Report on the Basic Survey of Population and Development in Southeast Asian Countries – India –

**MARCH 1986** 

The Asian Population and Development Association (foundation)

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THE ASIAN POPULATION AND DEVELOPMENT ASSOCIATION, 1986

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Report of survey at the
 office of Honorable
 Mr. Sat Paul Mittal

With an assistant (Mrs. Latika Sahrma)







dDDA office
Receiving explanation from
Mr. R. S. Gupta (Director,
Traffic & Transport Planning
DDA) about the details of
DDA establishment.

Delhi, Janakpuri

Interview at Delhi, Janakpuri by Fumiko Oshikawa





Faridabad
 In front of Vocational
 Training
 School in Faridabad
 Principal
 Counterparts from Faridabad
 Haruo Sagaza,
 (leader of the field party)
 Fumiko Oshikawa
 Yuiko Nishikawa

Urban planning display room in the Administrative Division of Faridabad



#### Foreword

This report presents the findings of a basic survey of population and development in India. In 1985, the Asian Population and Development Association (APDA) was entrusted with the survey project, "Basic Survey of Population and Development Problems in Southeast Asian Countries" by the Ministry of Health and Welfare and Japan International Corporation of Welfare Services. APDA selected India as the country in which its field survey would be conducted. The actual survey and analysis of the resultant findings were conducted by APDA's survey committee (Chairperson, Dr. Toshio Kuroda, Director Emeritus of the Nihon University, Population Research Institute).

For effective application of population policies in the East Asia and other countries, population dynamics as population growth, diseases, mortality, reproduction, population distribution and internal migration, as well as static data of the population including family structure and population structure must be closely defined. In addition, effects of these factors on living and welfare standards, and medical care must be reviewed.

The objective of this survey was to contribute to resolving the problems related to population and development in Asian nations, by conducting a detailed survey of population dynamics, living and welfare standards and health and medical care and other aspects in the Southeast Asian countries.

The field survey was conducted with the guidance and cooperation of Indian Association of Paul Mittal, М. Ρ. Chairman, Sat Hon. Parliamentarians for Problems of Population & Development, Mr. Takumi the Japanese Ambassador to India, Mr. Shinsuke Horiuchi, Hosaki, the Japanese Minister to India, and Mr. Toyoji Miyanaga, First Secretary of the Japanese Embassy. Also, staff members of Gandhi Memorial School and contributed to the field survey in various ways. others In Japan, Policy Planning & Evaluation Division, members of Minister's Ministry of Welfare and Department of Policies, Secretariat. Economic Cooperation Bureau, Ministry of Foreign Affairs, cooperated in the planning and arrangements of the field survey. I would like to express my heart-felt gratitude to all of them.

In conclusion, I sincerely hope that this report would contribute to the further advancement of the population and development program in India as well as the Japanese Government's effective cooperation extended to India.

Furthermore, I would like to add that this report is the responsibility of APDA and does not necessarily reflect the views nor policies of the Ministry of Health and Welfare or the Japanese Government.

March, 1986

Tatsuo Tanaka Chairman Asian Population and Development Association

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## CHAPTER 1

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## SUMMARY: POPULATION, WELFARE AND URBANIZATION

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#### 1. Trends and Policies Concerning the Population of India

India is noteworthy as a country which adopted a government policy of family planning in 1951 right after World War II. The government took a serious view of population increase and its attendant economic and social consequences, and emphasized family welfare and improving the health standard in its policy.

Second only to China which has the world's largest population at over one billion, the population of India is 743.63 million (1984 figures). With regard to the rate of population increase, the figure was 24.8% in the ten year period between 1961 and 1971, increasing slightly to 25% between 1971 and 1981. According to estimates by the Indian government, India's population will reach 837.2 million by 1991 and 996 million by 2001, assuming that the yearly average rate of increase will drop to 2% in the period between 1981 and 1991 and drop further to 1.6% between 1991 and 2001. Even so, the yearly increase in population will be 15.24 million from 1986 to 1991, 15.2 million from 1991 to 1996, and 14.57 million from 1996 to 2001. Since the population of India in 1981 was 685.2 million, an increase of 310.8 million people's predicted within the 20 years by the year 2001.

Table 1 shows the trends of vital rates, national, urban and rural In the early 1970s, the birth rate was 37.2 and the death rate areas. was 16.1, therefore the natural rate of increase was 21.1, or 2.1%. The birth rate has been showing a moderate but steady declining trend since then, and remained at the 33 level after 1976. On the other hand, the death rate remained at the 15 level although it showed a significant decline after 1977. As a result, the natural rate of increase, which was 2.11% in 1970 - 1972 dropped to 1.88% by 1976 - 1978. However, because the death rate dropped more rapidly than did the birth rate the natural rate of increase, thereafter, falling down into an upward-moving trend and reached 2.15% in 1980 - 1982 -- the highest level in the last 10 years. Nevertheless, there was a decrease in the increase, falling down to 1.95% in 1984 as a result natural rate of of a decline in the birth rate and an increase in the death rate.

As described above, the birth rate is maintaining a moderate but steady declining trend. What is worthy of special note here is the level of decline and declining trend in the birth rate of the urban population. However, it has been maintaining the level of 27 since 1976 - 1978. The progress of urbanization in India therefore contributes to the decline of the birth rate. However, the annual rate of natural increase of approximately 2% continues both in urban and rural areas because of the high birth rate among the agricultural population (35) which represents the vast majority, and also because of the declining trend in the death rate.

This trend of decline in the birth rate in India also shows up in the age structure of the population. For example, the percentage of the population between ages of 0 to 14 is low at 38.3%, and the percentage of the population aged over 65 is 4%. With the exception of Sri Lanka, this represents the lowest percentage of child population and the highest percentage of aged population among the South Asian countries (see Table 2).

Birth rates are shown also in Table 2 for reference. With the exception of Sri Lanka, India has the lowest birth rate among the South Asian countries and this is reflected in the low percentage of the child population and high percentage of the aged population. Because Sri Lanka has the lowest birth rate in South Asia, it has the lowest child population percentage and highest aged population percentage in the age structure.

Indian government has given a priority position to The the family-planning program including maternal and child health and welfare program in its 6th Five-Year Plan (1980-1985), with full awareness that it is both the catalyst and result of socio-economic development. On the basis of the goal to realize a stationary population with a net reproduction rate of 1 by the year 2000, targets have been laid down in terms of contraception practice rate, crude birth rate, crude death annual rate of increase, life-expectancy at birth and infant rate. mortality rates for the 7th Five-Year Plan (1985-1990). Clearly, the government is concentrating much energy on accomplishing these population targets.

Although the "two children" slogan seems to have wide acceptance, the total fertility rate is still extremely high at 4.4 (\*1). Infant mortality is still 113 (\*2), which is more than 3.5 times Sri Lanka's rate of 32. It has been widely proven that an important indirect factor which promotes the decline of the birth rate is the decline of the infant mortality rate. Today's China, which has a population much more than that of India, has succeeded in reducing its infant mortality rate, which used to be as high as 200 before 1949, to 12 in urban areas and 20 to 30 in rural areas (\*3). This striking improvement in the infant mortality rate seems to be one of the major factors which has enabled the remarkable decline of the birth rate in China. Professor Krishna at the Delhi School of Economics has pointed out that 25% to 40% of the population are malnourished despite the progress made in agriculture and the food distribution assistance provided to the poor. He notes further that the population below the poverty line (less than 10 U.S. dollars per month) is increasing at the rate of approximately 3.7 million every vear (\*4). Government estimates indicate that life expectancy, currently 54.1 years for males and 54.7 years for females (1980), will reach 64.1 years for males and 65.6 years for females by the beginning the next century (2001). Life expectancy in today's China has of already reached 65.8 years for males and 69.8 years for females, which is even much higher than that projected for India in 2001. The foregoing would seem to suggest the importance of reducing the death rate, particularly the infant mortality rate, and the urgency of

comprehensive measures for improving nutrition, medical treatment, and health and welfare.

Urbanization is an important problem which is related to population increase in India, as well as in other Asian countries. However. the urbanization in India has characteristics that are considerably different from those in, for Thailand. example, The major characteristic of urbanization in Thailand is that Bangkok is the primate city. In India, however, there are no primate cities, but instead, a number of large metropolitan cities. The proportion of urban to the entire population in India is 24.7% (\*5). Although population this is higher than the 15.1% urbanization level in Thailand, it is lower than that of Pakistan (29.1%) and of other ASEAN countries such as the Philippines (38.7%), Singapore (74.1%) and Malaysia (30.7%), and is about the same level as that of Indonesia (24.1%). Indonesia is similar to India in having large metropolitan areas. In Japan, the percentage of urban population was 24.0% in 1930.

Among the 12 cities in India with a population exceeding 1 million, there are 4 metropolitan areas with a population exceeding 4 million. They are Calcutta (9.16 million), Bombay (8.22 million), Delhi (5.71 million) and Madras (4.27 million).

An overwhelming majority of the Indian population still live in rural areas. Influenced by its vast area, religion, the regional characteristics of language and the decentralized political system, the majority of migration takes place from rural to rural areas. Nevertheless, the rate of increase of the urban population is extremely high. In the 10 years between 1971 and 1981, the national population increased by 25.0%, but the urban population increased at almost double that at 46.3%.

In this survey concerning the increasing urban population, we have tried to reveal the realities of the demographic behavior, public health, welfare, living arrangements and social consciousness, looking at both migrating and non-migrating populations. Although small in scale, and consisting mainly of field surveys of local residents including some interview, it is hoped that this survey might contribute in some way to administrative policies.

2. Health Issues in Developing Countries and International Cooperation

#### (1) Primary health care

Following World War II, world-wide health and medical activities began assuming the characteristics of comprehensive health care (\*6). From the latter half of the 1950s to the 1960s, partly as a result of guidance and assistance from WHO, there was systematization of health care and promotion of government-level health care programs. In the 1970s there was some reconsideration followed by a reform in WHO which may be called a policy shift, and this created a major flow in the promotion of primary health care. The main factor behind this change was strong concern over the fact that the health care standard in developing countries was not improving as expected, and the gap between developing and developed countries was continuing to widen.

#### (2) Declaration of Alma-Ata

An international conference under the joint auspices of WHO and UNICEF was held in 1978 at Alma-Ata in the U.S.S.R., at which the Declaration of Alma-Ata was adopted with regard to primary health care.

This declaration consists of 10 Items. The following quotation is from the preamble.

"This international conference on primary health care held in Alma-Ata on Sept. 12, 1978, asserts the necessity for urgent action by all governments, all of those engaged in health care and development, and by the world community to protect and improve the health of all the world's people, and has prepared the following declaration".

Item 1 affirms that health is a basic human right, and uses the definition in the WHO Charter which states that health does not simply mean the absence of sickness or weakness, but refers to an all-around tranquil condition in the physical, mental and social aspects of a human being.

Item 2 stresses that conspicuous differences in health conditions between developing and developed countries or within one country should not be tolerated.

Item 3 notes that economic and social development are essential for the promotion and protection of health, and that they will contribute to a better quality of life and world peace.

Item 4 states that people, as individuals or as groups, have the right and responsibility participate in the planning and implementation of health care. Although this is a short clause, it is extremely significant in indicating a new direction in public health care.

Item 5 talks about the responsibility of the government to maintain the health of its people, and states that the key to this is primary health care. Item 6 indicates the position of primary health care in the health care system.

In Item 7, the roles and features of primary health care are broken down into 7 subcategories, and the relation between primary health care and national policies and international cooperation are stressed in Items 8 and 9 respectively. Item 10 explains that the absence of military build-up and international disputes will contribute to the improvement of health care.

(3) International cooperation regarding the training of primary health care personnel

In January, 1981, when Mr. Zenko Suzuki, the then-Prime Minister of Japan, made a tour of 5 ASEAN countries (\*7), he obtained support from the leader of each country for cooperation in training programs. It was decided at the ASEAN conference with Japan that a primary health care training program for Thailand will be offered.

In this program to improve primary health care, a common task of all ASEAN countries, a two-fold plan was developed. They decided to establish a center for the training of supervisors and instructors who are directly connected with local residents. In addition, a program was set up for educational training and research development to develop the techniques for improving the health conditions through training and surveys in the model district.

For a start, with financial assistance from Japan, a training center was constructed in Salaya campus of Mahidol University in the suburbs of Bangkok, Thailand. At this center the previously mentioned primary health care training and research development as well as teaching material preparation were carried out. Also with Japanese funding, a plan was developed to allow the training of as many as 500 thousand primary health care personnel by constructing centers under the jurisdiction of the public health ministry in 4 regions: Chon Buri in the central region, Nakhon Si Thammarat in the southern region, Khon Kaen in the northeastern region and Nakhon Sawan in the northern region.

The training content is as follows.

- Domestic training consists of 14 courses, 2 to 4 weeks long for approximately 30 people. These courses are offered yearly for hospital directors, persons in charge of public health, agriculture, education, local administration, midwives and health volunteers.
- 2) A 3 month regional training course is offered for 10 trainees from each ASEAN country.
- 3) Once a year, an international seminar is held for presentation of research & exchange of information. This conference involves 35 specialists from ASEAN countries, international agencies such as WHO, & specialists from Japan.

This five-year plan which was implemented on Oct. 1, 1982 is Japan's first large-scale international cooperation, both in terms of

personnel training and primary health care, and therefore its results are drawing attention.

	Birth Rate (%)		Death Rate (%)			Natural Rate of Increase (%)			
Years	National	Rural	Urban	National	Rural	Urban	National	Rural	Urban
1970-72	37.2	38.7	30.2	16.1	17.6	10.1	21.1	21.1	20.1
1971-73	36.3	37.7	30.0	15.9	17.4	9.9	20.4	20.3	20.1
1972-74	35.3	36.7	29.4	15.7	17.3	9.7	19.6	19.4	19.7
1973-75	34.8	36.2	28.6	15.3	16.8	9.7	19.5	19.4	18.9
1974-76	34.4	36.1	28.4	15.0	16.5	9.7	19.4	19.6	18.7
1975-77	34.2	35.6	28.5	15.2	16.6	9.7	19.0	19.0	18.8
1976-78	33.3	34.9	27.6	14.5	15.9	9.3	18.8	19.0	18.3
1977-79	33.1	34.5	27.9	13.9	15.1	9.0	19.2	19.4	18.9
1978-80	33.3	34.5	28.1	13.1	14.2	8.6	20.2	20.3	19.5
1979-81	33.8	35.3	27.5	12.7	13.9	7.9	21.1	21.4	19.6
1980-82	33.8	35.4	27.6	12.3	13.5	7.7	21.5	21.9	19.9
1984	32.9			13.4			19.5		

# Table 1Rate of Population Dynamics in India by National<br/>Average, Rural Population and Urban Population

Reference: Year Book, 1983-84, Family Welfare Programme in India, Government of India, Ministry of Health and Family Welfare, Department of Family Welfare, 1984 date from 1984 ESCAP Population Data Sheet.

Note: Years refer to the average change during the respective 3 year period.

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Country	Percentage of population between ages 0 to 14	Percentage of population over age 65	Birth rate (%)
India	38.3	4.0	32.9
Afganistan	43.6	2.4	49.0
Bangladesh	45.8	3.2	43.9
Bhutan	40.5	3.3	38.1
Iran	43.4	3.5	40.1
Nepal	43.5	2.9	41.7
Pakistan	43.8	2.8	42.2
Sri Lanka	34.5	4.5	26.4

### Table 2 Age Structure of Population in South Asian Countries

Reference: 1984 ESCAP Population Data Sheet.

Note: Respective percentages of populations between the ages 0 to 14 and over 65 are for the entire population. Notes

- (\*1) 1984 ESCAP Population Data Sheet
- (\*2) Ibid.
- (\*3) Population headliners, No. 118, January 1985, ESCAP, p.2
- (\*4) Ibid.
- (\*5) ESCAP estimates, 1983
- (\*6) Comprehensive Health Care
- (\*7) ASEAN is an acronym for the Association of South East Asian Nations and the countries included here are Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei subsequently joined the Association and there are currently 6 member countries.

## CHAPTER 2

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## VARIOUS ASPECTS OF URBANIZATION

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Generally speaking, urbanization involves the process of an increasing concentration of the population in an urban setting as well as typically urban way of life becomes the norm. The fact that urbanization has progressed throughout the world could possibly be identified as the most significant pattern of social change of the current 20th century. The modernization of society or industrialization represents the cause of this trend of urbanization.

It is common knowledge at the present that urbanization in both developed and developing countries is progressing universally, and it is expected that this urbanization trend will accelerate even more in the future. Nevertheless, it appears that urbanization in developing countries is not necessarily accompanied by higher standards of living as has been observed in modernization in the West.

The appearance of slums and an expanded 'informal sector' seen in large cities of the developing nations are the results of so-called over-urbanization. In coping with such an issue, it is first necessary to elucidate the actual conditions of urban society as the basic premise in this effort.

In this chapter, the urbanization in India is taken up, and several aspects are studied from the perspective described in the above. In the study of urbanization, there are some approaches such as ones to demographic and ecological aspects, social structure and social consciousness of the urbanization phenomenon. Here, the actual conditions of urbanization in India are reviewed in terms of the concentration of population in urban environments.

#### 1. Trend of Population Concentration

Rural areas still represent a substantial part of present-day India, both in terms of population and economic activity. According to 1982 population projections by the United Nations, the rural population in 1985 was projected to be 74.5% of the national total (\*1). Also, agricultural production in 1977 accounted for 36% on a GDP basis, or more than twice that of mining and manufacturing combined (17%) (\*2).

