

# THE STATE OF WORLD POPULATION 1981



Rafael M. Salas  
Executive Director of the United Nations Fund  
for Population Activities



## Beyond 2000

**T**HE United Nations estimates that the global population could stabilize itself at 10.5 billion in the year 2110.<sup>1</sup> The rate of decline in fertility in the future will be crucial in determining when and at what level population stabilization can be achieved. The United Nations projects three scenarios for stabilization, high, medium and low, based on modest, moderate and significant rates of decline in fertility. The high variant results in a projected population of 14.2 billion, and the low variant in 8.0 billion.<sup>2</sup> The fact that the low level could be reached in 60 years, by the year 2040, whereas the high level would be reached in 150 years, by the year 2130, shows that the ultimate level of stable population is sensitive to the speed and extent of decline in fertility. If we are able to sustain the present tempo of population programmes and policies then stabilization appears feasible at the medium variant of 10.5 billion in the year 2110.

Though the 10.5 billion stable population projected by the United Nations medium variant is less alarmist than the figures projected by other studies, it still means that the global population would have grown to be nearly two and a half times larger than the present 4.4 billion. A number of studies have indicated the nature of the impact of population growth on global resources, the global environment and global development. Therefore, we cannot afford to be complacent about the nature of these inter-relationships, minimize the pressures they generate, or under-estimate the instability they perpetuate.

Even during the present century we might not be able to claim to have provided for the basic needs of nearly half of the world's population, spread not only across the developing countries but also living in some pockets of highly advanced societies. While imbalances created by poverty, malnutrition or ill-health persist, the social tensions arising out of population pressures will permeate every aspect of the quality of life on earth, even impinging on populations outside and setting up a chain reaction. Social consequences of overcrowding, for example, have already led to increase in crime and violence in the over-populated metropolitan centres of the world. The rural areas of many countries have so far been relatively free of similar tensions, but given the patterns of future population growth and its distribution, such problems are likely to spread over much larger areas of the developing world. The 9.1 billion people who will be living in the developing countries

will most acutely feel the impact of population growth on their resources and living conditions.

### HISTORICAL PATTERNS

Fertility began to decline in the high fertility societies of Europe and North America with industrialization in the 19th century. It took 150 years for them to reach low fertility levels without any conscious public policy interventions. During the first half of the 20th century it took the Soviet Union about 40 years to achieve this transition. And, during the latter half of the 20th century, Japan has taken only 25 years to undergo this transformation.

The demographic changes established by individual response to industrialisation can be read as: first, an articulation of an abundant future – leading to more children; secondly, improved living conditions leading to longer life expectancy for future generations; and thirdly, regulation of family size, by lowering birth rates to enjoy the fruits of science and new technology. Conscious public policies in planning for even more rapid industrial development over shorter spans of time therefore cannot ignore the knowledge we now have of how crucially family size is determined by socio-economic factors. A couple's conscious decision on family size, in turn, establishes fertility behaviour. Reduction of infant mortality has an impact on fertility decline, and this can be achieved by assured maternal or child health care, supplementary nutritional programmes, upgrading of the quality of environmental health and extension of medical care facilities. The industrial development of Japan, the Soviet Union, Europe and North America has been accompanied by such programmes thus creating the conditions for fertility decline.

With this historical hindsight, it is possible for the less developed regions of the world to gain valuable lessons in planning their own population growth. Scattered evidence from a few countries or regions in the less developed parts of the world where fertility rates have begun to fall show that the rates are declining faster. Moreover, it is happening within a smaller span of time than it took for Europe to achieve similar rates of decline in birth rates. It is from such an historical path analysis over different periods of time and under different historical conditions that one feels confident in suggesting that it is within our capability now to bring

about the demographic transition in the less developed countries in the remaining two decades of this century. Integration of population with development planning which is supported by the United Nations Fund for Population Activities (UNFPA) will certainly strengthen this capability.

