

# CENSUS OF INDIA, 1961

VOLUME XII

## ORISSA

PART I-B

REPORT ON VITAL STATISTICS  
AND  
FERTILITY SURVEY

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## PREFACE

The publication of a separate report on Vital Statistics is a novel feature of the 1961 Census. Besides presenting figures on Vital Statistics for the decade 1951—1961, the report includes a chapter on the level and trends of fertility in the State data for which were collected during a survey conducted by the State Census Organization in the post-enumeration period. Study of maternity and fertility in the context of explosive population growth in the country and consequent need for correct social planning has assumed considerable meaning and importance in recent years and the brief survey on fertility, undertaken at the instance of the Registrar General, India, in all the States was primarily designed to throw light on this subject. It must be admitted that the survey suffered from various limitations and yet it was decided that the data collected should be properly analysed and presented particularly with a view to providing some basic and bench mark data for those who hold interest in the subject.

The statistics of births and deaths were collected from the Vital Statistics unit of the State Health Directorate. The vital rates were worked out in the Census Organization based on 1951 and 1961 Census. Vital Statistics in Orissa, as in many other States, are greatly deficient and any analysis or interpretation thereof should be accepted with obvious reservations. Among the factors contributing to the deterioration of the vital statistics system and deficiency of the data in this State in recent years, particular mention may be made of the enlargement of the area of registration and non-installation of proper machinery, general lack of awareness at all levels about the efficacy of the data and a somewhat hasty switching over from the traditional to new forms of organization for collection of the data.

I owe a debt of gratitude to the Vital Statistics Section of the Office of the Registrar General for compiling the Summary Tables on Fertility Survey and for the valuable suggestions on the draft Vital Statistics Report. I am thankful to Shri H. Patnaik, M. A., Assistant Director of Health Services (Vital Statistics), for his willing co-operation in the matter of supply of the data on Vital Statistics and to the Superintendents, S. C. B. Medical College Hospital, Cuttack and the Moorshed Memorial Christian Hospital, G. Udayagiri for help in the collection of hospital maternity data.

I am hopeful that the report in spite of its shortcomings will prove generally useful for the demographers, planners and the public.

Cuttack

The 11th August, 1968

M. Ahmed

# CENSUS OF INDIA, 1961

## Government of India Publications

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## VITAL STATISTICS





## CHAPTER I

### Introduction

The present Report on Vital Statistics for the decade 1951—60 which forms a part of the 1961 Census programme, is the first attempt of its kind to collect and collate available data on Vital Statistics in the State of Orissa. Years ago, the Director-General of Health Services, India and the Director of Health Services, Orissa, at the Central and the State level respectively used to bring out Annual Reports on Vital Statistics. In May, 1949, the Government of India in the Ministry of Home Affairs Resolution No.2/5/59-Public, dated 16-5-1949, decided as follows: "The Government of India have decided to initiate steps forthwith for developing and improving systematic collection of statistics bearing upon the size and growth of population. For this purpose they have decided to establish a single organisation at the Centre in the Ministry of Home Affairs under a Registrar General and *ex officio* Census Commissioner to deal with population statistics including vital statistics of Census". In this State, however, the Director of Health Services and to some extent the Director of the Bureau of Statistics and Economic<sup>s</sup> continued to attend to this work under the Registrar General and Census Commissioner, India.

The history of registration of vital events can be traced back to antiquities. But the system of registration took shape with the Act of 1836 in England and Wales when a Central registry was created for the maintenance of records and statistics of births, marriages and deaths by cause for England and Wales. In India, the registration of vital events was not obligatory till the middle of the last century. The system of registration was introduced for the first time in 1844 in Madras. This was later extended in 1848 to Bombay, in 1870 to Bengal and during the subsequent decade to most other places. A law was enacted in 1886 for the whole of the country but with the passage

of time the States provided for compulsory registration of vital events in their own enactments.

Orissa was carved out as a separate province in 1936 with areas drawn from the then provinces of Bihar, Madhya Pradesh and Madras. These areas, therefore, inherited the systems of registration then prevalent in Bengal and Madras. In the Ganjam and Koraput districts of the newly formed State, the Madras Registration of Births and Deaths 1899 was followed, whereas in the remaining four districts the provisions of the Bengal Births and Deaths Registration Act 1873 were enforced.

### Registration system—Evolution in Orissa

It has been indicated earlier that two different Acts were in force in the State and that no single enactment has yet been enforced. The Bengal Births and Deaths Registration Act, 1873 was enforced in four constituent districts of Orissa when it was carved out as a separate province in 1936. The Madras Registration of Births and Deaths, 1899 was in operation in the districts of Ganjam and Koraput. Both the Acts provide for compulsory registration of births and deaths and penal provision, though low, in case of default. In the princely states, where no registration system worth the name was in operation, the Bengal Births and Deaths Registration Act was made applicable in 1952, some 3 to 4 years after their merger with the State of Orissa.

In 1936, a major part of Ganjam Agency and the entire district of Koraput except the then Union Board areas of Koraput, Jeypore, Nowrangapur, Gunupur, Rayagada, Kotpad and Gudari did not enjoy the benefit of any registration system. This was perhaps attributed to the preponderance of tribal population and acute dearth of literate persons to take charge of the work. After merger of the princely states, pending enforcement of the regular registration system-

an arrangement was made for collection of weekly figures of attacks of and deaths from cholera and smallpox in those areas. The area and population under registration in 1951 were only 21,694 square miles and 7,919,594 persons, respectively against the total area of 60,127 square miles and

the total population of 1,46,45,946. In other words, on this date only 36.1 per cent of the total area and 54.1 per cent of the total population of the State were under registration system. With the extension of the system to the ex-state areas in 1952, the districtwise population stood as follows:

**Table 1**

| Districts<br>(1)   | Total                         |                   | Under system of registration  |                   |
|--------------------|-------------------------------|-------------------|-------------------------------|-------------------|
|                    | Area<br>(in Sq. miles)<br>(2) | Population<br>(3) | Area<br>(in Sq. miles)<br>(4) | Population<br>(5) |
| Kalahandi ..       | 5,057.00                      | 1,009,654         | 5,057.00                      | 1,009,654         |
| Koraput ..         | 9,918.95                      | 1,498,271         | 30.79                         | 78,161            |
| Sambalpur ..       | 6,764.60                      | 1,508,686         | 6,764.60                      | 1,508,686         |
| Bolangir ..        | 3,411.60                      | 1,068,686         | 3,411.60                      | 1,068,686         |
| Baudh-Khondmals .. | 4,282.00                      | 514,427           | 4,282.00                      | 514,427           |
| Ganjam ..          | 4,725.00                      | 1,872,530         | 3,974.00                      | 1,816,094         |
| Sundargarh ..      | 3,788.00                      | 758,617           | 3,788.00                      | 758,617           |
| Dhenkanal ..       | 4,226.01                      | 1,028,935         | 4,226.01                      | 1,028,935         |
| Puri ..            | 4,043.34                      | 1,865,439         | 4,043.34                      | 1,865,439         |
| Keonjhar ..        | 3,216.50                      | 743,315           | 3,216.50                      | 743,315           |
| Cuttack ..         | 4,210.00                      | 3,060,320         | 4,210.00                      | 3,060,320         |
| Mayurbhanj ..      | 4,021.79                      | 1,204,043         | 4,021.79                      | 1,204,043         |
| Balasore ..        | 2,507.00                      | 1,415,923         | 2,507.00                      | 1,415,923         |

This comprised 91.47 per cent of the population living in 82.32 per cent area of the State. The portions left out were the same old areas in the districts of Ganjam and Koraput which constituted about 3 per cent of the population of Ganjam district and 94.78 per cent of the population of the district of Koraput.

#### The system in other States

The system of collection of vital statistics differs from State to State, yet some uniformity exists in principles and in some details. Nearly in all the States, two different agencies are made responsible for the rural and urban areas and the

village chowkidar, watchman or headman is usually the person in charge of collection of vital events in the rural areas. In U. P., for example as the system of collection of information through village chowkidars proved defective, the task was entrusted to Village Panchayats from 1951 under the U. P. Panchayati Raj Act, 1947. But it is said that after this change of system, the gap in registration stood considerably widened.

In Gujarat, registration of births and deaths in rural areas is the responsibility of the Revenue Department and the village official responsible for the job is the police patel. In Kutch area, the Revenue Accountant or Talati does this work

with the help of village Kotwal. Of late in some areas, the job has been taken over by the Grama Panchayats. In some of the Kutch villages, shopkeepers also collect information on births and deaths which is subsequently entered into the registration records maintained by the Talati. There is no statute whatsoever and administrative instructions issued by the Government and contained in the manual of revenue accounts guide the system in the Gujarat portion of the State. In urban areas, individual municipalities have framed their own bye-laws for the compulsory registration of births and deaths. In the former Saurashtra State, the Registration of Births, Deaths and Marriages Act, 1886 has been adopted since April 1954.

In the rural areas of Assam the recording agency is generally the chowkidars in Kachar and parts of Goalpara, while in the plains districts, it is the *gaonburas* and *mandals* or the *mauzadars*. Many of these persons and particularly the village chowkidars are often illiterate, invariably low-paid and are overburdened with many other duties. Reporting of births and deaths is not obligatory on house-owners and the village chowkidar makes the entries of births and deaths in his pocket book as and when he comes to know of them. The rural vital statistics collecting agents are gradually being replaced by Panchayats.

In Madras, in Panchayat areas where the Madras Registration of Births and Deaths Act, 1899 is in force, the village headmen do the work of registration of births and deaths and if the Panchayat consists of more than one village, then the headman of each village maintains a register relating to his village in the Panchayat. In municipal areas the municipal council is expected to register all births and deaths occurring in the municipality and for this purpose, the council may divide the municipality into several districts and appoint persons possessing the qualification of sanitary inspectors as Registrars of Births and Deaths.

### The system in Orissa

In Orissa, in the rural areas of Ganjam where the Madras Registration of Births and Deaths Act is in force, *Karji*\*, a village official acts as the Registrar for 3 to 4 villages on the basis of reports made by *Taliary* or the village servant. In other districts, the village chowkidar reports vital events to the police station where records in the prescribed register are maintained by the Thana staff. In urban areas covered by Municipalities or Notified Area Councils, the Health staff of these local bodies maintain registers and in other towns the staff of the Health Department do the job. Usually, two sets of registers are maintained—one for births and the other for deaths. The columns in the birth register denote date, informant, event, sex and religion and in death register two other columns showing age and cause of death are given over and above the columns for the birth register. Causes of deaths are noted in seven broad groups, viz., cholera, smallpox, plague, fever and respiratory diseases, wounds and accidents and other causes.

In the rural areas of 11 out of 13 districts of the State, provisions of the Bengal Births and Deaths Registration Act is in force. Here the chowkidars collect the vital statistics according to the statutory obligations as required under the Chowkidari Amendment Act, 1892 and the Orissa Police Manual. They too constitute the primary reporting agency in towns where the duty of registration has not been handed over to any urban local body. They fill in prescribed forms called *hat chitha* and produce the same at the police station on weekly or fortnightly parade days for subsequent entry into the daily registers of births and deaths maintained at the police station. In the rural areas of Ganjam, *Taliary*, the village servant reports vital events every week to the *Karji* who maintains the registers. In the towns, the Health staff attached to the Municipalities and Notified Area Councils collect and record the information. The Thana Officer, *Karji* or the Executive Officer of a Municipality or a Notified

\*The functionary has since been abolished and the system described here as existing in 1961 has undergone considerable change.

Area Council compiles the statistics in the monthly return giving total figures for the complete area with details of age, causes of mortality, religion, sex, etc. The Thana Officers or the Executive Officers of Municipalities send their monthly return to the District Health Officer whereas the Karji submits the return to the Taluk Officer who in his turn forwards it to the Director of Health Services, Orissa. The District Health Officer sends the monthly report for the reporting area in his charge to the Director of Health Services along with the recorded figures of each registration unit separately. The towns of Koraput follow the urban system of registration.

The system of registration under the Madras Registration of Births and Deaths Act, 1899 is said to be more effective though old. The Karji is literate with rudiments of training and with manageable area of operation whereas the Chowkidars, on the other hand, are illiterate without any training and their jurisdiction usually covers a much larger area. The system of check and counter-check of the statistics under the South Orissa system is also reported to be more effective than that under the North Orissa system.

Out of 62 towns as recorded in 1961 Census, only 26 were urban registration units in 1960. Vital events in 24 were being collected by Municipalities or Notified Area Councils and in the remaining 2, the police and health staff did the job. As in the rural units, there are separate registers to record births and deaths. The hospitals and maternity homes report vital events regularly to the urban local bodies. In the remaining urban units where no local bodies have yet been constituted, the machinery for the rural areas attend to the work. Thus, the registration units are the village Karji's office in the Ganjam district, police stations in other districts and offices of the urban local bodies in the town areas. As discussed earlier, the urban units in the North Orissa districts send their reports to the District Health Officers whereas those in the Southern Orissa are received directly by the Director

of Health Services. This compilation is centralised at the State level in respect of the urban and rural units of Ganjam and Koraput districts whereas in other areas the District Health Officer compiles reports for consolidation of State figures. It has been recognised that the system of centralised compilation functions more efficiently.

The report Vital Statistics of India, 1958 was the first such annual report published by the Registrar General. Though this first issue contained statistics for the years 1951-58, the scope of the subsequent issues had been greatly enlarged. Each State used to bring out their own annual reports and for Orissa, 1956 was, however, the last year for which such a report is available. Nonavailability and deficiency of data might have been the cause of its discontinuance but this does not seem justified as the logic of reality inherent in those reports is also subject to study and analysis so that the pattern of deficiencies can be removed in future collections.

The multifold utility of vital statistics can never be over-emphasised. It is through these statistics that the trends of birth and death rates, the incidence of diseases and the pattern of preventive measures to be adopted in the formulation of health policies are made out. Both the preventive and curative measures are organised on the basis of an accurate knowledge of disease and disabilities and as such, the importance of collection and compilation of accurate vital statistics is considerable.

It is rather well known that the system of registration of vital events and the reporting and compilation of vital statistics have greatly deteriorated during the past years. The old limping system seems to have come to a dead halt. Unawareness of the importance of vital statistics, blissful indifference at various levels toward its collection and the lack of a rigid system of control, check and counter-check seem to be responsible for the slow deterioration of the system. The pace of deterioration fast accelerated during the decade 1951-60. The rate

indeed was so rapid that it was difficult to achieve the anticipated break-through by the sheer process of handing over the system to the Grama Panchayats. The Orissa Grama Panchayat Act, 1948, provided registration of births, marriages and deaths as one of the obligatory functions of the Grama Panchayats. The village chowkidar continued to be responsible for collection of the vital events but the police and Grama Panchayat authorities together exercised a sort of diarchal control over him which resulted in further deterioration of the system. To add to this, the Act provided no penal provision for the malingering reporters. The end was yet to come and the last nail on the coffin was driven on the abolition of the chowkidari system in North Orissa districts and karji system in South Orissa.

A new system was evolved with the enforcement of the Orissa Grama Panchayat Act, 1964, wherein it was provided that heads of family and occupiers of houses should report about births and deaths within a fortnight of the occurrence to their respective ward members who at their end would report these occurrences to the Sarpanch of the Grama Panchayat who, it was envisaged, would function as the Regi-

strar of Births, Deaths and Marriages. It was on the Sarpanch to compile the monthly return and send the same to the B. D. O. who was to pass it on to the Director of Health Services. This system, it is understood, saw its success in very few areas. The Panchayat ward members deemed it below their dignity to act as substitutes of chowkidars. The near decay and failure of the peripheral registration machinery coupled with the weaknesses inherent in the new systems and their change in quick succession resulted, by and large, in widespread omissions and anomalies. This in its trail led to deficient and incomplete records at all stages. The state of deficiency in the continuity of records was so complete and extensive that it was difficult to sort out good and bad areas.

The ever-widening gap between the probable rates and the registration rates touched, as a consequence, appalling proportions. The Table below compares the computed rates with the registration rates of the State for the last two decades. It must be noted that the computed rates, however, were nearer the registration rates during the earlier decades when the registration machinery was working more effectively.

Table 2\*

| Decades | Registered rates |            | Computed rates |            | Percentage omission in registration |        |
|---------|------------------|------------|----------------|------------|-------------------------------------|--------|
|         | Birth rate       | Death rate | Birth rate     | Death rate | Births                              | Deaths |
| 1       | 2                | 3          | 4              | 5          | 6                                   | 7      |
| 1941—50 | 28.2             | 26.0       | 37.2           | 29.9       | 24.2                                | 13.0   |
| 1951—60 | 24.7             | 15.5       | 40.4           | 22.9       | 38.9                                | 32.3   |

\* Reproduced from Tables 19(A) and 21(A) of Vital Statistics of India for 1961

An idea about the extent of deficiency in the registered figures of births and deaths can be had from a comparison of these figures with those of population growth as ascertained during the

decennial population census. The Table below will illustrate how the percentage of deficiency records the high range of 18 to 87 per cent.

Table 3

| Districts        | Population in registration area |                |                      |                          | Deaths<br>1951-60        | Excess of<br>births over<br>deaths | Difference<br>between<br>columns<br>4 & 7 | Column 8 in<br>percentage<br>to<br>column 4 |
|------------------|---------------------------------|----------------|----------------------|--------------------------|--------------------------|------------------------------------|---|---|
|                  | Census<br>1951                  | Census<br>1961 | Variation<br>1961-51 | Births<br>1951-60        |                          |                                    |   |   |
| 1                | 2                               | 3              | 4                    | 5                        | 6                        | 7                                  | 8   | 9   |
| Kalahandi        | 858,781                         | 1,009,654      | 150,873              | (291,242)<br>262,118     | (189,122)<br>170,210     | 102,120                            | 48,753                                    | 32  |
| Koraput          | 60,262                          | 78,161         | 17,899               | 7,758                    | 5,463                    | 2,295                              | 15,604                                    | 87  |
| Sambalpur        | 1,301,804                       | 1,508,686      | 206,882              | 360,366                  | 234,403                  | 125,963                            | 80,919                                    | 39  |
| Bolangir         | 917,875                         | 1,068,686      | 150,811              | (340,852)<br>306,767     | (217,460)<br>195,714     | 123,392                            | 27,419                                    | 18  |
| Baudh, Khondmals | 456,895                         | 514,427        | 57,532               | 61,367                   | 46,075                   | 15,292                             | 42,240                                    | 73  |
| Ganjam           | 1,575,814                       | 1,795,234      | 219,420              | 414,196                  | 273,406                  | 140,790                            | 78,630                                    | 36  |
| Sundargarh       | 552,203                         | 758,617        | 206,414              | (154,607)<br>139,146     | (90,999)<br>81,899       | 63,608                             | 142,806                                   | 69  |
| Dhenkanal        | 839,241                         | 1,028,935      | 189,694              | 241,441                  | 138,107                  | 103,334                            | 86,360                                    | 46  |
| Puri             | 1,572,262                       | 1,865,439      | 293,177              | 407,872                  | 270,409                  | 137,463                            | 155,714                                   | 53  |
| Keonjhar         | 588,441                         | 743,315        | 154,874              | (187,697)<br>168,927     | (106,776)<br>96,098      | 80,921                             | 73,953                                    | 48  |
| Cuttack          | 2,529,244                       | 3,060,320      | 531,076              | 747,032                  | 473,196                  | 273,836                            | 257,240                                   | 48  |
| Mayurbhanj       | 1,028,825                       | 1,204,043      | 175,218              | (257,663)<br>231,897     | (152,469)<br>137,222     | 105,194                            | 70,024                                    | 40  |
| Balasore         | 1,106,012                       | 1,415,923      | 309,911              | 290,919                  | 161,339                  | 129,580                            | 180,331                                   | 58  |
| Orissa           | 13,387,659                      | 16,051,440     | 2,663,781            | (3,763,012)<br>3,639,806 | (2,359,224)<br>2,283,541 | (1,403,788)<br>1,356,265           | (1,259,993)<br>1,307,516                  | 47  |

Figures within brackets indicate estimates for the ten year period during 1951-60

Some adjustments had to be made in preparing estimates for this Table as complete records for the decade were not available for the ex-state areas whose statistics appeared only from 1952 onwards. All the areas of the State did not enjoy the benefit of the registration system. It needs specific mention that migration, a very important factor had not been taken into account in comparing the two sets of figures. Yet it was thought that some kind of a picture will emerge on the extent of omissions in the registration system and incompleteness of vital statistics records from the Table so prepared.

### Births

The birth statistics compared to that of death suffer from under-registration to a larger measure. Death mostly involves performance of several rituals, the event escaping notice altogether is, therefore, rendered more difficult. Table 2 shows that omissions in birth registration is to an extent of 39 per cent. The computed rates of birth for the State are 40 for the decade 1951—60 whereas the registered rate is only 25. Thus, in every 40 births occurring within the State 15 escape notice and 25 are recorded. The records of birth are thus reliable to an extent of 60 per cent only.

Table 4

| India/States      | Birth rates for |      |      |         |
|-------------------|-----------------|------|------|---------|
|                   | 1958            | 1959 | 1960 | 1951—60 |
| 1                 | 2               | 3    | 4    | 5       |
| India ..          | 22.3            | 23.6 | 22.8 | 22.1    |
| Orissa ..         | 23.8            | 28.6 | 24.6 | 24.7    |
| Andhra Pradesh .. | 19.3            | 17.9 | 17.9 | ..      |
| Gujarat ..        | 26.6            | 32.1 | 27.1 | ..      |
| Kerala ..         | 23.5            | 24.9 | 22.6 | ..      |
| Madras ..         | 28.8            | 29.8 | 28.0 | 28.1    |
| Maharashtra ..    | 27.1            | 29.2 | 29.5 | 32.3    |
| Mysore ..         | 22.8            | 27.9 | 27.9 | ..      |
| Punjab ..         | 37.3            | 36.0 | 35.7 | 39.9    |
| Madhya Pradesh .. | 16.1            | 18.1 | 18.1 | 19.7    |
| Uttar Pradesh ..  | 15.4            | 14.6 | 15.9 | 15.9    |
| West Bengal ..    | 20.2            | 22.7 | 19.2 | 21.5    |
| Delhi ..          | 28.8            | 30.5 | 29.3 | ..      |
| Assam ..          | 8.2             | 8.1  | 6.8  | 9.7     |
| Bihar ..          | 12.5            | 12.6 | 11.4 | 15.0    |

3 Census—2

The Table 4 presents a comparative picture of the registered birth rate in India with that of other States in the Union. These figures are reproduced from the Vital Statistics of India, 1961 and they reflect indirectly in a way the extent of under-registration in the States.

For long, the birth rates in India have been on the high side. The causes are not very far to seek. The high rate of mortality in the past from scourges like malaria, cholera, smallpox and other epidemics and the need of households for manual labour in agriculture and allied occupations favoured growth of large families from economic consideration. Social sanction favouring early marriages, preponderance of females making it easier for a widower to remarry and polygamy are other factors responsible for high birth rates. The decennial and the annual birth rates for the State and the districts during 1952, 1956 and 1960 are reproduced below in Table 5.

Table 5

| India/States    | Birth rates for * |         |      |      |      |
|-----------------|-------------------|---------|------|------|------|
|                 | 1941—50           | 1951—60 | 1952 | 1956 | 1960 |
| 1               | 2                 | 3       | 4    | 5    | 6    |
| Orissa ..       | 28.2              | 25.8    | 27.3 | 25.9 | 24.4 |
| Kalahandi ..    | ..                | 30.2    | 33.9 | 33.3 | 33.0 |
| Koraput ..      | 14.9              | 11.3    | 12.6 | 10.4 | 11.0 |
| Sambalpur ..    | 28.3              | 26.2    | 29.6 | 22.1 | 24.6 |
| Bolangir ..     | ..                | 34.1    | 40.8 | 36.6 | 27.3 |
| Baudh-Khondmals | 30.8              | 13.1    | 17.5 | 14.9 | 11.8 |
| Ganjam ..       | 25.4              | 24.6    | 24.2 | 23.1 | 21.2 |
| Sundargarh ..   | ..                | 23.3    | 28.8 | 23.2 | 19.6 |
| Dhenkanal ..    | 34.6              | 27.9    | 29.6 | 27.9 | 27.8 |
| Puri ..         | 29.9              | 24.4    | 21.8 | 25.8 | 25.3 |
| Keonjhar ..     | ..                | 28.0    | 30.5 | 25.4 | 28.3 |
| Cuttack ..      | 29.3              | 27.0    | 28.3 | 29.1 | 23.1 |
| Mayurbhanj ..   | ..                | 23.0    | 24.0 | 22.0 | 24.7 |
| Balasure ..     | 27.9              | 23.3    | 22.1 | 21.5 | 25.1 |

The corresponding rates for the decade 1941—50 for Kalahandi, Bolangir, Sundargarh, Keonjhar and Mayurbhanj districts have not been quoted as these princely states then contained in these districts were then outside the purview of the registration system. The rates for 1951—60

for those districts and others containing the ex-state areas take into account the birth record only between 1952—60. Among the districts, Koraput shows consistently poor results possibly due to its limited registration areas. The district of Baudh-Khondmals also records very low rates during the decade 1951—60. Among the factors responsible for such under-registration might be recorded its difficult and sparsely populated terrain and its population consisting mostly of hill tribes. The remaining districts have been classified into the following three categories :

- (a) Districts showing rates consistently higher than the State average—Kalahandi, Bolangir and Dhenkanal.
- (b) Those showing rates higher than the State average for most of the years—Sambalpur Cuttack and Keonjhar.
- (c) Districts whose rates are lower than the State average—Ganjam, Sundargarh, Puri, Mayurbhanj and Balasore:

The districts shown in (a) and (b) categories may be treated as good registration areas. It is difficult to reconcile to the poor performance and results of districts like Ganjam, Puri and Balasore, where the registration machinery is supposed to have taken deep roots for nearly a century. Records of Sundargarh are more complete compared to the other four districts, in group (c) and in 3 out of 9 years during the decade 1951—60, it has recorded higher rates. Ganjam, Mayurbhanj and Balasore districts have shown consistently low rates except in 1960, when their rates have gone up slightly above the State average. Puri records higher rates during 1956 and 1960. There is no room for complacency in the operation of the system in districts grouped under (a) and (b) as the working of the system leaves much to be desired. It is a fact that in districts like Koraput, Baudh-Khondmals and the five districts classed in group (c) above, the system deserves a more thorough attention:

The Table below presents the State averages of birth rates for rural and urban areas. The higher urban rates may be mainly due to better reporting in Municipal areas.

Table 6

| Years   | Total | Rural | Urban |      |
|---------|-------|-------|-------|------|
|         | 1     | 2     | 3     | 4    |
| 1951—60 | ..    | 25·8  | 25·6  | 31·8 |
| 1951    | ..    | 24·8  | 24·6  | 30·8 |
| 1952    | ..    | 27·3  | 27·3  | 28·7 |
| 1953    | ..    | 25·6  | 25·5  | 30·2 |
| 1954    | ..    | 25·8  | 25·6  | 31·4 |
| 1955    | ..    | 28·3  | 28·1  | 35·1 |
| 1956    | ..    | 25·9  | 25·6  | 33·7 |
| 1957    | ..    | 23·9  | 23·7  | 29·9 |
| 1958    | ..    | 23·3  | 23·0  | 31·6 |
| 1959    | ..    | 28·2  | 28·0  | 31·2 |
| 1960    | ..    | 24·4  | 24·1  | 33·7 |

The Table below gives the annual birth rate for the years 1936 to 1960. It is difficult to attempt a critical comparison of individual year to year rate as the fluctuations are mostly due to the vagaries of reporting. The Table, however, shows the deterioration of the registration system during and after the Second World War.

Table 7

| Years | Birth rates | Years | Birth rates | Years | Birth rates |
|-------|-------------|-------|-------------|-------|-------------|
| 1     | 2           | 3     | 4           | 5     | 6           |
| 1936  | 36·6        | 1941  | 30·9        | 1951  | 24·8        |
| 1937  | 34·8        | 1942  | 31·5        | 1952  | 27·3        |
| 1938  | 33·8        | 1943  | 30·8        | 1953  | 25·6        |
| 1939  | 34·9        | 1944  | 25·2        | 1954  | 25·8        |
| 1940  | 35·9        | 1945  | 27·4        | 1955  | 28·3        |
|       |             | 1946  | 27·5        | 1956  | 25·9        |
|       |             | 1947  | 26·7        | 1957  | 23·9        |
|       |             | 1948  | 26·4        | 1958  | 23·3        |
|       |             | 1949  | 26·1        | 1959  | 28·2        |
|       |             | 1950  | 26·8        | 1960  | 24·4        |



The vital statistics records are so defective and patently so deficient that it will be hazardous to prognosticate any trend on the basis of these figures. It is of course agreed that in recent years there is a greater awareness of the economic implications of large families and gradual adoption of family planning measures. The social and economic conditions favouring growth of large families which prevailed years ago are also said to be on the decline. All these may cumulatively lead to a declining trend of birth rate; but as it is, it would be difficult to foretell accurately the rate of fall in future years with the data available.

The discussion so far is confined to live births only. Still birth rate reflects on the adequacy or otherwise of the hygienic care the Society takes of its expectant mothers. The conditions on this count in the State are admittedly poor. Frequency of natural calamities, outbreak of epidemics and incidence of malaria and such other diseases greatly reduce the vitality of the people. The following Table attempts a comparison of the percentage of still births to total births in Orissa and some neighbouring States during the period from 1956 to 1960.

Table 8

| States         | Percentage of still births to total births |      |      |      |      |
|----------------|--|------|------|------|------|
|                | 1956                                       | 1957 | 1958 | 1959 | 1960 |
|                | 2  | 3    | 4    | 5    | 6    |
| Orissa         | 2.52                                       | 2.15 | 2.19 | 2.11 | 1.98 |
| Andhra Pradesh | 0.85                                       | 0.88 | 0.79 | 0.76 | 0.89 |
| Madhya Pradesh | 1.57                                       | 1.79 | 1.68 | 2.26 | 1.48 |
| Madras         | 10.48                                      | 1.66 | 1.55 | 1.60 | 1.61 |
| West Bengal    | 1.59                                       | 1.48 | 1.47 | 1.44 | 1.58 |
| Bihar          | 0.11                                       | 0.11 | 0.20 | 0.92 | 0.98 |

The Table below compares live births to still births and the percentage of still births to total births in Orissa during 1951—60. A slow but

perceptible decline in the percentage of still births to total births is noticeable in years after 1955. This may be attributed to an over-all improvement of the public health measures though it is contended that in this field there remains much room for improvement.

Table 9

| Years   | Live births | Still births | Percentage of still births to total births |
|---------|-------------|--------------|--|
| 1       | 2           | 3            | 4  |
| 1951 .. | 197,937     | 6,017        | 2.95                                       |
| 1952 .. | 375,404     | 12,909       | 3.32                                       |
| 1953 .. | 358,679     | 12,897       | 3.47                                       |
| 1954 .. | 368,252     | 10,347       | 2.73                                       |
| 1955 .. | 411,862     | 9,851        | 2.34                                       |
| 1956 .. | 383,327     | 9,917        | 2.52                                       |
| 1957 .. | 359,984     | 7,913        | 2.15                                       |
| 1958 .. | 356,991     | 7,994        | 2.19                                       |
| 1959 .. | 439,451     | 9,456        | 2.11                                       |
| 1960 .. | 387,919     | 7,851        | 1.98                                       |
| 1951—60 | 3,639,806   | 95,152       | 2.55                                       |

Table XIV in Appendix gives the still birth rate (i. e., still births per 1,000 of total live and still births) for the State and different districts. Puri records the highest which is double the rate of the State. The rates for Balasore, Cuttack and Kalahandi also swing on the high side.

#### Deaths

The statistics concerning mortality are perhaps as important as those of death as its study helps to determine the factors contributing to the well-being of the society. It has been stated earlier that the records of death registration are less deficient than birth and give more details.

The Table below compares the All-India death rate with that obtaining in the constituent States. The decennial rate for 1951—60 and the annual rates for the years 1958 to 1960 have been shown for the comparison.

**Table 10**  
DEATH RATE

| India/States   | 1958 | 1959 | 1960 | 1951-60 |
|----------------|------|------|------|---------|
| 1              | 2    | 3    | 4    | 5       |
| India          | 11.5 | 9.9  | 10.0 | 11.3    |
| Orissa         | 17.1 | 13.9 | 13.5 | 15.5    |
| Andhra Pradesh | 10.7 | 8.0  | 7.9  | ..      |
| Gujarat        | 13.7 | 12.2 | 11.2 | ..      |
| Kerala         | 7.2  | 7.4  | 6.6  | ..      |
| Madras         | 14.0 | 12.5 | 12.7 | 14.5    |
| Maharashtra    | 15.7 | 13.5 | 12.2 | 15.2    |
| Mysore         | 10.2 | 12.0 | 10.7 | ..      |
| Punjab         | 13.9 | 11.1 | 12.5 | 14.7    |
| Delhi          | 8.8  | 8.6  | 9.7  | ..      |
| Madhya Pradesh | 10.7 | 8.8  | 8.6  | 12.3    |
| Uttar Pradesh  | 9.4  | 7.7  | 8.9  | 9.2     |
| West Bengal    | 8.4  | 7.4  | 7.6  | 8.9     |
| Assam          | 3.6  | 3.6  | 2.7  | 4.4     |
| Bihar          | 7.3  | 5.3  | 5.0  | 7.9     |

Orissa appears to have recorded the highest death rate among the States. Under-registration is decidedly the common factor constant to all the States but among causes for this high death rate in Orissa may be included frequent visitation of epidemics; malaria and cholera. The outbreak of cholera and smallpox and casualties therefrom were particularly heavy during 1951—53 and 1956—58. 'Fever', that ill-defined word took the largest toll every year. The number of deaths per thousand population during the decade 1951—60 were 574.80, 27.58 and 15 for fever, smallpox and cholera respectively. In spite of public

health and preventive measures undertaken during the decade, the trend of mortality appears to have undergone no significant change.

Death rates in different districts of the State for the decades 1941—50 and 1951—60 and annual rates for 1952, 1956 and 1960 are given in the Table below.

**Table 11**

| State/Districts | 1941—50 | 1951—60 | 1952 | 1956 | 1960 |
|-----------------|---------|---------|------|------|------|
| 1               | 2       | 3       | 4    | 5    | 6    |
| Orissa          | 26.0    | 16.2    | 19.9 | 14.7 | 13.4 |
| Kalahandi       | ..      | 19.6    | 21.6 | 19.1 | 16.8 |
| Koraput         | 11.1    | 7.9     | 7.3  | 6.3  | 7.3  |
| Sambalpur       | 23.8    | 17.0    | 22.9 | 13.3 | 13.8 |
| Bolangir        | ..      | 21.8    | 28.7 | 21.2 | 15.2 |
| Baudh-Khondmals | 28.4    | 9.8     | 15.1 | 9.8  | 7.5  |
| Ganjam          | 24.7    | 16.3    | 15.8 | 12.0 | 10.6 |
| Sundargarh      | ..      | 13.7    | 18.2 | 14.2 | 9.6  |
| Dhenkanal       | 22.3    | 16.0    | 16.8 | 15.8 | 15.4 |
| Puri            | 27.1    | 16.2    | 18.9 | 14.0 | 15.8 |
| Keonjhar        | ..      | 15.9    | 17.5 | 14.7 | 15.3 |
| Cuttack         | 29.1    | 17.1    | 23.7 | 18.1 | 13.4 |
| Mayurbhanj      | ..      | 13.6    | 14.5 | 11.9 | 13.7 |
| Balasore        | 30.9    | 12.9    | 18.7 | 9.3  | 11.2 |

During the period, the fall in the death rate appears precipitous in the districts of Baudh-Khondmals, Ganjam, Dhenkanal, Puri, Cuttack and Balasore. The rates for 1941—50 for the district of Baudh-Khondmals exclude Baudh, an ex-state area and the rate of Dhenkanal for the decade relates to Angul Subdivision only. A comparison of the annual rates for all the 3 years given in the above Table will show that there has been a general decline in the rate during the period. The drop is conspicuous in the districts of Sambalpur, Bolangir and Balasore though it is difficult to assign reasons for the same. The declining trend continues in 7 of the 13 districts during 1960. It is true that the rates

are derived from highly deficient data, yet the possibility of a genuine decline in the death rate during the period in question cannot be ruled out.

The Table below gives yearwise rural and urban rates of mortality during the decade 1951—60.

Table 12

|       | Year    |      |      |      |      |      |      |      |      |      |      |
|-------|---------|------|------|------|------|------|------|------|------|------|------|
|       | 1951—60 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
| Rural | 16.2    | 21.0 | 20.1 | 18.4 | 15.1 | 14.3 | 14.7 | 17.5 | 16.7 | 13.6 | 13.4 |
| Urban | 15.1    | 18.8 | 15.0 | 15.0 | 13.0 | 13.7 | 14.6 | 16.9 | 17.3 | 13.9 | 14.2 |

The urban rates as cited above were lower than the rural rates till 1957 after which the trend stood reversed up to 1960. It is a fact that the registration machinery in 11 out of 13 districts came to almost a stand still position in 1959 when the work was sought to be transferred from the village Chawkidars to the Grama Panchayat. It may be that the uncertainties and adverse effects associated with this change started much earlier and continued beyond 1959. The increase in the scale of omissions in registration of deaths might also be responsible for these poor results. Whereas the machinery continued to work as before in towns, the registration system deteriorated considerably in rural areas. This might be the reason why the urban rates kept up their past trends during these years whereas the rural rates went down.

As the fall in the rate of mortality is significant, it is necessary to study the trend of mortality for a longer period. The rate from 1936 to 1961 for the State as a whole is given in the Table below.

Table 13

| Years | Death rates | Years | Death rates | Years | Death rates |
|-------|-------------|-------|-------------|-------|-------------|
| 1936  | 27.8        | 1941  | 28.0        | 1951  | 20.9        |
| 1937  | 28.6        | 1942  | 25.4        | 1952  | 19.9        |
| 1938  | 29.5        | 1943  | 30.3        | 1953  | 18.3        |
| 1939  | 28.2        | 1944  | 30.4        | 1954  | 15.1        |
| 1940  | 24.7        | 1945  | 27.9        | 1955  | 14.3        |
|       |             | 1946  | 23.8        | 1956  | 14.7        |
|       |             | 1947  | 26.9        | 1957  | 17.5        |
|       |             | 1948  | 22.6        | 1958  | 16.7        |
|       |             | 1949  | 22.1        | 1959  | 13.7        |
|       |             | 1950  | 20.5        | 1960  | 13.4        |

The decennial death rate for 1941—50 was 26 which went down to 16.2 during 1951—60. This apart, a study of the trend in the above Table will

show that the decline in the above trend is conspicuous. How much of this trend can be ascribed to the increasing health and public health measures and how much to the extent of under-registration is a matter too difficult to determine at this stage.

In the western countries where the economy has taken off from the agricultural to a deep-seated industrial base, the fall in the death rate was significant in the early stages of industrialization and it continued to be so till a constant level was reached. The birth rate on the other hand, went up initially but declined after a certain stage. Both these resulted in phenomenal growth of population at the early stages of industrialization. The next phase in this process of transition to urban industrialization was the level of birth to fall down considerably so as to counterbalance the death and record increase of population at a much low rate.

The Table below gives the percentage of deaths in various age-groups and the proportion of male and female deaths at these ages for the decade 1951—60.

Table 14

| Age-groups         | Percentage to total deaths | Proportion of deaths between males and females |         |
|--------------------|----------------------------|--|---------|
|                    |                            | Males  | Females |
| Below 1 year       | ..                         | 23.20  | 47.04   |
| 1—4 years          | ..                         | 13.33  | 47.90   |
| 5—9 years          | ..                         | 5.98   | 48.23   |
| 10—14 years        | ..                         | 4.49   | 48.28   |
| 15—19 years        | ..                         | 4.89   | 51.64   |
| 20—29 years        | ..                         | 7.32   | 53.31   |
| 30—39 years        | ..                         | 7.59   | 48.91   |
| 40—49 years        | ..                         | 8.12   | 47.20   |
| 50—59 years        | ..                         | 9.95   | 48.71   |
| 50 years and above | ..                         | 15.13  | 49.92   |

Though even a broad generalisation is difficult to make from such deficient data, it may be noted that the rate records the highest in the early ages up to four years being 36.53 per cent of the total deaths. A sharp decline is noticed in the subsequent age-groups, but an upward trend again sets in from the age-group of 15—19 years. It may be seen that in all the age-groups above 20—29 years the rate is higher among the males and the higher rate of female mortality in the child bearing age-group of 15—29 may be on account of maternal deaths.

Public health facilities, if poor in the regular districts, were reportedly worse in most of the ex-state areas. The coastal districts had frequent visitations of flood and large areas remained water-logged for long periods. Major parts of the inland districts being covered with forests were unhealthy having malarious climates. Bad communications made it difficult for the public health measures to reach the interiors. Diseases like malaria, filaria, cholera and smallpox took heavy toll of lives. Some of those diseases often assumed epidemic form and wiped out considerable portion of the population. The frequency of their recurrence also sapped the vitality of the people and increased their susceptibility to various kinds of ailments. Poverty and mal-nutrition added to the size of the problem. By and large, these conditions prevailed in the State till nearly the end of the decade, 1941—50.

It is an admitted fact that during the decade 1951—60, substantial progress has been achieved in the sphere of improvement of environmental hygiene, control of communicable diseases and expansion of improved facilities of medical and public health services. Not only that the public health measures to control filaria, malaria, leprosy cholera and smallpox have reached the interiors and have succeeded in stamping out the diseases to a large extent, there has been a phenomenal expansion of institutional curative facilities of both the general and specialised types of medical services. The leeway in the direction of shortage

of medical man power has also been sought to be largely made up. In some urban and rural centres, protected water supply programmes have been put into action. Better communications and flood control measures have certainly added to the general improvement in this direction. With all these the fact remains that the magnitude of the problem awaiting solution at the beginning of the decade was so colossal that all the efforts made to improve the health conditions have not made perceptible headway. Much remains to be done to bring the condition of the State at par with other States of the Union.

The Table below gives the records of death under seven broad heads, according to the classification usually adopted. Specific causes of death in respect of the common diseases is not usually reflected in the vital statistics records. Death due to plague is rare in the State. It may be noted that contrary to the general belief that cholera and smallpox are the two great killers, ever, in fact takes the heaviest toll of lives.

