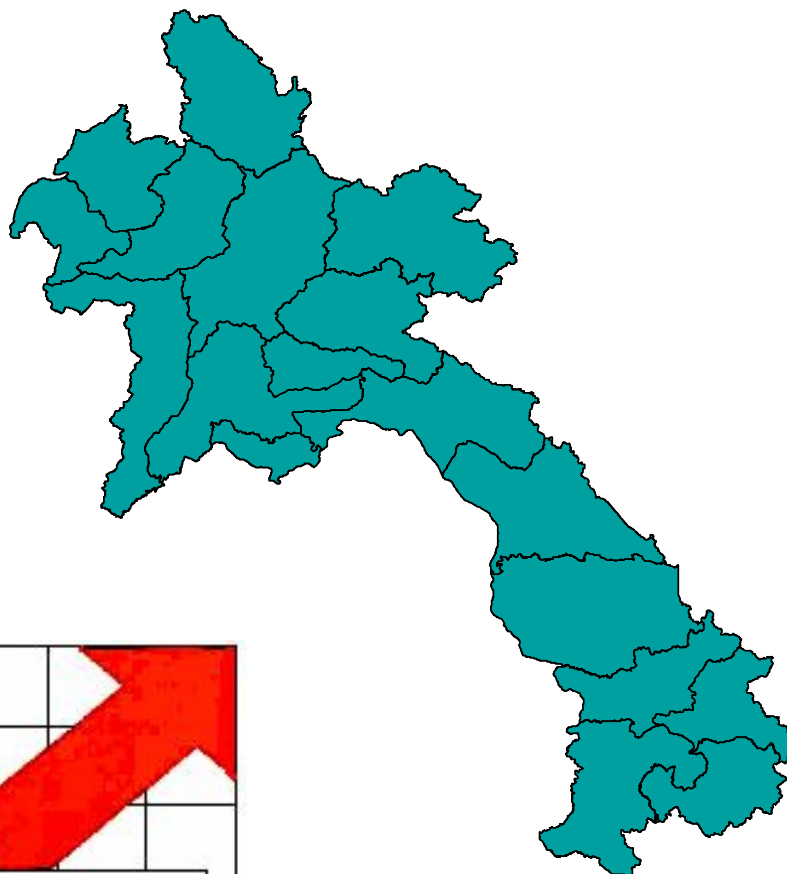


COMMITTEE FOR PLANNING AND COOPERATION  
NATIONAL STATISTICAL CENTRE

**THE HOUSEHOLDS OF LAO PDR**  
Lao Expenditure and Consumption Survey 1997/98  
LECS 2



## **Preface**

The Lao Expenditure and Consumption Survey 1997/98 (LECS 2) is the second survey on expenditure and consumption of Lao PDR. It was carried out from March 1997 to February 1998, five years after the first Lao expenditure and consumption survey in 1992/93.

The results in this report are based on data obtained from sample villages and blown up to the provincial level using weights. The LECS 2's actual sample size was 8 882 households including 57624 persons selected from 450 villages. The LECS 2 is a comprehensive survey which measuring consumption, incomes, own production in agriculture and household related business, construction, access to services, social indicators, food (rice) intake and time use.

We would like to take this opportunity to express our thanks to all persons engaged on different levels in the survey preparations and operations and to the sample villages for its cooperation throughout the time of survey. We also would like to express our gratitude to the Swedish International Development Agency, Sida, which has offered material and financial assistance to the survey. Sida has also offered technical assistance to the survey through its executing agency, Statistics Sweden.

The National Statistical Center welcomes suggestions and comments from users so that we can improve our performances in the future. (Tel: 21 4740, Tel/Fax: 21 6659 and 21 9129).

We hope to receive kind cooperation from all users.

Director ,  
National Statistical Center

**Bounthavy Sisouphanthong**

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## Background

The second Lao Expenditure and Consumption Survey (LECS 2) was undertaken from March 1997 to February 1998. The first LECS was conducted in 1992/93 and in the same period of time. LECS3 is scheduled to take place in 2002/2003. The objectives of the LECS are basically to provide,

- macro estimates for the National Accounts, both private consumption and household investments and income from agriculture and businesses
- the consumption structure (weighing system) for the Consumer Price Index (CPI)
- consumption in kind and barter trade
- demographic estimates
- estimates on labor force
- information on ownership or access to durable goods
- access to services
- nutrition
- poverty, income distribution

(The last two objectives: nutrition and poverty has specific reports)

LECS is a multi- purpose survey and can be designed in various ways with emphasis on particular issues. In 1992/93 the LECS was combined with a large module of social indicators, Lao Social Indicator Survey (LSIS). The 1997/98 version focuses on the economic activities of the households and a special module on time use was included.

The LECS 2 sample was made up of 8 882 households from 450 villages, 20 households from each, enumerated over 12 months starting 1<sup>st</sup> of March 1997 and ending 28<sup>th</sup> of February 1998. The sample was selected using the 1995 Population Census as a sampling frame. A two-stage sampling scheme was used. At the first stage a sample of enumeration areas (EAs) was selected by PPs sampling. A register of EAs which are villages or part of villages established for the Census was used as a sampling frame and stratified in the following way. Firstly the EAs were divided by province, and secondly into urban EAs, rural EAs with access to road and rural EAs without access to road. In all, the EA population was divided into 18 (provinces) x 3 (urban/rural classes) = 54 sampling strata. 25 EAs was selected in each province. The sample size was 102 EAs in urban stratum, 140 in rural stratum with access to road and 208 in rural stratum without access to road.

The second stage contained a systematic sample of households in each stratum. This was based on a fresh list of households in the EAs at the time of the survey. The same sample size was used in all EAs, namely 20 households unless the number of households was less than 20.

As LECS is a household survey it includes all members of the household. This was not possible to follow for the time use module where one person in the household was sampled to provide data of time use. The sampling scheme for this part also contained a genuine sample of persons.

Data on expenditure and income were collected for a whole month based on daily notation of all transaction divided into consumption, agriculture production and household businesses. At the

end of the month the households were asked about purchases of durable goods, e.g. furniture, TV, cars, motorcycles, etc., during the preceding 12 months.

In the middle of the month one day and one night were selected to book-keep data on time use. One person in the household was participating in this exercise randomly selected among all household members older than 10 years.

Data were entered into a database continuously. Data screening and editing were also done on a continuous basis as well as after all the data were entered. Table 0 shows the final survey status, i.e. the number of villages and households enumerated during March 1997 – February 1998, and the number of persons encountered in these households.

**Table 0: Survey data**

Month	Villages	Households	Persons
1997			
March	36	706	4614
April	37	724	4687
May	38	736	4682
June	36	706	4573
July	37	738	4766
August	36	717	4547
September	37	739	4859
October	37	739	4748
November	36	717	4823
December	37	738	4866
1998			
January	39	758	4955
February	44	864	5504
<b>Total</b>	<b>450</b>	<b>8882</b>	<b>57624</b>

As can be seen, there are on average 6.5 persons in the Lao household sample. The corresponding population estimate gives approximately the same result.

# 1. Consumption and Rice intake

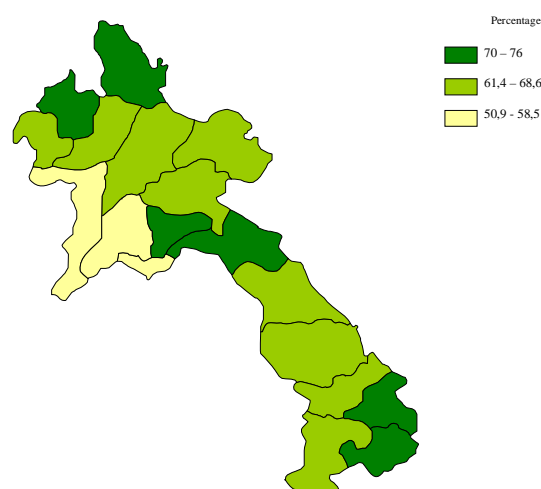
## 1.1 Consumption

The composition of the household consumption has since 1992/93 changed in two directions, in particular. The share of food is markedly lower, both in urban and rural areas. Spending on rice is also down, in particular in rural areas. The share of households with high proportion spent on food has decreased rapidly. The second main change is the increased spending on transport, both in urban and rural areas. Minor changes are increased housing consumption in urban areas, slightly more spending on household utensils and operation. Expenditure on clothing is unexpectedly down.

There are large variation between provinces, with Sekong, Attapeu, Phongsaly, Borikhamxay and Luangnamtha having more than 70 % spent on food, while Vientiane M. and Xayabury have the lowest shares.

Provinces with the highest food share also have the highest percent of consumption emanating from own production.

