

## APPENDIX - I

### A Note on Sampling

The two survey data viz. (1) "Family Planning Practices in India - Second All India Survey" undertaken by ORG, Baroda (Khan and Prasad, 1983) and (2) "Infant Mortality and its Causes in Gujarat" undertaken by PRC, Baroda (Gandotra, Das and Dey, 1982) were mainly used for analysis of sex preference pattern and its relation to fertility in India. The details regarding sample size, design and procedures adopted in these two studies are discussed below :

#### 1. Family Planning Practices in India - Second All India Survey (1980)

Sample Size : In all 34,831 currently married women aged 15 to 49 years or their husbands were interviewed for family planning survey.

Universe : All married couples in India with wife aged 15 to 49 years constituted the universe for this study, excepting those living in Assam and off-shore territories like Andaman and Nicobar.

Sampling Design : A multistage stratified sampling design was adopted for the survey.

Sampling Procedure : The country was divided into 14 primary strata, comprising of political states or group of states.

Each of the 14 primary strata were again stratified into secondary strata - urban and rural areas defined in the 1971 census of population. In urban areas, in each state, the cities and towns were classified into five urban sub-strata on the basis of population size viz. (i) 5 lakhs and over, (ii) between 1 and 5 lakhs, (iii) between 50,000 and 1 lakh, (iv) between 20,000 and 50,000 and (v) below 20,000 population. In each of the urban sub-strata thus formed, the sample was selected by using three stage sampling procedure. At the first stage, the towns were sampled. In all sub-strata excepting stratum-I, the towns were sampled with probability proportional to the total population of the sampled towns. In stratum-I, all the towns were included in the sample. Selection of dwelling units within each sampled town was the second stage of sampling. This was done with the help of electoral rolls for the towns, using systematic sampling procedure with a random start. In the towns with population one lakh and above, the sampling of dwelling units was preceded by sampling of electoral wards. At each dwelling unit all the members residing there were enumerated. From among these, the married members, who qualified were identified and one out of them was selected at random for conducting interview.

In rural areas the sampling procedure adopted was as follows. In each state, the villages with population of 50,000 and over were grouped to form a stratum and the required

number of villages were sampled on the basis of probability proportional to size (PPS). For representing the remaining villages, in the state, first a sample of two or more districts was selected with probability proportional to the total rural population of the sampled districts. Within each selected district, two taluka/tehsils were sampled with probability proportional to the total rural population of sampled talukas. The villages with population below 5000 in the sampled talukas/tehsils was stratified so as to form two strata viz. (i) villages with population between 1000 and 4999 and (ii) villages with population below 1000, and from each of these strata the required number of villages were selected. The procedure adopted in selection of dwelling units and respondents were almost the same as those used in case of urban areas.

## 2. Infant Mortality and its Causes in Gujarat (1979-80)

Sample Size : A probability sample of 11,053 currently married women (CMW) between 15 and 49 years of age living in rural and urban (city) areas of Gujarat State (India) were interviewed for the study. Out of this, a sample of 2444 CMW was covered from Saurashtra division; 2467 from North Gujarat division; 2922 from South Gujarat division and 3220 from Baroda city. Out of these, urban (city) and rural South Gujarat data were included for analysis carried out for the present study.

Universe : It was decided to utilise Sample Registration Scheme (SRS) villages in Gujarat as a base for drawing the sample for the rural areas of Gujarat. All the currently married women living in these villages of Gujarat and in the city of Baroda constituted the universe for the study.

Sampling Design : Multi-stage stratified sampling design was used to draw samples from rural and urban areas of Gujarat.

Sampling procedure : As per the sample registration scheme in rural Gujarat, the state has been broadly divided into three natural divisions viz. Rajkot division (Saurashtra), Ahmedabad division (North and Central Gujarat) and Baroda division (South Gujarat). Multi-stage stratified sampling design is used to draw samples from the above mentioned three divisions of Gujarat. Since SRS units within a division are scattered over districts, a district was taken as the first stage sampling unit. A belt of three districts from each of the three divisions was selected for the purpose of sampling in this study. A village or segment of a village was taken as second stage of sampling unit. To fix the number of villages to be selected from each selected district of the respective division, proportional allocation was done. Since SRS units (villages) within a district are from different strata of villages depending upon the size of the population, total number of units to be covered in a district were again

distributed in each stratum according to its size to represent different size class of population in the respective division. The household was taken as the third stage of sampling unit. Having fixed the number of households to be selected from each village, the sample of households were obtained using systematic sampling technique.

Baroda city was selected to represent the urban community in the present study. The Municipal Corporation of Baroda city was divided into six wards and each ward into a number of blocks. There were in all 107 blocks in the city area, and it was decided to cover roughly twenty percent of these blocks, which were distributed in six wards. To fix the number of blocks to be selected from each ward, proportional allocation was done. The sample of households to be selected from each block was also based on proportional allocation. From each ward the blocks were drawn by systematic sampling. Similarly, the households from each block were also drawn, by systematic sampling. All the members in a selected household were enumerated. From among these, the married women who qualified were identified and selected for individual interview.