Table 15

| Causes of death               | Number of Deaths | Percentage to total deaths |
|-------------------------------|------------------|----------------------------|
| 1                             | 2                | 3                          |
| 1. Cholera ..                 | 34,440           | 1.51                       |
| 2. Smallpox ..                | 62,978           | 2.76                       |
| 3. Fever ..                   | 1,312,573        | 57.48                      |
| 4. Dysentery and diarrhoea .. | 134,096          | 5.87                       |
| 5. Respiratory diseases       | 72,409           | 3.17                       |
| 6. Wounds and accidents       | 33,547           | 1.47                       |
| 7. Other causes ..            | 633,498          | 27.74                      |
| <b>Total ..</b>               | <b>2,283,541</b> | <b>100.00</b>              |

A comparative picture of the death rate from fever, smallpox and cholera in Orissa and India during the decade 1951—60 is projected in the Table below:

**Table 16**  
DEATHS PER 1,000 POPULATION

| Years   | Fever  |       | Smallpox |       | Cholera |       |
|---------|--------|-------|----------|-------|---------|-------|
|         | Orissa | India | Orissa   | India | Orissa  | India |
| 1       | 2      | 3     | 4        | 5     | 6       | 7     |
| 1951 .. | 10·12  | 7·7   | 0·82     | 0·44  | 0·53    | 0·15  |
| 1952 .. | 11·77  | 8·6   | 0·60     | 0·20  | 0·49    | 0·19  |
| 1953 .. | 11·44  | 7·4   | 0·13     | 0·10  | 0·30    | 0·40  |
| 1954 .. | 9·25   | 6·4   | 0·06     | 0·10  | 0·06    | 0·07  |
| 1955 .. | 8·43   | 4·8   | 0·03     | 0·10  | 0·04    | 0·03  |
| 1956 .. | 8·26   | 4·9   | 0·05     | 0·07  | 0·37    | 0·07  |
| 1957 .. | 10·43  | 5·1   | 0·35     | 0·12  | 0·23    | 0·15  |
| 1958 .. | 8·85   | 5·3   | 1·69     | 0·45  | 0·51    | 0·14  |
| 1959 .. | 7·36   | 4·0   | 0·72     | 0·11  | 0·05    | 0·02  |
| 1960 .. | 7·89   | 4·2   | 0·12     | 0·10  | 0·02    | 0·05  |

(Rates for India reproduced from Statistical Abstract of Indian Union 1962)

It needs no confession to say that the degree of inaccuracy in the recorded causes of mortality is really great and is perhaps greater than the registration error itself. No uniform system exists in the classification of diseases into broad groups throughout India. Statements often made about the cause of death are so uncertain and unreliable that misclassification under the circumstances is apt to occur. The rates in the Table have been computed on the basis of recorded statistics. It is presumed that the distortion on account of misclassification of causes of death may not be too great to seriously misrepresent the picture presented above. It may, however, be seen from the Table that the proportion of deaths due to fever is much larger in Orissa than the All-India level.

The pattern of mortality due to cholera, smallpox and fever in the districts, *Comparison of rates of mortality for the decade 1951—60 is among districts* presented in the Table below wherein the percentage of such deaths by rural and urban subdivisions has been given.

**Table 17**

| State/District     | Cholera |       |       | Smallpox |       |       | Fever |       |       |
|--------------------|---------|-------|-------|----------|-------|-------|-------|-------|-------|
|                    | Total   | Rural | Urban | Total    | Rural | Urban | Total | Rural | Urban |
| 1                  | 2       | 3     | 4     | 5        | 6     | 7     | 8     | 9     | 10    |
| Orissa ..          | 1·51    | 1·54  | 0·43  | 2·76     | 2·77  | 2·45  | 57·48 | 58·53 | 25·21 |
| Kalahandi ..       | 2·67    | 2·66  | 5·30  | 5·89     | 5·89  | 6·53  | 78·70 | 78·93 | 29·43 |
| Koraput ..         | 2·23    | 2·86  | 0·30  | 6·72     | 6·09  | 8·64  | 49·31 | 47·20 | 55·81 |
| Sambalpur ..       | 1·53    | 5·30  | 0·19  | 1·97     | 1·96  | 3·83  | 54·81 | 54·83 | 51·27 |
| Bolangir ..        | 1·19    | 1·21  | 0·33  | 2·47     | 2·48  | 1·82  | 65·02 | 65·15 | 55·79 |
| Baudh-Khondmals .. | 1·55    | 1·56  | ..    | 3·28     | 3·23  | 15·17 | 74·25 | 74·47 | 17·98 |
| Ganjam ..          | 1·86    | 1·91  | 0·92  | 4·47     | 4·97  | 3·99  | 46·85 | 48·41 | 20·05 |
| Sundargarh ..      | 0·52    | 0·53  | ..    | 1·32     | 1·34  | 0·33  | 66·07 | 66·18 | 58·55 |
| Dhenkanal ..       | 0·81    | 0·80  | 2·87  | 1·85     | 1·85  | ..    | 63·15 | 63·19 | 38·51 |
| Puri ..            | 1·09    | 1·15  | 0·13  | 2·25     | 2·32  | 1·10  | 43·95 | 44·75 | 35·13 |
| Keonjhar ..        | 0·43    | 0·44  | ..    | 1·46     | 1·47  | 0·65  | 80·81 | 80·90 | 68·67 |
| Cuttack ..         | 2·55    | 1·91  | 0·92  | 3·12     | 3·20  | 1·96  | 40·84 | 42·48 | 16·06 |
| Mayurbhanj ..      | 0·20    | 0·20  | 0·15  | 0·93     | 0·93  | 0·44  | 81·58 | 81·82 | 33·97 |
| Balasore ..        | 1·96    | 1·97  | 1·82  | 1·37     | 1·36  | 2·47  | 71·19 | 71·82 | 24·22 |

In 9 of the 13 districts, deaths from fever constitute more than 15 per cent of the total deaths. Fever accounts for over 70 per cent of mortality in each of the districts of Keonjhar, Kalahandi, Baudh-Khondmals and Balasore. In between urban and rural areas, invariably greater percentage of deaths occurs in the rural areas from cholera, smallpox or fever. The district of Cuttack has the highest percentage of deaths from cholera whereas Koraput and Kalahandi record the heaviest mortality from smallpox.

The State is intensively malarious from an early period. On account of the major fevers—malaria part of the area being mountainous and flood affected, the hill tracts as also the coastal and inland plains have a high degree of endemicity of fever principal among which is malaria. The continuous depletion of population in certain parts of the State like Balasore till 1951 was attributed to the incidence of malaria. Of the various preventive measures during the past years, specific mention may be made of the establishment of Malaria Demonstration project in the Jeypur hill tracts of Koraput district in 1949 with the assistance of the World Health Organisation, the National Malaria Eradication Programme sponsored by the Central Government and the T.C.M. launched at selected places in the coastal areas of the State in 1953. By the end of the Second Plan period, the entire population of the State had been brought under its operation. It will be seen from the Table 17 that the death rate in Mayurbhanj district is as high as 81.6 and five districts in the State record over 70 per cent of such mortality. But the results achieved during the decade of operation of this Programme are heartening in cases. Some of the places which were considered dreadful on account of endemicity of malaria or blackwater fever are no longer held in fear for this disease. The child parasite rate was reduced from 3.2 per cent in 1958 to 0.7 per cent in 1960. The infant parasite rate also went down from 2.6 per cent to 0.4 per cent during this period. The attendance of fever cases

in the hospitals has also been reduced considerably. Though deaths from fever are reported all the year round, the intensity is greater during the post-monsoon period from August to September. This may be due to the aftermath of rains which cause flood and keep large areas water-logged for long.

The scourge of smallpox caused heavy mortality Smallpox in the State during the decade. It assumes the form of epidemic once in every 5 to 6 years. 1958 is usually recalled as the year of worst suffering and highest casualties. The districts of Cuttack, Puri, Ganjam and Dhenkanal during the year were reported to have suffered the most. Considerable mortality was also from the district of Kalahandi in 1959. Though such a generalisation is difficult, it can be said that by and large, the period of highest mortality during the decade was the month of July in particular and the period from January to August in general experienced the major brunt. A systematic programme aiming at eradication of the disease commenced from 1958-59 when the districts were divided into five zones each and the vaccinators were required to make thorough census of all unprotected persons for vaccination. Besides, a Smallpox Pilot Project under the Smallpox Eradication Programme was started in the district of Bolangir in 1960-61. During the subsequent year, Sambalpur and Sundargarh districts came under the fold of this project. The programme was to cover the remaining districts progressively.

Cholera was admittedly a great killer Cholera during the decade 1941-50, but the intensity of its incidence was recorded as much less severe during the decade under report (1950-60). The number of deaths reported from this disease was not only much too less, some of the districts completely escaped the attack for a stretch of years. The measures adopted to control its recurrence were anticholera inoculation on a mass scale, disinfection of houses, chlorination of water sources and provision of good drinking water.

**Anti-cholera inoculation** was enforced as a compulsory measure of protection in badly affected districts under the provisions of Epidemic Diseases Act, 1897. Appointment of additional health staff, starting of temporary treatment centres and operation of the mobile field hygiene units in areas hard hit by the epidemic were other measures that proved successful in bringing down the rate of mortality. The year 1958 witnessed the highest casualties in the district of Kalahandi.

The remaining four groups of disease **Other causes** are heterogeneous in nature and records of individual causes are not available. Important ones in these groups are tuberculosis, leprosy and cancer. The first two of these diseases are much less dreadful now with the adoption of important public health and medical measures. Much ground remains to be covered in controlling cancer for the treatment of which facilities are not still available in the State.

## CHAPTER II

Infant mortality refers to death of children of less than one year. By **Infant mortality—its definition** infant mortality rate is meant the number of infant deaths occurring per thousand live births in population in one calendar year. Only live births and infant deaths are taken to account for the purpose of calculating infant mortality rate, and not the foetal deaths or still births.

Infant mortality rate to a large measure is a sensitive index of the **General causes of infant mortality** prevailing health and sanitary conditions in the society—a high rate stands generally for the poor and insanitary conditions. It is agreed that the first year after birth is the most vulnerable phase in the life of a child when he is greatly susceptible to external infections. The causes of infant mortality are many. The age of the mother, her general health and the order of birth are certainly very important factors. According to a U. N. report on foetal infant and early childhood mortality, too many births to the same mother lessen the chances of survival for the children born last. The lowest mortality rates usually occur among second children. Although the risk of death does not increase substantially until the fifth birth it then rises sharply, so that tenth or later children have only half as much a chance of survival as have the second children.

Many causes of infant mortality start operating when the child is still in the mother's womb. Many children owe their handicaps to heredity. Other socio-cultural factors prevalent among many castes and tribes in the form of age-old customs and traditions also contribute to a high infant mortality rate. Faulty feeding, malnutrition, carelessness and poverty are a few other contributory factors.

Accuracy and reliability of the data available relating to infant mortality are open to question. **Incompleteness of infant mortality statistics** The records suffer from deficiency in the extent of registration and area covered and to a very large degree, the causes of death are misclassified. Diagnosis of a disease during infancy presents genuine difficulties and often wrong statements are made about the causes of death.

In spite of the inherent deficiency of dated a comparison of the infant mortality rate obtaining in different States of India has been given in the Table below. The Table gives the registered rates for the decade 1951—60 and the annual rates for the last 3 years of the decade for the Union and the States. The rate for the State of Orissa though is higher than the All-India rate is by no means the highest. The rate is higher in the States of Uttar Pradesh, Assam and Madhya Pradesh.

**Table 18**

| India/States     | Registered Infant death rates |      |      |      |
|------------------|-------------------------------|------|------|------|
|                  | 1951—60                       | 1958 | 1959 | 1960 |
| 1                | 2                             | 3    | 4    | 5    |
| India ..         | 139                           | 102  | 88   | 87   |
| Orissa ..        | 146                           | 155  | 120  | 135  |
| Assam ..         | 184                           | 77   | 89   | 87   |
| Bihar ..         | 145                           | 74   | 73   | 80   |
| West Bengal ..   | 120                           | 80   | 70   | 77   |
| Andhra Pradesh   | 111                           | 86   | 83   | 80   |
| Kerala ..        | 120                           | 50   | 50   | 40   |
| Madras ..        | 109                           | 103  | 91   | 92   |
| Mysore           | 120                           | 71   | 70   | 62   |
| Gujarat ..       | 110                           | 103  | 81   | 81   |
| Maharashtra ..   | 109                           | 117  | 107  | 91   |
| Uttar Pradesh .. | 186                           | 103  | 85   | 92   |
| Madhya Pradesh   | 175                           | 147  | 99   | 93   |
| Punjab ..        | 110                           | 108  | 96   | 96   |

(Rates for India and States other than Orissa reproduced from Vital Statistics of India for 1961)



The Table below gives the infant mortality rates for the years 1951—60 and the decennial rate. Though it is difficult to account for occasional annual fluctuations, the reduction in the rate during the last two years of the decade seems important.

Table 19

| Years   | Infant death rate | Years | Infant death rate |
|---------|-------------------|-------|-------------------|
| 1       | 2                 | 3     | 4                 |
| 1951—60 | 146               | 1956  | 139               |
| 1951    | 189               | 1957  | 175               |
| 1952    | 159               | 1958  | 155               |
| 1953    | 153               | 1959  | 120               |
| 1954    | 133               | 1960  | 135               |
| 1955    | 127               |       |                   |

In the Table below, a comparison of the percentage of infant deaths to total deaths in the districts has been attempted. It may be seen that in the districts of Sambalpur, Bolangir, Ganjam, Dhenkanal, Puri, Cuttack and Balasore.

Table 20

| State/Districts    | Recorded total deaths | Infant deaths | Percentage of infant deaths to total deaths |
|--------------------|-----------------------|---------------|---|
| 1                  | 2                     | 3             | 4   |
| Orissa ..          | 2,283,541             | 529,368       | 23·2  |
| Kalahandi ..       | 170,210               | 33,053        | 19·4  |
| Koraput ..         | 5,463                 | 505           | 9·2   |
| Sambalpur ..       | 234,403               | 58,186        | 24·8  |
| Bolangir ..        | 195,714               | 53,822        | 27·5  |
| Baudh-Khondmals .. | 46,075                | 8,544         | 18·5  |
| Ganjam ..          | 273,406               | 69,775        | 25·5  |
| Sundargarh ..      | 81,899                | 14,781        | 18·1  |
| Dhenkanal ..       | 138,107               | 35,618        | 25·8  |
| Puri ..            | 270,409               | 66,546        | 24·6  |
| Keonjhar ..        | 96,098                | 20,114        | 20·9  |
| Cuttack ..         | 473,196               | 114,326       | 24·2  |
| Mayurbhanj ..      | 137,222               | 16,806        | 12·3  |
| Balasore ..        | 161,339               | 37,792        | 23·4  |

the percentage of such infant deaths to total deaths is higher than the State average. Bolangir records the highest proportion of such deaths and Dhenkanal ranks second. Koraput shows the lowest rate which may be due to incomplete records and major part of its area lying outside the system of registration.

Death by ages provide a useful study concerning infant mortality. The Table below presents the proportion of infant deaths by age-groups for the years 1951—60. It is noticed that deaths between first to the sixth month of a child are the highest. Over 75 per cent of infant deaths occur up to the sixth month after birth. These occur due to diseases of the mother during pregnancy, nutritional maladjustments immature birth and diseases peculiar to early infancy. Deaths during subsequent periods of the infant are mainly due to lack of proper care of the new-born babies and failure to ward off infections. The proportion of death from the first to the sixth month of the infant is visibly on the ascendency—a trend which needs to be halted.

Table 21

| Years | Under 1 week | 1 week to 1 month | 1 month to 6 months | 6 months to 12 months |
|-------|--------------|-------------------|---------------------|-----------------------|
| 1     | 2            | 3                 | 4                   | 5                     |
| 1951  | 25·4         | 24·0              | 26·5                | 24·1                  |
| 1952  | 25·1         | 22·0              | 28·6                | 24·3                  |
| 1953  | 26·1         | 22·7              | 29·1                | 22·1                  |
| 1954  | 26·0         | 23·0              | 29·9                | 21·1                  |
| 1955  | 26·0         | 24·4              | 30·4                | 19·2                  |
| 1956  | 25·9         | 22·7              | 31·0                | 20·4                  |
| 1957  | 23·6         | 21·2              | 32·5                | 22·7                  |
| 1958  | 24·0         | 22·9              | 33·1                | 20·0                  |
| 1959  | 24·7         | 23·3              | 33·8                | 18·2                  |
| 1960  | 23·7         | 22·5              | 34·2                | 19·6                  |



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**A P P E N D I X**

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TABLE I

Registered births and deaths in the State of Orissa during each year of 1951—1960

(T = Total R = Rural U = Urban)

| Year                |   | No. of births | No. of deaths |
|---------------------|---|---------------|---------------|
| 1                   |   | 2             | 3             |
| 1951                | T | 197,937       | 166,385       |
|                     | R | 188,423       | 160,572       |
|                     | U | 9,514         | 5,813         |
| 1952                | T | 375,404       | 273,703       |
|                     | R | 364,313       | 267,888       |
|                     | U | 11,091        | 5,815         |
| 1953                | T | 358,679       | 256,817       |
|                     | R | 346,325       | 250,678       |
|                     | U | 12,354        | 6,139         |
| 1954                | T | 368,252       | 215,187       |
|                     | R | 353,848       | 209,219       |
|                     | U | 14,404        | 5,968         |
| 1955                | T | 411,862       | 207,989       |
|                     | R | 395,200       | 201,509       |
|                     | U | 16,662        | 6,480         |
| 1956                | T | 383,327       | 217,757       |
|                     | R | 367,174       | 210,775       |
|                     | U | 16,153        | 6,982         |
| 1957                | T | 359,984       | 263,373       |
|                     | R | 345,182       | 255,020       |
|                     | U | 14,802        | 8,353         |
| 1958                | T | 356,991       | 256,567       |
|                     | R | 340,850       | 247,753       |
|                     | U | 16,141        | 8,814         |
| 1959                | T | 439,451       | 213,087       |
|                     | R | 419,125       | 204,034       |
|                     | U | 20,326        | 9,053         |
| 1960                | T | 387,919       | 212,676       |
|                     | R | 367,090       | 203,927       |
|                     | U | 20,829        | 8,749         |
| Total for 1951—1960 | T | 3,639,806     | 2,283,541     |
|                     | R | 3,487,530     | 2,211,375     |
|                     | U | 152,276       | 72,166        |

TABLE II

Births and deaths by sex and sex-ratio at birth and death for the State of Orissa during 1951—60

(M = Males F = Females)

| Year              |   | No. of births | No. of deaths | Female births per 1000 male births | Female deaths per 1000 male deaths |
|-------------------|---|---------------|---------------|------------------------------------|------------------------------------|
| 1                 |   | 2             | 3             | 4                                  | 5                                  |
| 1951              | M | 103,167       | 84,439        | 919                                | 970                                |
|                   | F | 94,770        | 81,946        |                                    |                                    |
| 1952              | M | 193,397       | 139,147       | 941                                | 967                                |
|                   | F | 182,007       | 134,556       |                                    |                                    |
| 1953              | M | 185,624       | 131,707       | 932                                | 950                                |
|                   | F | 173,055       | 125,110       |                                    |                                    |
| 1954              | M | 191,091       | 111,000       | 927                                | 939                                |
|                   | F | 177,161       | 104,187       |                                    |                                    |
| 1955              | M | 212,867       | 107,263       | 935                                | 939                                |
|                   | F | 198,995       | 100,726       |                                    |                                    |
| 1956              | M | 198,279       | 112,229       | 933                                | 940                                |
|                   | F | 185,048       | 105,528       |                                    |                                    |
| 1957              | M | 185,960       | 134,776       | 936                                | 954                                |
|                   | F | 174,024       | 128,597       |                                    |                                    |
| 1958              | M | 184,172       | 130,343       | 938                                | 968                                |
|                   | F | 172,819       | 126,224       |                                    |                                    |
| 1959              | M | 227,594       | 109,788       | 931                                | 941                                |
|                   | F | 211,857       | 103,299       |                                    |                                    |
| 1960              | M | 200,808       | 110,230       | 932                                | 929                                |
|                   | F | 187,111       | 102,446       |                                    |                                    |
| Total for 1951—60 | M | 1,882,959     | 1,170,922     | 933                                | 950                                |
|                   | F | 1,756,847     | 1,112,619     |                                    |                                    |

**TABLE III**  
**Births and deaths by districts during each year of 1951-60**  
 ( T = Total R = Rural U = Urban )

| Sl. No.            | Districts | 1951   | 1952   | 1953   | 1954   | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   | Total   |
|--------------------|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
|                    |           | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13      |
| <b>1 KALAHANDI</b> |           |        |        |        |        |        |        |        |        |        |        |         |
| T                  | Births    | ..     | 29,760 | 26,430 | 25,055 | 31,905 | 31,298 | 25,767 | 24,240 | 34,715 | 32,948 | 262,118 |
|                    | Deaths    | ..     | 18,975 | 19,489 | 15,667 | 17,160 | 17,911 | 19,380 | 23,710 | 21,139 | 16,779 | 170,210 |
| R                  | Births    | ..     | 29,760 | 26,430 | 24,967 | 31,822 | 31,091 | 25,573 | 24,006 | 34,439 | 32,753 | 260,841 |
|                    | Deaths    | ..     | 18,975 | 19,489 | 15,583 | 17,095 | 17,843 | 19,235 | 23,442 | 21,039 | 16,697 | 169,389 |
| U                  | Births    | ..     | ..     | ..     | 88     | 83     | 207    | 194    | 234    | 276    | 195    | 1,277   |
|                    | Deaths    | ..     | ..     | ..     | 84     | 65     | 68     | 145    | 268    | 100    | 82     | 812     |
| <b>2 KORAPUT</b>   |           |        |        |        |        |        |        |        |        |        |        |         |
| T                  | Births    | 887    | 791    | 764    | 631    | 597    | 727    | 681    | 904    | 932    | 844    | 7,758   |
|                    | Deaths    | 463    | 455    | 660    | 441    | 370    | 443    | 606    | 909    | 552    | 564    | 5,463   |
| R                  | Births    | 887    | 791    | 764    | 456    | 444    | 479    | 491    | 696    | 742    | 617    | 6,367   |
|                    | Deaths    | 463    | 455    | 660    | 309    | 261    | 264    | 391    | 591    | 383    | 344    | 4,121   |
| U                  | Births    | ..     | ..     | ..     | 175    | 153    | 248    | 190    | 208    | 190    | 227    | 1,391   |
|                    | Deaths    | ..     | ..     | ..     | 132    | 109    | 179    | 215    | 318    | 169    | 220    | 1,342   |
| <b>3 SAMBALPUR</b> |           |        |        |        |        |        |        |        |        |        |        |         |
| T                  | Births    | 26,516 | 39,411 | 34,721 | 36,311 | 41,325 | 31,143 | 34,158 | 32,734 | 47,321 | 36,726 | 360,366 |
|                    | Deaths    | 20,029 | 30,416 | 24,997 | 23,985 | 24,269 | 18,799 | 25,354 | 24,069 | 21,807 | 20,678 | 234,403 |
| R                  | Births    | 26,370 | 39,250 | 34,646 | 36,098 | 41,040 | 30,898 | 33,846 | 32,489 | 46,628 | 36,362 | 357,627 |
|                    | Deaths    | 19,906 | 30,278 | 24,961 | 23,874 | 24,112 | 18,662 | 25,143 | 23,867 | 21,521 | 20,458 | 232,782 |
| U                  | Births    | 146    | 161    | 75     | 213    | 285    | 245    | 312    | 245    | 693    | 364    | 2,739   |
|                    | Deaths    | 123    | 138    | 36     | 111    | 157    | 137    | 211    | 202    | 286    | 220    | 1,621   |
| <b>4 BOLANGIR</b>  |           |        |        |        |        |        |        |        |        |        |        |         |
| T                  | Births    | ..     | 38,228 | 32,830 | 31,994 | 45,315 | 36,519 | 27,740 | 28,876 | 36,329 | 28,936 | 306,767 |
|                    | Deaths    | ..     | 26,940 | 22,939 | 19,025 | 22,019 | 21,122 | 24,313 | 22,623 | 20,639 | 16,094 | 195,714 |
| R                  | Births    | ..     | 37,912 | 32,414 | 31,635 | 44,694 | 36,031 | 27,359 | 28,501 | 35,170 | 27,995 | 301,711 |
|                    | Deaths    | ..     | 26,804 | 22,747 | 18,864 | 21,765 | 20,911 | 24,051 | 22,303 | 20,055 | 15,518 | 193,018 |
| U                  | Births    | ..     | 316    | 416    | 359    | 621    | 488    | 381    | 375    | 1,159  | 941    | 5,056   |
|                    | Deaths    | ..     | 136    | 192    | 161    | 254    | 211    | 262    | 320    | 584    | 576    | 2,696   |

5 BAUDH-KHONDIMALS

|   |        |       |       |       |       |       |       |       |       |       |        |
|---|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| T | Births | 8,119 | 5,395 | 5,184 | 8,207 | 7,278 | 6,277 | 5,293 | 7,095 | 6,011 | 61,367 |
|   | Deaths | 7,011 | 4,506 | 4,169 | 5,258 | 4,785 | 5,279 | 4,678 | 4,241 | 3,853 | 46,075 |
| R | Births | 8,119 | 5,395 | 5,184 | 8,207 | 7,278 | 6,277 | 5,293 | 6,957 | 5,883 | 61,101 |
|   | Deaths | 7,011 | 4,506 | 4,169 | 5,258 | 4,785 | 5,279 | 4,678 | 4,131 | 3,785 | 45,897 |
| U | Births | ..    | ..    | ..    | ..    | ..    | ..    | ..    | 138   | 128   | 266    |
|   | Deaths | ..    | ..    | ..    | ..    | ..    | ..    | ..    | 110   | 68    | 178    |

6 GANJAM

|   |        |        |        |        |        |        |        |        |        |        |         |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| T | Births | 46,664 | 43,065 | 38,905 | 41,841 | 39,161 | 41,298 | 42,318 | 44,365 | 37,715 | 414,196 |
|   | Deaths | 41,227 | 32,967 | 21,963 | 22,416 | 20,239 | 26,657 | 37,002 | 26,726 | 18,898 | 273,406 |
| R | Births | 44,019 | 40,168 | 35,543 | 37,898 | 34,820 | 37,723 | 38,045 | 39,734 | 32,471 | 376,478 |
|   | Deaths | 39,818 | 31,749 | 20,860 | 21,216 | 18,989 | 24,943 | 34,858 | 24,639 | 17,187 | 258,346 |
| U | Births | 2,645  | 2,897  | 3,362  | 3,943  | 4,341  | 3,575  | 4,273  | 4,631  | 5,244  | 37,718  |
|   | Deaths | 1,409  | 1,218  | 1,103  | 1,200  | 1,250  | 1,714  | 2,144  | 2,087  | 1,711  | 15,060  |

7 SUNDARGARH

|   |        |        |        |        |        |        |        |        |        |        |         |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| T | Births | 16,708 | 16,387 | 15,688 | 18,250 | 15,385 | 14,789 | 12,024 | 15,328 | 14,587 | 139,146 |
|   | Deaths | 10,560 | 9,531  | 9,581  | 9,880  | 9,408  | 9,531  | 8,994  | 7,257  | 7,157  | 81,899  |
| R | Births | 16,597 | 16,261 | 15,561 | 18,040 | 15,215 | 14,576 | 11,797 | 14,655 | 13,817 | 136,519 |
|   | Deaths | 10,521 | 9,456  | 9,510  | 9,765  | 9,307  | 9,394  | 8,851  | 7,046  | 6,826  | 80,676  |
| U | Births | 111    | 126    | 127    | 210    | 170    | 213    | 227    | 673    | 770    | 2,627   |
|   | Deaths | 39     | 75     | 71     | 115    | 101    | 137    | 143    | 211    | 331    | 1,223   |

8 DHENKANAL

|   |        |       |        |         |        |        |        |        |        |        |         |
|---|--------|-------|--------|---------|--------|--------|--------|--------|--------|--------|---------|
| T | Births | 5,955 | 22,027 | 25,169  | 27,531 | 26,221 | 23,183 | 24,855 | 32,684 | 28,245 | 241,441 |
|   | Deaths | 3,449 | 14,032 | 13,248  | 13,518 | 14,845 | 20,196 | 14,531 | 14,089 | 15,671 | 138,107 |
| R | Births | 5,955 | 22,027 | 25,169* | 27,531 | 26,221 | 23,183 | 24,855 | 32,508 | 28,134 | 241,154 |
|   | Deaths | 3,449 | 14,032 | 13,248  | 13,518 | 14,845 | 20,196 | 14,531 | 13,992 | 15,594 | 137,933 |
| U | Births | ..    | ..     | ..      | ..     | ..     | ..     | ..     | 176    | 111    | 287     |
|   | Deaths | ..    | ..     | ..      | ..     | ..     | ..     | ..     | 97     | 77     | 174     |

9 PURI

|   |        |        |        |        |        |        |        |        |        |        |         |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| T | Births | 34,304 | 38,973 | 40,562 | 41,618 | 44,660 | 38,259 | 37,801 | 49,831 | 46,773 | 407,872 |
|   | Deaths | 27,456 | 27,946 | 24,195 | 20,883 | 24,232 | 29,974 | 31,107 | 24,987 | 29,209 | 270,409 |
| R | Births | 32,618 | 36,819 | 38,517 | 39,114 | 41,769 | 35,682 | 34,755 | 46,497 | 42,806 | 381,868 |
|   | Deaths | 26,159 | 26,489 | 22,901 | 19,371 | 22,497 | 28,180 | 28,926 | 23,425 | 27,853 | 254,030 |
| U | Births | 1,686  | 2,154  | 2,045  | 2,504  | 2,891  | 2,577  | 3,046  | 3,334  | 3,967  | 26,004  |
|   | Deaths | 1,297  | 1,457  | 1,294  | 1,512  | 1,735  | 1,794  | 2,181  | 1,562  | 1,956  | 16,379  |

TABLE III

Births and deaths by districts during each year of 1951--60--concl.

| Sl. No. | Districts  | 1951 | 1952   | 1953   | 1954   | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   | Total    |
|---------|------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
|         |            | 3    | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 1951--60 |
| 10      | KEONJHAR   |      |        |        |        |        |        |        |        |        |        |          |
| T       | Births     | ..   | 18,599 | 16,336 | 18,993 | 20,828 | 17,073 | 17,204 | 18,062 | 21,054 | 20,778 | 168,927  |
|         | Deaths     | ..   | 10,652 | 10,961 | 9,885  | 9,349  | 9,850  | 12,190 | 12,157 | 9,830  | 11,224 | 96,098   |
| R       | Births     | ..   | 18,365 | 16,160 | 18,790 | 20,746 | 17,073 | 17,204 | 18,062 | 20,799 | 20,315 | 167,514  |
|         | Deaths     | ..   | 10,498 | 10,865 | 9,793  | 9,305  | 9,850  | 12,190 | 12,157 | 9,763  | 11,061 | 95,482   |
| U       | Births     | ..   | 234    | 176    | 203    | 82     | ..     | ..     | ..     | 255    | 463    | 1,413    |
|         | Deaths     | ..   | 154    | 96     | 92     | 44     | ..     | ..     | ..     | 67     | 163    | 616      |
| 11      | CUTTACK    |      |        |        |        |        |        |        |        |        |        |          |
| T       | Births     | ..   | 73,643 | 71,638 | 79,987 | 84,984 | 81,842 | 75,852 | 71,558 | 80,740 | 69,860 | 747,032  |
|         | Deaths     | ..   | 49,421 | 53,589 | 42,885 | 39,287 | 50,910 | 55,296 | 44,090 | 35,405 | 40,643 | 473,196  |
| R       | Births     | ..   | 68,799 | 65,984 | 73,108 | 77,123 | 74,990 | 69,063 | 64,409 | 73,019 | 62,035 | 680,923  |
|         | Deaths     | ..   | 46,727 | 50,870 | 40,287 | 36,528 | 47,886 | 51,674 | 41,019 | 32,001 | 37,540 | 443,954  |
| U       | Births     | ..   | 4,844  | 5,654  | 6,879  | 7,861  | 6,852  | 6,789  | 7,149  | 7,721  | 7,825  | 66,109   |
|         | Deaths     | ..   | 2,694  | 2,719  | 2,598  | 2,759  | 3,024  | 3,622  | 3,071  | 3,404  | 3,103  | 29,242   |
| 12      | MAYURBHANJ |      |        |        |        |        |        |        |        |        |        |          |
| T       | Births     | ..   | 25,263 | 24,977 | 23,498 | 23,891 | 24,653 | 25,091 | 23,723 | 31,330 | 29,471 | 231,897  |
|         | Deaths     | ..   | 15,302 | 14,850 | 13,934 | 11,833 | 13,387 | 18,753 | 18,296 | 14,549 | 16,318 | 137,222  |
| R       | Births     | ..   | 25,058 | 24,659 | 23,217 | 23,672 | 24,500 | 24,947 | 23,644 | 31,256 | 29,382 | 230,335  |
|         | Deaths     | ..   | 15,241 | 14,722 | 13,826 | 11,740 | 13,289 | 18,685 | 18,246 | 14,506 | 16,287 | 136,542  |
| U       | Births     | ..   | 205    | 318    | 281    | 219    | 153    | 144    | 79     | 74     | 89     | 1,562    |
|         | Deaths     | ..   | 61     | 128    | 108    | 93     | 98     | 68     | 50     | 43     | 31     | 680      |
| 13      | BALASORE   |      |        |        |        |        |        |        |        |        |        |          |
| T       | Births     | ..   | 25,356 | 25,136 | 26,275 | 25,570 | 27,367 | 29,685 | 34,603 | 37,727 | 35,025 | 290,919  |
|         | Deaths     | ..   | 22,045 | 21,463 | 16,209 | 11,747 | 11,826 | 15,844 | 14,401 | 11,866 | 15,588 | 161,339  |
| R       | Births     | ..   | 24,743 | 24,598 | 25,603 | 24,869 | 26,809 | 29,258 | 34,298 | 36,721 | 34,520 | 285,092  |
|         | Deaths     | ..   | 21,755 | 20,132 | 15,995 | 11,575 | 11,647 | 15,659 | 14,284 | 11,533 | 15,377 | 159,196  |
| U       | Births     | ..   | 502    | 538    | 672    | 701    | 558    | 427    | 305    | 1,006  | 505    | 5,827    |
|         | Deaths     | ..   | 290    | 218    | 214    | 172    | 179    | 185    | 117    | 333    | 211    | 2,143    |



**TABLE IV**  
**Births and deaths classified by sex for each year of 1951—60 by districts**  
 (M—Males F=Females)

| Districts                 | 1951 | 1952   | 1953   | 1954   | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   | Total for 1951—60 |
|---------------------------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------------------|
| 1                         | 2    | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12                |
| <b>1. KALAHANDI</b>       |      |        |        |        |        |        |        |        |        |        |                   |
| M Birth                   | ..   | 15,474 | 13,591 | 12,854 | 16,306 | 16,174 | 13,375 | 12,475 | 17,941 | 16,890 | 135,080           |
| M Death                   | ..   | 10,184 | 10,269 | 8,428  | 9,112  | 9,630  | 10,352 | 12,174 | 11,200 | 9,029  | 90,378            |
| F Birth                   | ..   | 14,286 | 12,839 | 12,201 | 15,599 | 15,124 | 12,392 | 11,765 | 16,774 | 16,058 | 127,038           |
| F Death                   | ..   | 8,791  | 9,220  | 7,239  | 8,048  | 8,281  | 9,028  | 11,536 | 9,939  | 7,750  | 79,832            |
| <b>2. KORAPUT</b>         |      |        |        |        |        |        |        |        |        |        |                   |
| M Birth                   | ..   | 459    | 447    | 333    | 339    | 402    | 352    | 481    | 511    | 450    | 4,188             |
| M Death                   | ..   | 243    | 255    | 236    | 214    | 227    | 353    | 437    | 293    | 302    | 2,909             |
| F Birth                   | ..   | 428    | 344    | 298    | 258    | 325    | 329    | 423    | 421    | 394    | 3,570             |
| F Death                   | ..   | 220    | 200    | 205    | 156    | 216    | 253    | 472    | 259    | 262    | 2,554             |
| <b>3. SAMBALPUR</b>       |      |        |        |        |        |        |        |        |        |        |                   |
| M Birth                   | ..   | 13,789 | 20,197 | 17,954 | 18,824 | 21,373 | 16,232 | 17,483 | 23,698 | 19,073 | 185,644           |
| M Death                   | ..   | 10,357 | 15,493 | 12,857 | 12,313 | 12,393 | 9,730  | 12,820 | 11,185 | 10,559 | 119,848           |
| F Birth                   | ..   | 12,727 | 19,214 | 16,767 | 17,487 | 19,932 | 14,911 | 16,675 | 23,623 | 17,653 | 174,722           |
| F Death                   | ..   | 9,672  | 14,923 | 12,140 | 11,672 | 11,876 | 9,069  | 11,928 | 10,622 | 10,119 | 114,555           |
| <b>4. BOLANGIR</b>        |      |        |        |        |        |        |        |        |        |        |                   |
| M Birth                   | ..   | 19,213 | 19,213 | 16,875 | 16,514 | 23,112 | 14,144 | 14,807 | 18,764 | 14,889 | 156,898           |
| M Death                   | ..   | 13,587 | 13,587 | 11,937 | 10,607 | 11,281 | 12,493 | 11,525 | 10,606 | 8,405  | 100,759           |
| F Birth                   | ..   | 19,015 | 19,015 | 15,955 | 15,480 | 22,203 | 13,596 | 14,069 | 17,565 | 14,047 | 149,869           |
| F Death                   | ..   | 13,353 | 13,353 | 11,002 | 9,018  | 10,738 | 11,820 | 11,098 | 10,033 | 7,689  | 94,955            |
| <b>5. BAUDH-KHONDMAIS</b> |      |        |        |        |        |        |        |        |        |        |                   |
| M Birth                   | ..   | 1,338  | 4,255  | 2,758  | 2,710  | 4,288  | 3,348  | 2,777  | 3,556  | 3,111  | 32,148            |
| M Death                   | ..   | 1,207  | 3,525  | 2,294  | 2,184  | 2,804  | 2,780  | 2,348  | 2,168  | 2,050  | 23,908            |
| F Birth                   | ..   | 1,170  | 3,864  | 2,637  | 2,474  | 3,919  | 2,929  | 2,516  | 3,439  | 2,900  | 29,219            |
| F Death                   | ..   | 1,088  | 3,486  | 2,212  | 1,985  | 2,237  | 2,499  | 2,330  | 2,073  | 1,803  | 22,167            |

TABLE IV

Births and deaths classified by sex for each year of 1951-60 by districts--*concl'd.*  
(M=Males F=Females)

| Districts            | 1951   | 1952   | 1953   | 1954   | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   | Total for<br>1951-60 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------------------|
|                      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     |                      |
| <b>6. GANJAM</b>     |        |        |        |        |        |        |        |        |        |        |                      |
| M Birth              | 24,240 | 19,964 | 22,447 | 20,149 | 21,489 | 20,137 | 21,121 | 21,771 | 23,038 | 19,504 | 213,860              |
| M Death              | ..     | 12,710 | 16,970 | 11,113 | 11,171 | 10,154 | 13,358 | 13,284 | 13,297 | 9,737  | 138,026              |
| F Birth              | 22,424 | 18,900 | 20,618 | 18,756 | 20,352 | 19,024 | 20,177 | 20,547 | 21,327 | 18,211 | 200,336              |
| F Death              | 19,995 | 12,601 | 15,997 | 10,850 | 11,245 | 10,085 | 13,299 | 18,718 | 13,429 | 9,161  | 135,380              |
| <b>7. SUNDARGARH</b> |        |        |        |        |        |        |        |        |        |        |                      |
| M Birth              | ..     | 8,451  | 8,353  | 8,027  | 9,351  | 7,914  | 7,515  | 6,064  | 7,872  | 7,583  | 71,130               |
| M Death              | ..     | 5,685  | 5,004  | 5,048  | 5,133  | 4,915  | 5,036  | 4,801  | 3,797  | 3,802  | 43,221               |
| F Birth              | ..     | 8,257  | 8,034  | 7,661  | 8,899  | 7,471  | 7,274  | 5,969  | 7,456  | 7,004  | 68,016               |
| F Death              | ..     | 4,875  | 4,527  | 4,533  | 4,747  | 4,493  | 4,495  | 4,193  | 5,460  | 3,355  | 38,678               |
| <b>8. DHANKANAL</b>  |        |        |        |        |        |        |        |        |        |        |                      |
| M Birth              | 3,076  | 13,245 | 11,509 | 13,144 | 14,338 | 13,609 | 12,102 | 12,926 | 17,058 | 14,613 | 125,620              |
| M Death              | 1,772  | 7,473  | 7,160  | 6,753  | 6,944  | 7,462  | 10,101 | 7,420  | 7,206  | 7,952  | 70,243               |
| F Birth              | 2,879  | 12,326 | 10,518 | 12,025 | 13,193 | 12,612 | 11,081 | 11,929 | 15,626 | 13,632 | 115,821              |
| F Death              | 1,677  | 7,055  | 6,872  | 6,495  | 6,574  | 7,383  | 10,095 | 7,111  | 6,883  | 7,719  | 67,864               |
| <b>9. PURI</b>       |        |        |        |        |        |        |        |        |        |        |                      |
| M Birth              | 18,310 | 17,874 | 19,931 | 21,097 | 21,585 | 22,969 | 19,719 | 19,674 | 26,073 | 24,520 | 211,752              |
| M Death              | 13,870 | 14,935 | 13,981 | 11,967 | 10,539 | 12,293 | 15,094 | 15,328 | 12,538 | 14,743 | 135,288              |
| F Birth              | 15,994 | 17,217 | 19,042 | 19,465 | 20,033 | 21,691 | 18,540 | 18,127 | 23,758 | 22,253 | 196,120              |
| F Death              | 13,586 | 15,485 | 13,965 | 12,228 | 10,344 | 11,939 | 14,880 | 15,779 | 12,449 | 14,466 | 135,121              |
| <b>10. KEONJHAR</b>  |        |        |        |        |        |        |        |        |        |        |                      |
| M Birth              | ..     | 9,669  | 8,336  | 9,819  | 10,661 | 8,845  | 8,764  | 9,224  | 10,971 | 10,696 | 86,985               |
| M Death              | ..     | 5,429  | 5,634  | 5,159  | 4,913  | 5,110  | 6,188  | 6,312  | 5,229  | 5,876  | 49,870               |
| F Birth              | ..     | 8,930  | 8,000  | 9,174  | 10,167 | 8,228  | 8,440  | 8,838  | 10,083 | 10,082 | 81,942               |
| F Death              | ..     | 5,223  | 5,307  | 4,726  | 4,436  | 4,740  | 6,002  | 5,845  | 4,601  | 5,348  | 46,228               |

**11. CUTTACK**

|   |       |        |        |        |        |        |        |        |        |         |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| M | Birth | 37,491 | 41,719 | 44,345 | 42,819 | 39,676 | 36,934 | 42,243 | 36,344 | 389,465 |
|   | Death | 27,370 | 22,160 | 20,672 | 26,233 | 28,417 | 22,531 | 18,400 | 20,937 | 242,480 |
| F | Birth | 34,147 | 38,268 | 40,639 | 39,023 | 36,176 | 34,624 | 38,497 | 33,516 | 357,567 |
|   | Death | 26,219 | 20,725 | 18,615 | 24,677 | 26,879 | 21,559 | 17,005 | 19,706 | 230,716 |

**12. MAYURBHANJ**

|   |       |        |        |        |        |        |        |        |        |         |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| M | Birth | 12,838 | 12,169 | 12,482 | 12,565 | 12,915 | 12,272 | 16,281 | 15,051 | 119,505 |
|   | Death | 7,949  | 7,519  | 6,277  | 7,151  | 9,755  | 9,654  | 7,896  | 8,845  | 73,374  |
| F | Birth | 12,139 | 11,329 | 11,409 | 12,088 | 12,176 | 11,451 | 15,049 | 14,420 | 112,392 |
|   | Death | 6,901  | 6,415  | 5,556  | 6,236  | 8,998  | 8,642  | 6,653  | 7,473  | 63,848  |