**Food consumption 1997/98**



**Table 1: Household consumption, by provinces and regions in 1997/98 .**

	Total monthly consumption KIP/cu	Food (%)	% of which :	Rice	Clothings and footwear	Housing	HHs utensils operation	Transport	Recreation	Personal care	Alcohol and tobacco	Medical care	Other	Percent own production
<b>Lao PDR</b>	<b>38090</b>	<b>60.9</b>	<b>25.1</b>	<b>2.8</b>	<b>7.1</b>	<b>5.1</b>	<b>10.6</b>	<b>6.1</b>	<b>0.8</b>	<b>2.9</b>	<b>2.2</b>	<b>1.6</b>	<b>36.2</b>	
<i>Urban</i>	59260	50.6	14.4	3.1	10.3	5.9	13.4	7.6	1.1	3.0	1.9	3.1	10.0	
<i>Rural</i>	33670	64.6	29.0	2.7	5.9	4.8	9.5	5.5	0.7	2.8	2.4	1.0	45.5	
<b>North</b>	<b>30730</b>	<b>62.0</b>	<b>26.9</b>	<b>3.1</b>	<b>6.8</b>	<b>4.8</b>	<b>9.5</b>	<b>7.0</b>	<b>0.7</b>	<b>2.7</b>	<b>2.5</b>	<b>0.8</b>	<b>45.3</b>	
1 Phongsaly	24020	72.9	21.4	3.3	4.1	3.4	3.5	5.5	0.4	3.8	2.8	0.4	56.6	
2 Luangnamtha	26890	71.6	20.9	2.2	3.6	5.0	5.0	3.9	0.9	4.4	2.5	0.9	56.2	
3 Oudomxay	23500	65.5	31.7	3.3	9.2	4.3	4.8	7.0	0.4	2.2	2.1	1.2	50.5	
4 Bokeo	32360	66.3	26.3	2.5	11.5	3.1	4.4	5.2	0.7	3.1	2.7	0.6	49.5	
5 Luangprabang	30290	62.0	28.3	3.7	5.6	5.1	7.3	6.9	1.0	3.8	3.8	0.9	38.7	
6 Huaphanh	22370	68.6	31.3	4.4	10.6	4.4	2.7	5.1	1.0	1.2	1.5	0.6	56.4	
7 Xayaboury	47320	52.3	25.1	2.4	5.7	5.5	19.3	9.3	0.6	2.0	2.0	0.9	38.2	
<b>Center</b>	<b>45210</b>	<b>58.5</b>	<b>22.9</b>	<b>2.7</b>	<b>7.7</b>	<b>5.7</b>	<b>11.9</b>	<b>5.7</b>	<b>0.8</b>	<b>2.8</b>	<b>2.0</b>	<b>2.1</b>	<b>30.3</b>	
8 Vientiane M.	68430	50.9	14.9	3.1	8.6	5.5	14.9	7.1	1.0	3.2	1.8	3.9	13.2	
9 Xiengkhuang	35530	65.6	16.3	3.8	9.0	3.5	9.5	3.6	0.6	2.3	1.1	1.0	48.7	
10 Vientiane P.	45730	57.0	24.9	2.4	6.5	5.1	14.3	6.7	0.7	3.2	2.5	1.5	33.6	
11 Borikhamxay	40780	72.0	33.2	2.7	6.1	3.3	7.3	3.1	0.5	2.9	1.6	0.7	48.1	
12 Khammuane	37470	65.6	29.4	2.6	7.2	4.4	10.5	3.2	0.6	2.9	2.4	0.6	35.7	
13 Savannakhet	35010	61.4	30.3	2.1	7.5	8.2	8.7	5.5	1.0	2.3	2.2	1.0	40.9	
18 Xaysomboon	28090	70.0	25.0	2.5	4.6	2.5	6.1	8.0	0.9	1.9	2.3	1.3	51.0	
<b>South</b>	<b>32310</b>	<b>67.3</b>	<b>29.9</b>	<b>2.5</b>	<b>5.2</b>	<b>3.8</b>	<b>7.7</b>	<b>6.0</b>	<b>0.7</b>	<b>3.2</b>	<b>2.6</b>	<b>1.1</b>	<b>42.3</b>	
14 Saravane	31760	68.6	36.0	3.5	3.9	3.6	7.6	5.8	0.5	3.1	2.3	1.1	46.5	
15 Sekong	29820	76.0	23.1	2.0	6.6	2.7	3.6	4.0	0.5	2.9	1.6	0.2	58.1	
16 Champasack	33480	64.7	28.1	1.9	5.6	4.1	8.8	6.5	0.8	3.5	2.9	1.2	36.1	
17 Attapeu	29130	73.2	26.9	2.7	5.5	3.5	3.9	5.3	0.6	2.2	1.8	1.4	55.3	

Food now takes 61 % of the overall consumption compared to 64 % in 1992/93. The share of transport costs rose from 7 to 11 %. Other changes are fairly small. Although the costs spent on food were down, items like rice and fish slightly increased their share, while meat in particular now takes a smaller portion of the basket. Another observation to make is a shift from own production to expenditure (purchases). The share of own production of food items was 59 % in 1992/93 against 56 % in 1997/98.

**Table 2: Percent of food consumption by kind of items in 1992/93 and 1997/98**

Item	1992/93	1997/98
Rice	42.8	46.2
Other cereals and bread	1.9	2.3
Meat	18.4	16.1
Fish	10.7	12.9
Milk, cheese and eggs	1.1	0.9
Oils and fats	0.2	0.2
Fruits	1.7	1.7
Vegetables	9.0	9.1
Sugar and sweets	1.6	1.0
Non-alcoholic beverages, coffee & tea	1.6	1.4
Meals	3.7	4.1
Others	7.5	4.1
All food items	100.0	100.0

Tables 8 to 13 use the concept of expenditure and consumption. Expenditure is the value of what has been bought by households, while there are items that are not bought but taken from own production. These items are valued in the same way as if they would have been bought. There are own production of food items, owner occupied housing, and fetched firewood. Consumption is thus all expenditure plus the value of these so called imputed items. Further there are other costs households have that are not considered as consumption, outlays on taxes, interests, remittances given away. Households also have to spend money on repair and maintenance of their houses, which are considered as input of the production of housing services. Households also make investments in new houses.

LECS 2 distinguishes between urban households, households in rural areas with access to road and in rural areas without access to road. The average baskets of consumption of the households in these areas are quite different as the following figures tell. For further details, see following tables.

**Table 3: Share in percent of total consumption by areas in 1997/1998.**

Item	Urban areas	Rural areas with access to road	Rural areas without Access to road
Food consumption	51	61	68
Rice	16	30	35
Transport	13	11	8
Imputed rent, housing	18	4	3
% of own products in food	18	60	72

Comparisons between provinces in the North, Center and the South reveal differences in the composition of the baskets, the main ones are:

**Table 4: Share in percent of total consumption by region in 1997/1998**

Item	North	Center	South
Food consumption	62	59	67
Transport	10	12	8
Rice	31	26	33
Meat	5	2	2
Fish	4	5	7
% of own products in food	70	48	58

Although the households in the South spend relatively more on food (and on rice and fish) than other regions, it has far less share of own produces compared to the North and is this far more exposed to the market. In tables 9 and 10 the composition of consumption is further broken down into strata.

**Table 5: Share in percent of total consumption in urban area in 1997/1998.**

Item	North	Center	South
Share of food	49	50	55
Transport	15	14	9
Rice	18	16	15
Meat	13	9	12
Fish	4	5	8
% of own products in food	36	15	16

**Table 6: Share in percent of total consumption in urban with access to road in 1997/1998**

Item	North	Center	South
Share of food	57	63	63
Transport	15	9	12
Rice	29	30	30
Meat	11	10	9
Fish	5	10	9
Own produces in % of food	69	57	61

**Table 7: Share in percent of total consumption in urban without access to road in 1997/1998.**

Item	North	Center	South
Share of food	70	63	74
Transport	4	13	5
Rice	36	33	40
Meat	12	9	7
Fish	6	10	13
Own produces in % of food	78	71	65

Access to road and markets seem to have a significant importance for the consumption pattern. The share of food becomes higher with less access to markets and the dependence on own products. Within the strata (urban and rural areas) there are very similar baskets, the largest differences occur in rural areas without access to road. An interesting finding is that the share of own produces among food items in urban strata in the North is the double of those in the Center and the South. Either “urban areas” in the North are less developed or they provide fewer opportunities for marketing of products.

