, (c) can there be obtained a correlation between the total landmass of a country and the population development syndrome?, (d) is linking of growth in population with the adverse impacts of the variables of development universally true?, (e) can it be possible to close the gap between the private gains of the poor and the national loss accruing from large families, especially in view of the poor sections of the society treating the extra hands as their asset?, (f) who is guilty for demographic and environmental mess in which the world finds itself - First World or the Third World?. (g) can population control be deemed as a panacea for solving practically most of the problems of the developing world?, (h) should there be State intervention in limiting the size of family or a policy of persuation and incentive?, (i) what should be our basic approach- planning a population or planning for a population?, (j) is it advisable for the developing countries to reassign priorities to human resource over technology?, (k) is it worthwhile to continue with the existing system of development which generates and perpetuates poverty in certain areas and for certain group of people?

There may be another set of questions focussing on the role of elements, other than population, causing deterioration in situation. To exemplify, why not to blame the politician who in effect rather contribute to preventing vast majority of children from having modern education and skill; the bureaucrats who command and control rather than serve managing to acquire stronghold on economic processes; the technocrats who always resist innovation pleading for bought technology at great expense to the neglect of indigenous development; the trade union leaders who resist modernisation and upgradation of labour skills making the country a high labour-cost economy pondering to a labour aristrocracy leaving the vast majority of poor destitute (Indiresan, 1993). To add, why not to blame the host of other nondemographic factors, such as disparity in distributional patterns and allocation of resources, inequality in access to various facilities and services, inadequate and adhoc provision of infrastructures, breakdown of traditional resource system, mismatch between the cost of inputs and price of agricultural produce, lack of size-neutral effectively transferable technologies, conspicuous absence of desired priority in our spending, disorganisation of space, possessive use of public facilities, rampant corruption associated with operation of nexus at different levels and, above all, unbridled human greed causing more and more deprivation and marginalisation of the poor masses, etc, which have conspired to create undesirable state of affairs in general and adverse developmental situations in particular that are patently ascribed to rapid population growth.

The Context of India

In India, the crux of the problem is that here the incidence of population growth is unlikely to decline due to existing demographic potential (burden of past) and contemporary productive behaviour. The pity is that towards the middle of the 21st century India's hypothetical stationary population will be 1.69 billion and there will remain 'population momentum' to continue to exert pressure even after 2011 when the net reproduction rate will reach unity. Our age profile being characterised by preponderance of people below 15 years of age and small proportion of those above 65 years along with birth rate of 30 per thousand is quite unfavourable. Further, high infant and maternal mortality rates associated with lack of basic health and medical facilities; poors' looking for safety in the number of off-springs, particularly male children because of hope for care at old age; generation of pooled income, greater force of ballot power, etc; and more so greater concern for own family's future in comparison to that of national interest-all combine to create circumstances wherein it is practically impossible to restrain the rate of multiplication of population. The higher childbearing tendency of illiterate and health-poor Indian women (4.3, twice as much as required to achieve a Zero population growth) too adds negatively to the prevailing state of affairs.

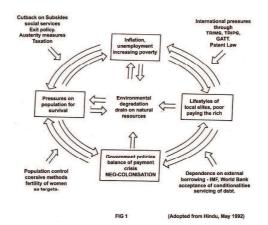
An analysis of the relationship of the population growth process with the development process in India brings out that the birth rate has dropped where per capita income is higher (eg. Goa : reduced from 33 to 18 per thousand) or literacy rate is relatively better (eg. Kerala). This phenomenon, however, does not hold true for the developing countries as a whole, as there is hardly 15 per cent of population above critical standard of living and for the remaining 85 per cent the large family is an asset or at least no problem under the perception that every additional mouth brings with it two extra hands. Also, in the opinion of World Bank (1990), the decision to have many children can be a sensible response to poverty, especially due to high mortality of children in destitute families which rather makes it essential to ensure that some children survive to support households in the parent's old age, if not soon.

Some explanations

Several scholars assert that there cannot be overpopulation in a society based on principles of justice, equality and reasons, because in such a society there exist factors which counteract excessive population increase. But the fact of matter is that present development pattern hardly cares for justice; it rather spews injustice. In this context, what is required is 'growth with justice' whereas in practice efforts are oriented towards 'growth for justice'. Generally, with rapid growth in population once the family size becomes unmanageable and fragmented and its land is reduced to a certain minimum (2-3 acres), the members are on slippery slope and they advance towards losing more or all of their land. Thus starts the circle of poverty. The possibility of such a situation is certainly greater when there occur 2 or 3 bad monsoons, lengthy illness, deaths and expensive marriages.