**13. BALASORE**

|   |       |        |        |        |        |        |        |        |        |         |
|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| M | Birth | 13,127 | 13,732 | 13,198 | 14,126 | 15,446 | 17,746 | 19,488 | 18,084 | 150,684 |
|   | Death | 9,913  | 8,113  | 5,810  | 5,858  | 8,029  | 7,388  | 5,973  | 7,993  | 80,618  |
| F | Birth | 12,009 | 12,543 | 12,372 | 13,241 | 14,239 | 16,857 | 18,239 | 16,941 | 140,235 |
|   | Death | 10,437 | 8,096  | 5,937  | 5,968  | 7,815  | 7,013  | 5,893  | 7,595  | 80,721  |

**TABLE V**  
**Birth rates and death rates by districts**  
 (T=Total R=Natural U=Urban)

| State/<br>Districts | 1941—50 | 1951—60 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|---------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|
| 1                   | 2       | 3       | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   |
| <b>1. KALAHANDI</b> |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate        | ..      | 30.2    | ..   | 33.9 | 29.6 | 27.6 | 34.5 | 33.3 | 27.0 | 25.0 | 35.3 | 33.0 |
| Dath Rate           | ..      | 19.6    | ..   | 21.6 | 21.8 | 17.2 | 18.6 | 19.1 | 20.3 | 24.5 | 21.5 | 16.8 |
| R Birth Rate        | ..      | 30.4    | ..   | 33.9 | 29.6 | 27.9 | 34.9 | 33.6 | 27.2 | 25.1 | 35.5 | 33.2 |
| Death Rate          | ..      | 19.7    | ..   | 21.6 | 21.8 | 17.4 | 18.8 | 19.3 | 20.4 | 24.5 | 21.7 | 16.9 |
| U Birth Rate        | ..      | 13.6    | ..   | ..   | ..   | 7.0  | 6.4  | 15.8 | 14.5 | 17.2 | 19.9 | 13.8 |
| Death Rate          | ..      | 8.7     | ..   | ..   | ..   | 6.6  | 5.0  | 5.2  | 10.8 | 19.7 | 7.2  | 5.8  |
| <b>2. KORAPUT</b>   |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate        | ..      | 14.9    | 11.3 | 12.6 | 11.9 | 9.5  | 8.8  | 10.4 | 9.5  | 12.3 | 12.4 | 11.0 |
| Death Rate          | ..      | 11.1    | 7.9  | 7.3  | 10.2 | 6.6  | 5.4  | 6.3  | 8.5  | 12.4 | 7.3  | 7.3  |
| R Birth Rate        | ..      | ..      | 12.1 | 12.6 | 11.9 | 10.3 | 9.8  | 10.2 | 10.2 | 14.1 | 14.6 | 11.9 |
| Death Rate          | ..      | ..      | 7.8  | 7.3  | 10.2 | 7.0  | 5.7  | 5.6  | 8.1  | 12.0 | 7.6  | 6.6  |
| U Birth Rate        | ..      | ..      | 8.5  | ..   | ..   | 8.0  | 6.8  | 10.8 | 8.1  | 8.7  | 7.8  | 9.1  |
| Death Rate          | ..      | ..      | 8.2  | ..   | ..   | 6.0  | 4.8  | 7.8  | 9.2  | 13.3 | 6.9  | 8.8  |
| <b>3. SAMBALPUR</b> |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate        | ..      | 28.3    | 26.2 | 29.6 | 25.7 | 26.5 | 29.7 | 22.1 | 23.8 | 22.5 | 32.1 | 24.6 |
| Death Rate          | ..      | 23.8    | 17.0 | 22.9 | 18.5 | 17.5 | 17.4 | 13.3 | 17.7 | 16.6 | 14.8 | 13.8 |
| R Birth Rate        | ..      | ..      | 26.7 | 30.2 | 26.3 | 27.0 | 30.3 | 22.5 | 24.3 | 23.0 | 33.3 | 24.7 |
| Death Rate          | ..      | ..      | 17.4 | 23.3 | 19.0 | 17.9 | 17.3 | 13.6 | 18.0 | 16.9 | 15.4 | 13.9 |
| U Birth Rate        | ..      | ..      | 7.2  | 5.1  | 2.3  | 6.1  | 7.8  | 6.4  | 7.9  | 5.9  | 9.2  | 14.2 |
| Death Rate          | ..      | ..      | 4.3  | 4.4  | 1.1  | 3.2  | 4.3  | 3.6  | 5.3  | 4.9  | 3.8  | 8.6  |
| <b>4. BOLANGIR</b>  |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate        | ..      | ..      | 34.1 | 40.8 | 34.4 | 33.0 | 46.1 | 36.6 | 27.4 | 28.1 | 34.8 | 27.3 |
| Death Rate          | ..      | ..      | 21.8 | 28.7 | 24.1 | 19.7 | 22.4 | 21.2 | 24.0 | 22.0 | 19.8 | 15.2 |
| R Birth Rate        | ..      | ..      | 34.5 | 41.0 | 34.8 | 33.5 | 46.5 | 37.0 | 27.7 | 28.4 | 35.3 | 27.7 |
| Death Rate          | ..      | ..      | 22.1 | 29.0 | 24.4 | 20.0 | 22.7 | 21.5 | 24.3 | 22.2 | 20.1 | 15.4 |
| U Birth Rate        | ..      | ..      | 20.1 | 22.1 | 18.8 | 15.9 | 26.9 | 20.7 | 15.9 | 15.3 | 24.1 | 19.2 |
| Death Rate          | ..      | ..      | 10.7 | 9.5  | 8.7  | 7.1  | 1.1  | 9.0  | 10.9 | 13.1 | 12.1 | 11.7 |

**5. BAUDH-KHONDIMALS**

|   |            |      |      |     |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|-----|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | 30.8 | 13.1 | 8.6 | 17.5 | 11.5 | 10.9 | 17.0 | 14.9 | 12.7 | 10.6 | 14.1 | 11.8 |
|   | Death Rate | 28.4 | 9.8  | 7.9 | 15.1 | 9.6  | 8.8  | 10.9 | 9.8  | 10.7 | 9.4  | 8.4  | 7.5  |
| R | Birth Rate | ..   | 13.1 | 8.6 | 17.5 | 11.5 | 10.9 | 17.0 | 14.9 | 12.7 | 10.6 | 13.9 | 11.7 |
|   | Death Rate | ..   | 9.8  | 7.9 | 15.1 | 9.6  | 8.8  | 10.9 | 9.8  | 10.7 | 9.4  | 8.3  | 7.5  |
| U | Birth Rate | ..   | 22.1 | ..  | ..   | ..   | ..   | ..   | ..   | ..   | ..   | 23.0 | 21.2 |
|   | Death Rate | ..   | 14.8 | ..  | ..   | ..   | ..   | ..   | ..   | ..   | ..   | 18.4 | 11.2 |

**6. GANJAM**

|   |            |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | 25.4 | 24.6 | 29.5 | 24.2 | 26.5 | 23.6 | 25.0 | 23.1 | 24.1 | 24.4 | 25.2 | 21.2 |
|   | Death Rate | 24.7 | 16.3 | 26.0 | 15.8 | 20.3 | 13.3 | 13.4 | 12.0 | 15.5 | 21.3 | 15.2 | 10.6 |
| R | Birth Rate | ..   | 23.7 | 29.4 | 23.7 | 26.1 | 22.8 | 24.0 | 21.8 | 23.3 | 23.2 | 23.9 | 19.3 |
|   | Death Rate | ..   | 16.2 | 26.6 | 15.9 | 20.6 | 13.4 | 13.4 | 11.9 | 15.4 | 21.2 | 14.8 | 10.2 |
| U | Birth Rate | ..   | 41.0 | 31.1 | 32.4 | 32.9 | 37.5 | 43.3 | 46.9 | 38.0 | 44.7 | 47.7 | 53.2 |
|   | Death Rate | ..   | 16.4 | 16.6 | 14.1 | 13.8 | 12.3 | 13.2 | 13.5 | 18.2 | 22.4 | 21.5 | 17.3 |

**7. SUNDARGARH**

|   |            |    |      |    |      |      |      |      |      |      |      |      |      |
|---|------------|----|------|----|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | .. | 23.3 | .. | 28.8 | 27.3 | 25.3 | 28.4 | 23.2 | 21.7 | 17.1 | 21.2 | 19.6 |
|   | Death Rate | .. | 13.7 | .. | 18.2 | 15.9 | 15.4 | 15.4 | 14.2 | 14.0 | 12.8 | 10.0 | 9.6  |
| R | Birth Rate | .. | 23.4 | .. | 29.0 | 27.4 | 25.4 | 28.5 | 23.3 | 21.6 | 17.0 | 21.1 | 19.3 |
|   | Death Rate | .. | 13.8 | .. | 18.4 | 15.9 | 15.5 | 15.4 | 14.2 | 13.9 | 12.8 | 10.1 | 9.6  |
| U | Birth Rate | .. | 22.4 | .. | 16.6 | 17.5 | 16.4 | 25.3 | 19.3 | 22.8 | 22.9 | 23.3 | 25.2 |
|   | Death Rate | .. | 10.4 | .. | 5.8  | 10.4 | 9.2  | 13.9 | 11.4 | 14.6 | 14.4 | 7.3  | 10.8 |

**8. DHENKANAL**

|   |            |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | 34.6 | 27.9 | 31.0 | 29.6 | 24.9 | 27.9 | 29.9 | 27.9 | 24.2 | 25.4 | 32.8 | 27.8 |
|   | Death Rate | 22.3 | 16.0 | 18.0 | 16.8 | 15.9 | 14.7 | 14.7 | 15.8 | 21.1 | 14.9 | 14.1 | 15.4 |
| R | Birth Rate | ..   | 27.9 | 31.0 | 29.6 | 24.9 | 27.9 | 29.9 | 27.9 | 24.2 | 25.4 | 32.9 | 27.9 |
|   | Death Rate | ..   | 16.0 | 18.0 | 16.8 | 15.9 | 14.7 | 14.7 | 15.8 | 21.1 | 14.9 | 14.2 | 15.5 |
| U | Birth Rate | ..   | 15.4 | ..   | ..   | ..   | ..   | ..   | ..   | ..   | ..   | 19.1 | 11.8 |
|   | Death Rate | ..   | 9.4  | ..   | ..   | ..   | ..   | ..   | ..   | ..   | ..   | 10.5 | 8.2  |

**9. PURI**

|   |            |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | 29.9 | 24.4 | 29.1 | 21.8 | 23.8 | 24.3 | 24.5 | 25.8 | 21.8 | 21.2 | 27.4 | 25.3 |
|   | Death Rate | 27.1 | 16.2 | 23.3 | 18.9 | 17.0 | 14.5 | 12.3 | 14.0 | 17.1 | 17.4 | 13.8 | 15.8 |
| R | Birth Rate | ..   | 24.0 | 28.9 | 21.6 | 23.5 | 24.2 | 24.2 | 25.4 | 21.4 | 20.5 | 27.0 | 24.5 |
|   | Death Rate | ..   | 15.9 | 23.2 | 18.7 | 16.9 | 14.4 | 12.0 | 13.7 | 16.9 | 17.0 | 13.6 | 15.6 |
| U | Birth Rate | ..   | 32.5 | 34.1 | 25.7 | 29.4 | 26.7 | 31.3 | 31.7 | 29.7 | 33.8 | 35.7 | 41.0 |
|   | Death Rate | ..   | 20.5 | 26.2 | 22.7 | 19.9 | 16.9 | 18.9 | 20.8 | 20.7 | 24.2 | 16.7 | 20.2 |

TABLE V

Birth rates and death rates by districts—*concd.*

(T=Total R=Rural U=Urban)

| State/<br>Districts   | 1941-50 | 1951-60 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 |
|-----------------------|---------|---------|------|------|------|------|------|------|------|------|------|------|
| 1                     | 2       | 3       | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   |
| <b>10. KEONJHAR</b>   |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate          | ..      | 28.0    | ..   | 30.5 | 26.2 | 29.7 | 31.8 | 25.4 | 25.1 | 25.7 | 29.3 | 28.3 |
| Death Rate            | ..      | 15.9    | ..   | 17.5 | 17.5 | 15.4 | 14.3 | 14.7 | 17.8 | 17.3 | 13.7 | 15.3 |
| R Birth Rate          | ..      | 28.0    | ..   | 30.6 | 26.3 | 29.8 | 32.2 | 25.4 | 25.1 | 25.7 | 29.5 | 28.2 |
| Death Rate            | ..      | 16.0    | ..   | 17.5 | 17.7 | 15.6 | 14.4 | 14.7 | 17.8 | 17.3 | 13.8 | 15.4 |
| U Birth Rate          | ..      | 21.6    | ..   | 23.9 | 17.4 | 19.5 | 7.6  | ..   | ..   | ..   | 21.1 | 37.3 |
| Death Rate            | ..      | 9.4     | ..   | 15.7 | 9.5  | 8.8  | 4.1  | ..   | ..   | ..   | 5.5  | 13.1 |
| <b>11. CUTTACK</b>    |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate          | ..      | 27.0    | 24.3 | 28.3 | 27.0 | 29.6 | 30.8 | 29.1 | 26.5 | 24.5 | 27.2 | 23.1 |
| Death Rate            | 29.3    | 17.1    | 21.1 | 23.7 | 20.2 | 15.8 | 14.2 | 18.1 | 19.3 | 15.1 | 11.9 | 13.4 |
| R Birth Rate          | ..      | 26.0    | 23.7 | 27.9 | 26.2 | 28.5 | 29.5 | 28.2 | 25.5 | 23.4 | 26.0 | 21.7 |
| Death Rate            | ..      | 17.0    | 21.1 | 24.1 | 20.2 | 15.7 | 14.0 | 18.0 | 19.1 | 14.9 | 11.4 | 13.2 |
| U Birth Rate          | ..      | 44.1    | 35.6 | 36.6 | 41.1 | 48.3 | 53.3 | 44.9 | 43.1 | 44.0 | 46.1 | 45.3 |
| Death Rate            | ..      | 19.5    | 21.1 | 17.0 | 19.8 | 18.2 | 18.7 | 19.8 | 23.0 | 18.9 | 20.3 | 18.0 |
| <b>12. MAYURBHANJ</b> |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate          | ..      | 23.0    | ..   | 24.0 | 23.3 | 21.6 | 21.6 | 22.0 | 22.0 | 20.5 | 26.7 | 24.7 |
| Death Rate            | ..      | 13.6    | ..   | 14.5 | 13.9 | 12.8 | 10.7 | 11.9 | 16.5 | 15.8 | 12.4 | 13.7 |
| R Birth Rate          | ..      | 23.1    | ..   | 24.1 | 23.3 | 21.6 | 21.7 | 22.1 | 22.2 | 20.7 | 27.0 | 25.1 |
| Death Rate            | ..      | 13.7    | ..   | 14.6 | 13.9 | 12.9 | 10.8 | 12.0 | 16.6 | 16.0 | 12.5 | 13.9 |
| U Birth Rate          | ..      | 11.4    | ..   | 19.1 | 26.8 | 21.7 | 15.6 | 10.1 | 8.9  | 4.5  | 4.0  | 4.5  |
| Death Rate            | ..      | 5.0     | ..   | 5.7  | 10.8 | 8.3  | 6.6  | 6.5  | 4.2  | 2.9  | 2.3  | 1.6  |
| <b>13. BALASORE</b>   |         |         |      |      |      |      |      |      |      |      |      |      |
| T Birth Rate          | ..      | 23.3    | 23.3 | 22.1 | 21.3 | 21.7 | 20.6 | 21.5 | 22.8 | 26.0 | 27.7 | 25.1 |
| Death Rate            | ..      | 12.9    | 21.3 | 18.7 | 17.3 | 13.4 | 9.5  | 9.3  | 12.2 | 10.8 | 8.7  | 11.2 |
| R Birth Rate          | ..      | 23.5    | 23.4 | 22.0 | 21.3 | 21.6 | 20.5 | 21.6 | 23.0 | 26.3 | 28.1 | 25.8 |
| Death Rate            | ..      | 13.1    | 21.5 | 18.9 | 17.5 | 13.5 | 9.5  | 9.4  | 12.3 | 11.0 | 8.8  | 11.5 |
| U Birth Rate          | ..      | 17.6    | 21.6 | 25.2 | 21.2 | 25.3 | 25.4 | 19.4 | 14.3 | 9.8  | 17.9 | 8.7  |
| Death Rate            | ..      | 6.5     | 12.5 | 9.2  | 8.6  | 8.1  | 6.2  | 6.2  | 6.2  | 3.8  | 5.9  | 3.6  |

14 ORISSA

(3 Census-5)

|   |            |      |      |      |      |      |      |      |      |      |      |      |
|---|------------|------|------|------|------|------|------|------|------|------|------|------|
| T | Birth Rate | 25.8 | 24.8 | 27.3 | 25.6 | 25.8 | 28.3 | 25.9 | 23.9 | 23.3 | 28.2 | 24.4 |
|   | Death Rate | 16.2 | 20.9 | 19.9 | 18.3 | 15.1 | 14.3 | 14.7 | 17.5 | 16.7 | 13.7 | 13.4 |
| R | Birth Rate | NA   | 24.6 | 27.3 | 25.5 | 25.6 | 28.1 | 25.6 | 23.7 | 23.0 | 28.0 | 24.1 |
|   | Death Rate | NA   | 21.0 | 20.1 | 18.4 | 15.1 | 14.3 | 14.7 | 17.5 | 16.7 | 13.6 | 13.4 |
| U | Birth Rate | 31.8 | 30.8 | 28.7 | 30.2 | 31.4 | 35.1 | 33.7 | 29.9 | 31.6 | 31.2 | 33.7 |
|   | Death Rate | 15.1 | 18.8 | 15.0 | 15.0 | 13.0 | 13.7 | 14.6 | 16.9 | 17.3 | 13.9 | 14.2 |

(NA = Not available)

**TABLE VI**  
**Infant deaths by districts for each year of 1951-60 by rural and urban subdivisions**  
 (T=Total R=Rural U=Urban)

| Districts          | 1 | 2      | 3     | 4     | 5     | 6     | 7     | 8      | 9      | 10    | 11    | Total for |         |
|--------------------|---|--------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-----------|---------|
|                    |   |        |       |       |       |       |       |        |        |       |       | 1951-60   | 1951-60 |
| 1. Kalahandi       | T | ..     | 3,043 | 3,284 | 2,684 | 3,676 | 3,836 | 6,617  | 3,052  | 3,765 | 3,096 | 3,096     | 33,053  |
|                    | R | ..     | 3,043 | 3,284 | 2,658 | 3,666 | 3,823 | 6,604  | 3,025  | 3,750 | 3,080 | 3,080     | 32,933  |
|                    | U | ..     | ..    | ..    | 26    | 10    | 13    | 13     | 27     | 15    | 16    | 16        | 120     |
| 2. Koraput         | T | 46     | 37    | 54    | 25    | 17    | 47    | 52     | 119    | 64    | 44    | 44        | 505     |
|                    | R | 46     | 37    | 54    | 15    | 7     | 19    | 34     | 67     | 38    | 23    | 23        | 340     |
|                    | U | ..     | ..    | ..    | 10    | 10    | 28    | 18     | 52     | 26    | 21    | 21        | 165     |
| 3. Sambalpur       | T | 4,935  | 7,739 | 5,944 | 6,133 | 6,795 | 4,640 | 5,894  | 4,929  | 5,838 | 5,339 | 5,339     | 58,186  |
|                    | R | 4,922  | 7,724 | 5,941 | 6,107 | 6,761 | 4,621 | 5,870  | 4,906  | 5,809 | 5,284 | 5,284     | 57,945  |
|                    | U | 13     | 15    | 3     | 26    | 34    | 19    | 24     | 23     | 29    | 55    | 55        | 241     |
| 4. Bolangir        | T | ..     | 6,974 | 5,865 | 5,331 | 7,197 | 6,554 | 6,113  | 5,380  | 5,740 | 4,668 | 4,668     | 53,822  |
|                    | R | ..     | 6,937 | 5,821 | 5,305 | 7,132 | 6,512 | 6,065  | 5,349  | 5,649 | 4,558 | 4,558     | 53,327  |
|                    | U | ..     | 37    | 44    | 26    | 65    | 42    | 48     | 32     | 91    | 110   | 110       | 495     |
| 5. Baudh-Khondmals | T | 409    | 1,562 | 990   | 952   | 1,359 | 229   | 219    | 926    | 953   | 945   | 945       | 8,544   |
|                    | R | 409    | 1,562 | 990   | 952   | 1,359 | 229   | 219    | 926    | 929   | 931   | 931       | 8,506   |
|                    | U | ..     | ..    | ..    | ..    | ..    | ..    | ..     | ..     | 24    | 14    | 14        | 38      |
| 6. Ganjam          | T | 11,038 | 5,451 | 7,488 | 3,909 | 5,703 | 7,572 | 10,424 | 10,494 | 4,897 | 2,799 | 2,799     | 69,775  |
|                    | R | 10,744 | 5,185 | 7,223 | 3,662 | 5,408 | 7,267 | 10,085 | 10,094 | 4,391 | 2,296 | 2,296     | 66,355  |
|                    | U | 294    | 266   | 265   | 247   | 295   | 305   | 339    | 400    | 506   | 503   | 503       | 3,420   |
| 7. Sundargarh      | T | ..     | 2,117 | 1,756 | 1,775 | 1,874 | 1,760 | 1,745  | 1,174  | 1,163 | 1,417 | 1,417     | 14,781  |
|                    | R | ..     | 2,117 | 1,751 | 1,770 | 1,857 | 1,735 | 1,719  | 1,141  | 1,124 | 1,338 | 1,338     | 14,552  |
|                    | U | ..     | ..    | 5     | 5     | 17    | 25    | 26     | 33     | 39    | 79    | 79        | 229     |
| 8. Dhenkanal       | T | 715    | 3,806 | 3,726 | 3,561 | 3,549 | 3,816 | 4,095  | 3,287  | 4,517 | 4,546 | 4,546     | 35,618  |
|                    | R | 715    | 3,806 | 3,726 | 3,561 | 3,549 | 3,816 | 4,095  | 3,287  | 4,477 | 4,514 | 4,514     | 35,546  |
|                    | U | ..     | ..    | ..    | ..    | ..    | ..    | ..     | ..     | 40    | 32    | 32        | 72      |
| 9. Puri            | T | 8,552  | 6,337 | 6,530 | 5,931 | 5,180 | 3,936 | 6,525  | 6,876  | 8,015 | 8,664 | 8,664     | 66,546  |
|                    | R | 8,204  | 5,972 | 6,200 | 5,654 | 4,840 | 3,606 | 6,167  | 6,356  | 7,570 | 8,108 | 8,108     | 62,677  |
|                    | U | 348    | 365   | 330   | 277   | 340   | 330   | 358    | 520    | 445   | 556   | 556       | 3,869   |
| 10. Keonjhar       | T | ..     | 2,457 | 2,099 | 2,098 | 2,085 | 2,152 | 2,204  | 2,178  | 2,274 | 2,567 | 2,567     | 20,114  |
|                    | R | ..     | 2,429 | 2,078 | 2,085 | 2,082 | 2,152 | 2,204  | 2,178  | 2,260 | 2,532 | 2,532     | 20,000  |
|                    | U | ..     | 28    | 21    | 13    | 3     | ..    | ..     | ..     | 14    | 35    | 35        | 114     |



|                |   |       |        |        |        |        |        |        |        |        |        |          |
|----------------|---|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|
| 11. Cuttack    | T | 7,977 | 13,553 | 11,472 | 11,405 | 10,615 | 13,466 | 12,883 | 11,323 | 10,179 | 11,453 | 1,14,326 |
|                | R | 7,369 | 13,008 | 10,768 | 10,610 | 9,607  | 12,511 | 11,929 | 10,531 | 9,100  | 10,427 | 1,05,860 |
|                | U | 608   | 545    | 704    | 795    | 1,008  | 955    | 954    | 792    | 1,079  | 1,026  | 8,466    |
| 12. Mayurbhanj | T | ..    | 2,204  | 1,759  | 1,888  | 1,451  | 1,677  | 2,062  | 1,713  | 1,769  | 2,283  | 16,806   |
|                | R | ..    | 2,201  | 1,744  | 1,877  | 1,438  | 1,670  | 2,058  | 1,710  | 1,767  | 2,277  | 16,742   |
|                | U | ..    | 3      | 15     | 11     | 13     | 7      | 4      | 3      | 2      | 6      | 64       |
| 13. Balasore   | T | 3,691 | 4,495  | 3,976  | 3,291  | 2,735  | 3,403  | 4,107  | 3,944  | 3,589  | 4,561  | 37,792   |
|                | R | 3,656 | 4,468  | 3,951  | 3,251  | 2,714  | 3,386  | 4,088  | 3,930  | 3,504  | 4,516  | 37,464   |
|                | U | 35    | 27     | 25     | 40     | 21     | 17     | 19     | 14     | 85     | 45     | 328      |

**TABLE VII (A)**  
**Infant death rate by districts in rural and urban subdivisions during each of the years 1951--60**

( T=Total R=Rural U=Urban )

INFANT DEATH RATE

| State/Districts    | 1951 | 1952  | 1953  | 1954  | 1955  | 1956  | 1957  | 1958  | 1959  | 1960  | 1951--60 |
|--------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| (1)                | (2)  | (3)   | (4)   | (5)   | (6)   | (7)   | (8)   | (9)   | (10)  | (11)  | (12)     |
| 1. Kalahandi       | T    | 102.3 | 124.3 | 107.1 | 115.2 | 122.6 | 256.8 | 125.9 | 108.5 | 94.0  | 126.1    |
|                    | R    | 102.3 | 124.3 | 106.5 | 115.2 | 123.0 | 258.2 | 126.0 | 108.9 | 94.0  | 128.7    |
|                    | U    | ..    | ..    | 295.5 | 120.5 | 62.8  | 67.0  | 115.4 | 54.3  | 82.1  | 113.9    |
| 2. Koraput         | T    | 51.9  | 70.7  | 39.6  | 28.5  | 64.6  | 76.4  | 131.6 | 68.7  | 52.1  | 65.1     |
|                    | R    | 51.9  | 70.7  | 32.9  | 15.8  | 39.7  | 69.2  | 96.3  | 51.2  | 37.3  | 51.2     |
|                    | U    | ..    | ..    | 57.1  | 65.4  | 112.9 | 94.7  | 250.0 | 136.8 | 92.5  | 115.6    |
| 3. Sambalpur       | T    | 186.1 | 171.2 | 168.9 | 164.4 | 149.0 | 172.6 | 150.6 | 123.4 | 145.4 | 161.5    |
|                    | R    | 186.7 | 171.5 | 169.2 | 164.7 | 149.6 | 173.4 | 151.0 | 124.6 | 145.3 | 163.3    |
|                    | U    | 89.0  | 40.0  | 122.1 | 119.3 | 77.6  | 76.9  | 93.9  | 41.8  | 151.1 | 80.5     |
| 4. Bolangir        | T    | ..    | 182.4 | 178.6 | 166.6 | 179.5 | 220.4 | 186.3 | 158.0 | 161.3 | 175.5    |
|                    | R    | ..    | 183.0 | 179.6 | 167.7 | 180.7 | 221.7 | 187.6 | 160.6 | 162.8 | 178.1    |
|                    | U    | ..    | 117.1 | 105.8 | 72.4  | 86.1  | 126.0 | 85.3  | 78.5  | 116.9 | 99.2     |
| 5. Baudh-Khondmals | T    | 163.1 | 192.4 | 183.5 | 183.6 | 31.5  | 34.9  | 174.9 | 134.3 | 157.2 | 139.2    |
|                    | R    | 163.1 | 192.4 | 183.5 | 183.6 | 31.5  | 34.9  | 174.9 | 133.5 | 158.3 | 142.1    |
|                    | U    | ..    | ..    | ..    | ..    | ..    | ..    | ..    | 173.9 | 109.4 | 141.7    |
| 6. Ganjam          | T    | 236.5 | 140.3 | 173.9 | 100.5 | 193.4 | 252.4 | 248.0 | 110.4 | 74.2  | 168.5    |
|                    | R    | 244.1 | 143.8 | 179.8 | 103.0 | 208.7 | 267.3 | 265.3 | 110.5 | 70.7  | 173.6    |
|                    | U    | 111.2 | 94.8  | 91.5  | 73.5  | 70.3  | 94.8  | 93.6  | 109.3 | 95.9  | 91.0     |
| 7. Sundargarh      | T    | ..    | 126.7 | 107.2 | 113.1 | 114.4 | 118.0 | 97.6  | 75.9  | 97.1  | 106.2    |
|                    | R    | ..    | 127.6 | 107.7 | 113.7 | 114.0 | 117.9 | 96.7  | 76.7  | 96.8  | 106.0    |
|                    | U    | ..    | ..    | 39.7  | 39.4  | 147.1 | 122.1 | 145.4 | 57.9  | 102.6 | 91.9     |
| 8. Dhenkanal       | T    | 120.1 | 148.8 | 169.2 | 141.5 | 145.5 | 176.6 | 132.2 | 138.2 | 160.9 | 147.5    |
|                    | R    | 120.1 | 148.8 | 169.2 | 141.5 | 145.5 | 176.6 | 132.2 | 137.7 | 160.4 | 146.1    |
|                    | U    | ..    | ..    | ..    | ..    | ..    | ..    | ..    | 227.3 | 288.3 | 257.8    |
| 9. Puri            | T    | 249.3 | 180.6 | 167.6 | 146.2 | 88.1  | 170.5 | 181.9 | 160.8 | 185.2 | 163.2    |
|                    | R    | 251.5 | 179.4 | 168.4 | 146.8 | 86.3  | 172.8 | 182.9 | 162.8 | 189.4 | 166.4    |
|                    | U    | 206.4 | 202.8 | 153.2 | 135.5 | 114.1 | 138.9 | 170.7 | 133.5 | 140.2 | 153.1    |
| 10. Keonjhar       | T    | ..    | 132.1 | 128.5 | 100.1 | 126.0 | 128.1 | 120.6 | 108.0 | 123.5 | 119.1    |
|                    | R    | ..    | 132.3 | 128.6 | 100.4 | 126.0 | 128.1 | 120.6 | 108.7 | 124.6 | 120.0    |
|                    | U    | ..    | 119.7 | 119.3 | 64.0  | ..    | ..    | ..    | 54.9  | 75.6  | 78.4     |

|                |   |       |       |       |       |       |       |       |       |       |       |       |
|----------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 11. Cuttack    | T | 140*1 | 184*0 | 160*1 | 142*6 | 124*9 | 164*5 | 169*8 | 158*2 | 126*1 | 163*9 | 153*0 |
|                | R | 140*6 | 189*1 | 163*2 | 145*1 | 124*6 | 166*8 | 172*7 | 163*5 | 124*6 | 168*1 | 155*8 |
|                | U | 134*1 | 112*5 | 124*5 | 115*6 | 128*2 | 139*4 | 140*5 | 110*8 | 139*7 | 131*1 | 127*6 |
| 12. Mayurbhanj | T | ..    | 87*2  | 70*4  | 80*3  | 60*7  | 68*0  | 82*2  | 72*2  | 56*5  | 77*5  | 72*5  |
|                | R | ..    | 87*8  | 70*7  | 80*8  | 60*7  | 68*2  | 82*5  | 72*3  | 56*5  | 77*5  | 73*0  |
|                | U | ..    | 14*6  | 47*2  | 39*1  | 59*4  | 45*8  | 27*8  | 3*0   | 27*0  | 67*4  | 40*7  |
| 13. Balasore   | T | 152*7 | 177*3 | 158*2 | 125*3 | 107*0 | 124*3 | 138*4 | 114*0 | 95*1  | 130*2 | 129*9 |
|                | R | 154*4 | 180*6 | 160*6 | 127*0 | 109*1 | 126*3 | 139*7 | 114*6 | 95*4  | 130*8 | 133*9 |
|                | U | 69*7  | 44*0  | 46*5  | 59*5  | 30*0  | 30*5  | 44*5  | 45*9  | 84*5  | 89*1  | 54*4  |
| 14. Orissa     | T | 188*8 | 159*2 | 153*2 | 133*0 | 126*8 | 138*5 | 174*8 | 155*2 | 120*1 | 135*0 | 145*6 |
|                | R | 191*4 | 160*5 | 154*6 | 134*3 | 127*6 | 139*8 | 177*1 | 157*0 | 120*2 | 135*9 | 149*8 |
|                | U | 136*4 | 115*9 | 114*3 | 102*5 | 109*0 | 107*8 | 121*8 | 117*5 | 117*8 | 119*9 | 116*3 |

**TABLE VII (B)**

**Infant death rate in each of the towns with population 30,000 and over during each of the years 1951—1960**

| Serial No. | Towns         | Infant death rate |        |        |        |        |        |        |        |        |        |         |        |  |
|------------|---------------|-------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--|
|            |               | 1951              | 1952   | 1953   | 1954   | 1955   | 1956   | 1957   | 1958   | 1959   | 1960   | 1951—60 |        |  |
| (1)        | (2)           | (3)               | (4)    | (5)    | (6)    | (7)    | (8)    | (9)    | (10)   | (11)   | (12)   | (13)    |        |  |
| 1          | Cuttack       | ..                | 133.59 | 104.43 | 119.64 | 113.53 | 120.93 | 136.60 | 147.31 | 108.97 | 144.75 | 130.80  | 127.70 |  |
| 2          | Puri          | ..                | 206.40 | 222.44 | 160.30 | 140.75 | 145.71 | 119.19 | 134.70 | 181.56 | 128.35 | 128.51  | 156.33 |  |
| 3          | Balasore      | ..                | 69.72  | 44.04  | 46.47  | 61.01  | 29.96  | 30.46  | 44.50  | 45.90  | 57.31  | 69.30   | 45.69  |  |
| 4          | Sambalpur     | ..                | 89.04  | 104.84 | 46.15  | 89.29  | 126.90 | 69.76  | 114.29 | 110.39 | 66.39  | NA      | 93.82  |  |
| 5          | Berhampur     | ..                | 108.69 | 91.52  | 84.39  | 73.64  | 66.36  | 62.41  | 95.43  | 93.54  | 117.63 | 97.69   | 89.37  |  |
| 6          | Bhubaneswar   | ..                | NA     | 94.20  | 112.50 | 109.51 | 96.64  | 98.12  | 160.38 | 119.09 | 106.48 | 166.34  | 108.89 |  |
| 7          | Rourkela      | ..                | NA     | NA     | NA     | NA     | NA     | NA     | NA     | NA     | NA     | NA      | NA     |  |
| 8          | For all towns | ..                | 137.51 | 116.75 | 114.37 | 105.85 | 112.22 | 105.56 | 129.05 | 117.14 | 121.90 | 122.94  | 117.97 |  |

(NA=Not Available)

**TABLE VIII**  
**Infant deaths in the State of Orissa by age-groups for rural and urban subdivisions**  
**for each year of 1951-60**  
(T=Total R=Rural U=Urban)

| Years                   |   |    | Under<br>1 week | 1 week<br>to<br>1 month | 1 month<br>to<br>6 months | 6 months<br>to<br>12 months | Total deaths<br>under<br>1 year |
|-------------------------|---|----|-----------------|-------------------------|---------------------------|-----------------------------|---------------------------------|
| 1                       |   |    | 2               | 3                       | 4                         | 5                           | 6                               |
| 1951                    | T | .. | 9,483           | 8,972                   | 9,889                     | 9,019                       | 37,363                          |
|                         | R | .. | 9,121           | 8,688                   | 9,507                     | 8,749                       | 36,065                          |
|                         | U | .. | 362             | 284                     | 382                       | 270                         | 1,298                           |
| 1952                    | T | .. | 14,996          | 13,128                  | 17,112                    | 14,539                      | 59,775                          |
|                         | R | .. | 14,508          | 12,964                  | 16,741                    | 14,276                      | 58,489                          |
|                         | U | .. | 488             | 164                     | 371                       | 263                         | 1,286                           |
| 1953                    | T | .. | 14,323          | 12,464                  | 16,019                    | 12,137                      | 54,943                          |
|                         | R | .. | 13,795          | 12,271                  | 15,604                    | 11,861                      | 53,531                          |
|                         | U | .. | 528             | 193                     | 415                       | 276                         | 1,412                           |
| 1954                    | T | .. | 12,720          | 11,311                  | 14,636                    | 10,316                      | 48,983                          |
|                         | R | .. | 12,109          | 11,106                  | 14,205                    | 10,087                      | 47,507                          |
|                         | U | .. | 611             | 205                     | 431                       | 229                         | 1,476                           |
| 1955                    | T | .. | 13,595          | 12,759                  | 15,860                    | 10,022                      | 52,236                          |
|                         | R | .. | 12,971          | 12,464                  | 15,247                    | 9,738                       | 50,420                          |
|                         | U | .. | 624             | 295                     | 613                       | 284                         | 1,816                           |
| 1956                    | T | .. | 13,725          | 12,048                  | 16,467                    | 10,848                      | 53,088                          |
|                         | R | .. | 13,199          | 11,733                  | 15,933                    | 10,482                      | 51,347                          |
|                         | U | .. | 526             | 315                     | 534                       | 366                         | 1,741                           |
| 1957                    | T | .. | 14,831          | 13,358                  | 20,482                    | 14,269                      | 62,940                          |
|                         | R | .. | 14,378          | 13,141                  | 19,824                    | 13,794                      | 61,137                          |
|                         | U | .. | 453             | 217                     | 658                       | 475                         | 1,803                           |
| 1958                    | T | .. | 13,283          | 12,665                  | 18,343                    | 11,104                      | 55,395                          |
|                         | R | .. | 12,799          | 12,397                  | 17,740                    | 10,563                      | 53,499                          |
|                         | U | .. | 484             | 268                     | 603                       | 541                         | 1,896                           |
| 1959                    | T | .. | 13,042          | 12,318                  | 17,824                    | 9,579                       | 52,763                          |
|                         | R | .. | 12,311          | 11,974                  | 17,080                    | 9,003                       | 50,368                          |
|                         | U | .. | 731             | 344                     | 744                       | 576                         | 2,395                           |
| 1960                    | T | .. | 12,401          | 11,788                  | 17,938                    | 10,255                      | 52,382                          |
|                         | R | .. | 11,638          | 11,456                  | 17,102                    | 9,688                       | 49,884                          |
|                         | U | .. | 763             | 332                     | 836                       | 567                         | 2,498                           |
| Total<br>for<br>1951-60 | T | .. | 1,32,399        | 1,20,811                | 1,64,570                  | 1,12,088                    | 5,29,868                        |
|                         | R | .. | 1,26,829        | 1,18,194                | 1,58,983                  | 1,08,241                    | 5,12,247                        |
|                         | U | .. | 5,570           | 2,617                   | 5,587                     | 3,847                       | 17,621                          |

