## 100 Million Women Are Missing

Worldwide, some 100 million females are missing, victims of nothing more than their sex. In China, India, Pakistan, New Guinea, and many other developing countries a traditional preference for boys has meant neglect and death for girls, millions of whom are killed at birth, deprived of adequate food, or denied the medical attention afforded to favored sons. In both China and India ultrasound and amniocentesis tests are employed, often against government directives, to determine the sex of a fetus so that it can be aborted if it is a female.

The evidence for the missing women starts with one fact: About 106 males are conceived and born for every 100 females. Normally, girls are hardier and more resistant to disease than boys, and in populations where the sexes are treated equally in matters of nutrition and health care, there are about 105 to 106 females for every 100 males. However, the 2001 census of India found just 93.2 females for every 100 males, while in China nearly 10\% of all girls of the 1990s birth cohorts are "missing" and in 2000 there were 120 boys under age 5 for every 100 girls.

Ratio deviations are most striking for second and subsequent births. In China, South Korea, Taiwan, and Hong

Kong, for example, the most recent figures for first-child sex ratios are near normal, but rise to 121 boys per 100 girls for a second Chinese child, and to 185 per 100 for a third Korean child. On that evidence, the problem of missing females is getting worse. Conservative calculations suggest there are more than 60 million females missing in China alone, almost $5 \%$ of the national population and more than are unaccounted for in any other country.

The problem is seen elsewhere. In much of South and West Asia and North Africa there are only some 94 females for every 100 males, a shortfall of about $12 \%$ of normal (Western) expectations. A 2000 United Nations report on South Asia suggests the " 100 million" world total of missing females is an understatement. It declares that abortions of female fetuses along with infanticide and the food favoratism shown boys have meant that 79 million lost females are attributed to discrimination in South Asia alone, including 20 to 25 million in India.

But not all poor countries show the same disparities. In sub-Saharan Africa, where poverty and disease are perhaps more prevalent than on any other continent, there are 102 females for every 100 males and in Latin America and the Caribbean there are equal numbers of males and females. Cultural norms and practices, not poverty or underdevelopment, seem to determine the fate and swell the numbers of the world's 100 million missing women.

15-64) must support. Population pyramids give quick visual evidence of that ratio.

They also foretell future problems resulting from present population policies or practices. The strict family-size rules and widespread preferences for sons in China, for example, skews the pyramid in favor of males. On current evidence, about 1 million excess males a year will enter an imbalanced marriage market in China beginning about 2010. Even now, the Chinese population pyramid shows never-married men ages 20-44 outnumber their female counterparts by nearly two to one. Millions of bachelors, unconnected to society by wives and children, may pose threats to social order and, perhaps, national stability not foreseen or planned when family control programs were put in place, but clearly suggested when made evident by population pyramid distortions.

## Natural Increase

Knowledge of a country's sex and age distributions also enables demographers to forecast its future population levels, though the reliability of projections decreases with
increasing length of forecast (Figure 6.13). Thus, a country with a high proportion of young people will experience a high rate of natural increase unless there is a very high mortality rate among infants and juveniles or fertility and birth rates change materially. The rate of natural increase of a population is derived by subtracting the crude death rate from the crude birth rate. Natural means that increases or decreases due to migration are not included. If a country had a birth rate of 22 per 1000 and a death rate of 12 per 1000 for a given year, the rate of natural increase would be 10 per 1000. This rate is usually expressed as a percentage, that is, as a rate per 100 rather than per 1000. In the example given, the annual increase would be $1 \%$.

## Doubling Times

The rate of increase can be related to the time it takes for a population to double, that is, the doubling time. Table 6.1 shows that it would take 70 years for a population with a rate of increase of $1 \%$ (approximately the rate of growth of Thailand or Argentina at the turn of the century) to double. A 2\% rate of increase-recorded in 2002 by Egypt and

