Singh, Onkar; Singh, A.K. : Population Growth and Family Planning in India: An Analysis. In: Strategies in Development Planning. Edited by Singh, Alok Kumar; Rai, Vinay Kumar; Mishra, Anand Prasad. Deep and Deep. P. 355-367. ISBN: 81-7100-905-0.

Population Growth and Family Planning in India: An Analysis

Onkar Singh and A.K. Singh

Introduction

The rapid growth of population is one of the major problems facing the country today. India is at the turning point in its population development. As early as 1970, the birth rate showed a distinct downward trend, and continued to fall further to its present lowest. Over and above this, it was possible for the first time since independence to slow down the population growth-rate as well.

Considering the population of the country as is 845 million, and the annual surplus of births over deaths stands at 15 million, there is no doubt that the "population explosion" still continues. It is, therefore, necessary to slow down the population development even more in order to reduce the grave consequences of the "population explosion" (Domros, M., 1984, p. 74).

The objective of the present paper is to analyse the trend of population increase and to discuss the constraints as well as various family planning measures adopted to control the population growth. Some social factors like reluctance of minority groups towards adopting family planning programmes emerge as the major constraints. With reference to family planning, the popular measures adopted in the country are sterilization, abortion IUD, conventional contraceptives, etc. Here it should be mentioned that family planning is not only concerned with limiting the number of children through preventive measures, but it is very much related with aspects of health-care and better standard of living.

Population Growth

From the first census (1871) the population of India has risen from 203 million to 685 million in 1981 and 845 million in 1991. India is thus the most heavily populated country after China (with 1.16 billion inhabitants in 1991); through 16 percent of the world population is living there, it occupies only 2.4 percent the earth surface.

India's relative population increases since 1871 is remarkably low although the absolute increase is high. India's population development since 1871 may be split into phases.

In the first phase, which is characterized by the British imperial health service, shows a strongly fluctuating course, indicating an altogether medium-sized population increases only. The level of birth rates and death rates is decisive for this, the balance of which determined population development. The high values of both of these demographic indicators are perfectly in line with those of the Third World especially in the case of the death rate. The reasons of high death rate are famines diseases and epidemics with heavy tool of lives. The two census periods 1891/1901 and 1911/1921 even had the effect of bringing about a population decrease amounting to no less than 41 million, i.e. 14.5 percent in the first case. The devastating influenza epidemic of 1918 cost 18.5 million lives.

The British imperial government improvement in health services in India through medicine, hygiene, nutrition and education. The government improve public health services, controlled infectious tropical diseases and provided better access to medicine and medical care.

During the second phase, i.e. after independence (1947), the rapid population growth led to the sudden increase in the population which became known as the "population explosion" on account of its very magnitude. This is expressed in the doubling of the population from 361 to 845 million between 1951 to 1991 India's relatively rapid population growth is thus identical to that of most developing countries.

Demographic Transformation Process

The development of birth rates and death rates in India to date allows one to identify only two of the usual, phases of the demographic transition. Until 1920, India remained in the first phase of pre-industrial agrarian society, which was characterized by high values for natality and mortality; this resulted to significant population growth. The early-industrial (second) phase only set in during the 1920: it was characterized by a marked drop in mortality together with continuing high natality. Extending to the late 1960, this phase manifested a rapid increase in population.

Only in the 1980 the demographic transformation process could enter in its third phase (the one of industrial society) which brought with it a noticeable decrease in the birth rate, accompanied by a further drop in mortality.

In respect of further population developments, India finds itself only just at the beginning of the fully effective third phase, in which the regressive birth rate dominates in contrast to mortality. Attaining the following phases of the demographic transformation process (phases IV and V) is at present a merely hypothetical matter so far as Indian population development is concerned. Predictions concerning the temporal course of phases III, IV and V are difficult to make (Domros, M., 1984, pp. 77-78).

Age and Sex Composition

In graphic representation, the age structure of the Indian population shows the typical form of developing countries, a pyramid indicative of a particularly greatly dynamic population. Indian population is increasing at the rate of 2.4%. The broad base, on the other hand, demonstrates the large proportion of children and young adults (42.1 percent below 15 years), the tapering apex shows the small proportion of old people (only 4.7 percent over 60 years of age). How young the Indian population really is, shown by the fact that every second Indian is under 18 years old. As a consequence of the large families the proportion of the population capable of employment (15-59 years) is only 53.2 percent, and hence comparatively low. Thus, the production potential dependent upon labour is more likely to be limited than indicated by the labour market (Table 23.1).