### QUICKENING DECLINE

The latest United Nations<sup>3</sup> assessment of population trends supported by independent evidence such as the findings of the World Fertility Survey undoubtedly signals a quickening of the rate of decline in world fertility. When the United Nations assessed world population trends in 1973, an annual average growth rate of 1.95 per cent was projected for 1975-80.<sup>4</sup> The 1978 assessment lowered the rate to 1.81 per cent.<sup>5</sup> The latest assessment, undertaken last year has further lowered the estimated growth rate to 1.73 per cent per annum for the period 1975-80.<sup>6</sup> It was based on more reliable population data for a much larger number of countries than was possible during the assessment in 1973. By now, population censuses have been completed also in a number of countries where none had ever been conducted. Such a small revision of the growth rate might appear inconsequential but its significance lies in confirming the probably irreversible downward trend in global population growth, the anticipated acceleration of this trend and its immense implications for development. United Nations estimates of population growth rates for the developing countries show an annual average growth rate of 2.10 in 1980, declining to 2.00 per cent by 1985. By the year 2000 the growth rate in developing countries is projected to decline to 1.80 per cent compared with a total world rate of 1.50 per cent per annum. The earlier projections were for rates of 1.90 per cent and 1.60 per cent per annum, respectively. These downward revisions in no way lessen the global and regional implications of development and population growth.

The decline in global population growth which began in 1965 was brought about initially by dramatic declines in growth rates in the developed countries – from a 1.2 per cent annual population growth rate in 1965 to 0.8 per cent in 1975.<sup>7</sup> During the same period the population growth rate of the developing countries rose from 2.25 per cent to 2.35 per cent,<sup>8</sup> an increase which occurred in spite of a declining birth rate because of a proportionately greater decline in mortality rates.

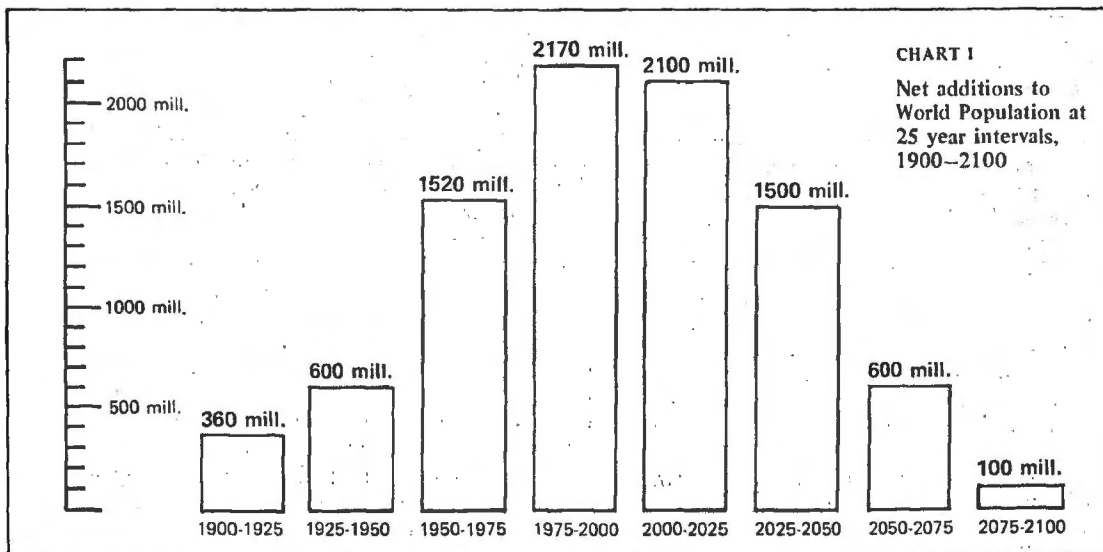
Recent data show that the rate of mortality decline had probably levelled off in the 1970s.<sup>9</sup>