**TABLE IX (A)**  
**Deaths by age-groups and sex in the State of Orissa for each year of 1951—60**  
(M=Males F=Females T=Total)

| Years             | 60 years and above                           |  |  |  |  |  |  |  |  |  |  | Total deaths |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--------------|
|                   | Under 1 year                                 | 1—4 years                                    | 5—9 years                                  | 10—14 years                                | 15—19 years                                | 20—29 years                                | 30—39 years                                | 40—49 years                                | 50—59 years                                  | 60 years and above                           | 11   |              |
| 1951              | M<br>19,296<br>F<br>18,067<br>T<br>37,363    | M<br>8,893<br>F<br>8,246<br>T<br>17,139      | M<br>5,512<br>F<br>5,302<br>T<br>10,814    | M<br>4,936<br>F<br>4,987<br>T<br>9,923     | M<br>5,169<br>F<br>5,309<br>T<br>10,478    | M<br>6,217<br>F<br>6,641<br>T<br>12,858    | M<br>6,729<br>F<br>6,682<br>T<br>13,411    | M<br>7,238<br>F<br>7,024<br>T<br>14,262    | M<br>8,263<br>F<br>7,917<br>T<br>16,180      | M<br>12,071<br>F<br>11,822<br>T<br>23,893    | M<br>84,439<br>F<br>81,946<br>T<br>166,385         |              |
| 1952              | M<br>31,348<br>F<br>28,427<br>T<br>59,775    | M<br>15,931<br>F<br>14,796<br>T<br>30,727    | M<br>8,666<br>F<br>8,297<br>T<br>16,963    | M<br>6,914<br>F<br>6,703<br>T<br>13,617    | M<br>7,374<br>F<br>8,013<br>T<br>15,387    | M<br>10,115<br>F<br>11,501<br>T<br>21,616  | M<br>11,373<br>F<br>11,141<br>T<br>22,514  | M<br>12,977<br>F<br>11,876<br>T<br>24,853  | M<br>14,775<br>F<br>14,181<br>T<br>28,956    | M<br>19,674<br>F<br>19,621<br>T<br>39,295    | M<br>139,147<br>F<br>134,556<br>T<br>273,703       |              |
| 1953              | M<br>29,077<br>F<br>25,866<br>T<br>54,943    | M<br>16,619<br>F<br>15,366<br>T<br>31,985    | M<br>8,502<br>F<br>7,852<br>T<br>16,354    | M<br>6,638<br>F<br>6,263<br>T<br>12,901    | M<br>6,814<br>F<br>7,342<br>T<br>14,156    | M<br>9,696<br>F<br>10,790<br>T<br>20,486   | M<br>11,049<br>F<br>10,416<br>T<br>21,465  | M<br>11,807<br>F<br>10,582<br>T<br>22,389  | M<br>13,791<br>F<br>13,111<br>T<br>26,902    | M<br>17,714<br>F<br>17,522<br>T<br>35,236    | M<br>131,707<br>F<br>125,110<br>T<br>256,817       |              |
| 1954              | M<br>26,218<br>F<br>22,765<br>T<br>48,983    | M<br>13,866<br>F<br>12,557<br>T<br>26,423    | M<br>6,355<br>F<br>5,839<br>T<br>12,194    | M<br>5,104<br>F<br>4,612<br>T<br>9,716     | M<br>5,083<br>F<br>5,644<br>T<br>10,727    | M<br>7,737<br>F<br>8,458<br>T<br>16,195    | M<br>8,846<br>F<br>8,563<br>T<br>17,409    | M<br>9,848<br>F<br>8,801<br>T<br>18,649    | M<br>11,724<br>F<br>10,853<br>T<br>22,577    | M<br>16,219<br>F<br>16,095<br>T<br>32,314    | M<br>111,000<br>F<br>104,187<br>T<br>215,187       |              |
| 1955              | M<br>27,845<br>F<br>24,391<br>T<br>52,236    | M<br>14,381<br>F<br>13,040<br>T<br>27,421    | M<br>5,943<br>F<br>5,479<br>T<br>11,422    | M<br>4,504<br>F<br>4,219<br>T<br>8,723     | M<br>4,748<br>F<br>4,976<br>T<br>9,724     | M<br>6,691<br>F<br>7,740<br>T<br>14,431    | M<br>7,696<br>F<br>7,347<br>T<br>15,043    | M<br>8,586<br>F<br>7,461<br>T<br>16,047    | M<br>10,310<br>F<br>9,656<br>T<br>19,966     | M<br>16,559<br>F<br>16,417<br>T<br>32,976    | M<br>107,263<br>F<br>100,726<br>T<br>207,989       |              |
| 1956              | M<br>28,134<br>F<br>24,934<br>T<br>53,068    | M<br>14,765<br>F<br>13,820<br>T<br>28,585    | M<br>6,804<br>F<br>6,358<br>T<br>13,162    | M<br>5,232<br>F<br>4,690<br>T<br>9,922     | M<br>4,982<br>F<br>5,178<br>T<br>10,160    | M<br>7,094<br>F<br>7,842<br>T<br>14,936    | M<br>8,273<br>F<br>7,574<br>T<br>15,847    | M<br>8,795<br>F<br>7,879<br>T<br>16,674    | M<br>11,078<br>F<br>10,534<br>T<br>21,612    | M<br>17,072<br>F<br>16,699<br>T<br>33,771    | M<br>112,229<br>F<br>105,528<br>T<br>217,757       |              |
| 1957              | M<br>33,209<br>F<br>29,731<br>T<br>62,940    | M<br>20,956<br>F<br>19,161<br>T<br>40,117    | M<br>7,858<br>F<br>7,406<br>T<br>15,264    | M<br>5,352<br>F<br>5,127<br>T<br>10,479    | M<br>5,509<br>F<br>5,706<br>T<br>11,215    | M<br>8,052<br>F<br>9,515<br>T<br>17,567    | M<br>9,447<br>F<br>9,070<br>T<br>18,517    | M<br>10,580<br>F<br>9,368<br>T<br>19,948   | M<br>13,740<br>F<br>13,063<br>T<br>26,803    | M<br>20,073<br>F<br>20,450<br>T<br>40,523    | M<br>134,776<br>F<br>128,597<br>T<br>263,373       |              |
| 1958              | M<br>28,954<br>F<br>26,441<br>T<br>55,395    | M<br>15,054<br>F<br>13,843<br>T<br>28,897    | M<br>6,220<br>F<br>5,682<br>T<br>11,902    | M<br>4,440<br>F<br>3,961<br>T<br>8,401     | M<br>5,544<br>F<br>5,902<br>T<br>11,446    | M<br>8,970<br>F<br>10,423<br>T<br>19,393   | M<br>9,747<br>F<br>9,429<br>T<br>19,176    | M<br>10,704<br>F<br>9,492<br>T<br>20,196   | M<br>12,195<br>F<br>11,649<br>T<br>23,844    | M<br>19,176<br>F<br>20,077<br>T<br>39,253    | M<br>130,343<br>F<br>126,224<br>T<br>256,567       |              |
| 1959              | M<br>28,397<br>F<br>24,366<br>T<br>52,763    | M<br>15,054<br>F<br>13,843<br>T<br>28,897    | M<br>6,220<br>F<br>5,682<br>T<br>11,902    | M<br>4,440<br>F<br>3,961<br>T<br>8,401     | M<br>5,544<br>F<br>5,902<br>T<br>11,446    | M<br>8,970<br>F<br>10,423<br>T<br>19,393   | M<br>9,747<br>F<br>9,429<br>T<br>19,176    | M<br>10,704<br>F<br>9,492<br>T<br>20,196   | M<br>12,195<br>F<br>11,649<br>T<br>23,844    | M<br>19,176<br>F<br>20,077<br>T<br>39,253    | M<br>109,788<br>F<br>103,299<br>T<br>213,087       |              |
| 1960              | M<br>28,126<br>F<br>24,256<br>T<br>52,382    | M<br>15,007<br>F<br>13,807<br>T<br>28,814    | M<br>6,332<br>F<br>5,666<br>T<br>11,998    | M<br>4,364<br>F<br>3,834<br>T<br>8,198     | M<br>4,331<br>F<br>4,809<br>T<br>9,140     | M<br>6,601<br>F<br>7,817<br>T<br>14,418    | M<br>7,504<br>F<br>7,060<br>T<br>14,564    | M<br>8,346<br>F<br>7,267<br>T<br>15,613    | M<br>10,235<br>F<br>9,615<br>T<br>19,850     | M<br>17,384<br>F<br>16,820<br>T<br>34,204    | M<br>110,230<br>F<br>102,446<br>T<br>212,676       |              |
| Total for 1951—60 | M<br>280,604<br>F<br>249,264<br>T<br>529,868 | M<br>158,560<br>F<br>145,785<br>T<br>304,345 | M<br>70,705<br>F<br>65,869<br>T<br>136,574 | M<br>53,051<br>F<br>49,514<br>T<br>102,565 | M<br>53,976<br>F<br>57,638<br>T<br>111,614 | M<br>77,987<br>F<br>89,058<br>T<br>167,045 | M<br>88,572<br>F<br>84,806<br>T<br>173,378 | M<br>97,677<br>F<br>87,295<br>T<br>184,972 | M<br>116,497<br>F<br>110,613<br>T<br>227,110 | M<br>173,293<br>F<br>172,777<br>T<br>346,070 | M<br>1,170,922<br>F<br>1,112,619<br>T<br>2,283,541 |              |

**TABLE IX (B)**  
**Deaths by age-groups in districts during the decade 1951—60**

| Serial No.               | State/Districts         | Under one year | 1—4 years | 5—9 years | 10—14 years | 15—19 years | 20—29 years | 30—39 years | 40—49 years | 50—59 years | 60 years and above | Total   |
|--------------------------|-------------------------|----------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|---------|
| (1)                      | (2)                     | (3)            | (4)       | (5)       | (6)         | (7)         | (8)         | (9)         | (10)        | (11)        | (12)               | (13)    |
| <b>1 KALAHANDI</b>       |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 33,053         | 31,127    | 11,562    | 7,502       | 7,936       | 12,477      | 13,426      | 14,944      | 17,734      | 20,449             | 170,210 |
|                          | Percentage of deaths .. | 19.42          | 18.29     | 6.79      | 4.41        | 4.66        | 7.33        | 7.89        | 8.78        | 10.42       | 12.01              | 100.00  |
| <b>2 KORAPUT</b>         |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 505            | 702       | 275       | 215         | 260         | 496         | 544         | 541         | 640         | 1,285              | 5,463   |
|                          | Percentage of deaths .. | 9.24           | 12.85     | 5.03      | 3.94        | 4.76        | 9.08        | 9.96        | 9.90        | 11.72       | 23.52              | 100.00  |
| <b>3 SAMBALPUR</b>       |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 58,186         | 28,339    | 11,630    | 8,524       | 9,682       | 17,281      | 18,042      | 18,861      | 23,442      | 40,416             | 234,403 |
|                          | Percentage of deaths .. | 24.82          | 12.09     | 4.96      | 3.64        | 4.13        | 7.37        | 7.70        | 8.05        | 10.00       | 17.24              | 100.00  |
| <b>4 BOLANGIR</b>        |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 53,822         | 31,895    | 12,324    | 7,466       | 7,616       | 13,326      | 13,795      | 13,610      | 17,175      | 24,685             | 195,714 |
|                          | Percentage of deaths .. | 27.50          | 16.30     | 6.30      | 3.81        | 3.89        | 6.81        | 7.05        | 6.95        | 8.78        | 12.61              | 100.00  |
| <b>5 BAUDH-KHONDMALS</b> |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 8,544          | 5,208     | 2,232     | 1,474       | 1,623       | 2,957       | 3,485       | 4,150       | 7,545       | 8,857              | 46,075  |
|                          | Percentage of deaths .. | 18.54          | 11.30     | 4.84      | 3.20        | 3.52        | 6.42        | 7.56        | 9.01        | 16.38       | 19.22              | 100.00  |
| <b>6 GANJAM</b>          |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 69,775         | 27,865    | 17,754    | 16,764      | 17,216      | 19,338      | 20,033      | 21,606      | 25,349      | 37,706             | 273,406 |
|                          | Percentage of deaths .. | 25.52          | 10.19     | 6.49      | 6.13        | 6.30        | 7.07        | 7.33        | 7.00        | 9.27        | 13.79              | 100.00  |
| <b>7 SUNDARGARH</b>      |                         |                |           |           |             |             |             |             |             |             |                    |         |
|                          | No. of deaths ..        | 14,781         | 12,129    | 5,943     | 4,310       | 4,265       | 6,589       | 7,369       | 7,603       | 8,390       | 10,520             | 81,899  |
|                          | Percentage of deaths .. | 18.05          | 14.81     | 7.26      | 5.25        | 5.21        | 8.05        | 9.00        | 9.28        | 10.24       | 12.85              | 100.00  |

TABLE IX (B)

Deaths by age-groups in districts during the decade 1951—60—concl'd.

| Serial No. | State/Districts         | Under one year | 1—4 years | 5—9 years | 10—14 years | 15—19 years | 20—29 years | 30—39 years | 40—49 years | 50—59 years | 60 years and above | Total     |
|------------|-------------------------|----------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|-----------|
| (1)        | (2)                     | (3)            | (4)       | (5)       | (6)         | (7)         | (8)         | (9)         | (10)        | (11)        | (12)               | (13)      |
| 8          | DHENKANAL               |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 35,618         | 26,049    | 8,305     | 4,708       | 4,825       | 8,160       | 8,509       | 9,004       | 12,649      | 20,280             | 138,107   |
|            | Percentage of deaths .. | 25.79          | 18.86     | 6.01      | 3.41        | 3.49        | 5.91        | 6.16        | 6.52        | 9.16        | 14.68              | 100.00    |
| 9          | PURI                    |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 66,546         | 40,147    | 13,524    | 9,171       | 10,734      | 17,397      | 16,918      | 19,728      | 26,205      | 50,039             | 270,409   |
|            | Percentage of deaths .. | 24.61          | 14.85     | 5.00      | 3.39        | 3.97        | 6.43        | 6.26        | 7.30        | 9.69        | 18.50              | 100.00    |
| 10         | KEONJHAR                |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 20,114         | 17,304    | 6,617     | 3,460       | 3,831       | 7,497       | 7,882       | 7,235       | 8,807       | 13,351             | 96,098    |
|            | Percentage of deaths .. | 20.93          | 18.01     | 6.89      | 3.60        | 3.99        | 7.80        | 8.20        | 7.53        | 9.16        | 13.89              | 100.00    |
| 11         | CUTTACK                 |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 114,326        | 50,842    | 28,759    | 24,750      | 26,700      | 34,746      | 35,361      | 38,611      | 45,970      | 73,131             | 473,196   |
|            | Percentage of deaths .. | 24.16          | 10.74     | 6.08      | 5.23        | 5.64        | 7.34        | 7.47        | 8.16        | 9.71        | 15.45              | 100.00    |
| 12         | MAYURBHANJ              |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 16,806         | 17,978    | 9,808     | 6,747       | 7,837       | 13,098      | 13,507      | 13,122      | 14,471      | 23,848             | 137,222   |
|            | Percentage of deaths .. | 12.25          | 13.10     | 7.15      | 4.92        | 5.71        | 9.55        | 9.84        | 9.56        | 10.55       | 17.38              | 100.00    |
| 13         | BALASORE                |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 37,792         | 14,760    | 7,841     | 7,474       | 9,089       | 13,683      | 14,507      | 16,242      | 18,914      | 21,037             | 161,339   |
|            | Percentage of deaths .. | 23.42          | 9.15      | 4.86      | 4.63        | 5.63        | 8.48        | 8.99        | 10.07       | 11.72       | 13.04              | 100.00    |
| 14         | ORISSA                  |                |           |           |             |             |             |             |             |             |                    |           |
|            | No. of deaths ..        | 529,868        | 304,345   | 136,574   | 102,565     | 111,614     | 167,045     | 173,378     | 185,257     | 227,291     | 345,604            | 2,283,541 |
|            | Percentage of deaths .. | 23.20          | 13.33     | 5.98      | 4.49        | 4.89        | 7.32        | 7.59        | 8.12        | 9.95        | 15.13              | 100.00    |



**TABLE X**  
**Deaths by causes by districts for the decade 1951—60 by rural and urban subdivisions**  
 ( T=Total R=Rural U=Urban )

| Districts               |   | Cholera | Small-pox | Fevers    | Dysentery and Diarrhoea | Respiratory diseases | Wounds and accidents | Other causes | Total     |
|-------------------------|---|---------|-----------|-----------|-------------------------|----------------------|----------------------|--------------|-----------|
| (1)                     |   | (2)     | (3)       | (4)       | (5)                     | (6)                  | (7)                  | (8)          | (9)       |
| 1. Kalahandi            | T | 4,544   | 10,030    | 133,949   | 3,246                   | 1,975                | 3,215                | 13,251       | 170,210   |
|                         | R | 4,501   | 9,977     | 133,710   | 3,207                   | 1,894                | 3,191                | 12,918       | 169,398   |
|                         | U | 43      | 53        | 239       | 39                      | 81                   | 24                   | 333          | 812       |
| 2. Koraput              | T | 122     | 367       | 2,694     | 438                     | 671                  | 44                   | 1,127        | 5,463     |
|                         | R | 118     | 251       | 1,945     | 361                     | 305                  | 44                   | 1,097        | 4,121     |
|                         | U | 4       | 116       | 749       | 77                      | 366                  | ..                   | 30           | 1,342     |
| 3. Sambalpur            | T | 1,237   | 4,613     | 128,470   | 12,839                  | 12,472               | 2,616                | 72,156       | 234,403   |
|                         | R | 1,234   | 4,551     | 127,639   | 12,697                  | 12,345               | 2,601                | 71,715       | 232,782   |
|                         | U | 3       | 62        | 831       | 142                     | 127                  | 15                   | 441          | 1,621     |
| 4. Bolangir             | T | 2,336   | 4,841     | 127,246   | 5,875                   | 5,386                | 1,961                | 48,069       | 195,714   |
|                         | R | 2,327   | 4,792     | 125,742   | 5,733                   | 5,281                | 1,890                | 47,253       | 193,018   |
|                         | U | 9       | 49        | 1,504     | 142                     | 105                  | 71                   | 816          | 2,696     |
| 5. Baudh-Khondmals      | T | 716     | 1,510     | 34,211    | 1,437                   | 759                  | 503                  | 6,939        | 46,075    |
|                         | R | 716     | 1,483     | 34,179    | 1,435                   | 747                  | 499                  | 6,838        | 45,897    |
|                         | U | ..      | 27        | 32        | 2                       | 12                   | 4                    | 101          | 178       |
| 6. Ganjam               | T | 5,079   | 12,223    | 128,090   | 15,247                  | 8,374                | 3,047                | 101,346      | 273,406   |
|                         | R | 4,940   | 11,576    | 125,070   | 13,079                  | 7,036                | 2,842                | 93,803       | 258,346   |
|                         | U | 139     | 647       | 3,020     | 2,168                   | 1,338                | 205                  | 7,543        | 15,060    |
| 7. Sundargarh           | T | 427     | 1,084     | 54,106    | 5,188                   | 3,265                | 1,661                | 16,168       | 81,899    |
|                         | R | 427     | 1,080     | 53,390    | 5,102                   | 3,175                | 1,637                | 15,865       | 80,676    |
|                         | U | ..      | 4         | 716       | 86                      | 90                   | 24                   | 303          | 1,223     |
| 8. Dhenkanal            | T | 1,112   | 2,552     | 87,224    | 6,379                   | 2,406                | 2,821                | 35,613       | 138,107   |
|                         | R | 1,107   | 2,552     | 87,157    | 6,364                   | 2,403                | 2,820                | 35,530       | 137,933   |
|                         | U | 5       | ..        | 67        | 15                      | 3                    | 1                    | 83           | 174       |
| 9. Puri                 | T | 2,945   | 6,080     | 118,843   | 22,456                  | 10,475               | 2,680                | 106,930      | 270,409   |
|                         | R | 2,924   | 5,900     | 113,679   | 20,130                  | 9,611                | 2,379                | 99,407       | 254,030   |
|                         | U | 21      | 180       | 5,164     | 2,326                   | 864                  | 301                  | 7,523        | 16,379    |
| 10. Keonjhar            | T | 416     | 1,403     | 77,664    | 1,822                   | 575                  | 1,235                | 12,983       | 96,098    |
|                         | R | 416     | 1,399     | 77,241    | 1,811                   | 537                  | 1,214                | 12,864       | 95,482    |
|                         | U | ..      | 4         | 423       | 11                      | 38                   | 21                   | 119          | 616       |
| 11. Cuttack             | T | 12,062  | 14,783    | 193,270   | 52,341                  | 22,080               | 8,425                | 170,235      | 473,196   |
|                         | R | 12,019  | 14,211    | 188,573   | 49,393                  | 20,632               | 8,249                | 150,877      | 443,954   |
|                         | U | 43      | 572       | 4,697     | 2,948                   | 1,448                | 176                  | 19,358       | 29,242    |
| 12. Mayurbhanj          | T | 276     | 1,276     | 111,954   | 3,863                   | 2,976                | 2,258                | 14,619       | 137,222   |
|                         | R | 275     | 1,273     | 111,723   | 3,770                   | 2,899                | 2,237                | 14,365       | 136,542   |
|                         | U | 1       | 3         | 231       | 93                      | 77                   | 21                   | 254          | 680       |
| 13. Balasore            | T | 3,168   | 2,216     | 114,852   | 2,965                   | 995                  | 3,081                | 34,062       | 161,339   |
|                         | R | 3,129   | 2,163     | 114,333   | 2,751                   | 905                  | 3,005                | 32,910       | 159,196   |
|                         | U | 39      | 53        | 519       | 214                     | 90                   | 76                   | 1,152        | 2,143     |
| Total for all districts | T | 34,440  | 62,978    | 1,312,573 | 134,096                 | 72,409               | 33,547               | 633,498      | 2,283,541 |
|                         | R | 34,133  | 61,208    | 1,294,381 | 125,833                 | 67,770               | 32,608               | 595,442      | 2,211,375 |
|                         | U | 307     | 1,770     | 18,192    | 8,263                   | 4,639                | 939                  | 38,056       | 72,166    |



|                |   |       |       |       |     |     |       |       |       |     |     |        |       |
|----------------|---|-------|-------|-------|-----|-----|-------|-------|-------|-----|-----|--------|-------|
| 11. Cuttack    | T | 1,629 | 1,860 | 2,407 | 149 | 96  | 3,997 | 1,445 | 266   | 83  | 130 | 12,062 | 25.49 |
|                | R | 1,623 | 1,837 | 2,405 | 148 | 95  | 3,992 | 1,442 | 264   | 83  | 130 | 12,019 | 27.07 |
|                | U | 6     | 23    | 2     | 1   | 1   | 5     | 3     | 2     | ..  | ..  | 43     | 1.47  |
| 12. Mayurbhanj | T | ..    | 22    | 20    | 10  | 21  | 26    | 62    | 95    | 18  | 2   | 276    | 2.01  |
|                | R | ..    | 22    | 20    | 9   | 21  | 26    | 62    | 95    | 18  | 2   | 275    | 2.01  |
|                | U | ..    | ..    | ..    | 1   | ..  | ..    | ..    | ..    | ..  | ..  | 1      | 1.47  |
| 13. Balasore   | T | 353   | 693   | 718   | 116 | 69  | 229   | 553   | 287   | 115 | 35  | 3,168  | 19.64 |
|                | R | 347   | 685   | 718   | 116 | 69  | 218   | 553   | 277   | 113 | 33  | 3,129  | 19.66 |
|                | U | 6     | 8     | ..    | ..  | ..  | 11    | ..    | 10    | 2   | 2   | 39     | 18.20 |
| 14. Orissa     | T | 4,192 | 6,754 | 4,220 | 859 | 570 | 5,487 | 3,501 | 7,795 | 754 | 308 | 34,440 | 15.08 |
|                | R | 4,138 | 6,699 | 4,194 | 856 | 568 | 5,467 | 3,494 | 7,681 | 730 | 306 | 34,133 | 15.44 |
|                | U | 54    | 55    | 26    | 3   | 2   | 20    | 7     | 114   | 24  | 2   | 307    | 4.25  |

**TABLE XII**

**Deaths from Smallpox by districts in the rural and urban subdivisions during each of the years 1951—60**

(T=Total R=Rural U=Urban)

| State/Districts    | Year |       |      |      |      |      |       |       |       |      | Proportion per 1,000 total deaths |         |
|--------------------|------|-------|------|------|------|------|-------|-------|-------|------|-----------------------------------|---------|
|                    | 1951 | 1952  | 1953 | 1954 | 1955 | 1956 | 1957  | 1958  | 1959  | 1960 | 1951—60                           | 1951—60 |
| 1                  | 2    | 3     | 4    | 5    | 6    | 7    | 8     | 9     | 10    | 11   | 12                                | 13      |
| 1. Kalahandi       | T    | 665   | 345  | 202  | 110  | 38   | 132   | 2,325 | 5,325 | 888  | 10,030                            | 58.93   |
|                    | R    | ..    | 665  | 345  | 202  | 110  | 38    | 130   | 5,315 | 875  | 9,977                             | 58.90   |
|                    | U    | ..    | ..   | ..   | ..   | ..   | ..    | 2     | 10    | 13   | 53                                | 65.27   |
| 2. Koraput         | T    | 46    | 3    | 10   | 4    | ..   | 4     | 267   | 14    | 19   | 367                               | 67.18   |
|                    | R    | 46    | 3    | 10   | 4    | ..   | 4     | 156   | 14    | 14   | 251                               | 60.91   |
|                    | U    | ..    | ..   | ..   | ..   | ..   | ..    | 111   | ..    | 5    | 116                               | 86.44   |
| 3. Sambalpur       | T    | 1,118 | 789  | 61   | 169  | 54   | 92    | 1,406 | 710   | 205  | 4,613                             | 19.68   |
|                    | R    | 1,071 | 787  | 61   | 169  | 54   | 92    | 1,394 | 710   | 204  | 4,551                             | 19.55   |
|                    | U    | 47    | 2    | ..   | ..   | ..   | ..    | 12    | ..    | 1    | 62                                | 38.25   |
| 4. Bolangir        | T    | ..    | 261  | 19   | 98   | 25   | 18    | 1,937 | 2,173 | 307  | 4,841                             | 24.74   |
|                    | R    | ..    | 261  | 19   | 98   | 15   | 18    | 1,915 | 2,162 | 301  | 4,792                             | 24.83   |
|                    | U    | ..    | ..   | ..   | ..   | 10   | ..    | 22    | 11    | 6    | 49                                | 18.18   |
| 5. Baudh-Khondmals | T    | 77    | 43   | 13   | ..   | 2    | 6     | 519   | 674   | 176  | 1,510                             | 32.77   |
|                    | R    | 77    | 43   | 13   | ..   | 2    | 6     | 519   | 647   | 176  | 1,483                             | 32.31   |
|                    | U    | ..    | ..   | ..   | ..   | ..   | ..    | ..    | 27    | ..   | 27                                | 151.69  |
| 6. Ganjam          | T    | 1,450 | 387  | 601  | 153  | 77   | 459   | 7,924 | 892   | 125  | 12,223                            | 44.70   |
|                    | R    | 1,376 | 386  | 599  | 153  | 76   | 190   | 7,628 | 888   | 125  | 11,576                            | 49.73   |
|                    | U    | 74    | 1    | 2    | ..   | 1    | 269   | 296   | 4     | ..   | 647                               | 39.91   |
| 7. Sundargarh      | T    | ..    | 123  | 7    | 11   | 7    | 35    | 531   | 234   | 122  | 1,084                             | 13.24   |
|                    | R    | ..    | 123  | 7    | 11   | 7    | 35    | 529   | 234   | 120  | 1,080                             | 13.39   |
|                    | U    | ..    | ..   | ..   | ..   | ..   | ..    | 2     | ..    | 2    | 4                                 | 3.27    |
| 8. Dhenkanal       | T    | 76    | 167  | 17   | 15   | 25   | 1,359 | 576   | 42    | 10   | 2,552                             | 18.48   |
|                    | R    | 76    | 167  | 17   | 15   | 25   | 1,359 | 576   | 42    | 10   | 2,552                             | 18.50   |
|                    | U    | ..    | ..   | ..   | ..   | ..   | ..    | ..    | ..    | ..   | ..                                | ..      |
| 9. Puri            | T    | 306   | 559  | 203  | 45   | 14   | 979   | 3,699 | 232   | 2    | 6,080                             | 22.48   |
|                    | R    | 270   | 557  | 199  | 45   | 10   | 930   | 3,623 | 224   | 2    | 5,900                             | 23.23   |
|                    | U    | 36    | 2    | 4    | ..   | 4    | 49    | 76    | 8     | ..   | 180                               | 10.99   |

|                |   |       |       |       |     |     |     |       |        |        |       |        |       |
|----------------|---|-------|-------|-------|-----|-----|-----|-------|--------|--------|-------|--------|-------|
| 10. Keonjhar   | T | ..    | 75    | 40    | 32  | 21  | 2   | 234   | 861    | 131    | 7     | 1,403  | 14:60 |
|                | R | ..    | 75    | 40    | 32  | 21  | 2   | 234   | 861    | 129    | 5     | 1,399  | 14:65 |
|                | U | ..    | ..    | ..    | ..  | ..  | ..  | ..    | ..     | 2      | 2     | 4      | 6:49  |
| 11. Cuttack    | T | 2,425 | 4,789 | 422   | 107 | 58  | 135 | 1,510 | 4,740  | 499    | 98    | 14,783 | 31:24 |
|                | R | 2,174 | 4,787 | 421   | 106 | 58  | 135 | 1,493 | 4,527  | 412    | 98    | 14,211 | 32:01 |
|                | U | 251   | 2     | 1     | 1   | ..  | ..  | 17    | 213    | 87     | ..    | 572    | 19:56 |
| 12. Mayurbhanj | T | ..    | 201   | 19    | 12  | 23  | 5   | 178   | 586    | 247    | 5     | 1,276  | 9:30  |
|                | R | ..    | 201   | 19    | 12  | 23  | 5   | 178   | 583    | 247    | 5     | 1,273  | 9:32  |
|                | U | ..    | ..    | ..    | ..  | ..  | ..  | ..    | 3      | ..     | ..    | 3      | 4:41  |
| 13. Balasore   | T | 1,029 | 247   | 24    | 31  | 2   | 9   | 244   | 571    | 45     | 14    | 2,216  | 13:74 |
|                | R | 990   | 246   | 24    | 31  | 1   | 8   | 240   | 569    | 40     | 14    | 2,163  | 13:59 |
|                | U | 39    | 1     | ..    | ..  | 1   | 1   | 4     | 2      | 5      | ..    | 53     | 24:73 |
| 14. Orissa     | T | 6,527 | 8,309 | 1,781 | 879 | 416 | 678 | 5,250 | 25,942 | 11,218 | 1,978 | 62,978 | 27:58 |
|                | R | 6,080 | 8,301 | 1,774 | 878 | 400 | 676 | 4,909 | 25,177 | 11,064 | 1,949 | 61,208 | 27:68 |
|                | U | 447   | 8     | 7     | 1   | 16  | 2   | 341   | 765    | 154    | 29    | 1,770  | 24:53 |

**TABLE XIII**  
**Deaths from Fever by districts in the rural and urban subdivisions during each of the years 1951—60**

| State/Districts        | (T=Total R=Rural U=Urban) |        |         |         |         |         |         |         |         |         |           |        |      | Proportion p.r<br>1,000 total deaths |         |
|------------------------|---------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|--------|------|--------------------------------------|---------|
|                        | 1951                      | 1952   | 1953    | 1954    | 1955    | 1956    | 1957    | 1958    | 1959    | 1960    | 1961      | 1962   | 1963 | 1951—60                              | 1951—60 |
| 1. Kalahandi           | T ..                      | 14,398 | 16,899  | 13,456  | 14,466  | 15,412  | 16,991  | 15,022  | 13,609  | 13,696  | 133,949   | 786.96 |      |                                      |         |
|                        | R ..                      | 14,398 | 16,899  | 13,398  | 14,425  | 15,405  | 16,953  | 14,979  | 13,581  | 13,672  | 133,710   | 789.32 |      |                                      |         |
|                        | U ..                      | ..     | ..      | 58      | 41      | 7       | 38      | 43      | 28      | 24      | 239       | 294.33 |      |                                      |         |
| 2. Koraput             | T ..                      | 207    | 313     | 258     | 224     | 233     | 321     | 271     | 303     | 328     | 2,694     | 493.14 |      |                                      |         |
|                        | R ..                      | 207    | 313     | 177     | 148     | 136     | 213     | 155     | 202     | 158     | 1,945     | 471.97 |      |                                      |         |
|                        | U ..                      | ..     | ..      | 81      | 76      | 97      | 108     | 116     | 101     | 170     | 749       | 558.12 |      |                                      |         |
| 3. Sambalpur           | T ..                      | 10,667 | 16,076  | 14,531  | 12,735  | 10,076  | 14,842  | 12,953  | 11,363  | 11,517  | 128,470   | 548.07 |      |                                      |         |
|                        | R ..                      | 10,631 | 16,008  | 14,518  | 12,648  | 9,991   | 14,764  | 12,862  | 11,199  | 11,378  | 127,639   | 548.32 |      |                                      |         |
|                        | U ..                      | 36     | 68      | 13      | 87      | 85      | 78      | 91      | 164     | 139     | 831       | 512.65 |      |                                      |         |
| 4. Bolangir            | T ..                      | ..     | 17,642  | 17,178  | 13,969  | 13,843  | 16,713  | 12,990  | 11,616  | 10,329  | 127,246   | 650.16 |      |                                      |         |
|                        | R ..                      | ..     | 17,574  | 17,054  | 13,877  | 13,734  | 16,553  | 12,854  | 11,267  | 9,972   | 125,742   | 651.45 |      |                                      |         |
|                        | U ..                      | ..     | 68      | 124     | 89      | 109     | 160     | 136     | 349     | 357     | 1,504     | 557.86 |      |                                      |         |
| 5. Baudh-<br>Khondmals | T ..                      | 1,857  | 4,618   | 3,711   | 4,151   | 4,064   | 3,885   | 3,306   | 2,364   | 2,596   | 34,211    | 742.51 |      |                                      |         |
|                        | R ..                      | 1,857  | 4,618   | 3,711   | 4,151   | 4,064   | 3,885   | 3,306   | 2,340   | 2,587   | 34,179    | 744.69 |      |                                      |         |
|                        | U ..                      | ..     | ..      | ..      | ..      | ..      | ..      | ..      | 24      | 8       | 32        | 179.78 |      |                                      |         |
| 6. Ganjam              | T ..                      | 17,694 | 13,363  | 17,014  | 10,186  | 9,862   | 15,148  | 13,462  | 11,793  | 9,254   | 128,090   | 468.50 |      |                                      |         |
|                        | R ..                      | 17,324 | 13,028  | 16,767  | 9,959   | 9,617   | 14,878  | 13,094  | 11,431  | 8,909   | 125,070   | 484.12 |      |                                      |         |
|                        | U ..                      | 370    | 335     | 247     | 227     | 245     | 270     | 368     | 362     | 345     | 3,020     | 200.53 |      |                                      |         |
| 7. Sundargarh          | T ..                      | ..     | 7,025   | 6,425   | 6,515   | 6,342   | 6,526   | 5,647   | 4,475   | 4,619   | 54,106    | 660.64 |      |                                      |         |
|                        | R ..                      | ..     | 6,995   | 6,385   | 6,479   | 6,286   | 6,422   | 5,535   | 4,378   | 4,410   | 53,390    | 661.78 |      |                                      |         |
|                        | U ..                      | ..     | 30      | 40      | 36      | 56      | 104     | 112     | 97      | 209     | 716       | 585.45 |      |                                      |         |
| 8. Dhenkanal           | T ..                      | 2,702  | 8,808   | 9,397   | 8,951   | 9,139   | 12,206  | 9,625   | 8,509   | 8,956   | 87,224    | 631.57 |      |                                      |         |
|                        | R ..                      | 2,702  | 8,808   | 9,397   | 8,951   | 9,139   | 12,206  | 9,625   | 8,472   | 8,926   | 87,157    | 631.88 |      |                                      |         |
|                        | U ..                      | ..     | ..      | ..      | ..      | ..      | ..      | ..      | 37      | 30      | 67        | 385.06 |      |                                      |         |
| 9. Puri                | T ..                      | 11,994 | 15,334  | 13,738  | 11,001  | 8,905   | 12,645  | 12,180  | 10,211  | 12,918  | 118,843   | 439.49 |      |                                      |         |
|                        | R ..                      | 11,620 | 14,798  | 13,267  | 10,576  | 8,358   | 12,016  | 11,539  | 9,787   | 12,297  | 113,679   | 447.50 |      |                                      |         |
|                        | U ..                      | 374    | 536     | 471     | 425     | 547     | 629     | 641     | 424     | 621     | 5,164     | 351.28 |      |                                      |         |
| 10. Keonjhar           | T ..                      | ..     | 8,759   | 8,907   | 8,220   | 7,732   | 10,032  | 9,676   | 7,683   | 9,133   | 77,664    | 808.17 |      |                                      |         |
|                        | R ..                      | ..     | 8,632   | 8,825   | 8,141   | 7,499   | 10,032  | 9,676   | 7,632   | 9,072   | 77,241    | 808.96 |      |                                      |         |
|                        | U ..                      | ..     | 127     | 82      | 79      | 23      | ..      | ..      | 51      | 61      | 423       | 686.69 |      |                                      |         |
| 11. Cuttack            | T ..                      | 19,783 | 27,883  | 24,976  | 19,675  | 17,830  | 21,610  | 16,237  | 13,045  | 16,506  | 193,270   | 408.46 |      |                                      |         |
|                        | R ..                      | 19,276 | 27,466  | 24,405  | 19,203  | 17,297  | 21,028  | 15,897  | 12,639  | 16,078  | 188,573   | 424.78 |      |                                      |         |
|                        | U ..                      | 507    | 417     | 571     | 472     | 533     | 582     | 340     | 406     | 428     | 4,697     | 160.63 |      |                                      |         |
| 12. Mayurbhanj         | T ..                      | ..     | 12,676  | 12,576  | 11,491  | 10,564  | 15,011  | 14,592  | 11,704  | 13,769  | 111,954   | 815.86 |      |                                      |         |
|                        | R ..                      | ..     | 12,641  | 12,540  | 11,463  | 10,523  | 14,990  | 14,576  | 11,690  | 13,761  | 111,723   | 818.23 |      |                                      |         |
|                        | U ..                      | ..     | 35      | 36      | 28      | 41      | 21      | 16      | 14      | 8       | 231       | 339.71 |      |                                      |         |
| 13. Balasore           | T ..                      | 15,740 | 14,875  | 14,532  | 12,002  | 8,494   | 11,255  | 9,798   | 8,254   | 11,647  | 114,852   | 711.87 |      |                                      |         |
|                        | R ..                      | 15,675 | 14,842  | 14,499  | 11,950  | 8,455   | 11,228  | 9,785   | 8,096   | 11,560  | 114,333   | 718.19 |      |                                      |         |
|                        | U ..                      | 65     | 33      | 33      | 52      | 12      | 27      | 13      | 158     | 87      | 519       | 242.18 |      |                                      |         |
| 14. Orissa             | T ..                      | 80,644 | 161,693 | 160,197 | 132,108 | 122,527 | 157,185 | 135,759 | 114,929 | 125,267 | 1,312,573 | 574.80 |      |                                      |         |
|                        | R ..                      | 79,292 | 160,044 | 158,580 | 130,495 | 120,525 | 155,168 | 133,883 | 112,714 | 122,780 | 1,294,381 | 585.33 |      |                                      |         |
|                        | U ..                      | 1,352  | 1,649   | 1,617   | 1,613   | 1,732   | 2,017   | 1,876   | 2,215   | 2,487   | 18,192    | 252.09 |      |                                      |         |

TABLE XIV

Live births, still births, infant deaths by districts and their rates for the decade 1951—60

| State/Districts       | Live Births | Still Births | Infant Deaths | Birth Rate | Still Birth Rate | Infant Death Rate |
|-----------------------|-------------|--------------|---------------|------------|------------------|-------------------|
| 1                     | 2           | 3            | 4             | 5          | 6                | 7                 |
| 1. Kalahandi ..       | 262,118     | 9,733        | 33,053        | 31·0       | 35·8             | 126·1             |
| 2. Koraput ..         | 7,758       | 96           | 505           | 11·3       | 12·2             | 65·1              |
| 3. Sambalpur ..       | 360,366     | 806          | 58,186        | 25·7       | 2·2              | 161·5             |
| 4. Bolangir           | 306,767     | 3,175        | 53,822        | 34·1       | 10·2             | 175·5             |
| 5. Baudh-Khondmals .. | 61,367      | 1,500        | 8,544         | 12·7       | 23·9             | 139·2             |
| 6. Ganjam ..          | 414,196     | 4,926        | 69,775        | 24·2       | 11·8             | 168·5             |
| 7. Sundargarh ..      | 139,146     | 3,363        | 14,781        | 23·3       | 23·6             | 106·2             |
| 8. Dhenkanal ..       | 241,441     | 3,113        | 35,618        | 25·9       | 12·7             | 147·5             |
| 9. Puri ..            | 407,872     | 20,590       | 66,546        | 23·8       | 48·1             | 163·2             |
| 10. Keonjhar ..       | 168,927     | 4,372        | 20,114        | 28·0       | 25·2             | 119·1             |
| 11. Cuttack ..        | 747,032     | 28,556       | 114,326       | 26·8       | 36·8             | 153·0             |
| 12. Mayurbhanj ..     | 231,897     | 2,981        | 16,806        | 23·0       | 12·7             | 72·5              |
| 13. Balasore ..       | 290,919     | 11,941       | 37,792        | 23·2       | 39·4             | 129·9             |
| 14. Orissa ..         | 3,639,806   | 95,152       | 529,868       | 25·4       | 25·5             | 145·6             |

**TABLE**  
**Deaths by months during 1960 in the State of Orissa due to**  
(M=Males F=Females R=Rural)

| Causes of death               |      | January |       | February |       | March |       |
|-------------------------------|------|---------|-------|----------|-------|-------|-------|
|                               |      | M       | F     | M        | F     | M     | F     |
| 1                             |      | 2       | 3     | 4        | 5     | 6     | 7     |
| Cholera                       | R .. | 3       | 5     | 6        | 2     | 4     | 2     |
|                               | U .. | 3       | 5     | 6        | 2     | 4     | 2     |
|                               | T .. | 3       | 5     | 6        | 2     | 4     | 2     |
| Smallpox                      | R .. | 126     | 132   | 86       | 108   | 107   | 129   |
|                               | U .. | 126     | 132   | 88       | 109   | 110   | 132   |
|                               | T .. | 126     | 132   | 88       | 109   | 110   | 132   |
| Fever                         | R .. | 4,781   | 4,673 | 4,343    | 4,261 | 4,905 | 4,407 |
|                               | U .. | 110     | 106   | 98       | 81    | 102   | 82    |
|                               | T .. | 4,891   | 4,779 | 4,441    | 4,342 | 5,007 | 4,489 |
| Dysentery<br>and<br>Diarrhoea | R .. | 402     | 350   | 358      | 335   | 378   | 358   |
|                               | U .. | 48      | 31    | 28       | 19    | 29    | 27    |
|                               | T .. | 450     | 381   | 386      | 354   | 407   | 385   |
| Respiratory<br>diseases       | R .. | 309     | 183   | 236      | 148   | 315   | 199   |
|                               | U .. | 30      | 22    | 20       | 11    | 29    | 15    |
|                               | T .. | 339     | 205   | 256      | 159   | 344   | 214   |
| Wounds<br>and<br>accidents    | R .. | 78      | 73    | 66       | 52    | 102   | 103   |
|                               | U .. | 8       | 3     | 6        | 2     | 7     | 8     |
|                               | T .. | 86      | 76    | 72       | 54    | 109   | 111   |
| Other<br>causes               | R .. | 2,586   | 2,444 | 2,132    | 2,054 | 2,184 | 2,050 |
|                               | U .. | 239     | 188   | 206      | 171   | 167   | 151   |
|                               | T .. | 2,825   | 2,632 | 2,338    | 2,225 | 2,351 | 2,201 |
| Total deaths                  | R .. | 8,285   | 7,860 | 7,227    | 6,960 | 7,995 | 7,248 |
|                               | U .. | 435     | 350   | 360      | 285   | 337   | 286   |
|                               | T .. | 8,720   | 8,210 | 7,587    | 7,245 | 8,332 | 7,534 |



## XV

## various causes classified by sex for rural and urban subdivisions

U=Urban T=Total )

| April |       | May    |       | June  |       | July  |       |
|-------|-------|--------|-------|-------|-------|-------|-------|
| M     | F     | M      | F     | M     | F     | M     | F     |
| 8     | 9     | 10     | 11    | 12    | 13    | 14    | 15    |
| 4     | 8     | 15     | 18    | 20    | 21    | 16    | 9     |
| ..    | ..    | 1      | 1     | ..    | ..    | ..    | ..    |
| 4     | 8     | 16     | 19    | 20    | 21    | 16    | 9     |
| 137   | 133   | 133    | 126   | 120   | 115   | 97    | 83    |
| 2     | 1     | 1      | 3     | ..    | 5     | 1     | 1     |
| 139   | 134   | 134    | 129   | 120   | 120   | 98    | 84    |
| 5,493 | 4,968 | 5,933  | 5,689 | 4,973 | 4,697 | 5,205 | 5,005 |
| 97    | 80    | 79     | 82    | 91    | 90    | 110   | 112   |
| 5,590 | 5,048 | 6,012  | 5,771 | 5,064 | 4,787 | 5,315 | 5,117 |
| 431   | 420   | 559    | 458   | 491   | 396   | 636   | 524   |
| 38    | 35    | 36     | 33    | 34    | 26    | 77    | 53    |
| 469   | 455   | 595    | 491   | 525   | 422   | 713   | 577   |
| 264   | 173   | 306    | 186   | 249   | 181   | 292   | 197   |
| 34    | 23    | 18     | 15    | 17    | 8     | 23    | 20    |
| 298   | 196   | 324    | 201   | 266   | 189   | 315   | 217   |
| 119   | 103   | 186    | 155   | 168   | 144   | 175   | 150   |
| 11    | 5     | 8      | 7     | 5     | 3     | 7     | 6     |
| 130   | 108   | 194    | 162   | 173   | 147   | 182   | 156   |
| 2,310 | 2,092 | 2,625  | 2,530 | 2,462 | 2,338 | 2,929 | 2,657 |
| 202   | 149   | 185    | 169   | 186   | 137   | 239   | 161   |
| 2,512 | 2,241 | 2,810  | 2,699 | 2,648 | 2,475 | 3,168 | 2,818 |
| 8,758 | 7,897 | 9,757  | 9,162 | 8,483 | 7,892 | 9,350 | 8,625 |
| 384   | 293   | 328    | 310   | 333   | 269   | 457   | 353   |
| 9,142 | 8,190 | 10,085 | 9,472 | 8,816 | 8,161 | 9,807 | 8,978 |

**TABLE**

**Deaths by months during 1960 in the State of Orissa due to**  
( M=Males F=Females R=Rural

| Causes of death               |      | August |       | September |       | October |       |
|-------------------------------|------|--------|-------|-----------|-------|---------|-------|
|                               |      | M      | F     | M         | F     | M       | F     |
| 1                             |      | 16     | 17    | 18        | 19    | 20      | 21    |
| Cholera                       | R .. | 7      | 13    | 12        | 6     | 12      | 10    |
|                               | U .. | ..     | ..    | ..        | ..    | ..      | ..    |
|                               | T .. | 7      | 13    | 12        | 6     | 12      | 10    |
| Smallpox                      | R .. | 46     | 42    | 40        | 37    | 21      | 17    |
|                               | U .. | 2      | 3     | ..        | ..    | ..      | ..    |
|                               | T .. | 48     | 45    | 40        | 37    | 21      | 17    |
| Fever                         | R .. | 5,918  | 5,662 | 5,991     | 5,838 | 5,372   | 5,352 |
|                               | U .. | 157    | 141   | 162       | 126   | 142     | 131   |
|                               | T .. | 6,075  | 5,803 | 6,153     | 5,964 | 5,514   | 5,483 |
| Dysentery<br>and<br>Diarrhoea | R .. | 630    | 614   | 669       | 594   | 574     | 522   |
|                               | U .. | 82     | 53    | 57        | 39    | 44      | 37    |
|                               | T .. | 712    | 667   | 726       | 633   | 618     | 559   |
| Respiratory<br>disease s      | R .. | 279    | 189   | 279       | 245   | 297     | 204   |
|                               | U .. | 30     | 21    | 26        | 18    | 34      | 19    |
|                               | T .. | 309    | 210   | 305       | 263   | 331     | 223   |
| Wounds<br>and<br>accidents    | R .. | 190    | 144   | 207       | 201   | 204     | 224   |
|                               | U .. | 11     | 4     | 13        | 10    | 11      | 13    |
|                               | T .. | 201    | 148   | 220       | 211   | 215     | 237   |
| Other causes                  | R .. | 3,098  | 2,826 | 2,736     | 2,668 | 2,354   | 2,121 |
|                               | U .. | 274    | 184   | 208       | 183   | 250     | 208   |
|                               | T .. | 3,372  | 3,010 | 2,944     | 2,851 | 2,604   | 2,329 |
| Total deaths                  | R .. | 10,168 | 9,490 | 9,934     | 9,589 | 8,834   | 8,450 |
|                               | U .. | 556    | 406   | 466       | 376   | 481     | 408   |
|                               | T .. | 10,724 | 9,896 | 10,400    | 9,965 | 9,315   | 8,858 |

## XV

various causes classified by sex for rural and urban subdivisions—concl'd.

