

## Census Results in Brief

	1995	2005		1995	2005
<b>Population Size, thousands</b>			<b>Education, Aged 6+, %</b>		
Total	<b>4 575</b>	<b>5 621</b>	Never been to school	38	23
Females	2 314	2 821	Currently at school	25	28
Males	2 261	2 800	Left school (incomplete)	20	20
			Left school (complete)	17	27
<b>Urban/Rural Population, %</b>			<b>Children Aged 6-16 Attending School, %</b>		
Urban areas	17	27.1	Girls	56	68
Rural areas	83	72.8	Boys	66	75
<b>Sex Ratio</b>			<b>Population Aged 10+, %</b>		
Males per 100 Females	97.7	99.3	<i>In Labour Force</i>	<b>70</b>	<b>66.6</b>
<b>Population Density</b>			Paid Employee and Employer	10	12
Persons per sq.km	19.3	23.7	Own Account Worker	55	42
<b>Age Composition, %</b>			Unpaid Family Worker	33	46
0-14 years	44	39	Unemployed	2	1
15-64 years	52	57	<i>Not in Labour Force</i>	<b>30</b>	<b>32.4</b>
65+ years	4	4	Students	69	69.8
<b>Marital Status</b>			Household duties	13	13.6
Never married	59	57	Retired/Sick/Too Old/Other	18	16.6
Married	36	38	<b>Households (%) Using for Cooking</b>		
Divorced/separated	2	1	Electrified Dwelling Unit	<b>25</b>	<b>57</b>
Widowed	3	3	Safe Water	15	35
<b>Citizenship, %</b>			Tenure Status Owner	97	96
Lao citizens	99.5	99.6	Toilet Facilities	29	49
Foreign citizens	0.5	0.2	<b>Households (%) Using for Cooking</b>		
<b>Religion, %</b>			Wood	93	79
Buddhist	65	67	Charcoal	4	15
Christian	1	2	Electricity	2	1
Other	33	31	<b>Fertility</b>		
<b>Households</b>			Crude Birth Rate, per thousand	41.3	34.7
In Collective, %	1.5	2	Average Number of Children per Women (TFR)	5.6	4.5
In Private, %	98.5	98	<b>Mortality, per thousand</b>		
Average household size	6.0	5.8	Crude Death Rate (CDR)	15.1	9.8
<b>Head of Households, %</b>			Infant Mortality Rate (IMR)	104	70
Females	11	10	Child Mortality Rate(CMR)	170	98
Males	89	89	<b>Life Expectancy at Birth, years</b>		
<b>Literacy, Aged 15+, %</b>			Females	52	63
Literate	60	73	Males	50	59
Non-literate	40	27			

# Table of Contents

Table of Contents .....	1
Chapter 1: Population Size and Composition .....	4
1.1. Population Size and Growth .....	4
1.2. Intercensal Population Growth during 1995- 2005.....	4
1.3. Age and Sex Composition .....	5
1.4. Sex Ratio .....	5
1.5. Dependency Ratio .....	6
1.6. Marital Status .....	7
1.7. Citizenship .....	8
1.8. Religion.....	8
1.9. Ethnic Groups .....	8
Chapter 2: Population Distribution and Migration.....	17
2.1. Population Size and Its Distribution by Province .....	18
2.1.1 Urban/Rural Population .....	19
2.1.2 Population Density .....	19
2.2. Internal and External Migration.....	20
2.3. Life-time Internal Migration .....	20
2.4. Intercensal Internal Migration.....	21
2.5. Intercensal External Migration .....	22
2.6. Internal Migration during 12 Months Prior to the Census.....	22
2.7. External Migration during the 12 Months Prior to the Census.....	24
Chapter 3: Household Characteristics .....	36
3.1 Number of Households and Household Size .....	36
3.2. Household Headship .....	37
3.3. Collective Households .....	37
Chapter 4: Education and Literacy .....	49
4.1 Population by School Attendance .....	50
4.2. School Enrolment.....	52
4.3. Highest Education Completed .....	53
4.4. Literacy Rates .....	55
Chapter 5: Economic Activity and Labor Force .....	75
5.1. The Labor Force in 2005.....	75
5.2. Provincial comparisons .....	79
5.3. Employment and Level of Education .....	79
5.4. Agriculture and Non- Agriculture Occupation .....	79
Chapter 6: Fertility .....	96
6.1. Number of women at reproductive ages .....	96
6.2. Number of Children Ever Born and Living .....	97
6.3. Number of Children and Education .....	99
6.4. Age at First Live Birth .....	99
6.5. Adolescent fertility trends.....	99
6.6. Estimated Number of Children .....	99
6.7. Fertility.....	100
6.8. Fertility at Provincial Level .....	101
Chapter 7: Mortality .....	108
7.1. Estimated mortality .....	108
7.2. Infant Mortality Rate (IMR) and Under 5 Mortality Rate (U5MR).....	109
7.3. Life expectancies .....	110

7.4. Maternal Mortality .....	111
7.5. Summary of mortality estimates .....	112
<b>Chapter 8: Housing Characteristics .....</b>	<b>116</b>
8.1. Housing .....	116
8.2 House construction.....	116
8.3 Use of Electricity .....	118
8.4 Water for Drinking and Cooking .....	119
8.5 Main Source of Energy for Cooking.....	121
8.6 Type of Toilet .....	122
<b>Chapter 9: Population Projections.....</b>	<b>140</b>
9.1. Population Projection in the 1995 Census .....	140
9.2. Annual Estimated Populations 1995 – 2005 .....	140
9.3. Population Projections 2005-2020.....	141

## Appendix 1: Census Questionnaire

# Chapter 1: Population Size and Composition

This chapter deals with the size and composition of the Lao PDR population. The results are based on the Lao PDR *de jure* population census that was taken on March 1, 2005. The enumerated population consisted of Lao citizens as well as citizens of other countries who had been granted permanent residence in Lao PDR. In addition Lao citizens residing abroad, e.g., diplomatic staffs, were also enumerated. The enumeration was organized by household.

## 1.1. Population Size and Growth

In March 2005, Lao PDR had a total population of 5.62 million of which 2.82 million were females and 2.80 million were males. The population then is evenly divided between the sexes.

## 1.2. Intercensal Population Growth during 1995- 2005

Since the last census taken in March 1995 the population has grown by 1 047 000 persons or by 2.1 percent per year. This is slightly more than the corresponding 991 000 during the previous intercensal period (1985-95). The intercensal period 1995-2005 has witnessed negative net-migration, i.e., more persons have emigrated than immigrated. Persons who had been absent from their usual place of residence for more than six months were not counted in the census.