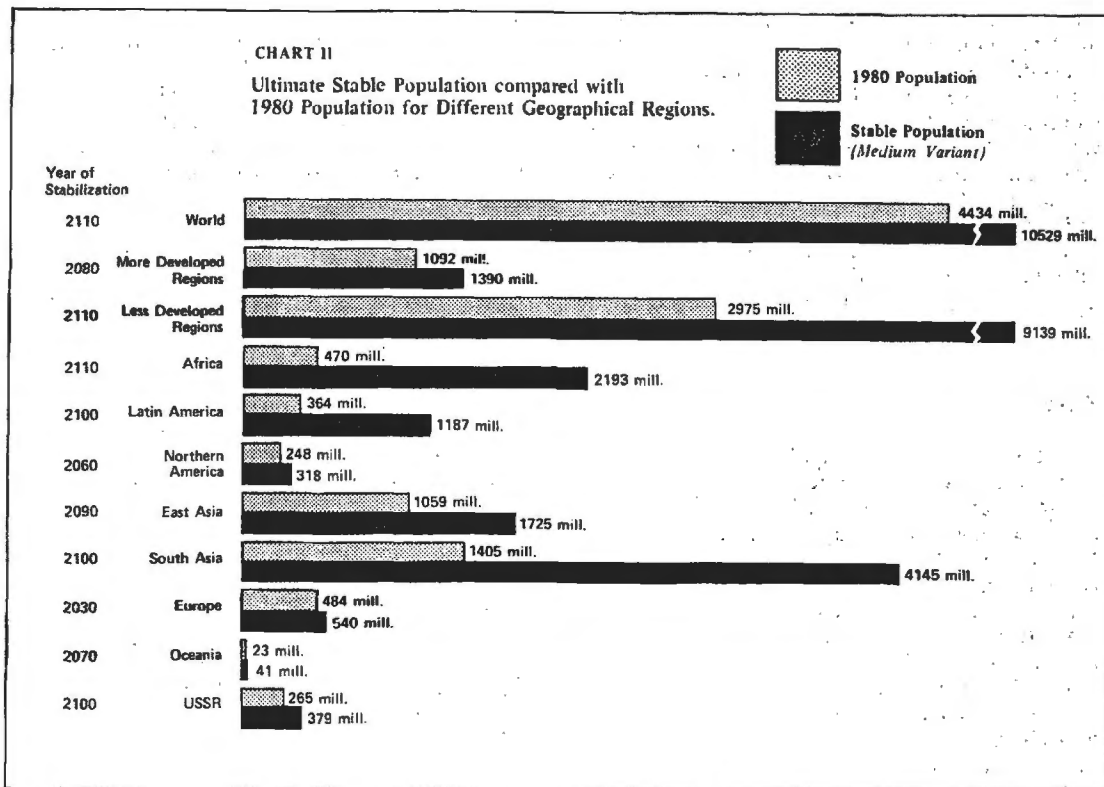
Comparisons of data obtained by the World Fertility Survey and various other studies, and deeper analysis and evaluation of the data, show the range and validity of the factors affecting fertility in the developing countries. We know that during the early phases of the demographic transition, it is comparatively easier to bring about a quicker and significant decline through comprehensive public measures in mortality rates rather than a similar decline in birth rates.

The decline in the birth rate is dependent on a host of social, economic and cultural factors which influence a couple's decision about family formation and ideal family size. Reduction of disparities in income and wealth, the opportunities offered for women to move from traditional occupations to newer occupations, number of years of schooling, population education aimed at helping people to make their socio-economic decisions and information about the best means to act on those decisions – all these contribute to a decline in fertility rates.

