INTRODUCTION

Expressions like ‘teeming millions’, the population ‘bomb’, ‘overpopulation’, ‘the population problem’ have become commonplace in the media, at meetings and seminars and even during casual discussions over a cup of tea. Sometimes this discussion is about poverty, sometimes about the environment or even when there is a traffic jam or when railway reservations become difficult to obtain. These words and expressions are actually loaded, unconsciously drawing on theories and arguments put forward by some thinkers.

Serious thinking about the issue of population started some two hundred years ago. Much of the general discussion on population (especially with regard to overpopulation) is based on the alarmist view that population is a threat to middle class survival.

The opposite view – that population is not a serious problem -- is not so aggressively promoted and thus has not gained wide currency. The logic here is that people are a resource and the poor opt for larger families as part of their survival strategy. There is also a big debate about the role and position of women in entire population-related discussions, policies and programmes. For the not-so-well-informed person, the entire issue becomes further clouded when statistics and studies are quoted or different technical terms used.

In this booklet we will try to acquaint the reader with some of the debates, issues and terminology associated with population and demography. An attempt will also be made to place the issue of population and demography in the context of the present social reality in the country. A separate section - Reproductive Health- Policy and Advocacy -- will deal with different population-related policies and how they evolved over time.
India’s population crossed the billion mark in the year 2000, and this represented a three times growth in the population in the last fifty years. This growth has always been a matter of grave concern for planners and development workers. The provisional figures released after the census 2001 reveal the following situation-

In this section some of the concepts and indicators related to population will be examined.

### Total population

<table>
<thead>
<tr>
<th></th>
<th>1,027,015,24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>531,277,078</td>
</tr>
<tr>
<td>Females</td>
<td>495,738,169</td>
</tr>
<tr>
<td>Sex ratio (females per 1000 males)</td>
<td>933</td>
</tr>
<tr>
<td>Density of population (per sq.km.)</td>
<td>324</td>
</tr>
<tr>
<td>Decadal growth rate</td>
<td>21.34%</td>
</tr>
</tbody>
</table>

### Demography and Population Studies

The study of human population is known by the two terms - demography and population studies. In many cases these two terms are used interchangeably, but some scholars also try to distinguish between the two. Broadly speaking, population studies is concerned with understanding what are the kinds of changes taking place in the size and nature of human populations. It is also concerned with why these changes are taking place. Demography refers to the hard core analysis of numbers while population studies look at the behavioural aspects affecting the reproductive behaviour of people.

Fertility, mortality and migration are the three basic aspects which influence the population of a particular place.

### Mortality Measures

Information about mortality, or how deaths take place within a community, is very important from the point of view of estimating the health of a community and understanding how it will grow. If the rate at which people die is more that the rate at which births occur the number of people (population) will decrease and the reverse will occur if the death rate is lower than the birth rate. Some of the common measures of measuring mortality in a community are given below-

**Crude Death Rate (CDR)** - This is a widely used index of mortality, but it is not regarded as a very sensitive one. It is calculated by dividing the total number of deaths in a community from all causes by the mid-year population of the community and expressing the result in terms of 1000 population. Disease-specific and age-specific death rates can be calculated in a similar way by modifying the numerator and the denominator in the equation. By and large, developed nations tend to have lower death rates than developing nations, but the gap has been rapidly closing over the last few decades.

**Infant Mortality Rate (IMR)** - The term ‘infants’ refers to children under the age of one year, and they are supposed to be specially vulnerable to different diseases and consequently to death. This measure is regarded as a more sensitive reflection of the health status and well-being of a community. In actual terms it is calculated as the
ratio of the total number of children dying under the age of one year to the total number of live births occurring in the year, expressed per thousand live births. The

Table 1: IMR of selected Indian states

<table>
<thead>
<tr>
<th>State</th>
<th>IMR-NFHS-1</th>
<th>IMR NFHS-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerala</td>
<td>23.8</td>
<td>16.3</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>50.5</td>
<td>43.7</td>
</tr>
<tr>
<td>Punjab</td>
<td>53.7</td>
<td>57.1</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>67.7</td>
<td>48.2</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>99.9</td>
<td>86.7</td>
</tr>
<tr>
<td>Orissa</td>
<td>112.1</td>
<td>81</td>
</tr>
</tbody>
</table>

difference in IMR between the developed and developing nations can be to the order of ten times. Developing nations have an IMR in the region of 5-10 per 1000 live births and developing nations about 100.

Maternal Mortality Rate (MMR) - This is a very significant indicator of the state of health services and well-being of women in a society. It is measured as a ratio of the total number of deaths in women which are attributable to pregnancy and childbirth, divided by the total number of live-births in a community expressed in 100,000. In practical terms it is difficult to indicate deaths which are remotely attributable to childbirth, so all maternal deaths in pregnancy and up to 42 days after childbirth are considered for this purpose. Unfortunately, accurate information about maternal mortality is often not available in many developing societies. The difference in MMR between developed and developing nations tends to be the highest among the three indicators discussed.