### Natural Population Increase 1995-2005

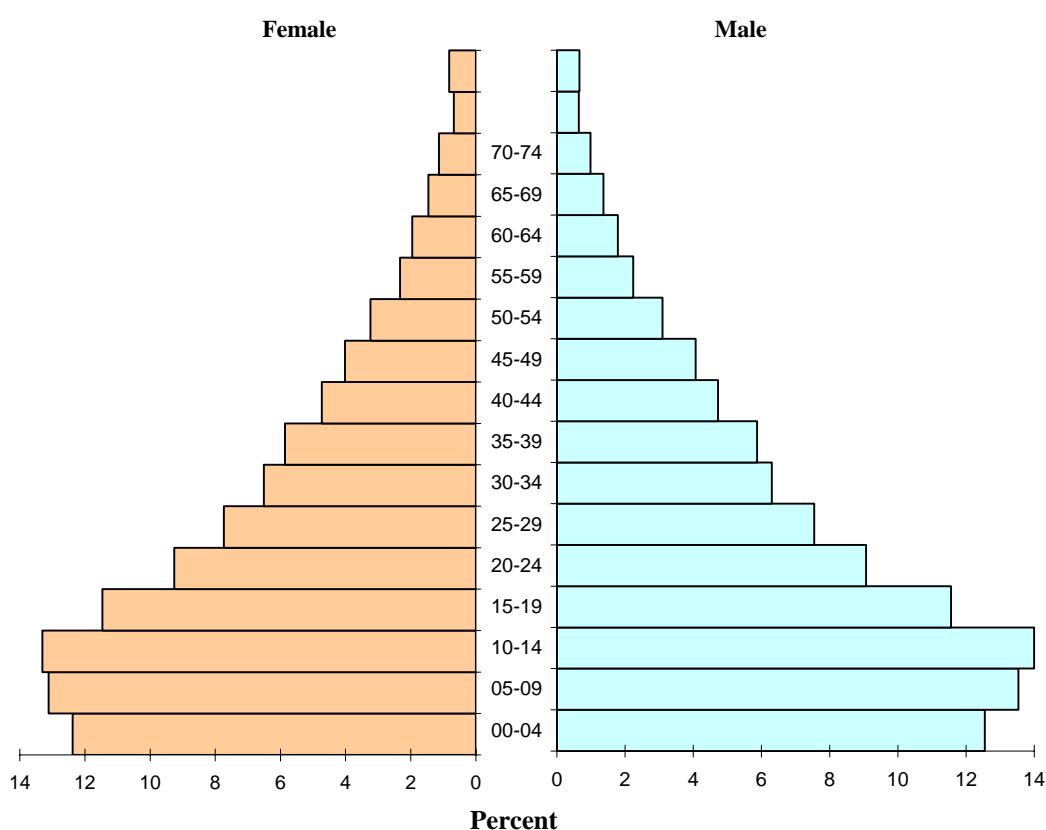
Census Year	Census Population	Intercensal Increase		Estimated Number of Births, Deaths and Natural Increase during Intercensal Period			Estimated Net migration '000	Natural Annual Growth Rate, %
		Absolute Number '000	Annual Growth Rate, %	Births '000	Deaths '000	Natural Increase '000		
1985	3 584 000							
1995	4 575 000	991	2.5					
2005	5 622 000	1 047	2.1	1 775	590	1 185	-138	2.5

Intercensal population increase is the difference between two neighboring censuses. In the absence of significant migration in and out of the country, intercensal population increase becomes the same as the natural increase, the difference between births and deaths during the period. Analysis of the population growth rate is given in chapter 9 which deals with population projections. The enumerated population in 2005 is in good agreement with the forecasts made in connection with analysis of the 1995 Lao population census.

### 1.3. Age and Sex Composition

The age and sex-distributions of the population are shown in table 1.1. The age-distribution mirrors past variability in fertility, mortality and migration. The age and sex-distribution is often illustrated by means of a population pyramid. The age-pyramid of Lao PDR continues to be broadly based; a characteristic of a young population. About 50 percent of the population is currently younger than 20 years. Compared to 1995 census, the proportion aged less than 15 years has declined (from 44 to 39 percent). At the same time the population at working ages, both male and females, has increased by about 4 percent.

**Lao Population Pyramid, 2005**



**Age and-Sex Distributions in the 1995 and 2005 Population Censuses**

Age group	1995 Census			2005 Census		
	Females	Males	Total	Females	Males	Total
0-14	43	45	44	39	40	39
15-64	53	51	53	57	56	57
65+	4	4	4	4	4	4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### 1.4. Sex Ratio

*Definition: The sex ratio is the number of males per 100 females.* Hence, a ratio below 100 indicates that there are more females than males. In 2005 the sex ratio was 99.3 as

## 1.7. Citizenship

The distribution of the population by country of citizenship is given in table 1.4. The majority, 99.6 percent, was Lao citizens. Vietnamese were 0.2 percent. Other citizens amounted to less than 0.1 percent of the total population.

Because the Census only enumerated Lao citizens and foreigners with permanent residence permit, it did not enumerate all foreigners staying in the country, even if they had stayed for more than six months. The number of foreigners was actually less than in 1995 (table 1.4), possibly resulting from some of them having received Lao citizenship after that time.

## 1.8. Religion

The leading religion was Buddhism which presented 67 percent. About 85 000 or 1.5 percent declared themselves as Christians. Muslim and Bahai represented less than 1 percent. Animism was not regarded as a religion and was included in “Other” which accounted for about 30.9 percent of the population (see table 1.5).

## 1.9. Ethnic Groups

In the Census, Lao citizens were asked about their ethnicity. The Census identified 49 different ethnic groups. The distribution of population with respect to ethnicity is given in table 1.6.

Table 1.6 shows that almost 55 percent were Lao, 11 percent Khmou and 8 percent Hmong. In most provinces a few ethnic groups make most of the population – Lao in Vientiane Capital, Vientiane Province, Xayaboury, Khammuane, Savannakhet, Saravane and Champasack, Akha, Khmou and Singsily in Phongsaly, Akha and Khmou in Luangnamtha, Khmou in Oudomxay, Khmou, Lue, Lao, Hmong and Lamed in Bokeo, Khmou, Lao and Hmong in Luangprabang, Tai, Lao and Hmong in Huaphanh, Lao and Hmong in Xiengkhuang, Tai and Lao in Borikhamxay, Katu, Triang and Harak in Sekong, Lao, Oy and Brao in Attapeu and Hmong, Lao and Khmou in Xaysomboon SR.