Two caveats have to be made in regard to declining global fertility, and lower growth rate. First, the current population growth rate in the developing countries is still higher than the growth rate that prevailed during the period 1950-55. All our efforts have only helped to arrest the rising trend in the population growth rate in the developing countries and to set it in reverse. Secondly, annual increments in total population will continue to be higher during the rest of this century in spite of the fact that the annual global growth rate is declining. It is estimated that in 1980 the net addition to global population was of the order of 80 million, and the net increments will be close to 90 million by the year 2000 because of annual increments continuing to rise. Even a declining birth rate when applied to an ever-expanding population base yields larger and larger annual increments in total population. Hence the warning in last year's State of World Population Report that the decline should not be taken to mean that "the population problem" had been solved. On the contrary, in the coming years the pressures generated by increases in the annual numbers will intensify problems associated with population growth. (See Chart I)

The relationship between increases in absolute numbers and the global growth rate is illustrated by examining population growth in this century. During the first quarter of this century the global growth rate





was 0.8 per cent, and the net increase amounted to 360 million. During the second quarter of the century the growth rate rose to 1.1 per cent and the net increase which resulted was 600 million. During the next quarter, 1950-75, the growth rate peaked at 1.9 per cent and the net addition to global population jumped to 1.5 billion. Since then the growth rate has declined, and yet the net addition to the total world population will be 2.2 billion in the last quarter of this century.<sup>10</sup>

### REGIONAL DEMOGRAPHIC DIVERSITY

The differences in fertility levels and in rates of decline in different regions of the world will result in different regions attaining stabilization at different times in the future.<sup>11</sup>

While the largest number will be added to the population of South Asia, that region is expected to reach the stable level in the year 2100, with an increase in population from the present 1.4 billion to 4.1 billion. East Asia, including China and Japan will reach a stable population of 1.7 billion in the year 2090, because of the already low population growth rate attained by China, adding only 0.5 billion to its current population of 1.2 billion. Africa, the region where stable population could be attained only by the year 2110, is expected to add 1.6 billion to its current population and reach 2.1 billion. Latin America, achieving stabilization by the year 2100, will add 0.8 billion to level at 1.2 billion. Europe, reaching stabilization earliest, in the year 2030, will have a population of 0.5 billion, adding only 0.05 billion to its current population; whereas the Soviet Union will have 0.38 billion people when it achieves stabilization in the year 2100. North America, stabilizing its population in the year 2060, will account for 0.32 billion.

South Asia and Africa will thus between themselves account for over 60 per cent of the world's total population at the time of stabilization. These two regions not only contain the greatest proportions of

poor people, whatever the criteria we use to define poverty, but also include some of the poorest sub-regions and countries of the world. Malnutrition, ill-health, illiteracy and the lowest life expectations are predominant in South Asia and Africa, accompanied by inadequate technology and economic organization. It is not very difficult to imagine the crippling burden their resources will have to bear even at stabilization from a combined population of 6.2 billion. In this context, one cannot help wondering whether such regional pressures of population or resources might not still pose some threat to global peace and stability even in the 21st century.

During the 20th century the decade of the Seventies has been marked by the dividends in hope issued by a global fertility decline, the only such dividends issued during a decade which began to generate disequilibrating forces in the international economic system. Have these last 10 years not reassured us that it is worth continuing to strive towards eliminating disparities caused by lack of population planning? (See Chart II)

### Africa

Fertility behaviour in African countries clearly represents an exception to the prevailing global pattern. The crude birth rate for the whole continent of Africa has remained practically constant between 1950 and 1980, changing only from 48 to 46.<sup>12</sup> There are a number of countries where the crude birth rates are close to 50. In fact, high fertility rates - crude birth rates over 45 - are the general rule in all countries of Africa, except a few such as Egypt, Gabon, Réunion, South Africa, and Tunisia. The highest birth rate estimated for any country in the world is for Kenya, 54 in 1980.<sup>13</sup> These high birth rates are reflected in the estimates of African populations at the time of stabilizations. Most of the African countries are undergoing tremendous changes in social structure and in economic organization. The inter-relationships between these profound changes in

African society and the demographic variables need much further investigation for an understanding of the forces determining fertility in these countries.

One of the factors which possibly discourages a reduction in fertility in African countries is the prevalence of high levels of infant and general mortality rates. Since decline in mortality usually precedes decline in fertility, it appears that African fertility levels will continue to be high unless mortality rates are brought down. In many African countries crude death rates exceed 20 per 1000 population and the highest death rates anywhere in the world are found in this region.

