## Table 9 - Demographic Yearbook 2000

Table 9 presents live births and live-birth rates by urban/rural residence for as many years as possible between 1996 and 2000.

Description of variables: Live birth is defined as 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 any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movements of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live-born regardless of gestational age<sup>10</sup>.

Statistics on the number of live births are obtained from civil registers unless otherwise noted. For those countries or areas where civil registration statistics on live births are considered reliable (estimated completeness of 90 per cent or more) the birth rates shown have been calculated on the basis of registered live births. However, for countries or areas where civil registration of live births is non-existent or considered unreliable (estimated completeness of less than 90 per cent or of unknown completeness), estimated rates are presented whenever possible instead of the rates based on the registered births. These estimated rates are identified by a footnote. Officially estimated rates using well-defined estimation procedures and sources whether based on census or sample survey data are given first priority. If such estimates are not available, rates estimated by the Population Division of the United Nations Secretariat are presented.

The urban/rural classification of birth is that provided by each country or area; it is presumed to be based on the national census definitions of urban population that have been set forth at the end of the technical notes for table 6.

Rate computation: Crude live-birth rates are the annual number of live births per 1 000 mid-year population.

Rates by urban/rural residence are the annual number of live births, in the appropriate urban or rural category, per 1 000 corresponding mid-year population.

Rates presented in this table have not been limited to those countries or areas having a minimum number of live births in a given year. However, rates based on 30 or fewer live births are identified by the symbol  $(\clubsuit)$ .

These rates, unless otherwise noted, have been calculated by the Statistics Division of the United Nations.

In addition, some rates have been obtained from sample surveys, from analysis of consecutive population results and from the application of the "reverse-survival" method, which consists of increasing the number of children of a given age group recorded in a census or sample survey, by a life-table survival coefficient, so as to estimate the number of births from which these children are survivors. To distinguish them from civil registration data, estimated rates are identified by a footnote.

Reliability of data: Each country or area has been asked to indicate the estimated completeness of the live births recorded in its civil register. These national assessments are indicated by the quality codes (C), (U), and (...) that appear in the first column of this table.

C indicates that the data are estimated to be virtually complete, that is, representing at least 90 per cent of the live births occurring each year, while U indicates that data are estimated to be incomplete, that is, representing less than 90 per cent of the live births occurring each year. The code (...) indicates that no information was provided regarding completeness.

Data from civil registers which are reported as incomplete or of unknown completeness (coded U or ...) are considered unreliable. They appear in italics in this table. When data so coded are used to calculate rates, rates also appear in italics.

These quality codes apply only to data from civil registers. If a series of data for a country or area contains both data from a civil register and estimated data from, for example, a sample survey, then the code applies only to the registered data. If only estimated data are presented, the symbol (..) is shown instead of the quality code. For more information about the quality of vital statistics data in general, and the information available on the basis of the completeness estimates in particular, see section 4.2 of the Technical Notes.

Limitations. Statistics on live births are subject to the same qualifications as have been set forth for vital statistics in general and birth statistics in particular as discussed in section 4 of the Technical Notes.

The reliability of data, an indication of which is described above, is an important factor in considering the limitations. In addition, some live birth are tabulated by date of registration and not by date of occurrence; these have been indicated by a (+). Whenever the lag between the date of occurrence and date of registration is prolonged and, therefore, a large proportion of the live-birth registrations are delayed, birth statistics for any given year may be seriously affected.

Another factor which limits international comparability is the practice of some countries or areas not to include in livebirth statistics infants who were born alive but died before the registration of the birth or within the first 24 hours of life, thus underestimating the total number of life births. Statistics of this type are footnoted. In addition, it should be noted that rates are affected also by the quality and limitations of the population estimates that are used in their computation. The problems of under-enumeration or over-enumeration and, to some extent, the differences in definition of total population have been discussed in section 3 of the Technical Notes dealing with population data in general, and specific information pertaining to individual countries or areas is given in the footnotes to table 3. In the absence of official data on total population, United Nations estimates of mid-year population have been used in calculating some of these rates.

The rates estimated from the results of sample surveys are subject to possibilities of considerable error as a result of omissions in reporting of births, or as a result of erroneous reporting of events which occurred outside the reference period. However, rates estimated from sample surveys do have an outstanding advantage, and that is the availability of a built-in and strictly corresponding population base. The accuracy of the birth rates estimated by the "reverse-survival" method is affected by several factors, the most important of which are the accuracy of the count of children in the age groups used and errors in the survival coefficients.

It should be emphasized that crude birth rates - like crude death, marriage and divorce rates - may be seriously affected by the age-sex structure of the populations to which they relate. Nevertheless, they do provide a simple measure of the level of and changes in natality.

The comparability of data by urban/rural residence is affected by the national definition of urban and rural used in tabulating these data. It is assumed, in the absence of specific information to the contrary, that the definitions of urban and rural used in connection with the national population census were also used in the compilation of the vital statistics for each country or area. However, the possibility cannot be excluded that, for a given country or area, the same definitions of urban and rural are not used for both the vital statistics data and the population census data. When known, the definitions of urban used in national population census are presented at the end of the technical notes to table 6. As discussed in detail in the technical notes to table 6, these definitions vary considerably from one area or country to another.

In addition to problems of comparability, vital rates classified by urban/rural residence are also subject to certain special types of bias. If, when calculating vital rates, different definitions of urban are used in connection with the vital events and the population data and if this results in a net difference between the numerator and denominator of the rate in the population at risk, then the vital rates would be biased. Urban/rural differentials in vital rates may also be affected by whether the vital events have been tabulated in terms of place of occurrence or place of usual residence. This problem is discussed in more detail in section 4.1.4.1 of the Technical notes.

Coverage: Live births are shown for 144 countries or areas. Data are presented by urban/rural residence for 63 countries or areas.

Crude live-birth rates are shown for 207 countries or areas. Rates are presented by urban/rural residence for 34 countries or areas.

Earlier data: Live births have been shown in each issue of the Demographic Yearbook. Data included in this table update the series covering a period of years as follows:

<b>Issue</b> Special Edition on Natality, CD. 1999	Years Covered
- Numbers	1980 - 1999 1985 - 1999
- Rates Historical Supplement, CD,	1965 - 1999 1948 – 1997
1997	10.0
1992	1983 – 1992
1986	1967 – 1986
1981	1962 – 1981
Historical Supplement, 1979	1948 - 1977

For further information on years covered prior to 1948, readers should consult the Index.