Table 23.1: Percentage distribution of Population by Age-groups, 1971-91

Age-group year	**1981**			**1991**		
	Persons	Male	Female	Persons	Male	Female
0-14	44.2	41.8	42.3	39.3	39.0	39.6
15-29	25.6	25.4	26.1	27.7	27.9	27.8
30-44	17.1	17.3	17.0	17.1	16.9	17.8
45-49	10.0	10.3	9.5	10.3	10.6	10.0
60 & above	5.1	5.2	5.5	5.6	5.6	5.4

Source: Census of India, 1981 and 1991

The Over young-age structure now poses insoluble problems for the Indian government with regard to education and employment; the 13 to 14 million excess of births per-year of the 1980 implies the construction of 1270 new schools annually, the training of 373,000 additional teachers if the demand is to be met. Added to this is the annual requirement of 4 million new work places (Bichsed and Kunz, 1982, p. 61).

Literacy

India still has an alarmingly high proportion of illiterate people and a comparatively small number of literate ones (1981). Although the 437 million illiterate persons include 60 million children below the school age, subtracting them from the total, still leaves every second Indian of school age, an illiterate.
In 1991, there was a spatial amplitude in the literacy rate which varied between 69% (Kerala) and a depressing 20% (Arunachal Pradesh). The grounds for this are to be found in the regionally varying number and upkeep of educational institutions.

The striking gradient also exists between urban and rural areas, with the large number and. better development of schools in town, resulting in a higher literacy rate (59.7% in 1971) than in the villages (only 27.4%).
A comparison of the two sexes reveals a particularly low literacy rate among women. In 1981 the percentage of literate women was only 25 percent while in case of men it was 47 percent.

Regional Population Distribution

The population growth in India led as well to a rapid increase in the average density of population (1951:117 inhabitants/km^2 1981:221 inhabitants/km^2). The population density provides a graphic expression of the regionally very varied natural endowments as well as of the unequal agricultural potential of the Indian sub-continent. India is still regarded as a 'land of villages' (Singh, 1983, p. 89). Proof of this is the large number of villages (1971:576,000 with no great change until now) contrasting with the small number of towns (1971:2531; 1981:3245). Although in relation to the overall growth of the population, rural increase always exceeds urban growth, the substantial percentage increase in the proportion of urban population is very striking, especially since independence (i.e. from 16 percent to 24 percent). Evidence for this is found in the disproportionately high urban growth rates, i.e. 46 percent in 1971-81 in contrast to 25 percent for the overall population. Every fourth Indian is now living in a town, and further population developments in India are likely to follow a rural-urban population shift, a typical feature of developing countries.

Urbanization

The twin processes of urbanization and rural exodus are responsible for the rural-urban population development. The two phenomena are examined here on a quantitative basis. In India towns are classified into six classes on the basis of population number (Table 23.2).

Class	Number of inhabitants
I	100,000 and more
II	50,000 - 100,000
III	20,000 - 50,000
IV	10,000 - 20,000
V	5,000 - 10,000
VI	5,000 above

The urban population development in India, already indicated by the large increase in the total number of towns from 1834 in 1901 to 3245 in 1991, receives emphatic documentation through the increase of urban population from 26 to 150 million (i.e. by 500%)

The greater part of the urban population now lives in large cities (Class I). Between 1901 and 1981, their number grew from 24 to 216, the number of their inhabitants jumped from 7 to 94 million. Though dominant in numbers, towns of classes II to VI register only 62 million people (Tables 23.2 and 23.3).

Table 23.2: Urban Population by Class of Towns

Class of towns	No. of Towns			Percent			Population (million)			Percent		
	1961	1971	1981	1961	1971	1981	1961	1971	1981	1961	1971	1981
> 100,000	113	148	216	4.59	5.59	6.66	38.2	60.9	24.31	48.4	55.4	60.4
50,000 to 99,999	138	183	270	5.65	6.76	8.32	9.4	12.4	18.19	11.9	11.4	11.7
20,000 to 49,999	484	582	739	19.63	22.12	22.77	14.6	17.8	22.42	18.5	16.3	14.3
10,000 to 19,999	748	874	1048	30.38	33.50	32.29	10.3	12.4	14.86	13.0	11.0	9.5
5,000 to 9,999	761	678	742	30.90	22.50	22.87	5.7	5.1	5.64	7.2	4.7	3.6
Below 5,000	218	178	230	8.85	6.53	7.09	0.4	0.5	0.79	1.0	0.5	0.5
All classes	2462	2643	3245	100.00	100.00	100.00	78.9	109.1	156.19	100.00	100.00	100.00

Source: 1961 & 1971 : India's Urbanization 1901-2001, Bose Ashish, p. 485. 1981: Hand Book on Social Welfare Statistics, 1981, p. 10. Assam and J. & K. are excluded.