## Asia

On the basis of the levels of birth rates the countries of Asia can be divided into three broad groups, though exceptions can be found in each group.<sup>14</sup> The highest fertility level, with an estimated birth rate during 1975-1980 of around 45 per 1000 population, is in the West Asian region, comprising the geographical area lying between Pakistan and Turkey. The lowest birth rate is in the East Asian region including China, which has made considerable headway in the demographic transition. China's crude birth rate is estimated at 18.3 per 1000 population in 1978 and the aim is to bring down the natural rate of increase in population to 5 per 1000 by 1985. China's one-child family policy incorporates both financial incentives and disincentives.

Intermediate levels of crude birth rates characterise the countries of the rest of Asia, in South and Southeast Asia. In this group, a few countries, such as Sri Lanka and Singapore, have succeeded in reducing their birth rates to a significant extent. Bangladesh, on the other hand, still has a crude birth rate around 45. But there are clear indications that this region is poised for a significant reduction in birth rates.

Mortality rates have declined considerably everywhere in this region during the recent past with a few exceptions. The East Asian region has the lowest mortality rates, below 10 per 1000 population, thus accelerating the decline in fertility in this region. Mortality rates in the West Asian region are generally lower than in South Asia. However, in some countries of Asia, such as Afghanistan, Bhutan and Nepal, crude death rates continue to be high, at 20 or more per 1000. At the time of population stabilization Asia's population will still constitute nearly 60 per cent of global population.

## Latin America

On the basis of crude birth rates the Latin American countries can also be classified into three broad groups.<sup>15</sup> Argentina, Chile and Uruguay, in the Temperate zone, have the lowest birth rates in this region, between 20 and 25 per 1000 population. All the Caribbean Islands, except Haiti and the Dominican Republic, are in the second group with a crude birth rate well below 30 per 1000 population, which is also the dividing line for birth rates between the developed and developing countries. The countries of Middle America and the Tropical South American regions form a third group, and crude birth rates for many within this group exceed 35 per 1000 population. Generally speaking, there has been hardly any significant decline in the overall birth rate, in this area although Mexico, Panama and Guyana may be poised for declines in birth rates.

The Mexican crude birth rate which declined by 19 per cent during the period 1970-1978 might decline further as a result of a new population policy.

Mortality rates almost everywhere in Latin America are among the lowest in the less developed group, and, therefore, the resistance of fertility rates to decline cannot be attributed to the prevalence of high mortality rates. The population growth rates in Middle America and Tropical South America are even higher than the growth rate of South Asia due to this difference between birth and death rates. All these factors will affect both the time-frame and the numbers when stabilization of population is reached in this region.

## More Developed Regions

When the global population is stabilized the share of the more developed regions will decline from 24 per cent in 1980 to 13 per cent. Uniformly low levels of fertility characterize this group, and in 14 out of 22 countries the fertility rate in 1977 had fallen below the replacement level of 2.1. Within this group, the countries of Northern and Western Europe have the lowest fertility rates. This group, on the other hand, has to consider initiating major cultural, social and economic policies to cope with their rising percentages of people over 65 years old. Whereas in 1980 people over 65 constituted 11 per cent of their population, by the year 2000 this will increase to 13 per cent and by 2025 to 16.7.<sup>16</sup> Europe and North America will reach population stabilization in the years 2030 and 2060 respectively.

## FAMILY SIZE

The decline in fertility accompanied by lowering of growth rates depends on the decisions of couples and individuals regarding family size. It is indeed in recognition of this reality that the World Population Plan of Action emphasizes the right of couples and individuals to decide freely and responsibly the number and spacing of their children and to have access to the information and means to do so. This has been further endorsed in the Colombo Declaration on Population and Development and the Rome Declaration on Population and the Urban Future. The World Plan of Action also re-emphasizes the sovereign right of each nation to choose the population programme most appropriate for its needs and requirements. In pursuance of this, the United Nations Fund for Population Activities maintains strict neutrality, leaving it to governments themselves to make available the information, education and means for couples and individuals to exercise this right, in the context of their own population characteristics and social and cultural traditions.

