

Population Characteristics in the Lao People's Democratic Republic

*The Government recognizes that high
fertility contributes to high infant,
child and maternal mortality*

By Carl M. Frisen*

The Lao People's Democratic Republic is - with the exception of Singapore - the least populated country of continental South-east Asia; it also has the lowest density of population. The country's first nationwide census as of 1 March 1985 reported a preliminary total of 3,584,803 inhabitants

* The author of this article, who is a former Chief of the ESCAP Population Division, is a Research Associate at the Institute of Population Studies (IPS), Chulalongkorn University, Bangkok, Thailand. This article is based on a paper that he presented at the Seminar on Population and Labour Force of the Southeast Asian Region, the proceedings of which were published by IPS in January 1991. It should be noted that the spelling of Lao provinces follows that given in the 1985 Census of Lao PDR, with a few exceptions such as Suvanakheth rather than Savannakhet.

(Lao PDR, 1986).^{1/} The total land area is 236,800 square kilometres, resulting in a density of only 15 persons per sq. km in 1985. A recent estimate places the 1990 population at 4.2 million, or almost 18 persons per sq. km (State Planning Committee, n.d.[a]).

Lao PDR is a land-locked country bordered on the north-west by Myanmar, on the north by China, on the east by Viet Nam, on the south by Cambodia and on the west by Thailand. Its major transit routes are through Thailand on the west and Viet Nam on the east. For the most part, the western boundary is marked by the Mekong River. Only the north-western province of Sayaburi and smaller segments of Oudomsay and Luangprabang provinces lie to the west of the river. The eastern border is generally mountainous, following the ridge of the Annamite Cordillera.

About 80 per cent of the land is between 200 and 3,000 metres above sea level. Extensive river plains of the Mekong and its tributaries are located primarily in the southern half of the country but continue northward to include the plain of Vientiane, on which the Vientiane Municipality is located. Three provinces bordering the Mekong River, namely, Vientiane Municipality, Suvannakhet and Champasak, accounted for 37 per cent of the Lao population in 1985 and had densities of 96, 25 and 26 persons per sq. km, respectively. [Map 1](#) shows the population density in 1985 with the dots distributed randomly by computer.^{2/} Over 50 per cent of the Lao people live in provinces bordering the Mekong, most of the population residing within 30 km of the river.

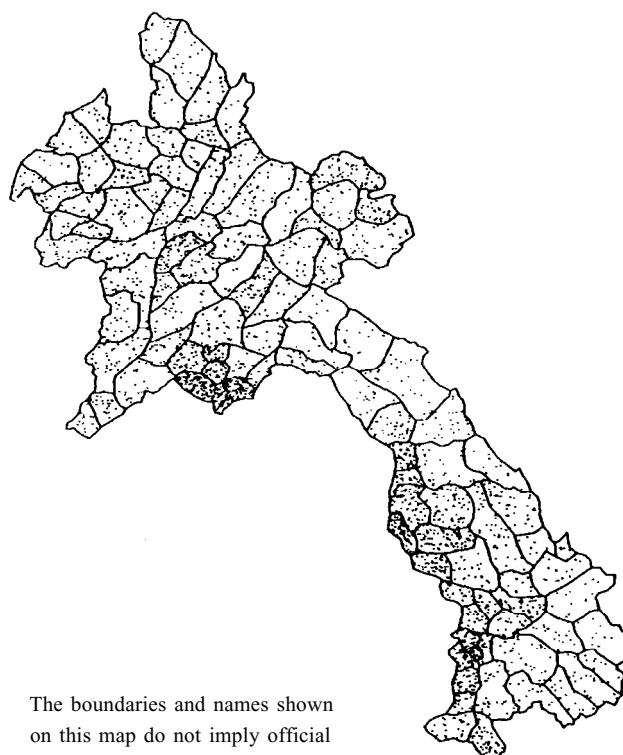
Although no official figures on urban populations have been published, the city of Vientiane was reported to have a population of 150,000 in 1985, Suvannakhet about 50,000, Pakse 20,000 and Luangprabang about 8,000. The rural population is estimated at 85 per cent of the total, residing in 11,000 villages (UNICEF, 1987).