Table 2: Maternal Mortality Ratio in selected Asian Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>MMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sri Lanka</td>
<td>30</td>
</tr>
<tr>
<td>China</td>
<td>115</td>
</tr>
<tr>
<td>Thailand</td>
<td>200</td>
</tr>
<tr>
<td>Pakistan</td>
<td>340</td>
</tr>
<tr>
<td>Indonesia</td>
<td>390</td>
</tr>
<tr>
<td>India</td>
<td>407</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>850</td>
</tr>
<tr>
<td>Nepal</td>
<td>1500</td>
</tr>
</tbody>
</table>

(From-UNFPA India-Briefing sheets, July 2000)

Table-3: Mortality and fertility figures of selected Indian states (SRS )

<table>
<thead>
<tr>
<th>State</th>
<th>CBR-96</th>
<th>CDR-93</th>
<th>MMR-97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamil Nadu</td>
<td>19.2</td>
<td>8.2</td>
<td>195</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>23.2</td>
<td>7.3</td>
<td>135</td>
</tr>
<tr>
<td>Punjab</td>
<td>23.5</td>
<td>7.9</td>
<td>196</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>34</td>
<td>11.6</td>
<td>707</td>
</tr>
</tbody>
</table>

Measuring Fertility - Fertility refers to the actual births that women undergo. Different fertility measures are used to measure the total number of births that
take place either in a community or at the level of an individual woman. Fertility behaviour has been one of the most widely studied aspects in the field of population studies. Some of the commonly used measures of fertility are described below.

**Crude Birth Rate (CBR)**- This the simplest measure of fertility and is calculated as the ratio of the total number of live births in a community divided by the total mid-year population in a particular year and expressed per thousand population. It is not considered a very sensitive measure of actual fertility because the calculation includes a large group which does not have the ability to give birth.

**General Fertility Rate (GFR)**- This is a more accurate measure of fertility in the community and the denominator is restricted to women in the age bracket 15-44, because that is the reproductive age group. Even more specific rates refer to women in different age brackets.

**Total Fertility Rate (TFR)**- This is a slightly different indicator because here the rate does not refer to a community as a whole but to individual women. This rate is very commonly used and refers to the total number of childbirths an individual woman undergoes in her entire reproductive life. The calculations involved are complex, but it is a useful measure to compare the fertility of individual women across different periods of time or across different areas.

**Net Reproductive Rate (NRR)**- This rate refers to the potential reproductivity of a population by calculating the average number of daughters born to mothers. The assumption being that if there are more daughters born to the succeeding generation the overall population is bound to increase- because there will be more child-bearers in the future. When the NRR is less than one then the population can be expected to decrease as there will be fewer numbers of child-bearers in the future. An NRR of 1 is referred to as Replacement Level Fertility because at this rate total number of current childbearers/mothers are being replaced by an equal number of future childbearers/daughters. India had a goal of NRR 1 by 2000.
Table-4: Desired Demographic Goals

<table>
<thead>
<tr>
<th>Indicator</th>
<th>By 2000 (6 Plan estimates)</th>
<th>By 2006-7 (8th Plan estimates)</th>
<th>Actual Situation-2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRR</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>CBR</td>
<td>21</td>
<td>21.7</td>
<td>26.1 (SRS 99)</td>
</tr>
<tr>
<td>CDR</td>
<td>9</td>
<td>7.4</td>
<td>8.7 (SRS 99)</td>
</tr>
<tr>
<td>IMR</td>
<td>60</td>
<td>48</td>
<td>77 (SRS 99)</td>
</tr>
<tr>
<td>LEB</td>
<td>64</td>
<td>66.1(M)67.1(F)</td>
<td>64.6 (RGI)</td>
</tr>
</tbody>
</table>

Migration- This is the third important determinant of the total population of the place after births and deaths- and so demographic study is also concerned with how and why people move from one place to another. Simply stated, migration refers to the movement of people from one place to another. The UN has added that the movement or change in residence should be for a minimum period of one year and that some administrative boundary should have been crossed. People usually migrate after marrying (especially women) or in the search of livelihood. Migration is either internal or international. The internal migrant is referred to as an in-migrant or an out-migrant and the person who crosses international borders an immigrant or emigrant depending on whether s/he is coming in or going out. In many cases migration has a significant effect on the situation of both the place the person leaves or goes to.

Demographic Transition- This is a theory which tries to explain how the population of a particular region changes over a period of time with advances in the economic and social conditions. According to this theory early agrarian life was characterised by high rates of birth and death with no consequent increase in the population (high stationary phase). This was followed by the early expanding phase, where due to advances in the field of health services and economic situation the death rates declined fast but the birth rates were still high. In the third phase, the birth rates too declined and the growth rates started declining- late expanding phase. In the fourth or low stationery phase, birth rates and death rates again match each other but both the figures are very low. In the fifth and final phase, the birth rates reduce even further while death rates have reached their lowest possible level and are more than the

Chart 2: Annual exponential growth rate in India in the last century in %
birth rate. Here the population starts declining. This theory is based on the historical observations in developed countries. Many countries today are not following this typical model which correlated development with population growth.
One feature of population growth that needs to be understood is the concept of **demographic momentum** which refers to the interesting phenomenon of growth in population which continues to be high even after birth rates have declined. This is because the people born before the birth rate declines will continue to reproduce for a period of twenty years to twenty five and during this period the growth rate continues to be high despite there being low birth rates.

**Sex Ratio** - This is the ratio of the population of men to women in a country or region. It is expressed as the number of women for every thousand men. An inverse sex ratio refers to the situation where the number of women for thousand men is less than one thousand. This inverse sex ratio usually denotes a lower social position of women. In India the sex ratio has always been inverse and this is also true of China and other South Asian countries. In other, particularly non-Asian countries, the number of women is usually more. In 2001, the sex ratio in India stood at 933.