Thus, India has its social structure based on rural areas, but urbanization has been rapidly advancing at the same time. Table 1 presents the trend of the ratio of urban population to the national total according to population census data recorded since 1901. It should be mentioned here that are "urban area" in the population census of India is defined as follow (\*3):

(a) All places with a municipality, corporation, cantonment board or notified town area committee and etc.

- (b) All other places which satisfy the following criteria:
  - i) A minimum population of 5,000
  - ii) At least 75 percent of male working population engaged in nonagricultural pursuits; and
  - iii) A density of population of at least 400 persons per sq. km. (1,000 persons per sq. mile)

It can be seen in Table 1 that while India's population increased at a rate of 20 to 25% every 10 years since 1961, the rate of increase for the urban population was extremely high at 26.4% in 1951 - 1961, 38.2% in 1961 - 1971 and 46.3% in 1971 - 1981. Accordingly, the pace of urbanization, which has been at the 10% level during the first half of this century, reached 23.3% in 1981.

India's populaiton growth in the 1960s was rapid enough to be referred to as a population explosion. In this sense, it can be also said that the urban population in the same decade exploded at even a more significant manner. It should be noted here that the 46.3% increase of urban population in 1971 - 1981 is equivalent to annual growth rate of 3.9%.

The rates of urbanization in Table 1 are categorized by size of population; exceeding 20,000 and below 20,000. It is seen that urban areas with populations lower than 20,000 peaked at 5.8% in 1961, thereafter undergoing continuous decline. In comparison, urban areas with populations exceeding 20,000 have been increasing, indicating that population growth in large urban centers is more substantial. This aspect will be considered in more detail later. At this point, the growth of urban population by state is investigated.

Table 2 shows the rate of urbanization by state during 1971 - 1981, as well as the rate of population growth by urban and rural areas during the same peirod. With regard to the rate of urbanization, relatively high figures were seen in the states of Gujarat (31.1%), Karnataka (28.9%), Maharashtra (35.0%), Tamil Nadu (33.0%) and West Bengal (26.5%).

The urban agglomeration's or cities with a population exceeding 1 million, namely Ahmadabad, Bangalore, Bombay, Madras and Calcutta, are all located in these five states, and the urbanization rate had already exceeded 20% in all the five states as early as in 1951.

The urban population in these states, including the large cities identified here did not show significant increase during 1971 - 1981. Instead, a high growth rate of the urban population during the past 10 years was seen in the frontier states, such as Assam, Manipur, Meghalaya, Nagaland, and Sikkim. Generally speaking, the rate of urbanization in these states was low in 1971. In other words, urbanization was seen to have advanced in 1971 - 1981 in those areas where urbanization was insignificant before 1971, and growth rate of the urban population in those states, which include the cities, did not exceed the national average during the period 1971 - 81.

This implies that urban population growth from 1971 to 1981 was comparatively more intense in medium-sized cities (more than 100,000 but less than 1 million) than in those large cities having a population exceeding 1 million. Table 3 shows the population growth in 1971 - 1981 in 12 large cities having populations exceeding 1 million people based on the 1981 census. Except the three cities of Delhi, Bangalore and Jaipur, the growth rate during this period was below 50%.

In the 1981 Census Report (Series 1, Paper 2 of 1981, Statement 18) 67 cities were seen to have population growth rates exceeding the 50% mark from 1971 to 1981. Of these 67 cities, with the exception of the above-mentioned three large cities and Behar, which is ranked in 57th place, 63 cities have populations exceeding 10,000 but less than 1 million. Accordingly, India's recent urbanization has been more conspicuous in medium-size cities.

Lastly, the number of cities and the urban population distribution by size class of towns are considered. It is clearly seen in Table 4 that the towns with populations exceeding 100,000 people have appeared in large number during the past 20 years both in terms of the number of cities and their respective populations. While the number of these towns increased 2.1 times from 104 in 1961 to 218 in 1981, the overall urban population increased 2.4-fold from 39.8 million in 1961 to 95.1 million in 1981. At the same time, the ratio of popultion for cities of 100,000 people or more against the total urban population had increased from 50.9% to 60.4 in the same period. The urban population growth rate is also high in this class (exceeding 50%), indicating clearly that towns having more than 100,000 inhabitants had these undergone substantial development as previously stated.

2. Migration to Urban Areas and Its Characteristics

In the case of India, no significant variations exist between urban and rural populations regarding the natural increase rate. The results of the Sample Registration System are as follows (\*4):

		Crude birth rate	Crude death rate	Rate of natural increase
		(0/00)	· (o/oo)	(0/00)
1971	Urban areas	30.1	9.7	20.4
	Rural areas	38.9	16.4	22.5
1981	Urban areas	27.0	7.8	19.2
	Rural areas	35.6	13.7	21.9

The rate of natural increase is slightly higher in rural areas. So it is clear that the rapid population growth in the urban areas has generally been caused by migration from rural to urban areas.

In this section, the size of this migration towards urban areas and the characteristics of immigrants are analyzed. However, migration data are extremely scare, and there is no other source except the census data for 1961 to 1971.

According to census data, those whose current address and place of birth are different are defined as lifetime immigrants. Their total was 134.61 million according to the 1961 census (\*5). This corresponds 30.6% of the total population of India for that year. to Among the 134.61 million people, 30.5 million were city dwellers at that time, 38.7% of the overall urban population. The 1971 census indicating recorded 159.62 million as lifetime migrants, or 29.1% of the entire population, with urban dwellers accounting for 36.3% or 39.63 million of the total urban population.

In other words, approximately 40% of India's urban population are migrants. Because this is a figure representing the national average, the number of migrants may vary by city size and the respective socioeconomic characteristics. For example, Casssen gave the figures of 72.1% in 1951, 64.2% in 1961 and 54.1% in 1971 with regard to the migration volume for Greater Bambay (\*6).

Migrants from urban areas to other urban areas are actually included in calculating the migration rate when using the abovementioned census data. Therefore, the figure would drop if limited to migrants from rural areas only. The number of immigrants from rural areas and their percentage against the entire urban population in 1961 and 1971 were 19.68 million people (24.9%) and 23.13 million people (21.2%), respectively.

Since out-migration from urban to rural areas is occuring at the same time as against in-migration from rural to urban areas, the net influx from rural to urban areas can be obtained by adjusting these factors. The results are described below.

In terms of the net influx rate, figures are smaller in 1971 than in 1961, indicating that out-migration from urban to rural areas has increased appreciably during this period. The characteristic of inmigration into urban areas is that there are more males than females.

		Total	Male	Female
1961	Actual number (thousand)	14,865	8,748	6,117
	Net-migration rate (%)	18.8	11.1	7.7
1971	Actual number (thousand)	13,752	8,156	5,596
	Net-migration rate (%)	12.6	7.5	5.1

Next, the rates of lifetime migrants classified by type of migration stream for males and females are present in Table 5. It is observed that migration between rural areas accounts for more than 70% of the total in India. And the rate is particularly high for women with the figure at the 80% level, a very conspicuous feature. The following order is rural to urban, urban to urban and urban to rural.

For the migration stream between rural areas the female ratio is high, but that of males is higher for migration into cities, i.e., in the rural to urban and urban to urban streams. One point here is that short-distance migration resulting from marriage accounts for a substantial portion of female migration whereas migration to cities in search of employment is relatively common among males. Among the two types of migration to urban centers, the percentage of migration from rural to urban areas was 64.6% for males and 61.3% for females in 1971. According to the results of a survey conducted by the International Institute for Population Studies (IIPS) in 1979 on immigrants to Greater Bombay, the percentage of those who migrated from rural areas was 64.0% for males and 66.4% for females (\*7). From this, it appears legitimate to say that the percentage of those from rural areas among these immigrants to urban areas is approximately 60%.

By analyzing the above migration stream by distance, the the percentage of shortfollowing traits are seen. Among females, distance migration between districts is overwhelmingly high at 72.1% of the total in 1971. Rural to rural migration is particularly noticeable, accounting for 63% of the total short-distance migration (\*8). On the whole, number of migrants decreases in order of intradistrict migration, intrastate migration and interstate migration, indicating that distance and migration rate are in an inverse correlation. As far as migration to urban area is concerned, intradistrict migration was 35.5%, intrastate migration was 37.1% and interstate migration was 27.5% in 1971, with intrastate migration being predominant here (\*9). In the previous IIPS survey, the percentages of interstate migration against the total migration for Bombay was 43.9% for males and 41.7% for females (\*10), implying the fact that the magnetic force of population extends to the wider fringe of such a large city.

The migration in India has thus far been viewed, mainly centering on lifetime magration controlling for size and destination. The demographic and socio-economic structure of the migrant population is now investigated, centering on in-migration into urban settings.

Firstly, the migrant population composition of males and females is examined using sex ratio figures (male/female x 100). The figures for lifetime migrants according to 1971 census data are described below.

Migration streams	Total domestic migration	Interstate migration
Rural to rural	29.8	59.2
Urban to rural	66.0	107.3
Rural to urban	105.7	171.8
Urban to urban	100.0	118.9
Total	45.1	105.9

As previously mentioned, the number for females is high regarding migration between rural areas, while that for males is high regarding migration to urban centers. A characteristic of interstate migration is that the number of males is high, particularly for rural to urban migration. According to the previously cited IIPS survey, the sex ratio of in-migration population to Bombay is 125.4.

The age structure of migrants is now analyzed. The data are outdated but the age distribution of those (lifetime migrants) migrating to cities with populations exceeding 100,000 in 1961 was as follows (\*11).

Age	Age Male		
0 - 14	(%) 16.6	(%) 20.5	
15 - 34	48.1	47.3	
35 - 59	30.7	26.0	
60 and over	4.7	6.2	
Total	100.0	100.0	

The age group of 15 - 34 accounts for an overwhelmingly high percentage among both males and females, and their figures are near 50%. It is a well-known fact that the majority of those migrating to cities are members of the younger generation. Since the data shown here do not incorporate the variable of age at the time of migration but only age at the time of the survey, it must be remembered that the age distribution trends to be somewhat higher than that at the time of migration.

Data on other migration characteristics at the time of migration are extremely limited in the case of India, and the only alternative is to depend on small-scale special survey. Table 6 shows the age distribution of the in-migration population according to the IIPS survey conducted in Bombay. It can be seen from this that the percentage of younger generation had grown very large when compared to the census data mentioned earlier. Some reasons for the high ratio of people in the 15 - 19 age group, which exceeds 30%, appear to be seeking higher education and marriage. It is also worthy of note that ratios for the above-35 age group are insignificant with 3.8% for males and 6.7% for females.

Lastly, the author would like to identify several characteristics based on socio-economic factors for the in-migration population of Bombay according to the survey results of IIPS (\*12).

As for education, the level of achievement is higher among inmigration people in comparison to that of those in the non-in-migration population among males. The percentage of matriculation and above is 32.5% for lifetime migrants and 44.6% for period migrants during period 1971 - 1979, indicating substantial difference with the figure for the non-in-migration population of 25.8%. In the case of the female inmigration population, the standard is lower compared to both the female non-in-migration population and male in-migration population.

With regard to accompanying members at the time of migration, unaccompanied migration accounts for the largest percentage among males at 58.4%. Among females, migration accompanying one's spouse is the largest percentage at 41.6%, followed by that accompanying one's brothers and sisters, which is 15.3%. The percentage for those accompanied by both spouse and children is an insignificant 5.6%.

With regard to the reasons for migration, "in search of jobs" had the highest percentage of 59.9% among male period migrants during 1971 -1979, followed by "education" (20.7%) and "marriage" (12.9%). On the other hand for females, "marriage" accounted for the highest percentage of 85.4%, followed by "education" (5.2%) and "accompanying the family and other family reasons" (5.2%), indicating that primary reason for migration among females is marriage.

3. Socio-Economic Characteristics of Urban Population

In this section, the population characteristics are examined for urban and rural areas, primarily depending on the results of the 1981 Census (\*13). In this manner, it is expected that, although at the macro level, a certain degree of analysis can be done on the recent actual living conditions of urban dwellers in India. By clarifying certain characteristics of the urban population, it is also expected to supplement an insufficient analysis due to limited data on the socioeconomic characteristics of the in-migration population in the cities, which were reviewed in the previous section.

First of all, the urban population age structure in 1981 in

comparison with that of the rural population can be illustrated as seen in Table 7. The Indian population still exhibits the structure in which the percentage of the younger population is high and that of the However, the characteristic feature here is that aged low. the percentage of the younger population slightly declines in urban areas. The percentage of the population between ages 0 and 14 is 36.6% in urban areas and 40.5% in rural areas. The percentages of the urban population are higher for the age groups between 10 and 39, indicating the fact that a large number of the younger population migrated from rural areas is included in these portions. Incidentally, the percentage for the aged population is high in rural areas.

Secondly, marital status and number of children are considered. The percentage of those married is low for both males and females in urban areas. It is particularly low among members of the younger generation up to age 30, indicating the fact that marrying age in cities is high. For instance, according to Goyal's estimate, while average age at marriage was 24.3 for males and 19.2 for females in the urban area, it was 21.6 for males and 16.7 for females in the rural area. Such difference still seems to exist today.

The average number of offspring born per female by age is as shown on Table 9. The number of children is smaller in urban areas for all age groups.

Thirdly, data on education are analyzed. The literacy rate had increased during the 1971 - 1981 period, but the difference between urban and rural areas is still significant. That among males over 15 in urban areas went up to 76.4% in 1981, indicating the diffusion higher education among the younger generation.

A similar phenomenon is also seen in the rate of school attendance among members of the younger generation. The figure for those between 5 and 9 is 58.7% in urban areas and 33.0% in rural areas, and that for the 10 - 14 group is 71.6% in urban areas and 44.3% in rural areas, reflecting the remarkable diffusion of primary education throughout the urban areas. Also, there is virtually no variation among males and females for school attendance in urban areas, while it remains significant in rural areas of the country.

Fourthly, the labour force participation is investigated. To begin with, the percentages of main workers in the overall population, i.e. work participation rate, are as follows (Same reference as Table 7, according to Table 26).

		Urban areas (%)	Rural areas (%)
1971	Male	48.8	53.6
	Female	6.7	13.4
1981	Male	48.5	52.6
	Female	7.3	16.0

This work participation rate is high among both males and females in rural areas. The reason why the female rate is significantly higher in rural areas at 2-fold in comparison to urban areas is the result of working wives in rural familes.

Next, the condition of employment by industry can be illustrated as Naturally, the number of people employed in presented in Table 11. primary industry is small in urban areas. Large portion of urban males work in "manufacturing other than household industry" (26.0%), "other services" (22.0%) and trade and commerce (21.0%), while a substantial portion of urban females work in "other services" (37.4%), as labourers (16.6%) and "manufacturing "agricultural other than household industry" (14.3%). Even among urban residents, 16.6% of the female population are engaged in agricultural occupations, but the percentage is still higher in rural areas at 50.2%, and represents a major employment sector for females in India.

Fifthly, the expectation of life at birth as an index of health is examined. According to Table 12, the average life span in India had increased over 50 years in the latter half of the 1970s, but this also indicates that the difference between urban and rural areas is extremely large. There is a difference of about 10 years among both males and females. Such a gap in health standards is also exemplified by the infant mortality rate according to the same Sample Registration System. According to the findings, the infant mortality rate in 1970 was 90 for every 1,000 live births in urban areas and 136 in rural areas. In 1980, the same categories were 65 in urban areas and 124 in rural areas, and the gap is increasing.

#### 4. Future of the Urban Population

Thus far the increase in the urban population of India and its primary factors, as well as the structural characteristics of the urban population have been reviewed from the perspective of urbanization of the Indian population, mainly using macro data. Here an attempt is made to outline the future of India's urban population.

As mentioned earlier, urbanization emerged as a worldwide trend Along with the increasing popularity after the start of this century. of urban lifestyles, the trend of concentrated populations in urban is very likely to continue in the future. However, it areas is extremely difficult to predict the speed of urbanization and degree of extensive expansion of urban areas. It is also difficult to foresee future social change and its related problems. Not only is it largely influenced by multiple factors from progressing industrialization and subsequent changes in the people's lifestyle and social consciousness adjustments via government policies based on social planning must be performed.

However, tentatively setting aside these various unforeseeable consequences, it is possible to make a projection regarding urbanization by use of a series of assumptions incorporating relatively predictable demographic variables. Until now, many projections have already been performed based on various methods. Here, the future of urbanizaiton in India is examined using the U.N. Projections (as assessed in 1982) as the most recent data.

Table 13 presents projections of the urbanization rates for 75 years from 1950 to 2025. Since the base of the projections is 1980, figures up to this year can be considered very close to actual figures. Urbanization in developed regions will further advance in the future and reach the level exceeding 80%, and that of developing nations will also exceed 50%. Urbanization in India will advance at a level relatively lower than other regions during this century, but will be accelerated during the 21st Century, and a high urbanization rate of 53.6% has been predicted for the year 2025.

To what extent will the population of India increase by then? Table 14 shows the medium projection values of the same U.N. The population of India will reach 1,188.50 million in Projections. 2025, which is 1.56 times larger than the 1985 population. The urban population grow to 636.62 million by 2025, which is 3.28 times larger than the urbanpopulation in 1985. If such urbanization does occur, the annual average urban population growth rate would be at about 3 to 4%. If the urban population increases at such a rapid rate while the growth rate of overall population declines, it can be seen at a glance that the consequences of urbanization would clearly pose serious problems. The main task for the future is to develop a program which realizes structural conversion from a rural-oriented society to urban-oriented one.

