

# International Brief

## Population Trends: Peru

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- Peru, one of Latin America's largest nations, is home to over 26 million people.
- Peru's demographic profile reflects dramatic declines in fertility and mortality since the mid-1970s. The country's crude birth rate has been reduced by over one-fourth of its 1975 level; its crude death rate, by half.
- As a result, Peru's population is increasingly concentrated in the labor force age range (ages 15 to 64). During the coming 20 years, the ratio of dependent-age population<sup>1</sup> to working age population will decrease by over one-fifth of its 1998 level.
- Within the country, regional and urban-rural variations in fertility and mortality are pronounced. For instance, infant mortality is three times higher in rural areas than in Lima, the capital<sup>2</sup>; the total fertility rate (TFR), twice as high.
- Demographic variations reflect disparities in wealth, resources, and availability of government services. Access to maternal health care and family planning services, like other health care services, continues to be significantly better for urban than for rural couples. Current government policy seeks to correct this situation.

### Peruvian Demography Reflects Subnational Social and Economic Disparities

Latin America's fifth largest nation has historically been, and continues to be, divided along linguistic and class lines. Lima, the national capital, is the apex of the hierarchy and smaller settlements and rural areas are at its base.

The 70 percent of the Peruvian population living in urban areas have higher incomes, on average, and more access to resources, government services, and other amenities than do rural residents. For example, according to the 1996 Demographic and Health Survey (DHS) report (ENDES 1996), over 90 percent of urban households have electricity; less than one-fifth of rural households do (Table 2.9). Similarly, only 6 percent of females ages 6 and above living in urban places have no education, but 24 percent of rural females have no formal schooling (ENDES 1996: Table 2.6). The percentage of females with at least a secondary education

is 57 percent in urban areas and 16 percent in rural areas.

Lima differs markedly from the rest of the country not only in terms of its industry and labor market, its educational offerings and the availability of services, but also in terms of a series of demographic and health indicators. For example, infant and child mortality rates are much lower in Lima than in the rest of the country. Child mortality in Lima is about one-fourth the level in other urban areas and one-eighth the level prevailing in rural areas (box).

One-fourth of Peruvian children were malnourished in 1996, and again the problem varied with residence. In Lima, 10 percent of children under age 5 were classified as malnourished. That figure was 20 percent in other urban areas and 40 percent in rural areas (ENDES 1996: Table 9.8).

Urban residents also tend to enjoy better health care coverage than rural residents. In 1996, over 80 percent of urban women in need of prenatal care received such care

### Demographic Differentials in Peru: Infant Mortality, Child Mortality, and Fertility

Area	Percent of population 1993	Infant mortality rate 1986-96	Child mortality rate <sup>1</sup> 1986-96	Total fertility rate 1993-96
Rural .....	30	71	31	5.6
Urban <sup>2</sup> .....	70	35	12	2.8
Lima .....	29	23	4	2.5

<sup>1</sup>Dependent age groups are defined to include youth (ages 0 to 14) and the elderly (ages 65 and over).

<sup>2</sup>Throughout this report, Lima refers to the Lima metropolitan area.

<sup>1</sup>Child mortality (ages 1 to 4) is the probability of dying between exact ages 1 and 5.

<sup>2</sup>2,000 or more inhabitants. Forty-one percent of Peru's population lives in urban areas other than Lima.

Sources: INEI 1993 and ENDES 1996.

from a trained health professional, but fewer than half of rural mothers did (ENDES 1996: Table 8.2). Similarly, 4 out of 5 urban births but only 1 out of 5 rural births were attended by a doctor or nurse (Endes 1996: Table 8.8).

### Peru's Demographic Transition

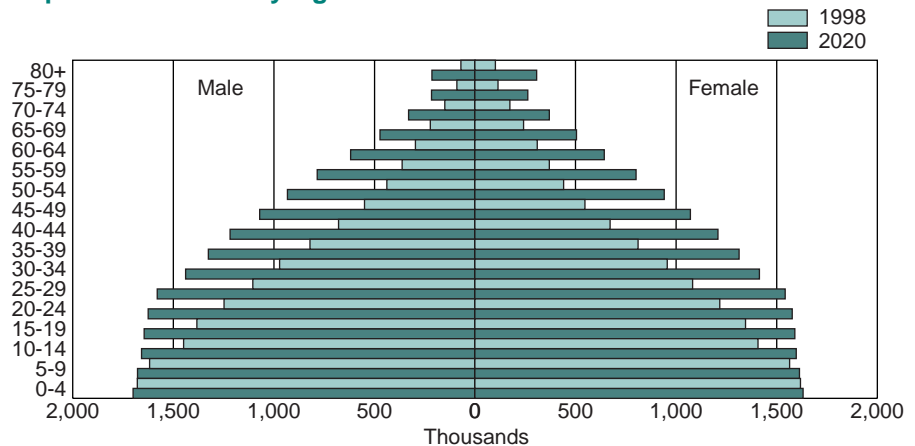
Peru has been quite successful in lowering mortality. Since 1975, life expectancy at birth has increased from 57 years to nearly 70 years, fueled in part by a rapid fall in infant and child mortality. Infant mortality has declined from an estimated 105 infant deaths per 1,000 live births in 1975 to 41 today (Table 1).