**Table 8: Household consumption by item groups in 1997/98.****Total and monthly household average. Percentages**

Item group	LECS 1997/98			LECS 1992/93	
	Monthly HHs Average in KIP	Percent		Percent	
		of grand Total	of group total	of grand total	of group total
<b>Food expenditure</b>	<b>50999</b>	<b>26.9</b>	<b>100</b>	<b>26.3</b>	<b>100</b>
Rice	13753	7.3	27.0	4.6	17.4
Other cereals and bread	2479	1.3	4.9	1.2	4.6
Meat	12942	6.8	25.4	7.6	28.8
Fish	4900	2.6	9.6	2.9	10.9
Milk, cheese and eggs	1049	0.6	2.1	0.7	2.7
Oils and fats	241	0.1	0.5	0.1	0.6
Fruits	1503	0.8	2.9	0.7	2.6
Vegetables	4178	2.2	8.2	2.7	10.1
Sugar and sweets	1147	0.6	2.2	1.0	3.9
Non-alcoholic beverage coffee & tea	1656	0.9	3.2	1.0	3.9
Other foods	2413	1.3	4.7	1.4	5.5
Meals	4739	2.5	9.3	2.4	9.0
<b>Own produced of food</b>	<b>64221</b>	<b>33.9</b>	<b>100</b>	<b>38.0</b>	<b>100</b>
Rice own produced	39442	20.8	61.4	22.9	60.4
Other own grain products	181	0.1	0.3	.	.
Vegetables own produced	6340	3.3	9.9	3.1	8.0
Fruits own produced	415	0.2	0.6	0.4	1.2
Meat own produced	5559	2.9	8.7	4.2	11.0
Fish own produced	9937	5.2	15.5	4.0	10.5
Other own products	2348	1.2	3.7	3.4	8.9
<b>Clothing, footwear, tailoring</b>	<b>5265</b>	<b>2.8</b>	<b>100</b>	<b>4.1</b>	<b>100</b>
<b>Housing</b>	<b>13402</b>	<b>7.1</b>	<b>100</b>	<b>7.1</b>	<b>100</b>
Rent of houses	60	0.0	0.4	0	0.3
Imputed rent	8939	4.7	66.7	4.7	66.1
Fetches firewood	1941	1.0	14.5	1.3	18.2
Water, electricity, etc	2461	1.3	18.4	1.1	15.4
<b>Household utensils and operations</b>	<b>9674</b>	<b>5.1</b>	<b>100</b>	<b>4</b>	<b>100</b>
<b>Medical care</b>	<b>4246</b>	<b>2.2</b>	<b>100</b>	<b>2.4</b>	<b>100</b>
<b>Transport and communications</b>	<b>20007</b>	<b>10.6</b>	<b>100</b>	<b>6.7</b>	<b>100</b>
<b>Recreation</b>	<b>11562</b>	<b>6.1</b>	<b>100</b>	<b>3.8</b>	<b>100</b>
<b>Education</b>	<b>934</b>	<b>0.5</b>	<b>100</b>	<b>0.8</b>	<b>100</b>
<b>Personal care</b>	<b>1464</b>	<b>0.8</b>	<b>100</b>	<b>3.1</b>	<b>100</b>
<b>Alcohol and tobacco</b>	<b>5449</b>	<b>2.9</b>	<b>100</b>	<b>3</b>	<b>100</b>
<b>Others</b>	<b>2098</b>	<b>1.1</b>	<b>100</b>	<b>0.7</b>	<b>100</b>
<b>Total consumption</b>	<b>189319</b>	<b>100.0</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table 9: Household consumption by item groups in 1997/98.****Monthly averages and percentages of total consumption by region.**

Item group	Urban		Rural		Rural		Total	
			with access		Without access			
	Average	%	Average	%	Average	%	Average	%
<b>Food expenditure</b>	<b>122444</b>	<b>41.4</b>	<b>46495</b>	<b>24.3</b>	<b>28246</b>	<b>18.9</b>	<b>50999</b>	<b>26.9</b>
Rice	28480	9.6	12314	6.4	9453	6.3	13753	7.3
Other cereals and bread	5782	2.0	2264	1.2	1433	1.0	2479	1.3
Meat	27105	9.2	13453	7.0	7360	4.9	12942	6.8
Fish	11840	4.0	4950	2.6	2317	1.6	4900	2.6
Milk, cheese and eggs	3574	1.2	777	0.4	330	0.2	1049	0.6
Oils and fats	721	0.2	158	0.1	128	0.1	241	0.1
Fruits	4879	1.7	1077	0.6	590	0.4	1503	0.8
Vegetables	11224	3.8	3527	1.8	2093	1.4	4178	2.2
Sugar and sweets	2221	0.8	1105	0.6	785	0.5	1147	0.6
Non-alcoholic beverages, coffee & tea	5169	1.7	1323	0.7	622	0.4	1656	0.9
Other foods	3585	1.2	2462	1.3	1947	1.3	2413	1.3
Meals	17864	6.0	3086	1.6	1190	0.8	4739	2.5
<b>Own produced of food</b>	<b>27037</b>	<b>9.2</b>	<b>70847</b>	<b>37.1</b>	<b>72794</b>	<b>48.8</b>	<b>64221</b>	<b>33.9</b>
Rice own produced	18525	6.3	44567	23.3	43199	29.0	39442	20.8
Other own grain products	54	0.0	208	0.1	206	0.1	181	0.1
Vegetables own produced	1757	0.6	6987	3.7	7525	5.0	6340	3.3
Fruits own produced	199	0.1	471	0.2	452	0.3	415	0.2
Meat own produced	2424	0.8	5635	2.9	6650	4.5	5559	2.9
Fish own produced	3687	1.2	10969	5.7	11439	7.7	9937	5.2
Other own products	391	0.1	2011	1.1	3322	2.2	2348	1.2
<b>Clothing, footwear, tailoring</b>	<b>9145</b>	<b>3.1</b>	<b>4883</b>	<b>2.6</b>	<b>4135</b>	<b>2.8</b>	<b>5265</b>	<b>2.8</b>
<b>Housing</b>	<b>30289</b>	<b>10.3</b>	<b>11722</b>	<b>6.1</b>	<b>8493</b>	<b>5.7</b>	<b>13402</b>	<b>7.1</b>
Rent of houses	11	0.0	161	0.1	0	0.0	60	0.0
Imputed rent	23041	7.8	7966	4.2	4513	3.0	8939	4.7
Fetches firewood	679	0.2	1875	1.0	2454	1.6	1941	1.0
Water, electric, etc	6559	2.2	1720	0.9	1526	1.0	2461	1.3
<b>Household utensils and operations</b>	<b>17502</b>	<b>5.9</b>	<b>11990</b>	<b>6.3</b>	<b>5037</b>	<b>3.4</b>	<b>9674</b>	<b>5.1</b>
<b>Medical care</b>	<b>5582</b>	<b>1.9</b>	<b>4566</b>	<b>2.4</b>	<b>3513</b>	<b>2.4</b>	<b>4246</b>	<b>2.2</b>
<b>Transport and communications</b>	<b>39662</b>	<b>13.4</b>	<b>20918</b>	<b>10.9</b>	<b>12106</b>	<b>8.1</b>	<b>20007</b>	<b>10.6</b>
<b>Recreation</b>	<b>22551</b>	<b>7.6</b>	<b>11182</b>	<b>5.9</b>	<b>7823</b>	<b>5.2</b>	<b>11562</b>	<b>6.1</b>
<b>Education</b>	<b>2740</b>	<b>0.9</b>	<b>746</b>	<b>0.4</b>	<b>416</b>	<b>0.3</b>	<b>934</b>	<b>0.5</b>
<b>Personal care</b>	<b>3165</b>	<b>1.1</b>	<b>1244</b>	<b>0.7</b>	<b>1008</b>	<b>0.7</b>	<b>1464</b>	<b>0.8</b>
<b>Alcohol and tobacco</b>	<b>8986</b>	<b>3.0</b>	<b>5083</b>	<b>2.7</b>	<b>4432</b>	<b>3.0</b>	<b>5449</b>	<b>2.9</b>
<b>Others</b>	<b>6354</b>	<b>2.2</b>	<b>1391</b>	<b>0.7</b>	<b>1077</b>	<b>0.7</b>	<b>2098</b>	<b>1.1</b>
<b>Total consumption</b>	<b>295457</b>	<b>100.0</b>	<b>191066</b>	<b>100.0</b>	<b>149080</b>	<b>100.0</b>	<b>189319</b>	<b>100.0</b>