Lastly, projections the vast cities of India are presented in Table 15. In India, the four large cities and Bangalore are included among the 35 largest cities of the world. Their ranks will rise as society moves toward the year 2000, and Calcutta will be the 4th largest city in the world with population of 16.6 million, followed by Bombay in 5th place with 16.0 million and Delhi in 10th place with 13.3 million. This trend of the development of giant Indian cities will greatly influence the future development of India.

Year	Population		Urban Po	Rate of Urbanization (%)				
	Year	Actual number (million people)	Rate of increase in ten years (%)	Actual number (million people)	Rate of increase in ten years (%)	Total	Cities with population above 20,000	Cities with population below 20,000
	1901	238.4	-	25.9	-	10.8	_	-
	1911	252.1	5.8	25.9	0.4	10.3	-	-
- 28	1921	251.3	-0.3	28.1	8.3	11.2	6.1	5.0
1	1931	279.0	11.0	33.5	19.1	12.0	7.0	5.0
	1941	318.7	14.2	44.2	32.0	13.9	9.1	4.8
	1951	361.1	13.3	62.4	41.4	17.3	12.1	5.2
	1961	439.2	21.6	78.9	26.4	18.0	14.2	5.8
	1971	548.2	24.8	109.1	38.2	19.9	16.5	3.4
	1981	685.2	25.0	159.7	46.3	23.3	20.1	3.2

Table 1 Change in Urban Population (1901 - 81)

(Note) \* Rate of urbanization refers to percentage of urban population in the entire population.

(Reference) Census of India, 1971, 1981.
State	Rate of urbani	zation (%)	Population growth rate during 1971 - 1981 (%)		
	1971	1981	Urban areas	Rural areas	
India	19.9	23.3	46.3	19.7	
Andhra Pradesh	19.3	23.3	48.6	17.0	
Assam	8.9	10.3	58.8	. 33.9	
Bihar	10.0	12.5	54.8	20.7	
Gujarat	28.0	31.1	41.4	22.3	
Haryana	17.7	21.9	59.5	22.2	
Himachal Pradesh	7.0	7.6	34.8	22,9	
Jammu and Kashmir	18.6	21.1	46.9	25,8	
Karnataka	24.3	28.9	50.7	19.1	
Kerala	16.2	18.7	37.6	15.7	
Madhya Pradesh	16.3	20.3	56.0	19.3	
Maharashtra	31.2	35.0	40.0	17.6	
Manipur	13.2	26.4	165.4	12.3	
Meghalaya	14.6	18.1	64.0	26.6	
Nagaland	10.0	15.5	134.0	40.8	
Orissa	8.4	11.8	68.5	15.7	
Punjab	23.7	27.7	44.5	17.5	
Rajasthan	17.6	21.1	58.7	27,5	
Sikkim	9.4	16.2	159.7	39.5	
Tamil Nadu	30.3	33.0	28.0	13.0	
Tripura	10.4	11.0	38.9	31.1	
Uttar Pradesh	14.0	18.0	60.6	19.8	
West Bengal	24.8	26.5	31.7	20.4	
Delhi	89.7	92.7	58.2	8.0	

# Table 2 Rate of Urbanization by State (1971, 1981)

(Reference) Ministry of Health and Family Welfare, Yearbook 1983-84, P.34. (Original reference is <u>Census of</u> <u>India 1981</u>)

.

City	Population (	thousand)	Growth rate (%)
	1971	1981	1971 - 1981
Calcutta	7,031	9,166	30.4
Bombay	5,971	8,227	37.8
Delhi	3,647	5,714	56.7
Madras	3,170	4,277	34.9
Bangalore	1,654	2,914	76.2
Hyderabad	1,796	2,528	40.8
Ahmadabad	1,742	2,515	44.4
Kanpur	1,275	1,688	32.4
Poona	1,135	1,685	48.5
Nagpur	930	1,298	39.6
Lucknow	814	1,007	23.7
Jaipur	637	1,005	57.8

Table 3 Population in Cities with Population Exceeding 1 Million and Population Growth (1971 - 1981)

(Reference) United Nations, <u>Demographic Yearbook</u>, 1979, 1983.

	ing glass of towns	Numt	ber of cities		Urbar (	Urban population (million)		Distribution ratio (%)		:io (%)	Growth rate (%)	
		1961	1971	1981	1961	1971	1981	1961	1971	1981 19	961-71 19	71-81
I.	Over 100,000 people	104 (7)	147 (9)	218 (12)	39.8 (17.8)	60.7 (27.4)	95.1 (42.0)	50.9 (22.8)	56.3 (25.4)	60.4 (26.7)	52.6 (53.9)	56.7 (53.3)
II.	. 50,000 - 99,999 people	129	178	270	8.5	12.0	18.2	10.9	11.2	11.6	40.9	51.2
m	. 20,000 - 49,999 people	450	573	744	13.5	17.5	22.6	17.3	16.3	14.3	20.7	28.7
IV.	. 10,000 - 19,999 people	736	850	1,053	10.1	12.0	14.9	13.0	11.1	9.5	18.6	24.1
v.	5,000 - 9,999 people	743	656	761	5.5	5.0	5.8	7.0	4.6	3.7	-9.1	16.1
VI.	. Below 5,000 people	209	170	255	0.7	0.6	0.8	0.9	0.5	0.5	-22.5	59.7
	Total	2,371	2,574	3,301	78.1	107.8	157.4	100.0	100.0	100.0	38.0	46.0

Table 4 Number of Cities and Urban Population by Size Class of Towns (1961 - 1981)

(Note) Figures in parenthesis refer to cities with over 1 million people.

(Reference) Prepared from <u>Census of India 1981</u>, Series-1, India, Paper 2 of 1981, <u>Provisional Population Totals</u>; Rural-Urban Distribution.

	101			1971	
Total	Male	Female	Total	Male	Female
73.7	56.7	81.3	71.3	53.5	78.8
3.6	4.6	3.2	4.9	6.1	4.4
14.5	25.7	9.7	15.0	26.1	10.3
8.1	13.0	5.8	8.8	14.3	6.5
100.0	100.0	100.0	100.0	100.0	100.0
			and language of the second		
	Total 73.7 3.6 14.5 8.1 100.0	Total Male 73.7 56.7 3.6 4.6 14.5 25.7 8.1 13.0 100.0 100.0 pse, "Urbanization :	Total   Male   Female     73.7   56.7   81.3     3.6   4.6   3.2     14.5   25.7   9.7     8.1   13.0   5.8     100.0   100.0   100.0     ose, "Urbanization in India: #   4	Total   Male   Female   Total     73.7   56.7   81.3   71.3     3.6   4.6   3.2   4.9     14.5   25.7   9.7   15.0     8.1   13.0   5.8   8.8     100.0   100.0   100.0   100.0     ose, "Urbanization in India: A demographed   A demographed	TotalMaleFemaleTotalMale73.756.781.371.353.53.64.63.24.96.114.525.79.715.026.18.113.05.88.814.3100.0100.0100.0100.0100.0see, "Urbanization in India: A demographic

# Table 5 Migration Rates of Lifetime Migrants by Type of Migration Stream (1961, 1971) (%)

Reference) Ashish Bose, "Urbanization in India: A demographic Perspective", in <u>Patterns of Urbanization</u>, Vol. 1, edited Goldstein and Sly, 1977, p.310.

Age	Male	Female
0 - 4	7.1	5.0
5 - 9	7.9	4.5
10 - 14	15.9	14.6
15 - 19	30.7	38.7
20 - 24	22.6	21.7
25 - 29	8.6	5.6
30 - 34	3.4	3.2
35 - 39	1.6	1.8
40 - 44	0.7	1.7
45 +	1.5	3.2
Total	100.0	100.0
Average age	18.4	19.8

# Table 6 Age Distribution of In-migration Population of Greater Bombay (IIPS Survey, 1979) (%)

(Reference) Srinivasan & Mukerji, <u>op. cit.</u>, p.328. (Note 7)

	Aç	ge	Total Population	Urban Population	Rural Population
0	_	4	12.6	11.6	12.9
5	_	9	14.1	12.7	14.5
10	-	14	12.9	12.3	13.1
15	-	19	9.6	10.6	9.3
20	-	24	8.6	10.2	8.1
25	-	29	7.6	8.8	7.3
30	-	34	6.4	7.0	6.2
35		39	5.8	6.2	5.7
40	-	44	5.1	5.2	5.1
45	-	49	4.4	4.3	4.4
50	-	54	3.8	3.5	3.9
55	-	59	2.5	2.2	2.5
60	+		6.5	5.4	6.8
То	ta.	L	100.0	100.0	100.0
			(665,289)	(157,680)	(507,608)

Table	7	Age S	truct	ure o	f Popu	lation	by
		Urban	and	Rural	Areas	(198]	L) _

- (Note) Excludes Assam. Figures in the parenthesis refer to actual total numbers. (thousand people)
- (Reference) Census of India 1981, Series-1 India, Paper-2 of 1983, <u>Key Popula-</u> tion Statistics Based on 5 percent Sample Data, Table 5.

	Mal	le	Fema	ale
Age –	Urban	Rural	Urban	Rural
10 - 14	1.0	3.1	2.2	7.8
15 - 19	5.6	14.8	27.9	48.9
20 - 24	29.5	49.0	73.5	88.4
25 - 29	68.0	81.0	91.4	95.4
30 - 34	89.3	91.7	94.0	95.1
35 - 39	94.6	94.0	92.9	93.3
40 - 44	94.9	93.0	87.1	88.0
45 - 49	94.5	92.3	81.5	83.3
50 - 54	92.2	89.3	67.6	69.7
55 - 59	91.1	87.8	62.7	68.5
60 - 64	88.5	82.6	40.9	43.6
65 - 69	82.7	79.8	36.9	41.6
70 +	73.2	69.8	20.1	22.1
Total	41.4	42.3	43.5	46.5

Table 8 Percentage of the Currently Married (1981)

( % )

(Reference) Same as Table 6.

				(१)
	Age	Total	Urban areas	Rural areas
15	- 19	0.17	0.13	0.19
20	- 24	1.13	0.99	1.19
25	- 29	2.41	2.24	2.47
30	- 34	3.46	3.22	3.53
35	- 39	4.26	3.98	4.35
40	- 44	4.71	4.38	4.81
45	- 49	4.99	4.68	5.07
50	+	4.74	4.50	4.80

Table 9 Average Number of Children Born Per Woman by Age (1981)

(Reference) Same as Table 7.

	Population o of age	ver 15 years	Population o of age	ver 35 years
	Urban areas	Rural areas	Urban areas	Rural areas
1971 Total	60.3	27.0	49.3	19.4
Male	72.4	40.5	64.5	31.2
Female	45.4	12.9	30.2	6.5
1981 Total	65.1	32.7	54.3	23.2
Male	76.4	47.3	69.2	38.0
Female	51.9	17.6	35.9	8.6

# Table 10 Literary Rate (1981)

(Reference) Same as Table 7

( % )

Table	11	Distribution	n of	Main	Workers	by	Broad
		Industrial (	Categ	yories	s (1981)		

	•					-:	(%)
Indu	istrial Category		Male			Female	
<u> </u>		Total	Urban	Rural	Total	Urban	Rural
1. (	Cultivators	43.7	5,2	55.2	33.2	4.7	37.1
11.	Agricultural labourers	19.6	4.7	24.0	46.2	16.6	50.2
ш.	Livestock, forestry, fishing, hunting and plantations, orchards and allied activities	2.3	1.8	2.5	1.8	1.9	1.9
IV.	Mining and quarrying	0.6	1.0	0.5	0.4	0.5	0.3
v.	Manufacturing, process: servicing and repairs	ing,					
(a)	Household industry	3.2	4.2	2.9	4.6	10.5	3.8
(b)	Other than household industry	8.9	26.0	3,8	3.6	14.3	2.1
VI.	Constructions	1.8	4.1	1,1	0.8	2.9	0.5
vп.	Trade and commerce	7.3	21.0	3.3	2.0	8.9	1.1
vm.	Transport, storage and communications	3.3	9.9	1.4	0.4	2.3	0.1
IX.	Other services	9.2	22.0	5.4	7.0	37.4	2,9
Tota	al	100.0	100.0	100.0	100.0	100.0	100.0
		(-/////////////////////////////////////			,,,,,,,,,	1.010111	(,

(Reference) Same as Table 7 (Prepared from Table 17, 18).

	Total	Urban I	Rural
1970 - 75			
Total	49.7	58.9	48.0
Male	50.5	58.8	48.9
Female	49.0	59.2	47.1
1976 - 80			
Total	52.3	60.1	50.6
Male	52.5	59.6	51.0
Female	52.1	60.8	50.3

Table	12	Expectation	of	Life
		at Birth		

(Reference)

Registrar General, Sample <u>Registration Bulletin</u>, June, 1984, p.15.

						(5)	
Year	World	Developed Regions	Developing Regions	East Asia	South Asia	India	-
1950	29.4	53.6	17.3	16.9	16.1	17.3	-
1955	31.3	56.8	19.2	18.6	17.2	17.6	
1960	33.6	60.3	21.4	20.6	18.3	18.0	
1965	35.7	63.4	23.7	22.6	19.7	18.8	
1970	37.0	66.4	25.3	23.6	21.2	19.8	
1975	38.3	68.7	27.1	25.0	23.2	21.5	
1980	39.9	70.6	29.4	26.6	25.4	23.4	
1985	41.6	72.4	31.7	28.2	27.7	25.5	
1990	43.6	74.2	34.4	30.3	30.4	28.0	
1995	45.8	76.0	37.3	32.8	33.5	30.9	
2000	48.2	77.8	40.4	35.8	36.8	34.2	
2005	50.9	79.5	43.8	39.1	40.5	37.9	
2010	53.8	81.2	47.3	42.8	44.3	42.0	
2015	56.7	82.7	50.9	46.5	48.0	45.9	
2020	59.6	84.1	54.4	50.2	51.7	49.8	
2025	62,5	85.4	57.7	53.7	55.3	53.6	

## Table 13 Projections of Urbanization Rates (World, Regions, India; 1950 - 2025)

(Reference) United Nations, World Population Prospects; Estimates and Projections as Assessed in 1982, New York, 1985.

Year	Population (thousand)	Urban population (thousand)	Urbanization rate (%)	Urban population growth rate (annual average,
1950	350,445	60,467	17.3	
1955	384,997	67,763	17.6	2.3
1960	431,463	77,460	18.0	2.7
1965	488,777	91,885	18.8	3.4
1970	551,323	108,907	19.8	3.4
1975	618,826	132,865	21.5	4.0
1980	688,956	161,426	23.4	3.9
1985	761,175	194,186	25.5	3.7
1990	831,948	232,947	28.0	3.6
1995	899,131	277,917	30.9	3.5
2000	961,531	329,148	34.2	3.4
2005	1,015,331	385,128	37.9	3.1
2010	1,065,220	446,761	41.9	3.0
2015	1,112,514	510,853	45.9	2.7
2020	1,154,456	575,022	49.8	2.4
2025	1,188,504	636,618	53.6	2.0

Table 14 Future Projections of Urbanization of Population in India (Medium projection, 1950 - 2025)

(Reference) Prepared from two U.N. data on Table 13 and 15.