**Table 5: Sex Ratio of Selected Indian States (Census-1951-2001)**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>946</td>
<td>841</td>
<td>930</td>
<td>933</td>
<td>927</td>
<td>933</td>
</tr>
<tr>
<td>Kerala</td>
<td>1028</td>
<td>1022</td>
<td>1016</td>
<td>1032</td>
<td>1036</td>
<td>1058</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>941</td>
<td>936</td>
<td>930</td>
<td>937</td>
<td>934</td>
<td>922</td>
</tr>
<tr>
<td>Punjab</td>
<td>844</td>
<td>854</td>
<td>865</td>
<td>879</td>
<td>882</td>
<td>874</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>910</td>
<td>909</td>
<td>879</td>
<td>885</td>
<td>876</td>
<td>898</td>
</tr>
<tr>
<td>Orissa</td>
<td>1022</td>
<td>1001</td>
<td>988</td>
<td>981</td>
<td>971</td>
<td>972</td>
</tr>
</tbody>
</table>

**Juvenile Sex Ratio** refers to the sex ratio that exists in the population in the age group 0 to 6 years. This is considered to be a more sensitive index of the status of women because the adult sex ratio is often influenced by migration. If the degree of male out-migration is high from a certain area the area will have a very favourable sex ratio (eg. certain districts in eastern UP) while the converse will be true for urban areas where male in-migration can be assumed to be very high. These figures then can be very confusing. The sex ratio of the 0 to 6 population is not influenced by migration and thus is considered more reliable. In the 2001 census a very alarming trend of dropping of juvenile ratios has been noticed and this is especially true of the so-called developed states like Punjab, Haryana, Himachal Pradesh and Gujarat. This could be due to pre-natal sex selective abortion, denying girl children the chance to be born.

**Chart: 3**

Decline in juvenile sex ratio compared overall sex ration

**Population Pyramid** (Age-Sex structure)- When the population of a particular region is arranged graphically according to age-groups and sex, we get a graph which resembles a pyramid. This population pyramid provides a lot of information about the composition of a particular society and its situation. In a typical developed nation, where the
birth rates have declined a considerably long time
ago and the life expectancy of the population is quite high, the population pyramid is in the shape of a column while in a different country where birth rates are high and life expectancy is lower, the pyramid is shorter and more acute.

It is clear from the Indian pyramid that the Indian population is much younger, and about 40% of India’s population is usually under the age of 15. This position has held steady for a long time. On the other hand, the proportion of population above the age of 60 is increasing, due to decrease in mortality. The dependency ratio refers to the proportion of under-15s and over-60s to the population between 15 and 59. The dependency ratio in India is about 75%.

**Chart 5 : Population Pyramid of India (NHFS-1998-99)**

**Life Expectancy** - This is a measure of how many years a person is expected to survive in the prevalent situation. This measure can be calculated at any particular age, though the common practice is to refer to life expectancy at birth. In some situations, life expectancy at one year of age is also considered and this figure is usually more than the life expectancy at birth, because the risks of dying in the first year are high. India has made dramatic progress in life expectancy at birth and from a lowly figure of about 31 in 1951 it has increased to around 60 years in 1991. Life expectancy at birth of women is usually higher than that of men. In India this was not
the case till very recently because despite staying at home women had to face much higher risks primarily related to maternal mortality.

**Growth Rate** - This is a figure which is the nightmare of Indian planners and demographers. It refers to the overall growth of the population and is calculated either annually or every ten years. The decadal growth rate in India is over 20% with the north Indian states of Uttar Pradesh, Bihar and Madhya Pradesh having a decadal growth rate of about 25% per cent during 1981-91. South Indian states like Kerala and Tamil Nadu on the other hand had decadal growth rates of about 14% in the same period. Annual growth rates are less than 10% of decadal growth rates because the growth is cumulative. Annual growth rate in our country is around 2%.

**Population Projection** - This is an estimation or forecasting of the population of a particular region at some point in the future. In order to make this projection, complex mathematical calculations are done utilising the age-sex distribution, mortality, fertility and migration figures or the region. Different scholars use different assumptions about growth and it is possible to come up with different figures using different methods. Population projection is an important tool for planning and policy formulation.

**Sex-disaggregated data** - Many of the indices described above are used to gauge the status of a particular region be it a state or a country. These macro indices often do not relate the true picture of women, particularly the discriminations that women have to face. In order to understand the differential situation of women and men in a particular place it is always good to get sex-disaggregated data. Sex ratio by its very nature provides differential information. Other demographic indices on which sex disaggregated information is worth looking at include IMR, CBR and CDR, Life Expectancy and so on.

**Sources of Demographic Information**

**Census** - The enumeration of the entire population of a country or a region at a particular time is known as a census. Usually census is conducted at definite intervals which in India is after every ten years. During a census, every individual's particulars are separately recorded, and every effort is made to cover the entire territory. Ideally, the whole effort should be done on a single day. Census is usually the primary source of basic population data at the national or state level. This data is required for various administrative, planning and research purposes.

**Census in India** - The first comprehensive census in India took place in 1881 and since then has taken place after every ten years. The last census was in the year 2001. The census is the responsibility of the Union Ministry of Home Affairs. Before 1951
a temporary census organisation would be set up for every census but since then a permanent office of the Registrar General has been set up. At the state level there are Directorates of Census Operations. The Registrar General is responsible for census, registration of birth and deaths, and for conducting other relevant surveys. The census is conducted in accordance with the Census Act of India (1948).