**Table 10: Household consumption and expenditure by region and item group in 1997/98**

**Percentages of total.**

Item group	North			Center			South			Total
	Urban	Rural	Rural	Urban	Rural	Rural	Urban	Rural	Rural	
	with		Without	with		without	with		without	
	Access		Access	access		access	access		access	
To road		To road	to road		to road	to road		to road		
<b>Food expenditure</b>	<b>31.2</b>	<b>17.8</b>	<b>15.1</b>	<b>42.8</b>	<b>27.2</b>	<b>18.1</b>	<b>46.3</b>	<b>24.3</b>	<b>26.2</b>	<b>26.9</b>
Rice	6.6	3.1	4.7	10.2	7.9	4.8	9.9	6.5	11.7	7.3
Other cereals and bread	1.6	1.1	1.0	2.1	1.3	1.1	1.1	0.9	0.8	1.3
Meat	10.6	7.0	4.9	8.7	7.1	5.2	11.0	6.8	4.4	6.8
Fish	2.0	1.5	1.0	4.2	2.8	1.5	5.9	3.5	2.6	2.6
Milk, cheese and eggs	0.6	0.4	0.2	1.3	0.4	0.2	1.1	0.3	0.2	0.6
Oils and fats	0.2	0.1	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1
Fruits	0.8	0.5	0.2	1.9	0.6	0.4	1.2	0.4	0.7	0.8
Vegetables	3.5	1.2	0.8	3.8	2.2	1.6	4.6	1.8	1.9	2.2
Sugar and sweets	0.7	0.4	0.4	0.8	0.7	0.6	0.8	0.6	0.7	0.6
Non-alcoholic beverages, coffee & tea	0.5	0.3	0.2	2.0	0.8	0.5	2.0	0.8	0.7	0.9
Other foods	1.2	1.2	1.0	1.2	1.2	1.3	1.3	1.6	1.7	1.3
Meals	3.0	1.0	0.6	6.5	2.0	1.0	7.2	1.1	0.8	2.5
<b>Own produced of food</b>	<b>17.8</b>	<b>39.4</b>	<b>54.6</b>	<b>7.6</b>	<b>35.7</b>	<b>45.0</b>	<b>9.0</b>	<b>38.4</b>	<b>47.7</b>	<b>33.9</b>
Rice own produced	11.7	25.8	30.8	5.4	22.2	27.8	5.1	23.3	28.7	20.8
Other own grain products	0.0	0.1	0.3	0.0	0.1	0.1	0.0	0.2	0.1	0.1
Vegetables own produced	1.5	3.8	6.9	0.3	3.2	3.6	1.3	4.6	4.3	3.2
Fruits own produced	0.2	0.3	0.4	0.1	0.2	0.2	0.0	0.3	0.2	0.2
Meat own produced	1.9	4.2	7.1	0.6	2.5	3.5	0.6	2.6	2.6	2.9
Fish own produced	2.0	3.5	4.9	1.0	6.7	8.5	1.8	5.9	10.1	5.2
Other own products	0.4	1.6	4.1	0.1	0.7	1.3	0.2	1.3	1.3	1.2
<b>Clothing, footwear, tailoring</b>	<b>3.8</b>	<b>2.4</b>	<b>3.5</b>	<b>3.2</b>	<b>2.4</b>	<b>2.6</b>	<b>1.5</b>	<b>3.4</b>	<b>2.1</b>	<b>2.8</b>
<b>Housing</b>	<b>10.1</b>	<b>6.5</b>	<b>6.0</b>	<b>10.2</b>	<b>6.5</b>	<b>6.1</b>	<b>10.7</b>	<b>4.1</b>	<b>4.4</b>	<b>7.1</b>
Rent of houses	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Imputed rent	8.5	4.7	3.3	7.6	4.3	3.2	8.4	2.7	2.3	4.7
Fetches firewood	0.3	0.9	2.3	0.2	1.1	1.4	0.1	0.8	1.2	1.0
Water, electricity, etc	1.3	0.9	0.4	2.4	1.0	1.5	2.1	0.6	0.9	1.3
<b>Household utensils and operations</b>	<b>6.6</b>	<b>5.5</b>	<b>3.6</b>	<b>5.9</b>	<b>7.1</b>	<b>3.4</b>	<b>5.4</b>	<b>4.3</b>	<b>3.0</b>	<b>5.1</b>
<b>Medical care</b>	<b>2.5</b>	<b>2.4</b>	<b>2.7</b>	<b>1.7</b>	<b>2.4</b>	<b>1.8</b>	<b>2.5</b>	<b>2.2</b>	<b>2.9</b>	<b>2.2</b>
<b>Transport and communications</b>	<b>14.6</b>	<b>14.8</b>	<b>3.9</b>	<b>13.7</b>	<b>9.1</b>	<b>13.2</b>	<b>9.3</b>	<b>11.6</b>	<b>4.6</b>	<b>10.6</b>
<b>Recreation</b>	<b>8.4</b>	<b>7.3</b>	<b>6.3</b>	<b>7.2</b>	<b>4.9</b>	<b>5.0</b>	<b>10.2</b>	<b>6.8</b>	<b>4.3</b>	<b>6.1</b>
<b>Education</b>	<b>1.0</b>	<b>0.2</b>	<b>0.2</b>	<b>1.0</b>	<b>0.5</b>	<b>0.3</b>	<b>0.3</b>	<b>0.3</b>	<b>0.4</b>	<b>0.5</b>
<b>Personal care</b>	<b>0.9</b>	<b>0.7</b>	<b>0.7</b>	<b>1.1</b>	<b>0.7</b>	<b>0.6</b>	<b>1.1</b>	<b>0.5</b>	<b>0.7</b>	<b>0.8</b>
<b>Alcohol and tobacco</b>	<b>2.5</b>	<b>2.4</b>	<b>3.1</b>	<b>3.1</b>	<b>2.5</b>	<b>2.8</b>	<b>3.1</b>	<b>3.5</b>	<b>3.1</b>	<b>2.9</b>
<b>Others</b>	<b>0.6</b>	<b>0.6</b>	<b>0.4</b>	<b>2.6</b>	<b>0.8</b>	<b>0.9</b>	<b>0.7</b>	<b>0.6</b>	<b>0.9</b>	<b>1.1</b>
<b>Total consumption</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100</b>

**Table 11: Household Consumption and Expenditure by region and Item group in 1997/98**

Item group	North		Center		South	
	Monthly Average	% Of total	Monthly average	% of total	Monthly average	% of total
<b>Food expenditure</b>	<b>27636</b>	<b>18.5</b>	<b>69288</b>	<b>30.2</b>	<b>45044</b>	<b>28.5</b>
Rice	6579	4.4	17975	7.8	15217	9.6
Other cereals and bread	1674	1.1	3496	1.5	1362	0.9
Meat	9794	6.6	16392	7.1	9809	6.2
Fish	1986	1.3	6684	2.9	5328	3.4
Milk, cheese and eggs	498	0.3	1602	0.7	620	0.4
Oils and fats	147	0.1	357	0.2	115	0.1
Fruits	616	0.4	2293	1.0	1049	0.7
Vegetables	2003	1.3	5898	2.6	3582	2.3
Sugar and sweets	640	0.4	1513	0.7	1088	0.7
Non-alcoholic beverages, coffee & tea	412	0.3	2573	1.1	1473	0.9
Other foods	1643	1.1	2893	1.3	2508	1.6
Meals	1642	1.1	7612	3.3	2892	1.8
<b>Own produced of food</b>	<b>65015</b>	<b>43.5</b>	<b>64860</b>	<b>28.3</b>	<b>61446</b>	<b>38.8</b>
Rice own produced	38979	26.1	40790	17.8	36995	23.4
Other own grain products	292	0.2	107	0.0	177	0.1
Vegetables own produced	7526	5.0	5391	2.4	6688	4.2
Fruits own produced	501	0.3	377	0.2	367	0.2
Meat own produced	7848	5.3	4822	2.1	3654	2.3
Fish own produced	5948	4.0	11849	5.2	11776	7.4
Other own products	3920	2.6	1523	0.7	1789	1.1
<b>Clothing, footwear, tailoring</b>	<b>4647</b>	<b>3.1</b>	<b>6266</b>	<b>2.7</b>	<b>3887</b>	<b>2.5</b>
<b>Housing</b>	<b>10211</b>	<b>6.8</b>	<b>17752</b>	<b>7.7</b>	<b>8213</b>	<b>5.2</b>
Rent of houses	29	0.0	102	0.0	9	0.0
Imputed rent	6923	4.6	11859	5.2	5260	3.3
Fetches firewood	2168	1.5	2010	0.9	1417	0.9
Water, electricity, etc	1092	0.7	3781	1.6	1528	1.0
<b>Household utensils and operations</b>	<b>7099</b>	<b>4.8</b>	<b>12964</b>	<b>5.7</b>	<b>6007</b>	<b>3.8</b>
<b>Medical care</b>	<b>3806</b>	<b>2.5</b>	<b>4616</b>	<b>2.0</b>	<b>4075</b>	<b>2.6</b>
<b>Transport and communications</b>	<b>14174</b>	<b>9.5</b>	<b>27263</b>	<b>11.9</b>	<b>12167</b>	<b>7.7</b>
<b>Recreation</b>	<b>10440</b>	<b>7.0</b>	<b>13185</b>	<b>5.7</b>	<b>9516</b>	<b>6.0</b>
<b>Education</b>	<b>478</b>	<b>0.3</b>	<b>1412</b>	<b>0.6</b>	<b>532</b>	<b>0.3</b>
<b>Personal care</b>	<b>1096</b>	<b>0.7</b>	<b>1880</b>	<b>0.8</b>	<b>1065</b>	<b>0.7</b>
<b>Alcohol and tobacco</b>	<b>4087</b>	<b>2.7</b>	<b>6522</b>	<b>2.8</b>	<b>5088</b>	<b>3.2</b>
<b>Others</b>	<b>750</b>	<b>0.5</b>	<b>3387</b>	<b>1.5</b>	<b>1200</b>	<b>0.8</b>
<b>Total consumption</b>	<b>149439</b>	<b>100.0</b>	<b>229395</b>	<b>100.0</b>	<b>158240</b>	<b>100.0</b>