The data collected by the World Fertility Survey shed some light on the spread of family planning information, the extent and availability of choices, the practices followed, and the impediments still prevailing in knowledge and means for couples and individuals to exercise their right.<sup>17</sup>

In 14 out of 20 developing countries although nearly 90 per cent of the ever-married women in the reproductive age knew of one or more family planning methods, practices fell far short of knowledge because access to means were often unavailable. For example, in Pakistan, whereas 75 per cent had knowledge of family planning only 32 per cent had access to the means to practice it; and whereas nearly half of the

women did not want to have another child only 6 per cent of currently-married women in Pakistan practised limitation of family size.

On the other hand, in the Republic of Korea, almost all the women in the reproductive age knew of a method, and 86 per cent also had access to the means to exercise their choice; and, similarly, while 74 per cent did not want any more children, 35 per cent of married women in the Republic of Korea were using a method to limit family size. Meanwhile, in a country like Nepal only one-fifth of currently married women even have information and knowledge to limit family size. The crude birth figures for these countries reflect the differences in access to knowledge and means. In Pakistan the crude birth rate declined from 46.8 per 1000 in 1960-65 to 43.1 per 1000 in 1975-80; in Nepal, it declined from 45.8 per 1000 to 43.7, a comparatively minor decline; in the Republic of Korea the decline was from 39.6 to 24.3.<sup>18</sup>

In general, impressive gains have been made during the last decade in enabling people to exercise their basic right to plan their family size. For example, in India, the proportion of married women in the reproductive age group of 15-44 who practise family planning has increased from 8 per cent in 1969 to 23 per cent in 1979; and in Malaysia, from 6 per cent to 36 per cent during the same 10 years.<sup>19</sup> In Mexico, between 1973 and 1978 the increase has been from 13 per cent to 40 per cent; and in Thailand, between 1971 and 1979, from 10 per cent to 39 per cent.<sup>20</sup> Progress has been comparatively slow in countries ranging from Bangladesh to most of the countries of the African region, and some of the countries in Middle America and Tropical South America.

It has been found that the age at marriage, which is influenced by prevailing cultural and social norms, is another of the most important determinants of family size. In the less developed countries women who marry early invariably have more pregnancies than women who chose to marry later.

The results of the World Fertility Survey data collected also show that women who reside in urban areas and whose husbands are engaged in non-agricultural occupations have lower fertility compared with women in rural areas whose menfolk are in agricultural occupations. Age at marriage, choice of occupation and location of residence, are all closely related to education, and the higher the levels of education the lower the fertility. It is thus clear that the spread of education and changes in traditional patterns of occupation have a significant impact on fertility. Public policies adopted in Sri Lanka and other areas in the less developed region show that, even in societies with low per capita incomes, fertility can decline when rural populations have access to health and education.

### **ASSISTANCE FOR POPULATION PROGRAMMES**

The World Population Plan of Action while recognizing the basic right of couples and individuals to determine family size also emphasizes that population policies should be an integral part of overall development policies geared to optimise available resources for balanced growth. The integration of population policies in the social and economic goals and strategies of some countries has already hastened their demographic transition. Generally speaking, countries which are making significant strides toward self-reliant socio-economic advance are also the ones which are succeed-

ing in implementing population programmes. Several of the less developed countries have committed substantial human and developmental resources to their population programmes. To supplement this, international assistance for these programmes has averaged about \$250 million per annum in the Seventies. This assistance becomes either critical, crucial or catalytic in implementing population programmes.

It is critical in the case of the poorest among the less developed countries, especially in Africa, where even the data base was lacking, let alone the training and skills needed to implement these programmes. In Africa, 43 per cent of UNFPA assistance was for data collection and 24 per cent for family planning.