The capitalism encourages rapid population growth, as has been indicated by Marx who observed that the surplus unemployed and underemployed population does not arise because natural increase outstrips resource, but because the accumulation of capital which this very population makes possible allows investment in such things as automated machinery which makes the people superfluous. This superfluous number serves to drive downwages, thus, further increasing profit of the rich. The rich may reinvest capital and get richer while the poor in effort to have more income through increase in number of labourers per household can get only children.

Fig. 1 exhibits how the population growth is connected with drain on natural resources and environmental degradation; how the life style of elites affects that process; what role is played by government policies as well as international organisations in this context; how all these account for multi-faceted problems of poverty and unemployment, etc; and how the population control measures are devised. It reveals that the problem does not relate only to growing pressure of population but also to the pressure on population in terms of various constraints caused by different forces.



Concluding Observations

A proper understanding of population growth-development syndrome requires a multidimensional but integrated approach. It has to be borne in mind that the number per se are not the real measure of overpopulation, as the 'rising expectations' and the rapist and centrist tendencies associated with craze of consumerism aped by emerging affluent classes matter more in drain on ecosystem and non-renewable resources. And the fact remains: nature can satisfy the human need but not the greed. So contextual is Plum's (1977) suggestion that those advanced most in the mastery over nature need to have mastery over their inner nature, i.e., self mastery, self discipline. In view of global interconnections and interdependence among biological, social and environmental phenomena (Capra, 1985), the solution to the problem of population growth and development should be concerned as much with resource development issues for more developed countries as with family planning programme in Third World (Ehrlich, 1972). Also, there is desired attitudinal change among the rich, the elites, and powerful group at different levels along with international cooperation, as 'it is as much our world as of developed countries-certainly, in numbers, more ours than that of others'.

Our family planning programmes, which have failed to achieve optimum results for a number

of factors like ignorance, poverty, poor health, religious customs, non-involvement of people (masses) and above all, lack of political will on the part of government, should be revitalised with more human face. Obviously, better impacts may be realised when economic prosperity and social wellbeing go hand in hand which requires balance in investment on economic infrastructural facilities and human resource development, as has been visualised in a recent study of Rao (2005). Further, alongside adoption of age old imperatives of population control (e.g. reducing infant and maternal mortality, promoting literacy among women and empowering them, discouraging frequent pregnancy harmful to mother as well as child, convincing the masses about benefits of small visa-vis problems of large families, making easy availability of various family planning aids, inducing sense of social security among poor, etc.), there is needed an expanding vista of improving skills, technology, rising incomes (Mitra, 1990) which could help sustain the revolution of rising expectations.

In order to link the population growth with development in a right perspective it is essential to induce change in the existing structure and process of development wherein advantages are cornered by resource (wealth) owners equipped with a octopus like tentacles and capacities to hoard most of what is budgetwise designed for the poor, the backwards and the ruralites. It has to be kept in mind that the poor would have otherwise taken care of themselves had the minimum need facilities been allowed to reach them, had the skill formation technologies and requisite educational opportunities been given to them, had the adequate prices of their produce and wages of their labour been paid to them (Kurien, 1978). Doubtless, people will accept family planning measures if they are convinced that it is beneficial to them. However, it is encouraging to note that we are moving towards a fertility replacement level as opposed towards population disaster.

The population control programme in developing countries in general and in India in

particular are dogged by deficiencies of policies, plan strategy and implementation (D'Souza, 1990). Here the variations in parameters of population growth in different States of the country are yet to be tailored into the national framework. Now there is felt need to evolve an appropriate policy system which could effectively operate under wide range of conditions. It requires a shift from population to people, from a number game of targets and achievements to a more realistic and human approach in implementing the population programme (Bose, 1990). In this regard, the critical issue, as based on the past experience, is not the presence or absence of state intervention but the extent and quality of that intervention in keeping with principle of social well-being (radical improvements and appropriate provision of education, medicare, employment, etc.) and economic prosperity going hand in hand aiming at balance between population and economic growth. It does require integration of population factor into development planning so as to coordinate all population influencing activities carried out by government.

There is good case for establishment of National Population Commission (Sahav, 1993) which could acquire authentic and detailed information about socio-economic as well as demographic variables and regularly review the role of population factor in the formulation, implementation and evaluation of development projects and overall development planning process. A serious attempt must be made to construct a more rational model around population growthdevelopment syndrome wherein the Indian philosophy of 'Bahujan Hitay, Bahujan Sukhay' and 'Daridra Narayan' (welfare and comfort of masses and respect to poor) is given due weightage in right perspective. And it should ever be kept in mind that people are not the problem; people are the solution. We must learn to celebrate diversity- not trying to make everything uniform, as cultural diversity with inexhaustible creativity can be rich source for sustainable solution.