**How a census is conducted** - Conducting a census in India is a very large operation because of the size of the population and the extent of the country. A large number of enumerators are used for the purpose which includes primary school teachers, village level officials and patwaris, clerks and government office employees. The total number of persons involved during the census of 1991 was 1.7 million. The first activity of the census is the house-listing which is done before the actual headcount starts. Each house is given a unique number and information about the house including its type, purpose, size, number of inhabitants and so on are recorded. During the last census, availability of toilets was included in the information gathered. This is followed by the enumeration process which ideally should take place on a single day. There are two types of enumeration - *de facto* - where all persons who spent the night in a certain house on the particular day are counted there or *de jure* where all persons normally residing in a particular house are recorded together.

In India the *de jure* method has been in use since 1941. The ‘individual slip’ is the core of the Indian census and in 1991 information on 23 different items was recorded under four broad heads. These are Demographic and Social, Educational, Migration and Economic. The actual number and items under which information is obtained has varied from census to census.
Census 2001

The first step was the preparation of a complete and unduplicated list of all geographical entities in the country which included all states, districts, tahsils/taluks/community development blocks, villages and towns. This was done before the census was to take place but three new states were created just three months before the census was to take place and this list had to be revised.

Since 1961 to 1991 two questionnaires were used - the Individual Slip and the Household Slip, but this year only one compact Household schedule was used.

Census operation was carried out in two phases - the House numbering and Houselisting operation followed by the Population enumeration. The first phase was completed between April and September 2000. The Population Enumeration was done between 9th and 28th February 2001, with a revision round between 1st and 5th March. The houseless population was enumerated on the night of 28th February 2001. The referral moment was taken to be 00.00 hours on March 1st, 2001.

Over two million enumerators and supervisors were involved in the exercise covering 220 million households living in 593 districts, 5564 tahsils/taluks, 5161 towns and around 6.4 lakh villages.

How Census data may be obtained - Information gathered during the enumeration process is compiled in summaries which are prepared district-wise. Primary census data is available up to the village level, while information about the economic and migration status is available in tables up to the tehsil level. All this data and general background information of the district is published in the District Census Handbooks since 1951. Unfortunately, it takes quite some time after the census for these to be released, but fortunately the information is now available in diskettes and CD Roms from the office of the Registrar General or from the State Directorates. These products are priced, but the provisional data from the Census 2001 is also available from the census 2001 website - www.censusindia.net.

Registration of Vital Events - Birth, death, marriage and divorce are called vital events in demographic parlance. According to the Registration of Births and Deaths Act (1969) it is compulsory for all births and deaths in the country to be recorded. In urban areas this is conducted by the municipalities while in rural areas the responsibility has been given to gram pradhans. Based on these records, the Registrar General of India compiles the Vital Statistics of India. Unfortunately the recording procedures are still not complete and these data can be inaccurate.

SRS - Sample surveys are a method of collecting information in which, instead of obtaining information from the whole population, it is obtained from a representative set and the conclusions applied to the whole group. The Sample Registration System or SRS is a survey which has been ongoing since 1964-65 and now covers the whole country. Under the SRS, continuous enumeration of vital events as they take place, is done in a set of sample villages and a survey is also done every six months in the same sample. The results from the two different sources are matched and published.
in the SRS Reports (Annual) and SRS Bulletin (six-monthly) by the Office of the Registrar General. Some data is also available through their website – www.censusindia.net

**National Family Health Survey (NFHS)** - This is a nationwide survey which was first conducted in 1992-93 with the objective of collecting information about fertility, knowledge and practice of Family Planning, Maternal and Child Health, infant and child mortality and their reasons and determinants. Information has been compiled into National and State level reports which are available with International Institute of Population Sciences and state-level Population Research Centres. The next round of the NFHS was conducted in 1998-99. Unlike other population related surveys, this survey is coordinated by the IIPS and is sponsored by the Union Ministry of Health and Family Welfare. Information available in the NFHS reports include statistics on fertility, practice of Family Planning, utilisation of antenatal services, immunisation of children, breast feeding and infant feeding practices, infant and child mortality. NFHS data is available as posters, summary reports, state-wise detailed reports and a country report.
Population is a Problem

This argument has roots in what is commonly called Mathusian thinking. Thomas Robert Malthus was an English clergyman and college professor. In 1798 he wrote an essay in which he put forth the theory that the growth of human population will outstrip the growth in food production, and thus population growth needs to be checked. He argued that while food production increases in arithmetic progression (1,2,3,4,...), human population increases in geometric progression (1,2,4,8,...). In this situation there will not be food for all. The checks that he had proposed, being a clergyman, were mostly restricted to moral restraint.

While Malthus’ original fear that food production will not be able to keep up with the growth of human numbers has been unfounded due to rapid progress in agricultural technology, an extension of this logic is still being offered by a group of thinkers who are now called neo-Malthusian. These writers have been looking at the natural resources of the world as a whole and feel that the earth’s natural resources will not be able to support the growth of population and call for public policies to restrict the growth of population. National family planning policies and programmes that different countries have adopted were a result of this logic.

People are a Resource

This stream of thought is diametrically opposed to the Malthusian arguments discussed above. Marx and Engels had argued against Malthus that there can be no single law of population increase and different modes of production tend to encourage different situations. They felt that capitalist societies would encourage large number of poor people so that wages would be forced down. We can see a similar situation today where countries which provide most international aid for population control also shift their production bases to the same countries because labour rates are the cheapest there.

Many studies have also shown that the poor in different countries see greater economic sense in the number of persons in the family. Children provide solid economic support either by taking care of household chores, thereby freeing adults to seek other modes of income generation, or they contribute labour in many sectors—witness the carpet, bangle and fireworks industry in different parts of India.