U=Urban T=Total)

| November |       | December |       | Total   |         |         |
|----------|-------|----------|-------|---------|---------|---------|
| M        | F     | M        | F     | M       | F       | T       |
| 22       | 23    | 24       | 25    | 26      | 27      | 28      |
| 38       | 46    | 12       | 17    | 149     | 157     | 306     |
| ..       | ..    | ..       | ..    | 1       | 1       | 2       |
| 38       | 46    | 12       | 17    | 150     | 158     | 308     |
| 36       | 28    | 22       | 28    | 971     | 978     | 1,949   |
| 1        | ..    | ..       | ..    | 12      | 17      | 29      |
| 37       | 28    | 22       | 28    | 983     | 995     | 1,978   |
| 5,064    | 4,873 | 4,930    | 4,447 | 62,908  | 59,872  | 122,780 |
| 82       | 63    | 89       | 74    | 1,319   | 1,168   | 2,487   |
| 5,146    | 4,936 | 5,019    | 4,521 | 64,227  | 61,040  | 125,267 |
| 493      | 458   | 526      | 446   | 6,147   | 5,475   | 11,622  |
| 22       | 22    | 30       | 28    | 525     | 403     | 928     |
| 515      | 480   | 556      | 474   | 6,672   | 5,878   | 12,550  |
| 300      | 215   | 287      | 226   | 3,413   | 2,346   | 15,759  |
| 28       | 19    | 30       | 23    | 319     | 214     | 566     |
| 328      | 234   | 317      | 249   | 3,732   | 2,560   | 6,292   |
| 162      | 166   | 148      | 126   | 1,805   | 1,641   | 3,446   |
| 4        | 4     | 5        | 2     | 96      | 67      | 163     |
| 166      | 170   | 153      | 128   | 1,901   | 1,708   | 3,609   |
| 2,223    | 2,165 | 2,341    | 2,140 | 29,980  | 28,085  | 58,065  |
| 206      | 140   | 223      | 181   | 2,585   | 2,022   | 4,607   |
| 2,429    | 2,305 | 2,564    | 2,321 | 32,565  | 30,107  | 62,672  |
| 8,316    | 7,951 | 8,266    | 7,430 | 105,373 | 98,554  | 203,927 |
| 343      | 248   | 377      | 308   | 4,857   | 3,892   | 8,749   |
| 8,659    | 8,199 | 8,643    | 7,738 | 110,230 | 102,446 | 212,676 |

**TABLE XVI**  
**List of urban registration units**

| District           | Town             | Popula-<br>tion<br>(1961) | District       | Town           | Populat-<br>ion<br>(1961) |
|--------------------|------------------|---------------------------|----------------|----------------|---------------------------|
| 1                  | 2                | 3                         | 1              | 2              | 3                         |
| 1. Kalahandi       | .. Bhawanipatna  | 14,300                    | 7. Sundargarh  | .. Sundargarh  | 11,329                    |
| 2. Koraput         | .. Jeypore       | 25,291                    |                | .. Birmitrapur | 20,301                    |
| 3. Sambalpur       | .. Deogarh       | 6,839                     | 8. Dhenkanal   | .. Bhuban      | 9,476                     |
|                    | .. Jharsuguda    | 19,227                    | 9. Puri        | .. Puri        | 60,815                    |
|                    | .. Sambalpur     | 38,915                    |                | .. Bhubaneswar | 38,211                    |
|                    | .. Bargarh       | 15,375                    | 10. Keonjhar   | .. Keonjhar    | 12,624                    |
| 4. Bolangir        | .. Bolangir      | 18,663                    | 11. Cuttack    | .. Cuttack     | 146,308                   |
|                    | .. Sonapur       | 7,108                     |                | .. Kendrapara  | 15,830                    |
|                    | .. Patnagarh     | 7,592                     |                | .. Jajpur      | 13,802                    |
|                    | .. Titlagarh     | 7,433                     | 12. Mayurbhanj | .. Baripada    | 20,301                    |
|                    | .. Kantabanji    | 8,863                     | 13. Balasore   | .. Balasore    | 33,931                    |
| 5. Baudh-khondmals | Baudh            | 6,088                     |                | .. Bhadrak     | 25,285                    |
| 6. Ganjam          | .. Berhampur     | 75,931                    |                |                |                           |
|                    | .. Parlakhemundi | 22,708                    |                |                |                           |

## **FERTILITY SURVEY**



## FERTILITY SURVEY

The object of the post-census fertility survey was to collect information on the fertility pattern of Indian women and incidentally to obtain information on working force, since each individual in the household was being followed in any case. All ever-married women were to be included within the scope of the survey and their fertility differentials were to be studied by the various characteristics.

Once population is reckoned as an important factor influencing development and planning in a welfare State, it is imperative to study the factors contributing to its variation. Of the three components of population variation, birth and death are certainly important as migration contributes to a negligible part to population dynamics. Thus, the study of the fertility and mortality patterns goes a long way to unfold revealing truths and predictions about the population pattern which, as a complex phenomenon in itself, is intimately connected with any form of socio-economic planning.

The population growth in Orissa has been conspicuously dynamic during the decade 1951—60. Enumeration and registration of data on births and deaths in Orissa is grossly incomplete and the vital statistics thrown up by them are too deficient and unreliable to indicate any accurate trend. The need to undertake and complete the sample census on fertility in the post-census period thus received added importance in the context of the prevailing deficient data.

The idea to make fertility the subject of a sample survey to be conducted by investigators over whom the Census Organization has control was initially mooted at the first conference of Superintendents of Census Operations in 1959. In the post-census period the first guide lines from the Registrar

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General, India were received in October, 1961 when the bulk of the sorting work was going to be finished and a good complement of staff were available for the special sample survey.

It was decided that the frame should correspond broadly to the Census territorial divisions and those sample villages and urban Blocks as were selected for the post-enumeration check should be earmarked as samples for this special survey.

The Census territorial divisions correspond closely to the administrative divisions from the district downwards to the village. In urban localities, the Town areas and thereafter the Municipal or Union wards come into the picture. The smallest Census territorial unit is a Block which comprises either one whole village or two or more whole villages so as to comprise 150 households or 750 persons on the average in the rural areas and 120 households or 600 persons in the urban areas.

Accordingly, in the State of Orissa fertility survey was to be undertaken in 147 rural and 84 urban P. E. C. Blocks which were 1 and 5 per cent respectively of the total rural and urban Blocks in the State. But as some of these P. E. C. Blocks in the coastal districts of Orissa had been badly affected by flood, some Blocks were excluded and finally 111 rural and 79 urban P. E. C. Blocks were selected in consultation with the Deputy Registrar General. The districtwise distribution of the sample Blocks is given in the Table below. The fertility survey covered a population of 1,26,584 of which 84,844 were rural and 41,740 were urban. The population comprised 61,042 females of which 25,264 were never married and 35,778 were ever-married females.

**Table 1**  
DISTRICTWISE DISTRIBUTION OF SAMPLE BLOCKS

| District        | Sample Blocks |           |
|-----------------|---------------|-----------|
|                 | Rural         | Urban     |
| Kalahandi       | 7             | 2         |
| Koraput         | 5             | 6         |
| Sambalpur       | 15            | 10        |
| Bolangir        | 11            | 2         |
| Baudh-Khondmals | 2             | 1         |
| Ganjam          | 15            | 12        |
| Sundargarh      | 8             | 9         |
| Dhenkanal       | 9             | 3         |
| Puri            | 10            | 10        |
| Konjhar         | 3             | 2         |
| Cuttack         | 20            | 12        |
| Mayurbhanj      | 6             | 3         |
| Balasore        | 10            | 6         |
| <b>Total</b>    | <b>121</b>    | <b>79</b> |

Two schedules were prescribed for fertility survey. One was a Household schedule (Appendix A) and the other a Fertility slip (Appendix B).

The household schedule had 3 sections. In section I the names of all persons of the household present in the village or town at the time of investigator's visit were to be entered. Such other details as their relationship with the household, sex, age and marital status had to be mentioned so as to provide a possible clue to any omission in the list of inmates. Section II carried great importance as the questions were designed to find out if there was any woman in the household who married more than once. As any direct question on the point might prove embarrassing and may be resented by many females, a general question 'A' was asked whose answer when in the affirmative was to be pursued further for completing forthwith her particulars in respect of remarriages at the top right hand corner of this women's fertility slip. The third section related to persons above 10 years of age with the intention to find out the number of working persons in the household. This section was designed to bring to focus the significance of occupational pattern based on 15 days reference period and position regarding seasonal workers.

One slip had to be filled for every woman who was ever married. The slip contained 14 columns in all and many answers were to be recorded within

geometrical designs so as to make them suitable for hand sorting. The aim was to collect information on the total number of children of an ever married woman, cross-tabulated with reference to her age at marriage, duration of married life, religion, education and the husband's status. All the births occurring to the woman were broadly classified into two categories; one in Column 12 took stock of only the current level of births, i. e., all births occurring between Diwali 1960 to Diwali 1961. Other births occurring prior to Diwali 1960 were mentioned against Column 13.

All the three Deputy Superintendents in Pilot survey charge of the regional tabulation offices located at Cuttack, Sambalpur and Berhampur remained in charge of the survey in their respective areas. Persons employed for tabulation served as investigators. Training was imparted to them in a pilot survey, in 6 rural and 4 urban blocks. The pilot survey more in the nature of pretest operation helped to highlight difficulties, if any, in obtaining answers to different questions in the fertility slip. Prevalence of purda system and general resentment of women married more than once to answer questions were a few of the many difficulties faced by the investigators.

The investigation work commenced on 21st January, 1962 and was completed on 5th March, 1962. The slips, after investigation were brought to Cuttack for scrutiny, processing, coding and tabulation in accordance with the instructions received from the Registrar General, India.

The fertility slips were first sorted for the following four categories of women. The number of women in each category is also indicated against each.

*Group A—Women married only once and still in married state:*

| Total  | Rural  | Urban |
|--------|--------|-------|
| 28,497 | 19,676 | 8,821 |

*Group B—Women married only once but now widowed or divorced:*

| Total | Rural | Urban |
|-------|-------|-------|
| 6,722 | 4,811 | 1,911 |



**Group C—Women married more than once but in married state now :**

| Total | Rural | Urban |
|-------|-------|-------|
| 497   | 428   | 69    |

**Group D—Women married more than once but now widowed or divorced :**

| Total | Rural | Urban |
|-------|-------|-------|
| 62    | 56    | 6     |

The following broad concepts and definitions were adopted for the purpose of the survey.

(1) *Ever married woman*—The term 'ever married woman' included all women who had married any time during their lives, i. e., women who were still in the marital status and women divorced or separated or widowed at the time of investigator's visit.

(2) *Current and lifetime fertility*—Current fertility refers to births during the last 12 months while by the term 'lifetime fertility' is meant all the children born to a woman of completed fertility or of specified duration of married life.

(3) *Live and still births*—If a child is born alive it is a live birth even though it may die soon after. If the child is born dead, i. e., it does not show any sign of life after birth, it is a still birth. Live birth is the complete expulsion or extraction from its mother of a product of conception irrespective of the duration of pregnancy which, after such separation, breathes or shows signs of life. Foetal death is a death prior to the complete expulsion or extraction from its mother of a product of conception irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the foetus does not breathe or show any other evidence of life. If such a product of conception has attained at least 28 weeks of gestation, it will be termed as a still birth.

(4) *Parity progression ratio*—Parity ratio of order N is defined in terms of probability of women with 'n' children already obtaining the n+1th-

Thus parity progression ratio for the n + 1th parity is the proportion of women who got the n + 1th child having born 'n' children. To illustrate the point, if parity ratio for order 4 is 0.84 in rural and 0.85 in urban, it implies that out of 100 women having four children 84 in rural and 85 in urban go to have fifth child and the remaining women stop child bearing after the fourth birth order.

(5) *Sterility ratio*—Sterility ratio is the complement of parity progression ratio and can be interpreted accordingly as proportion of women who cease reproduction after getting the nth child.

(6) *Marital age specific fertility rate*—This refers to the number of live births to 1,000 married women in the specified age-group in a year.

The data collected in the course of survey suffered from various handicaps. Though age is the most important criterion and the quality of data is apt to suffer greatly in absence of correct reporting of data on age, general ignorance of the rural and backward sample population on this score affected proportionately the data collected. As indicated earlier, prevalence of purda system, general apathy of the rural mass to enquiries of this nature and the smallness of the size of the sample are a few other factors which affected the quantitative assessment of figures. An abridged set of 13 Tables were, therefore, prepared for presentation at the end of the report.

Attained age and marital status are two important points which control a woman's reproductive behaviour. Marital status with four-fold classification into 'A', 'B', 'C' and 'D' has been adopted for the sake of convenience. The Table

Results of the survey

Distribution of women of reproductive age-group

below gives the total number of women and their percentage distribution according to attained age.

**Table 2**

PERCENTAGE DISTRIBUTION OF WOMEN BY ATTAINED AGE  
(ALL WOMEN)

| Attained age  | Total number of women |        | Percentage distribution |       |
|---------------|-----------------------|--------|-------------------------|-------|
|               | Rural                 | Urban  | Rural                   | Urban |
| 12 & below .. | 106                   | 9      | 0.4                     | 0.1   |
| 13--17 ..     | 1,041                 | 477    | 4.2                     | 4.4   |
| 18--22 ..     | 3,942                 | 1,882  | 15.8                    | 17.4  |
| 23--27 ..     | 3,572                 | 1,656  | 14.3                    | 15.3  |
| 28--32 ..     | 3,778                 | 1,696  | 15.1                    | 15.7  |
| 33--37 ..     | 2,374                 | 1,031  | 9.5                     | 9.5   |
| 38--42 ..     | 2,687                 | 1,141  | 10.8                    | 10.6  |
| 43--47 ..     | 1,760                 | 698    | 7.0                     | 6.5   |
| 48+ ..        | 5,708                 | 2,217  | 22.9                    | 20.5  |
| Total ..      | 24,971                | 10,807 | 100.0                   | 100.0 |

It will be seen therefrom that of the total number of females included in the sample, about 69.7 per cent in rural and 72.9 per cent in urban areas fall within the reproductive age-group of 13 to 42. Their number, however, 12 or below is insignificant. But the distribution in the age-group 48 and above is considerable both in Rural and Urban areas.

The Table below presents the distribution of women according to the 4 categories of their marital status that a very large and substantial proportion of the female population should belong to category 'A' i. e., women married only once and still in married state reflects in a way the society where polyandry is looked down upon. Proportion of women belonging to the 'C' and 'D' categories are, therefore, very small in both Rural and Urban areas.

**Table 3**

PERCENTAGE DISTRIBUTION OF WOMEN  
BY MARITAL STATUS

| Marital status | Total number of women |        | Percentage distribution |       |
|----------------|-----------------------|--------|-------------------------|-------|
|                | Rural                 | Urban  | Rural                   | Urban |
| A ..           | 19,676                | 8,821  | 78.8                    | 81.6  |
| B ..           | 4,811                 | 1,911  | 19.3                    | 17.7  |
| C ..           | 428                   | 69     | 1.7                     | 0.6   |
| D ..           | 56                    | 6      | 0.2                     | 0.1   |
| Total ..       | 24,971                | 10,807 | 100.0                   | 100.0 |

A—Women married only once and still in married state.

B—Women married only once but now widowed or divorced.

C—Women married more than once but in married state now.

D—Women married more than once but now widowed or divorced.

Table I in the Appendix gives the distribution of women according to the frequency of marriage. The only significant result imagined from the Table by number of times married is that in all age-groups those marrying once constitute the predominating majority and those marrying more than once constitute a very small proportion. Of the latter, the highest distribution seems to be in the age-group of 33 and above and though frequency to the extent 4 does not occur in the urban sample at all, the same in the rural areas are confined to the age-group of 28 and above.

The Table below gives the cross classification of women under group 'A' by their age at marriage against marriage duration. Irrespective of the marriage duration, majority of the marriages seem to occur below 18 years of age. It will appear from the Table that women with a longer marriage duration prefer to marry in more numbers before they were

18 than those with a shorter marriage duration. This trend is more noticeable in urban areas than in rural areas which would otherwise establish that marriage below 18 still enjoys greater popularity in the rural areas. An opposite trend is noticeable in the age-groups of 18 and above which goes to establish the contrary trend that more number of women in rural and urban areas prefer to marry above 18 in recent years. Another perceptible trend seems to exist in urban sector where a clear break through in the matter of preference of advance age at marriage is noticed compared to the rural areas. To cite the figures, 19·8 per cent of the sample women under group 'A' in urban areas with the marriage duration of below one year have married at 18 years and above compared to 11·8 per cent only in the rural areas. The corresponding figure for the marriage duration of 1 to 4 years is 19·6 for the urban areas contrasted to 14·8 in the rural areas. This is further supported by the fact that 6 per cent of women marry at the age of 12 years and below in the rural areas compared to 2 per cent only in the urban areas as is evident from Table II-B(1) in the Appendix.

Table 4

| PERCENTAGE DISTRIBUTION OF WOMEN BY AGE AT MARRIAGE IN DIFFERENT DURATIONS OF MARRIAGE |       |      |                              |                 |       |     |
|--|-------|------|------------------------------|-----------------|-------|-----|
| Rural  |       |      | Marriage duration (in years) | Urban           |       |     |
| Age at marriage  |       |      |                              | Age at marriage |       |     |
| 23+  | 18—22 | —18  |                              | —18             | 18—22 | 23+ |
| 0·0  | 11·8  | 88·2 | 0                            | 80·2            | 19·1  | 0·7 |
| 0·2  | 14·6  | 85·2 | 1—4                          | 80·4            | 19·2  | 0·4 |
| 0·2  | 13·4  | 86·4 | 5—9                          | 84·5            | 14·8  | 0·7 |
| 0·3  | 13·7  | 86·0 | 10—14                        | 85·3            | 14·4  | 0·3 |
| 0·2  | 13·9  | 85·9 | 15—29                        | 85·4            | 14·2  | 0·4 |
| 0·2  | 13·0  | 86·8 | 30+                          | 84·7            | 15·1  | 0·2 |
| 0·2  | 13·7  | 86·1 | All durations                | 84·3            | 15·3  | 0·4 |

The median age at marriage of 0—4 year marriage duration is almost the same for rural and urban areas, edging slightly on the higher side in the urban component. Similar is the case with the median age at marriage of the current mothers of the same marriage duration, the interquartile range and the average age at marriage. The average age at marriage for women of 10—14 years marriage duration seems to be higher than the average age of a shorter marriage duration. Further details are shown in Table II in the Appendix.

The births occurring in the preceding 12 months of survey were studied to determine the proportion of live, still and multiple births. The study is useful as it helps to assess the age bracket of women where largest percentage of births occur. The family planning and other population curbing measures evince naturally great interest about this age-group so as to concentrate their operation. The study further helped to determine the proportion of multiple and still births to total live births and the manner of dispersion of these categories of births within specific age-groups.

The Table below presents absolute figures of current level of births in 8 different age-groups. 1777 women in the rural areas and 878 in the urban areas were studied for the purpose. Of any single age-group, the highest concentration of birth seems to be in the age-group of 18—22 both in rural and urban areas where 29·6 and 30·8 per cent respectively of the total current level of births occurred. But the age-groups from 18 to 32 accounted for the maximum proportion of births where 77·2 and 80·2 per cent of births occurred in rural and urban areas respectively.

No other category of multiple births except twins was reported which contributed to a very insignificant percentage of the total births. Though this reflected no accurate measure for any generalisation, the multiple births seemed

concentrated in the age-groups from 28 to 47 in rural areas and 23 to 37 in urban areas.

Table 5

CONTRIBUTION OF BIRTHS ARISING OUT OF MULTIPLE BIRTHS TO TOTAL BIRTHS—CURRENT LEVEL

| Attained age | Total births |       | Births arising from births of twins* |       |
|--------------|--------------|-------|--------------------------------------|-------|
|              | Rural        | Urban | Rural                                | Urban |
| 13—17 ..     | 56           | 38    | ..                                   | ..    |
| 18—22 ..     | 526          | 270   | ..                                   | ..    |
| 23—27 ..     | 433          | 233   | ..                                   | 2     |
| 28—32 ..     | 412          | 201   | 2                                    | 2     |
| 33—37 ..     | 195          | 91    | 2                                    | 2     |
| 38—42 ..     | 117          | 35    | 2                                    | ..    |
| 43—47 ..     | 25           | 6     | 2                                    | ..    |
| 48+ ..       | 13           | 4     | ..                                   | ..    |
| All ages ..  | 1777         | 878   | 8                                    | 6     |

\*There were no other multiple births

The following Table gives the still birth rates per 100 total births separately before and after 6

Table 6

STILL BIRTH RATES PER 100 TOTAL BIRTHS (LIVE AND STILL)

| Attained age |   | Still birth rate              |                                |
|--------------|---|-------------------------------|--------------------------------|
|              |   | After six months of gestation | Within six months of gestation |
| 13—17        | R | ..                            | 9.5                            |
|              | U | ..                            | 9.5                            |
| 18—22        | R | ..                            | 5.5                            |
|              | U | ..                            | 5.5                            |
| 23—27        | R | ..                            | 6.2                            |
|              | U | ..                            | 3.6                            |
| 28—32        | R | ..                            | 3.9                            |
|              | U | ..                            | 2.4                            |
| 33—37        | R | ..                            | 3.5                            |
|              | U | ..                            | 4.2                            |
| 38—42        | R | ..                            | 6.3                            |
|              | U | ..                            | 5.3                            |
| 43—47        | R | ..                            | 3.8                            |
|              | U | ..                            | 14.3*                          |
| 48+          | R | ..                            | ..                             |
|              | U | ..                            | ..                             |
| All ages     | R | ..                            | 5.2                            |
|              | U | ..                            | 4.4                            |

\*Based on only 7 births (live and still)

months of gestation. It is borne out from these figures that both in rural and urban areas, the rate is higher for still births after 6 months of gestation. The rate for all ages after 6 months of gestation is 5.2 and 4.4 and the same within 6 months of gestation is 1.1 and 1.4 for rural and urban areas respectively.

It has been stated in earlier chapters that the rate of birth is expressed as the number of children born per thousand of population. According to the Registrar General's Report on Vital Statistics of India for 1960, the State average for Orissa is 24.6. The rate, according to this survey is 20.9 for rural and 21.0 for urban areas. These apparently low figures may be ascribed to wrong reporting.

The word 'fertility' in demographic studies is used in relation to the actual occurrence of births especially live births and fertility rates are obtained by dividing the number of births during some period by the number of persons in some section of the corresponding population. The level of fertility in any given society is determined by a series of factors, inextricably interlaced in complex ways and it is difficult to predict the rate from any single study. The marital age specific fertility rate means the annual number of live births to 1,000 married women in the specified age-group. To illustrate the point, if age specific nuptial fertility rate for the age-group 13—17 is given as 54.5, it means that 54.5 births occurred to 1,000 married women in the age-group of 13 to 17 in the calendar year under reference.

The age specific fertility rates as emerging from the survey are presented in the Table below. Fertility appears to be at its peak in the age-group of 18—22, slightly declines thereafter up to the age 32 and the level being somewhat maintained up to 37 drops abruptly again. Even in the

age-group after completed fertility of 48 years and after, the rate is 5.0 for rural areas and 4.3 for urban areas. The fertility rate for women of 13—47 age-group is 100.5 for rural and 110.2 for urban areas.

The marital fertility rates of women aged 13—47 years are given according to characteristic religion, woman's education, husband's education, occupation, etc., in Tables VII(A) and VII(B) of the Appendix.

Table 7

| INCOMPLETE FERTILITY                            |    |            |       |       |       |       |       |       |           |
|---|----|------------|-------|-------|-------|-------|-------|-------|-----------|
| <i>(a) Age specific nuptial fertility rates</i> |    |            |       |       |       |       |       |       |           |
|   |    | Age-groups |       |       |       |       |       |       |           |
|   |    | 13—17      | 18—22 | 23—27 | 28—32 | 33—37 | 38—42 | 43—47 | 48 & over |
| Rural   | .. | 54.5       | 135.4 | 125.0 | 112.5 | 91.0  | 54.7  | 17.9  | 5.0       |
| Urban   | .. | 80.3       | 145.5 | 145.4 | 125.2 | 97.4  | 37.7  | 10.0  | 4.3       |

| <i>(b) Nuptial fertility rates for women of 13—47</i> |    |                         |                              |          |
|---|----|-------------------------|------------------------------|----------|
|   |    | Women married only once | Women married more than once | Combined |
| Rural   | .. | 100.0                   | 124.7**                      | 100.5    |
| Urban   | .. | 110.4                   | 83.3†                        | 110.2    |

\*\*Based on 369 women only

†Based on 60 women only

Those unable to have the capacity of producing children are said to be sterile. Sterility may be primary when a woman has not the capacity to conceive or it may be secondary which may occur after one or more births due to natural or pathological causes or due to accident. The opposite of sterility is fecundity which is the ability to have children. The rate of sterility pertaining to a particular age-group is the ratio of women becoming sterile within that period to the fertile women as at the beginning of the period.

The Table below gives the picture regarding onset of sterility as shown in the rate per 1,000 women according to quinquennial age-groups. The Table shows that with the advancement of age, the rate of sterility increases both in rural

and urban sector until it reaches the peak at 40—42 age-group.

Table 8

## ONSET OF STERILITY

*Rate of sterility per 1,000 women according to quinquennial age-groups*

| Ages  | Rural | Urban |
|-------|-------|-------|
| 20    | 7     | 7     |
| 20—24 | 21    | 20    |
| 25—29 | 34    | 35    |
| 30—34 | 79    | 75    |
| 35—39 | 182   | 177   |
| 40—42 | 226   | 213   |

Results are based on women

(i) with present ages 38—47

(ii) married only once but still in a married state

(iii) had at least a child

Average number of children born per woman shows the lifetime fertility. Attained age and duration of married life of women are the important factors which determine their reproductive behaviour. The Table below gives the average number of children by attained age of 'A' type women. The average number of children increases with the

Average number of children born per currently married woman—  
Incomplete fertility

increase in age-group until it reaches its maximum limit at the 38—42 age-group both for rural and urban areas and then it declines. The Tables showing the average number of children by age at marriage and duration of married life is given in Table IV of the Appendix. The average for all ages of women and all durations of marriage is 2.6 for rural and 2.8 for urban. The Table by characteristics is given in Tables V (A) and V (B) in the Appendix.

**Table 9**  
INCOMPLETE FERTILITY  
*Average number of children by attained age*

|       |    | Attained age  |               |               |               |               |               |               |               |                |
|-------|----|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|       |    | 13—17         | 18—22         | 23—27         | 28—32         | 33—37         | 38—42         | 43—47         | 48 & over     | All ages       |
| Rural | .. | 0.2<br>(1028) | 1.0<br>(3847) | 2.1<br>(3425) | 3.0<br>(3459) | 3.5<br>(2056) | 3.8<br>(2084) | 3.7<br>(1287) | 3.6<br>(2384) | 2.6<br>(19570) |
| Urban | .. | 0.3<br>(473)  | 1.1<br>(1849) | 2.4<br>(1603) | 3.2<br>(1528) | 3.9<br>(934)  | 4.0<br>(929)  | 3.9<br>(501)  | 3.8<br>(941)  | 2.7<br>(8812)  |

(Figures in brackets indicate number of women in the age-group)

Women with the following age at marriage and duration of completed fertility married life may be said to constitute completed fertility.

| Age at marriage | Duration of married life |
|-----------------|--------------------------|
| —18             | 30+                      |
| 18—22           | 30+                      |
| 23+             | 15+                      |

Women aged 43 years and above have also been taken to assume as having completed their fertility periods. The survey results reveal that the average number of children born to women of completed fertility for 'A' type women is 3.6 for rural and 3.8 for urban. The average number of children of 0—4 age-group per women in the reproductive span of 15—44 years has been computed at 6.4 on the actuals of 1961 Census which is much higher than the results of the survey.

The low results of the latter may be due to under reporting.

The discussion in preceding paragraphs relate to 'A' type women who constitute 79.6 per cent of the total number of ever married women of 'B', 'C' & 'D' categories of women, as stated earlier constitute only 18.8 per cent, 1.4 per cent and 0.2 per cent of the total sampled ever married women population. Study of their fertility, though more of academic importance, was conducted as otherwise it would probably mean ignoring the different experiences of the remarried.

The Table below gives the average number of children by attained age for different classes of married women. The average for 'B', 'C' and 'D' type women is 2.4 rural/2.4 urban, 2.2 rural/1.8 urban and 2.5 rural/3.8 urban respectively.

Table 10

AVERAGE NUMBER OF CHILDREN BY ATTAINED AGE FOR DIFFERENT CLASSES OF MARRIED WOMEN

| Attained age |   |    | Group B         |                            | Group C         |                            | Group D         |                            |
|--------------|---|----|-----------------|----------------------------|-----------------|----------------------------|-----------------|----------------------------|
|              |   |    | Number of women | Average number of children | Number of women | Average number of children | Number of women | Average number of children |
|              | 1 |    | 2               | 3                          | 4               | 5                          | 6               | 7                          |
| 13—17        | R | .. | 15              | 0·2                        | 1               | 1·0                        | ..              | ..                         |
|              | U | .. | 4               | ..                         | ..              | ..                         | ..              | ..                         |
| 18—22        | R | .. | 64              | 0·7                        | 31              | 0·8                        | ..              | ..                         |
|              | U | .. | 24              | 0·6                        | 8               | 0·6                        | ..              | ..                         |
| 23—27        | R | .. | 87              | 1·2                        | 60              | 1·3                        | ..              | ..                         |
|              | U | .. | 40              | 1·0                        | 13              | 0·8                        | ..              | ..                         |
| 28—32        | R | .. | 213             | 1·8                        | 103             | 2·2                        | 3               | 0·7                        |
|              | U | .. | 100             | 1·6                        | 14              | 2·7                        | 1               | 1·0                        |
| 33—37        | R | .. | 247             | 2·0                        | 65              | 2·6                        | 6               | 2·3                        |
|              | U | .. | 85              | 2·0                        | 12              | 2·2                        | ..              | ..                         |
| 38—42        | R | .. | 528             | 2·2                        | 71              | 2·5                        | 4               | 3·8                        |
|              | U | .. | 206             | 2·1                        | 5               | 1·8                        | 1               | 4·0                        |
| 43—47        | R | .. | 432             | 2·3                        | 38              | 2·4                        | 3               | 3·7                        |
|              | U | .. | 189             | 2·4                        | 8               | 1·5                        | ..              | ..                         |
| 48+          | R | .. | 3,225           | 2·7                        | 59              | 3·0                        | 40              | 2·4                        |
|              | U | .. | 1,263           | 2·7                        | 9               | 2·3                        | 4               | 4·5                        |
| All ages     | R | .. | 4,811           | 2·4                        | 428             | 2·2                        | 56              | 2·5                        |
|              | U | .. | 1,911           | 2·4                        | 69              | 1·8                        | 6               | 3·8                        |

Childlessness is a phenomenon associated with age at marriage and has been studied with respect to women of completed fertility. The percentage of childless women among completed fertility women is 8·5 for rural and 8·0 for urban areas. On a study of childless women of completed fertility according to their age at marriage reveal that the maximum proportion (22·2 for rural and 14·3 for urban) were married at 23 or above. The lowest (7·9 for rural and 6·9 for urban) belong to 18 years or below age at marriage. The figures for the intermediate group with 18·22 as their age at marriage is 12·0 for rural and 13·6 for urban. It is borne out from the above figures that the pro-

**Composition of family sizes for completed fertility women**

portion of childless women increases with the increase in age at marriage.

The Table below gives the percentage of families having number of children and according to their age at marriage for mothers of completed fertility. The highest percentage of families have 3 to 4 children and the proportion of families decreases with the increase in number of children. Similar conclusions can be drawn from a study of their age at marriage. The percentage of families marrying at ages of all groups are also the highest in the groups with 3 or 4 children. It is significant that no families with mothers marrying at 23 or above have more than 6 children.

Table 11

(a) COMPLETED FERTILITY WITHOUT DIFFERENTIALS OF AGE AT MARRIAGE

*Percentage of families of different sizes for mothers of completed fertility*

|          | Percentage of families having number of children |      |      |      |      |      |     |     |     |     | Total |             |
|----------|--|------|------|------|------|------|-----|-----|-----|-----|-------|-------------|
|          | 0  | 1    | 2    | 3    | 4    | 5    | 6   | 7   | 8   | 9   |       | 10 and over |
| Rural .. | 8.5  | 13.7 | 13.5 | 14.7 | 14.9 | 13.0 | 9.7 | 5.6 | 3.7 | 1.6 | 1.1   | 100.0       |
| Urban .. | 8.0  | 12.9 | 13.9 | 14.6 | 12.4 | 12.2 | 9.6 | 7.2 | 4.2 | 2.4 | 2.6   | 100.0       |

(b) COMPLETED FERTILITY WITH DIFFERENTIALS OF AGE AT MARRIAGE

*Percentage of families of different sizes for mothers of completed fertility*

| Age at marriage | Percentage of families having number of children |      |      |      |      |      |      |     |     |     | Total |             |
|-----------------|--|------|------|------|------|------|------|-----|-----|-----|-------|-------------|
|                 | 0  | 1    | 2    | 3    | 4    | 5    | 6    | 7   | 8   | 9   |       | 10 and over |
| —18 Rural ..    | 7.9  | 13.6 | 13.2 | 14.1 | 14.7 | 13.9 | 10.4 | 5.6 | 4.0 | 1.5 | 1.1   | 100.0       |
| Urban ..        | 6.9  | 11.8 | 13.7 | 14.0 | 12.3 | 13.4 | 9.9  | 8.3 | 4.5 | 2.6 | 2.6   | 100.0       |
| 18—22 Rural ..  | 12.0   | 13.8 | 13.8 | 15.0 | 14.3 | 12.0 | 8.5  | 4.5 | 2.5 | 2.3 | 1.3   | 100.0       |
| Urban ..        | 13.6   | 14.2 | 16.5 | 17.0 | 13.1 | 11.4 | 6.3  | 2.3 | 2.8 | 1.7 | 1.1   | 100.0       |
| 23+ Rural ..    | 22.2   | 11.1 | 5.6  | 33.3 | 16.7 | 5.5  | 5.6  | 0.0 | 0.0 | 0.0 | 0.0   | 100.0       |
| Urban ..        | 14.3   | 0.0  | 0.0  | 35.7 | 21.4 | 21.4 | 7.2  | 0.0 | 0.0 | 0.0 | 0.0   | 100.0       |



**Parity progression and Sterility ratio.** Parity ratio of order  $n$  is defined in terms of probability of women with  $n$  children already obtaining the  $n+1$ th child. If parity ratio for order 1 is 85 in rural and 86 in urban, this means that out of 100 women having 1 child 85 in rural and 86 in urban go to have the 2nd child. The remaining women stop child bearing after the 1st birth order. Sterility ratio is the

complement of parity progression ratio and can be interpreted accordingly. The Table below gives the parity progression and sterility ratios for women of completed fertility. It is clear from the Table that the parity ratio decreases with the increase in the parity order. The rate of decline, however, is gradual and not abrupt. The reverse is the case with sterility ratio where the ratio increases with the increase in parity order.

Table 12

COMPLETED FERTILITY WITHOUT DIFFERENTIALS OF AGE AT MARRIAGE

*Parity progression ratio, i. e., proportion of women who got  $n+1$ th child,  $n$  children having been born and Sterility ratio, i. e., proportion of women who ceased reproduction after getting  $n$ th child (completed fertility women)*

|       |    | Parity Ratio |      |      |      |      |      |      |      |      |      |
|-------|----|--------------|------|------|------|------|------|------|------|------|------|
| n     | =  | 0            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
| Rural | .. | 91.5         | 85.1 | 82.7 | 77.2 | 69.9 | 62.6 | 55.3 | 53.2 | 42.1 | 39.4 |
| Urban | .. | 92.0         | 86.0 | 82.4 | 77.6 | 75.6 | 60.1 | 63.2 | 56.1 | 54.1 | 52.8 |

|       |    | Sterility Ratio |      |      |      |      |      |      |      |      |      |
|-------|----|-----------------|------|------|------|------|------|------|------|------|------|
| n     | =  | 0               | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
| Rural | .. | 8.5             | 14.9 | 17.3 | 22.8 | 30.1 | 37.4 | 44.7 | 46.8 | 57.9 | 60.6 |
| Urban | .. | 8.0             | 14.0 | 17.6 | 22.4 | 24.4 | 39.9 | 36.8 | 43.9 | 45.9 | 47.2 |

The following Table gives the pattern of parity progression ratio for different birth order by age at marriage for women of completed fertility. The parity ratio declines with the increase in the age at marriage. The reverse is true in case of steri-

lity. The conclusion with regard to the relationship between the parity order and the parity ratio as narrated above holds good for every age at marriage

Table 13

*Parity progression ratio, i. e., proportion of women who got n+1th child, n children having been born and Sterility ratio i. e., proportion of women who ceased reproduction after getting nth child*

| n =                          | 0    | 1     | 2    | 3    | 4    | 5     | 6     | 7     | 8     | 9     |  |
|------------------------------|------|-------|------|------|------|-------|-------|-------|-------|-------|--|
| <b>Age at marriage —18</b>   |      |       |      |      |      |       |       |       |       |       |  |
| Parity Ratio                 |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 92.1 | 85.3  | 83.2 | 78.4 | 71.3 | 62.0  | 53.9  | 54.2  | 39.8  | 42.9  |  |
| Urban ..                     | 93.1 | 87.3  | 83.1 | 79.2 | 77.0 | 67.5  | 64.6  | 53.7  | 53.7  | 51.0  |  |
| Sterility Ratio              |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 7.9  | 14.7  | 16.8 | 21.6 | 28.7 | 38.0  | 46.1  | 45.8  | 60.2  | 57.1  |  |
| Urban ..                     | 6.9  | 12.7  | 16.9 | 20.8 | 23.0 | 32.5  | 35.4  | 46.3  | 46.3  | 49.0  |  |
| <b>Age at marriage 18—22</b> |      |       |      |      |      |       |       |       |       |       |  |
| Parity Ratio                 |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 88.0 | 84.3  | 81.4 | 75.1 | 68.5 | 61.3  | 55.3  | 57.1  | 58.3  | 35.7  |  |
| Urban ..                     | 86.4 | 83.6  | 77.2 | 69.4 | 66.2 | 55.6  | 56.0  | 71.4  | 50.0  | 40.0  |  |
| Sterility Ratio              |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 12.0 | 15.7  | 18.6 | 24.9 | 31.5 | 38.7  | 44.7  | 42.9  | 41.7  | 64.3  |  |
| Urban ..                     | 13.6 | 16.4  | 22.8 | 30.6 | 33.8 | 44.4  | 44.0  | 28.6  | 50.0  | 60.0  |  |
| <b>Age at marriage 23+</b>   |      |       |      |      |      |       |       |       |       |       |  |
| Parity Ratio                 |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 77.8 | 85.7  | 91.7 | 45.5 | 40.0 | 50.0  | 0.0   | 0.0   | 0.0   | 0.0   |  |
| Urban ..                     | 85.7 | 100.0 | 58.3 | 57.1 | 25.0 | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |  |
| Sterility Ratio              |      |       |      |      |      |       |       |       |       |       |  |
| Rural ..                     | 22.2 | 14.3  | 8.3  | 54.5 | 60.0 | 50.0  | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Urban ..                     | 14.3 | 0.0   | 41.7 | 42.9 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |

The average number of children contributed by each birth order to the average size of a family is given in the following Table. It is brought out clearly that in both rural and urban areas, the contribution of the first three birth orders to

the average size of a family under all the three groups of ages at marriage is high, a noticeable decline commences thereafter. The average size of a family is higher in case of marriages at ages below 18 as compared to other two higher age-groups of effective marriage.