**Table 12: Consumption by income classes in 1997/98**

	Percentage of income classes					Total
	< 20	20-40	40-60	60-80	> 80	
<b>Food total</b>	<b>74.2</b>	<b>73.3</b>	<b>70.8</b>	<b>66.7</b>	<b>52.2</b>	<b>60.9</b>
Rice	11.7	9.5	8.4	6.8	6.4	7.3
Other cereals and bread	1.2	1.1	1.0	1.3	1.4	1.3
Meat	6.7	5.5	6.0	6.5	7.5	6.8
Fish	2.0	1.8	1.9	2.3	3.1	2.6
Milk, cheese and eggs	0.3	0.3	0.4	0.5	0.7	0.6
Oils and fats	0.1	0.1	0.1	0.1	0.1	0.1
Fruits	0.4	0.5	0.6	0.7	1.1	0.8
Vegetables	1.8	1.6	1.8	2.0	2.6	2.2
Sugar and sweets	0.4	0.5	0.6	0.6	0.6	0.6
Non-alcoholic beverages, coffee & tea	0.4	0.4	0.4	0.7	1.2	0.9
Other foods	1.4	1.2	1.3	1.2	1.1	1.2
Meals	0.9	1.0	1.2	1.8	3.6	2.5
<b>Total own production</b>	<b>46.8</b>	<b>49.8</b>	<b>47.0</b>	<b>42.1</b>	<b>22.7</b>	<b>33.9</b>
Rice own produced	23.7	27.5	27.8	26.2	14.9	20.8
Other own products	3.8	3.5	2.4	1.6	0.6	1.4
Vegetables own produced	8.0	7.0	5.1	3.6	1.5	3.2
Fruits own produced	0.4	0.3	0.3	0.3	0.1	0.2
Meat own produced	4.8	4.7	3.8	3.6	1.9	2.9
Fish own produced	6.2	6.8	7.5	6.7	3.6	5.2
<b>Total others</b>	<b>25.8</b>	<b>26.7</b>	<b>29.2</b>	<b>33.3</b>	<b>47.8</b>	<b>39.1</b>
Clothing, footwear, tailoring	2.4	2.5	2.7	2.7	2.6	2.6
Rent of houses	0.0	0.3	0.0	0.0	0.0	0.0
Imputed rent	4.1	4.2	4.1	4.5	5.2	4.7
Fetches firewood	1.8	1.7	1.4	1.2	0.7	1.0
Water, electricity, etc	0.6	0.5	0.9	1.0	1.7	1.3
Household utensils and operations	2.9	3.3	3.6	4.3	6.4	5.1
Medical care	2.1	2.3	2.8	2.4	2.0	2.2
Transport and communications	3.0	3.6	4.9	6.9	15.7	10.6
Recreation	4.8	4.0	4.5	5.5	7.3	6.1
Education	0.5	0.3	0.5	0.6	0.8	0.7
Personal care	0.5	0.7	0.7	0.8	0.8	0.8
Alcohol and tobacco	3.0	2.9	2.6	2.6	3.1	2.9
Others	0.3	0.4	0.5	0.8	1.6	1.1
<b>Grand total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table 13. Consumption patterns by income classes and urban rural areas in 1997/98**

	Urban areas					Rural areas with access to road					Rural areas without access to road					Total
	Income classes															
	-20	20-40	40-60	60-80	80-	-20	20-40	40-60	60-80	80-	-20	20-40	40-60	60-80	80-	
<i>Number of households</i>	9418	12471	18239	3102	63689	16850	32944	54206	74837	101847	38451	61944	85605	97592	84260	
				4												
% of households by area	7	9	14	23	47	6	12	19	27	36	10	17	23	27	23	
<b>Food</b>	<b>64.6</b>	<b>61.6</b>	<b>58.9</b>	<b>56.8</b>	<b>46.1</b>	<b>74.9</b>	<b>74.2</b>	<b>70.2</b>	<b>68.5</b>	<b>53.5</b>	<b>78.3</b>	<b>76.6</b>	<b>75.2</b>	<b>69.8</b>	<b>58.2</b>	<b>60.9</b>
Rice own produce and bought	25.8	25.1	22.9	19.1	12.8	36.9	37.3	36.2	35.7	24.0	39.2	40.7	40.9	37.4	28.6	28.1
Meat own produce and bought	14.1	12.4	10.9	11.0	9.2	11.1	9.9	9.3	10.1	10.1	10.5	9.8	10.0	9.7	8.6	9.8
Fish own produce and bought	7.0	7.0	7.4	6.8	4.3	8.0	9.2	10.3	9.6	7.1	8.8	8.7	9.5	9.7	9.0	7.8
Vegetables own produce, bought	7.5	6.2	5.7	4.7	3.9	9.8	9.3	7.2	5.7	4.1	10.8	9.0	7.2	6.0	4.5	5.5
Fruits own produce, bought	1.2	1.5	1.6	1.6	1.9	0.8	0.7	0.8	0.9	0.9	0.6	0.6	0.7	0.8	0.7	1.1
Other food items	9.1	9.5	10.5	13.6	14.0	8.2	7.9	6.3	6.6	7.2	8.5	7.8	7.1	6.2	6.7	8.6
% of food own produced	29.8	37.7	32.8	22.8	11.0	63.2	63.8	65.1	68.4	53.3	76.0	78.1	76.4	74.4	63.7	55.7
<b>Non-food items</b>	<b>35.4</b>	<b>38.4</b>	<b>41.1</b>	<b>43.2</b>	<b>53.9</b>	<b>25.1</b>	<b>25.8</b>	<b>29.8</b>	<b>31.5</b>	<b>46.5</b>	<b>21.7</b>	<b>23.4</b>	<b>24.8</b>	<b>30.2</b>	<b>41.8</b>	<b>39.1</b>
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## 1.2 Rice intake

With a daily rice intake of 582 gram per person, the total consumption for eating can be estimated to 1080 000 tons per year. This is well consistent with the consumption estimate.

The urban population consumes 20 % less rice than the rural population, while there is little difference between rural areas with access to road and without access to road.

People in the South eat less amount of rice than people in the Center and in the North. Particularly people in Sekong and Attapeu have relatively low rice consumption.

The rice intake seems to be higher in remote areas. this is particularly the case in Vientiane Municipality, Xiengkhuang and Vientiane P. However in Sekong and Attapeu the intake is lower in remote compared to urban areas.

Daily rice intake 1997/98

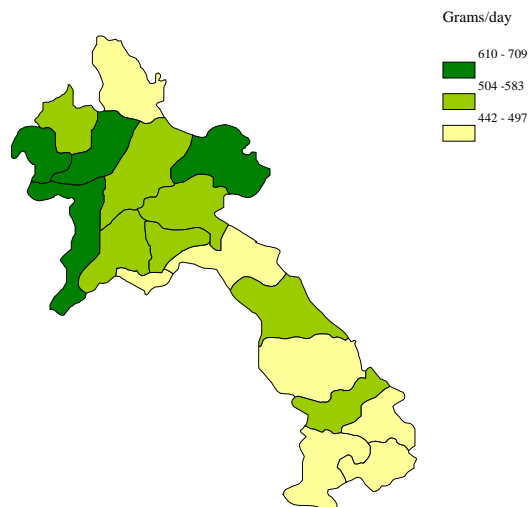


Table 14: Daily rice intake in grams per person by provinces and regions in 1997/98

	0-4	5-9	10-14	15-19	20-24	25-49	50+	All	Urban areas	Rural areas with road access	Rural areas without road access
<b>Lao PDR</b>	<b>272</b>	<b>461</b>	<b>601</b>	<b>697</b>	<b>715</b>	<b>722</b>	<b>583</b>	<b>582</b>	<b>493</b>	<b>590</b>	<b>608</b>
Urban	237	392	503	577	568	572	481	493			
Rural	277	473	621	725	750	755	602	600			
<b>North</b>	<b>286</b>	<b>512</b>	<b>659</b>	<b>771</b>	<b>821</b>	<b>823</b>	<b>645</b>	<b>644</b>	<b>589</b>	<b>651</b>	<b>650</b>
1 Phongsaly	299	549	682	797	844	821	634	660	497	556	679
2 Luangnamtha	292	513	652	768	829	825	666	658	583	647	686
3 Oudomxay	333	530	674	807	878	843	663	666	662	639	675
4 Bokeo	244	451	606	751	846	824	636	621	709	669	599
5 Luangprabang	257	487	608	716	731	759	622	601	504	603	615
6 Huaphanh	245	484	674	767	811	821	636	616	629	577	639
7 Xayaboury	344	558	715	823	897	878	674	704	610	716	704
<b>Center</b>	<b>280</b>	<b>448</b>	<b>588</b>	<b>676</b>	<b>672</b>	<b>681</b>	<b>568</b>	<b>565</b>	<b>474</b>	<b>575</b>	<b>617</b>
8 Vientiane M.	223	361	496	573	548	550	506	489	445	504	644
9 Xiengkhuang	256	512	722	876	898	854	695	659	505	600	723
10 Vientiane P.	281	484	647	721	744	745	556	612	554	608	650
11 Borikhamxay	241	443	626	802	848	804	695	629	452	637	642
12 Khammuane	262	462	605	711	732	727	609	589	531	578	620
13 Savannakhet	327	449	564	639	641	661	536	546	497	558	546
18 Xaysomboon SR	271	487	645	787	781	773	643	588	582	635	648
<b>South</b>	<b>234</b>	<b>406</b>	<b>540</b>	<b>644</b>	<b>668</b>	<b>663</b>	<b>519</b>	<b>526</b>	<b>458</b>	<b>544</b>	<b>528</b>
14 Saravane	269	453	602	733	748	775	625	594	506	591	606
15 Sekong	256	371	434	515	519	526	435	433	465	407	445
16 Champasack	221	400	533	625	653	635	490	513	442	550	512
17 Attapeu	172	320	481	627	634	600	431	465	483	485	452