Malthus had argued that such people who do not contribute as much to society as they produced were a primary reason for the inadequacy of food supply. Marx and Engels had argued that each individual always produces more food than she or he can consume. If we follow this logic then people are a resource, and poor people’s behaviour all around the globe tends to prove this. But the problem of inadequate resources still persists and we will examine this in the next argument.

Population and Natural Resources

Seeing population as a natural resource is a very strong argument nowadays, and has the sanction of environmentalists around the globe. In a way it is an extension of Malthusian thinking and has been receiving tremendous attention since Paul Ehrlich’s book *The Population Bomb* was published. In this worldview, the argument of food supply is extended to include all natural resources and the theory concludes that at today’s accelerated rates of consumption, very little is going to be left of the earth’s natural resources very soon. But what needs closer attention is: who consumes all the resources? It has been conclusively shown with data from all sectors that natural resources are mainly consumed by the extravagant North (the developed countries) and not by the poorer nations with their meagre needs. The whole problem is more a question of distributive justice than of larger numbers of people *per se*. Though this information has been available for a long time now, Northern countries are extremely wary of cutting down their consumption levels.

Turning a blind eye to their own consumption behaviour, these countries and thinkers have been involved in aggressively promoting Family Planning programmes in the poorer nations of the world. The World Environment Conference at Rio in 1992 was supposed to be one platform where such issues were to be debated by all countries, but the final outcome has left much to be desired in terms of commitment to reducing levels of consumption in these countries.
Family Planning or Development?

It is often argued that the larger the density of population in a country, the greater is its population problem. It is also argued that the greater the density of people, the greater the strain on the carrying capacity of the land. But then urban conglomerations have the greatest density of people and they are also supposed to be the most developed. It has now been accepted that just the reduction of numbers should not be the goal, but the development of people. Family planning is supposed to assist in achieving this goal. There is a great degree of disagreement as to what development implies, and we will touch upon some of these disagreements in the next debate. Even then, there is some agreement that life expectancy, mortality rates, literacy rates are some of the essential indicators of development. And examination of figures across countries show that there are many countries where the density of population is large but these are better ‘developed’ than others with much less density. Thus we need to look beyond absolute numbers in terms of density to family sizes and fertility rates.

It is argued by some people that once social development (even in terms of the some indicators mentioned above) is promoted, people tend to regulate family size on their own. It is also true that the western world achieved population stabilisation much before contraceptives were either available or aggressively promoted. Thus the state should try to fulfill its obligations to health services (prolong life and reduce death) and education, especially for women, and the population problem will take care of itself. It is interesting to note that the leader of the Indian delegation to the 1974 conference on Population in Bucharest had argued in a similar vein and the country started its aggressive Family Planning programmes very soon thereafter.
Social Development and Population

Decline in population has long been held as a major product of economic development, but increasing evidence gathered through the years is now challenging this opinion. According to evidence gathered in Kerala (a favourite subject of study of demographers) and elsewhere it has been proposed that economic development is not a necessary condition for population decline. On the other hand, the socio-cultural milieu, education of women, position and status of women, increase in the quality of life across age-groups, infrastructural facilities, efficient health services including contraceptive services, high cost of living etc are more essential factors in reducing the desired number of children in families.

Since such a large number of factors affect the number of children in a family, the study of population and fertility is increasingly becoming a multidisciplinary subject with people with various interests becoming involved. These include people from the disciplines of economics, sociology, psychology, geography, public health, anthropology, women’s studies and of course mathematics and statistics. Social scientists, programme managers and even activists from different fields who are interested in the socio-economic-political development of people (especially the poor) often need to place their work in terms of the impact it makes in numbers of people or the quality of their lives. For such purposes, a knowledge of demography comes in handy.

Two child norm- a state priority or individual choice

When the two child norm becomes a state priority it can lead to increased coercion of women. Women’s health can become a casualty due to lack of attention to women’s health problems and poor quality of services. Also, the two child norm is also not desirable from a population and development point of view because social justice is one of the key features of development and this can lead to increase in sex selective abortions.
Table 6: A comparison of demographic, family planning and socio-economic indicators (different states)

<table>
<thead>
<tr>
<th>Issue</th>
<th>India</th>
<th>UP</th>
<th>Rank</th>
<th>MP</th>
<th>Rank</th>
<th>Kerala</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pop growth</td>
<td>21.34</td>
<td>25.8</td>
<td>11</td>
<td>24.3</td>
<td>12</td>
<td>9.42</td>
<td>1st</td>
</tr>
<tr>
<td>MMR</td>
<td>408</td>
<td>707</td>
<td>Last*</td>
<td>498</td>
<td>3rd</td>
<td>195</td>
<td>3rd</td>
</tr>
<tr>
<td>Institutional delivery%</td>
<td>33.6</td>
<td>15.5</td>
<td>24</td>
<td>20.1</td>
<td>19</td>
<td>93</td>
<td>1st</td>
</tr>
<tr>
<td>Family Planning FU%</td>
<td>74.6</td>
<td>54.3</td>
<td>24</td>
<td>84</td>
<td>10</td>
<td>91.1</td>
<td>6th</td>
</tr>
<tr>
<td>Female Literacy #</td>
<td>54.2</td>
<td>43</td>
<td>25</td>
<td>50.3</td>
<td>22</td>
<td>87.86</td>
<td>1st</td>
</tr>
<tr>
<td>Per Capita Income*(Rs)</td>
<td>4485</td>
<td>4185</td>
<td>12/16</td>
<td>4166</td>
<td>14/16</td>
<td>5778</td>
<td>3/16</td>
</tr>
</tbody>
</table>