Table 14

(a) COMPLETED FERTILITY WITHOUT DIFFERENTIALS OF AGE AT MARRIAGE

*Average number of children contributed by each birth order to the average size of a family of completed fertility*

|          | Order of Birth |     |     |     |     |     |     |     |     |             | Average family size |
|----------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-------------|---------------------|
|          | 1              | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10 and over |                     |
| Rural .. | .92            | .78 | .64 | .50 | .35 | .22 | .12 | .06 | .03 | .01         | 3.63                |
| Urban .. | .92            | .79 | .65 | .51 | .38 | .26 | .16 | .09 | .05 | .03         | 3.84                |

## (b) COMPLETED FERTILITY WITH DIFFERENTIALS OF AGE AT MARRIAGE

*Average number of children contributed by each birth order to the average size of a family of completed fertility*

| Age at marriage | Order of birth |     |     |     |     |     |     |     |     |             | Average family size |      |
|-----------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-------------|---------------------|------|
|                 | 1              | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10 and over |                     |      |
| —18             | Rural ..       | .92 | .79 | .65 | .51 | .37 | .23 | .12 | .07 | .03         | .01                 | 3.70 |
|                 | Urban ..       | .93 | .81 | .68 | .54 | .41 | .28 | .18 | .10 | .05         | .03                 | 4.01 |
| 18—22           | Rural ..       | .88 | .74 | .60 | .45 | .31 | .19 | .11 | .06 | .04         | .01                 | 3.39 |
|                 | Urban ..       | .86 | .72 | .56 | .39 | .26 | .14 | .08 | .06 | .03         | .01                 | 3.11 |
| 23+             | Rural ..       | .78 | .67 | .61 | .28 | .11 | .06 | .00 | .00 | .00         | .00                 | 2.51 |
|                 | Urban ..       | .86 | .86 | .86 | .50 | .29 | .07 | .00 | .00 | .00         | .00                 | 3.43 |

The rate of family building as measured by the percentage ratio of the average number of children born per woman in a specified duration group to the average for the preceding duration group is given in the following

Table. It reveals from the figure that family building is at its peak in the marriage duration of 5—9 years for women of all groups of ages at marriage but as the duration of married life advances, the pace of reproduction slackens.

Table 15

EFFECT OF AGE AT MARRIAGE ON THE GROWTH OF FAMILY SIZE AS SHOWN BY THE PERCENTAGE RATIO OF AVERAGE CHILDREN BORN PER WOMAN TO THE AVERAGE FOR THE PRECEDING DURATION GROUP

| Duration of marriage | Age at marriage |       |       |       |       |       |     |
|----------------------|-----------------|-------|-------|-------|-------|-------|-----|
|                      | —18             |       | 18—22 |       | 23+   |       |     |
|                      | Rural           | Urban | Rural | Urban | Rural | Urban |     |
| 5—9                  | ..              | 320   | 300   | 280   | 340   | 1,000 | 229 |
| 10—14                | ..              | 169   | 161   | 171   | 147   | 110   | 150 |
| 15—29                | ..              | 133   | 138   | 138   | 128   | 127   | 142 |
| 30+                  | ..              | 103   | 100   | 103   | 97    | 71    | 103 |

\*Based on less than 50 women.

With a view to assessing the effects of age at marriage on the growth of family size, that is, average number of children born, performance of women married between the ages 18—22 has been taken as an index in the following statement.

It appears from the indices in this statement that, by and large, the age at marriage is inversely related to the size of family which means that the lower the age at marriage, the higher the average number of children and *vice versa*.

Table 16

EFFECT OF AGE AT MARRIAGE ON FAMILY SIZE *i. e.*, AVERAGE NUMBER OF CHILDREN PER WOMAN BORN UP TO SPECIFIED DURATION OF MARRIAGE TAKING THE PERFORMANCE OF WOMEN MARRIED BETWEEN 18—22 AS 100

| Duration of marriage | Age at marriage |       |       |       |       |       |
|----------------------|-----------------|-------|-------|-------|-------|-------|
|                      | —18             |       | 18—22 |       | 23+*  |       |
|                      | Rural           | Urban | Rural | Urban | Rural | Urban |
| 1—4 ..               | 100             | 120   | 100   | 100   | 40    | 140   |
| 5—9 ..               | 114             | 106   | 100   | 100   | 143   | 94    |
| 10—14 ..             | 113             | 116   | 100   | 100   | 92    | 96    |
| 15—29 ..             | 109             | 125   | 100   | 100   | 85    | 106   |
| 30+ ..               | 109             | 129   | 100   | 100   | 59    | 113   |
| All durations ..     | 108             | 126   | 100   | 100   | 59    | 100   |

\*Based on less than 50 women.

The expectation of fertile life was worked out by making use of sterility ratio in the same manner as expectation of life is worked out from mortality rates. From this various ages, it is calculated how many years of fertility remains for a woman having attained some specified age.

It will appear from the Table below on the expectation of fertile life at various ages for 'A' type women the expectation is almost the same in both rural and urban areas. As is natural, the expectation declines with the age until it becomes 4·26 and 4·55 for rural and urban respectively in the age-group of 35—39. It is further borne out from a study of the figures for the youngest age-groups, fertility in the majority of women is expected to cease at 36 years or so of age except, of course, in the highly fertile section in which reproduction

goes on till a later age. The interval between the first menstruation and menopause should not be confused with the fertile period of a woman, which indeed may commence much later and end much earlier.

Table 17

## Onset of Sterility

*Expectation of fertile life at various ages*

| Ages     | Rural | Urban |
|----------|-------|-------|
| 15—19 .. | 18·66 | 18·90 |
| 20—24 .. | 14·24 | 14·48 |
| 25—29 .. | 10·54 | 10·74 |
| 30—34 .. | 7·03  | 7·32  |
| 35—39 .. | 4·26  | 4·55  |

The data on fertility were collected according to such characteristics as religion, woman's education, husband's education, nature of work and industry. The fertility experience of tribal people being of special interest, instructions were given to record religion as well as tribe, particularly in the sample blocks where the tribal people were known to be preponderant. This facilitated separate analysis of data for such tribes as each of these differentials enumerated above were of considerable importance influencing the fertility pattern. The study by characteristics proved to be useful. The impact of different socio-economic and cultural conditions and their influence on reproductive behaviour were matters that projected through analysis of such data. Though the data collected were greatly deficient this might serve as basis for predicting the

variation in birth rate among different sections of the population according to these variables.

Effect of religion on the reproductive behaviour of woman is certainly great as each religion through its own precepts, customs and beliefs goes a long way to determine the fertility pattern of its own believers. It is true that the sample thing of some religions was too small to help drawing any critical conclusion.

The reproductive behaviour of women in terms of the average number of children born per woman both for completed and incompleting fertility has been given in the statements in the Appendix. These data again have been broken up into the women's age at marriage. Similarly, the age specific marital fertility rates have also been shown by differentials in statements in the Appendix.

## CONCLUSION

Study of population dynamics in the context of economic planning is so enormously important that it is redundant to repeat the motive factors behind the cry to halt the accelerated population growth in this country. The rate of population growth during the last decade has been phenomenally high compared to the rates during the previous decades. The general awareness aroused by the conscious directive of the planners for planned parenthood and family planning measures has to be reckoned with as a force all too important in a country where with the welfare measures to decrease mortality and increase the average life span of an individual, the potential fertility of women must also be checked. In fact, fertility and population dynamics are matters so inextricably intertwined together that in the nature of the census traditions, it was thought desirable that a fertility survey should be conducted along with the 1961 Census in order to bring out the main components of such a complex biological phenomenon as fertility is.

The survey of course was fraught with grave limitations. It was a post-census survey undertaken by random sampling in the enumeration blocks some of which had to be abandoned later because of the visitations of natural calamities. In the backward areas of the State canvassing of schedules posed veritably an uphill task. The purdah system that entailed the investigators to collect more data from the masculine counterparts, the natural hesitation of women to come forward with truths about more than one marriage, ignorance of age and its misstatement, loose

notions about time duration, etc., are only a few of the many problems encountered by the investigators. This apart, the study could not be conducted with the precision and accuracy it deserved because of a lot of other limiting factors. The study of fertility by differentials was far from complete as at times the sample chosen was too small to arrive at anything. It will be appropriate, therefore, to make a clear confession of all the deficiencies and limitations from which the data suffer before outlining the summary conclusions.

The fact remained that this was the first study of its kind not only in the domain of census but in this State where no other organization within our knowledgeable sources had taken up a similar survey. This organization, therefore, while elaborating the Tables had to start from a clean slate as no other comparable data were available from any other source to help arrive at any critical comparative account.

The following is a brief summary of results arrived at in the foregoing paragraphs :

(1) Marriage in women is universal phenomena in the State. Most of those married belong to the 'A' category, i. e., women married once and still in married state. The highest proportion of married women belong to the fertile age of 18 to 32 both in the rural and urban areas.

(2) The current level of births of women below 18 was low. But the same reached its peak between the age-group 18—32 and later took a declining trend.

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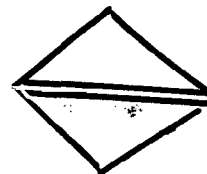
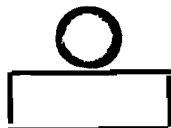
**APPENDICES**

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**APPENDIX A**  
**POST-CENSUS SURVEY**  
**HOUSEHOLD SCHEDULE**



Census Location Code \_\_\_\_\_ S. No. \_\_\_\_\_

**SECTION 1**

[Persons (including visitors) in the household on the date of investigator's visit]

| Name | Rel. to Head | Sex | Age | M. S. | Name | Rel. to Head | Sex | Age | M. S. |
|------|--------------|-----|-----|-------|------|--------------|-----|-----|-------|
| 1    |              |     |     | 7     |      |              |     |     |       |
| 2    |              |     |     | 8     |      |              |     |     |       |
| 3    |              |     |     | 9     |      |              |     |     |       |
| 4    |              |     |     | 10    |      |              |     |     |       |
| 5    |              |     |     | 11    |      |              |     |     |       |
| 6    |              |     |     | 12    |      |              |     |     |       |

**SECTION 2**

- (a) Is remarriage after widowhood or divorce permissible in your family ? (Yes/No)
- (b) If 'Yes' is the answer, is there any woman in the family who has been married more than once ? Give reference to Sl. No. in Section 1.

**SECTION 3** Fill for all males and females above age 10 listed in Section 1.

| Activity during the last 15 days  | Sl. No. in Section 1 |  |  |  |  |  |  |  |
|---|----------------------|--|--|--|--|--|--|--|
|   |                      |  |  |  |  |  |  |  |
| 1 (a) What was the person doing most of last 15 days ? Wkg/H/O/UW.  |                      |  |  |  |  |  |  |  |
| (b) If answer is H/O/UW, did the person do any work at all for pay or wages or in own business or profession or farm or as unpaid family worker on any day or days during the last 15 days ? (Yes/No) |                      |  |  |  |  |  |  |  |
| (c) If 'No' is the answer to (b), was the person looking for work ? (Yes/No)  |                      |  |  |  |  |  |  |  |
| (d) If 'No' is the answer to (c), does the person have an occupation or business or profession, even though he or she did not work during last 15 days ? (Yes/No)                                     |                      |  |  |  |  |  |  |  |
| 2 (a) Is the person a casual worker, that is, working whenever he or she gets some work ? (Yes/No)  |                      |  |  |  |  |  |  |  |
| (b) If 'No' is the answer to 2 (a), whether his or her usual work is different from present work ? (Yes/No)   |                      |  |  |  |  |  |  |  |
| (c) 'Yes' is the answer to 2 (a), whether his or her usual work is of seasonal nature ? (Yes/No)  |                      |  |  |  |  |  |  |  |

Signature of Investigator.....

Date.....

APPENDIX B  
POST-CENSUS SURVEY

FERTILITY SLIP

(For ever-married woman)

REMARRIAGES

1. Household Schedule  
Ref. \_\_\_\_\_

2. Location  
Code \_\_\_\_\_

3. Name \_\_\_\_\_

4. Present Age  
(Completed years) \_\_\_\_\_

5. Religion \_\_\_\_\_

6. Education \_\_\_\_\_

8. (a) Age at wedding  
(Age at first wedding,  
if remarried) \_\_\_\_\_

(b) Interval between wedding  
and the time she came to  
live with her husband \_\_\_\_\_

(c) Her age when she began  
to live with her husband  
[Total of (a) & (b)]

A. If remarried after  
widowhood or divorced  
write R.

B. How many times  
remarried ?

C. Duration in years of  
current marriage.

7. Marital  
Status \_\_\_\_\_  
(M/W/S)

9. If W/S, No. of years  
when marriage  
was broken by  
divorce \_\_\_\_\_

10. Duration of total  
married life  
[(4) — (9) — (8c)]

11. HUSBAND'S PARTICULARS

(a) Nature of Work

(b) Nature of Industry  
in which working

(c) Education

Code

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |

12. (i) Births after Diwali 1960

(a) Sex \_\_\_\_\_

(b) Type of birth \_\_\_\_\_  
(L/SA/SB)

(ii) Did this birth occur *before*  
or *after* Diwali 1961 (*Before/after*) \_\_\_\_\_

13. All children born alive to this woman  
*before Diwali 1960*

|                | Present age if still alive<br>1 |   | Age at death those now dead<br>2 |   | No. of years passed since death<br>3 | Total of (2) & (3)<br>4 |
|----------------|---------------------------------|---|----------------------------------|---|--------------------------------------|-------------------------|
|                | M                               | F | M                                | F |                                      |                         |
| 1st ..         |                                 |   |                                  |   |                                      |                         |
| 2nd ..         |                                 |   |                                  |   |                                      |                         |
| 3rd ..         |                                 |   |                                  |   |                                      |                         |
| 4th ..         |                                 |   |                                  |   |                                      |                         |
| 5th ..         |                                 |   |                                  |   |                                      |                         |
| 6th ..         |                                 |   |                                  |   |                                      |                         |
| 7th ..         |                                 |   |                                  |   |                                      |                         |
| 8th ..         |                                 |   |                                  |   |                                      |                         |
| 9th ..         |                                 |   |                                  |   |                                      |                         |
| 10th ..        |                                 |   |                                  |   |                                      |                         |
| No. of entries |                                 |   |                                  |   | Total children                       | M<br>F                  |

14. Total No. of children born alive including that given in Q. 12 but excluding still births

\_\_\_\_\_ Male \_\_\_\_\_ Female Total

## APPENDIX C

## INSTRUCTIONS REGARDING PREPARATION OF HOUSEHOLD SCHEDULES AND FERTILITY SLIPS

*A. Household Schedule*

1. (i) In Section 1 all persons of the household present in the village or town at the time of investigator's visit should be entered. The requirements are more or less the same as in filling Census Individual slip.

(ii) It may be suggested to the respondent to give the name of residents in the sequence of their natural relationships, e. g., head, wife, son, son's wives and children, unmarried daughters and then any others. A wide variety of related and unrelated persons come under others, e. g., parents, married daughters and their husbands and children, nephews, nieces, grandsons, grand daughters.

(iii) Consideration of the entries of relation to head, age and marital status will indicate whether any person has been missed in the list. This should be checked up in order to catch omissions of residents.

2. Section 2 aims at finding out if there is any woman who married more than once. A direct question on the point may be resented by many families and hence a general question (a) is asked. Only if the answer is in affirmative should question (b) be asked, otherwise not. If there is any woman who married more than once, it is desirable to complete forthwith her particulars in respect of remarriages at the top right hand corner of this woman's fertility slip. This question of remarriages should not be broached lightly or more often than is necessary.

3. (i) Section 3 is to be filled only in respect of persons above age 10 to find out the number of working persons in the household. The following gives the definition of 'working' for the purpose of this survey:

A person is 'working' if his activity brings him or to his family earnings in cash or kind. Such earnings should arise

from repairs done or services rendered or sale of own or somebody else's produce including manufactured goods. The earning arising from interest, dividend, pension, rent, royalty and begging are not relevant in this connection.

The object is to see how this definition works operationally. In 1961 Census, the concept of work was made clear through a number of illustrative examples. The two basic concepts in the definition adopted for this survey should be particularly explained to the field Investigators. The first is that in return for the activity some earning in cash or *kind* should accrue to him or *to his family*. This does not involve any question of dependency. The other is that the earning should accrue from the type of economic activities specified in the definition. In the case of seasonal work like cultivation, livestock, dairying, household industry, etc., a person should have had some regular work of more than an hour a day throughout most of the reference period of 15 days to be considered as 'working'. This should be particularly borne in mind in the case of a family worker.

(ii) The answer to Q. 1(a) may be recorded as:

Wkg—Working  
H—Keeping house  
O—Doing other work  
UW—Unable to work

(iii) A person's usual work is what he considers it to be.

(iv) Seasonal work is one which can be carried on only during certain periods of seasons of the year and not throughout the year.

*B—Fertility Slip*

It is to be filled for every woman who was ever-married.

|                |       |   |
|----------------|-------|---|
| Q.5. For Hindu | write | H |
| Muslim         | write | M |
| Christian      | write | C |
| Jain           | write | J |
| Buddhist       | write | B |
| Sikh           | write | S |

For others write the answer actually returned.

Q.6. Education may be filled according to the highest standards reached as follows:

|   |   |
|---|---|
| Formal schooling but High school or equivalent examination not passed | E |
| Passed High School or equivalent examination                          | H |
| Graduated from college  | G |
| Others comprising just Literate and Uneducated                        | 0 |

Questions 8—10 are on marriage particulars designed to elicit a woman's age, when she came to live with her husband and the duration of married life. Care should be taken to collect them correctly and tactfully without causing any annoyance to the informant. Collection of these particulars will present some difficulty in the case of women married more than once. Such women must have already been marked on the top right hand corner of the slip. In their case special instruction given in (iii) below should be carefully followed.

(i) In some communities, there is a separate formal ceremony or occurrence such as Gauna, Mukhawa or Dwiragaman which takes place quite some time after the wedding celebrations. This is a custom which continues from the time when girls used to be married before attainment of puberty but used to start married life with the husband some time after the attainment of puberty. This second ceremony, therefore marks the time when the girl comes to live with her husband, and her age at this time is sought in Q. 8 (c) through two subsidiary questions 8(a) and 8(b). Information on Q.8 (b) should be obtained tactfully in two stages; first by a preliminary sorting question as to whether she came to her husband's home to live with him immediately after her wedding. If answer is 'Yes' 0 may be

entered in 8(b) and age entered in 8(a) may be repeated in 8(c). If 'No' is the answer, the interval should be asked and entered in 8(b). Before entering the total of 8(a) and 8(b) in 8(c) it should be checked up with an apparently superfluous third question whether this total represents her age when she came to live with the husband.

(ii) The difference between the present age of a woman and her age in 8(c) gives the duration of total married life, only where the woman has been married once and still continues in the married state. However, even in this case the duration so obtained should be verified by a direct question on duration before recording in Q.10. That is to say, if the informant gives the duration of married life to be the same as calculated above the figure should be recorded in Q.10. If it differs, her present age as recorded in Q. 4, her age when she began to live with her husband as recorded in Q.8(c) and the duration as now returned in Q.10 should be severally checked again with the informant in order to find out which one of these three items should be revised so that Q.4 and Q.10 can tally with each other. The necessary revisions in the recorded entries should be made.

(b) Where a woman was married only once and is now widowed, separated or divorced, the period that elapsed after she was widowed or divorced should be ascertained as required in Q.9. Entry in Q.10 then is given by subtracting the total of entries in Q.9 and Q.8(c) from that in Q.4.

(iii) Where a woman has been married more than once, duration of total married life is the total of several periods lived in the married state during each marriage. This can be conveniently obtained by first enquiring about the period of break between the earlier marriage and the remarriage, and adding up the periods of breaks. This total of breaks in married life should be subtracted from the difference between the entries in Q.4 and Q. 8 (c) to get the duration of total married life. The intervals have to be ascertained tactfully and carefully.

**Q.11.** In Q.11 (b) on Nature of Industry the activities of the employer or the establishment where the person works should be fully recorded. The activity may relate to a production industry, business, trade, profession or service. The description should give the chief articles or goods produced or repaired or services rendered by the employer or the establishment.

**Q.12.** If a child is born alive, it is a live birth, even though it may die soon after. However, if the child is born dead, i.e., it does not show any sign of life after birth, it is a still birth. In such cases, it should be ascertained whether the still birth occurred before or after the completion of six months of pregnancy. Thereafter the type of birth in Q.12 (i) (b) should be entered according to the following Code :

|  |    |
|--|----|
| Live birth                                 | L  |
| Still birth after six months of pregnancy  | SA |
| Still birth before six months of pregnancy | SB |

**Q.12** Children born are to be recorded in two sections. Those born after Diwali of 1960 are to be entered in Q.12 (i) and (ii). All children born before Diwali of 1960 will be entered in Q.13. In States, where Diwali is not readily recalled any other important festival, which occurred near about this time, may be taken. The object in Q.12 is to find out if there was any birth during a period of 12 months but most persons find it difficult to fix a span of 12 months and hence are unable to give correct information. Keeping this in view, Q.12 has been divided into two parts. Part (i) enquires about all births that took place after the preceding Diwali in 1960, which the informant can well fix his mind. Part (ii) requires the informant to fix his attention

to the Diwali of 1961 (which will be just over) and say if the birth occurred before or after this date. By considering answers to parts (i) and (ii), it would be possible to locate births that occurred between the two Diwalis of 1960 and 1961.

**Q. 13.** In this question information is to be collected only about children born alive, leaving out still births. The informant has to closely recollect the past and needs assistance. He may first be asked to concentrate on those still alive. He can then easily fill in those who are no longer alive.

If no child is reported to have been born it should be asked specifically if there was none born, who may have died.

Co. 4 of Q. 13, really works out the present ages of dead children if they had not died and were now alive. A quick glance of the entries against Cols. 1 and 4 will show the internal consistency of the information. Births generally occur with a time gap of 2 to 3 years. Only in a few cases will the gap be the shorter, in which case confirmation of the fact should be obtained. Where there is a wider gap, it should be made sure that there is no omission. It will be a good thing if the entries against Cols. 1 and 4 are reviewed with the help of the respondent asking for confirmation of the time interval between successive births, which, ordinarily, should be easy.

Total number of children recorded in Q. 13 have to be shown in the margin as provided there.

**Q. 14.** In question 14 the number of all the children born alive including any shown in Q. 12 but excluding any still birth is to be recorded.

## APPENDIX D

## TABLES

*The following Codes have been used for Tables V (A), V (B), VI(B) and VII (B)*

**Women's Education**

- E— Formal schooling but high school or equivalent examination not passed
- H— High school or equivalent examination
- G— Graduated from college
- O— Others comprising just literates and uneducated

**Husband's Education**

- E— Formal schooling but high school or equivalent examination not passed
- H— High school or equivalent examination
- G— Graduated from college
- O— Others comprising just literates and uneducated

**Nature of Work**

- T— Technical, professional and related workers
- A— Administrative, executive and managerial workers
- C— Clerical and related workers
- S— Sales workers
- FA— Farmers
- FH— Hunters, Loggers and related workers
- P— Production process workers and craftsmen
- W— Unskilled workers

**Nature of Industry**

- FA— Agriculture, where occupation is farming
- FO— Agriculture, where occupation is other than farming
- Q— Quarrying and Mining
- M— Manufacture
- B— Building and construction
- C— Commerce
- T— Transport, storage and communication
- S— Services

TABLE I

Percentage of women by the number of times married (All women)  
(Actual numbers are given in brackets)

| Attained age | Rural |                 |              |                 |                  | Urban           |             |            |                 |                  |
|--------------|-------|-----------------|--------------|-----------------|------------------|-----------------|-------------|------------|-----------------|------------------|
|              | Once  | Twice           | Thrice       | 4 times or more | Total            | Once            | Twice       | Thrice     | 4 times or more | Total            |
| 13-17        | ..    | 99.9<br>(1043)  | 0.1<br>(1)   | ..<br>(-)       | 100.0<br>(1044)  | 100.0<br>(477)  | ..<br>(-)   | ..<br>(-)  | ..<br>(-)       | 100.0<br>(477)   |
| 18-22        | ..    | 99.2<br>(3911)  | 0.8<br>(30)  | ..<br>(-)       | 100.0<br>(3942)  | 99.5<br>(1873)  | 0.4<br>(8)  | 0.1<br>(1) | ..<br>(-)       | 100.0<br>(1882)  |
| 23-27        | ..    | 98.3<br>(3512)  | 1.7<br>(59)  | ..<br>(-)       | 100.0<br>(3572)  | 99.2<br>(1643)  | 0.8<br>(13) | ..<br>(-)  | ..<br>(-)       | 100.0<br>(1656)  |
| 28-32        | ..    | 97.2<br>(3672)  | 2.6<br>(98)  | 0.2<br>(7)      | 100.0<br>(3778)  | 99.2<br>(1682)  | 0.8<br>(14) | ..<br>(-)  | ..<br>(-)       | 100.0<br>(1696)  |
| 33-37        | ..    | 97.0<br>(2303)  | 2.8<br>(67)  | 0.1<br>(1)      | 100.0<br>(2374)  | 98.8<br>(1019)  | 1.1<br>(11) | 0.1<br>(1) | ..<br>(-)       | 100.0<br>(1031)  |
| 38-42        | ..    | 97.2<br>(2612)  | 2.7<br>(72)  | 0.1<br>(2)      | 100.0<br>(2687)  | 99.5<br>(1135)  | 0.5<br>(6)  | ..<br>(-)  | ..<br>(-)       | 100.0<br>(1141)  |
| 43-47        | ..    | 97.7<br>(1719)  | 1.9<br>(33)  | 0.4<br>(8)      | 100.0<br>(1760)  | 98.9<br>(690)   | 1.0<br>(7)  | 0.1<br>(1) | ..<br>(-)       | 100.0<br>(698)   |
| 48+          | ..    | 98.3<br>(5609)  | 1.5<br>(88)  | 0.1<br>(8)      | 100.0<br>(5708)  | 99.4<br>(2204)  | 0.6<br>(13) | ..<br>(-)  | ..<br>(-)       | 100.0<br>(2217)  |
| All ages     | ..    | 98.1<br>(24381) | 1.8<br>(448) | 0.1<br>(30)     | 100.0<br>(24865) | 99.3<br>(10723) | 0.7<br>(72) | 0.0<br>(3) | ..<br>(-)       | 100.0<br>(10798) |



**TABLE II**

**Age at marriage**

(a) *Percentage distribution of women by marriage duration for each age at marriage*

| Marriage duration | Rural           |       |                 |       |       |          | Urban           |       |       |          |
|-------------------|-----------------|-------|-----------------|-------|-------|----------|-----------------|-------|-------|----------|
|                   | Number of women |       | Age at marriage |       |       |          | Age at marriage |       |       |          |
|                   | Rural           | Urban | —18             | 18—22 | 23+   | All ages | —18             | 18—22 | 23+   | All ages |
| 0                 | 407             | 152   | 2.1             | 1.8   | 0.0   | 2.1      | 1.6             | 2.2   | 2.7   | 1.7      |
| 1—4               | 2,837           | 1,358 | 14.3            | 15.4  | 14.6  | 14.4     | 14.7            | 19.2  | 16.2  | 15.4     |
| 5—9               | 3,466           | 1,669 | 17.7            | 17.2  | 17.1  | 17.6     | 19.0            | 18.3  | 29.7  | 18.9     |
| 10—14             | 3,606           | 1,672 | 18.3            | 18.3  | 24.4  | 18.3     | 19.2            | 17.8  | 13.5  | 19.0     |
| 15—29             | 6,290           | 2,808 | 31.9            | 32.5  | 36.8  | 32.0     | 32.3            | 29.5  | 32.5  | 31.8     |
| 30+               | 3,070           | 1,162 | 15.7            | 14.8  | 17.1  | 15.6     | 13.2            | 13.0  | 5.4   | 13.2     |
| All durations     | 19,676          | 8,821 | 100.0           | 100.0 | 100.0 | 100.0    | 100.0           | 100.0 | 100.0 | 100.0    |

(b)(i) *Marriage duration 0—4 years—current level*

|   | Rural | Urban |
|---|-------|-------|
| 1. Percentage of women marrying at age 12 and below           | 6.0   | 2.0   |
| 2. Median age at marriage                                     | 16.3  | 16.5  |
| 3. Inter-quartile range                                       | 1.1   | 1.2   |
| 4. Average age at marriage                                    | 16.3  | 16.6  |
| (ii) Average age at marriage in marriage duration 10—14 years | 16.1  | 16.1  |

TABLE III

## Completed fertility with differentials of age at marriage

(a) Average number of children born to women of completed fertility (Women married once only and now in a married state)

|       |    | Age at marriage |       |     |
|-------|----|-----------------|-------|-----|
|       |    | —18             | 18—22 | 23+ |
| Rural | .. | 3.7             | 3.4   | 2.5 |
| Urban | .. | 4.0             | 3.1   | 3.4 |

(b) Percentage of childless women of completed fertility

|       |    | Age at marriage |       |      |
|-------|----|-----------------|-------|------|
|       |    | —18             | 18—22 | 23+  |
| Rural | .. | 7.9             | 12.0  | 22.2 |
| Urban | .. | 6.9             | 13.6  | 14.3 |

TABLE IV  
Incomplete Fertility  
(a) Birth Rate

|       |      |
|-------|------|
| Rural | 20.9 |
| Urban | 21.0 |

(b) Average number of children by age at marriage and duration of marriage

| Duration of marriage | Age at marriage |       |       |       |       |       |                      |       |
|----------------------|-----------------|-------|-------|-------|-------|-------|----------------------|-------|
|                      | -18             |       | 18-22 |       | 23+*  |       | All ages at marriage |       |
|                      | Rural           | Urban | Rural | Urban | Rural | Urban | Rural                | Urban |
| 1-4                  | 0.5             | 0.6   | 0.5   | 0.5   | 0.2   | 0.7   | 0.5                  | 0.6   |
| 5-9                  | 1.6             | 1.8   | 1.4   | 1.7   | 2.0   | 1.6   | 1.6                  | 1.8   |
| 10-14                | 2.7             | 2.9   | 2.4   | 2.5   | 2.2   | 2.4   | 2.6                  | 2.9   |
| 15-29                | 3.6             | 4.0   | 3.3   | 3.2   | 2.8   | 3.4   | 3.6                  | 3.9   |
| 30+                  | 3.7             | 4.0   | 3.4   | 3.1   | 2.0   | 3.5   | 3.7                  | 3.9   |
| All durations †      | 2.6             | 2.9   | 2.4   | 2.3   | 2.0   | 2.3   | 2.6                  | 2.8   |

\*Based on less than 50 women

†Excludes women with duration of marriage '0' years

**TABLE V (A)**  
INCOMPLETE FERTILITY  
*Number of women and average number of children born per woman in different durations of married life by characteristics*

| Characteristic : Religion           | Duration of married life (in years) |       |                |       |                 |                       |                |                       |                 |       |                |       |                 |                       |                |       |
|-------------------------------------|-------------------------------------|-------|----------------|-------|-----------------|-----------------------|----------------|-----------------------|-----------------|-------|----------------|-------|-----------------|-----------------------|----------------|-------|
|                                     | Hindu                               |       |                |       | Muslim          |                       |                |                       | Christian       |       |                |       | Gond            |                       |                |       |
|                                     | Number of Women                     |       | Average Number |       | Number of Women |                       | Average Number |                       | Number of Women |       | Average Number |       | Number of Women |                       | Average Number |       |
|                                     | Rural                               | Urban | Rural          | Urban | Rural           | Urban                 | Rural          | Urban                 | Rural           | Urban | Rural          | Urban | Rural           | Urban                 | Rural          | Urban |
| 1-4                                 | 2,355                               | 1,198 | 0.5            | 0.6   | 93              | Small number of women | 0.6            | Small number of women | 52              | ..    | ..             | ..    | ..              | ..                    | 0.4            | ..    |
| 5-9                                 | 2,846                               | 1,502 | 1.6            | 1.8   | 91              | ..                    | 2.0            | ..                    | 78              | ..    | ..             | ..    | ..              | ..                    | 1.4            | ..    |
| 10-14                               | 2,989                               | 1,453 | 2.6            | 2.9   | 106             | ..                    | 3.4            | ..                    | 91              | ..    | ..             | ..    | ..              | ..                    | 2.3            | ..    |
| 15-29                               | 5,176                               | 2,540 | 3.6            | 3.9   | 138             | ..                    | 4.0            | ..                    | 157             | ..    | ..             | ..    | ..              | ..                    | 3.0            | ..    |
| 30+                                 | 2,587                               | 1,055 | 3.6            | 3.9   | 72              | ..                    | 3.3†           | ..                    | 65              | ..    | ..             | ..    | ..              | ..                    | 3.8            | ..    |
| All durations *                     | 15,983                              | 7,748 | 2.6            | 2.8   | 500             | 280                   | 3.1            | 2.8                   | 102             | 26    | 2.8            | 3.0   | 443             | ..                    | 2.4            | ..    |
| <b>Characteristic : Religion</b>    |                                     |       |                |       |                 |                       |                |                       |                 |       |                |       |                 |                       |                |       |
| Duration of married life (in years) | Kandh                               |       |                |       | Kisan           |                       |                |                       | Mahali          |       |                |       | Munda           |                       |                |       |
|                                     | Number of Women                     |       | Average Number |       | Number of Women |                       | Average Number |                       | Number of Women |       | Average Number |       | Number of Women |                       | Average Number |       |
|                                     | Rural                               | Urban | Rural          | Urban | Rural           | Urban                 | Rural          | Urban                 | Rural           | Urban | Rural          | Urban | Rural           | Urban                 | Rural          | Urban |
| 1-4                                 | ..                                  | ..    | ..             | ..    | ..              | Small number of women | ..             | ..                    | 40              | ..    | 0.6            | ..    | ..              | Small number of women | ..             | ..    |
| 5-9                                 | ..                                  | ..    | ..             | ..    | ..              | ..                    | ..             | ..                    | 53              | ..    | 1.8            | ..    | ..              | ..                    | ..             | ..    |
| 10-14                               | ..                                  | ..    | ..             | ..    | ..              | ..                    | ..             | ..                    | 75              | ..    | 2.5            | ..    | ..              | ..                    | ..             | ..    |
| 15-29                               | ..                                  | ..    | ..             | ..    | ..              | ..                    | ..             | ..                    | 89              | ..    | 3.4            | ..    | ..              | ..                    | ..             | ..    |
| 30+                                 | ..                                  | ..    | ..             | ..    | ..              | ..                    | ..             | ..                    | 62              | ..    | 4.3            | ..    | ..              | ..                    | ..             | ..    |
| All durations *                     | 201                                 | ..    | 2.1            | ..    | ..              | 179                   | ..             | 2.5                   | 319             | ..    | 2.7            | ..    | ..              | 285                   | ..             | 3.3   |

\* Excludes women with duration of married life 0<sup>+</sup> years.

† Data appear to be defective. Rates are low due to large proportion of childless women.

— Not calculated due to small number of women in the sample.

## Characteristic : Religion

| Duration of married life (in years) | Santhal         |              |                | Shabar          |       |                | Other Tribes    |       |                | All Tribes      |       |                |     |     |
|-------------------------------------|-----------------|--------------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----|-----|
|                                     | Number of Women |              | Average Number | Number of Women |       | Average Number | Number of Women |       | Average Number | Number of Women |       | Average Number |     |     |
|                                     | Rural           | Urban        | Rural Urban    | Rural           | Urban | Rural Urban    | Rural           | Urban | Rural Urban    | Rural           | Urban | Rural Urban    |     |     |
| 1-4                                 | ..              | Small number | ..             | ..              | ..    | ..             | 170             | ..    | 0.5            | ..              | 409   | 57             | 0.5 | 0.5 |
| 5-9                                 | ..              | of women     | ..             | ..              | ..    | ..             | 213             | ..    | 1.4            | ..              | 549   | 72             | 1.5 | 1.6 |
| 10-14                               | ..              | "            | ..             | ..              | ..    | ..             | 197             | ..    | 2.7            | ..              | 543   | 97             | 2.5 | 2.5 |
| 15-29                               | ..              | "            | ..             | ..              | ..    | ..             | 344             | ..    | 3.6            | ..              | 999   | 115            | 3.5 | 3.2 |
| 30+                                 | ..              | "            | ..             | ..              | ..    | ..             | 153             | ..    | 3.8            | ..              | 434   | 29             | 3.9 | 3.2 |
| All durations *                     | 178             | ..           | 2.7            | ..              | 2.4   | ..             | 1,077           | ..    | 2.5            | ..              | 2,934 | 370            | 2.6 | 2.3 |

## Characteristic : Woman's Education

| Duration of married life (in years) | O               |       |                | E               |       |                | H               |       |                | G               |       |                |    |
|-------------------------------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|-----------------|-------|----------------|----|
|                                     | Number of Women |       | Average Number | Number of Women |       | Average Number | Number of Women |       | Average Number | Number of Women |       | Average Number |    |
|                                     | Rural           | Urban | Rural Urban    | Rural           | Urban | Rural Urban    | Rural           | Urban | Rural Urban    | Rural           | Urban | Rural Urban    |    |
| 1-4                                 | ..              | 2,671 | 1,148          | 0.5             | 0.6   | 166            | 187             | 0.5   | 0.6            | ..              | ..    | ..             | .. |
| 5-9                                 | ..              | 3,311 | 1,406          | 1.6             | 1.7   | 153            | 242             | 1.8   | 2.5            | ..              | ..    | ..             | .. |
| 10-14                               | ..              | 3,455 | 1,448          | 2.6             | 2.8   | 149            | 208             | 2.7   | 3.3            | ..              | ..    | ..             | .. |
| 15-29                               | ..              | 6,034 | 2,511          | 3.6             | 3.8   | 254            | 282             | 2.7†  | 4.5            | ..              | ..    | ..             | .. |
| 30+                                 | ..              | 2,966 | 1,074          | 3.7             | 3.9   | 104            | 86              | 2.6†  | 3.5††          | ..              | ..    | ..             | .. |
| All durations *                     | 18,437          | 7,587 | 2.6            | 2.7             | 826   | 1,005          | 2.1             | 3.0   | 66             | 6               | 2.3   | ..             | .. |

\*Excludes women with duration of married life '0' years.

-Not calculated due to small number of women in the sample.

\*\*Separate break-up of tribes in urban is not available.

† Data appear to be defective. May be due to misclassification of married life.

†† Data appear to be defective.

Differential groups not considered due to small number of women.

**TABLE V (A)**  
**INCOMPLETE FERTILITY**

*Number of women and average number of children born per woman in different durations of married life by characteristics—contd.*  
**Characteristic: Husband's Education**

| Duration of married life (in years) | O               |       | E               |       | H               |       | G                     |       |     |     |     |
|-------------------------------------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------------|-------|-----|-----|-----|
|                                     | Number of Women |       | Number of Women |       | Number of Women |       | Number of Women       |       |     |     |     |
|                                     | Rural           | Urban | Rural           | Urban | Rural           | Urban | Rural                 | Urban |     |     |     |
| 1-4                                 | 2,423           | 706   | 332             | 386   | 211             | —     | Small number of women | 55    | —   | 0.8 |     |
| 5-9                                 | 3,071           | 862   | 324             | 490   | 243             | —     | 2.1 of women          | 74    | —   | 2.2 |     |
| 10-14                               | 3,187           | 956   | 371             | 429   | 222             | —     | 3.5                   | 65    | —   | 3.4 |     |
| 15-29                               | 5,574           | 1,628 | 655             | 736   | 317             | —     | 4.8                   | 127   | —   | 4.7 |     |
| 30+                                 | 2,808           | 789   | 241             | 266   | 78              | —     | 4.9                   | 29    | —   | 4.7 |     |
| All durations *                     | 17,063          | 4,941 | 1,923           | 2,307 | 1,071           | 2.2   | 3.1                   | 32    | 350 | 2.7 | 3.3 |

**Characteristic: Nature of Work**

| Duration of married life (in years) | T               |       | A               |       | C               |       | S               |       |       |     |     |
|-------------------------------------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-------|-----|-----|
|                                     | Number of Women |       | Number of Women |       | Number of Women |       | Number of Women |       |       |     |     |
|                                     | Rural           | Urban | Rural           | Urban | Rural           | Urban | Rural           | Urban |       |     |     |
| 1-4                                 | 120             | 205   | 0.4             | 0.5   | 120             | 163   | 0.6             | 42    | 171   | 0.5 | 0.6 |
| 5-9                                 | 145             | 270   | 1.5             | 1.8   | 179             | 205   | 2.0             | 64    | 214   | 1.7 | 2.0 |
| 10-14                               | 168             | 271   | 2.7             | 3.0   | 183             | 150   | 3.4             | 64    | 228   | 2.7 | 3.3 |
| 15-29                               | 236             | 354   | 3.9             | 4.1   | 337             | 252   | 4.3             | 116   | 390   | 3.9 | 4.0 |
| 30+                                 | 87              | 104   | 4.0             | 4.4   | 48              | 45    | 4.2             | 53    | 145   | 3.8 | 3.9 |
| All durations *                     | 756             | 1,204 | 2.6             | 2.7   | 867             | 815   | 2.4             | 339   | 1,148 | 2.8 | 3.0 |

\*Excludes women with duration of married life '0' years.

--Not calculated due to small number of women in the sample.

Characteristic: Nature of Work

| Duration of married life (in years) | FA              |       | FH              |       | P               |       | W               |       |     |     |     |     |
|-------------------------------------|-----------------|-------|-----------------|-------|-----------------|-------|-----------------|-------|-----|-----|-----|-----|
|                                     | Number of Women |       | Number of Women |       | Number of Women |       | Number of Women |       |     |     |     |     |
|                                     | Rural           | Urban | Rural           | Urban | Rural           | Urban | Rural           | Urban |     |     |     |     |
| 1-4                                 | 1,994           | 224   | 0.5             | 0.6   | 128             | 148   | 0.5             | 0.5   | 65  | —   | 0.7 |     |
| 5-9                                 | 2,385           | 247   | 1.6             | 1.7   | 191             | 148   | 1.5             | 1.9   | 72  | —   | 1.6 |     |
| 10-14                               | 2,585           | 272   | 2.6             | 2.7   | 166             | 177   | 2.5             | 3.2   | 75  | —   | 2.7 |     |
| 15-29                               | 4,599           | 547   | 3.5             | 3.5   | 268             | 270   | 3.6             | 4.0   | 85  | —   | 3.4 |     |
| 30+                                 | 2,181           | 311   | 3.5             | 3.6   | 109             | 118   | 3.7             | 4.0   | 17  | —   | —   |     |
| All durations*                      | 13,744          | 1,601 | 2.6             | 2.7   | 862             | 861   | 2.5             | 2.9   | 281 | 314 | 2.3 | 2.4 |

Characteristic: Nature of Industry

| Duration of married life (in years) | FA              |       | FO              |       | Q               |                       | M               |       |     |     |     |     |     |     |
|-------------------------------------|-----------------|-------|-----------------|-------|-----------------|-----------------------|-----------------|-------|-----|-----|-----|-----|-----|-----|
|                                     | Number of Women |       | Number of Women |       | Number of Women |                       | Number of Women |       |     |     |     |     |     |     |
|                                     | Rural           | Urban | Rural           | Urban | Rural           | Urban                 | Rural           | Urban |     |     |     |     |     |     |
| 1-4                                 | 1,994           | 224   | 0.5             | 0.6   | 93              | Small number of women | 0.5             | —     | 133 | 134 | 0.5 | 0.5 |     |     |
| 5-9                                 | 2,385           | 247   | 1.6             | 1.7   | 155             | —                     | 1.7             | —     | 206 | 145 | 1.4 | 2.0 |     |     |
| 10-14                               | 2,585           | 272   | 2.6             | 2.7   | 166             | —                     | 2.6             | —     | 52  | 143 | 2.6 | 3.1 |     |     |
| 15-29                               | 4,599           | 547   | 3.5             | 3.5   | 271             | —                     | 3.3             | —     | 299 | 256 | 3.5 | 4.1 |     |     |
| 30+                                 | 2,181           | 311   | 3.5             | 3.6   | 111             | —                     | 3.5             | —     | 114 | 105 | 3.7 | 4.1 |     |     |
| All durations*                      | 13,744          | 1,601 | 2.6             | 2.7   | 796             | 75                    | 2.6             | 2.1   | 15  | 2   | 934 | 783 | 2.5 | 2.9 |

\* Excludes women with duration of married life '0' years.  
 —Not calculated due to small number of women in the sample.