### Reference Tables

Table 1.1	Population, Distribution by Sex and Age Group.
Table 1.2	Population, Percent Distribution by Marital Status and Province.
Table 1.3	Total Population, Percent Distribution by Marital Status and Age Group.
Table 1.3.1	Female Population, Percent Distribution by Marital Status and Age Group.
Table 1.3.2	Male Population, Percent Distribution by Marital Status and Age Group.
Table 1.4	Population, Distribution by Sex and Citizenship.
Table 1.5	Population, Distribution by Sex and Religion.
Table 1.6	Population, Distribution by Sex and Ethnic Group.
Table 1.7	Dependent Ratios by Province.

## Chapter 2: Population Distribution and Migration

People were enumerated in the geographical place in which they were present on the day of the census given that this place was their usual residence (usual defined as the person having lived there at least during the last six months). If that condition was not fulfilled the person was enumerated at the village maintaining his/her family book. For all persons enumerated it is possible to identify residence in village, district and province and whether the village is located in urban and rural areas.

The five criteria's for urban villages:

- ❖ *The village must lie in the municipal vicinity where the district or provincial authority is located, there are more than 600 residents or more than 100 households*
- ❖ *There is a road for motor vehicles to get access to the village*
- ❖ *The majority of households in the village are electrified*
- ❖ *There is a tap water supply in service to the majority of households*
- ❖ *There is a market in the village*

Rural areas were divided into two categories, those with access to road and those without access to road.

Four questions were the basis for migration information:

- ❖ *Where was (name) born (by district, province and foreign country codes)*
- ❖ *Where was (name) living at last census in March 1995*
- ❖ *How many persons (enumerated) had moved in to the household during the last twelve months prior to the census*
- ❖ *How many persons have moved out from the household during the last twelve months prior to the census*

The Lao Census 2005 thus collected three types of internal migration information.

- ❖ *Migration since birth with district as the lowest regional level (movements within districts are not registered),*
- ❖ *Migration since last census March 1995 also with district as lowest regional level, and*
- ❖ *Migration the last twelve months prior to the census*

The first two pieces of information were identical with those of the 1995 census. Migration the last twelve months before the census was not asked in the 1995 census.

Population distribution is of particular important for planning purposes, especially when data is disaggregated by geographic subdivision such as provinces and districts.

## Reference Tables

Table 2.1	Population, Distribution by Sex and Province.
Table 2.2	Population, Distribution by Urban/Rural Areas and Province.
Table 2.3	Population, Area and Population Density by Province.
Table 2.4	Population, Percent Distribution by Place of Birth and Enumeration by Province.
Table 2.5	Population Aged 10 Years and Above, Percent Distribution by Place of Enumeration in 1995 and 2005 by Province.
Table 2.5.1	Population Aged 10 Years and Above, Percent Distribution by Place of Enumeration in 1995 and 2005 by Province and Sex.
Table 2.6	Intercensal Migration Between Provinces.
Table 2.7	Number of People Moving Between Provinces since 1995 Census.

## Chapter 3: Household Characteristics

This chapter discusses household characteristics recorded in the 2005 Lao Census. Distinction was made between private and collective households.

*A private household* can be single person or multi-person households. (A) a single person household comprises of a dwelling unit, arranging for food and other life necessities on his/her own without joining other persons and possessing his/her own civil registration book. (B) a multi-person household comprises of a dwelling unit, and who together arrange for food and other life necessities and share a common registration book.

*A collective household* consists of accommodation units of a government, organization, enterprise, school, temple, hospital, etc. To be enumerated in a collective household the person must be registered under a common registration book for the collective household.

A household is not the same as a family. The difference is that a household may consist of one person or more persons not necessarily related by blood. A family must have at least two related members. The concept of family is not used in the census. In practice, however, a household is usually composed of a single family, or contains more than one family.

### 3.1 Number of Households and Household Size

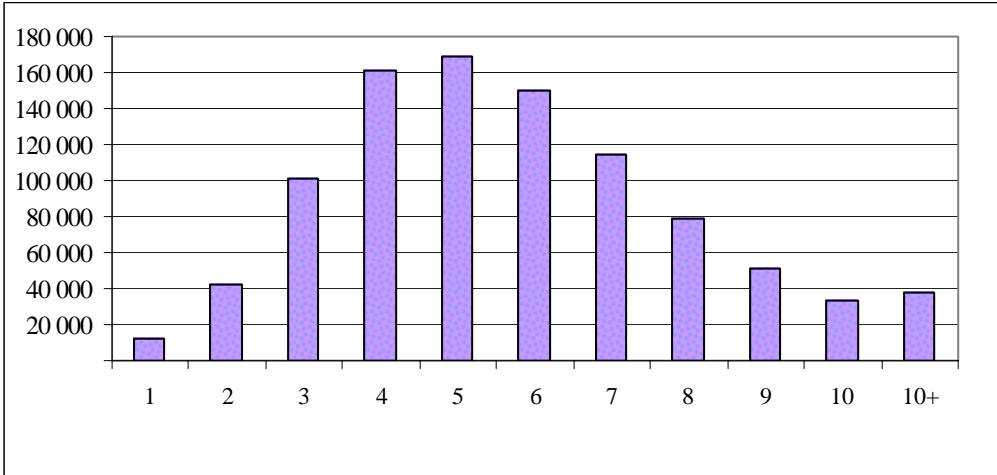
Tables 3.1 and 3.2 show the total household population, in private households, numbers of households, and average household size by province and region. There were almost 952 386 private households in the country with a total population of almost 5.6 million persons. The average household size was 5.9 persons, slightly lower than in the 1995 census. The remainder of the population about 123 000 persons were living in collective households.

The distribution of household size by province and urban/rural presented in table 3.1 and 3.2. The provinces Sekong, Huaphanh and Xiengkhuang had the highest average household size about 6.5 members while Xayaboury, Vientiane Capital and Khammuane had the lowest average size about 5.5 members.

The household size is generally lower in urban areas as compared to rural areas and the size is also somewhat lower in rural areas with access to road than in areas without access to road.