C	alcutta		Bombay		Delhi	Madras Ba		angalore	
Ranking	Population	Ranking	Population	Ranking	Population	Ranking	Population	Ranking	Population
	Million people		Million people		Millign Peoplen		Millign		Millign
12	4.4	19	2.9	-	(1.4)	-	(1.4)	-	(0.8)
13	4.9	19	3.4	-	(1.8)	-	(1.5)	-	(0.9)
14	5.5	19	4.0		(2.3)	-	(1.7)	-	(1.2)
16	6.2	19	4.9	29	2.9	-	(2.3)	-	(1.4)
15	7.1	18	5.9	26	3.6	34	3.1	-	(1.7)
12	8.2	17	7.2	24	4.6	-	(3.8)	-	(2.2)
8	9.5	14	8.5	24	5.9	34	4.4	-	(3.0)
6	11.0	10	10.1	21	7.4	31	5.2	-	(4.0)
5	12.6	7	11.9	17	9.2	32	6.1	-	(5.2)
5	14.5	6	13.8	12	11.1	32	7.1	34	6.5
4	16.6	5	16.0	10	13.3	31	8.2	32	8.0
-	C. Ranking 12 13 14 16 15 12 8 6 5 5 4	Calcutta     Ranking   Population     Million   million     12   4.4     13   4.9     14   5.5     16   6.2     15   7.1     12   8.2     8   9.5     6   11.0     5   12.6     5   14.5     4   16.6	Calcutta       Ranking     Population     Ranking       Million     Ranking       12     4.4     19       13     4.9     19       14     5.5     19       16     6.2     19       15     7.1     18       12     8.2     17       8     9.5     14       6     11.0     10       5     14.5     6       4     16.6     5	Calcutta     Bombay       Ranking     Population     Ranking     Population       Million     Ranking     Population     Million       12     4.4     19     2.9       13     4.9     19     3.4       14     5.5     19     4.0       16     6.2     19     4.9       15     7.1     18     5.9       12     8.2     17     7.2       8     9.5     14     8.5       6     11.0     10     10.1       5     14.5     6     13.8       4     16.6     5     16.0	Calcutta     Bombay       Ranking     Population     Ranking     Population     Ranking       Million     Ranking     Population     Ranking     Population     Ranking       12     4.4     19     2.9     -       13     4.9     19     3.4     -       14     5.5     19     4.0     -       16     6.2     19     4.9     29       15     7.1     18     5.9     26       12     8.2     17     7.2     24       8     9.5     14     8.5     24       6     11.0     10     10.1     21       5     14.5     6     13.8     12       4     16.6     5     16.0     10	CalcuttaBombayDelhiRankingPopulationRankingPopulationRankingPopulationMillion peopleMillion peopleMillion peopleMillion peopleMillion people124.4192.9-(1.4)134.9193.4-(1.8)145.5194.0-(2.3)166.2194.9292.9157.1185.9263.6128.2177.2244.689.5148.5245.9611.01010.1217.4512.6711.9179.2514.5613.81211.1416.6516.01013.3	Calcutta     Bombay     Delhi       Ranking     Population     Ranking     Population     Ranking     Population     Ranking     Population     Ranking       Million     Million     Population     Ranking     Population     Ranking     Population     Ranking       12     4.4     19     2.9     -     (1.4)     -       13     4.9     19     3.4     -     (1.8)     -       14     5.5     19     4.0     -     (2.3)     -       16     6.2     19     4.9     29     2.9     -       15     7.1     18     5.9     26     3.6     34       12     8.2     17     7.2     24     4.6     -       8     9.5     14     8.5     24     5.9     34       6     11.0     10     10.1     21     7.4     31       5     14.5     6     13.8     12     11.1     32	Calcutta     Bombay     Delhi     Madras       Ranking     Population       12     4.4     19     2.9     -     (1.4)     -     (1.4)       13     4.9     19     3.4     -     (1.8)     -     (1.7)       14     5.5     19     4.0     -     (2.3)     -     (1.7)       16     6.2     19     4.9     29     2.9     -     (2.3)       15     7.1     18     5.9     3.6     3.4     3.1	Calcutta     Bombay     Delhi     Madras     Ba       Ranking     Population     Ranking     Ranking     Population     Ranking     Population     Ranking     Ranking

Table 15 Future of Large Cities in India (World Ranking in Population) (1950 - 2000)

(Reference) United Nations, Estimates and Projections of Urban, Rural and City Populations, <u>1950-2025</u>, New York, 1985, Table A-12. Notes

- (\*1) According to projection values from United Nations, <u>World</u> <u>Population Prospects</u>; <u>Estimates and Projections as Assessed in</u> 1982, New York, 1985.
- (\*2) United Nations, Statistical Yearbook, 1979/80, New York, 1981.
- (\*3) <u>Census of India 1981</u>, Series-1, India, Paper 2 of 1981, Provisional Population Totals; Rural-Urban Distribution, p.23.
- (\*4) Registrar General, Sample Registration Bulletin, June, 1984, p.2.
- (\*5) Atsushi Otomo, Haruo Sagaza, Urbanization of Population in Asian Countries", Institute of Development Economies, 1984, Chapter 11.
- (\*6) R.H. Cassen, India, Population, Economy, Society, 1978, p.124.
- (\*7) K. Srinivasan & S. Mukerji (eds.), <u>Dynamics of Population</u> and <u>Family Welfare</u>, 1983, p.322.
- (\*8) Ashishi Bose, op.cit., p.312 (Note of Table 5)
- (\*9) Otomo, Sagaza, op. cit., calculated from Table 11-10.
- (\*10) Srinivasan & Mukerji, op.cit., p.323.
- (\*11) <u>Census of India 1971, Birth Place Migration in India</u>, Series 1 -India, Special Monograph, No.1, 1974, p.178.
- (\*12) Data quoted in the following is from p.331 onward in op. cit. (Srinivasan & Mukerji).
- (\*13) Asok Mitra, India's Population: Aspects of Quality and Control, Vol.I, 1978, p.324.

CHAPTER 3

SURVEY REPORT

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#### 1. Purpose of Survey and Its Method

#### (1) Purpose of survey

Difference between urban and rural areas is a major point when considering the population problems in India. For instance, there is a considerable fertility differentials among areas, as the figure in rural areas is 144.9 while that in urban areas is 111.4 as of 1980. With regard to the use of sterilization operation and IUD among those who practice family planning, for which figures are available for rural and urban areas, both are practiced at a higher rate in urban areas. Indian government authorities also acknowledge the fact that majority At present. of pills and condoms are used in urban areas. families having more than 5 children are rare in large cities. Although such differences are gradually being reduced with the current diffusion of family planning in rural areas, it indicates the big difference which still exist between urban and rural areas regarding the significance and conditions of giving birth to children and rearing them.

Small number of children and relataively smooth diffusion of family planning in urban areas can be broadly explained from two viewpoints. One is the aspect that permeation activities from the administration side was easy because, compared to rural areas, health and medical institutions are more complete and information is conveyed more easily through various media in urban areas. This point was particularly a major factor during the initial period of family planning diffusion activities. But since family planning in India has been mostly developed on the premises of voluntary practice by the receiving side, the difference between urban and rural areas can not be explained only by these factors from the administration side. Diffusion of the family plan was not possible unless there was a factor in living condition and attitude of life of urban dwellers to bring about the limitation in number of children.

The purpose of this survey was mainly to focus on the viewpoint of the latter, i.e. living condition and attitude of the receiving side, and to study which class of urban dwellers in India are limiting the number of children in what way. For this purpose, interview survey was conducted on a wide range of topics, e.g. income, occupation, educational standard expected for their children, change in lifestyle regarding purchase of durable consumer goods and diet etc., and in order to grasp the significance of children in the lives migration, of urban dwellers. Such viewpoint offers suggestions not only in the case of population problem in urban areas, but also when considering the present state and the future of family planning in rural areas.

(2) Selection of sample households and sample areas

dwellers includes various The term urban groups with socio-economic characteristics different from each other, and it goes without saying that differences between regions and communities are large in a country like India. Moreover, since it is impossible to adopt a systematic sampling method in a short term survey as this one, there is no other choice but to adopt an arbitrary method suitable to the ojbective of the survey regarding the selection of samples and sample areas. In this survey, the following points were taken into consideration in selecting the areas and samples. (i) areas are selected from big cities and their suburbs as areas where urban living conditions are eminent. This is also appropriate in observing the entire trend of urbanization. In ubanization of India, the population increase in cities with population over 1 million people is higher than that of smaller cities. (ii) sample households are selected from a wide range of income groups with emphasis on working class households in which urban lifestyle is taking root.

Considering the above 2 points as well as limitation of survey schedule, total of two locations were selected, one from a housing development and another from an industrial area both in the suburbs of Delhi, and the sample households were selected to include those from different income groups. Therefore, the sample households do not reflect the income distribution of population. Furthermore, poor class such as slum dwellers and class with extremely high income are also not included in the sample.

### (3) Method of survey

In this survey, the following two types of questionnaires were used. (i) A type which questions basic items such as family structure and income, used as a preliminary survey conducted by the Indian cooperators. Number of sample households are 200 and 80 respectively in the two areas. (ii) A more detailed type used by the Japanese surveyors. This is for the survey of sample households selected with reference to the preliminary survey conducted by the Indian cooperators. Number of sample households are 40 and 32, respectively. Selection of survey blocks and samples of survey in both regions was entrusted to the judgement of the Indian survey cooperators.

Wholehearted cooperation such as preliminary survey and provision of assistants for Japanese surveyors was offered from Indian side through Honorable Mittal. Surveys conducted by the Japanese surveyors are mostly interviews with housewives.

## (4) Two survey areas

Two regions of survey are both newly developed areas with expansion of Delhi.

## Janakpuri Colony

This colony is a housing development which has been constructed in the western suburb of Delhi by Delhi Development Authority (hereinafter referred to as DDA) since the latter half of 1960's. Total area is over 700 hectares, and current population is estimated to be approximately 120 thousand.

Urban development of Delhi, which is rapidly increasing its socio-economic importance as the capital of India, is carried out under the jurisdiction of DDA based on the Master Plan of Delhi outlined in 1961. Supply of housing which deals with rapid population increase is one of the core targets of urban planning, and housing developments have been constructed one after another outside the existing urban area by DDA since the latter half of 1960's. Janakpuri District was the one of the first colony among these housing developments, and it is also one of the largest in scale. Construction is almost complete at present, and resident population has already exceeded the projected 95 thousand.

Land use in the colony is all decided by DDA. Along with residential area, two community centers including shopping centers, banks and public facilities as well as small scale shopping centers have been arranged in various places. Primary and middle schools, hospital and park are arranged according to the plan. The district forms a good living environment on the whole. Buses are used as means of public transportation, and frequent bus service is provided to downtown. However, problem of traffic jam is severe in addition to congestion inside the bus, and classes with some financial leeway use scooters. It normally takes 40 minutes by bus to downtown.

There are three types of housing in the district which are follows.

Sale of Land — Sale of Apartment -- 1 room -- 3 room/type

Housing leased to government and public sector employees.

Roughly speaking, indivisual houses, cooperative housing scheme apartment and 3 room type apartment are for middle high income group and 1 room type called Janata Quarter is for low income group. Apartments are all 2 to 5 stories buildings, and 1 room type is also equipped with toilet and private water.

A method of paying a certain amount of deposit to DDA for registration and obtaining the purchasing right through lottery has

been adopted for the sales of land. Since registration is not made according to the housing colony, it is by chance that a resident moves into a certain colony. And since various types of housings as described exist within one district, there is a significant difference in economic status between the neighbors. Therefore, living according to the type of community, as seen in Indian cities in the past, is impossible here.

Although Janakpuri was shunned as an inconvenient new development when the construction started, it has now become popular as a housing development with relatively good environments because residential area further expanded outward thereafter and because many of the middle class people had to seek their housing in the suburbs due to rising land price in Delhi. For this reason, there are many cases where a house is resold at a price much higher than the original price, and there seems to be a high mobility among residents.

### Grandhinager District (Faridabad city)

Faridabad in Haryana State is an industrial city located immediate south of Union Territory of Delhi and Gandhinagar, survey area, is a residential area mainly consisting of workers who work for the factory located in the city.

Turning point for Faridabad to develop as a city came at the end of 1940's when a camp for refugees from Pakistan was established here. The city developed rapidly particularly from the 1970's onward due to active promotion for factories thereafter and increase in economic weight of Delhi, and has become the nucleus of industrial town in the outskirts of Delhi. Its population also increased rapidly in the last 30 years as shown on Table 1-1. Thus majority of the residents are immigrants.

Slums were formed in various places of the city during this population increase, making the housing problem in Faridabad a serious one. According to the survey made by the city authorities in 1980, there are 50 slums in the city and their population has reached 65,000 which is one fifth of the entire population of the city. The local government is promoting the relocation of slums which are particularly in bad condition, and construction of 1 room with kitchen type housing which can be purchased by monthly installment fee of about 50 rupees is in progress.

Although the sample area Gandihinagar is an area which was formed by illegal occupation of public land, it was not considered for relocation since its living environment is relatively good. The houses become private properties after the right for land use is approved, and some servicing of the living environment such as maintenance of sewage and common well for drinking water has been carried out by the local government. The area is crowded with houses consisting of 1 or 2 rooms, a kitchen and a small garden that are built along the streets 2 to 3 meters wide. Few houses have private wells, and public wells located on the street are used. Sewerage is drained directly to the shallow ditches on both sides of the street. On the other hand, however, durable consumer goods are currently spreading at a rapid rate, and the interiors of these houses are neatly arranged, many utensils are found in kitchens and a number of TV antennas can be seen on their roofs.

Aside from government schools, there is a school for children up to 11th grade in this area which is run by a group of social worker. Majority of children in school age receive education in any of these two schools. There is also a medical clinic under the medical insurance system for factory workers in the vicinity, and many of the workers receive medicine and treatment free of charge. There are also private medical practitioners in the area.

Majority of the residents are immigrants from the northern states and the region which is now in Pakistan. Segregation of habitat according to religion or community is not found here, and it is similar to Janakpuri in the sense that people who belong to different religions live next to each other.

## 2. Characteristics of the Sample Households

## (1) Age structure and migration

In the preliminary survey, 200 households from Janakpuri, DDA colony and 80 households from Faridabad in Haryana have been selected by the Indian counterparts as sample households.

Age structure in both districts is as shown on Table 2-1. In urban India, generally male population exceed female one, because city ward migration is dominant in male. According to the 1981 census sex ratio in India (female population for every male population of 1000) was 934, but it goes down to 880 in the cities. In sample households of this survey, single male households are not included. Sex ratio is, therefore, relatively in balance.

As is clear from the age structure, dependency ratio of child population on economically active population (ages 0 - 14/15 - 59) is 49.4% in Delhi and 83.7% in Faridabad. In contrast, dependency ratio of aged population (ages over 60/15 - 59) is 5.82% in Delhi and 0.7% in Faridabad and is extremely low. Regarding marital status, percentage of households living with their parents and relatives are only 5.8% in Delhi and 1.3% in Faridabad, and nuclear families account for the majority of households. Janakpuri is a subdivision style colony in which 4 story, 3 story and 2 story apartment style buildings and single family houses are distributed. They are in styles called 3-room-set, 2-room-set and 1-room-set, which respectively have 3 rooms, 2 rooms and 1 room for bedroom or living room with a kitchen and a bathroom. In other words, structure of the buildings themselves are in the style of urban nuclear family type housing.

Classification of residents in the district according to the place of birth is as shown on Table 2-2

Reflecting the geographical condition, majority of their places of birth are neighboring states such as Delhi, Uttar Pradesh, Punjab and Haryana.

Percentage of population from the above states is 84.1% in Delhi and 75.4% in Faridabad. In addition, distinctive feature of Faridabad is that people from foreign countries account for 14.3% of the entire Faridabad has a history of having received many refugees population. after the partition of India and Pakistan. Therefore, people born in foreign countries refer to those who came from Pakistan. The recent advancement of industrialization in the area is mainly due to the policy to provide employment opportunities to these refugees. This industrialization has also brought about rapid population inflow into Rate of population increase between 1971 and 1981 was Faridabad. 28.75% in Haryana and 39.88% in Faridabad, and population increase due to social increase is particularly in progress.

Migration classified by previous residence is examined. In the case of Faridabad, there are only few samples and it is difficult to process them statistically. In case of Delhi, 99 households filled in the section about their migration history, 89.9% of which migrated from other districts in Delhi to Janakpuri . Others migrated from Uttar Pradesh, Punjab and Haryana. The housing supply system in Janakpuri consists of households engaged in government related institutions such as DESU (Delhi Electric Supply Undertaking) and households which applied to DDA and received parceled out housing through lottery. Therefore the majority of households migrated here after having either establishing an economic base in Delhi or having an ability to purchase housing.

## (2) Occupation, income and living standard

Occupational structure and income in Janakpuri and Faridabad are as shown on Table 2-3.

Occupations of householders in Janakpuri are mainly white collar class, most of which are in the service industry. No substantial difference in income can be seen between occupations and similar income distribution is observed within respective classified occupations. Income distribution within respective classified occupations in Janakpuri is concentrated in the range of 1,000 to 2,500 Rs. per month, and regional average income is 1,574 Rs. per month. In Faridabad, it is concentrated in the range under 1,000 Rs. per month and the average is 945 Rs. per month.

How do these income standards affect the actual living standard? One possible indicator is the rate of durable consumer goods possession as shown on Table 2-4. Consumer goods which have been adopted here are 5 items, i.e. radio, sewing machine, TV set, refrigerator and scooter.

With regard to Faridabad, relation between income and possesion rate of durable consumer goods is more distinct and hoseholds with monthly income over 2,000 Rs. have all the consumer goods mentioned Characteristics as clear as Faridabad can not be observed in above. Delhi. This seems to have been influenced by the size of samples. Income standard regarding the possession of durable consumer goods is slightly higher in Delhi than in Faridabad, and the turning point is 3,000 Rs. The trend of consumer goods possession is in the sequence of radio, TV set, sewing machine followed by refrigerator and scooter, proportion to the increase in income standard. A trend can be observed in the high income class to switch from black and white TV set to color TVset, Radio, TV set and sewing machine are easy items to purchase as they can be purchased for 1,000 to 2,000 Rs. Radio is an item which is relatively easy to own, and in Faridabad, all households with monthly family income over 1,500 Rs. have a radio, and all households with monthly family income over 2,500 Rs. have a TV set.

Percentage of wives among the working population in Janakpuri is 17.7%, 35.2 % of them are engaged in health and education services and 48.1% are engaged in other service industries. In the case of Faridabad, 2 households out of 80 households have working wives, and one is engaged in health and education services, and the other is engaged in other service industries.

Percentage of women among the working population in urban areas is low in India as a whole. Percentage of working women in 1981 census was 22.45% in rural areas and 11.65% in urban areas. The latter figure was 9.10% in urban Delhi and 5.6% in Faridabad urban complex. As the above figures indicate, it is difficult to obtain employment opportunities in urban areas of India compared to rural areas. Employment opportunities of women are related with their educational standard in the impressions obtained from this interview survey. In the urban middle class which was surveyed this time, type of work mainly desired by women is teaching which is appropriate in terms of experience, salary and actual working hours. Educational standard will be discussed in the next section, but it can be said that percentage of working women is high in Delhi where educational standard is high and employment opportunities for women is abundant.

#### (3) Educational standard

Educational standard in Delhi and Faridabad is as shown on Table Educational standard is higher in Delhi for both husband and 2~5. 57.14% of husbands and 41.26% of wives in Delhi have an academic wife. background of college degree and above while the same figures in Faridabad are 8.17% for husbands and 7.16% for wives. Educational standard of Faridabad is concentrated in primary and middle school education and the percentages are 27.5% and 51.25%, respectively. Furthermore, illiteracy rate among wives is high in Fairdabad at According to the 1981 census, national average literacy rate 34.21%. is 36.23%, 65.8% for urban male and 47.8% for urban female. In the urban section of Delhi, the figures are 69.0% for male and 54.7% for female. In Faridabad urban complex the figures are 65.0% and 44.0%, respectively. Judging from these standards, educational standard in the subject areas of survey is higher than their respective regional standard.