TABLE V (A)

## INCOMPLETE FERTILITY

*Number of women and average number of children born per woman in different durations of married life by characteristics—concl'd.*

## Characteristic : Nature of Industry

| Duration of married life (in years) | B               |                       | C              |       |                 |       | T              |       |                 |       | S              |       |                 |       |                |       |     |
|-------------------------------------|-----------------|-----------------------|----------------|-------|-----------------|-------|----------------|-------|-----------------|-------|----------------|-------|-----------------|-------|----------------|-------|-----|
|                                     | Number of Women |                       | Average number |       | Number of Women |       | Average Number |       | Number of Women |       | Average Number |       | Number of Women |       | Average Number |       |     |
|                                     | Rural           | Urban                 | Rural          | Urban | Rural           | Urban | Rural          | Urban | Rural           | Urban | Rural          | Urban | Rural           | Urban | Rural          | Urban |     |
| 1-4                                 | ..              | Small number of women | —              | —     | 44              | 176   | 0.5            | 0.6   | —               | 57    | —              | 0.5   | 158             | 487   | 0.4            | 0.6   |     |
| 5-9                                 | ..              | "                     | —              | —     | 66              | 214   | 1.7            | 2.0   | 86              | 86    | —              | 1.9   | 165             | 637   | 1.5            | 1.9   |     |
| 10-14                               | ..              | "                     | —              | —     | 67              | 237   | 2.6            | 3.3   | 96              | 96    | —              | 2.7   | 142             | 579   | 2.5            | 3.0   |     |
| 15-29                               | ..              | "                     | —              | —     | 119             | 409   | 4.1            | 4.1   | 101             | 101   | —              | 3.3   | 318             | 921   | 3.8            | 4.3   |     |
| 30+                                 | ..              | "                     | —              | —     | 58              | 145   | 3.8            | 3.9   | 15              | 15    | —              | —     | 127             | 185   | 4.2            | 4.3   |     |
| All durations*                      | ..              | 27                    | 183            | 2.7   | 2.6             | 354   | 1,181          | 2.9   | 3.0             | 92    | 355            | 2.2   | 2.4             | 910   | 2,809          | 2.6   | 2.8 |

\* Excludes women with duration of married life '0' years.

—Not calculated due to small number of women in the sample.



**TABLE V (B)**  
**Incomplete Fertility**  
*Average number of children born per woman by age at marriage in different durations of married life by characteristics*

| Characteristic : Religion              | Hindu                            |                                  | Muslim                           |                                  | Gond                             |                                  |
|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|  | Rural                            | Urban                            | Rural                            | Urban                            | Rural                            | Urban                            |
|  | Age at marriage<br>—18 18—22 23+ | Age at marriage<br>—18 18—22 23+ | Age at marriage<br>—18 18—22 23+ | Age at marriage<br>—18 18—22 23+ | Age at marriage<br>—18 18—22 23+ | Age at marriage<br>—18 18—22 23+ |
| Duration of married life<br>(in years) |                                  |                                  |                                  |                                  |                                  |                                  |
| 1-4                                    | 0.5 @                            | 0.6 0.5 @                        | 0.8† @                           | 0.6 @                            | 0.5† —                           | .. ..                            |
| 5-9                                    | 1.6 1.4 @                        | 1.8 1.7 @                        | 2.6† @                           | 2.0 @                            | 1.5 —                            | .. ..                            |
| 10-14                                  | 2.7 2.4 @                        | 2.9 2.5 @                        | 3.5† @                           | 3.5 @                            | 2.3 —                            | .. ..                            |
| 15-29                                  | 3.6 3.3 @                        | 4.0 3.3 @                        | 4.1 @                            | 4.2 @                            | 3.1 2.3†                         | .. ..                            |
| 30+                                    | 3.7 3.2 @                        | 4.1 3.1 @                        | —                                | 3.1** @                          | 3.9 —                            | .. ..                            |
| All durations*                         | 2.6 2.3 2.1†                     | 2.9 2.3 2.3†                     | 3.0 3.5††                        | 2.8 2.3 @                        | 2.5 1.8 —                        | .. ..                            |
| Characteristic : Religion              |                                  |                                  |                                  |                                  |                                  |                                  |
|  |                                  | Mahali                           |                                  | Other Tribes                     |                                  | All Tribes                       |
|  |                                  | Rural                            |                                  | Rural                            |                                  | Rural                            |
|  |                                  | Urban                            |                                  | Urban                            |                                  | Urban@@                          |
| Duration of married life<br>(in years) |                                  |                                  |                                  |                                  |                                  |                                  |
|  |                                  | Age at marriage<br>—18 18—22 23+ |                                  | Age at marriage<br>—18 18—22 23+ |                                  | Age at marriage<br>—18 18—22 23+ |
| 1-4                                    | 0.6† @                           | .. ..                            | 0.5 0.6† @                       | .. ..                            | 0.5 @                            | 0.5† @                           |
| 5-9                                    | 1.8† @                           | .. ..                            | 1.5 1.3†                         | .. ..                            | 1.5 1.4 @                        | 1.6 @                            |
| 10-14                                  | 2.6 @                            | .. ..                            | 2.6 2.8 @                        | .. ..                            | 2.5 2.3 @                        | 2.6 @                            |
| 15-29                                  | 3.5 @                            | .. ..                            | 3.6 3.5 @                        | .. ..                            | 3.6 3.1 @                        | 3.4 @                            |
| 30+                                    | 4.3† @                           | .. ..                            | 3.7 4.1†                         | .. ..                            | 3.9 3.9 —                        | @ @                              |
| All durations *                        | 2.8 2.5 —                        | .. ..                            | 2.5 2.5 @                        | .. ..                            | 2.6 2.4 @                        | 2.4 1.7† —                       |

\* Excludes women with duration of married life '0' years.

@ Not calculated since the number of women in the sample was below 25.

† Average is based on number of women between 25 and 49.

†† Data appear to be defective.

— No women

\*\* Lower average due to higher proportion of childless women.

Different tribal groups not considered due to small number of women : Religion—1. Christian 2. Others; Tribes—1. Kondh 2. Kisan 3. Munda 4. Santhal 5. Shabar

@@ Separate break-up of Tribes in *Urban* is not available.

**TABLE V (B)**  
**Incomplete Fertility**  
*Average number of children born per woman by age at marriage in different durations of married life by characteristics—contd.*

| Characteristic : <b>Woman's Education</b> | O               |       |                 |     |                 |      | E               |       |                 |      |                 |     | H               |       |                 |     |                 |     |
|---|-----------------|-------|-----------------|-----|-----------------|------|-----------------|-------|-----------------|------|-----------------|-----|-----------------|-------|-----------------|-----|-----------------|-----|
|   | Rural           |       | Urban           |     | Urban           |      | Rural           |       | Urban           |      | Rural           |     | Urban           |       | Rural           |     | Urban           |     |
|   | Age at marriage |       | Age at marriage |     | Age at marriage |      | Age at marriage |       | Age at marriage |      | Age at marriage |     | Age at marriage |       | Age at marriage |     | Age at marriage |     |
| Duration of married life (in years)       | -18             | 18-22 | 23+             | -18 | 18-22           | 23+  | -18             | 18-22 | 23+             | -18  | 18-22           | 23+ | -18             | 18-22 | 23+             | -18 | 18-22           | 23+ |
| 1-4                                       | 0.5             | 0.5   | @               | 0.6 | 0.5             | @    | 0.5             | @     | —               | 0.6  | 0.7             | @   | ..              | ..    | ..              | ..  | ..              | ..  |
| 5-9                                       | 1.6             | 1.4   | @               | 1.7 | 1.6             | @    | 1.8             | @     | —               | 2.6  | 1.8**           | @   | ..              | ..    | ..              | ..  | ..              | ..  |
| 10-14                                     | 2.7             | 2.4   | @               | 2.9 | 2.3             | @    | 2.7             | @     | —               | 3.3  | 3.5**           | @   | ..              | ..    | ..              | ..  | ..              | ..  |
| 15-29                                     | 3.7             | 3.3   | @               | 3.9 | 3.1             | @    | 2.8††           | @     | —               | 4.6  | 4.3**           | —   | ..              | ..    | ..              | ..  | ..              | ..  |
| 30+                                       | 3.7             | 3.4   | @               | 4.1 | 3.1             | @    | 2.6††           | @     | —               | 3.5† | @               | —   | ..              | ..    | ..              | ..  | ..              | ..  |
| All durations *                           | 2.7             | 2.4   | 2.0†            | 2.8 | 2.2             | 2.6† | 2.1             | 1.9   | —               | 3.1  | 2.6             | @   | ..              | ..    | ..              | ..  | ..              | ..  |

| Characteristic : <b>Husband's Education</b> | O               |       |                 |     |                 |     | E               |       |                 |     |                 |     | H               |       |                 |     |                 |     |
|---|-----------------|-------|-----------------|-----|-----------------|-----|-----------------|-------|-----------------|-----|-----------------|-----|-----------------|-------|-----------------|-----|-----------------|-----|
|   | Rural           |       | Urban           |     | Urban           |     | Rural           |       | Urban           |     | Rural           |     | Urban           |       | Rural           |     | Urban           |     |
|   | Age at marriage |       | Age at marriage |     | Age at marriage |     | Age at marriage |       | Age at marriage |     | Age at marriage |     | Age at marriage |       | Age at marriage |     | Age at marriage |     |
| Duration of married life (in years)         | -18             | 18-22 | 23+             | -18 | 18-22           | 23+ | -18             | 18-22 | 23+             | -18 | 18-22           | 23+ | -18             | 18-22 | 23+             | -18 | 18-22           | 23+ |
| 1-4   | 0.5             | 0.5   | @               | 0.5 | 0.4             | @   | 0.5             | 0.7** | @               | 0.6 | 0.6             | @   | 0.3             | @     | —               | 0.6 | 0.6**           | —   |
| 5-9   | 1.6             | 1.4   | @               | 1.7 | 1.4             | @   | 1.6             | 1.6** | @               | 2.0 | 1.7             | @   | 1.7**           | @     | —               | 2.2 | 1.9**           | @   |
| 10-14                                       | 2.7             | 2.4   | @               | 2.7 | 2.1             | @   | 2.5             | 2.4** | @               | 3.0 | 2.3             | @   | 2.9**           | @     | —               | 3.5 | 3.5**           | @   |
| 15-29                                       | 3.7             | 3.3   | @               | 3.7 | 2.7             | @   | 3.4             | 3.3   | @               | 4.2 | 3.2             | @   | 3.9**           | @     | —               | 4.9 | 4.2             | —   |
| 30+   | 3.7             | 3.4   | @               | 3.8 | 2.9             | @   | 3.4             | @     | —               | 4.3 | 3.1**           | —   | @               | —     | —               | 5.0 | @               | —   |
| All durations *                             | 2.7             | 2.4   | 2.0**           | 2.7 | 2.1             | @   | 2.4             | 2.7   | @               | 2.9 | 2.2             | @   | 2.3             | 1.9** | @               | 3.2 | 2.8             | @   |

\* Excludes women with duration of married life '0' years.

@ Not calculated since the number of women in the sample was below 25.

\*\* Average is based on number of women between 25 and 49.

— No women

†† Differential groups not considered due to small number of women : *Women's Education*—1. H, 2. G

‡ Data appear to be defective. May be due to misclassification of duration of married life.

† Data appear to be defective

## Characteristic : Husband's Education

| Duration of married life (in years) | G               |                 |                 |                 |                 |                 |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                     | Rural           |                 | Urban           |                 | Urban           |                 |
|                                     | Age at marriage | Age at marriage | Age at marriage | Age at marriage | Age at marriage | Age at marriage |
|                                     | -18             | 18-22           | 23+             | -18             | 18-22           | 23+             |
| 1-4                                 | ..              | @               | -               | 0.8†            | @               | @               |
| 5-9                                 | ..              | @               | @               | 2.3†            | @               | @               |
| 10-14                               | ..              | @               | -               | 3.5             | @               | -               |
| 15-29                               | ..              | @               | -               | 4.8             | @               | I               |
| 30+                                 | ..              | -               | -               | 4.7†            | @               | -               |
| All durations*                      | ..              | 2.8†            | @               | 3.6             | 2.7             | @               |

## Characteristic : Nature of Work

| Duration of married life (in years) | T               |                 |                 |                 |                 |                 |   |      |      |      |      |     |      |      |     |   |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---|------|------|------|------|-----|------|------|-----|---|
|                                     | Rural           |                 | Urban           |                 | Urban           |                 |   |      |      |      |      |     |      |      |     |   |
|                                     | Age at marriage | Age at marriage | Age at marriage | Age at marriage | Age at marriage | Age at marriage |   |      |      |      |      |     |      |      |     |   |
|                                     | -18             | 18-22           | 23+             | -18             | 18-22           | 23+             |   |      |      |      |      |     |      |      |     |   |
| 1-4                                 | ..              | 0.4             | @               | -               | 0.6             | 0.4†            | @ | 0.6  | 0.7† | -    |      |     |      |      |     |   |
| 5-9                                 | ..              | 1.6             | @               | @               | 1.8             | 1.4†            | - | 1.7† | @    | 1.4† | @    | 2.1 | 2.0† | @    |     |   |
| 10-14                               | ..              | 2.8             | @               | -               | 3.1             | 2.6†            | @ | 2.6† | @    | 3.0  | 2.8† | -   | 3.5  | 3.0† | @   |   |
| 15-29                               | ..              | 4.0             | @               | @               | 4.2             | 3.5†            | @ | 3.9  | @    | 4.6  | 3.7  | -   | 4.4  | 3.7† | @   |   |
| 30+                                 | ..              | 3.9             | @               | -               | 4.5             | @               | - | 3.4† | @    | 4.7† | @    | -   | 4.4† | @    | -   |   |
| All durations*                      | ..              | 2.7             | 2.2             | @               | 2.9             | 2.0             | @ | 2.6  | 2.7† | @    | 3.3  | 2.5 | @    | 2.9  | 2.3 | @ |

\* Excludes women with duration of married life '0' years.

@ Not calculated since the number of women in the sample was below 25.

† Average is based on number of women between 25 and 49.

- No women.

**TABLE V (B)**  
**Incomplete Fertility**  
*Average number of children born per woman by age at marriage in different durations of married life by characteristics—concl.*  
**Characteristic : Nature of Work**

| Duration of married life<br>(in years)  | S                                |                                  | FA                               |                                  | P                                |                                  |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|   | Rural                            | Urban                            | Rural                            | Urban                            | Rural                            | Urban                            |
|   | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ |
| 1-4                                     | 0.5†                             | 0.6                              | 0.5                              | 0.6                              | 0.5                              | 0.5                              |
| 5-9                                     | 1.6                              | 2.1                              | 1.5                              | 1.7                              | 1.5                              | 1.9                              |
| 10-14                                   | 2.7                              | 3.4                              | 2.4                              | 2.8                              | 2.6                              | 3.2                              |
| 15-29/                                  | 4.0                              | 4.3                              | 3.3                              | 3.6                              | 3.8                              | 4.0                              |
| 30+                                     | 3.8†                             | 4.2                              | 3.2 <sup>1</sup>                 | 3.8                              | 3.7                              | 4.1                              |
| All durations*                          | 2.9                              | 3.1                              | 2.4                              | 2.8                              | 2.6                              | 2.9                              |
| <b>Characteristic : Nature of Work</b>  |                                  |                                  |                                  |                                  |                                  |                                  |
| Duration of married life.<br>(in years) | W                                |                                  | Urban                            |                                  | Urban                            |                                  |
|   | Rural                            | Urban                            | Rural                            | Urban                            | Rural                            | Urban                            |
|   | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ |
| 1-4                                     | 0.5†                             | 0.8                              | 0.5                              | 0.6                              | 0.5                              | 0.5                              |
| 5-9                                     | 1.5                              | 1.6                              | 1.5                              | 1.7                              | 1.5                              | 1.9                              |
| 10-14                                   | 2.6†                             | 2.8                              | 2.4                              | 2.8                              | 2.6                              | 3.2                              |
| 15-29                                   | 3.5                              | 3.6                              | 3.3                              | 3.6                              | 3.8                              | 4.0                              |
| 30+                                     | 3.8†                             | 4.2                              | 3.2 <sup>1</sup>                 | 3.8                              | 3.7                              | 4.1                              |
| All durations*                          | 2.4                              | 2.5                              | 2.4                              | 2.8                              | 2.6                              | 2.9                              |

\* Excludes women with duration of married life '0' years.

@ Not calculated since the number of women in the sample was below 25.

† Average is based on number of women between 25 and 49.

— No women

Differential groups not considered due to small number of women : 1. FH

## Characteristic : Nature of Industry

| Duration of married life<br>(in years) | FA                               |                                  | FO                               |                                  | M                                |                                  |
|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|  | Rural                            | Urban                            | Rural                            | Urban                            | Rural                            | Urban                            |
|  | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ |
| 1-4                                    | 0.5                              | 0.5†                             | 0.5                              | @                                | 0.4                              | @                                |
| 5-9                                    | 1.6                              | 1.5†                             | 1.8                              | 1.5†                             | 1.4                              | 1.4†                             |
| 10-14                                  | 2.7                              | 2.4                              | 2.8                              | 1.9†                             | 2.7                              | @                                |
| 15-29                                  | 3.6                              | 3.3                              | 3.6                              | 2.6                              | 3.7                              | 2.1†                             |
| 30+                                    | 3.6                              | 3.2                              | 3.8                              | 3.1                              | 3.7                              | @                                |
| All durations*                         | 2.6                              | 2.4                              | 2.8                              | 2.2                              | 2.6                              | 1.8                              |

## Characteristic : Nature of Industry

| Duration of married life<br>(in years) | C                                |                                  | T                                |                                  | S                                |                                  |
|--|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|  | Rural                            | Urban                            | Rural                            | Urban                            | Rural                            | Urban                            |
|  | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ | Age at marriage<br>-18 18-22 23+ |
| 1-4                                    | 0.6†                             | 0.6                              | 0.6†                             | @                                | 0.5                              | 0.4†                             |
| 5-9                                    | 1.6                              | 1.8†                             | 2.0                              | 1.4†                             | 1.5                              | @                                |
| 10-14                                  | 2.6                              | 2.7†                             | 3.4                              | 2.7†                             | 2.5                              | @                                |
| 15-29                                  | 4.1                              | 3.0                              | 4.3                              | 3.0                              | 3.8                              | 3.6†                             |
| 30+                                    | 3.9                              | 4.2                              | 4.2                              | 2.7†                             | 4.1                              | @                                |
| All durations*                         | 2.9                              | 2.5†                             | 3.1                              | 2.3                              | 2.7                              | 2.3                              |

\* Excludes women with duration of married life '0' years.

@ Not calculated since the number of women in the sample was below 25.

† Average is based on number of women between 25 and 49.

— No women

Differential groups not considered due to small number of women: 1.Q, 2.B

TABLE VI (A)  
Completed Fertility

*Number of women and average number of children born per woman of completed fertility  
by characteristics*

(Women aged 43 years and above)

| Characteristic   | Rural        |                         | Urban        |                         |
|--|--------------|-------------------------|--------------|-------------------------|
|  | No. of women | Average No. of children | No. of women | Average No. of children |
| <b>I. Religion</b>   |              |                         |              |                         |
| 1. Hindu   | 3,088        | 3.6                     | 1,310        | 3.9                     |
| 2. Muslim  | 38           | 4.0                     | 92           | 3.2*                    |
| 3. Sikh  | ..           | ..                      | ..           | ..                      |
| 4. Christian   | 20           | @                       | 3            | @                       |
| 5. All Tribes  | 525          | 3.8                     | 32†          | 2.9*                    |
| 6. Gond  | 89           | 3.5                     | ..           | ..                      |
| 7. Kandh   | 30           | 3.1*                    | ..           | ..                      |
| 8. Kisan   | 36           | 3.6                     | ..           | ..                      |
| 9. Mahali  | 61           | 4.3                     | ..           | ..                      |
| 10. Munda  | 63           | 4.7                     | ..           | ..                      |
| 11. Santhal  | 42           | 3.6                     | ..           | ..                      |
| 12. Shabar   | 26           | 3.7                     | ..           | ..                      |
| <b>II. Woman's Education</b>   |              |                         |              |                         |
| 1. Formal schooling but High School or equivalent examination not passed | 139          | 2.6*                    | 96           | 4.1                     |
| 2. High School or equivalent examination                                 | ..           | ..                      | 1            | @                       |
| 3. Graduated from college  | ..           | ..                      | ..           | ..                      |
| 4. Others comprising just Literates and Uneducated                       | 3,532        | 3.7                     | 1,441        | 3.9                     |
| <b>III. Husband's Education</b>  |              |                         |              |                         |
| 1. Formal schooling but High School or equivalent examination not passed | 312          | 3.3*                    | 338          | 4.0                     |
| 2. High School or equivalent examination                                 | 26           | 4.9                     | 106          | 5.0                     |
| 3. Graduated from college  | ..           | ..                      | 47           | 4.6                     |
| 4. Others comprising just Literates and Uneducated                       | 3,333        | 3.6                     | 951          | 3.6                     |
| <b>IV. Nature of Work</b>  |              |                         |              |                         |
| 1. Technical, Professional and Related Workers                           | 105          | 4.1                     | 135          | 4.3                     |
| 2. Administrative, Executive and Managerial Workers                      | 46           | 3.5                     | 79           | 4.4                     |
| 3. Clerical and Related Workers  | 26           | 4.9                     | 69           | 4.1                     |
| 4. Sales Workers   | 62           | 3.7                     | 180          | 3.9                     |
| 5. Farmers   | 2,629        | 3.5                     | 363          | 3.5                     |
| 6. Hunters, Loggers and Related Workers                                  | ..           | ..                      | ..           | ..                      |
| 7. Production Process Workers and Craftsmen                              | 122          | 3.8                     | 149          | 4.0                     |
| 8. Unskilled Workers   | 29           | 3.8                     | 28           | 4.1                     |
| <b>V. Nature of Industry</b>   |              |                         |              |                         |
| 1. (i) Agriculture, where occupation is Farming                          | 2,629        | 3.5                     | 363          | 3.5                     |
| (ii) Agriculture, where occupation is Other than Farming                 | 138          | 3.5                     | 14           | @                       |
| 2. Quarrying and Mining  | ..           | ..                      | ..           | ..                      |
| 3. Manufacture   | 134          | 3.7                     | 131          | 4.1                     |
| 4. Building and Construction   | 4            | @                       | 27           | 3.9                     |
| 5. Commerce  | 69           | 3.9                     | 180          | 3.8                     |
| 6. Transport, Storage and Communication                                  | 2            | @                       | 24           | @                       |
| 7. Services  | 153          | 4.2                     | 279          | 4.2                     |

@ Not calculated since the number of women in the sample is below 25.

† Separate break-up for different tribes in urban is not available.

\* Averages in general are low, but specially in these cases data appear to be defective.

TABLE VI (B)  
Completed Fertility  
Average number of children born per woman of completed fertility by age at marriage for characteristics

| Age at marriage | Religion |       |        |       |      |   |           |       |      |     |       |       |       |      |        |       |       |      |    |
|-----------------|----------|-------|--------|-------|------|---|-----------|-------|------|-----|-------|-------|-------|------|--------|-------|-------|------|----|
|                 | Hindu    |       | Muslim |       | Sikh |   | Christian |       | Gond |     | Kandh |       | Kisan |      | Mahali |       | Munda |      |    |
|                 | R        | U     | R      | U     | R    | U | R         | U     | R    | U   | R     | U     | R     | U    | R      | U     | R     | U    |    |
| —18             | ..       | 3.7   | 4.1    | 3.4** | 3.1  | — | —         | 4.9** | —    | 3.9 | ..    | 3.3** | ..    | 3.8* | ..     | 4.3*  | ..    | 4.6* | .. |
| 18--22          | ..       | 3.2   | 3.1    | —     | —    | — | —         | —     | —    | ..  | ..    | ..    | ..    | 4.2* | ..     | 4.2** | ..    | —    | .. |
| 23+             | ..       | 2.5** | 3.4**  | —     | —    | — | —         | —     | —    | ..  | ..    | ..    | ..    | —    | ..     | —     | ..    | —    | .. |

| Age at marriage | Religion |    |        |    |              |    |            |
|-----------------|----------|----|--------|----|--------------|----|------------|
|                 | Santhal  |    | Shabar |    | Other Tribes |    | All Tribes |
|                 | R        | U† | R      | U† | R            | U  | R          |
| —18             | 3.4*     | .. | 3.8**  | .. | 3.7          | .. | 3.9        |
| 18--22          | ..       | .. | ..     | .. | 4.1          | .. | 3          |
| 23-             | —        | .. | ..     | .. | —            | .. | —          |

\* Average is based on number of women between 25 and 49.

\*\* Average is based on number of women between 11 and 25.

— Average is not calculated since the number of women is up to 10.

† Separate break-up for different tribes in Urban is not available.

TABLE VI (B)

Completed Fertility

Average number of children born per woman of completed fertility by age at marriage for characteristics—concl'd.

| Age at marriage | Woman's Education |             |             |             |             | Husband's Education <sup>1</sup> |             |             |             |       |   |      |       |       |
|-----------------|-------------------|-------------|-------------|-------------|-------------|----------------------------------|-------------|-------------|-------------|-------|---|------|-------|-------|
|                 | E<br>R<br>U       | H<br>R<br>U | G<br>R<br>U | O<br>R<br>U | E<br>R<br>U | H<br>R<br>U                      | H<br>R<br>U | G<br>R<br>U | O<br>R<br>U |       |   |      |       |       |
|                 |                   |             |             |             |             |                                  |             |             |             |       |   |      |       |       |
| —18 ..          | 2.6               | 3.5         | —           | —           | 3.7         | 4.1                              | 3.4         | 4.3         | 5.8**       | 5.0   | — | 4.7* | 3.7   | 3.8   |
| 18—22 / ..      | —                 | 3.5**       | —           | —           | 3.4         | 3.1                              | 2.8**       | 3.1*        | —           | 4.8** | — | —    | 3.4   | 2.9   |
| 23+ ..          | —                 | —           | —           | —           | 2.5**       | 3.5**                            | —           | —           | —           | —     | — | —    | 2.5** | 3.5** |

| Age at marriage | Nature of Work |             |             |             |                  |                  |             |             |       |     |   |   |     |       |       |       |
|-----------------|----------------|-------------|-------------|-------------|------------------|------------------|-------------|-------------|-------|-----|---|---|-----|-------|-------|-------|
|                 | T<br>R<br>U    | A<br>R<br>U | C<br>R<br>U | S<br>R<br>U | F<br>A<br>R<br>U | E<br>H<br>R<br>U | P<br>R<br>U | W<br>R<br>U |       |     |   |   |     |       |       |       |
|                 |                |             |             |             |                  |                  |             |             |       |     |   |   |     |       |       |       |
| —18 ..          | 3.9            | 4.5         | 3.4*        | 4.7*        | 4.8**            | 4.4*             | 3.8*        | 4.2         | 3.6   | 3.8 | — | — | 3.7 | 4.1   | 4.3** | 5.4** |
| 18—22 ..        | —              | 2.9**       | —           | —           | —                | —                | —           | 2.7*        | 3.2   | 3.1 | — | — | —   | 3.3** | —     | —     |
| 23+ ..          | —              | —           | —           | —           | —                | —                | —           | —           | 2.5** | —   | — | — | —   | —     | —     | —     |



Nature of Industry

| Age at marriage | Nature of Industry |      |   |     |       |   |       |     |      |   |       |     |       |
|-----------------|--------------------|------|---|-----|-------|---|-------|-----|------|---|-------|-----|-------|
|                 | FA                 | FO   | Q | M   | B     | C | T     | S   | R    | U |       |     |       |
| —18             | 3.6                | 3.7  | — | 3.7 | 4.2   | — | 4.1** | 3.9 | 4.2  | — | 5.5** | 4.1 | 4.4   |
| 18—22           | 3.2                | 3.1* | — | —   | 3.3** | — | —     | —   | 2.7* | — | —     | —   | 3.0** |
| 23              | 2.5**              | —    | — | —   | —     | — | —     | —   | —    | — | —     | —   | —     |

\* Average is based on number of women between 25 and 49.

\*\* Average is based on number of women between 11 and 25.

— Average is not calculated since the number of women is up to 10.

Differential groups not considered due to small number of women: *Woman's Education*—1. H, 2. G *Nature of Industry*—1. F.O., 2. Q

† Separate break-up for different tribes in Urban is not available.

TABLE VII (A)

## Marital Fertility Rates (M. F. R.) by characteristics

(Women between ages 13 and 47)

*N. B. Rates in general are very deficient but in cases where the values are less than 100.0, under recording of live births seems to be the possibility.*

| Characteristic  | Rural        |          | Urban        |          |
|---|--------------|----------|--------------|----------|
|   | No. of women | M. F. R. | No. of women | M. F. R. |
| <b>I. Religion</b>  |              |          |              |          |
| 1. Hindu ..   | 14,205       | 100.1    | 7,025        | 112.5    |
| 2. Muslim ..  | 260          | 69.2*    | 443          | 112.9    |
| 3. Christian ..   | 88           | 102.3    | 24           | @        |
| 4. Gond ..  | 399          | 80.2*    | ..           | ..       |
| 5. Kandh ..   | 187          | 58.8*    | ..           | ..       |
| 6. Kisan ..   | 155          | 77.4*    | ..           | ..       |
| 7. Mahali ..  | 260          | 59.2*    | ..           | ..       |
| 8. Munda ..   | 241          | 145.2    | ..           | ..       |
| 9. Santhal ..   | 176          | 56.8*    | ..           | ..       |
| 10. Shabar ..   | 240          | 87.5*    | ..           | ..       |
| 11. Other Tribes ..   | 975          | 133.3    | ..           | ..       |
| 12. All Tribes ..   | 2,633        | 102.2    | 356†         | 70.2*    |
| <b>II. Woman's Education</b>  |              |          |              |          |
| 1. Formal schooling but High School or equivalent examination not passed .. | 754          | 104.8    | 975          | 144.6    |
| 2. High School or equivalent examination ..                                 | 6            | "        | 73           | 137.0    |
| 3. Graduated from college ..  | 1            | "        | 11           | "        |
| 4. Others comprising just Literates and Uneducated ..                       | 16,425       | 99.8     | 6,812        | 101.7    |
| <b>III. Husband's Education</b>   |              |          |              |          |
| 1. Formal schooling but High School or equivalent examination not passed .. | 1,771        | 98.8     | 2,135        | 111.5    |
| 2. High School or equivalent examination ..                                 | 243          | 111.1    | 1,018        | 139.5    |
| 3. Graduated from college ..  | 36           | 138.0    | 337          | 121.7    |
| 4. Others comprising just Literates and Uneducated ..                       | 15,136       | 99.8     | 4,381        | 100.9    |
| <b>IV. Nature of Work</b>   |              |          |              |          |
| 1. Technical, Professional and Related Workers ..                           | 691          | 140.4    | 1,139        | 118.5    |
| 2. Administrative, Executive and Managerial Workers ..                      | 267          | 127.3    | 849          | 122.5    |
| 3. Clerical and Related Workers ..  | 154          | 97.4*    | 787          | 137.2    |
| 4. Sales Workers ..   | 300          | 130.0    | 1,054        | 123.3    |
| 5. Farmers ..   | 12,309       | 96.6     | 1,388        | 97.3*    |
| 6. Hunters, Loggers and Related Workers ..                                  | 6            | "        | 1            | "        |
| 7. Production Process Workers and Craft men ..                              | 804          | 111.9    | 775          | 118.7    |
| 8. Unskilled Workers ..   | 270          | 122.2    | 303          | 150.7    |
| <b>V. Nature of Industry</b>  |              |          |              |          |
| 1. (i) Agriculture, where occupation is Farming ..                          | 12,309       | 96.6*    | 1,388        | 97.3*    |
| (ii) Agriculture, where occupation is Other than Farming ..                 | 721          | 87.4*    | 72           | 83.3*    |
| 2. Quarrying and Mining ..  | 16           | "        | 2            | "        |
| 3. Manufacture ..   | 858          | 115.4    | 710          | 123.9    |
| 4. Building and Construction ..   | 26           | 115.4    | 167          | 113.8    |
| 5. Commerce ..  | 313          | 147.0    | 1,088        | 120.4    |
| 6. Transport, Storage and Communication ..                                  | 91           | 131.9    | 353          | 107.6    |
| 7. Services ..  | 805          | 128.0    | 2,703        | 128.4    |

@ Not calculated since the number of women in the sample is below 25.

† Separate break-up for different tribes in Urban is not available.

\* Data appear to be defective due to under-recording of live births.

TABLE VII (B)  
Age Specific Marital Fertility Rates (A-S, M, F, R.) by characteristics

| Characteristic : Religion | Age Specific Marital Fertility Rates (A-S, M, F, R.) by characteristics |       |            |              |     |            |              |    |            |              |    |            |              |    |            |              |       |            |              |  |
|---------------------------|---|-------|------------|--------------|-----|------------|--------------|----|------------|--------------|----|------------|--------------|----|------------|--------------|-------|------------|--------------|--|
|                           | Hindu   |       |            | Muslim       |     |            | Gond         |    |            | Mahali       |    |            | Other Tribes |    |            |              |       |            |              |  |
|                           | No. of women  |       |            | No. of women |     |            | No. of women |    |            | No. of women |    |            | No. of women |    |            |              |       |            |              |  |
| Age-group                 | R   | U     | A.S.M.F.R. | R            | U   | A.S.M.F.R. | R            | U  | A.S.M.F.R. | R            | U  | A.S.M.F.R. | R            | U  | A.S.M.F.R. | R            | U     | A.S.M.F.R. |              |  |
| 13-17                     | 870   | 414   | 54.0       | 82.1         | 44  | 90.9       | 19           | .. | @          | ..           | .. | ..         | 40           | .. | 100.0      | ..           | ..    | ..         |              |  |
| 18-22                     | 3,226   | 1,654 | 132.7      | 149.9        | 109 | 119.3      | 75           | .. | 186.7      | ..           | 87 | ..         | 103.4        | .. | 230        | ..           | 173.9 | ..         |              |  |
| 23-27                     | 2,844   | 1,418 | 124.8      | 150.2        | 98  | 142.9      | 70           | .. | 57.1       | ..           | 40 | ..         | 75.0         | .. | 191        | ..           | 167.5 | ..         |              |  |
| 28-32                     | 2,838   | 1,398 | 114.5      | 124.5        | 80  | 162.5      | 99           | .. | 80.8       | ..           | 77 | ..         | 51.9         | .. | 201        | ..           | 144.3 | ..         |              |  |
| 33-37                     | 1,647   | 858   | 94.1       | 95.6         | 37  | 135.1      | 58           | .. | 69.0       | ..           | 4  | ..         | @            | .. | 128        | ..           | 101.6 | ..         |              |  |
| 38-42                     | 1,700   | 831   | 55.3       | 42.1         | 46  | 0.0        | 41           | .. | 48.8       | ..           | 50 | ..         | 40.0         | .. | 124        | ..           | 72.6  | ..         |              |  |
| 43-47                     | 1,080   | 452   | 16.7       | 8.8          | 29  | 34.5       | 37           | .. | 0.0        | ..           | 2  | ..         | @            | .. | 61         | ..           | 49.2  | ..         |              |  |
| 48+                       | 2,008   | 858   | 5.0        | 3.5          | 63  | 15.9       | 52           | .. | 0.0        | ..           | 59 | ..         | 0.0          | .. | 117        | ..           | 17.1  | ..         |              |  |
| Chara t r stic : Religion |   |       |            |              |     |            |              |    |            |              |    |            |              |    |            |              |       |            |              |  |
| Age-group                 | All Tribes  |       |            |              |     |            |              |    |            |              |    |            |              |    |            |              |       |            |              |  |
|                           | No. of women  |       |            | No. of women |     |            | No. of women |    |            | No. of women |    |            | No. of women |    |            | No. of women |       |            | No. of women |  |
| 13-17                     | 127   | 13    | 47.2       | @            | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 18-22                     | 548   | 78    | 149.6      | 102.6        | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 23-27                     | 511   | 80    | 125.2      | 62.5         | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 28-32                     | 551   | 88    | 116.2      | 102.3        | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 33-37                     | 371   | 34    | 83.6       | 88.2         | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 38-42                     | 337   | 47    | 50.4       | 0.0          | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 43-47                     | 188   | 16    | 26.6       | @            | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |
| 48+                       | 337   | 16    | 5.9        | @            | ..  | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | .. | ..         | ..           | ..    | ..         | ..           |  |

(i) Not calculated due to small number of women in the sample.  
 A.S.M.F.R. have not been calculated in cases where the number of women in the differential group falls below 300.  
 Differential groups not considered due to small number of women: 1. Christian, 2. Kandha, 3. Kisan, 4. Munda, 5. Shabar, 6. Santhal  
 -- No women  
 \* Separate break-up for different tribes in Urban is not available.

**TABLE VII (B)**  
**Age Specific Marital Fertility Rates (A. S. M. F. R.) by characteristics - contd.**

| Characteristic :<br>Age group | O            |       |            |       |              |     | E          |       |              |    |            |    | H            |    |            |    |              |    | G          |    |              |    |  |  |
|-------------------------------|--------------|-------|------------|-------|--------------|-----|------------|-------|--------------|----|------------|----|--------------|----|------------|----|--------------|----|------------|----|--------------|----|--|--|
|                               | No. of women |       | A.S.M.F.R. |       | No. of women |     | A.S.V.F.R. |       | No. of women |    | A.S.M.F.R. |    | No. of women |    | A.S.M.F.R. |    | No. of women |    | A.S.M.F.R. |    | No. of women |    |  |  |
|                               | R            | U     | R          | U     | R            | U   | R          | U     | R            | U  | R          | U  | R            | U  | R          | U  | R            | U  | R          | U  | R            | U  |  |  |
| 13-17                         | ..           | 956   | 393        | 53.3  | 76.3         | 72  | 77         | 69.4  | 103.9        | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 18-22                         | ..           | 3,639 | 1,554      | 135.5 | 137.1        | 206 | 272        | 135.9 | 202.4        | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 23-27                         | ..           | 3,302 | 1,374      | 125.1 | 131.7        | 122 | 200        | 123.0 | 225.0        | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 28-32                         | ..           | 3,311 | 1,371      | 112.1 | 124.7        | 145 | 191        | 124.1 | 136.1        | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 33-37                         | ..           | 1,982 | 822        | 90.3  | 88.5         | 74  | 107        | 108.1 | 74.8         | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 38-42                         | ..           | 1,993 | 841        | 55.7  | 38.0         | 90  | 85         | 33.3  | 35.3         | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 43-47                         | ..           | 1,242 | 457        | 15.3  | 10.9         | 45  | 43         | 44.4  | 0.0          | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 48+                           | ..           | 2,290 | 888        | 4.4   | 4.5          | 94  | 53         | 21.3  | 0.0          | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |

| Characteristic :<br>Age-group | O            |       |            |       |              |     | E          |       |              |     |            |    | H            |       |            |    |              |    | G          |    |              |    |  |  |
|-------------------------------|--------------|-------|------------|-------|--------------|-----|------------|-------|--------------|-----|------------|----|--------------|-------|------------|----|--------------|----|------------|----|--------------|----|--|--|
|                               | No. of women |       | A.S.M.F.R. |       | No. of women |     | A.S.M.F.R. |       | No. of women |     | A.S.M.F.R. |    | No. of women |       | A.S.M.F.R. |    | No. of women |    | A.S.M.F.R. |    | No. of women |    |  |  |
|                               | R            | U     | R          | U     | R            | U   | R          | U     | R            | U   | R          | U  | R            | U     | R          | U  | R            | U  | R          | U  | R            | U  |  |  |
| 13-17                         | ..           | 871   | 257        | 57.4  | 70.0         | 118 | 126        | 42.4  | 103.2        | 75  | 80.0       | 15 | 15           | 80.0  | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 18-22                         | ..           | 3,330 | 984        | 136.9 | 160.6        | 424 | 534        | 120.3 | 101.1        | 254 | 165.4      | 77 | 77           | 194.8 | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 23-27                         | ..           | 3,034 | 873        | 123.9 | 105.4        | 331 | 441        | 136.0 | 183.7        | 216 | 203.7      | 73 | 73           | 191.8 | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 28-32                         | ..           | 3,091 | 879        | 113.2 | 111.5        | 326 | 413        | 92.0  | 142.9        | 216 | 138.9      | 74 | 74           | 121.6 | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 33-37                         | ..           | 1,796 | 525        | 89.1  | 104.8        | 245 | 251        | 98.0  | 63.7         | 115 | 139.1      | 43 | 43           | 46.5  | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 38-42                         | ..           | 1,854 | 546        | 51.8  | 33.0         | 209 | 247        | 67.0  | 52.6         | 105 | 38.1       | 31 | 31           | 0.0   | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 43-47                         | ..           | 1,160 | 317        | 12.9  | 9.5          | 118 | 123        | 50.8  | 16.3         | 37  | 0.0        | 24 | 24           | 0.0   | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |
| 48+                           | ..           | 2,173 | 634        | 4.6   | 4.7          | 194 | 215        | 10.3  | 4.7          | 69  | 0.0        | 23 | 23           | 0.0   | ..         | .. | ..           | .. | ..         | .. | ..           | .. |  |  |

@ Not calculated due to small number of women in the sample.  
A.S.M.F.R. have not been calculated in cases where the number of women in the differential group falls below 300.  
Differential groups not considered due to small number of women : *Woman's education*—I. H. 2.G

TABLE VII (B)  
Age Specific Marital Fertility Rates (A. S. M. F. R.) by characteristics—contd.

| Characteristic:<br>Age group | T<br>No. of women |     | A.S.M.F.R. |       | A<br>No. of women |       | A.S.M.F.R. |       | C<br>No. of women |     | S<br>No. of women |       | FA<br>No. of women |       |                |   |                |   |                |   |                |   |                |   |                |   |                |   |
|------------------------------|-------------------|-----|------------|-------|-------------------|-------|------------|-------|-------------------|-----|-------------------|-------|--------------------|-------|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|----------------|---|
|                              |                   |     |            |       |                   |       |            |       |                   |     |                   |       |                    |       | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   |                |   |
|                              |                   |     |            |       |                   |       |            |       |                   |     |                   |       |                    |       | R              | U | R              | U | R              | U | R              | U | R              | U | R              | U | R              | U |
| 13-17                        | 47                | 57  | 85.1       | 87.7  | 38                | 105.3 | 55         | 90.9  | 11                | 61  | 114.8             | 756   | 106                | 47.6  | 66.0           |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 18-22                        | 154               | 296 | 162.3      | 152.0 | 183               | 202.2 | 199        | 175.9 | 64                | 237 | 156.3             | 2,671 | 286                | 134.0 | 146.9          |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 23-27                        | 158               | 277 | 208.9      | 155.2 | 171               | 152.0 | 175        | 194.3 | 68                | 217 | 161.8             | 2,375 | 244                | 122.5 | 143.4          |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 28-32                        | 141               | 241 | 141.8      | 145.2 | 181               | 132.6 | 162        | 123.5 | 68                | 204 | 147.1             | 2,485 | 261                | 107.0 | 111.1          |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 33-37                        | 84                | 109 | 83.3       | 36.7  | 128               | 93.8  | 93         | 139.8 | 31                | 139 | 161.3             | 1,519 | 174                | 94.1  | 97.7           |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 38-42                        | 75                | 106 | 106.7      | 28.3  | 102               | 9.8   | 72         | 13.9  | 40                | 132 | 50.0              | 1,537 | 205                | 49.4  | 24.4           |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 43-47                        | 32                | 53  | 0.0        | 0.0   | 46                | 0.0   | 31         | 0.0   | 18                | 64  | 0.0               | 966   | 112                | 19.7  | 0.0            |   |                |   |                |   |                |   |                |   |                |   |                |   |
| 48+                          | 73                | 82  | 0.0        | 12.2  | 33                | 0.0   | 38         | 0.0   | 44                | 116 | 0.0               | 1,663 | 251                | 4.8   | 4.0            |   |                |   |                |   |                |   |                |   |                |   |                |   |
| Nature of Work               |                   |     |            |       |                   |       |            |       |                   |     |                   |       |                    |       |                |   |                |   |                |   |                |   |                |   |                |   |                |   |
| Characteristic:<br>Age group | P<br>No. of women |     | A.S.M.F.R. |       | W<br>No. of women |       | A.S.M.F.R. |       | No. of women      |     | A.S.M.F.R.        |       | No. of women       |       | A.S.M.F.R.     |   |                |   |                |   |                |   |                |   |                |   |                |   |
|                              |                   |     |            |       |                   |       |            |       |                   |     |                   |       |                    |       |                |   | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   | Nature of Work |   |
|                              |                   |     |            |       |                   |       |            |       |                   |     |                   |       |                    |       |                |   | R              | U | R              | U | R              | U | R              | U | R              | U | R              | U |

① Not calculated due to small number of women in the sample.  
 ② A.S.M.F.R. have not been calculated in cases where the number of women in the differential group falls below 300.  
 † Differential groups not considered due to small number of women: 1. FH  
 ‡ Data appear to be defective.