Ethnicity

Ethnic diversity is an important characteristic of the Lao population. There is official reference to 68 ethnic groups, but there is no ethnographic evidence to support this specific number. With 80 per cent of its area defined as mountainous and with limited lines of transportation and communication, Lao PDR faces a difficult task in trying to blend these diverse groups into a "Lao society". For convenience they are sometimes consolidated into three major groups, as described by Stuart-Fox (1986, p. 45):

Map 1: Density of the population of the Lao People's Democratic Republic by district, 1985

Distribution of population
(1 dot equal 1,000 people)



The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations

“Based on a combination of cultural, linguistic and geographical criteria, however, it is usual to divide the population of Laos into three broad groups. These have been designated as the Lao Theung, or ‘Lao of the mountain slopes’, speaking Mon-Khmer languages; the Lao Soung, or ‘Lao of the mountain summits’, speaking Tibeto-Burman languages; and the Lao Loum, or ‘Lao of the mountains and plains’, speaking T’ai languages. The ethnic, or lowland, Lao of the Mekong valley constitute but one of the groups making up the Lao Loum.”

In the 1985 census, Lao respondents were asked: “What is your ethnic group”? Apparently because of problems of comparability and classification, the results are considered unofficial but they suggest that the Lao Loum comprise about 68 per cent of the total population, the Lao Theung about 22 per cent and the Lao Soung 10 per cent. Smaller ethnic minorities include the Vietnamese, Chinese and Indians, residing chiefly in urban areas.

Age-sex distribution

The reported sex ratio for Lao PDR in 1985 was 96.1 males per 100 females. Aside from possible under-reporting in the census, other factors contributing to the low sex ratio could be the effect of over two decades of military activity and the large-scale out-migration following cessation of fighting. The impact on the national sex ratio by age groups is shown in [table 1](#). The high ratios reported for the 35-39 and 65-69-year-old age groups raise questions of age misreporting.

Lao PDR has a young population. The 1985 census age distribution shows 44 per cent were under 15 years of age, one-half of the population was between 15 and 59 years and 6 per cent were aged 60 years and over ([table 2](#)). As seen in [table 1](#), the lowest sex ratios among adults of working age were recorded for the 15-24-year-old age group, indicating that many young working people were lost to the labour force through emigration. Other factors contributing to a low sex ratio were possible underenumeration of males and the effects of the years of internal warfare. The overall impact is reflected in provincial sex ratios for the population 15 years of age and over. [Map 2](#) shows that, in 1985, 10 of the country’s 17 provinces reported fewer than 90 males per 100 females and in two provinces the sex ratio of adults was less than 80. Geographically they comprised the four northernmost and eight southernmost provinces with a population of 1.93 million, or 54 per cent of the national total. A band of four provinces stretching across the country at its widest point had adult sex ratios of 95 to 99. Only Vientiane Municipality had a ratio of over 100 for adults.

Table 1: Population of Lao PDR by age and sex, 1985

Age group (years)	Total	Male	Female	Sex ratio
0-4	620,470	315,959	304,511	103.76
5-9	511,103	261,046	250,057	104.39
10-14	454,360	231,548	222,812	103.92
15-19	344,954	161,777	183,177	88.32
20-24	281,716	126,233	155,483	81.19
25-29	277,759	131,810	145,949	90.31
30-34	199,137	95,520	103,617	92.19
35-39	187,923	93,486	94,437	98.99
40-44	128,363	60,492	67,871	89.13
45-49	141,437	67,597	73,840	91.55
50-54	110,826	53,047	57,779	91.81
55-59	102,455	49,505	52,950	93.49
60-64	79,288	39,250	40,038	98.03
65-69	58,447	30,130	28,317	106.40
70-74	36,731	17,205	19,526	88.11
75-79	22,203	10,661	11,542	92.37
80-84	14,499	6,396	8,103	78.93
85-89	6,262	2,795	3,467	80.62
90-94	3,525	1,361	2,164	62.89
95-99	1,591	655	936	69.98
100-104	1,104	410	694	59.08
105-109	196	82	114	71.93
110-114	210	68	142	47.89
115+	244	82	162	50.62
Total	3,584,803	1,757,115	1,827,688	96.14