In this survey, educational standard is the key factor which influences income, decision on number of children and rate of family planning practice. (Relation between number of children and rate of family planning practice for different levels of educational standard will be discussed in the next section in detail.) Correlation matrix of education, income and number of children in Delhi and Faridabad is as shown on Table 2-6.

Educational standard and income indicated here are shown by the figures of the householders. Correlation coefficient is not high in either Delhi or Faridabad, but positive correlation between educational standard and negative correlation between number of children and educational standard can be observed. That is, it indicates that higher the educational standard, higher the income and smaller the of children. Higher correlation is observed in Delhi regarding number the latter. This positive correlation between educational standard and income standard seems to have an effect on their idea about their This is also related to the degree of future children's education. expectations to their children, and creates a tendency to give higher education to their children. This was also revealed in the actual interview survey, and the parents' aspiration to give the highest education desired by their children is observed.

Education is not only an important element in rate of family planning practice and determination of income, but is also a key factor for deciding the number of children. Number of children according to the age and according to the educational standard in Delhi and Faridabad are as shown on Table 2-7.

Number of children according to educational standard shows more distinct distribution in Delhi. That is, the average number of children is 3.5 when the educational level of the head of household is primary school, while the same figure is 2.2 when the education level of the head of household is college degree and above, and difference between the two is more than one child. In all age groups, a similar the less the number trend of higher the academic background, of children can be seen from the number of children classified by educational standard. On the other hand, possibly influenced by small number of samples, distribution as distinct as Delhi can not be found in Faridabad. These studies were done on educational standard of their age structure but the relation between householders and educational standard of wives and number of children can be drawn as in Diagram 2-1. Figures in the axis of abssissas show the level of education of wives. 1 means illiterate, 2 is literate with no education, 3 is primary, 4 is middle, 5 is matriculation, 6 is technical diploma course, 7 is graduate and 8 is more than graduate

An obvious relation can be observed between educational standard of wives and number of children both in Delhi and Faridabad. Improvement in educational standard of wives promotes a tendency to provide higher quality education to children, and also seems to be an important factor in increasing the rate of family planning practice.

## (4) Family planning

Decline of infant mortality rate can be cited as one of the important factors for decline of birth rate. According to SRS (Sample Registration System), infant mortality rate in 1980 was 114 per mill in national average of India and 65 per mill in urban areas. In 1978, infant mortality rate was 64 per mill in urban area of Delhi and 53 per mill in urban areas of Haryana, showing a very low figure. Decline of infant mortality rate in urban area seems to have been caused by full availability of medical facilities and by superior hygiene condition compared to rural areas. In this survey, a survey on the place of the delivery was done as one of the indexes for studying the decline of infant mortality rate and medical standard.

As obvious from Table 2-8, there are many cases of giving birth at medical institutions attended by doctors in urban areas, while rate of giving birth attended by untrained persons is higher in rural areas. Furthermore, it is revealed by the interview survey that as income increases, the rate of giving birth at private hospitals, which provide higher quality in treatment, instead of government run hospitals increases. Such trends are more noticeable in Delhi. Rate of giving birth at medical institutions is higher in Delhi than in Faridabad.

Table 2-9 is a study of relation between number of children and rate of family planning implementation. Noteworthy point is that rate of family planning implementation peaks at households with 2 children in Delhi while it peaks at households with 3 to 4 children in Faridabad. If this trend is connected with ideal number of children, its figure will be two in Delhi and three to four in Faridabad.

How do these attitudes towards family planning differ according to educational standard and age? Since the rate of family planning practice was 67.3%, i.e. only 37 households in Faridabad, it is impossible to examine the relation as described above from sample The figures for Delhi are as shown on Table 2-10. Rate of households. practice increases with improvement in educatonal standard, and rate of acceptors among those with college degree and above is 44.19% which is In terms of age, rate of acceptors during the close to half. reproduction age until 49 has reached 70.35%.

As indicated above, improvement of educational standard is the key factor for family planning as well in urban India.

## 3. Analysis of Survey Results - Urban Life and Family Planning

In Section 2, characteristics of sample households such as income, occupation, educational standards and age of parents as well as correlation between these characteristics and number of children, diffusion of family planning were studied. Roughly speaking, younger age households in higher income/higher education standards tend to have fewer children and show higher rate of family planning practice. In the sample surveyed by the Japanese investigators, number of existing children indicates similar trend as seen in Table 3-1. Please refer to Table 3-13 regarding the family planning. In this section, these points will be discussed in more detail. Information from the small samples collected by the Japanese investigators will be mainly used for data.

## (1) Income and lifestyle

It has already been observed in Section 2 that income is a major factor in determining the number of children. Then let us examine from various aspects why the motivation to limit the number of children becomes stronger in high income class, and what differences exist between low inome lifestyle and high income lifestyle in the urban life of present India.

(a) Living standard

The first point is the problem of general living expenses. It is possible that financial leeway to raise children decreases in spite of increase in income if the living standard, desired by the family as well as socially expected and accepted, becomes higher leading to higher living expenses. And since the expenses for raising children increases in proportion to improvement in living standard, living expenses become a major factor in determining the number of children. Although no survey was conducted on household budget in this survey, some idea about the difference in living expenses according to income class should be available from several indexes regarding living standard.

Table 3-2 shows living standard according to income class seen from the aspects of durable goods diffusion and amount of milk purchased. Summary regarding durable goods has already been described on 200 and 80 samples, but here it is shown with points mentioned in the note considering standard purchasing price and maintenance expenses. We also pick up milk as an index of living standard, because it is an item which responds to total household expenditure sensitively in India regardless of differences in diet.

The following points can be understood from this table.

 Living standard seen from such material side is steadily improving in proportion to increase of income in both areas. However, in the case of Janakpuri, where there is wide disparity in income, there is a considerable disparity in material standard of sample households.
In Janakpuri district, marked difference in living standard is created at a monthly income of about 3,000 Rs.

(3) When both districts are compared, diffusion of durable goods and amount of milk purchase tend to be higher in Janakpuri between the same income groups of these two areas.

Points (1) and (2) indicate that living expenses increase according to increase of income, and that considerable living expenses are necessary, particularly for what might be referred to as urban middle class with monthly income of over 3,000 Rs, in order to maintain the lifestyle which they desire and are expected by others. According to the answers on diet during the weaning period which is directly connected with expenses of child raising, it was only this high income class that gave relatively expensive items such as fruits on a daily basis.

The difference between both areas in (3) can be seen as difference in demonstration effect which is based on difference in character of these districts, one being a residential area in the suburb of a large city with many white collars, and the other a residential area for factory workers. In this sense, financial pressure seems to be higher in Janakpuri between the same income groups of the two areas.

This increase in living expenses is expressed not only on material plane but also on the plane of service such as medicine as shown on Table 3-3. Despite the fact that both districts have relatively well equipped with public medical institutions, many people go to private doctors and hospitals among the high income class.

## (b) Education for children

The second point is education for children. Extent and quality of education given to children has much significance as the largest factor which determined the future of children in big cities where educational standard is closely connected with opportunities and conditions of employment. A strong correlation between educational standard and income is shown in Table 3-4. Especially under today's condition which could be called educational inflation that accompanied the diffusion of higher education after the independence, education is a matter of largest concern for the parents.

Let us briefly touch on the educational system of India before going into the results of survey. School age is 1 year earlier than Japan and starts at the age of 5. Grades 1 through 5 is primary school, 6 through 8 is middle school and 9 through 11 (previously 12) is classified as high school. Thereafter one can either proceed to college. master's and doctor's course or to vocational training or qualification course. There are public schools and private schools for grades 1 through 11. Most of the latter give their classes in English, which is said to be advantageous for proceeding to higher education. Compulsory education has not been realized yet but rate of registration is increasing every year, and the rate of registration in the primary level is 83.6% in entire India (100.2% for male and 65.9% for female) as of 1979-80. (Note: Not all registered children are constantly going to school.)

Table 3-5 shows the educational standard of children over 18 in the sample household and type of school attended by children in 1st through 11th grade.

The following points came to attention regarding the educational standard children over 18 years of age.

- (a) Aside from the fact that high income class provide high educational standard in general,
- (b) Educational standard is higher in Gandhinagar district for the class with monthly income under 1,000 Rs.
- (c) In Janakpuridistrict, there is much improvement in educational standard when monthly income exceeds 2,000 Rs, and college graduates and above become the majority. Regarding (b), it is dangerous to pick out any trend because of the small number of samples. But taking this into consideration with the previously described aspect of living expenses, it seems that there is more burden of educational expenses in Janakpuri district for this income class.

Regarding the type of school being attended, number of private schools increase as income class becomes higher and number of children going to public school is 0 for households with monthly income over 3,000 Rs in Janakpuri district. High number of "others" mostly among the low income class in Gandhinagar district is due to the existence of a school run by social workers. Popularity of private schools among the high income class along with high educational standard of children over 18, shows how much this class is trying to provide high level education.

Answers to the question "To what extent do you want to educate your children?", which was asked to examine this point, are listed on Table 3-6. In both districts "up to the child" decreases and "as much as possible" increases as income gets higher, and more people clearly specify their desired level. It can be seen that the number of parents expecting college degree and above increases after their monthly income exceeds 1,000 Rs, and that master's degree and above is expected among those with monthly income over 3,000 Rs.

This inclination towards higher education naturally increases the burden of educational expenses. Table 3-7 shows the sense of burden felt by different income class. With the exception of the class with monthly income exceeding 2,000 Rs educational expenses are a serious problem, and many of the answerers said that they want to educate their children even if they had to be frugal themselves. The increased sense of burden in the class with monthly income exceeding 3,000 Rs in Janakpuri seems to reflect the extremely high educational standard expected among this class.

Examining the answers on education, it can be pointed out that higher standard education is desired as the income class becomes higher, and that burden of its expenses has become a serious problem for classes with monthly income of 1,000 to 2,000 Rs. These points appear to have become important factors in determining the number of children.

#### (2) Income and family life

Other important points besides living standard which might affect each family in determining the number of their children include problems of family forms and lifestyle. It has been said that generally in India, large families as typically seen in the extended family are desired, wives working outside is not encouraged and the sons are ideally supposed to look after their parents of old age. This ideal way of a family makes it possible to raise a considerable number of children relatively easily and also makes it necessary to have some sons. It has been indicated in the national scale survey that number of large families are already not so common in urban areas of India today. Let us examine family forms and lifestyles of our samples.

## (a) Form of family and life in old age

Table 3-8 shows the form of family and average number of family members for sample households in both areas. Percentage of nuclear family consisting of a couple and unmarried children is high in both areas, particularly in Gandhinagar where it accounts for the majority at 91%. Behind such high percentage of nuclear family in Gandhinagar district, there appears to be reasons, aside from inclination of householders' age in sample households to be in relatively younger age group, such as the fact that this district is a residential area for people who came here in the last 15 years, and that independence of married children is relativy easier in this area where rent and house prices are lower compared to Delhi.

In terms of income class, hardly any difference is noticed in Gandhinagar district where there is not much difference of income between sample households, while nuclear families are few and number of family member is large among the low income class in Janakpuri district. But since extended family type, which includes more than one married brothers in the family is very rare and most of non-nuclear families are three- generation families, this trend can be considered as the result of economic factors such as housing situation and supporting aged parents, rather than the manifestation of traditional orientation towards large families.

This point can also be confirmed by Table 3-9 which shows answers for questions regarding outlook on life in the old age. Many households in high income class considering are economically independent life in the old age while high expectation towards children is recognized among low income class in both areas, and this trend is particularly clear in Janakpuri. Economic independence in one's old age mainly depends on retirement allowance, pension and provident fund. most employments at small scale enterprises and unorganized However, sector, which is common among the low income class, do not have these systems. Moreover, since the receiving amount is decided according to the amount of wage during employment, it is not sufficient for the low income class even if they are qualified for such allowance.

There were also many cases among those who expect support from children in the old age where they were not convinced of its realization. Many of the respondents expressed their anxiety by saying: "situation have changed ...." "I can't rely on my son after he marries...." This point shows the difference in ideas about life in the old age between rural and urban areas. In rural area, living with their son's family is generally accepted, and it leads to a considerable guarantee in the old age. This is not necessarily true in urban areas.

What kind of significance do these trends in family form and outlook on life in the old age have in terms of raising children? Firstly, the fact that there are many nuclear type families is a factor which promotes the limitation on number of their children freely and that it is more difficult to get people to assist in child raising. Significance of children as guarantee for life in the old age is also relatively small. This point is especially conspicuous in the high income class, but low income class seems to have a similar trend unless their children receive education and find employment with good conditions, and it can be understood that family structures in sample households including toward small number of children on the whole.

(b) Employment of wives

Among the changes in family relations and lifestyle, employment of wives is a factor which directly affect the number of children. Its significance is expected to be particularly large in the samples of this survey in which the process towards nuclear family is in progress. In this survey, wives' views on employment was added to the survey items as well as their working condition to examine this point.

First of all, Table 3-10 examines whether or not there is any difference in the rate of family planning practice and number of children between households which approves their wives to work and other households. In Janakpuri rate of family planning practice tends to be slightly higher when wives are working, and there is no big difference in number of children. On the other hand, rate of practice is higher among households in which wives are not working/not approve to work in Gandhinagar, and number of children also tend to be lower. There seems to be some difference in the working environment behind these differences between the two areas. Working condition of wives as well as educational standard, age and attitude towards working wives in both area are shown on Table 3-11 and Table 3-12. The major points can be summarized as follows.

- There is a big difference between the 2 areas regarding wives' working condition, and while there are hardly any families with working wives in Gandhinagar district, working rate among wives is high in Janakpuri district. Close look at Janakpuri district reveals the trend that: i) working rate of wives is high among the high income class, and half of the wives are working in the group with monthly income of over 3,000 Rs; ii) working rate is high among the highly educated wives.
- 2) With regard to the attitude towards wives working : i) both husband and wife in higher income group have more desire/support for working wives in Janakpuri while the higher income class conversely has negative attitude in Gandhinagar; ii) both husband and wife with higher educational standard tend to have more positive attitudes for working wives in both areas; iii) although no clear trend can be identified in classification by age, there is a slight increase of positive attitude among the wives over 35 in Janakpuri district.
- 3) Examining the type of wives' work in Janakpuri district, many of those in the high income and highly educated groups are employed in the organised (and many in public) sector, and: many of those in the low income and low educational standards group are engaged in homework such as sewing and knitting.

What can be concluded from the various points above? The first point is the issue of educational standard and type of employment one can get. Whether or not married woman can start working is largely dependent on employment opportunity for type of work which is feasible in terms of time and social acceptance. Particularly since the subjects of this survey are samples which hardly include the poorest class, wives are quite selective about their work. (Refer to the conditions of work desired by the wives). Types of work such as teacher and clerk (particularly in public sector whose conditions of employment is stable) which is popular among married women generally require considerably high academic background such as college degree or above, and it is difficult for wives with lower educational standards to get these jobs. This seems to be making the latter's attitude The fact that wives with no desire for work towards work negative. increase in the group with monthly income over 1,000 Rs at Gandhinagar shows that when they have some financial leeway they become negative towards work under the condition in which the possibility for getting a "respectable job" is small.

The second point is that wives' incomes are an important parts in total household income among the high income group in which high percentage of wives work. 'In the case of households in Janakpuri with monthly income over 3,000 Rs, wives' monthly incomes are as high as ranging between 1,000 and 1,900 Rs. And as previously mentioned, they are indispensable factors which support the high expectations of this group for living standard and education. Husbands also approve and expect their wives to work, and reduction of household duties through household electric appliances (even washing machines have been introduced in some households) as well as availability of inexpensive housekeepers make it easier for wives to work.

As shown above, it can be pointed out from this survey that working wives of considerably high income class with monthly income over 3,000 Rs in Janakpuri are factors which lead directly and indirectly to limiting the number of children. Furthermore, not only the termination of reproductive period early due to family planning for wives with high educational standards whose working rate is high, but also the period starts late because of high marriage age, and the resulting reproductive period will be shorter.

As seen above, family planning was studied from various aspects of urban life and income in the urban area. It has been shown in the survey result that family relation and lifestyle of relatively high income group are inclined towards having less children, and that it is also difficult to have many children in the relatively low income class. This trend is more obvious in Janakpuri, which is a residential area in the suburb of a big city, than in Gandhinagar, which is a residential area for factory laborers. These points coincide with the survey results regarding number of children and rate of family planning practice.

#### (3) Characteristics of family planning diffusion

In 3-1 and 3-2, factors involved in diffusion of family planning were examined from the practicer's side. Next, let us touch on the method of family planning practice as an issue of point of contact between the family planning programmes and its receiving sides.

The most popular family planning method in India is sterilization. The government is actively promoting the diversification of practicing methods at present. Use of pills and condoms is increasing in urban areas, but the rate of operation is sterilization is still high in all In 1983, 25.9% of couples of reproductive age are practicing India. family planning (22.0% sterilization, 1.4% IUD, 2.5% other methods). Operation is a reliable method for the administration side because its effectiveness is nearly 100%, but not necessarily easy for the practicers to accept as it denies future possibilities and creates concerns over health such as sequela as well as psychological disorder. This is a serious problem particularly for young couples with up to That is why diffusion of means such as pills, condom about 2 children. IUD, which can be used as a method for spacing and reversal is and desired. However, the users are still confined to limited groups mainly in urban area because these methods require some knowledge and constant effort to have reliable effect. It is also important from this standpoint that methods of family planning practice are selected from various methods according to situation and purpose of the practicers when examining the degree of success in family planning programmes.