Over the same period, the number of births women have on average (the total fertility rate (TFR)) has fallen from 5 to 3. Fertility is declining throughout Peru, albeit faster in urban areas than in rural areas. Between the 1977/78 World Fertility Survey and the 1996 DHS, urban fertility fell by nearly 40 percent, to a TFR of 2.8 children per woman. During the same time period, rural fertility fell by about 25 percent, to 5.6 children per woman (ENDES 1991/92: Table 3.3; ENDES 1996: Table 3.1).

Peru's rate of natural increase has also declined from around 2.6 percent per year in 1975 to about 2.1 percent in 1998. If present trends continue, Peru's population will grow by over one-third of its present size—from 26 million persons today to nearly 37 million persons—by the year 2020.

During the same time frame, Peru's age structure will become increasingly older and increasingly concentrated in the prime economically productive age range (Table 1). By 2020, the working age population (persons ages 15-64) will be over half again as large as today, and the number of elderly will have doubled, while the under-15 age group will have increased only slightly (Figure 1). Largely as a result of the growth of the working age population relative to the under-15 population,

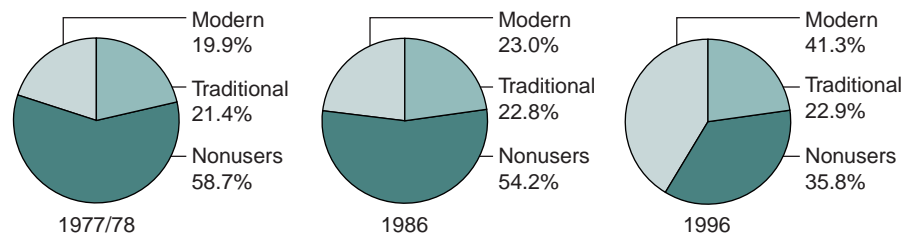
Figure 1.  
**Population of Peru by Age and Sex: 1998 and 2020**



Source: U.S. Bureau of the Census, International Data Base.

Figure 2.  
**Changes in Contraceptive Use and Method Mix Over Past 20 Years**

(Percent of married women ages 15 to 49)



Source: U.S. Bureau of the Census, International Data Base; and ENDES 1996.

Peru's dependency ratio will fall from 67 percent to just 52 percent over the coming 2 decades (Table 1).

### Contraceptive Use

The fertility decline central to Peru's demographic transition has been made possible by an increase in the use of family planning and a shift to more effective methods of contraception. Contraceptive prevalence has risen from about 41 percent of married women in the late 1970s to 46 percent in 1986 and to 64 percent in 1996 (Table 2). Adoption of more efficient, modern methods of contraception since 1986 accounts for nearly all of this increase (Figure 2).

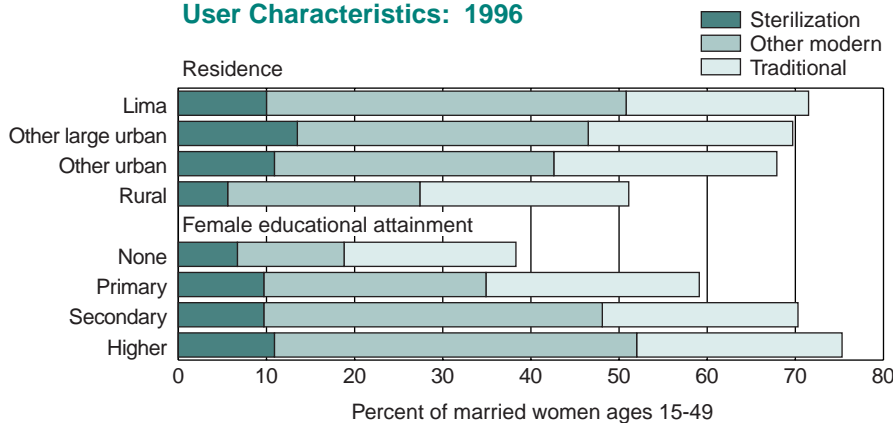
However, data from the 1996 DHS show distinct differences in usage

patterns. Rural and less educated women have lower contraceptive prevalence rates than other women, and they rely more heavily on less effective, traditional methods (Figure 3).