## 2. Access to and usage of resources and institutional services

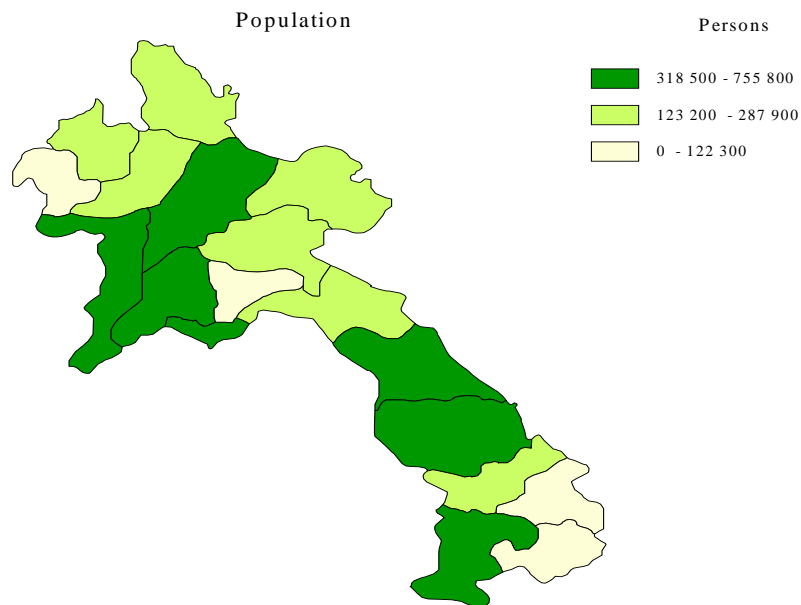
### 2.1 Human resources

Human resources can often be limited by time-consuming diseases, shortened life, many births, etc. Therefore it is important to incorporate the time in the analyses. Besides location, time is also important when looking on access to services. Time will be more analyzed in the next chapter.

52 % of all households have 5 – 7 members and 75 % have 4 – 8 members. That is one important explanation to the egalitarian society, as the consumption level is close related to household size. Of the total population, 44 % are under 15 years.

See appendix 1 about population size and demographic estimates.

#### Households by provinces 1997/98



**Table 15. Household size and number of households by provinces and regions in 1997/98**

	House- hold size	No.HHs '000'	% urban
<b>Lao PDR</b>	<b>6.5</b>	<b>783</b>	<b>100</b>
Urban	6.3	135	17
Rural	6.5	649	83
<b>North</b>	<b>6.4</b>	<b>252</b>	<b>10</b>
1 Phongsaly	6.0	26	7
2 Luangnamtha	6.0	20	16
3 Oudomxay	6.6	34	16
4 Bokeo	5.8	21	5
5 Luangprabang	6.3	63	11
6 Huaphanh	7.3	38	7
7 Xayaboury	6.3	50	8
<b>Center</b>	<b>6.6</b>	<b>374</b>	<b>25</b>
8 Vientiane M.	6.3	92	64
9 Xiengkhuang	7.4	32	6
10 Vientiane P.	6.7	50	17
11 Borikhamxay	6.2	28	6
12 Khammuane	6.5	51	13
13 Savannakhet	6.7	112	14
18 Xaysomboon SR	6.7	9	7
<b>South</b>	<b>1.4</b>	<b>159</b>	<b>10</b>
14 Saravane	6.7	43	7
15 Sekong	6.7	11	16
16 Champasack	6.2	89	11
17 Attapeu	6.5	16	5

**From the 1995 Population Census**

- Savannakhet is the most populated province with 15 % of the total population.
- The majority (63 %) lives in urban areas only in Vientiane Municipality. In the other provinces, only 5-17 % lives in urban areas.
- In Vientiane Municipality the population density is 134 persons per sq. km. In the other provinces the density is 8-33 persons per sq. km.
- In both Vientiane Municipality and Xaysomboon Special Region 56 % are born in the same district. In the other provinces 72-92 % are born in the same district as they live.
- The sex ratios by province range from 94 to 102 men per 100 women.
- The average household size in both Census 85 and Census 95 is only 6.0 compared with 6.5 and 6.6 in both LECS. The household definition is very similar. The difference is similar in all regions and household types. Generally, there is a bigger risk to underestimate (missed people) than overestimate (double count). It is also easier to control quality, better train the enumerators and more time to explain the definitions in a survey than in a census. LECS can in this respect be seen as late post-enumerating survey for calibrating the census for population figures, but not necessary for distribution data.

The number of household in Lao PDR is increased from 637 000 in 1992/1993 to 783 000 in 1997/1998, while the average of the household size is more or less the same.

*The households in Lao ODR are fairly homogenous even between regions and sub-groups, making it easier to compare economic data.*

## 2.2 Health environment and prevention

The major health problems in Lao PDR are diseases that could be reduced by better environment and preventive care, like immunization, clean water, good sanitation, better nutrition and health care. Malaria was a major health problem in 89 % of the villages according to LSIS 1993. Other major problems were diarrhea (80 %), respiratory infections (56 %) and measles (36 %).

Both water and sanitation are still big problems in Lao PDR, particularly in rural areas, even if some progress has been made during the last five years. The North lacks safe water, while the South lacks good sanitation more than average. Less than half of the rural population have safe water within the village and the standard is very different between provinces. The time to fetch water is about a quarter to day in Lao PDR. In rural Sekong it takes almost half an hour.

The immunization rate was relatively low in 1993 (22%), but programs have been carried out in 87 % of the villages during the last three years. Only Sekong and Attapeu in the South have low rates. There is a health development project in one of every four villages.

Safe drinking water 1997/98

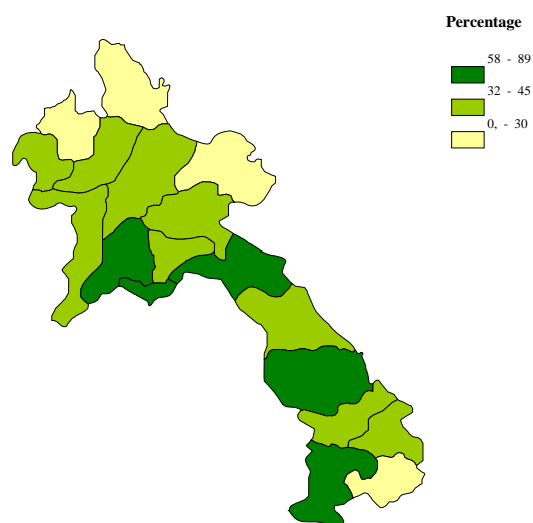


Table 16: Health environment and prevention by provinces and regions in 1997/98

	Piped water or protected well % households	Without toilet % households*	Fetching water in rural areas min/day & person	Immunization program % villages	Health development project % villages
<b>Lao PDR</b>	<b>50</b>	<b>71</b>	<b>14</b>	<b>87</b>	<b>27</b>
<i>Urban</i>	77	25	4	95	32
<i>Rural</i>	45	80	15	86	26
<b>North</b>	<b>32</b>		<b>12</b>	<b>84</b>	<b>28</b>
1 Phongsaly	27	88	8	80	27
2 Luangnamtha	27	71	17	87	24
3 Oudomxay	32	84	9	82	39
4 Bokeo	45	82	15	86	11
5 Luangprabang	37	75	10	86	35
6 Huaphanh	23	64	9	75	20
7 Xayaboury	33	30	15	100	30
<b>Center</b>	<b>64</b>		<b>18</b>	<b>92</b>	<b>22</b>
8 Vientiane M.	89	30	10	95	35
9 Xiengkhuang	37	56	13	85	33
10 Vientiane P.	61	55	23	88	20
11 Borikhamxay	65	78	17	91	12
12 Khammuane	38	86	19	88	27
13 Savannakhet	66	89	21	95	12
18 Xaysomboon SR	39	81	11	81	4
<b>South</b>	<b>48</b>		<b>16</b>	<b>86</b>	<b>40</b>
14 Saravane	39	96	22	94	52
15 Sekong	43	86	29	34	16
16 Champasack	58	86	11	100	40
17 Attapeu	30	89	10	59	0

Note: \* Cencus 1995

## 2.3 Health services

The Laotians rely much on self-care, but less than half of all villages have a pharmacy ( in Luangnamtha only 10 %) and only one third have a licensed pharmacy.

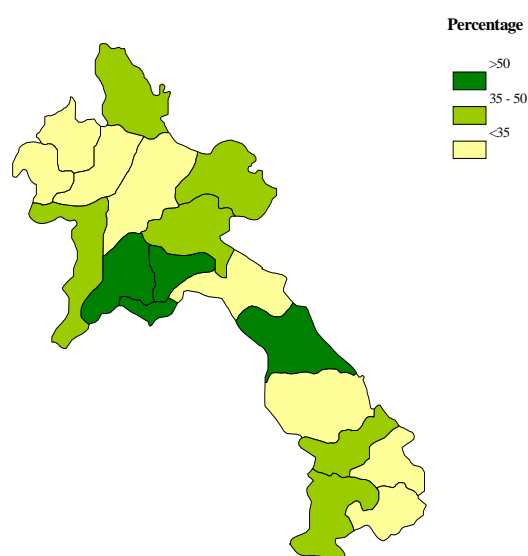
The primary health care is well distributed and is available within the village for 75 % of the population and almost all in urban areas. The access to modern health care is better than the access to traditional healers. These figures, however, do not describe the usage of different health care.

Only 7 % gave birth at hospital in 1993.

The time to hospital varies a lot. In Huaphanh more than one third of the households has more than 8 hours to nearest hospital. In Phongsaly 9 % and in Luangnamtha 13 % have 6-8 hours to the hospital.