Table 3.4 also shows the distribution of private households by size of household. Just over 1 percent of the households are single-person households, while 4 percent have more than 10 members, with 3 percent in urban, 4 in rural with road and 5.5 percent in rural without access to road.

**Figure 3.1. Private Households by Household Size**



**Reference Tables**

- Table 3.1 Population in Households (Private and Collective), Average Household Size, Distribution by Urban/Rural Areas and Province.
- Table 3.2 Population in Private Households, Average Household Size, Distribution by Urban/Rural Areas and Province.
- Table 3.3 Population in Private Households, Distribution by Sex and Age Group.
- Table 3.4 Population in Private Households, Distribution by Sex of Head of Household, Household Size and Urban/Rural Areas.
- Table 3.5 Population in Collective Households, Distribution by Sex and Age Group.
- Table 3.6 Population in Collective Households, Distribution by Sex and Province.
- Table 3.7 Population in Collective Households, Percent Distribution by Size of Household and Province.

## Chapter 4: Education and Literacy

Educational characteristics of the population in the 2005 Lao Census were restricted to persons aged 6 years and over. The information on education and literacy was obtained by three standard questions on:

- ❖ *School attendance,*
- ❖ *Educational attainment, and*
- ❖ *Literacy*

School attendance is defined as attendance at any regular accredited educational institution or program, public or private, for organized learning at any level of education. It was specified as:

### ***Has (name) ever attended school?***

- ❖ *Never been to school*
- ❖ *Currently at school*
- ❖ *Left school*
- ❖ *(No answer)*

Persons who are currently at school or have left school should specify their educational attainment, i.e. their highest grade completed in the educational system divided by basic education and a higher (vocational) education:

### *Basic education:*

- ❖ *None (no level completed)*
- ❖ *Primary school (grades 1-6)*
- ❖ *Lower secondary school (grades 1-3)*
- ❖ *Upper secondary school (grades 4-6)*

### *Higher (vocational) education:*

- ❖ *First level*
- ❖ *Middle level*
- ❖ *High level/University*
- ❖ *Post graduate level*
- ❖ *Other*

Information on level of completed education meant the completion of a full academic year/course. For example, a child currently attending grade one would not have completed grade one yet and would therefore be in the category of “no level completed”. Also, all persons in the category “never been to school” in the question on school attendance were categorized as “No level completed”.

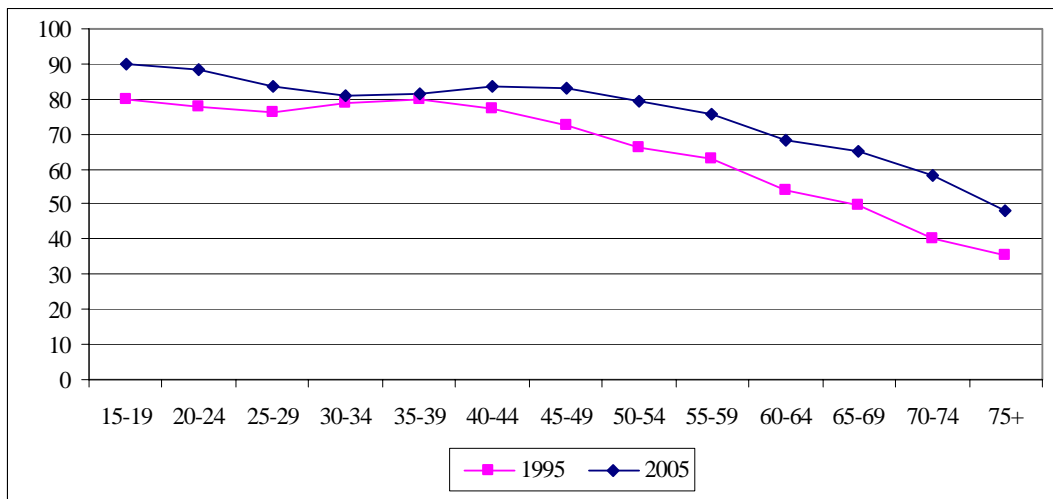
On literacy there was one question only also to be answered by all persons aged 6 years and over:

### ***Can (name) read and write Lao?***

#### *Response alternatives:*

- ❖ *Yes*
- ❖ *No*

In order to obtain correct information on literacy it is necessary to carry out reading as well as writing tests. Such an approach is not viable with the limited time given to the enumeration.



### Reference Tables

- Table 4.1 School Attendance for Population Aged 6 Years and above by Sex and Urban/Rural Areas.
- Table 4.2 School Attendance for Population Aged 6 Years and above by Sex and Age Group.
- Table 4.3 School Attendance for Population Aged 6 Years and above by Sex and Ethnic Group.
- Table 4.4 School Enrolment Rate by Sex and Age (6-25 Years).
- Table 4.5 Highest Level of Education Completed by Province for Population Aged 6 Years and Above.
- Table 4.6 Highest Level of Education Completed by Sex and Age Group.
- Table 4.7 Literacy Rates for the Population Aged 15 Years and Above By Sex and Province and by Urban/Rural Areas.
- Table 4.8 Literacy Rates for the Population Aged 15 Years and Above By Sex and Age Group.
- Table 4.9 Literacy Rates for the Population Aged 15 Years and Above by Sex and Ethnic Group.

## Chapter 5: Economic Activity and Labor Force

The 2005 census measures, like the 1995 census, the activity status of the Lao population by the approach of “the usually active population”, which means the main activity during the past 12 months. This approach was chosen instead of the “currently active population” usually referred to the status for the past week, because it represents a more stable measure of the economically active population and its structural distribution for economic analysis, projections and development planning. The activity status has been measured for the population 10 years and above. It thus includes children who have still not finished school because many children normally participate in agriculture or other types of economic activity.

