## Technical notes<sup>1</sup>

Table 7 (Female population by age and total number of children born alive and urban/rural residence, each census: 1948–1997) presents female population by age and total number of children born alive and urban/rural residence for each census between 1948 and 1996.

**Description of variables:** Age is defined as age at last birthday, that is, the difference between the date of birth and the reference date of the age distribution expressed in completed solar years. The age classification used in this table is the following: 15–19 years, 5 year groups through 70–74 years, and 75 years and over and age unknown.

The urban/rural classification is that provided by each country or area; it is therefore presumed to be based on the national definitions of urban population that have been set forth at the end of Technical Notes for table 2.

The aggregate number of children are shown under the heading "Number". In addition, the table includes the gross fertility ratio described under "Ratio computation".

The data are from censuses taken in the period 1948 to 1996. Data obtained from sample surveys are shown for those countries or areas where no census of the total population was held during the period. These have been indicated with a footnote.

**Ratio computation:** The gross fertility ratio is the total number of children reported to have been born to women in each age group per 1 000 female population in that age group, as recorded at the census.

To make these ratios more widely available when the aggregate number of children was not reported, the Statistics Division of the United Nations estimated these aggregates by (1) multiplying each child-category from 0 to 7 by its corresponding population frequency, (2) multiplying the population in the 8–9 class by 8, (3) multiplying the population in the "10 and over" category by 10, the lower limit of this open interval, (4) multiplying the population in the "Not stated category" by zero on the assumption that it was likely that women in this category had no children, and summing the products.

The resultant estimate is no doubt low, in as much as the minimum class limit has usually been used as the mean value for the open interval, while zero was assumed as

<sup>&</sup>lt;sup>1</sup> Demographic Yearbook Historical Supplement 1948–1997, United Nations DYB-CD, Sales No.: E/F.99.XIII.12, United Nations Publications New York, Geneva

the mean value for the unknowns. Nevertheless, it provides an index of family size which-employed with proper caution-can be quite useful.

**Reliability of data:** No special reliability codes have been used in connection with this table.

**Limitations:** International comparability of these data is limited by variations among countries or areas in the groups of women to which the statistics refer. Some data refer to all female population 15 years of age and over; others refer to all women who have ever been married; in some instances, they are currently married women only. Some of these variations introduce a secondary difference in the base data in that married women may report legitimate offspring only. In other cases, late foetal deaths may be included. These variations, when known, are noted in the table.

Perhaps the major limitation on the reliability of the indices derived from data in these tables is that the response of the information to the question on number of children born alive is subject to many errors. The answer may be in error because of misinterpretation, lack of knowledge on the part of the respondent (who often is not the woman involved), faulty memory or misinformation of the meaning of the question. Faulty memory may affect the response – especially of women past the child-bearing age– because the events involved relate to a time long past. Children who died soon after birth are especially likely to be omitted, even by younger women, as are children who died just before the census date and even grown children (under a strict interpretation of the word "child") who have left the home.[23]

Because of the unreliability of the answers, there is also considerable variation in the proportion of women for whom the number of children is given as unknown. These variations particularly affect the ratios because of the assumption made in the tabulation that unknown number of children is equivalent to childlessness.

Consequently, except for comparisons between countries or areas where the group of women covered is the same with respect to marital status, for example, and between distributions in which unknowns are unimportant, the ratios cannot be used for international comparison of levels of fertility. They can, however, be utilized for international comparisons of general trends or of relative differences between age groups.

In addition to the special limitations in comparability which arise from the special nature of the data, they are subject also to under-or over-enumeration and, to some extent, to differences in definition of total population of these factors have been discussed in section 3 of the Technical Notes dealing with population data in general. The inaccuracies and variations in age reporting also described and evaluated in section 3.1.3 are also important in relation to the data in these tables, especially in so far as they may affect the numbers of women in each age group.

**Coverage:** Female population by age and number of children born alive is shown for 162 countries or areas.

**Earlier data:** Female population by age and number of children born alive has been shown previously in issues of the Demographic Yearbook.