Fertility and mortality

The preliminary results of a multiround survey started in 1988 give a crude birth rate (CBR) of 45.0 and a crude death rate (CDR) of 16.0 per thousand population for the period 1988-1990 (State Planning Committee, n.d.[b]). Lao vital rates remain high and there is as yet no clear indication of a significant reduction in fertility with the possible exception of Vientiane Municipality. Perhaps a better measure of fertility, in view of the skewed sex ratio of the Lao adult population, is the total fertility rate (TFR). This is the number of children that a woman would bear in her lifetime based on current age-specific fertility rates. The preliminary results of the multiround survey reported a TFR of 6.8 for a period of about 18 months in 1987-1988 (State Planning Commission, n.d.[a]). This compares with a 1960 estimate

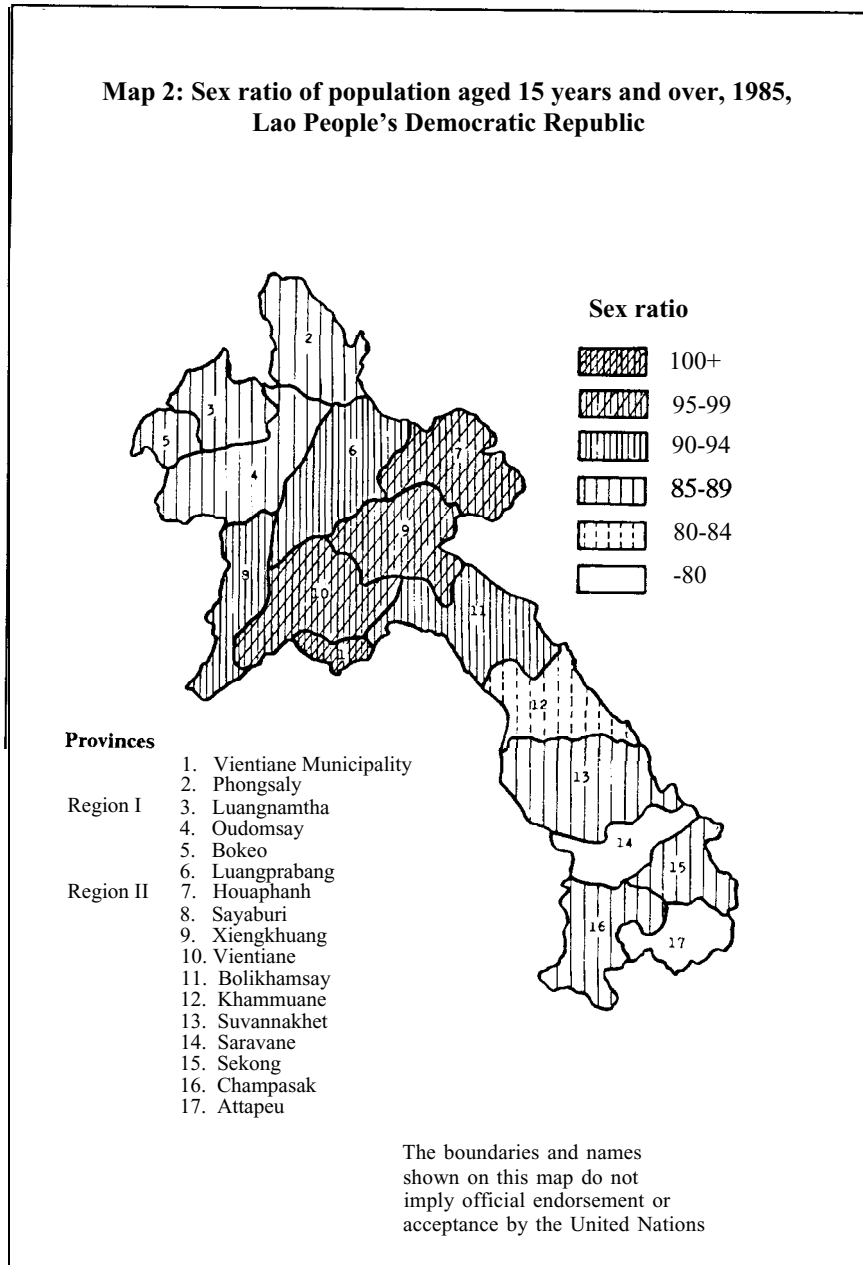
Table 2: Projected population of the Lao People's Democratic Republic to the year 2000 by broad age group