Table 23.3: Rural and Urban Population

Year	Total Population (million)	Rural	Urban	No. of towns
1901	238	212	25	1834
1911	252	226	26	1777
1921	251	223	28	1920
1931	279	245	33	2048
1941	319	274	44	2210
1951	361	298	62	2844
1961	439	355	78	2370
1971	548	360	108	2462
1981	685	525	159	2643
1991	845	628	217	3245

Source: Census of India, 1981.

A significant role in the rapid urban population development in India has been played by the 'metropolitan areas'. Their number has risen to 12 with a total of 42 million inhabitants, accounting for 27% of urban population. The growth rate of million cities is altogether the highest in India. Every million city, with the exception of Calcutta, exceeds the growth rate of the urban population as a whole (1951-81:104 percent), and is for higher than the all-India growth rate (71%). Their rapid population increase is, therefore, only partly due to the surplus of births, partly and due to the gains through migration.

In the period 1971-81, million cities of India showed a population growth from 29.597 to 42.160 million inhabitants accounting for a rise of 12.563 million (42.4 percent), exactly twice as much as the natural growth rate (21.2 percent) of India. Migration plays an important role in the entire development of the urban population. From 1951 to 1991 the urban population increased by 47 percent, of which was 21.2 percent due to the surplus of births and 25.8% due to migration gains.

The considerable rural-urban migration, though effecting 27 million people during the period 1951-81, did not result at all in a regressive population development in rural areas. The considerable migration from rural areas and the disproportionally large increase in the urban population can be explained by push and pull factors, which operate in India in the same way as in other countries of the third world. The attraction of the large cities is concentrated in the hope a job and linked with it, upward social mobility.

Family Planning

Family planning vs. population growth was the motto of the national population policy in independent India since the introduction of the first five-year plan (1951-56). Family planning programme is perhaps the most effective policy intervention to control fertility and stabilise population size. Since the effect of the programme varies from state to state, the fertility impact also varies from stage to state. Contraception is the need of the day to counteract the explosive increase in population.

After independence, family planning was stepped up. The sole aim was the lowering of the birth rate. There was no significant economic or social measure to accompany it.

Religion plays a vital and important role in the life of the people of India. Muslim by and large does not adopt the family planning programme. Other factors responsible for the failure of family planning is illiteracy, poverty etc. Islam like other religions believes that children are the gift of god and advise a proper care to feed, love and educate them (Kaur, 1974, pp. 73-77). The family planning methods provided by the programme are vasectomy, tubectomy, the IUD, conventional contraceptives, (i.e. condoms, diaphragms, jelly/cream tubes, foam tables) and oral pills. In addition, induced abortion is available, free of charge, in institutions recognised by the government for this purpose.

Sterilisation is the main method for family planning programme in India. The number of annual acceptors of this method is far larger than for the IUD. The number of conventional contraceptive users relates to the prevalence of such use, rather than to number of new acceptors (statistics on sterilization and other contraceptive methods see (Table 23.4). In 1972-73 over three million sterilizations were performed; two-thirds of them in camps. During the emergency period (1975-77), almost 11 million sterilization were performed but later on this programme witnessed virtual collapse.

Table 23.4: Number of eligible couples and percentage of eligible couples effectively protected by various methods of family planning from 1970-71 to 1980-81 for rural and urban areas.