Table 3-13 is a breakdown of methods for family planning practice in both districts, and major points can be summarized as follows.

- Percentage of methods other than sterilization is higher than the national average of India in both areas. Particularly in Janakpuri district, more than half of the practicers depend on methods other than sterilization.
- 2) There is hardly any difference between income classes in Gandhinagar, but the rate of methods other than sterilization is high among the high income groups in Janakpuri and sterilization is nil in the group with monthly income over 3,000 Rs in particular.
- 3) In terms of the number of existing children, sterilization suddenly increases at 3 children and above in both areas, and spacing method is popular among the samples with 1 to 2 children in Janakpuri.
- In terms of wife's age, spacing method is popular among the young age group in Janakpuri.

On the whole, diversification of methods for family planning practice is realized in Janakpuri whereas the rate of sterilization is still high in Gandhinagar. It is also worthy of note that the rate of practice itself is lower in Gandhinagar, and that higher income classes use higher rate of methods other than sterilization. Pills and condom can be also acquired at subsidized price or as government ration for free, besides the high quality products sold at general distribution mechanism, but further propaganda activities on its usage and improvement of quality is necessary in order for low income class to accept them positively.

Results of survey on the method of family planning practice reflect necessity and attitude of the practicers regarding family planning as described in 3-(1) and 3-(2). It can be considered that more voluntary family planning is being realized in some groups such as the high income groups of Janakpuri which is highly motivated to limiting the number of children.

## (4) Migration

Since both areas of this survey are newly developed areas, householders are immigrants in all households of the survey sample. Majority of householders in both districts are from the northern states and Delhi. Refugees from Pakistan who migrated during the partition in 1947 can also be found in both areas. In addition to this, some people from the southern states and other large cities like Calcutta are included in the sample in Janakpuri district.

In Janakpuri, householders of sample households have lived in Delhi for a considerably long, exceeding 20 years in majority of households. Since housings in this area are mostly purchased ones, most of them have moved several times in Delhi before moving to the present address. In Gandhinagar, 10 to 20 years is the most common number of years people have lived in Faridabad. Many of them have moved several times within the city before moving to the present address as in the case of Janakpuri district, but there are also people who came here directly counting on their relatives who moved here earlier.

Since both districts are regions comprised of immigrants, it is possible that their lifestyle and attitude towards family planning are different depending on their place of origin and years of residence in the present city. Special attention must be given to their origin (rural/urban), and years of residence in the present city, i.e. the extent of impact given to immigrants by urbanization as a movement.

Table 3-14 is a list of income class, family form, rate of family planning practice and rate of working wives classified by place of origin. In Janakpuri, those who came from rural areas tend to be in lower income groups, have more family members than average, have lower rate of family planning practice and have lower rate of working wives. On the other hand, no clear trend is found in any of these points in Gandhinagar. In order to verify whether the trend seen in Janakpuri district is a reflection of difference in place of origin or simply a difference in income group, place of origin/years of residence were examined with diffusion rate of consumer goods and amount of milk purchased as indexes of living standard, householder's educational standards and family type for respective income levels. However, no distinct trend was recognized in any item.

Although sufficient analysis could not be performed due to limited number of samples, it seems better to regard the difference between those from rural area and those from urban area as caused by difference in income. Especially as in Janakpari where it is difficult for immigrants from rural villages to move in right away and the dwellers have income above certain level, difference between places of origin is minimized. And those from rural areas with high income are mostly from upper groups of rural society, and it is possible that their consciousness and living conditions were already closer to those in the cities than general rural population.

## (5) Conclusion

Lastly, let us summarize the noteworthy points from above survey results.

(a) Compared with the national average of India, number of children is smaller and rate of family planning is in two areas surveyed. Aside from the fact that both areas are mainly comprised from households with income above certain level, these districts being urban residential areas with relatively good living environment (public health and medical facilities such as medical insurance system and public hospitals, as well as educational facilities, etc.), be the reason for this.

(b) However, there are differences in degree of family planning diffusion according to income group and educational standard. Among the relatively upper class of the urban middle class, typical characteristics of urban life style such as improvement in consumption standard, strong inclination towards higher educational level for better employment and change in family as seen in the plan for life in the old age and working wives, have become a strong motivation to control the number of children. On the other hand, such trend is relatively weaker among middle and lower group of urban dewellers such as factory workers.

(c) The point in (b) is also reflected in condition and method of family planning practice they use. The couples' motivation and necessity has become a major regulating factor regarding their acceptance of family planning.
(d) As far as this survey areas are concerned, difference in income is a major factor which regulates lifestyle more than difference in place of origin classified by rural/urban areas.

This survey made us realize the importance of receivers' various factors in the diffusion of family planning. Results of survey show that practice of family planning through appropriate methods at the time necessary for each couple becomes possible only when the receiving couples need for family planning by themselves. In today's India, many people have accepted to limit the number of their children to 3 or 4 as a result of efforts of family planning programmes in the last 30 years. However, in order to realize the diversification of practicing methods and 2 children per houshold programmes currently promoted by the government, it seems necessary to create a condition in which the receiving couples can grasp living standard and education higher than the present level as a feasible, realistic goal.

	IN FALLOADAU"
1961	77,915
1971	170,143
1981	330,864

#### Table 1-1 Population Increase in Faridabad\*

\* Area included in present Faridabad Complex Administration Standard Urban Area

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<u></u>	De	lhi	Fari	dabad
	Male	Female	Male	Female
0 - 4	35	32	18	13
5 - 9	53	54	41	19
10 - 14	71	69	38	41
15 - 19	62	65	39	31
20 - 24	32	48	12	12
25 - 29	24	39	9	13
30 - 34	32	41	9	19
35 - 39	42	56	20	23
40 - 44	50	46	24	18
45 - 49	47	23	18	-
50 - 54	18	7	1	4
55 - 59	4	_	4	1
60 - 64	2	7	1	1
65 -	15	13	-	-
Total	487	500	234	195

Table 2-1 Age Structure (Delhi, Faridabad)

.

	Figures	inside parenthesis	are percentages
Birth place	Delhi	Faridabad	
Delhi	22 (11.3)	3 (3.9)	
U.P.	46 (23.6)	28 (36.4)	
Punjab-Haryana	96 (49.2)	27 (35.1)	
Bihar	1 (0.5)	1 (1.3)	
Rajastan-M.P.	8 (4.1)	5 (0.5)	
Western States	4 (2.1)	-	
Eastern States	4 (2.1)	1 (1.3)	
Southern States	10 ( 5.1)	1 (1.3)	
Foreign Countries	4 (2.1)	11 (14.3)	
Total	195 (100.0)	77 (100.0)	

Table 2-2 Population Structure According to Place of Birth

# Table 2-3 Income and Occupational Classification

2-3-1 Delhi

Income (Rs/month) Industry	- 499	500 <del>-</del> 999	1000 - 1499	1500 - 1999	2000 – 2499	2500 – 2999	3000 - 3499	3500 - 3999	4000 -	Total
Primary Industry			_			_		-	_	
Mining	-	-	l		-	-	-	-	-	1 (1.3)
Manufacturing	2	16	8	1	1	l	l	-	-	30 (40.0)
Construction	2	6	-	-	-	-	-	-	-	8 (10.7)
Commerce	-	8	-	l	-	-	-	-	-	9 (12.0)
Transportation - Communication	l	1	l	-	-	-	-	-	-	3 ( 4.0)
Medicine • Education	1	6	З	-	ľ.	• 🖛	-	-	-	11 (14.7)
Other service industries	3	3	4	L		ĩ	-	-	-	13 (17.3)
Total	9 (12.0)	40 (53.3)	17 (22.7)	3 ( 4.0)	2 ( 2.7)	2 ( 2.7)	1 ( 1.3)	1 ( 1.3)		75

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Income (Rs/month) Industry	- 499	500 - 999	1000 - 1499	1500 - 1999	2000 - 2499	2500 <del>-</del> 2999	3000 - 3499	3500 - 3999	4000 -	Total
Primary Industry	_	1	2	3		2	_		_	8
Mining	-	-	2	ı	1	l	-	-	-	5 (4,2)
Manufacturing	-	2	3	3	3	-	-	l	1	13 ( 2.8)
Construction	-	-	-	-	l	-		-	-	l (6,8)
Commerce	-	l	4	-	6	2	l	l	1	16 ( 0.5)
Transportation - Communication	-	l	2	2	3	2	4	1	l	16 ( 8.3)
Medicine • Education	-	-	5	l	2	l	l		l	ll (8.3)
Other service industries	1	21	34	30	19	1	5	2	1	122 ( 5.7)
Total	1 ( 0.5)	26 (13.5)	52 (27.1)	40 (20.8)	35 (18.2)	17 (18.9)	11 ( 5.7)	5 (2.8)	5 (2.8)	192 (88.9)

## Table 2-3 Income and Occupational Classification (cont'd)

<sup>2-3-2</sup> Faridabad

Table	2-4	Rate	of	Durable	Consumer	Goods	Possession
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2-4-1 Delhi

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Income (Rs/month) Goods	- 499	500 - 999	1000 - 1499	1500 <b>-</b> 1999	2000 – 2499	2500 - 2999	3000 - 3499	3500 - 3999	4000 -
Radio	100	88.5	73.8	90.0	83.3	100	100	100	100
Sewing Machine	100	80.8	86.8	85.0	80.8	82.4	81.8	100	100
TV	-	80.8	90.8	90.0	80.8	94.1	100	91.7	100
Refrigerator	-	30.8	89.8	70.0	88.1	88.2	81.8	100	100
Scooter	-	-	7.5	7.5	5.8	5.9	27.3	-	40.0

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#### Table 2-4 Rate of Durable Consumer Goods Possession (cont'd)

#### 2-4-2 Faridabad

,	Income (Rs/month) Goods	- 499	500 - 999	1000 - 1499	1500 - 1999	2000 - 2499	2500 - 2999	3000 - 3499	3500 - 3999	4000 -
- 72	Radio	58.3	70.7	83.3	100	100	100	100	100	100
I	Sewing Machine	58.3	75.8	88.9	100	100	100	100	100	100
	TV	18.7	58.1	83.3	100	100	100	100	100	100
	Refrigerator	-	4.9	28.8	66.7	100	100	100	100	100
	Scooter	-	2.4	18.7	33.7	100	100	100	100	100

999 <u>9-9999-9999-99999-99999-99999-99999-9999</u>	Del	hi	Faridabad		
	Husband	Wife	Husband	Wife	
Illiterate	2	24	3	28	
Literate with no ed.	-	3	4	5	
Primary	2	7	22	18	
Middle	15	19	41	20	
Matriculation	85	58	3	3	
Graduate	112	78	7	8	
Total	198	189	80	78	

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# Table 2-5 Educational Standard

# Table 2-6 Correlation Matrix (educational Standard, income, number of children)

	Educational standard	Income	Number of children
Educational standard	1.00	0.29	-0.37
Income		1.00	-0.17
Number of children			1.00

2-6-1 Delhi

# 2-6-2 Faridabad

	Educational standard	Income	Number of children
Educational standard	1.00	0.26	-0.09
Income		1.00	-0.08
Number of children			1.00

Ed. std. Age	Illiterate	Literate with no ed.	Primary	Middle	Matric	Graduate	All educa- tional levels
20 - 24						0.5	0.5
25 - 29					1.0	1.2	1.0
30 - 34	-				2.1	1.8	1.7
35 - 39	8.0		3.0	3.5	2,8	1.8	2.3
40 - 44				4.0	2.7	2.5	2.8
45 - 49	5.0		4.0	4,5	3,3	3.0	3.4
50 - 54					3.0	2.9	2.9
55 - 59				5.0		3.0	4.0
All age groups	5.5		3,5	3.9	2.8	2.2	2.8

#### Table 2-7-1 Number of Children According to Age and Educational Standard (Delhi)

Ed. std. Age	lliterate	Literate with no ed.	Primary	Middle	Matric	Graduate	All educa- tional levels
20 - 24				0			0
25 - 29			1.0	0.5		2.0	1.0
30 - 34		4.0	2.5	3.5	0		2.9
35 - 39			8.7	2,8		4.0	4.8
40 - 44	4.0	4.0	2.9	3.4	4.0	3.0	3.3
45 - 49	5.0	4.0	4,0	3,8	3.0	4.0	4.0
50 - 54				5.0			5.0
55 - 59	1.0		8.0	3.5			3.5
All age groups	3.3	4.0	3.0	2.9	2,3	3.3	3.5

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Table 2-7-2 Number of Children According to Age and Educational Standard (Faridabad)

Delivery place Area	Medical institutions	Trained medical practicioners	Untrained medical practicioners	Not stated
Delhi	132 (72.5)	29 (15,9)	21 (11.5)	-
Faridabad	8 (10.3)	24 (30.8)	10 (12.8)	38 (48.2)
India urban* (1978)	50.9%	16.1%	26.5%	6.5%
India rural	15.6%	8.6%	60.0%	15.8%

Figures inside parenthesis are percentages

(%)

\* 1978: Gov. of India, Levels, Trends, and Differentials in Fertility, 1979

Table	2-9	Rate	of H	Famil	Ly :	Planr	ning	[ Pra	ctice	
		Accoi	ding	j to	Nu	mber	of	Child	dren	
<u> </u>						وروبي المناطر				

Area		0	1	2	3	4	5	6	7 -	Total
Delle i	YES	1.7	11.0	31.2	16.8	8,7	6,4	1.2	1.2	77.7 (135)
Deini	- NO	1.2	2.9	6.4	5.8	3.5	2.3		-	22.1 (38)
	YES	-	3. 6	3.6	23.6	23.6	10.9	1.8	-	67.1 (37)
Faridaba	d — NO	1.8	1.8	9.1	3.6	9.1	3.8	1.8	1.8	32.8 (18)

Educational <u>Standard</u> Age	Illiterate	Literate with no ed.	Primary	Middle	Matric	Graduate	Total
20 - 24						0.58	0.58
25 - 29						2.33	2.33
30 - 34					2.91	11.05	13.96
35 - 39	0.58		0.58	1.16	3.49	9.88	15.69
40 - 44				1.16	9.88	8.72	19.76
45 - 49			0.58	2.33	6.98	8.14	18.03
50 - 54					3.49	3.49	6.98
55 - 59				0.58			0.58
Total	0.58		1.16	5.23	26.75	44.19	77.91 (172)

## Table 2-10 Rate of Family Planning Practice (According to Age and Educational Standard) Delhi

	Janak Puri							Gandhinagar							
	Nu	mber	of	exi	sting	ch	ildren		Num	ber	of	exis	ting	childr	en .
	0	1	2	3	4	5	Average	0	1	2	3	4	5	Over	6 Total
Income (Rs/month)															
- 999		2		4	2	2	3.2	1	0	2	5	6	2	2	3.7
1000 - 1999			3	8			2.7				4	8	2		3.8
2000 - 2999		l	2	3	2	1	3.0								
3000 -	1	3	4	1			1.6								
Total number of samples	1	6	9	16	4	3	2.6	1		2	9	14	14	2	3.8 32
Mother's age													-	·	
20 - 24	1	l					0.5								
25 - 29	1	3	2	1			1.4	l		1	1	4	1		3.3
30 - 34		1	2	2			2,2			l	5	2	2		3.5
35 - 39			3	5		1	2.9				3	3		1	3,9
40 - 44			2	3	1		2.8					3	1		4.3
45 - 49				1	2	2	4.2					1		1	6.0
Over 50				2	1		3.3					1			4.0
Total number of samples	2	5	9	14	4	3	37 2.6	1		2	9	14	4	2	3.8 32
Father's educational standard				<u></u>											
Under 8th grade		1	2	2	3	l	3.1				4	8	2		3.9
9 - 12 grade		2		6		2	3.0	1		1	5	3	2	2	3.8
Qualification course etc.			2	4	1		2,9			1		1			3.0
College degree	1	1	5	3			2.6					2			4.0
Master's degree and above		2	1				1.3								
Total number of samples	1	6	10	15	4	3	39 2.6	ł		2	9	14	4	2	3.8
Mother's educational standard							•								
Under 5th grade				3	3	l	3.7				4	7	4	2	4.4
6 - 8 grade			1	ı			2.5				2	5			3.7
9 - 12 grade		3	2	9		2	2,8	1		2	3	1			2.4
Qualification course etc.			1	1	1		3,0								
College degree and above	1	3	6				1.5								
Total number of samples	1	6	10	14	4	3	2.6	1		2	9	13	4	2	3.8

Table 3-1 Number of Sample Households According to Number of Existing Children

(Note) Excluding unclear samples

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Income group (Rs/day)	Points for durable goods*	Amount of milk purchased (%/day/person)		
[Janak Puri District]				
- 999	7.4	0.24		
1000 - 1999	11.3	0.32		
2000 - 2999	11.0	0.39		
3000	21.0	0.60		
Total samples	12.5	0.38		
[Gandhinagar]	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
- 999	2.2	0.12		
1000 -	7.4	0.27		
Total samples	4.5	0.21		

## (Note)

Points for durable goods

Sewing machine/radio	1
Black and white TV/gas cooker	2
Conventional cooler	3
Refrigerator	4
Color TV	5
Scooter/motorcycle	10
Automobile	20