*bigger states; Data from Census-01, NFHS-2, and SRS 97; #28states, ^ India HDR-16 states

Population and Poverty

In conventional development discourses, population and poverty are seen as interrelated, often as cause-and-effect. In this vision, the path to economic growth is population control. Most population programmes around the world have started with this belief. But right from the time of Malthus it has been the numbers of the poor that have mattered - it was never a problem of overpopulation of the rich. Unfortunately, this mistakes the symptom for the disease. That poverty is not the cause for overpopulation has to be clearly recognised. In fact, there are some countries that have successful population control programmes and continue to be very poor. In order to understand the reasons behind the overpopulation of the poor, one will have to understand why people are poor and for this one will have to examine the structure of power - political power, economic power, social power. One will also have to address the different structures that keep these power structures alive.

Population Control and Women

Population control has been a major area of concern for women’s rights activists around the globe. In fact, much of the new understanding on population issues and changes in population policies have been due to the concerted efforts of feminists,
scholars and activists. Some of the major debates and advocacy struggles will be highlighted in the section on Reproductive Health- Policy and Advocacy.
Population Density - Economic Prosperity - Population stabilisation

It is often thought the population density is one of the reasons holding back economic progress. If this were true cities with the highest densities of population would be economically the worst off. Among Indian states MP and Rajasthan have very low densities of population but are economically far poorer than Kerala with the highest density of population among states. On the other hand economic prosperity also cannot predict population. Kerala with a much poorer economy has a far more stable population growth than Haryana, which is economically one of the stronger states. The key predictor of population stabilisation is perhaps social justice.

Population Control affects the lives of women very deeply because women are seen as the main party in procreation or adding to population. Thus almost all population control strategies have been focussed on women as targets of contraceptives - pills, injections, sterilisation operations and so on. Women have also long been perceived as soft targets and this has often led to very coercive situations in different parts of the world. The attention that women have received as potential or actual mothers is in sharp contrast to the attention that women’s health has received in different countries of the world. This anomaly has led to women’s health activists around the globe taking very strong -- and justified -- positions on population control. It has been argued by many experts that women’s education, social position, financial status, decision-making abilities are far better predictors of the number of children she will opt for than limited population control regimes focussing on temporary and permanent contraceptive methods.

According to some authorities there are two main stands that women usually take on the subject of population control. These can be summarised as follows -

The radical viewpoint rejects all population control policies as being anti-people and being promoted by western vested interests because they focus on the population of poor countries. The proponents of this point of view reject the government’s role in regulating the size of families, because it has often led to coercion and violence against women, and stress on the government’s role in welfare of people and of women. The second point of view which may be called progressive calls for a feminist population policy which is more broadbased and focuses on women’s health, empowerment and rights. It calls for framing of holistic population policies which include issues like abortion, infertility, safe motherhood, free and informed choice in the number and spacing of children,
access to contraceptives and so on. This progressive viewpoint is the dominant voice in the international women’s health movement today.

Population Control and Family Planning

Very often these two words are considered synonymous. The roots of this kind of thinking perhaps lie in the belief that Family Planning is the best way to population control. India’s Family Planning programme explicitly and implicitly has long held this view and whenever the words Family Planning are mentioned even in the latest documents, the idea of population control follows. It is true that if all families are involved in planning their families then the population growth of the country (India for example) will certainly start declining. But on the other hand what has actually happened is that with the objective of population control, coercive contraception has often been practiced in the name of Family Planning. It must be clearly understood that population control reveals a national concern while family planning is strictly restricted to decision making at the family level. While family planning assists in population control, the two are in no way synonymous.

Population Discourse in India

India is well known as the first country in the world to have adopted Family Planning. But this policy was backed by a long history of population-related thinking and action within the country. The debate on whether the population growth in the country was too high was started in the 1930’s. It was also concurrently argued that India was the wealthiest country in the world with the poorest people, and the nationalists held that Independence would tilt the balance. At the same time many organisations were founded on Malthusian lines and started working for Family Planning and population control. Subhas Chandra Bose and Jawaharlal Nehru were also strong advocates of Family Planning. The objective of most of these efforts was to ensure greater socio-economic development. It must be noted that the initial impetus to population control came entirely from Indian concerns for development. Later on the programme and policies became influenced by foreign experts and donor organisations which helped by introducing an extension-based approach but also introduced the much maligned target-based monitoring system.

Much has been written about India’s Family Planning programme - justifying its successes as well as some of its major shortcomings, and the interested reader may refer to some the excellent papers on the subject. But in the mid-’70s Family Planning and its targets were becoming an obsession with the administration- right from Districts Magistrates/Collectors to lowly village level functionaries. Under the pressure to get the right numbers, all forms of practices from persuasion to pressure to blackmail were being used to get women under the surgeon’s scalpel, while surgeons in many cases threw basic aseptic and surgical norms to the wind to increase their tallies and records. In this hurry many women well past menopause were ‘sterilised’, others underwent multiple sterilisations and untold millions underwent other major and minor complications.

In the madness of chasing Family Planning targets, women’s health took a back seat. Despite some achievements in lowering birth rates, India’s Family Planning
programme had begun to draw flak from within and outside the country, particularly from women’s health activists who demanded greater attention to women’s health
needs and a shift away from the method-specific target fever which used to grip the nation between January and March.