TABLE VII (B)  
Age Specific Marital Fertility Rates (A. S. M. F. R.) by characteristics--*concl'd.*

| Characteristic.<br>Age-group | FA           |     | FO           |       | M            |       | C            |     | T            |       |    |     |       |       |    |       |
|------------------------------|--------------|-----|--------------|-------|--------------|-------|--------------|-----|--------------|-------|----|-----|-------|-------|----|-------|
|                              | No. of women |     | No. of women |       | No. of women |       | No. of women |     | No. of women |       |    |     |       |       |    |       |
|                              | R            | U   | R            | U     | R            | U     | R            | U   | R            | U     |    |     |       |       |    |       |
| 13-17                        | 756          | 106 | 47.6         | 66.0  | 43           | 46.5  | 38           | 39  | 131.6        | 102.6 | 12 | 4   | @     | 125.0 | 22 | (a)   |
| 18-22                        | 2,671        | 286 | 134.0        | 146.9 | 113          | 88.5  | 195          | 177 | 133.3        | 203.4 | 65 | 238 | 153.8 | 117.6 | 88 | 125.0 |
| 23-27                        | 2,375        | 244 | 122.5        | 143.4 | 181          | 127.1 | 210          | 149 | 138.1        | 107.4 | 71 | 224 | 169.0 | 205.4 | 93 | 118.3 |
| 28-32                        | 2,485        | 261 | 107.0        | 111.1 | 155          | 77.4  | 187          | 129 | 149.7        | 139.5 | 70 | 212 | 142.9 | 127.4 | 82 | 134.1 |
| 33-37                        | 1,519        | 174 | 94.1         | 97.7  | 91           | 120.9 | 88           | 76  | 56.8         | 78.9  | 33 | 151 | 333.3 | 79.5  | 28 | 0.0   |
| 38-42                        | 1,537        | 205 | 49.4         | 24.4  | 87           | 46.0  | 88           | 88  | 56.8         | 68.2  | 40 | 135 | 50.0  | 59.3  | 23 | (a)   |
| 43-47                        | 966          | 112 | 19.7         | 0.0   | 51           | 19.6  | 52           | 52  | 19.2         | 38.5  | 22 | 64  | (a)   | 0.0   | 17 | (a)   |
| 48                           | 1,663        | 251 | 4.8          | 4.0   | 87           | 11.5  | 82           | 79  | 12.2         | 12.7  | 47 | 116 | 0.0   | 0.0   | 7  | @     |

| Characteristic.<br>Age group | S            |     | No. of women |       | A.S.M.F.R.   |    | No. of women |    | A.S.M.F.R.   |    | No. of women |    | A.S.M.F.R.   |    |
|------------------------------|--------------|-----|--------------|-------|--------------|----|--------------|----|--------------|----|--------------|----|--------------|----|
|                              | No. of women |     | No. of women |       | No. of women |    | No. of women |    | No. of women |    | No. of women |    | No. of women |    |
|                              | R            | U   | R            | U     | R            | U  | R            | U  | R            | U  | R            | U  | R            | U  |
| 13-17                        | 44           | 142 | 68.2         | 84.5  | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 18-22                        | 225          | 675 | 168.9        | 174.8 | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 23-27                        | 135          | 577 | 192.6        | 161.2 | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 28-32                        | 134          | 577 | 111.9        | 135.2 | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 33-37                        | 103          | 315 | 97.1         | 120.6 | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 38-42                        | 124          | 282 | 88.7         | 21.3  | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 43-47                        | 40           | 135 | 0.0          | 14.8  | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |
| 48+                          | 113          | 144 | 0.0          | 0.0   | ..           | .. | ..           | .. | ..           | .. | ..           | .. | ..           | .. |

(a) Not calculated due to small number of women in the sample.  
A.S.M.F.R. have not been calculated in cases where the number of women in the differential group falls below 300.  
Differential groups not considered due to small number of women: 1, Q, 2, B  
† Data appear to be defective.

**LIST OF AGENTS FOR THE SALE OF GOVERNMENT OF INDIA PUBLICATIONS**  
(as on 17th February 1964)

|  |  |
|--|--|
| <b>AGARTALA</b> —Laxmi Bhandar Books & Scientific Sales .. (Rest.)   | <b>BHOPAL</b> —  |
| <b>AGRA</b> —  | 1 Superintendent, State Government Press   |
| 1. National Book House, Jeoni Mandi .. (Reg.)  | 2. Lyall Book Depot, Mohd. Din Bldg. Sultania Road .. (Reg.)   |
| 2. Wadhwa & Co., 45, Civil Lines .. (Reg.)   | 3. Delite Books, Opp. Bhopal Talkies .. (Rest.)  |
| 3. Banwari Lal Jain, Publishers, Moti Ka ra .. (Rest.)   | <b>BHUBANESWAR</b> —Ekamra Vidyabhaban, Eastern Tower, Room No. 3 .. (Rest.)   |
| 4. English Book Depot, Sadar Bazar, Agra Cantt. .. (Rest.)   | <b>BIJAPUR</b> —Shri D. V. Deshpande, Recognised Law Booksellers, Prop. Vinod Book Depot, Near Shirusheti Chowk .. (Rest.) |
| <b>AHMADNAGAR</b> —V. T. Jorakar, Prop. Rama General Stores, Navi Path .. (Rest.)                                    | <b>BIKANER</b> —Bhandani Bros. .. (Rest.)  |
| <b>AHMEDABAD</b> —   | <b>BILASPUR</b> —Sharma Book Stall, S dar Bazar .. (Rest.)   |
| 1. Balgovind Kuber Dass & Co., Gandhi Road .. (Reg.)   | <b>BOMBAY</b> —  |
| 2. Chandra Kant Chiman Lal Vor a Gandhi Road .. (Reg.)   | 1 Supdt., Printing and Stationery, Queens Road   |
| 3. New Order Book Co., Ellis Bridge .. (Reg.)  | 2. Charles Lambert and Co., 101, Mahatma Gandhi Road .. (Reg.)   |
| 4. Mahajan Bros., Opp. Khadia Police Gate .. (Rest.)   | 3. Co-operators Book Depot, 5/32, Ahmed Sailor Bldg. Dadar .. (Reg.)   |
| 5. Sastu Kitab Ghar, Near Relief Talkies, Patthar Kuva, Relief Road .. (Reg.)  | 4. Current Book House, Maruti Lane, Raghunath Dadaji St. .. (Reg.)   |
| <b>AJMER</b> —   | 5. Current Technical Literature Co. P. Ltd., India House, 1st Floor .. (Reg.)  |
| 1. Book-Land, 663, Madar Gate .. (Reg.)  | 6. International Book House Ltd., 9, Ash Lane, M. G. Road .. (Reg.)  |
| 2. Rajputana Book House, Station Road .. (Reg.)  | 7. Lakkani Book Depot, Girgaum .. (Reg.)   |
| 3. Law Book House, 271, Hathhi Bhata .. (Reg.)   | 8. Elpees Agencies, 24, Bhangwadi, Kalbadevi .. (Reg.)   |
| 4. Vijay Bros., Kutchery Road .. (Rest.)   | 9. P. P. H. Book Stall, 190-B, Khetwadi Main Road .. (Reg.)  |
| 5. Krishna Bros., Kutchery Road .. (Rest.)   | 10. New Book Co., 188-190, Dr. Dadabhai Naoroji Road .. (Reg.)   |
| <b>ALIGARH</b> —Friends' Book House, Muslim University Market .. (Reg.)  | 11. Popular Book Depot, Lamington Road .. (Reg.)   |
| <b>ALLAHABAD</b> —   | 12. Sunder Das Gian Chand, 601, Girgaum Road, Near Princess Street .. (Reg.)   |
| 1. Superintendent, Printing & Stationery, U. P.  | 13. D. B. Taraporewala Sons and Co. (P) Ltd., 210, Dr. Dadabhai Naoroji Road .. (Reg.)                                     |
| 2. Kitabistan, 17-A, Kamla Nehru Road .. (Reg.)  | 14. Thacker and Co., Rampart Row .. (Reg.)   |
| 3. Law Book Co., Sardar Patel Marg, P. Box 4 .. (Reg.)   | 15. N. M. Tripathi Private Ltd., Princess Street .. (Reg.)   |
| 4. Ram Narain Lal Beni Modho, 2-A, Katra Road .. (Reg.)  | 16. The Kothari Book Depot, King Edward Road .. (Reg.)   |
| 5. Universal Book Co., 20, M. G. Road .. (Reg.)  | 17. P. H. Rama Krishna and Sons, 147, Rajaram Bhuvan, Shivaji Park Road No. 5 .. (Rest.)                                   |
| 6. The University Book Agency (of Lahore), Elgin Road .. (Reg.)  | 18. C. Jamnadas and Co., Booksellers, 146-C., Princess St. .. (Reg.)   |
| 7. Wadhwa & Co., 23, M. G. Marg .. (Rest.)   | 19. Indo Nath and Co., A-6, Daulat Nagar Borivli .. (Reg.)   |
| 8. Bharat Law House, 15, Mahatma Gandhi Marg .. (Rest.)  | 20. Miner va Book Shop, Shop No. 1/80, N. Subha Road .. (Reg.)   |
| 9. Ram Narain Lal Beni Prashad, 2-A, Katra Road .. (Rest.)   | 21. Academic Book Co., Association Building, Girgaum Road .. (Rest.)   |
| <b>AMBALA</b> —  | 22. Dominion Publishers, 23, Bell Building, Sir P. M. Road .. (Rest.)  |
| 1. English Book Depot, Ambala Cantt. .. (Reg.)   | 23. Bombay National History Society, 91 Walkeshwar Road .. (Rest.)   |
| 2. Seth Law House, 8719, Railway Road, Ambala Cantt. .. (Rest.)  | 24. Dowamadeo and Co., 16, Naziria Building, Ballard Estate .. (Rest.)   |
| <b>AMRITSAR</b> —  | 25. Asian Trading Co., 310, the Miraball, P. B. 1505 .. (Rest.)  |
| 1. The Law Book Agency, G. T. Road, Putfigarh .. (Reg.)  | <b>CALCUTTA</b> —  |
| 2. S. Gupta, Agent, Govt. Publications, Near P. O. Majith Mandi .. (Reg.)  | 1. Chatterjee and Co., 3/1, Bacharam Chatterjee Lane .. (Reg.)   |
| 3. Amar Nath & Sons, Near P. O. Majith Mandi .. (Reg.)   | 2. Dass Gupta and Co. Ltd., 54/3, College Street .. (Reg.)   |
| <b>ANAND</b> —   | 3. Hindu Library, 69 A, Bolaram De Street .. (Reg.)  |
| 1. Vijaya Stores, Station Road .. (Rest.)  | 4. S. K. Lahiri and Co. Private Ltd., College Street .. (Reg.)   |
| 2. Charto Book Stall, Tulsi Sadan, Stn. Road .. (Rest.)  | 5. M. C. Sarkar and Sons. Private Ltd. 14, Bankim Chatterjee Street .. (Reg.)  |
| <b>ASANSOL</b> —D. N. Roy & R. K. Roy, Booksellers, Atwal Building .. (Rest.)  | 6. W. Newman and Co. Ltd. 3, Old Court House Street .. (Reg.)  |
| <b>BANGALORE</b> —   | 7. Oxford Book and Stationery Co., 17, Park Street .. (Reg.)   |
| 1. The Bangalore Legal Practitioner Co-op. Society Ltd., Bar Association Building .. (Reg.)                          | 8. R. Chambray and Co. Ltd. Kent House, P. 33, Mission Road Extension .. (Reg.)  |
| 2. S. S. Book Emporium, 118, Mount Joy Road .. (Reg.)  | 9. S. C. Sarkar and Sons Private Ltd. I. C. College Square .. (Reg.)   |
| 3. The Bangalore Press, Lake View, Mysore Road, P. O. Box 507 .. (Reg.)  | 10. Thacker, Spink and Co. (1933) P., Ltd., 3, Esplanade East .. (Reg.)  |
| 4. The Standard Book Depot, Avenue Road .. (Reg.)  | 11. Firma K. L. Mukhopadhyay, 6/1A, Banchha Ram Akrar Lane .. (Reg.)   |
| 5. Vichara Sahitya Private Ltd., Balepet .. (Reg.)   | 12. K. K. Roy, P. Box No. 10210, Calcutta-19 .. (Rest.)  |
| 6. Makkala Pustaka Press, Balamandira, Gandhinagar .. (Reg.)   | 13. Sm. P. D. Upadhyay, 77, Muktararn Babu Street .. (Rest.)   |
| 7. Maruthi Book Depot, Avenue Road .. (Rest.)  | 14. Universal Book Dist. 8/2, Hastings Street .. (Rest.)   |
| 8. International Book House P. Ltd., 4-F., Mahatma Gandhi Road .. (Reg.)   | 15. Modern Book Depot, 9, Chowringhee Centre .. (Rest.)  |
| 9. Navakarnataka Pubns. Private Ltd., Majestic Circle .. (Rest.)   | 16. Soor and Co., 125, Canning Street .. (Reg.)  |
| <b>BAREILLY</b> —Agarwal Brothers, Bara Bazar .. (Reg.)  | 17. S. Bhattacharjee, 49 Dharamtala Street .. (Rest.)  |
| <b>BARODA</b> —  | 18. Mukherjee Library, 10 Sarba Khan Road .. (Reg.)  |
| 1. Shri Chandrakant Mohan Lal Shah, Raopura .. (Rest.)   | 19. Current Literature Co. 208, Mahatma Gandhi Road .. (Reg.)  |
| 2. Good Companions Booksellers, Publishers & Sub-Agent .. (Rest.)  | 20. The Book Depository, 4/1, Madan Street (1st Floor) .. (Rest.)  |
| 3. New Medical Book House, 540 Madan Zampa Road .. (Rest.)   | 21. Scientific Book Agency, Netaji Subhas Road .. (Rest.)  |
| <b>BEAWAR</b> —The Secretary, S. D. College, Co-operative Stores Ltd. .. (Rest.)                                     | 22. Reliance Trading Co., 17/1 Banku Bihari Ghose Lane, District Howrah .. (Rest.)   |
| <b>BELGHARIA</b> —Granthlok, Antiquarian Booksellers & Publishers (24-Parganas), 5/1 Amlica Mukherjee Road .. (Reg.) | 23. Indian Book Dist. Co., 6512, Mahatma Gandhi Road .. (Rest.)  |
| <b>BHAGALPUR</b> —Paper Stationery Stores, D. N. Singh Road .. (Reg.)  | <b>CALICUT</b> —Touring Book Stall .. (Rest.)  |

5. English Book Shop, 34, Sector 22D .. (Rest.)
6. Mehta Bros, 15-Z, Sector 22-B .. (Rest.)
7. Tandan Book Depot, Shopping Centre, Sector 16 .. (Rest.)
8. Kailash Law Publishers, Sector 22-B .. (Rest.)
- CHHINDWARA**—The Verma Book Depot .. (Rest.)
- COCHIN**—Saraswat Corporation Ltd., Palliarakav Road .. (Reg.)
- CUTTACK**—
1. Press Officer Orissa Sectt. .. (Reg.)
  2. Cuttack Law Times .. (Reg.)
  3. Prabhat K. Mahapatra, Mangalabag, P. B. 35 .. (Reg.)
  4. D. P. Sur & Sons, Mangalabag .. (Rest.)
  5. Utkal Stores, Balu Bazar .. (Rest.)
- DEHRADUN**—
1. Jugal Kishore & Co., Rajpur Road .. (Reg.)
  2. National News Agency, Paltan Bazar .. (Reg.)
  3. Bishan Singh and Mahendra Pal Singh, 318, Chukhuwala .. (Reg.)
  4. Utam Pustak Bhandar, Paltan Bazar .. (Rest.)
- DELHI**—
1. J. M. Jaina & Brothers, Mori Gate .. (Reg.)
  2. Atma Ram & Sons, Kashmere Gate .. (Reg.)
  3. Federal Law Book Depot, Kashmere Gate .. (Reg.)
  4. Bahri Bros., 188, Lajpat Rai Market .. (Reg.)
  5. Bawa Harkishan Dass Bedi (Vijaya General Agencies) P. B. 2027, Ahata Kedara, Chamalian Road .. (Reg.)
  6. Book-Well, 4, Sant Narankari Colony, P. B. 1565 .. (Reg.)
  7. Imperial Publishing Co., 3, Faiz Bazar, Daryaganj .. (Reg.)
  8. Metropolitan Book Co., 1, Faiz Bazar .. (Reg.)
  9. Publication Centre, Subzimandi .. (Reg.)
  10. Youngman & Co., Nai Sarak .. (Reg.)
  11. Indian Army Book Depot, 3, Daryaganj .. (Reg.)
  12. All India Educational Supply Co. Shri Ram Buildings, Jawahar Nagar .. (Rest.)
  13. Dhanwant Medical & Law Book House, 1522 Lajpat Rai Market .. (Rest.)
  14. University Book House, 15, U. B. Bangalore Road, Jawahar Nagar .. (Rest.)
  15. Law Literature House, 2646, Balimaran .. (Rest.)
  16. Summer Brothers, P. O. Birla Lines .. (Rest.)
  17. Universal Book & Stationery Co., 16 Netaji Subhash Marg .. (Reg.)
  18. B. Nath & Bros., 3808, Anarkhawalan (Chowri Bazar) .. (Rest.)
  19. Rajkamal Prakashan P. Ltd., 8, Faiz Bazar .. (Reg.)
  20. Premier Book Co., Printers, Publishers & Booksellers, Nai Sarak .. (Rest.)
  21. Universal Book Traders, 80, Gokhale Market .. (Reg.)
  22. Tech. & Commercial Book Coy., 75, Gokhle Market .. (Rest.)
  23. Saini Law Publishing Co., 1416, Chabiganj, Kashmere Gate .. (Rest.)
  24. G. M. Ahuja, Booksellers & Stationers, 309, Nehru Bazar .. (Rest.)
  25. Sat Narain & Sons, 3141, Mohd. Ali Bazar, Mori Gate .. (Reg.)
  26. Kitab Mahal (Wholesale Div.) P. Ltd., 28, Faiz Bazar .. (Reg.)
  27. Hindu Sahitya Sansar, Nai Sarak .. (Rest.)
  28. Munshi Ram Manohar Lal, Oriental Booksellers & Publishers, P. B. 1165, Nai Sarak .. (Rest.)
  29. K. L. Seth, Suppliers of Law, Commercial Tech. Books, Shanti Nagar, Ganeshpura .. (Rest.)
  30. Adarsh Publishing Service, 5 A/10 Ansari Road .. (Rest.)
- DHANBAD**—
1. Ismag Co-operative Stores Ltd., P. O. Indian School of Mines .. (Reg.)
  2. New Sketch Press, Post Box 26 .. (Rest.)
- DHARWAR**—
1. The Agricultural College Consumers Co-op. Society .. (Rest.)
  2. Rameshraya Book Depot, Subhas Road .. (Rest.)
  3. Karnatakaya Sahitya Mandira of Publishers and Booksellers .. (Rest.)
- BRNAKULAM**—
1. Pai & Co., Cloth Bazar Road .. (Rest.)
  2. South India Traders, C/O Constitutional Journal .. (Reg.)
- FEROZEPUR**—English Book Depot, 78, Jhoke Road .. (Reg.)
- GAUHATI**—Mokshada Pustakalaya .. (Reg.)
- GAYA**—Sahitya Sadan, Gautam Buddha Marg .. (Reg.)
- HAZIABAD**—Jayana Book Agency .. (Rest.)
- GORAKHPUR**—Vishwa Vidyalaya Prakashan, Nakhes Road .. (Reg.)
- GUDUR**—The General Manager, The N. D. C. Publishing & Ptg. Society Ltd. .. (Rest.)
- GUNTUR**—Book Lovers Private Ltd., Kadriguda, Chowrasta .. (Reg.)
- GWALIOR**—
1. Suptd, Printing & Stationery, M. B. .. (Reg.)
  2. Loyal Book Depot, Patankar Bazar, Laskhar .. (Reg.)
  3. M. C. Daftari, Prop. M. B. Jain & Bros., Booksellers, Sarafa, Laskhar .. (Rest.)
- HUBLI**—Pervaje's Book House, Koppikar Road .. (Reg.)
- HYDERABAD**—
1. Director, Govt. Press .. (Reg.)
  2. The Swaraj Book Depot, Lakdikapul .. (Rest.)
  3. Book Lovers Private Ltd. .. (Rest.)
  4. Labour Law Publications, 873, Sultan Bazar .. (Rest.)
- IMPHAL**—Tikendra and Sons, Bookseller .. (Rest.)
- INDORE**—
1. Wadhawa and Co., 56, M. G. Road .. (Reg.)
  2. Swarup Brothers, Khajuri Bazar .. (Rest.)
  3. Madhya Pradesh Book Centre, 41, Ahilyapura .. (Rest.)
  4. Modern Book House, Shiv Vilas Palace .. (Rest.)
  5. Navyug Sahitya Sadan, Publishers and Booksellers, 10, Khajuri Bazar .. (Rest.)
- JABALPUR**—
1. Modern Book House, 286, Jawaharganj .. (Reg.)
  2. National Book House, 135, Jai Prakash Narain Marg .. (R.)
- JAIPUR**—
1. Government Printing and Stationery Department, Rajasthan .. (Reg.)
  2. Bharat Law House, Booksellers and Publishers, Opp. Prem Prakash Cinema .. (Reg.)
  3. Garg Book Co., Tripolia Bazar .. (Reg.)
  4. Vani Mandir, Sawai Mansingh Highway .. (Reg.)
  5. Kalyan Mal and Sons., Tripolia Bazar .. (Rest.)
  6. Popular Book Depot, Chaura Rasta .. (Reg.)
  7. Krishna Book Depot, Chaura Rasta .. (Rest.)
  8. Dominion Law Depot, Shah Building, P. B. No. 23 .. (Rest.)
- JAMNAGAR**—Swadeshi Vastu Bhandar .. (Reg.)
- AMSH E**
1. Amar Kitab Ghar, Diagonal Road, P. B. 78 .. (Reg.)
  2. Gupta Stores, Dhakdidih .. (Reg.)
  3. Sanyal Bros, Booksellers and News Agents, Bistupur Market .. (Rest.)
- JAWALAPUR**—Sahayog Book Depot .. (Rest.)
- JHUNJHUNU**—
1. Shashi Kumar Sarat Chand .. (Rest.)
  2. Kapram Prakashan Prasaran, 1/90 Namdha Niwas, Azad Marg .. (R.)
- ODHPUR**—
1. Dwaraka Das Rathi, Wholesale Books and News Agents .. (Reg.)
  2. Kitab-Ghar Sojati Gate .. (Reg.)
  3. Choppra Brothers, Tripolia Bazar .. (Reg.)
- JULLUNDUR**—
1. Hazooria Bros, Mai Hiran Gate .. (Rest.)
  2. Jain General House, Bazar Bansanwala .. (Reg.)
  3. University Publishers, Railway Road .. (Rest.)
- KANPUR**—
1. Advani and Co., P. Box 100, The Mall .. (Reg.)
  2. Sahitya Niketan, Shradhanand Park .. (Reg.)
  3. The Universal Book Stall, The Mall .. (Reg.)
  4. Raj Corporation, Raj House, P. B. 200, Chowk .. (Rest.)
- KARUR**—Shri V. Nagaraja Rao, 26, Srinivasapuram .. (Rest.)
- KODARMA**—The Bhagwati Press, P. O. Jhumri Tilaiya, District Hazaribagh .. (Reg.)
- KOLHAPUR**—Maharashtra Granth Bhandar, Mahadwar Road .. (Rest.)
- KOTA**—Kota Book Depot .. (Rest.)
- KUMTA**—S. V. Kamat, Booksellers and Stationers (N. Kanara) .. (Reg.)
- LUCKNOW**—
1. Soochna Sahitya Depot (State Book Depot) .. (Reg.)
  2. Balkrishna Book Co. Ltd., Hazratganj .. (Reg.)
  3. British Book Depot, 84, Hazratganj .. (Reg.)
  4. Ram Advani, Hazratganj, P. B. 154 .. (Reg.)
  5. Universal Publishers (P) Ltd., Hazratganj .. (Reg.)
  6. Eastern Book Co., Lalbagh Road .. (Reg.)
  7. Civil and Military Educational Stores, 106/B, Sadar Bazar .. (Rest.)
  8. Acquarium Supply Co., 213, Faizabad Road .. (Rest.)
  9. Law Book Mart, Amin-Ud-Daula Park .. (Rest.)



**LUDHIANA—**

1. Layall Book Depot, Chaura Bazar .. (Reg.)
2. Mohindra Brothers, Katcheri Road .. (Rest.)
3. Nanda Stationery Bhandar, Pustak Bazar .. (Rest.)
4. The Pharmacy News, Pindi Street .. (Rest.)

**MADRAS—**

1. Superintendent, Government Press, Mount Road .. (Reg.)
2. Account Test Institute, P. B. 760, Emgore .. (Reg.)
3. C. Subbiah Chetty and Co., Triplicane .. (Reg.)
4. K. Krishnamurthy, Post Box 384 .. (Reg.)
5. Presidency Book Supplies, 8, Pycrofts Road, Triplicane .. (Reg.)
6. P. Vardachary and Co., 8, Linghi Chetty Street .. (Reg.)
7. Palani Parchuram, 3, Pycrofts Road, Triplicane .. (Reg.)
8. NCBH Private Ltd., 199, Mount Road .. (Rest.)
9. V. Sadanand, The Personal Bookshop, 10, Congress Building, 111, Mount Road .. (Rest.)

**MADURAI—**

1. Oriental Book House, 258, West Masi Street .. (Reg.)
2. Vivekananda Press, 48, West Masi Street .. (Reg.)

**MANDYASUGAR TOWN—** K. N. Narimbe Gowda and Sons

1. K. N. Narimbe Gowda and Sons .. (Rest.)

**MANGALORE—** U. R. Shenoy Sons, Car Street, P. Box 128

1. U. R. Shenoy Sons, Car Street, P. Box 128 .. (Reg.)

**MANJESHWAR—** Mukenda Krishna Nayak

1. Mukenda Krishna Nayak .. (Rest.)

**MATHURA—** Rath & Co., Tiiohi Building, Bengali Ghat

1. Rath & Co., Tiiohi Building, Bengali Ghat .. (Rest.)

**MEERUT—**

1. Prakash Educational Stores, Subhas Bazar .. (Reg.)
2. Hind Chitra Press, West Kutchery Road .. (Reg.)
3. Loyal Book Depot, Chhipi Tank .. (Reg.)
4. Bharat Educational Stores, Chhipi Tank .. (Rest.)
5. Universal Book Depot, Booksellers and News Agents .. (Rest.)

**MONGHYR—** Anuasandhan, Minerva Press Building

1. Anuasandhan, Minerva Press Building .. (Rest.)

**MUSSOORIE—**

1. Cambridge Book Depot, The Mall .. (Rest.)
2. Hind Traders .. (Rest.)

**MUZAFFARNAGAR—**

1. Mittal and Co., 85-C, New Mandi .. (Rest.)
2. B. S. Jain and Co., 71 Abupura .. (Rest.)

**MUZAFFARPUR—**

1. Scientific and Educational Supply Syndicate .. (Reg.)
2. Legal Corner, Tikmanio House, Amgola Road .. (Rest.)
3. Tirhut Book Depot .. (Rest.)

**MYSORE—**

1. H. Venkatramaiah and Sons, New Statue Circle .. (Reg.)
2. Peoples Book House, Opp. Jagan Mohan Palace .. (Reg.)
3. Gesta Book House, Booksellers and Publishers, Krishnamurthipuram .. (Rest.)
4. News paper House, Lansdowne Building .. (Rest.)
5. Indian Mercantile Corporation, Toy Palace, Ramviles .. (Rest.)

**NADIAD—** R. S. Dessay, Station Road

1. R. S. Dessay, Station Road .. (Rest.)

**NAGPUR—**

1. Superintendent, Government Press & Book Depot .. (Reg.)
2. Western Book Depot, Residency Road .. (Reg.)
3. The Asst. Secretary, Mineral Industry Association, Mineral House .. (Rest.)

**NAINITAL—** Coural Book Depot, Bara Bazar

1. Coural Book Depot, Bara Bazar .. (Rest.)

**NANDED—**

1. Book Centre, College, Law, General Books, Station Road .. (Rest.)
2. Hindustan General Stores, Paper and Stationery Merchants, P. B. No. 51 .. (Rest.)
3. Sanjoy Book Agency, Vazirabad .. (Rest.)

**NEW DELHI—**

1. Amrit Book Co., Connaught Circus .. (Reg.)
2. Bhawani and Sons, 8. F, Connaught Place .. (Reg.)
3. Central News Agency, 23/90, Connaught Circus .. (Reg.)
4. Empire Book Depot, 278, Aliganj .. (Reg.)
5. English Book Stores, 7-I, Connaught Circus P. O. B. 328 .. (Reg.)
6. Faqir Chand and Sons, 15-A, Khan Market .. (Reg.)

7. Jain Book Agency, C-9, Prem House, Connaught Place .. (Reg.)
8. Oxford Book and Stationery Co., Scindia House .. (Reg.)
9. Ram Krishan and Sons (of Lahore), 16/B, Connaught Place .. (Reg.)
10. Sikh Publishing House, 7-C, Connaught Place .. (Reg.)
11. Suneja Book Centre, 24/90, Connaught Circus .. (Reg.)
12. United Book Agency, 31. Municipal Market, Connaught Circus .. (Reg.)
13. Jayana Book Depot, Chhapparwala Kuau, Karol Bagh .. (Reg.)
14. Navayug Traders, Desh Bandhu Gupta Road, Dev Nagar .. (Reg.)
15. Saraswati Book Depot, 15, Lady Harding Road .. (Reg.)
16. The Secretary, Indian Met. Society, Lodi Road .. (Reg.)
17. New Book Depot, Latest Books, Periodicals, Stationery and Novelles, P. B. 96, Connaught Place .. (Reg.)
18. Mehra Brothers, 50-G, Kalkaji .. (Reg.)
19. Laxmi Book Stores, 42, Janpath .. (Rest.)
20. Hindi Book House, 82, Janpath .. (Rest.)
21. Peoples Publishing House (P) Ltd., Rani Jhansi Road .. (Reg.)
22. R. K. Publishers, 23, Beadon Pura, Karol Bagh .. (Rest.)
23. Sharma Bros, 17, New Market, Moti Nagar .. (Reg.)
24. Aapki Dukan, 5/5777, Deb Nagar .. (Rest.)
25. Sarvodaya Service, 66A-1, Rohtak Road, P. B. 2521 .. (Rest.)
26. H. Chandson, P. B. No. 3034 .. (Rest.)
27. The Secretary Federation of Association of Small Industry of India, 23-B/2, Rohtak Road .. (Rest.)
28. Standard Booksellers and Stationers, Palam Enclave .. (Rest.)
29. Lakshmi Book Depot, 57, Regarpura .. (Rest.)
30. Sant Ram Booksellers, 16, New Municipal Market, Lody Colony .. (Rest.)

**PANJIM—**

1. Singhals Book House, P. O. B. 70, Near the Church .. (Rest.)
2. Sagoon Gaydev Dhoud, Booksellers, 5-7 Rua, 3, Idc Jameria .. (Rest.)

**PATHANKOT—** The Krishna Book Dept, Main Bazar

1. The Krishna Book Dept, Main Bazar .. (Rest.)

**PATIALA—**

1. Superintendent, Bhupendra State Press .. (Reg.)
2. Jain and Co., 17, Shab Nashin Bazar .. (Reg.)

**PATNA—**

1. Superintendent, Government Printing (Bihar) .. (Reg.)
2. J. N. P. Agarwal and Co., Padri-Ki-Haveli, Raghunath Bhaban .. (Reg.)
3. Luxmi Trading Co., Padri-Ki-Haveli .. (Reg.)
4. Moti Lal Banarasi Dass, Bankipore .. (Reg.)
5. Bengal Law House, Chowhatta .. (Rest.)

**PITHORAGARH—** Maniram Punetha and Sons

1. Maniram Punetha and Sons .. (Rest.)

**PONDICHERRY—** M/S. Honesty Book House, 9, Rue Duplix

1. M/S. Honesty Book House, 9, Rue Duplix .. (R.)

**POONA—**

1. Deccan Book Stall, Deccan Gymkhana .. (Reg.)
2. Imperial Book Depot, 266, M. G. Road .. (Reg.)
3. International Book Service, Deccan, Gymkhana .. (Reg.)
4. Raka Book Agency, Opp. Natu's Chawl, Near Appa Balwant Chowk .. (Reg.)
5. Utility Book Depot, 1339, Shivaji Nagar .. (Rest.)

**UDUKOTTAI—** Shri P. N. Swaminathan Sivam and Co., East Main Road

1. Shri P. N. Swaminathan Sivam and Co., East Main Road .. (Rest.)

**RAJKOT—** Mohan Lal Dossabhai Shah, Booksellers and Sub-Agents

1. Mohan Lal Dossabhai Shah, Booksellers and Sub-Agents .. (Reg.)

**RANCHI—**

1. Crown Book Depot, Upper Bazar .. (Reg.)
2. Pustak Mahal, Upper Bazar .. (Rest.)

**REWA—** Superintendent, Government State Emporium, V. P.

1. Superintendent, Government State Emporium, V. P. .. (Rest.)

**ROURKELA—** The Rourkela Review

1. The Rourkela Review .. (Rest.)

**SAHARANPUR—** Chandra Bharata Pustak Bhandar, Court Road

1. Chandra Bharata Pustak Bhandar, Court Road .. (Rest.)

**SECUNDERABAD—** Hindustan Diary Publishers, Market Street

1. Hindustan Diary Publishers, Market Street .. (Reg.)

**SILCHAR—** Shri Nishitto sen, Nazirpati

1. Shri Nishitto sen, Nazirpati .. (Rest.)

**SIMLA—**

1. Supdt., Himachal Pradesh Govt. .. (Reg.)
2. Minerva Book Shop, The Mall .. (Reg.)
3. The New Book Depot, 79, The Mall .. (Reg.)

**SINNAR—** Shri N. N. Jakhadi, Agent, Times of India, Sinner, (Nasik)

1. Shri N. N. Jakhadi, Agent, Times of India, Sinner, (Nasik) .. (Rest.)

## SHILLONG—

1. The Officer-in-charge, Assam Govt., B. D.
2. Chapla Book stall, P. B. No. 1

SONEPAT—United Book Agency .. (Reg.)

SRINAGAR—The Kashmir Book shop, Residency Road .. (Reg.)

SURAT—Shri Gajanan Pustakalaya, Tower Road .. (Reg.)

## TIRUCHIRAPALLI—

1. Kalpana Publishers, Wosiur .. (Reg.)
2. S. Krishnaswami & Co., 35, Subhash Chander Bose Road .. (Reg.)
3. Palamiappa Bros. .. (Rest.)

## RIVANDRUM—

1. International Book Depot, Main Road .. (Reg.)
2. Reddar Press & Book Depot, P. B. No. 4 .. (Rest.)

TUTICORIN—Shri K. Thiagarajan, 10-C, French Chapal Road .. (Rest.)

## UDAIPUR—

1. Jagdish & Co., Inside Surajapole .. (Rest.)
2. Book Centre, Maharana Bhopal Consumers' Co-op. Society Ltd. .. (Rest.)

UJJAIN—Manak Chand Book Depot, Sati Gate .. (Rest.)

## VARANASI—

1. Students Friends & Co., Lanka .. (Rest.)
2. Chowkhamba Sanskrit Series office, Gopal Mandir Road, P. B. 8 .. (Reg.)
3. Globe Book centre .. (Rest.)
4. Kohinoor store, University road, Lanka .. (Reg.)
5. B. H. U. Book Depot .. (Rest.)

VELLORE—A. Venkatasubhan, Law Booksellers .. (Reg.)

VIJAYAWADA—The Book and Review centre, Eluru Road, Governpet .. (Rest.)

## VISAKHAPATNAM—

1. Gupta Brothers, Vizia Building .. (Reg.)
2. Book Centre, 11/97, Main Road .. (Reg.)
3. The Secy. Andhra University, General Co-op. Stores Ltd. .. (Rest.)

VIZIANAGARAM—Sarda and Co. .. (Rest.)

WARDHA—Swarajeya Bhandar, Bhorji Market .. (Reg.)

## For Local Sale

1. Govt. of India Kitab Mahal, Janpath Opp. India Coffee House, New Delhi
2. Govt. of India Book Depot, 8 Hastings Street, Calcutta
3. High Commissioner for India in London, India House, London, W. C. 2

## Railway Bookstall holders

1. S/s A. H. Wheeler & Co., 15, Elgin Road, Allahabad
2. Gahlot Bros., K. E. M. Road, Bikaner
3. Higgenbothams & Co., Ltd., Mount Road, Madras
4. M. Gulab Singh & Sons Private Ltd., Mathura Road, New Delhi

## Foreign

1. S/s Education Enterprise Private Ltd., Kathamandu (Nepal)
2. S/S Aktie Bogat, C. E. Fritzes Kungl. Hovbokhandel, Fredsgation-2 Box 1656, Stockholm-16 (Sweden)
3. Reise-und Verkehrsverlag Stuttgart, Post 730 Gutenbergstra 21, Stuttgart No. 11245, Stuttgart den (Germany West)
4. Shri Iswar Subramanyam 45' Reversite Drive St. 6, New York, 27 NWY
5. The Proprietor, Book Centre Lakshmi Mansons, 49 The Mall, Lahore Pakistan)

## On S. and R. Basis

1. The Head Clerk, Govt. Book Depot, Ahmedabad
2. The Assistant Director, Extension Centre, Kapileswar Road, Belgaum
3. The Employment Officer, Employment Exchange, Dhar
4. The Asst. Director, Footwear Extension Centre, Polo Ground No. 1 Jodhpur
5. The O. I/C, Extension Centre, Club Road, Muzaffarpur
6. The Director, Indian, Bureau of Mines, Government Of India, Ministry of Mines and Fuel, Nagpur
7. The Asst. Director, Industrial Extension Centre, Nadiad (Gujarat)
8. The Head Clrkr, Photozincographic Press, 5, Finance Road, Poona
9. Government Printing and Stationery, Rajkot
10. The O.I./C. Extension Centre, Industrial Estate, Kokar, Ranchi
11. The Director, S. I. S. I. Industrial Extension Centre, Udhna, Surat
12. The Registrar of Companies, Narayani Building, 27, Erabourne Road, Calcutta-1
13. The Registrar of Companies, Kerala, 50 Feet Road, Ernakulam
14. The Registrar of Companies, H. No 3-5-83, Hyderguda, Hyderabad
15. Registrar of Companies, Assam, Manipur and Tripura, Shillong
16. Registrar of Companies, Sunlight Insurance Building, Ajmeri Gate Extension New Delhi
17. Registrar of Companies, Punjab and Himachal Pradesh, Link Road, Jullundur City
18. Registrar of Companies, Bihar, Jamal Road, Patna-1
19. Registrar of Companies, Raj. & Ajmer; Shri Kamta Prasad House, 1st Floor, 'C' scheme, Ashok Marg, Jaipur
20. The Registrar of Companies, Andhra Bank Building, 6, Linghi Chetty Street P. B. 1530, Madras
21. The Registrar of Companies, Mahatma Gandhi Road, West Cott. Bldg P. B. 334, Kanpur
22. The Registrar of Companies, Everest 100, Marine Drive, Bombay
23. The Registrar of Companies, 162, Brigade Road, Bangalore
24. The Registrar of Companies, Gwalior
25. Asst. Director, Extension Centre, Bhuli Road, Dhanbad
26. Registrar of Companies, Orissa, Cuttack Chandi, Cuttack
27. The Registrar of Companies, Gujarat State, Gujarat Samachar Building, Ahmedabad
28. Publication Division, Sale Depot, North Block, New Delhi
29. The Development Commissioner, Small Scale Industries, New Delhi
30. The O.I/C., University Employment Bureau, Lucknow
31. O. I/C., S. I. S. I. Extension Centre, Malda
32. O. I/C., S. I. S. I. Extension Centre, Habra, Tabaluria, 24-Parganas
33. O. I/C., S. I. S. I. Model Carpentry Workshop, Piyali Nagar, P. O. Burnipur
34. O. I/C., S. I. S. I. Chrontanning Extension Centre, Tangra, 33, North Topsia Road, Calcutta-46
35. O. I/C., S. I. S. I. Extension Centre (Footwear), Calcutta
36. Asst. Director, Extension Centre, Hyderabad
37. Asst. Director, Extension Centre, Krishna Distt. (A. P.)
38. Employment Officer, Employment Exchange, Jhabua
39. Dy. Director In charge, S. I. S. I., C/o Chief Civil Admn. Goa, Panjim
40. The Registrar of Trade Unions, Kanpur
41. The Employment Officer, Employment Exchange, Gopal Bhavan, Morini
42. The O. I/C. State Informa Centre, Hyderabad
43. The Registrar of Companies, Pondicherry
44. The Asst. Director of Publicity and Information, Vidhan Sabha (P. B. 271), Bangalore