Age group	1985	1990	1995	2000
Number (000)				
0-14	1,600.4	1,864.4	2,170.0	2,467.2
15-19	1,791.4	2,062.4	2,370.6	2,740.3
60+	226.2	243.2	257.4	292.5
Total	3,618.0	4,170.0	4,798.0	5,500.0
Per cent				
0-14	44.2	44.7	45.2	44.9
15-19	49.5	49.5	49.4	49.8
60+	6.3	5.8	5.4	5.3
Total	100.0	100.0	100.0	100.0
5-year change (000)				
0-14	-	+ 264.0	+ 305.6	+ 297.2
15-19	-	+ 271.0	+ 308.2	+ 369.7
60+	-	+ 17.0	+ 14.2	+ 35.1
Total	-	+ 552.0	+ 628.0	+ 702.0
5-year change (%)				
0-14	-	+ 16.5	+ 16.4	+ 13.7
15-19	-	+ 15.1	+ 14.9	+ 15.6
60+	-	+ 7.5	+ 5.8	+ 13.6
Total	-	+ 15.3	+ 15.1	+ 14.6

for Thailand of 6.6 cited by Das Gupta *et al.* (1963), again reflecting the high level of Lao fertility.

As is the case with most Lao demographic data, estimates of mortality tend to vary. In its country presentation to the Second United Nations Conference on the Least Developed Countries, held in 1990, the Lao PDR estimated infant mortality in 1986 at 116 deaths per thousand births. Other estimates for the latter 1980s approximate this figure. Information on maternal mortality is even more difficult to obtain, but there is general recognition that both infant and maternal death rates are too high. It is also evident that rates vary considerably between the urban areas and the remote mountain provinces. The Government's efforts to expand health services, now largely concentrated in the major urban centres, are severely limited by the lack of medical facilities and supplies, problems of transportation and communication and the unwillingness of medical personnel to accept posting in thinly populated, isolated rural areas. Ethnic diversity further complicates the problem. A recent step has been the establishment of a maternal and child health care institute that will seek to reduce the high levels of infant, child and maternal mortality through a programme including birth spacing.

**Map 2: Sex ratio of population aged 15 years and over, 1985,
Lao People's Democratic Republic**



Population policy

In view of the country's relatively small population and low population density, the Government has adopted a pro-natalist policy. Population growth is viewed as essential to economic development and national security. At the same time, the Government recognizes that high fertility, with short birth intervals, inadequate health services and problems of malnutrition, contributes to high infant, child and maternal mortality. The current expansion of maternal and child health services incorporates the first phase of a child spacing programme to provide services through two clinics in Vientiane city hospitals and clinics in the remainder of Vientiane Municipality and in Luangprabang, Vientiane, Khammuane, Suvannakhet and Champasak provinces. The two clinics in Vientiane Municipality are currently functioning and clinics in the remaining areas should be operational before the end of 1991. It is hoped that the programme will provide nationwide coverage within the next three years.

Migration

Out-migration began before the change in Government in late 1975 and has continued at varying levels up to the present time. The monthly statistical reports of the United Nations High Commissioner for Refugees (UNHCR) provide one measure of emigration from Lao PDR and show that from 1975 to the end of May 1991 a total of 359,000 people entered UNHCR camps in Thailand, i.e. 213,000 lowland Lao and 146,000 hilltribe migrants. In addition, there has been significant unofficial border crossing into Thailand with varying estimates of the numbers involved. Stuart-Fox (1986, p. 52) mentions a possible total of 60,000 which would imply a total out-migration of well over 400,000. UNHCR figures on repatriation show 8,000 have returned to Lao PDR up to 31 May 1991, primarily persons who could not qualify for resettlement in a third country. Stuart-Fox (1986, p. 53) summarized the significance of this movement noting that

“the outflow not only included most of the former Lao elite, but also represented a substantial proportion of the educated middle class. Laos lost not only most of its professionally qualified doctors, engineers, managers and administrators, but also a large proportion of its mechanics, tradesmen and artisans.”

The impact of this stream of emigration is evident today in the age-sex structure of the population and the composition of the labour force.