The ICPD was a much needed boost to the concerned citizens of the country because with it came many much needed changes in the programme. These will be discussed in the section on Reproductive Health- Policy and Advocacy.

No discussion on population programmes in India can be complete without a mention of Kerala. Kerala’s performance on the population control front is seen as an oasis in the otherwise barren landscape in India. The various studies and articles on Kerala’s remarkable demographic parameters have very clearly brought out the fact that these were not due in any way to the National Family Planning Programme but to the socio-economic-political conditions prevailing in the state. In fact, comparing Kerala with the programme in China clearly outlines some of the shortcomings of a state-sponsored Family Planning programme for controlling birth rates and family sizes. Notably, the position of women in Kerala is far superior to that in China.

### Population Facts or Myths

Given below are a few statements regarding population - which of them are true.

1. Since India’s Independence, population growth has overtaken food production.
2. Low population density ensures economic progress and states and countries with high density of population are poorer.
3. India’s population is growing because uneducated, poor people have more children now than they did fifty years ago. While the educated middle class has controlled its family size.
4. Poor people have more children because they do not appreciate the benefits of family planning.
5. Economic prosperity is only the way to development and population stabilisation.
6. India’s cities are more crowded now because of increasing birth rate in slum populations.
7. The world’s natural resources are getting depleted at a very high rate because of high population growth in poor countries like India.
8. India’s population is growing rapidly because couples have more children now than they did fifty years ago.
9. The two child norm is not only useful from a population and development point of view but is also good for women’s health.
10. Women in India have always outlived men because they usually stay at home and are exposed to fewer hazards.

Note: None of these statements can be justified on the basis of available data.
As has been mentioned earlier, population and demography is essentially a multi-disciplinary subject in which a large number of disciplines are involved. In India the study of population has been particularly significant because of our large population and in order to devise ways and means to control the growth in numbers as well as finding development solutions. There are many policy research and think tanks engaged in working on the myriad issues. Names and addresses of different organisations working on the issue concerning population and demography from different perspectives are given below. This list does not purport to be a complete list in any way.

Organisations working on Population related areas

Centre for Development Studies, Thiruvananthapuram
Prashanthanagar, Ulloor, Thiruvananthapuram, Kerala-695011

Centre for Operations Research Training (CORT)
405, Woodland Apartment, Race Course Road, Vadodra – 390007, Gujarat
Ph-0265-326453/326034/336875

Centre for Social and Technical Change (SOCTEC)
14, Bandstand Apartments, B.J. Road, Bandra (W), Mumbai-400050
email- soctec@giashm01.vsnl.net.in

Foundation for Research in Health Systems
6, Gurukripa, Apartments, 183, Azad Society, Ahmedabad, 380015
email- frhsad@ad01.vsnl.net.in

Gujarat Institute of Development Research
Gota Char rasata, Gota, Ahmedabad-380481, Ph-079-474809

Healthwatch Trust
YA 6 Sahvikas, Plot no – 68, IP Extension, Delhi – 110092
Ph- 011- 3367110
Fax- 011-2429749
email- healthwatchindia@hotmail.com

IIHMR
1, Prabhu Dayal Marg, Sanganer Airport, Jaipur-302011, Rajasthan
email- root@iihmr.sirdnetd.ernet.in
IIM, Ahmedabad
Public Systems Group,
IIM Vastrapur,
Ahmedabad- 380015
Ph-079 407241

Institute of Economic Growth
Delhi University Enclave,
Delhi- 110007

Institute of Health Systems
5-10-193, HACA Bhawan, Opp.
Public Garden, Ground Floor,
Hyderabad- 500004
email- his.ihsnet@access.net.in

International Institute of Population Sciences
Govandi Station Road,
Deonar,
Mumbai-400088
Ph-022-5563254-56

Institute of Social Studies Trust
East Court,
Upper Ground Floor, Zone 6A,
India Habitat Centre,
Lodi Road, New Delhi 110003,
Ph- 011-4641083

Ministry of Health and Family Welfare
Nirman Bhawan,
New Delhi – 110001

Operations Research Group
Rameshwar Estate,
Subhanpur,
Vadodara, Gujarat,
Ph-0265-381461/76

Population Council
Zone 5A, Ground Floor,
India Habitat Centre,
Lodi Road, New Delhi –110003.
Ph-011-4642901/02

Population Foundation of India
B-28, Qutab Institutional Area,
Tara Crescent,
New Delhi 110016.
email- popfound@de12.vsnl.net.in

Tata Institute of Social Sciences
Sion – Trombay Road,
Deonar,
mumbai 400088.
Ph- 022-5563290

UNFPA
55 Lodi Estate,
New Delhi 110003,
Ph- 011-4628877/4627702

USAID
Qutab Hotel Road,
New Delhi –110016,
Ph-011-6856301

World Bank
New Delhi Office,
70 Lodi Estate, New Delhi 110003,
Ph 011-4617241
One can also contact the Population Resource/Research Centres of different Universities and States.
Books for Further Reading

As population studies and demography cut across a large number of disciplines, the number and variety of books that one can read is consequently very large. Some of the books we found useful were:

For understanding demography, particularly the technical side-

Reading Material for the Distant Learning Course for Master of Population Sciences of the IIPS

For Perspective on Population related debates-

Desai Sonalde 1994,- Gender Inequalities and Demographic Behaviour : India , New York , Population Council
Heyser Noleen 1996 - The Balancing Act- MacArthur International Lecture series
Sen Amartya - (Various books and papers)