The first question asked was:

*What was your main activity the last twelve months?*

*Response alternatives:*

- ❖ *Paid Employee/Government (01)*
- ❖ *Paid Employee/Parastatal (02)*
- ❖ *Paid Employee/Private (03)*
- ❖ *Paid Employee/State Enterprise (04)*
- ❖ *Employer (05)*
- ❖ *Own Account Worker (06)*
- ❖ *Unpaid Family Worker (07)*
- ❖ *Unemployed (08)*
- ❖ *Student (09)*
- ❖ *Household Duties (10)*
- ❖ *Retired/Sick/Too Old (11)*
- ❖ *Other (12)*

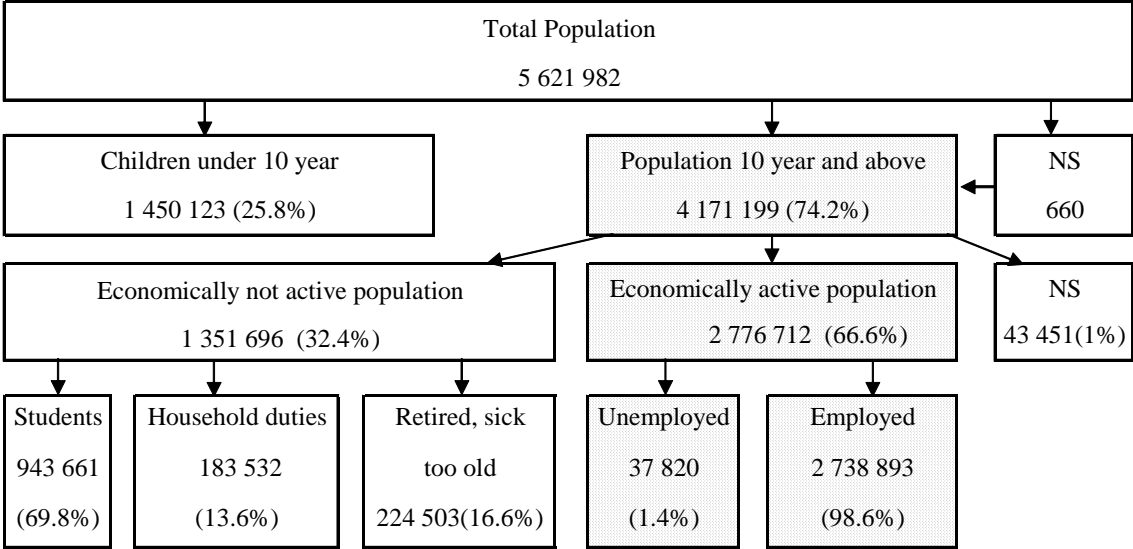
A person with response alternatives 01-08 is considered to be economically active, alternative 08 with the assumption that the person actually is looking for a job. Students (09) and persons whose main activity is household duties (10), retired/sickness/too old (11) are together with the other response alternatives considered to fall in the category “economically not active population”.

The usually active population, or the labor force, comprises all persons who are 10 years and above and who are either employed or unemployed specified as 01 to 08 in the above list.

### 5.1. The Labor Force in 2005

What should be noted first is that the population 10 years and above has increased with just over 1 million people since 1995, while children under 10 are only slightly more (23 000). For the population 10 years and above it is the economically not active population that has become 400 000 more (44 percent increase), in particular more students and people with household duties as main activity. The economically active population 560 000 more (up with 25 percent).

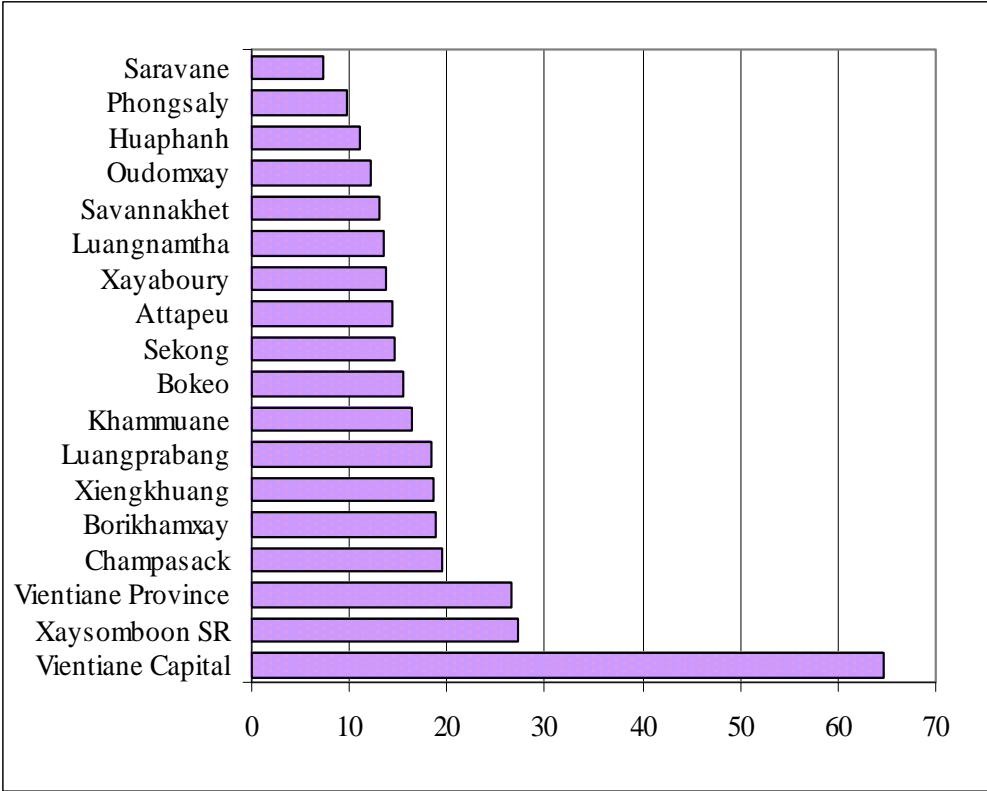
**Figure 5.1. Distribution of the Population by Main Activity**



As the figure above illustrates, the active population is divided into two categories, those who were employed and those who were unemployed but looking for work during the past 12 months. Among those employed the majority is (still) self-employed, own account workers mainly in agriculture and unpaid family workers. The employed can be divided into seven categories with the numbers according to the following table.

economically active persons are occupied in non-farm activities. This is further illustrated in figure 5.4. Within agriculture only a small fraction has livestock farming as the main activity, while mixed farming (crop and livestock production) is more frequent in Xiengkhuang, Xaysomboon SR, Xayaboury and Luangprabang than in other provinces.

**Figure 5.4. Non-Farm Activities by Province, percent**



**Reference Tables**

- Table 5.1 Population Aged 10 Years and Above, Percent Distribution by Main Activity, Urban/Rural Areas, Sex and Age Group.
- Table 5.2.1 Population Aged 10 Years and Above, Percent Distribution by Main Activity, Sex and Highest Level of Basic Education.
- Table 5.2.2 Population Aged 10 Years and Above, Percent Distribution by Main Activity, Sex, and Highest Level of Vocational Education.
- Table 5.3 Population Aged 10 Years and Above, Percent Distribution by Main, Activity, Province and Sex.
- Table 5.4 Population Aged 10 Years and Above, Percent Distribution by Main Activity Ethnic Group and Sex.
- Table 5.5 Population, Age 10 Years and Above, Activity and Unemployment Rates by Province.
- Table 5.6 Economically Not Active Population Aged 10 Years and Above, Percent Distribution by Activity, Sex and Age Group.
- Table 5.7 Percent Distribution of Occupation in Agriculture, Fishery and Non-Farm Activities by Province and Sex.