	Medical Facilities Used									
Income group	Public hospitals	Medical Insurance System Hospitals	Private Hospitals	Unknown/ indefinite						
[Janak Puri] (Rs/month)										
- 999	4 <sup>*2</sup>		2	4						
1000 - 1999	8		2	3						
2000 - 2999	2		1	4						
3000 -	1*2		6	2						
Total samples	15		21	13						
[Gandhinagar] (Rs/month)										
- 999	4	6	4	6						
1000 -	2	2	3	7						
Total samples	6	8	7	13						

Table 3-3 Medical Facilities Used<sup>\*1</sup>

\*1 Partially includes overlapped answers

\*2 Includes are military affiliated hospital

	Educa	Educational standard of head of household								
	Under 8th degree	Between grades 9 thr. 12	College	Master's degree or above						
[Janak Puri] (Rs/month)										
- 999	5	3	1							
1000 - 1999	2	5	4	3						
2000 - 2999			2	5						
3000 -			1	4	4					
Total samples	7	8	8	12	4					
[Gandhinagar] (Rs/month)										
- 999	9	7	1							
1000 -	6	6	1	1	1					
Total samples	15	13	2	1	1					

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# Table 3-4 Educational Standard of Head of Household and Income Group

		Child	ren order than	Schools attended by children in 1st through 11th grade					
Income group	Below 8th grade	Up to 12th grade	Qualifi+ cation course etc.	College and above	Total	Public	Private	Others <sup>*2</sup>	Total
[Janak Puri] (Rs/month)	<u>,</u>				<u></u>				<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
- 99 <del>9</del>	2 (22%)	5 (56%)		2 (20%)	9 (100%)	16 (89%)	2 (11%)		18 (100%)
1000 - 1999		3 (23%)	2 (15%)	8 (62%)	13 (100%)	19 (79%)	4 (17%)	1 (4%)	24 (100%)
2000 - 2999				3 (100%)	3 (100%)	7 (50%)	7 (50%)		14 (100%)
3000 -				2 (100%)	2 (100%)		8 (89%)	1 (11%)	9 (100%)
Total samples	2 ( 7%)	8 (30%)	2 (7%)	15 (55%)	27 (100%)	42 (65%)	21 (32%)	2 (3%)	65 (100%)
[Gandhinagar] (Rs/month)		T <u>aganga ng </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
- 999	3 (30%)	5 (50%)	2 (20%)		10 (100%)	5 (11%)	1 (2%)	39 (87%)	45 (100%)
1000 -	l (9%)	5 (45%)	2 (18%)	3 (27%)	11 (100%)	6 (19%)	1 ( 3%)	25 (78%)	32 (100%)
Total samples	4 (19%)	10 (48%)	4 (19%)	3 (14%)	21 (100%)	11 (14%)	2 ( 3%)	64 (83%)	77 (100%)

#### Table 3-5 Education for Children \*1

\*1 Exludes samples that are unclear or have problems in entry.

\*2 Refers to schools run by social worker in Grandhinagar area, exclusively, and to schools of religions groups and air force affiliated schools in Janak Puri district

	General a	answers	Spec:	ified answ	ers			
Income group	As much as possible	Up to the child	Up to llth grade	College degree	Master's degree and above	Unknown	Total	
[Janak Puri] (Rs/month)								
- 999	4	3	1	2		0	10	
1000 - 1999	4			5	l	3	13	
2000 - 2999	4	l	l			1	7	
3000 -	2			2	5	0	9	
Total numbers	14	4	2	9	6	4	39	
[Gandhinagar] (Rs/month)								
- 999	3	3	8	4		0	18	
1000 -	2	3	1	5	·	2	13	
Total numbers	5	6	9	9		2	31	

Table	3-6	Expectations	for	Children'	S	Education
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Imcome group	Felt	Not felt	Unknown
[Janak Puri] (Rs/month)			
- 999	4	2	4
1000 - 1999	7	2	4
2000 - 2999	1	4	2
3000 -	3	5	1
Total samples	15	13	11
[Gandhinagar] (Rs/month)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
- 999	18	0	0
1000 -	8	3	2
Total samples	26	3	2

Table 3-7 Sense of Burden from Educational Expenses

Table 3-8 Family Type and Number of Family Members

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I	:	Head	of	household	and	wife	÷	[unmarried	children]	
---	---	------	----	-----------	-----	------	---	------------	-----------	--

- Family type Average number of family Income group Total members T ΙI [Janak Puri] Rs - 999 5 (50%) 10 (100%) 5.5 5 (50%) 1000 - 1999 8 (62%) 5 (38%) 13 (100%) 5.6 2000 - 2999 6 (86%) 1 (14%) 7 (100%) 4.7 3000 -6 (67%) 3 (33%) 9 (100%) 3.6 Total samples 25 (64%) 14 (36%) 39 (100%) 4.9 [Gandhinagar] Rs 18 (100%) - 999 17 (94%) 1 (6%) 5.7 1000 -12 (86%) 2 (14%) 14 (100%) 5.7 Total samples 29 (91%) 3 (9%) 32 (100%) 5.7
- II : Other than above\*

\*: Mostly 3 generations living together

	Outlo	ok on life in	the old age	
Income group	Independence oriented	Expecting partial support from children	Expecting support from children	Total
[Janak Puri] (Rs/month)				
- 999	1	4	1	6
1000 - 1999	3	5	2	10
2000 - 2999	6			6
3000 -	6	3		9
Total samples	16	12	3	31
[Gandhinagar] (Rs/month)				
- 999	1	8	6	15
1000 -	1	8	3	12
Total samples	2	16	9	27

Table 3-9 Outlook on Life in the Old Age\*

\*: Excludes unknown

	Number of	F	ng	Number of existing children						
	sample couples* <sup>1</sup>	Practicing	Not practicing	Unnecessary/ no answer	0	1	2	3	4	5 and above
[Janak Puri]	· ··· · ···									
All samples	42	29	8	5	5	7	14	19	4	4
Samples with wives working <sup>±2</sup>	9 (2)* <sup>4</sup>	7 (1)	(1)	2	1	1	4	4	1	
Wife approves work samples* <sup>3</sup>	22	16	1	4	2	3	6	8	2	1
Wife disapproves work samples	20	13	7	1	3	3	4	7	1	3
Unknown										
[Gandhinagar]										
All samples	32	18	6	8	1		1	13	11	6
Samples with wives working* <sup>2</sup>	1 (2)* <sup>4</sup>	1 (1)		(1)					(1)	1 (1)
Wife approves work samples* <sup>3</sup>	16	7	5	4	1		1	7	2	5
Wife disapproves work samples	15	10	1	4				б	9	1
Unknown	1	1								

Table 3-10 Employment of Wives and Family Planning

Note \*1 There are cases where more than 1 couple was taken from 1 sample household.

\*2 and \*3 3 includes 2

\*4 Figures inside parenthesis are those with wives' monthly income below 100 Rs.

#### [Janak Puri]

		r	income grou	p (Rs/mont	:h)	Educational standard (wives)				Age (wives)					
		- 999	1000 - 1999	2000 - 2999	3000 -	8th grade and below	9th through 12th grade	Qualifi- cation course etc.	College and above	20 - 29	30 - 34	35 - 39	40 - 44	45 - 50	50 +
To	tal number of sample uples <sup>*1</sup>	12	13	7	10	12	16	3	11	12	7	9	. 8	2	4
Nu Wi	mber of working ves samples	0 (1) <sup>*2</sup>	3 (1)	1 (0)	5 (0)	1 (0)	3 (2)	1 (0)	4 (0)	3 (0)	2	1 (2)	l	0	2 (0)
Ave in	erage monthly come of wives (Rs)	0 (35)*2	400 (60)	1400 (0)	1420 (0)	300 (0)	1100 (43)	1200	1200	1100	950	1500 (43)	1400		750
Ťyş	e of wives' work														
5	Self-employed	0 (1) *2	3 (1)			1 (0)	1 (2)		1	1	1	(2)			7
	Public			1 (0)	4 (0)		2	ĩ	2	1	1	1	1		l
	Private				1 (0)				1	1					
Ati Wiv	titude towards ves working*3														
	Desired Total	4	7	4	7	Э	9	2	8	5	5	6	4		2
	Only work that ca done at home	n [1]	(1)				[2]					[1]	[1]		
ife	Only "good" work	[3]	(3)	(3)	[7]		[6]	[2]	[8]	[4]	[4]	[5]	[1]		(1)
3	No conditions/ No answer		[3]	(1)		[3]	[2]			[1]	[1]		[2]		[1]
	Not desired	8	6	3	3	9	7	1	3	7	2	3	4	2	2
	Unknown/others		O												
	Approve	2	s	2	7	2	5	2	7	6	4	2	4		2
band	Conditional approval		l	T	Ż		l		3	Ì	1	Ż			
Husl	Disapprove	5	5	4	1	5	B	1	1.	3	2	5	2	2	
	Unknown	5	l			5	l			2			2		2

\*1 Includes all couples in a household.
\*2 Figures inside parenthesis are those with wives' monthly income below 100Rs.
\*3 Includes samples currently working.
\*4 Mostly teaching and typing sto.

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[Gandhi	nagar]

		Incor (Rs,	me group /month)	A	Academic background (wives)			Age (wives)						
		- 999	1000 -	5th grade and below	6th through 8th grade	9th through 12th grade		20 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 +	
Tot	al number of sample ples	18	14	17	5	9		8	9	7	5	2	1	
Nuf san	mber of working wives mples	(2)	1 (0)	1 (1)	0 (1)	0		(2)	1	0	0	0	0	
Ave of	erage monthly income wives		1000	1000 ( )	(35)				1000					
Tyr	e of wives' work							<u></u>			·····		· · · · · · · · · · · · · · · · · · ·	
5	self-employed	(2)	1 (0)	1 (1)	(1)			(2)	1					
	Public													
I	mployed Private													
Att	titude towards wives: king													
	Desired Total	13	3	8	3	6		6	5	4	1		<u> </u>	
	Only work that can done at home	[3]	[1]	[2]	[1]			[2]	[2]					
fe	Only "good" work	[2]			[1]	[1]			[1]	[1]				
ίM	No conditions/ No answer	[8]	[2]	[6]	[1]	[5]		[4]	[2]	[3]	[1]			
	Not desired	5	10	8	2	3		2	4	3	з.	l	T	
	Unknown/others		1	l							1	1		
pug	Approve	. 7	2	2	2	5		4	3	3	0			
Husba	Conditional approval	1	3	2	1			1	1	1	1			
	Disapprove	9	8	11	2	4		3	5	3	3	1	1	
	Unknown	1	1	2							1	1		

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		Janak Puri								Gandhinagar						
		Practicing			Not	Not	st.	Practicing				Not	Not			
		*2 Husband sterili- zation	Wife sterili zation	Condom, - pill	Un- known	practic- ing	neces- sary	es- Total /	Husband sterili- zation	Wife steri- lizatio	Condom, pill on	Un- known	practic- ing	neces- sary	Tota.	
[Income] (F	Rs/month)															
-	999	1	1	2	1	5	2	12	2	3	3	1	6	3	18	
1000 -	1999	2	4	з			2	11			_					
2000 -	2999	l	2	3	1	1.		8	4	3	1	T	o	3	12	
3000 -				7		l	1	9								
Total sar	mples	4	7	15	2	7	5	40	6	6	4	2	6	6	30	
[Number of e	existing children]	1						· · · · · · · · · · · · · · · · · · ·								
0				1		2	1	3								
1				4		3	1	8								
2				8	1		2	10			l		l	1	3	
3		3	5	1	1	1	1	13	3		1	1	3	1	19	
4		1	l					3	2	3	2	l	1	4	13	
5			1	l		1		3	1	2					3	
6 and a	bove									· 1			1		2	
Total sar	mples	4	7	15	2	7	5	40	6	6	4	2	6	6	30	

						*1
Table	3-13	Method	of	Family	Planning	Practice *

		Janak Puri					Gandhinagar							
	Practicing			Not Not-			Practicing		Not	Not				
	*2 Husband sterili- zation	Wife steri- lizatio	Condom, pill on	Un- known	practic- ing	neces- sary	Total	Husband sterili- zation	Wife steri lizat	Condom, - pill ion	Un- known	practic- ing	neces- sary	Total
(Wife's age)														
20 - 24			2		1		4							
25 - 29		1	4		3		8		1	2	1	2	2	8
30 - 34		2	3	1			6	3	1	1		3	1	9
35 - 39	3	1	4		1		9	2	1		l	1	2	7
40 - 44	1	2	2		l	2	8	l	l	l			1	4
45 - 49		1			1		2		2					2
50 and above						2	3							
Total samples	4	7	15	2	7	4	39	6	6	4	2	6	6	30

\*1 Total does not coincide with the rest because unclear answers have been excluded.

\*2 S refers to operation.

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#### Table 3-14 Migration \*2

[Janak Puri]

	Place of origin			Years of continuous residence in Delhi			
	Large cities	Cities	Rural areas	20 years or more	Between 10 to 19 years	9 years or less	
[Income] (Rs/month)							
- 999	3	0	6	7	2	0	
1000 - 1999	3	5	4	10	1	1	
2000 - 2999	2	4	l	5	0	2	
3000 -	3	5	1	4	1	4	
Total samples	11	14	12	26	4	7	
(Family form)							
Percentage of nuclear family	10 (91%)	7 (50%)	7 (58%)	11 (64%)	1 (25%)	7 (100%)	
Average number of family members	4.2	4.9	6.0	5.3	4.5	5.0	
[Family planning]							
Practicing	8 (73%)	9 (64%)	7 (58%)				
Not practicing	1 (9%)	3 (21%)	5 (42%)				
Not necessary and others	2 (18%)	2 (14%)					
[Average number of existing children]	2.2	2.6	2.5				
<pre>{Rate of wives working}</pre>	5 (45%)	2 (14%)	0				

\*1 Excludes samples with unclear migration history

\*2 Data regarding migration of householders

## [Gandhinagar]

	Place of origin			Years of continuous residence in Faridabad			
	Large cities	Other cities	Rural areas	20 years or more	Between 10 to 19 years	9 years or less	
(Income) (Rs/month)							
- 999	3	8	2	6	6	1	
1000 -	0	9	4	5	8	0	
Total samples	3	17	6	11	14	1	
[Family form]							
Percentage of nuclear family	3 (100%)	14 (82%)	6 (100%)				
Average number of family members	6.0	5,4	5.7				
[Family planning]							
Practicing	3 (100%)	8 (47%)	3 ( 50%)				
Not practicing	0	3 (18%)	1 ( 17%)				
Not necessary	0	6 (35%)	2 ( 33%)				
(Average number of existing children)	4.0	3.2	4,5				
[Rate of wives working]	1 ( 33%)	2 (11%)					

Diagram 2-1 Education Level of Wives and Number of Children



2-1-1 Delhi





#### Appendix



# CHAPTER 4

# SURVEY MEMBERS AND ITINERARY

JAPANESE INVESTIGATION COMMITTEE (Includes members of the field party)

- Toshio Kuroda:Director Emeritus of Nihon University Population<br/>InstituteAkira Koizumi:Professor at the Medical Department, Tokyo<br/>UniversityHaruo Sagaza:Professor at the Literature Department, Waseda<br/>University (leader of the field party)Fumiko Oshikawa:Research officer, Area Studies Department, Institute<br/>of Developing Economies (field survey member)
- Junji Funatsu: Participant, Asian Population and Development Association
- Masaaki Endo: Business Manager, Asian Population and Development Association
- Yuiko Nishikawa: Research Worker, Asian Population and Development Association, (field survey coordinator)

#### LOCAL COOPERATORS

1. Embassy of Japan

Takumi Hosaki:	Ambassador, Embassy of Japan in India
Shinsuke Horiuchi:	Minister, Embassy of Japan in India
Toyoji Miyanaga:	First secretary, Embassy of Japan in India

2. Indian Diet Members

Honorable Mr. Sat Paul Mittal

3. Government and U.N. Related Agencies

Mr.	Vernon	Peries	Consultant,	UNFPA	(United	Nations	Fund	For
			Population	Activit	ies)			

	My Makanabu Niahimura	International Dragramme Officer UNEDA
	Mr. Motonobu Nishimura	International Programme Officer, UNPPA
	Mr. S. K. Sudhakar	Joint Secretary, Ministry of Health and Family Welfare
	Dr. R. S. Gupta	Director, Traffic and Transport Planning, Delhi Development Authority
	Prof. T. R. Anand	Dean of Studies and Head of Department of Medical Care and Hospital Administration, National Institute of Health and Family Planning
	Prof. B. P. Desai	Institute of Economic Growth, University of Delhi
	Dr. K. C. Seal	Director General, Central Statistics Organization
	Dr. S. N. Ray	Chief Executive Officer, Central Statistical Organization
	Dr. R. N. Pandey	Deputy Director, Central Statistical Organization
	Mr. H. L. Bhutani	Principal, Industrial Training Institute
	Mr. Naresh Gulati	Chief Administrator, Faridabad Complex Administration
	Dr. S. R. Tyagi	Medical Super Intendant, E. S. I. Hospital
	Mr. B. R. Ojha	Organizing Secretary of Haryana Pradesh Congress Committee
Д	Interview Assistants	
•		
-	Delhi -	
	Mrs. Latika Sharma	
	Mrs. Sarla Chand	Principal Bedi Public School
_	Faridabad -	
	Mrs. Prakash Sharma	Principal, Gandhi Memorial Public School

- Mr. M. K. Luthra
- Mr. Rajinder Singh
- Mr. Subash Verma
- Mr. R. C. Sharma
### SURVEY ITINERARY