Population situation in India -

Srinivasan K, 1995 - Regulating Reproduction in India’s Population, New Delhi, Sage Publications
Satia and Jeejeebhoy 1991. -The Demographic Challenge : A Study or Four Large Indian States- Bombay, OUP

Demographic Data about India

District Census Handbooks and data on Floppy
Journals -
These are some of the journals that carry articles about demography and population studies:

- Economic and Political Weekly
- Reproductive Health Matters
- Population and Development Review
- Population Studies
- Studies in Family Planning
- International Family Planning Perspectives
- Demography
- Population Bulletin
- Demography India
- Population Reports

Some useful websites:
- www.censusindia.net
- www.demographic.research.org
- www.iipsindia.org
- www.janani.org
- www.nfhsindia.org
- www.popcouncil.org
- www.popfound.org
- www.unfpa.org.in
UNDERSTANDING REPRODUCTIVE HEALTH

A Resource Pack

This Resource Pack is an introduction for those who wish to learn about different facets of Reproductive Health. Reproductive Health as a concept is relatively new and, despite the name, is not exclusively a 'health' subject. In its ambit it involves social sciences, medical sciences, women’s issues, human rights, population sciences, demography and so on. Thus it could be of relevance to individuals with a wide range of interests. Reproductive Health is an issue of interest to Government planners and managers because of the overwhelming concern for population. Reproductive Health is also a matter of great interest to the NGO sector, because of their concern for the health of women. Concern for women, their rights, well being and health is the underlying theme for the entire Resource Pack.

This Resource Pack has been designed as a series of booklets so that the interested reader may straight-away refer to the issue of her/his interest. The matter and presentation of the material in the different booklets has been kept simple as well as provocative as it is meant for the first-time user. Each booklet has been divided into four sections - the first dealing with theory and concepts, the second with issues of relevance, the third on best practices in the field. Keeping the interest of the practitioner in mind there is also a small resource section at the end of each booklet.

The booklets in this pack are as follows -

<table>
<thead>
<tr>
<th>Booklet</th>
<th>Title</th>
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<tbody>
<tr>
<td>1</td>
<td>An Introduction to Reproductive Health</td>
</tr>
<tr>
<td>2</td>
<td>Understanding Numbers : Population and Demography</td>
</tr>
<tr>
<td>3</td>
<td>Changing Paradigms : RH Policy and Advocacy</td>
</tr>
<tr>
<td>4</td>
<td>Exploring New Frontiers : Reproductive and Sexual Rights</td>
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<td>Maternal health is still important</td>
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<td>6</td>
<td>The Promise of better health : Women’s Health</td>
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<td>7</td>
<td>Beyond Family Planning : Contraception</td>
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<td>8</td>
<td>The Emerging Agenda : Adolescents</td>
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<td>9</td>
<td>Forging new partnerships : Men’s Health and Responsibility</td>
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<td>10</td>
<td>Coming to terms with reality : HIV/AIDS and STDs</td>
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<td>11</td>
<td>Acknowledging ourselves : Sex and Sexuality</td>
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<td>12</td>
<td>Women have Minds Too! : Exploring the interface between Reproductive Health and Mental health</td>
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<tr>
<td>13</td>
<td>Taking a stand : Violence, Women and Health</td>
</tr>
<tr>
<td>14</td>
<td>Data Digest</td>
</tr>
</tbody>
</table>

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The KRITI Resource Centre, is involved in providing training support, production and distribution of material, and engaging in creative partnerships with other institutions to strengthen their work of empowering women at the grassroots level, enabling women to lead healthier lives. The primary activities of the KRITI Resource Centre for Women's Health, Gender and Empowerment are as follows:

**TRAINING** - KRITI has considerable experience and expertise in trainings related to Women’s Health and Gender and has provided training support to over 100 organisation as well as Government projects and departments in the states of UP, Uttarakhand, Bihar, Jharkhand, Madhya Pradesh, Delhi, Rajasthan, Haryana and Himachal Pradesh. The Resource centre has been involved in partnerships with other gender training organizations like JAGORI, IWID, and the South Asian Network of Gender Trainers (SANGT).

**PRODUCTION AND DISTRIBUTION OF LEARNING AND COMMUNICATION MATERIAL** - KRITI is also involved in designing and producing appropriate material for the special needs of those involved in working with communities on these issues. Much of the material is in Hindi. Copiously illustrated material has also been produced keeping grassroots needs in mind. For the practitioners KRITI has produced newsletters, field manuals, training manuals and kits, briefing kits and information sheets on various relevant issues.

**RESEARCH AND DOCUMENTATION** - KRITI Resource Centre engages in field level documentation, to get a more holistic understanding of women’s health and the socio-economic conditions that influence it. Some of the studies it has conducted and participated in include a study of traditional birthing practices, Abortion and women’s health in rural areas of Uttarakhand, customs and practices around menstruation, the possibility of HIV/AIDS, implementing the Target Free Approach in Family welfare programmes in UP, quality of care of health care service is UP, violence against women and so on.

**ADVOCACY** - The resource centre is also actively involved with advocacy on the issues of Women’s Health and Population Policies and Violence against Women. It is closely working with other networks and organisations working on these issues.

**SERVICES PROVIDED BY KRITI RESOURCE CENTRE**
- Library and documentation centre
- Books, posters and other materials
- Training and internship
- Support for developing gender sensitive community based interventions/training programmes