Year	Estimated No. of eligible couple in lacs	% of India effectively protected			Estimated No. of eligible couple in lacs	% of Rural effectively protected			Estimated No. of eligible couple in lacs	% of Urban effectively protected		
		Sterilisation	IUD & C.C. users	All methods		Sterilisation	IUD & C.C. users	All methods		Sterilisation	IUD & C.C. users	All methods
1970-71	930	8.1	2.5	10.6	755	6.0	1.7	7.7	175	17.4	5.1	22.5
1971-72	953	9.9	2.5	12.4	774	7.4	1.9	9.3	179	20.3	5.6	25.9
1972-73	974	12.3	2.4	14.7	791	9.6	1.8	11.4	183	23.9	4.9	28.8
1973-74	996	12.4	2.5	14.9	809	9.6	2.0	11.6	187	24.2	4.8	29.0
1974-75	1019	12.8	2.2	15.0	827	9.9	1.8	11.7	192	25.1	4.2	29.3
1975-76	1042	14.4	2.8	17.2	846	11.3	2.4	13.7	196	27.7	4.6	32.3
1976-77	1062	20.9	2.9	23.8	865	17.4	2.4	19.8	200	36.0	4.5	40.4
1977-78	1089	20.2	2.4	22.6	884	16.7	2.0	18.7	205	35.4	3.9	39.3
1978-79	1114	19.9	2.5	22.4	904	16.4	2.1	18.5	209	35.1	4.3	39.4
1979-80	1130	19.9	2.4	22.3	925	16.4	1.8	18.2	214	34.9	4.7	39.6
1980-81	1163	20.0	2.7	22.7	945	16.4	2.1	18.5	219	35.5	5.0	40.5

Source: Ministry of Health and Family Welfare, 1982, New Delhi.

Presently the sterilization programme is doing particularly well in Maharashtra, Andhra Pradesh, Gujarat, Kerala, Karnataka and Tamil Nadu. In Assam and the rest of the North-East, Bihar, Uttar Pradesh and Jammu & Kashmir performance on the increase, is but still it is very poor.

The prevalence of various methods of family planning is shown in Table 23.4 for the period from 1980-81. The predominance of sterilization in family planning is clearly brought out. In 1970-71; 8.1 percent of couples were protected by sterilization, and only 2.5 percent by other methods. In 1980-81 couples protected by sterilisation rose to 20.0 percent, while couples protected by other methods rose only slightly to 2.7 percent. During the emergency period, however, this percentage jumped to 23.8.

In a country like India where 76 percent population inhabit in rural areas higher fertility and natural increase in make it important to estimate family planning prevalence separately for rural and urban areas. In 1970-71 only 7.7 percent of rural couples were effectively protected by family planning against 22.5 percent of urban couples. By 1980-81, 18.5 percent of rural couples and 40.5 percent of urban couples were protected. It can also be seen in Table 23.4 that the relative protection offered by sterilisation is more in urban areas that in urban areas.

There was wide variation by state in the percentage of couples effectively protected by all methods in 1974-75. For instance, this percentage was as low as 6.8 in Bihar, 7.7 in Rajasthan and 8.4 in Uttar Pradesh. However, it was as high as 28.4 in Haryana, 26.0 in Maharashtra, and in Punjab. If sterilisation alone is considered, Maharashtra had the highest percentage of couples protected (23.6), followed by Tamil Nadu with 18.5 and Gujarat with 18.3 (Ministry of Health and Welfare, 1975).

It is worth to note the differential performance of the programme in rural and urban areas in each state. From Table 23.5 it is seen that over 20 percent rural couples were protected by 1980-81 in A.P., Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab and West Bengal. And over 40% of urban couples were protected in Andhra Pradesh, Assam, Haryana Maharashtra and Tamil Nadu.

Table 23.5: Percentage of eligible couples effectively protected in rural and urban areas by state and by method, 1980-81

State	Sterilisation				IUD insertions and C.C. Users				All methods			
	Rural	Urban	State	U/R ٩	Rural	Urban	State	U/R ٩	Rural	Urban	State	U/R ٩
Andhra Pradesh	21.5	43.4	25.7	2.0	0.4	0.8	0.5	2.0	21.9	44.2	26.2	2.0
Assam	11.7	85.8	17.8	7.3	0.5	4.2	0.8	8.4	12.2	90.0	18.8	7.4
Bihar	10.1	23.6	11.3	2.3	0.4	1.5	3.8	3.8	10.5	25.1	11.9	2.4
Gujarat	29.5	32.0	30.2	1.1	2.3	5.3	3.1	2.3	31.8	37.3	33.3	1.2
Haryana	18.5	44.2	22.9	2.4	4.9	10.2	5.8	2.1	23.6	54.4	23.7	2.3
Jammu & Kashmir	6.7	20.8	9.1	3.1	1.2	2.9	1.5	2.4	7.9	23.7	10.7	3.0