International assistance is of crucial importance to a number of medium-sized countries in which family planning programmes receive a small portion of limited domestic resources. For instance, Bangladesh clearly illustrates the crucial nature of international assistance for population programmes, which was \$6.2 million of a total of \$9.4 million in 1974; and \$9.3 million of a total of \$14.4 million in 1976.<sup>21</sup>

In Asia and Latin America, however, international assistance is catalytic, as is shown by the increasingly large amount of their domestic resources allocated to population programmes. In these areas international assistance for research, equipment, experts and local costs supplements large-scale domestic investment in these programmes. During 1979-81, 65 per cent of the assistance of UNFPA for Asia was for family planning, and, 54 per cent of the allocation for Latin American was also for family planning.

In India and China, which have committed substantial domestic resources to population programmes, international assistance has been largely supplementary. India spent \$600 million on family planning during the period 1974-79, in which the foreign assistance component was \$84 million.<sup>22</sup> China has mostly depended on its own resources for implementing its population programmes, by sustained inputs of human skills and energies and by creating the climate for the participation of its people in achieving their population goals. Of late, China has accepted some international assistance through UNFPA for its data collection and family planning programmes.

The UNFPA has emerged as the principal multi-lateral funding organization for integrated population and development programmes. Its annual budget amounts to \$150 million per annum and its neutral and flexible policies have encouraged countries in the world to make efforts towards correcting the imbalances between global population growth and global resources.

### **TOWARDS GREATER COMMITMENT**

The year 1980 is a watershed in our assessment of the global future. The Report of the International Commission on North-South Dialogue, and the conclusions of such conferences as the Toronto Conference on the Global Future, and the Rome Conference on the Urban Future, have helped to clarify many of the major issues that lie ahead. We have almost reached a consensus that integrated global development and the prospects for global stability are intertwined and depend on an enlightened understanding of the emerging demographic profile.

Population stabilization, indeed, will be a crucial determinant of the prospects for global stability beyond the year 2000 and with a time horizon of the next century. Last year's State of World Population Report

was a reminder that although global fertility had begun to decline, a greater international commitment would still be needed to resolve the population problem at the global level. Although in the long run it might be possible to overcome the limitations on economic growth imposed by resources, through the development of new technology to find substitutes for scarce natural resources and to harness renewable energy sources, imbalances may persist in the developing countries between population and resources. In this context it may be worthwhile to undertake a longterm exercise to assess the need for population assistance with a view to

achieving stable population within the time-framework laid down by the United Nations. Such an exercise could identify the quantum of total population assistance, the time-profile for such assistance, the relative significance of the various components of population changes, the regional distribution of assistance, and the options available.

The success of population programmes, as indeed of all development programmes, ultimately depends on the participation of people. A particular kind of future therefore becomes thinkable if the goals of development embody the wishes of people.

#### REFERENCES

1. United Nations Department of International Economic and Social Affairs, *Long-range Global Population Projections*, Population Division Working Paper, 1981 forthcoming.
2. Ibid.
3. United Nations, Department of International Economic and Social Affairs, *World Population Prospects As Assessed in 1980*, January 1981.
4. United Nations, *World Population Trends and Prospects by Country, 1950-2000: Summary Report of the 1978 Assessment*, 1979.
5. Ibid.
6. Op. cit., January 1981.
7. United Nations Department of International Economic and Social Affairs, *Report on Monitoring of Population Trends*, ESA/P/WP.68, December 1980.
8. Ibid.
9. Davidson R. Gwatkin, *Indicators of Change in Developing Country Mortality Trends: The End of an Era*, Population and Development Review, Vol. 6 No. 4, 1980.
10. Op. cit., Population Division Working Paper.
11. Ibid.
12. Op. cit., January 1981.
13. Ibid.
14. Ibid.
15. Ibid.
16. United Nations Department of International Economic and Social Affairs, *World Demographic Indicators: Estimates and Projections - as Assessed in 1980*, January 1981.
17. Op. cit., December 1980.
18. Op. cit., January 1981.
19. Dorothy L. Nortman and Ellen Hofstatter, *Population and Family Planning Programmes*, 10th Edition 1980, Population Council.
20. Ibid.
21. Ibid.
22. Ibid.