Labour force

In a report prepared for a United Nations meeting in 1986 on the least developed countries, the Lao labour force was estimated at 1.6 million (Lao PDR, April 1986). A recent tabulation of the 1985 census data confirms the 1.6 million total and provides a sectoral breakdown. Agriculture and forestry accounted for 90 per cent of the labour force while industry and construction involved only two per cent.

The Government is aware that the technical skill of the indigenous labour force is low, noting that at the time of the 1985 census there were only 500 engineers and 1,500 technicians in the country. There is also a shortage of adequately trained managerial manpower. These serve as constraints on the economic development programme (Lao PDR, 1990).

Education

The 1985 census included a question on the educational attainment of the population (table 3 summarizes the results). Primary enrolment begins at age six years and includes grades 1 through 5. Secondary and higher secondary levels include grades 6 through 8 and 9 through 11, respectively. The data indicate that about one-half of the Lao population of school age and above have never attended school.

Education even at the primary level appears to have been very limited in availability until the establishment of the current Government, which made primary education one of its earliest priorities; a major effort was initiated to expand school facilities. A comparison of the numbers of pupils enrolled in general education classes in 1975-1976 and 1987-1988 provides a measure of the Government's achievement (State Planning Committee, 1986, 1989):

Table 3: Level of educational attainment in Lao PDR by sex, 1985

Level	Total	Male	Female
University (higher level)	183	164	19
University*	10,096	7,216	2,880
High level equivalence*	1,271	1,021	250
Middle level*	12,143	7,934	4,209
Higher secondary (3 yrs.)	51,888	34,778	17,110
Secondary (3 yrs.)	195,727	123,854	71,873
Primary (5 yrs.)	1,180,696	655,383	525,313
Total	1,452,004	830,350	621,654

* Includes both those studying and those who have completed the level.

	1975-1976	1987-1988 (in thousands)	Change
Total	346.3	678.1	+ 331.9
Primary	317.1	558.9	+ 241.7
Secondary	26.6	89.0	+ 62.3
Higher secondary	2.5	30.3	+ 27.8

Note: Change calculated using unrounded figures.
Technical and vocational school pupils excluded.

The rapid expansion of the school system has resulted in serious problems, including high percentages of dropouts and repeat enrolment, the use of poorly qualified teachers and inadequate physical facilities and teaching materials (Lao PDR, April 1989; UNICEF, 1987).

Lao schools at the primary and secondary levels are classified as general and vocational, with the latter representing 3 per cent of approximately 700,000 students reported in 1987-1988. Among the schools at the technical first and secondary levels are schools of agriculture, irrigation, forestry, civil engineering, electronics, post and communications, commerce, finance, nursing and fine arts. At the university and higher levels, facilities include polytechnic and medical universities and electronics, architecture, transport and communications and normal schools. Enrolments reported in 1987-1988 were 7,000 pupils in first-level technical schools, 9,200 in secondary technical schools and 5,400 in high schools. About 1,000 students had fellowships for study abroad in institutions of higher education (State Planning Committee, 1989). It may be anticipated that for some time to come the lack of qualified instructors and adequate facilities and equipment will limit the expansion of enrolments in the vocational and higher education levels. This, in turn, will constrain efforts to expand the base of skilled manpower within the country's labour force.

Population projections

Following the 1985 census and a 1986 survey of fertility and mortality, the State Statistical Centre prepared a set of population projections to the year 2000 (State Planning Committee, n.d.[c]). A summary by broad age groups is given in [table 2](#). The assumptions on which the projections are based were not spelled out, but the relatively small changes in the age distributions imply little change in birth and death rates over the 15-year interval. The final results of the current multiround vital statistics survey are expected to provide a basis for a new set of projections and for a set of life tables. Meanwhile, the current decade is expected to show an increase of about 600,000 in the number of children under 15 years of age, 680,000 in

the population between the ages of 15 and 59 years and almost 50,000 in those 60 years of age and over. Total population gain for 1900-2000 is projected at 1,330,000 or 32 per cent.