### High Risk Pregnancies, Unwanted Fertility and Unmet Need for Contraception

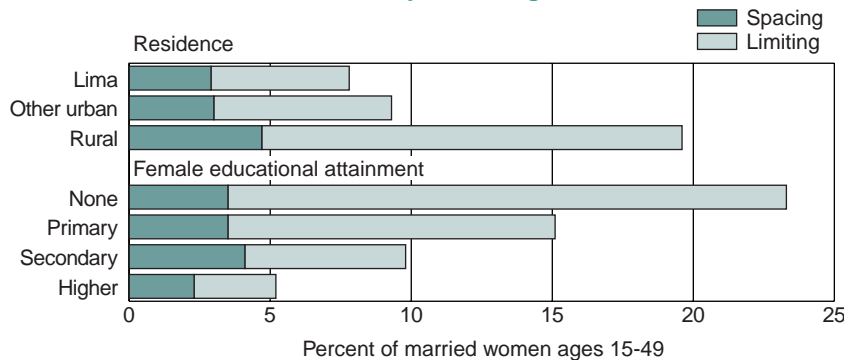
Although the practice of family planning is growing, the unmet need for contraception is still high. Indeed, over half of all pregnancies that went to term in 1996 were considered "high risk" (ENDES: Table 7.5). Some of these pregnancies could have been avoided with family planning. Apart from the matter of health risk, there is evidence that women were bearing an average of about

Figure 3.  
**Contraceptive Method Mix by User Characteristics: 1996**



Source: ENDES 1996.

Figure 4.  
**Unmet Need for Family Planning: 1996**



Source: ENDES 1996.

one child more than the number they desired in 1996 (ENDES 1996: Tables 3.1, 6.9, 7.5).

One in 8 married women said she wanted to limit or space future births, but was not using a method of family planning in 1996. The percentage of married women in this situation, deemed to have unmet need for family planning, was higher in rural areas (20 percent) than in urban areas (9 percent). The percentage was also higher for less educated women than for women with a secondary education (Figure 4).

Part of the problem stems from limited access to family planning services. In 1991, median travel time to the nearest source of a modern method of contraception

was 16 minutes for urban residents compared with about an hour for rural residents (ENDES 1991/92: Table 4.12).

Information on the use of induced abortion provides additional evidence of unmet need. Peruvian health officials have been cited as indicating that as many as 1 in every 3 pregnancies in the country is terminated through induced abortion (*The Washington Post*, 11/10/95:A24). And abortion is considered one of the leading causes of maternal mortality in Peru. The government and proponents of its population policy say that greater access to contraceptive services is required to reduce both unwanted pregnancies and abortions.

### The Government Responds

One of the challenges facing Peru during the coming years will be that of expanding access to family planning and other reproductive health services for poor, less educated, and rural underserved populations. The government recently reversed a policy, in place since 1996, of setting targets for sterilizations. Its stated commitment now is to a goal of ensuring that women have information and counseling to achieve their individual desires with respect to spacing and number of children.

### References

Instituto Nacional de Estadística e Informática (INEI). 1993. *Peru: Crecimiento y Distribución de la Población (Análisis de Cifras Preliminares)*. Censos Nacionales 1993 series. Lima.

Instituto Nacional de Estadística e Informática and Macro International, Inc. 1997. *Encuesta Demográfica y de Salud Familiar 1996*. (ENDES 1996). Columbia, MD.

Instituto Nacional de Estadística e Informática, Asociación Benefica PRISMA, and Macro International, Inc. 1992. *Encuesta Demográfica y de Salud Familiar 1991/1992*. (ENDES 1991/1992). Columbia, MD.

The International Programs Center (IPC) collects, assesses, and analyzes population and related statistics from all countries. Based on these data, IPC produces the demographic estimates and projections used in this series of reports. This report was prepared with the support of the U.S. Agency for International Development. More detailed information is available from the International Programs Center, Population Division, Bureau of the Census, Washington, D.C. 20233-8860.

Table 1.  
**Population Indicators for Peru:  
1990 to 2020**

(Population in thousands, figures may not add to totals because of rounding)