Karnataka	20.3	22.8	20.9	1.1	2.1	3.0	2.3	1.4	22.4	25.8	23.2	1.2
Kerala	20.5	77.5	29.7	3.8	1.0	2.4	1.2	2.4	22.5	79.9	30.9	3.6
Madhya Pradesh	19.3	26.0	20.3	1.3	0.7	2.7	1.0	3.9	20.0	28.7	21.3	1.4
Maharashtra	30.6	39.5	33.2	1.3	0.2	4.2	1.4	21.0	30.2	43.7	34.6	1.4
Orissa	23.3	35.1	24.3	1.5	1.0	3.2	1.2	3.2	24.3	38.3	25.4	1.6
Punjab	19.2	19.3	19.2	1.0	5.5	6.4	5.7	1.2	24.7	25.7	24.9	1.0
Rajasthan	9.2	26.0	12.1	2.2	0.8	4.4	1.4	5.5	10.0	30.4	13.5	3.0
Tamil Nadu	17.0	48.4	26.4	2.8	0.6	2.8	1.3	4.7	17.6	51.2	27.6	2.9
Uttar Pradesh	7.8	13.8	8.1	1.9	2.4	4.4	2.7	1.8	9.7	18.2	10.8	1.9
West Bengal	20.9	27.0	22.3	1.3	0.9	2.2	1.2	2.4	21.8	29.2	23.5	1.3
All India	16.4	35.5	20.0	2.2	2.1	5.2	2.7	2.5	18.5	40.7	22.7	2.2

q = The ratio of urban to rural percentages of eligible couples protected.

Source: Ministry of Health and Family Welfare, 1982.

The socio-economic characteristics of family planning acceptors are important in judging the demand for family planning and its differential effect on the fertility of various segments of the population.

In 1979-80, the mean number of living children at acceptance was 2.7 for the IUD, 3.5 for tubectomy and 3.7 for vasectomy. The percentage of couples accepting family planning with three or less living children was 75 for IUD, 60 for vasectomy and 52 for tubectomy. During 1977-80 contraceptive failure was the reason given for termination in about 47% of cases at national level, although it was high as 90% in Himachal Pradesh and 66% in Maharashtra. An estimated four to six million abortions are criminally induced each year.

These findings provide an insight to reorient the family planning strategy and fertility behaviour strategy and its fertility impact. Social values and family institutions require that each couple should have at least one surviving son, particularly in rural areas. With high infant and child mortality a couple will not take risk of undergoing sterilisation before having at least two sons since, in practice, a sterilisation operation is irreversible off reversible methods such as the IUD, condom, and piller stage of family formation.

References

1. Agarwala, S.N. (1977): India's Population Problems, New Delhi.

2. Bichsel, U.R. Kunz (1982) : Indien Entwicklungsland Zwischen Tradition and Fortschrift, Frankfurt, Aarau.

3. Cassen, R.H. (1978): India: Population, Economy, Society, London, Macmillan.

4. Census of India, ed. by P. Padmanabhan, Registrar General and Census Commissioner for India: Series 1, paper 1/1981, New Delhi.

5. Chandrasekhar, S. (1972): Infant Mortality, Population Growth and Family Planning in India, London.

6. Domros, M. (1981) : Sudasien and Indien in : Harms-Handbuch der Geographic (Hrsg. V.E. Grutzbach and W. Roll), Bd. Asien 1, Munchan, S. 118-58.

7. Kaur, P. (1974) : Religion and Birth Control, Religion and Medicine (eds.), K.N. Udupa and Gurumohan Singh, pp. 73-77, Varanasi.

8. Kohli, S. (1977): Family Planning in India, New Delhi.

9. Ministry of Health and Family Welfare, (1975): Family Welfare Programme in India, Year Book 1974-75, New Delhi, Government of India.

10. Rele, J.R. and Sinha, U.P. (1970): Fertility and Mortality in India, 1951-60, In Ashish Bose, P.D. Desai and S.P. Jain (eds.), Studies in Family Planning, London, Allen and Unwin.

11. Singh, A.K. (1985): Population and Settlement in U.P., Inter India Pub., New Delhi.

12. Tim Dyson, & Nigel Crook: ed. (1984) : India's Demography Essays on the Contemporary Population, South Asian Publishers Pvt. Ltd., New Delhi.