In average 600 KIP per person per month is spent on medicine and the expenditures for medical treatments are almost neglectible.

**Pharmacy in village 1997/98**



**Table 17: Health services by Provinces and regions in 1997/98.**

	% village with pharmacy	Pharmacy with license % total	Primary health care <sup>1</sup> HHS.	Traditional healer % HHS	Trad. birth attendant % HHS	Hospital 8+ hours away % of HHS	Medicine per person KIP/month
<b>Lao PDR</b>	43	32	75	53	48	8	600
<i>Urban</i>	75	72	98	53	27	0	800
<i>Rural</i>	36	23	71	53	52	9	600
<b>North</b>	<b>35</b>	<b>20</b>	<b>67</b>	<b>36</b>	<b>44</b>	<b>13</b>	<b>600</b>
1 Phongsaly	44	13	50	17	16	12	500
2 Luangnamtha	10	10	33	34	21	9	400
3 Oudomxay	31	15	87	44	32	28	300
4 Bokeo	29	11	43	7	31	17	600
5 Luangprabang	25	22	54	30	49	3	900
6 Huaphanh	37	17	79	51	30	36	200
7 Xayaboury	57	29	91	49	85	0	700
<b>Center</b>	<b>49</b>	<b>39</b>	<b>78</b>	<b>56</b>	<b>40</b>	<b>5</b>	<b>600</b>
8 Vientiane M.	62	62	78	60	39	0	800
9 Xiengkhuang	41	29	66	76	25	8	300
10 Vientiane P.	65	48	86	51	38	0	800
11 Borikhamxay	28	26	69	66	34	0	500
12 Khammuane	51	42	68	43	51	20	700
13 Savannakhet	33	20	86	54	41	4	600
18 Xaysomboon SR	55	50	69	35	44	0	400
<b>South</b>	<b>41</b>	<b>37</b>	<b>82</b>	<b>72</b>	<b>72</b>	<b>6</b>	<b>600</b>
14 Saravane	44	23	72	64	70	10	500
15 Sekong	26	20	60	14	14	23	300
16 Champasack	43	43	92	87	81	0	700
17 Attapeu	36	27	71	56	69	18	400

<sup>1</sup> Medical practitioner, trained nurse, community health worker or dispensary

## 2.4 Health as a resource

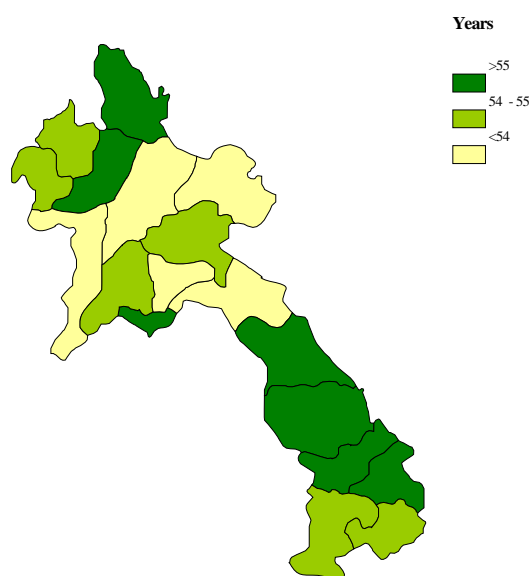
Sickness and death limits the welfare, but also restricts the resources to create welfare. The life expectancy is an indicator of each persons total time resources. Mortality and particular infant mortality is an indicator of reduced resources. Fertility is reproductive, but childbearing is also a possible time constraint to productive time.

The female life expectancy was 52 years and the male 50 years according to Census 1995. The differences are big (up to 10 years) between the provinces.

Infant mortality rate has decreased from 113 in 1992/93 to 104 in 1995.

In the rural areas, one out of five females in reproductive age, gave birth to live born child. In urban areas it was only one of ten. In Oudomaxay, Huaphanh, Xayasomboon SR and Sekong it was one out of four or more. This show that rural areas has higher fertility compared to urban areas.

**Life expectancy 1995**



**Table 18 : Health indicators by Provinces and regions in 1997/98.**

	Cencus 1995			Lecs1997/98
	Female life expectancy years	Male life expectancy years	Infant mortality rate 1995	Live births by females 15-49 % last year
<b>Lao PDR</b>	<b>52</b>	<b>50</b>	<b>104</b>	<b>17</b>
Urban				10
Rural				18
<b>North</b>				<b>17</b>
1 Phongsaly	58	55	94	17
2 Luangnamtha	55	52	119	16
3 Oudomxay	58	55	88	24
4 Bokeo	54	51	82	22
5 Luangprabang	53	50	132	14
6 Huaphanh	53	51	125	25
7 Xayabury	51	49	126-134	10
<b>Center</b>				<b>15</b>
8 Vientiane M.	59	57	72	8
9 Xiengkhuang	54	52	121	22
10 Vientiane P.	54	52	102	12
11 Borikhamxay	50	48	136	17
12 Khammuane	57	54	83	17
13 Savannakhet	58	55	80	19
18 Xaysomboon SR	50	47	138	27
<b>South</b>				<b>18</b>
14 Saravane	57	54	86	20
15 Sekong	56	53	96	24
16 Champasack	55	53	91	17
17 Attapeu	55	52	93	15

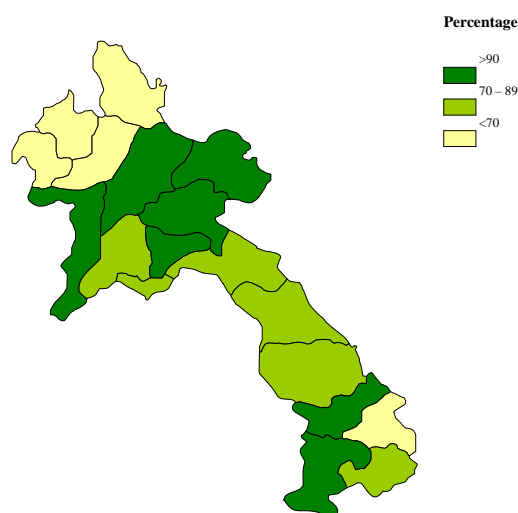
## 2.5 Educational services

Most villages (85%) have their own primary school. Almost half of the villages have a complete primary school and 11 % have low secondary school. Urban areas have less own schools, but can go to a nearby village. Parts of the North have much less own schools.

The teachers are equally distributed between the provinces, but maybe not within them. Textbooks are available in most villages. Only in Sekong there is a low rate of text books. The quality seems to be better now compared to 1993.

The school fees vary a lot, but are generally small compared to the households' total annual expenditures for education. Those expenditures vary from 19 000 KIP in Sekong to 53 700 KIP in Vientiane Municipality.

**Primary school in village 1997/98**



**Table 19: Educational services and quality by Provinces and regions in 1997/98.**

	Primary school in village % villages	Complete prim. school % villages	Low sec. school in v. % villages	Pupils/ teacher No.	Textbooks available % villages	Thousand Kips / year			
						Fee for primary school	Fee for lower sec.	Fee for upper sec.	School exp/ household
<b>Lao PDR</b>	<b>85</b>	<b>43</b>	<b>11</b>	<b>30</b>	<b>82</b>	<b>1.4</b>	<b>2.5</b>	<b>4.0</b>	<b>15.2</b>
<i>Urban</i>	69	60	20	36	67	1.4	3.2	4.5	43.0
<i>Rural</i>	87	42	10	29	83	1.4	2.1	3.7	7.2
<b>North</b>	<b>83</b>	<b>32</b>	<b>9</b>	<b>29</b>	<b>76</b>	<b>2.0</b>	<b>1.7</b>	<b>2.3</b>	<b>7.7</b>
1 Phongsaly	63	14	19	20	54	2.4	1.8	2.4	2.4
2 Luangnamtha	63	16	7	32	63	0.3	1.0	2.0	3.0
3 Oudomxay	66	13	1	31	45	2.1	2.6		10.6
4 Bokeo	64	20	11	26	60	2.1	1.0		5.7
5 Luangprabang	97	37	5	31	92	1.0	1.6	1.7	11.1
6 Huaphanh	100	50	9	28	100	3.9	2.5	3.3	3.1
7 Xayaboury	99	64	16	31	99	3.4	1.3	2.1	10.5
<b>Center</b>	<b>86</b>	<b>51</b>	<b>14</b>	<b>30</b>	<b>84</b>	<b>1.2</b>	<b>2.7</b>	<b>3.9</b>	<b>22.5</b>
8 Vientiane M.	88	76	18	33	85	1.4	2.6	3.2	53.7
9 Xiengkhuang	91	52	16	27	91	0.4	0.6		13.5
10 Vientiane P.	89	58	14	30	89	1.2	3.8	7.7	26.1
11 Borikhamxay	88	45	17	31	88	2.5	5.2	2.0	13.6
12 Khammuane	88	36	24	29	78	0.6	1.2	0.8	8.7
13 Savannakhet	82	52	6	30	82	0.5	1.4	1.4	7.0
18 Xaysomboon SR	90	54	15	30	90	0.7	1.4	2.0	16.4
<b>South</b>	<b>90</b>	<b>50</b>	<b>10</b>	<b>30</b>	<b>88</b>	<b>0.9</b>	<b>2.5</b>	<b>4.7</b>	<b>9.8</b>
14 Saravane	91	52	14	36	91	0.8	5.8	10.0	13.3
15 Sekong	68	16	10	27	51	1.1	2.4	1.5	1.9
16 Champasack	98	56	6	27	98	1.0	2.3	4.6	8.8
17 Attapeu	85	55	12	30	85				11.6

## 2.6 Knowledge

School attendance in Lao PDR is generally low. As in most developing countries there are frequent drop-outs, particularly among females. The Lao schools, however, areas also characterized by “drop-ins”. Few starts at the planned school starting age and only 2 years are being in average by both males and females at the age of 14. Average years of schooling is 3 years. The younger generation (15-49 years old) has 5-6 years for males and 2-4 years for females. The males have almost the same years of schooling in different ages in this generation, while females have 4 years up to the age of 34. Those 35-39 have 3 years of schooling and those 40-49 have only 2 years.