## Chapter 6: Fertility

Fertility is one of three basic demographic main features provided by the Census, the others being mortality and migration. Fertility and related statistics are based on questions asked to women in their reproductive ages, 15 - 49 years of age. While the other census questions were answered by the heads of households, the questions on fertility were supposed to be answered directly by the women.

All the women in the age group 15 – 49 years of age were asked the following question:

***Have you given any live birth?***

- ❖ *Yes*
- ❖ *No*

For those who answered “yes”, there were some more questions asked:

***How many children born alive to you***

- ❖ *Were with you during the census night (by sex of child)?*
- ❖ *Were elsewhere during the census night (by sex of child)?*
- ❖ *Have died?*

These questions thus provide number of children ever born and the specification was made in order to minimize the risk that children away from home or dead would not be accounted for.

The section on fertility was completed by the question:

- ❖ ***How old were you when you had your first live birth?***

### 6.1. Number of women at reproductive ages

Women aged 15 – 49 years of age were asked about number of children ever born and surviving. As fertility has been high in the past the number of women that reaches reproductive ages continues to increase. Figure 6.1 shows the changes between the 1995 and the 2005 censuses. The population projections (presented in chapter 9) demonstrate that the female population 15-49 years will continue to increase in absolute numbers, and as a share of the total female population. The share will go up from current 2005 level of 49.6 percent to 51.4 in 2010 and 52.6 percent in 2020.

## 7.5. Summary of mortality estimates

As mortality rates have declined and continue to decline. Life expectancy (LE) has increased by 10 years during the intercensal period. It is estimated to increase another 7 years up to 2015 both for men and women. During the same period infant mortality rate (IMR) and under 5 mortality rate (U5MR) are expected to decrease about 40 percent.

### Mortality Measurements 1995-2005 (selected years) and Estimations for 2010 and 2020

Mortality Measurements	1995	2000	2005	2010	2015	2020
Female LE	52.0	61.0	63.0	66.7	70.3	74.0
Male LE	50.0	57.0	59.0	62.7	66.3	70.0
Total LE	51.0	59.0	61.0	64.7	68.3	72.0
CDR per 1000	13.6	11.6	9.8	8.0	6.5	5.3
IMR	104.0	82.0	70.0	56.5	44.0	32.4
U5MR	170.0	107.0	97.6	76.4	57.2	40.5

#### Reference Tables

- Table 7.1 Deceased Persons During the Last 12 Months by Sex and Province.  
Table 7.2 Deceased Persons During the Last 12 Months by Sex and Age Group.  
Table 7.3 Estimated of Maternal Death and Female Population Aged 15-49 Years by Age Group.

## Chapter 8: Housing Characteristics

The 2005 census, like the 1995 census, included a large part regarding housing conditions of the population. This part contains housing tenure, electricity, size of living area, access to water, main source of energy for cooking and type of toilet facilities. Results are presented in Tables 8.1 to 8.7. They refer to private households.

### 8.1. Housing

Tenure status refers to the arrangements under which the household occupies its living quarters and the nature of its right to be there (see table 8.1). As an average for the whole country 96 percent of the households own their own houses/dwelling units. Only on urban areas and in particular in Vientiane Capital are there any significant number of other arrangements such as tenant and tied accommodation, in urban areas about 6 percent and in Vientiane Capital about 9 percent. In rural areas owner-occupiers are close to 100 percent. The tenure arrangements are basically the same as in the 1995 census.

#### Occupancy status definitions used

*Response alternatives:*

- ❖ *Owner: An owner is one who owns the house or is in a process of buying it*
- ❖ *Tenant: A tenant rents and occupies the whole dwelling unit and generally pays electricity and water charges to urban authorities*
- ❖ *Lodger: A lodger rents part of a dwelling unit which is normally occupied by the owner*
- ❖ *Tied accommodation: A person living in tied accommodation occupies it by virtue of his or her job. The accommodation belongs to the employer and is made available as part of terms of employment.*
- ❖ *Other: Includes those who stay free in a dwelling unit but constituting a separate household*

### 8.2 House construction

Tables 8.2.1 and 8.2.3 include questions about the construction quality of the house on type of building materials used for roof, wall and floor. Basically four types of houses can be identified referring to the structure of materials:

- ❖ *Concrete/brick houses,*
- ❖ *Wooden houses,*
- ❖ *Concrete/wooden houses and*
- ❖ *Semi-permanent houses with structures of bamboo, plywood and grass.*

The first three types of house are defined as permanence houses and the fourth type is defined as temporary house. About 10 percent of the private households live in semi-permanent houses where floor wall and roof are made of bamboo or grass (grass only on roof). The remaining households live in permanent houses (either of floor, wall or roof not made of bamboo or grass). The situation by province is illustrated in the following figure.

## Reference Tables

Table 8.1	Private Households, Percent Distribution by Tenure Status and Province and by Urban/Rural Areas.
Table 8.2.1	Private Households, Percent Distribution by Type of Roof and Province and by Urban/Rural Areas.
Table 8.2.2	Private Households, Percent Distribution by Type of Wall and Province and by Urban/Rural Areas.
Table 8.2.3	Private Households, Percent Distribution by Type of Floor and Province and by Urban/Rural Areas.
Table 8.3	Private Households, Percent Distribution by Size of Living Area in the Dwelling Unit and Province and by Urban/Rural Areas.
Table 8.4	Private Households, Percent Distribution by Use of Electricity and Province and by Urban/Rural Areas.
Table 8.5	Private Households, Percent Distribution by Source of Water for Drinking and Cooking, Distance to Water and by Urban/Rural Areas.
Table 8.5.1	Private Households, Percent Distribution by Source of Water for Drinking and Cooking, Distance to Water and by province.
Table 8.6	Private Households, Percent Distribution by Main Source of Energy for Cooking by Province and Urban/Rural Areas.
Table 8.7	Private Households, Percent Distribution by Type of Toilet and Province and by Urban/Rural Areas.
Table 8.8	Household Operating Agriculture Land: Total number and Percent and Average Size of Agriculture Land Area, By Province and Urban/Rural Areas.
Table8.9	Household Operating Agriculture Land, Percent Distribution by Size of Land Area. By Province and Urban/Rural Areas.