References

- Abraham, A.S. (1990): 'The State of the World in 2000 A.D.: Grim Prospects', *Times of India*, 4 July.
- Bose, Ashish (1990): quoted by S.M. Shah in 'A Report on International Population Conference' (Sept. 20-27, 1989), *Yojna* (Special Issue): Development and Population, Jan., p.73.
- Boserup, E. (1980): *Population and Technology*, Blackwell, Oxford.
- Capra, F. (1985): *The Turning Point*, Collins Publishing Group, London.
- Coale, Ansley J., E.M. Hoover (1985): Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospects. Princeton.
- D'Souza, Tyrone (1990): 'Need to Reorient Population Policies', *Times of India*, 11 July.
- Ehrlich, P. and Ehrilch, A. (1972): *Population, Resource, Environment*, Freeman, San
 Francisco
- Findlay, Allan and Finlay, Anne (1987): *Population* and *Development in the Third World*, Methuen & Co. Ltd., New York.
- Frenda, Marcus F. (1972): 'Mrs. Gandhi Goes to Stockholm: A Survey of India's Policies and Non-Policies on Population and Environment', American Universities Fieldstaff Reports, South Asia Series 16.
- Frenda, Marcus F. (1975): Responses to Population Growth in India, Praeger Publishers, New York
- Horlacher, D. et al. (1986): Population and Socioeconomic Development, Progress Publishers, Moscow.
- Indiresan (1983): 'Who is Ours', *The Hindu*, October, 16.
- Kurien, C.T. (1978): *Poverty, Planning and Social Transformation*, Allied Publishers Private Ltd., New Delhi.

- Malthus, Thomas R. (1826): An Essay on the Principles of Population, Vol. 1, John Murray, London.
- Mishra, G. (2000): *Malthus and His Ghost*, Manak Publications, New Delhi.
- Mitra, Ashok (1990): 'Revolution of Expectations', *Yojna* (Special Issue): Development and Population, Jan., pp. 22-24.
- Mitra, A.P. (1990): 'Influence of Population Growth on Environment', *Yojna* (Special Issue): Development and Population, Jan., p. 40.
- Narlikar, J.V. (2000): 'The Billion Booby Trap: India has no Cause to Cheer', *Times of India*, Aug. 2002
- Panandikar, V.A.P. (1990): 'Soaring Population: Rich will not help', *Times of India*, 26 June.
- Plum, Warner (1977): *Industrialization and Mass Poverty* (Translated from German by L.F. Miller), Godesberg, Germany.
- Population Report (1983): *Migration, Population Growth and Development*, Baltimore, Johns Hopkins University.
- Premi, M.K. (1990): 'Population -A Parameter in Economic Development', *Yojna* (Special Issue): Development and Population, Jan.
- Ram Prasad, V. (1992): 'Is it Population Pressure or Pressure on Population', *The Hindu*, Sunday, May 31.
- Rao, Mohan (2005): From Population Control to Reproductive Health, Sage Publications, New Delhi.
- Rao, V.K.R.V. (1990): 'Population Contributing to Production or Consumption', *Yojna* (Special Issue): Development and Population, Jan.
- Report (1990) of Planning Commission, Unemployment Level Worsening', *Times of India*, 11 May 90.
- Report (1990) of the United Nations Population Fund (UNFPA), 'The State of World Population 1990' (Excerpts given in *Times of India*), 4 July '90.

- Sahay, K.B. (1992): 'Why is Population Control Not a Success', *The Hindu*, Sept. 8.
- Sahay, K.B. (1993): 'A Population Commission to Wage the War', *The Hindu*, March 23.
- Singh, D.N. (Ed.) (1991): Population Growth, Environment and Development, Environment & Development Study Centre, Varanasi.
- Singh, D.N. (Ed.) (1992): 'Population Growth and Economic Development', *Annals*, NAGI, Vol. XII No. 1&2, pp.55-68.
- Singh, D.N.B. (1993): 'Human Resource Development or Utilization', *The Hindu*, July 1.
- Swaminathan, M.S. (1995): 'Agriculture, Food Security and Employment: Changing Times, Uncommon Opportunities', *Nature and Resources* (UNESCO), Vol. 31, No.1, pp. 2-15.

- Swamy Subramaniam (1971): *Indian Economic Planning: An Alternative Approach*, Vikas Publications, Delhi.
- Valeja, B. (2000): 'A Drastic Decline: Needless Alarm over Population', *Times of India*, 11 Sept, 2000.
- World Bank (1985): Population Change and Economic Development, Oxford, OUP.
- World Bank (1990): World Development Report on Poverty, Oxford.

Dr. D.N. Singh Professor, Department of Geography, Banaras Hindu University, Varanasi-5