Indicator	1990	1998	2000	2010	2020
<b>POPULATION</b>					
Total country.....	21,989	26,111	27,136	32,122	36,904
Urban.....	15,150	18,802	19,747	24,503	29,276
Rural.....	6,839	7,308	7,389	7,619	7,628
<b>Male, Total Country</b>					
All ages.....	11,068	13,132	13,645	16,133	18,508
0 to 14.....	4,319	4,741	4,834	4,999	5,038
15 to 44.....	5,074	6,207	6,469	7,795	8,828
15 to 49.....	5,493	6,757	7,063	8,635	9,899
15 to 64.....	6,366	7,857	8,230	10,288	12,236
65+.....	383	534	581	846	1,234
75+.....	111	161	176	285	429
<b>Female, Total Country</b>					
All ages.....	10,921	12,979	13,491	15,989	18,396
0 to 14.....	4,186	4,595	4,682	4,827	4,849
15 to 44.....	4,960	6,083	6,343	7,651	8,650
15 to 49.....	5,377	6,630	6,935	8,491	9,721
15 to 64.....	6,278	7,752	8,123	10,172	12,105
65+.....	457	632	686	990	1,443
75+.....	147	217	238	379	568
<b>Married Females</b>					
Ages 15 to 49.....	3,099	3,902	4,112	5,144	6,051
15 to 19.....	138	160	163	187	189
20 to 24.....	493	579	602	686	752
25 to 29.....	630	757	789	936	1,081
30 to 34.....	603	773	808	996	1,142
35 to 39.....	501	656	702	888	1,061
40 to 44.....	401	538	574	778	966
45 to 49.....	334	439	475	673	859
<b>DEPENDENCY RATIO</b>					
Both sexes.....	73.9	67.3	65.9	57.0	51.6
<b>LIFE EXPECTANCY AT BIRTH (years)</b>					
Both sexes.....	65.7	70.0	70.8	74.4	77.1
Male.....	63.6	67.7	68.5	72.0	74.6
Female.....	68.0	72.3	73.2	76.9	79.7
<b>INFANT MORTALITY RATE (per 1,000 births)</b>					
Both sexes.....	57.8	40.8	37.1	23.6	15.2
Male.....	64.3	45.9	41.7	26.3	17.0
Female.....	51.0	35.5	32.4	20.6	13.4
<b>UNDER-FIVE MORTALITY RATE (per 1,000 births)</b>					
Both sexes.....	81.0	54.7	49.1	29.7	18.5
Male.....	87.1	59.6	53.6	32.8	20.5
Female.....	74.6	49.6	44.4	26.5	16.4
<b>MATERNAL MORTALITY RATIO 1989-1996 (per 100,000 births)</b>					
Total.....					265
<b>TOTAL FERTILITY RATE</b>					
Per woman.....	4.1	3.3	3.1	2.6	2.3

Note: Dependency ratio is the number of persons under age 15 and ages 65 and above per 100 persons ages 15 to 64 years.

Sources: U.S. Bureau of the Census, International Programs Center, International Data Base; and ENDES 1996, Table 7.12.

Table 2.  
**Contraceptive Prevalence Among Currently  
Married Women 15 to 49 Years of Age by  
Method**

Method	Percentage of married women currently using specific methods for selected years			Percentage of married woman currently using specific methods by residence: 1996		
	1977/78	1986	1996	Other Lima urban	Rural	
All.....	41.3	45.8	64.2	71.6	69.2	51.2
Pill.....	5.5	6.5	6.2	7.9	6.5	4.3
Condom.....	1.4	0.7	4.4	8.0	4.1	1.4
IUD.....	1.8	7.4	12.0	17.1	13.0	6.1
<b>Female</b>						
sterilization.....	3.6	6.1	9.5	9.6	12.6	5.4
Other modern....	7.6	2.3	9.2	8.2	9.3	10.3
Traditional.....	21.4	22.8	22.9	20.7	23.7	23.7

Sources: ENDES 1996, Tables 4.4 and 4.6; and U.S. Bureau of the Census, International Programs Center, International Data Base.

Table 3.  
**Other Proximate Determinants of Fertility**

<b>CHILDLESS WOMEN: 1996</b>	
Percent of currently married women ages 45 to 49.....	4.6
<b>DURATION OF POSTPARTUM INFECUNDABILITY: 1996</b>	
<b>Median Months By Residence</b>	
Country.....	9.6
Lima.....	8.2
Other larger centers.....	7.9
Remaining urban.....	8.0
Rural.....	12.1
<b>Median Months By Educational Attainment</b>	
None.....	15.3
Primary.....	11.5
Secondary.....	8.9
Higher.....	6.3

Source: ENDES, 1996, Table 5.12.

Table 4.  
**Age-Specific Fertility Rates**  
(Per 1,000 women)

Age	1975	1986	1993	1998	2000
15 to 19.....	93	83	79	67	62
20 to 24.....	238	191	184	167	160
25 to 29.....	265	204	175	165	162
30 to 34.....	220	165	147	129	122
35 to 39.....	174	126	110	90	81
40 to 44.....	70	66	51	39	34
45 to 49.....	16	13	8	7	6
Total fertility rate.....	5.4	4.2	3.8	3.3	3.1

Source: U.S. Bureau of the Census, International Programs Center, International Data Base.