## Chapter 9: Population Projections

Population projections are made in order to provide future estimates of the population size and structure to planners, policy makers and researchers. Such projections are based on past trends of fertility, mortality and migration as well as on assumptions on how these factors develop in the future. The size and structure of the projected population will depend on these assumptions.

The population projections in this report cover the period of 2006-2020. There are two projections made: the first one is what will happen if the 2005 levels of fertility and mortality prevail for the projection period (2006-2020) which means levels of fertility and mortality are the same as 1995, and the second one is based on a continued decline in fertility and mortality.

### 9.1. Population Projection in the 1995 Census

The population in the 1995 census was projected up to 2020 also in two alternatives. One assumed that the 1995 fertility and mortality levels would prevail, another assumed declines in fertility and mortality. The first projections estimated a population of 5,916 thousand people in 2005 and the second (more realistic) projection a population of 5,763 thousand people in 2005. Neither of the projections took into account of any negative migration abroad, but assumed that migration, as situation at that time indicated, would be negligible. With that clarification the first projections made from the 1995 census look pretty accurate.

### 9.2. Annual Estimated Populations 1995 – 2005

With knowledge about the most recent estimates of fertility and mortality and net-migration annually projected populations during the intercensal period have been calculated and the results are given in the table below. The demographic characteristics providing this estimate are the followings:

- ❖ Total fertility rate (TFR) declined from 5.0 in 1995 (and estimated from the 1995 census) to 4.5 in 2005
- ❖ The gross reproduction rate (GRR), the number of daughters a woman gives birth to, reduced from 2.4 to 2.2
- ❖ The net reproduction rate (NRR), the number of daughters a woman leaves behind while accounting for the possibility of her death before the end of her reproductive period, unchanged at 1.9
- ❖ A negative net-migration of about 15 000 persons per year, evenly divided between men and women
- ❖ Life expectancies at birth increased from 51.4 years for males in 1995 to 59.1 years and for women from 55.0 to 63.0 years
- ❖ Crude birth rate (CBR) per 1000 fell from 36.6 in 1995 to 34.3 in 2005
- ❖ Crude death rate (CDR) per 1000 fell from 13.6 in 1995 to 9.6 in 2005

## Intercensal Estimated Population Characteristics 1995-2005

Characteristics	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Fertility</b>											
Input TFR	5.0	5.0	4.9	4.9	4.8	4.8	4.7	4.7	4.6	4.6	4.5
GRR	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2
NRR	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
<b>Vital Rates</b>											
CBR per 1000	36.6	36.3	35.9	35.6	35.3	35.1	34.9	34.8	34.6	34.5	34.3
CDR per 1000	13.6	13.2	12.9	12.5	12.0	11.6	11.2	10.8	10.4	10.0	9.6
RNI percent	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.5
<b>Mortality</b>											
Female LE	52.0					61.0					63.0
Male LE	50.0					57.0					59.0
Total LE	51.0					59.0					61.0
IMR	104.0					82.2					70.0
U5MR	170.0					106.9					97.6

Under these circumstances the theoretical population would grow from 4 575 million in 1995 to 5 646 in 2005 as the table 9.1 indicates. The estimated population is thus only marginally higher than the enumerated population in 2005 – the difference is only about 20 000 persons.

The intercensal projections also show that the annual number of births and deaths are higher than the enumerated figures. The annual number of births was thus estimated at 167 000 in 1995 and at 193 800, while the enumeration stops at 109 000 in 1995 and 195 000 in 2005. Similar under-enumeration can be spotted for number of deaths.

It should be noted that even though fertility was declining for the intercensal period, nevertheless the yearly number of births is likely to increase due to structural effects. Increasingly large cohorts of women enter reproductive ages and therefore more children are born even though TFR declines. As it can be seen in table 9.1 Women in reproductive ages are taken an increasingly higher share of the population or from 45.6 percent in 1995 to 49.1 percent in 2005.

The table on intercensal estimated population shows that the actual population growth for 2005 is estimated at 2.1 percent, but the natural population growth (real net increase, RNI), that is, crude birth rate minus crude death rate is about 2.5 percent. Furthermore, there seems to be no reduction in the natural growth rate during the intercensal period. The fact that actual growth rate is lower is due to negative net-migration, i.e. people has emigrated in greater numbers than those who has immigrated.

### 9.3. Population Projections 2005-2020

Based on the enumerated population in the 2005 population census projections have been made up to 2020. The main projection is presented in Table 9.2 and the projection shows what would happen assuming a reasonable decline in fertility and mortality. The assumptions behind the projection are as depicted in the following table. In summary the assumptions are:

- ❖ TFR declines from 4.5 in 2005 to 2.1 in 2020
- ❖ Life expectancies for males and females increase from 59 and 63 in 2005 to 70 and 74 years in 2020, respectively.
- ❖ Infant mortality decreases from 70 per 1000 in 2005 to 34.2 per 1000 in 2020
- ❖ Net migration is assumed to increase from -15 000 persons per year to -20 000 persons in 2020
- ❖ The annual number of births would decrease from about 190 000 in 2005 to about 136 000 in 2020
- ❖ The crude birth rate decreases from about 34 per 1000 in 2005 to about 19 per 1000 in 2020