Conclusion

Given the small size and sparsity of the country's population when compared with its neighbours, the Lao Government's endorsement of a high fertility policy is not surprising. At the same time, Government policy classifies the current level of mortality as unacceptable. With the support of the World Health Organization and the United Nations Population Fund, a child-spacing programme has been started in order to reduce high infant, child and maternal mortality. This is part of a broad programme to expand health care on a nationwide scale. At the same time, the Government is faced with the problem of limited resources with which to improve the quality of its population in line with its social and economic goals.

School enrolment data indicate that growth in the number of schools, teachers and students is failing to keep up with increases in the school-age population, expectation of life at birth appears to be below 50 years, and technically trained manpower is in short supply owing to postwar out-migration and the current lack of adequate training facilities. Should the high growth rate persist through the current decade, it can be expected to exact a cost in terms of slower socio-economic development. The Government faces a difficult task in trying to meet the basic needs of its people and seeking to improve the country's economic status.

Footnotes

1. In evaluating the 1985 census results, it should be noted that all published data are based on a 10 per cent sample except the national and provincial totals which were obtained by manual count. A report on the census issued in 1986 contained tables but no text, and tabulations were limited to national and provincial populations by sex and age, by sex and educational attainment, by family size and by district. The Government is considering preparation of a report including data from the 1985 census, a 1986 fertility and mortality survey and a multi-round vital statistics survey recently carried out. In the meantime, any analysis of the 1985 census is tentative in view of the preliminary nature of the published tabulations.

2. District boundaries are not shown for Vientiane Municipality and the population is distributed randomly within the total area. Two new districts have been created in Suvannakhet province since the 1985 census and the 1985 populations are distributed randomly over the areas of the provinces as they existed in 1985. The two southernmost districts in Oudomsay province were part of Sayaburi province in 1985. [Map 2](#) shows the provincial boundaries as of 1989.

References

- Das Gupta, Ajit, Samruay Chotechanapibal, Thip Chalothorn and Wiwit Siripak (1963). "Population perspective of Thailand." (Mimeographed). Reprinted in *Perspective on Thai Population*. Research Report No. 11. (Bangkok, Institute of Population Studies, Chulalongkorn University, 1974).
- Lao PDR (1986). *Population of Lao PDR (01-03.1985)*, Vientiane.
- _____ (1989). "Report on the economic and social situation, development strategy, and assistance needs of Lao PDR". Prepared for the Round Table Meeting, Geneva, April 1989.
- _____ (1990). "Country presentation by the Government of the Lao People's Democratic Republic". Prepared for the Second United Nations Conference on the Least Developed Countries, Paris, 3-14 September 1990, United Nations.
- Lao State Planning Committee (1986). "10 years of socio-economic development in the Lao People's Democratic Republic", Vientiane.
- _____ (1989). Basic data about the social and economic development of Lao People's Democratic Republic, Vientiane.
- _____ n.d. (a). Lao People's Democratic Republic Multiround Vital Statistics Survey: Preliminary results, July 1987-December 1988.
- _____ n.d. (b). Lao People's Democratic Republic Multiround Vital Statistics Survey: Population Size, Distribution and Growth. (Mimeograph report).
- _____ n.d. (c). Untitled working paper on age-sex distribution, 1985 to 2000, (unpublished).
- Robinson, Warren C. (1989). "Population trends and policies in Laos (Lao People's Democratic Republic) and Cambodia (Democratic Kampuchea)". Paper presented at the IUSSP International Population Conference, New Delhi, 20-27 September 1989.
- Stuart-Fox, Martin (1986). *Laos: politics, economics and society*, (London, Frances Pinter).
- United Nations (1989). Trends in Population Policy. Population Studies No. 114, (New York, United Nations).
- _____ (1991). *World Population Prospects 1990*. Population Studies No. 120, (New York, United Nations).
- United Nations Children's Fund (UNICEF), (1987). "An analysis of the situation of children and women in the Lao People's Democratic Republic", Vientiane, United Nations Children's Fund.
- United Nations Development Programme (UNDP), (1989). *Development Co-operation: Lao People's Democratic Republic, 1988 Report*, July.
- World Bank (1978). *World Development Report 1978*. (Washington, D.C., World Bank), August.
- Zachariah, K.C. and M.T. Vu (1988). *World population projections, 1987-88* edition. From the data files of the World Bank, (Washington, D.C., World Bank).