Period: Sept. 15 - Sept. 28, 1985

Da	te		Content of Survey
Sept.	15	(Sun.)	. Leave Narita
	16	(Mon.)	. Arrive at Delhi
			. Meeting with the first secretary Toyoji Miyanaga from Embassy of Japan in India
			. Visit of respect to Minister Shinsuke Horiuchi of Embassy of Japan
			. Meeting with Mrs. L. Sharma and Mrs. S. Chand who are surveyors of Janakpuri, DDA colony
			. Visit of respect to Mr. Vernon Peries, Indian representative of UNFPA and explained the content of survey
			. Excursion of Janakpuri, DDA colony
			. Sample interview
	17	(Tue.)	. Visit the office of Honorable Mr. S. P. Mittal, MP.
			. Meeting with Faridabad surveyors Mr. G. S. Chaudhry and Mr. S. Verma
			. Interview with Mr. S. K. Sudhakar, Joint Secretary of Ministry of Health and Family Welfare
			. Luncheon party given by Honorable Mr. Mittal
			. Visit DDA Office.
			. Receive explanation about the details of DDA establishment and about the orgnization from Dr. R. S. Gupta, the Director of Traffic and Transport Planning in DDA.
			. Visit the Institute of Health and Family Welfare

Date	Content of Survey
Sept, 17 (Tu	<ul> <li>e) Received summarized explanation regarding education, research, training and orgnization of family planning in India from Prof. T. R. Anand, who is Dean of Studies as well as Head of Dept. of Medical Care and Hospital</li> </ul>
18 (We	d) . Explanation of outlook on sample survey in India from Dr. K. C. Seal, Director General, Dr. S. N. Ray, Chief Excecutive Officer and Dr. R. N. Pandey, Deputy Director, Examination of geustionnaire for this survey
	. Explanation of historical outlook on Faridabad from Prof. Desai of Institute of Economic Growth
	. Survey in DDA Colony Janakpuri, Discussion with Minister Horiuchi, First Secretary Miyanaga and Mr. Motonobu Nishimura of UNFPA about the survey
19 (Th	u) . Meeting with Faridabad counterparts Mr. Subash Verma, Mr. Rajider Singh, Mr. R. C. Sharma and Mr. M. K. Luthra
	. Meeting with survey assistant Mrs. Prakash Sharma, Principal, Gandhi Memorial Public School
	. Visit to Industrial Training Institute
	. Survey in Faridabad
20 (Fr	<ul> <li>Discussion with Mr. B. R. Ojha, Organizing Secretary of Haryana Pradesh Congress Committee</li> </ul>
	. Visit to Faridabad Central School
	. Receive explanation on the outlook of Faridabad urban development from Mr. Naresh Gulati, Chief Administrator of Deputy Ministry Office
	. Visit to ESI Hospital
	. Dr. S. R. Tyagi, Medical Super Intendant
	. Field survey in Faridabad
21(Sat	.) . Field survey in Faridabad

Dat	te	Content of Survey
Sept. 3	22 ( Sun . )	<ul> <li>Mr. Haruo Sagaza, field party leader goes back to Japan</li> <li>Field survey in Faridabad</li> <li>Farewell function at Gandhi Memorial Public School</li> </ul>
	23 (Mon.)	<ul> <li>Explanation on outlook regarding National Sample Survey from Dr. S. N. Ray, Chief Executive Officer of Central Statistics Organization</li> <li>Collection of data on Faridabad at Library of Institute of Economic Growth</li> </ul>
:	24(Tue.)	. Field survey at Janakpuri, DDA
:	26(Thu.)	
:	27(Fri.)	. Excursion to check the facilities in Janakpuri, DDA
		. Dinner party held by Minister Horiuchi of Embassy of Japan
:	28 (Sat.)	. Leave Delhi . Arrive at Narita

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## CHAPTER 5

# QUESTIONNAIRE SAMPLE

### COMMUNITY SURVEY QUESTIONNAIRE (URBAN INDIA)

1 . I.D. number

2 . Name of respondent (Head of household)\_\_\_\_\_

3 . Address \_\_\_\_\_

4 . General situation : total number in a household \_\_\_\_\_\_ persons

5. Name of community \_\_\_\_\_

6 . Ask all the member of family

01 relationship of household		©				G	>	Į,	0			· @			ග				
	anter name and relationship		of ho	uzeho l	d l				[	_		ţ				l			
	relationship		hizz	elf												1			
02	sex *encifice with applicable number 1.maie 2. female	1	2	:		1	2			1	2		1	2		1	2		
03	age *enter the acutual age																		
04	marital status rencircle with applicable number 1.never married 2.married 3.divorce 4.separated 5.widower/widow becamze spose is dead	1		2	3	1 4	2	3		1 4	2 5	3	1 4	2 5	3	1	2 5	:	3
05	mother tongue * enter the mame of your mother tongue	1						-								1			
06	vhat religion do you belong to? 1.Nindu 2.Muslim 3.Christian 4.Sikh 5.Others	12345				12345				1 2 3 4 5			1234			12345			
07	type of activity what is your main activity during last one year? Rencircle with applicable number 1.for a person engaged mainly in work 2.for a person engaged partly in work besides emgaging in howe duties.attending school.	12		ente	r col.08 & 09	12		enter	=01.08 & 03	1	_ ent	er col.08 & 05	1		nter col.0 & 0	3 1 3 2	J	enter	col.08 & 03
	and 50 on. 3.had no job but seeking one 4.engaged in home duties 5.attended school 6.others (infant or aged etc.) enter col.11	3456		- enter	cəi.11	3456		enter c	ol.11	345 -	ente	r col.11	3456	e	ater col.11	3456		enter c	∞l.11

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		Û	2	0	3	ී
08 =1 *e	uation of working neurcle with applicable number 1.emplorer other than bouschold enterprise 2.sorked (self-amployed)in household enterprise 4.worked as helper in household enterprise 5.worked as casual wage labour 6.others	2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	1 2 3 4 5 6	I 2 3 4 5 5
09   10 *5 vi pe	me of establishment tate the name of the office, factory, shop in hich person worked. if no no name, state the essonal name of employer or self employed					
10 is	ncome per month Menter imcome and/or expenditure in August in rupees	income <u>Rz</u> . czpend. Dz-	incose <u>Rs</u> .	income <u>Rr</u> . expend. <u>Rr</u> .	incone <u>Pr</u> . expend. <u>Rr</u> .	income <u>Rs.</u> expend. <u>Rs</u> .
11   n	nme of school #state name of school and enter either governmental or public into parenthesis	nnme: ( )	лажие: ( )	Tahme : ( )	name:	name: ( )
12 1	evel of literacy *encircle with applicable number 1, illiterate 2, literate with no education 3, educated	1 2 3	1 2 3	123	1 2 3	1 2 3
13	ducational attainment *encircle with applicable number 1. primary 2. middle 3. matriculation, high school 4. non-technical diploma not equal to degree 5. technical diploma not equal to degree 6. graduate and above	1 2 3 4 5 6	1234	-2 34 5 6	1 2 3 4 5 6	1 2 3 4 5 6
14	medical care -1. In case of illness who dignosed? *encircle with applicable number 1.self-dignosis 2.parents / relatives 3.traditional healer 4.doctor 5.not appricable (no illness)	1 2 3 4 5	1 234 5	1 2 3 4 5	1 2 3 4 5	1 23 4 5
	4-2.where is your place of delivery? 1.home 2.modical institution 3.mom-medical institution 4.others	1 2 3 4	1 22 3 4	1234	1 2 3 4	1 2 3 4

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14-J.who attended at your birth? 1.doctor 2.lady health worker or midwife 3.traditional birth attendant 4.non professional person 5.cot stated	123 45				1 2 3 4 5			123 75	3				1 2 3 4 5				1 2 3 4 5		
5 family planning 15-2.hew many children are ideal in your opinion? Penter your ideal number		dau	(5) zater(s	,   		\$c	agyget (2) 2(2)			_ son dau	i(s) igater(	3) 1		50	m(ș) uzater(	(i) (i) (i) (i) (i) (i) (i) (i) (i) (i)		sor dat	(;) ighter(s)
15-2.arc you practicing or have you practiced family planning? *encircle with applicable number 1. yes 2.mo	1	2			1	ŗ.		THE REAL PROPERTY.	1	2			1	2			1	2	
13 (ask the head of the household) durable goods do you have following goods? Tempirele with applicate number (if yes. encircle 1. if no. encircle 2.) 1.7.V.set 1.yes 2.no 2.refrigerator 1.yes 2.no 3.air conditioner 1.yes 2.no 4.redio 1.yes 2.no 5.sewing machine 1.yes 2.no 6.ges range 1.yes 2.no 7.entcreycle 1.yes 2.no 8.car 1.yes 2.no 9.others 1.yes 2.no	123456789	1 1 1 1 1 1	22222222			1111111	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			111111111111111111111111111111111111111	2222222222222		123456789	1111212111	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		123456789	111111111111111111111111111111111111111	222222222222222222222222222222222222222
17 [ migration 17-1.what is your birth place? (1) rural or urban *emcircle with applicable number	(I) -	1	2		(:) -	1	2		(1) -	1	2		(1) -	1	2		(1) -	1	2
(2) state	(2) -	1	2	3	(2) -	1	2 3	3	(2) —	1	2	3	(2) —	1	2	3	(2) —	1	2 3
1.Delhi 2.U.P. J.Punjab-Maryama 4.Bihar S.Rajasiban 6.Merbya Prajesh	1	4	5	6		4	56	6		4	5	6		4	5	6		4	56
7.Western states and UTs 8.Eastern states and UTs 8.Southern states and UTs 10.Foreign countries (incl. present Pakistan and Bangradesh)		7 10	8	9	1	7 19	8 9	9		7 10	8	9		7 10	8	9		7 10	89
17-2. why did you more into this colony/community? *empirate with applicable number 1. marriags 2. followed parents/family 3. job/commonic reserve than transfer) 4. transfer 5. education 8. others	1	2 5	3		1	2 5	3 6		1	2 5	3 6		1	2 5	3		1	2 5	3 6

		0			(2)			රා			(4)			ත	
17-3.did you have any acquaintance before coming here? 1.family 2.relatives 3.community memory 4.neighbours 5.friends 6.me one (independently) 7.others	1 4 7	2 5	3 6	1	2 5	3 6	147	2 5	3 6	1 4 7	2 5	3 6	1 4 7	2 5	3 6
13 { degree of satisfactics of this colony/community 19-1. are you satisfied with this colony/community? Sentrate with applicable number 1.rec. satisfied 2.more or less satisfied 3.more or less satisfied 3.more or less disatisfied 5.more satisfied 5.more stated	12345	r enter	col.18-2	12345	L enter	col.18-2	12345	J ester	col.18-2	12345	J ester	col.18-2	1234	- ester	col.18-2
18-2. why are you dissatisfied? 1. housing condition is not adequate 2. educational facility is not edequate 3. medical care is not adequate 4. transportation service is not adequate 5. relationship with neighbours is not well established 6. house rent/price is not reasonable 7. others	1 23 45 67			1004001			1234567			1 23 45 67			1 20 45 67		

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COMMUNITY SURVEY QUESTIONNAIRE (URBAN INDIA) II.

1. 1.2. suzber\_\_\_\_\_ 2. Mane of respondent (Head of Household) 3. Ask the head of household (1) How many times do you take meals a day? repoircle with applicable number l. dze 2. tvo 3. three 4. core than four (2) That kind of food did you take yesterday? vstate the name of food in each meal 1. breakfast 2. lanch 3. dizner (2) What kind of food are you taking regularly? vescitcle with applicable number 1. rice 2. wheat 3. zilk 4. others (state the name of food)\_\_\_\_ (1) How many of the children have you given birth to now live with you? Astate the number of children (E) How many of your children have died? verate the number of children (6) Have you ever had any still-birth, that is a child who was born after at least seven mentas of pregnancy? rencircle with applicable number 1. 7es 2. ze (7) Gid you give breast feeding to your last child? vstate the period of breast feeding 1. \_\_\_\_\_ seaths 2. capict remember (9) What kind of food did you give the child after weaning from your breast feeding? vstate the food which you have given \_\_\_\_ (9) How many children do you have now? vstate the number of children \_\_\_\_\_ sons and \_\_\_\_\_ daughters

(10) Co you want zore children than you have now?	
*encircle with applicable number and state reason if any	
1. jes reason	
2. no reason	
(11) How many children are ideal in your opinion?	
*state the number of children	
sons and daughters	
(12) Do you prefer sons to daughters?	
*encircle with applicable number and state reason if any	
1. jes reason	
2. no reason	
(13) Are you practicing family planning now?	
*encircle with applicable number	
1. yes enter question No. 14	
2. no ———— enter question No. 15	
(14) If yes, since when are you practicing fabily planning?	
*state the period of year	
years ago	
(15) If no, have you ever practice family planning?	
*encircle with applicable number and state the reason to do so.	
1. 7es reason	
2. no reason	
(18) If you are practicing family planning, what kind of method do you accept?	
1. sterilization	
2. pill	
3. !VD	
4. condos	
5. others	
(1?) Free where do you get information and tools of family planning?	
*encircle with applicable number	
1. prizary health center	
2. public clínic	
3. public information paper	
4. others (specify)	
(18) In your opinion, how zuch education does a boy from a family such as yours need to	get along
in the world these days?	
1. primary	
2. secondary	
3. university	
4. others	

(19	) if a family in your circumstances were to educate sons to this level, would it be faivly
-	easy economically, somewhat a burden, or heavy burden?
	versircle with applicable number
	! fairly easy
	2. sczewiał a burden enter guestion No. 20
	3. beauge burden
(20)	If you have a burder, state the reason
	Testata the reason
(21)	At what are would you say sons usually begin help to parent?
	remained with applicable number and enter the age
	:. age: years old
	2. never help
(22)	lz your cpizion, how much education does a girl from a family such as yours need to get
	along in the world these days?
	*encircle with applicable number
	1. prizary
	2. secondary
	3. university
	4. others
(23)	If a family in your circumstances were to educate daughters to this level, would it be
	fairly easy economically, somewhat a burden, or heavy burden?
	*encircle with applicable number
	1. fairly easy
	2. sczewnat a burden enter question No. 24
	3. heavy burden
(24)	If you have a burden, state the reason
	*state the reason
(25)	At what age would you say daughter's usually begin help to parent?
	Ressircle with appricable number and enter the age
	1. age: years old
	2. never help
(28)	Are any of your children working for noney?
	*encircle with applicable number
	l. yes
	2. no

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(27) Do you expect your children to contribute to your househol	ld when they start working?
*encircle with applicable number?	
!. yes	
2. zo	
(28) What means of financial support do you think you will have w	ien you and your partner are
old, or can no longer work for any other reason?	
vencircle with applicable number	
1. help from children	
2. help from other family	
3. saving / insome from business farm or other property	
4. pension / social security	
5. ECT.	
6. others (specify	)
(29) When you are old, do you expect to rely on your children to finan	icial support?
*escircle with applicable number	
1. steat deal	
2. cnly a little	
3. not at all	
. Ask the fecales in the household	
(j) indicate relationship of household:	
Naze of the respondent:	
(30) Did you work for pay or profit during the last year?	
xencitale with appricable number	
1. ves duestion No. 31 and No. 32	
2. 20	
(31) How does your partner feel about your working for pay or profit?	
*encircle with applicable nuclei	
1 8007076	
2 disapprove (if any, state the reason	)
3. other (specify	)
(32) Kenta you having a / another haby make it inconvenient for you to	work?
vencircle with applicable number	
1. yes	
2. EC	

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(33) How would your partner feel abour it, if you were to take a job?	
*encircle with applicable number	
1. approve	
2. disapprove (if any, state the reason	)
3. others (specify	)
(34) What is your attitude towards women working outside the home?	
*encircle with applicable number	
1. approve (if any, state the reason	)
2. disapprove (if any, state the reason	)
3. others (specify	<u> </u>
(35) Are you interested in finding work?	
*encircle with appricable number	
1. yes	
2. no	
3. others (specify	)

#### 5. Ask the signation history to the head of household

(Migration means change of residence for more than six months)

\*enter age, place, reason and assistance at each stage of migration according to the note and coding.

		(1)	(3)	(4)	(5)
	àge	place	place in DHL	reason	acquaintance
birth place	from 0 to years	State No 1. rural 2. urban			
lst zigration	from years to years	State No. 1. rural 2. urban			
2nd migration	from years to years	State No 1. rural 2. urban			
3rd nigration	from years to years	State No 1. rural 2. urban	-		
4th migration	from years to years	State No 1. rural 2. urban			
present . residence	fromyears toyears	State No 1. rural 2. urban			

Note and coding

- (1) place : encircle with applicable number of State into the above table

  - 1. Delhi-enter (3) 2. Utiar Pradesh 3. Punjab-Haryana 4. Bihar 5. Rajasthan 8. Madhya Pradesh 7. Western States and UTs 8. Eastern States and UTs 9. Southern States and UTs 10. Foreign Countries
- (2) rural or urban : encircle with applilcable number 1. rural

2. urban

- (3) Which part in Delhi: encircle with applicable number 1. old Delhi 2. New Delhi 3. other DDA colony 4. rural Delhi
- (4) reason : enter applicable number of the reason into the above table

   carriage
   followed parent / fabily
   job / economic reason (Other than transfer)
   transfer

   5. education 8. others
- (5) acquaintance : did you have any acquaintance before coming here?

   family
   relatives
   community members
   neighbours
   friends
   no one (independently)