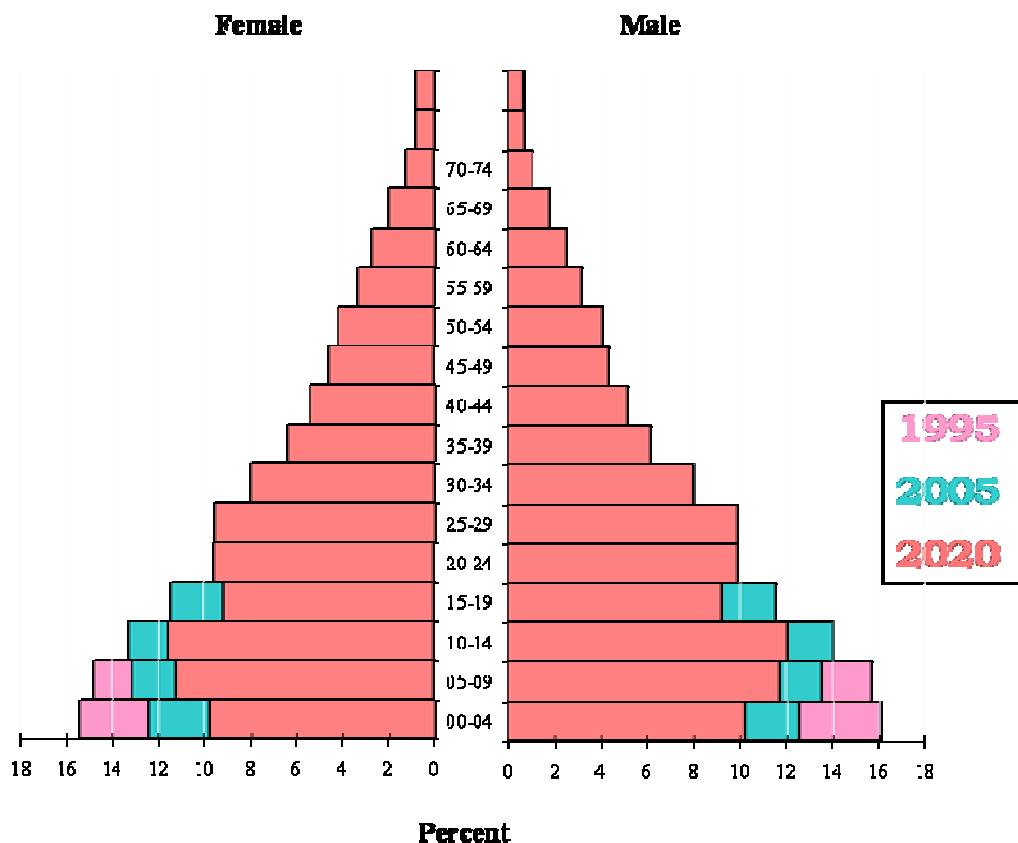
### Population Projection for Lao PDR 2005-2020

Characteristic	2005	2006	2007	2008	2009	2010	2011	2012
<b>Fertility</b>								
Input TFR	4.5	4.3	4.2	4	3.9	3.7	3.5	3.4
GRR	2.2	2.1	2	2	1.9	1.8	1.7	1.7
NRR	1.9	1.9	1.8	1.7	1.7	1.6	1.6	1.5
<b>Mortality</b>								
Female LE	63.0	63.7	64.5	65.2	65.9	66.7	67.4	68.1
Male LE	59.0	59.7	60.5	61.2	61.9	62.7	63.4	64.1
Total LE	61.0	61.7	62.5	63.2	63.9	64.7	65.4	66.1
IMR	70.0	67.2	64.4	61.8	59.2	56.6	54.1	51.5
U5MR	97.6	93.0	88.6	84.4	80.4	76.4	72.4	68.4
<b>Vital Rates</b>								
CBR per 1000	34.7	33.7	32.6	31.6	30.7	29.9	28	28.1
CDR per 1000	9.8	9.4	9.1	8.7	8.4	8.0	7.7	7.4
RNI percent	2.5	2.4	2.4	2.3	2.2	2.2	2.1	2.1
Characteristic	2013	2014	2015	2016	2017	2018	2019	2020
<b>Fertility</b>								
Input TFR	3.2	3.1	2.9	2.7	2.6	2.4	2.3	2.1
GRR	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0
NRR	1.4	1.4	1.3	1.3	1.2	1.1	1.0	1.0
<b>Mortality</b>								
Female LE	68.9	69.6	70.3	71.1	71.8	72.5	73.3	74.0
Male LE	64.9	65.6	66.3	67.1	67.8	68.5	69.3	70.0
Total LE	66.9	67.6	68.3	69.1	69.8	70.5	71.3	72.0
IMR	48.9	46.4	44.0	41.7	39.4	37.1	34.7	32.4
U5MR	64.3	60.7	57.2	53.8	50.5	47.2	43.8	40.5
<b>Vital Rates</b>								
CBR per 1000	27.2	26.2	25.1	24.0	22.8	21.5	20.1	18.7
CDR per 1000	7.0	6.8	6.5	6.2	6.0	5.7	5.5	5.3
RNI percent	2.0	1.9	1.9	1.8	1.7	1.6	1.5	1.4

As the above table demonstrates the natural growth rate of the population will remain at 2.4 percent the next years but drop to 2.2 percent in 2010 and to 1.9 percent in 2015 and to 1.4 percent in 2020. With a continued and somewhat increased negative net immigration the actual growth rate will drop from current 2.5 percent down to 1.1 percent in 2020. The population size in 2020 would with these assumptions reach 7,260 thousand persons. With constant 2005 mortality, fertility and net-migration the population would instead reach 7,990 thousand by 2020, more than 730 thousand more compared to the more realistic projection with falling fertility and mortality.

The age structure of the 2020 projected population is also shown in a population pyramid. The population in working ages will slowly increase as percentage of total population, from 57 percent in 2005 to 59 and 61 percent in 2010 and 2020, respectively.

**Population Pyramid in years 1995, 2005 and 2020**



As noted, the projection for 2020 assumes that in this year TFR will reach the reproductive level of about 2.1. (see table 9.2). In this respect it must be noted that fertility trends have pointed downwards in almost all countries since the 1970s. Especially in recent years it has become apparent that fertility is likely to remain below replacement level in many countries during the next decades. The population aged 65+ in Lao PDR is likely to remain very low during the next decades.

It might not be happening in the Lao PDR because fertility is likely to remain well above the reproductive level. However, because fertility now is falling and possibly quite rapidly, it is important that some thought is given to the future age-distribution of the population. This can be done by means of population projections.

Table 9.3 shows a hypothetical projection based on demographic estimates for 2005. In this projection the population estimate for 2020 is about 7.9 million. The corresponding population estimate in table 9.2 is 7.3 million. Projections show rounded figures and are subject to revision when demographic estimates have been finalized.

## Reference Tables

- |           |                                                                                                                              |
|-----------|------------------------------------------------------------------------------------------------------------------------------|
| Table 9.1 | Estimated Lao PDR Population 1995-2005 by Sex and Age Group.                                                                 |
| Table 9.2 | Population Projection to 2020 by Sex and Age Group.                                                                          |
| Table 9.3 | Population Projection to 2020 with Constant Levels of Fertility, Mortality and Net Immigration in 2005 by Sex and Age Group. |