In urban areas males aged 20-44 have 9 years of schooling, compared to 5 years for the same group in rural areas and only 2-3 years in Phongsaly, Luangnamtha and Sekong. Females keeps up with the males in urban areas till the age of 19, but have one year less till the age of 29 and 3-4 years thereafter. In rural areas females are already behind from the age of 15.

On the average a child spends 3.5 hours per day including the weekends on education. The disadvantage pattern for females remains. The result is visible in the big differences in the adults' ability to read and write, between sexes as well as provinces.

Lack of knowledge is the fifth most common restriction mentioned by the village heads for not earning more money in the villages.

Years of schooling 1997/98

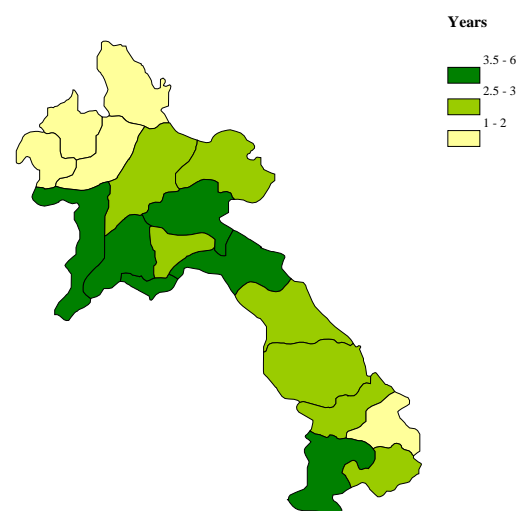


Table 20: Time for education by Provinces and regions in 1997/98.

	No. of schooling years				Time used for education hours/day				Literacy rate 15+		Lack of knowledge (%)
	Female	Male	F 15-19	M 15-19	F -14	M -14	F 15-19	M 15-19	Female	Male	
<b>Lao PDR</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>3.1</b>	<b>3.7</b>	<b>1.9</b>	<b>2.4</b>	<b>55</b>	<b>82</b>	<b>7</b>
<i>Urban</i>	5	6	7	7	4.3	6.3	3.9	5.4	82	96	8
<i>Rural</i>	2	4	4	5	2.9	3.3	1.5	1.9	49	79	7
<b>North</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>2.1</b>	<b>1.8</b>	<b>1.3</b>	<b>3.2</b>	<b>44</b>	<b>74</b>	<b>9</b>
1 Phongsaly	1	2	3	3	1.0	2.5	0.9	1.2	33	55	11
2 Luangnamtha	1	2	2	3	1.0	1.0	0.5	0.9	19	51	5
3 Oudomxay	1	3	2	4	1.8	2.9	0.2	1.9	36	78	10
4 Bokeo	1	2	3	4	3.2	2.8	2.1	2.9	33	70	17
5 Luangprabang	2	4	4	5	2.4	4.9	1.8	1.8	50	77	6
6 Huaphanh	2	3	3	4	1.9	2.9	1.3	1.4	38	72	8
7 Xayaboury	3	4	5	6	2.8	3.2	1.3	2.6	68	87	10
<b>Center</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>3.6</b>	<b>3.8</b>	<b>2.3</b>	<b>2.6</b>	<b>64</b>	<b>87</b>	<b>7</b>
8 Vientiane M.	5	7	8	8	4.5	5.5	4.2	4.8	84	96	3
9 Xiengkhuang	3	4	4	6	1.9	2.2	1.3	2.2	58	83	0
10 Vientiane P.	4	5	6	7	4.4	5.3	2.9	3.1	69	89	6
11 Borikhamxay	3	4	5	6	4.1	4.0	1.9	2.0	63	87	8
12 Khammuane	2	4	4	5	3.3	3.4	1.6	1.6	60	87	12
13 Savannakhet	2	4	4	4	3.8	3.0	1.5	1.6	50	81	10
18 Xaysomboon SR	2	3	3	5	2.8	2.9	0.9	3.6	43	76	1
<b>South</b>	<b>2</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>3.8</b>	<b>4.4</b>	<b>1.7</b>	<b>2.6</b>	<b>51</b>	<b>84</b>	<b>5</b>
14 Saravane	2	3	3	4	2.2	3.9	0.6	1.7	41	78	3
15 Sekong	1	2	2	3	2.2	3.4	1.0	1.8	37	72	7
16 Champasack	3	4	4	6	9.6	4.8	2.5	2.7	57	89	5
17 Attapeu	2	4	4	5	5.2	5.2	3.3	4.1	57	81	10

## 2.7 Land and productive assets

The land is still well distributed in Lao PDR. The majority (508 000 households) own their land. Additional 166 000 don't own, but have access to land (mostly in the North and in rural areas). (Column 3 includes owning).

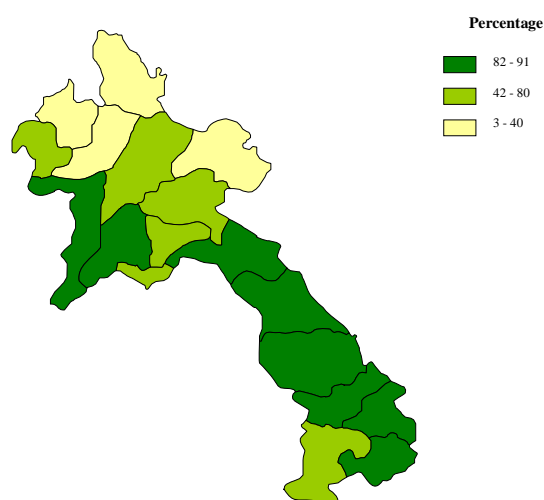
Irrigated land is owned by 25 % of the households, by 44% in the North, 20 % in the Center and 7 % in the South. Land-owners have on average one hectare of irrigated land. The total irrigated area has increased from 100 000 to 180 000 hectares since 1992/93.

The households owning cows and buffaloes have on average 5.3 animals.

Besides land, very few claims that they have access to the assets without owning them. Figures only for owning is therefore presented here.

Productive assets in agriculture are low. Tractors and rice husking machines are owned by less than 10 % of the households, in Xayaboury more than 20 %

**Land ownership 1997/98**



**Table 21: Percentage of Households Access to land and productive assets by Provinces and regions in 1997/98.**

	Owning land	Access to land	Owned land size Ha/HHs	Access to irrigated land	Owing Cow Buffaloes	Owning tractor	Owning ox cart	Owning rice husking m.	Owning boat	Owning fish net
<b>Lao PDR</b>	<b>65</b>	<b>86</b>	<b>1.6</b>	<b>25</b>	<b>61</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>18</b>	<b>62</b>
<i>Urban</i>	42	51	1.4	21	30	6	2	3	8	38
<i>Rural</i>	70	93	1.6	26	68	7	7	8	20	66
<b>North</b>	<b>44</b>	<b>94</b>	<b>1.1</b>	<b>44</b>	<b>61</b>	<b>7</b>	<b>3</b>	<b>11</b>	<b>12</b>	<b>60</b>
1 Phongsaly	29	100	1.0	36	61	0	2	7	8	61
2 Luangnamtha	33	93	1.0	35	59	8	4	7	2	41
3 Oudomxay	37	91	1.2	38	58	2	0	7	6	62
4 Bokeo	61	94	0.7	61	61	11	5	8	11	39
5 Luangprabang	42	90	1.1	25	48	2	0	9	24	61
6 Huaphanh	3	98	0.6	59	80	1	1	8	8	66
7 Xayaboury	87	94	1.2	62	66	22	11	23	11	67
<b>Center</b>	<b>72</b>	<b>80</b>	<b>1.6</b>	<b>20</b>	<b>61</b>	<b>9</b>	<b>7</b>	<b>5</b>	<b>19</b>	<b>62</b>
8 Vientiane M.	49	56	2.9	21	28	13	1	2	13	39
9 Xiengkhuang	64	94	0.8	62	79	2	1	10	2	60
10 Vientiane P.	82	85	1.5	31	57	14	7	6	20	76
11 Borikhamxay	86	89	1.4	8	57	17	5	5	35	74
12 Khammuane	87	89	1.4	4	74	4	4	7	28	75
13 Savannakhet	80	88	1.6	12	80	8	16	5	20	64
18 Xaysomboon SR	74	76	1.0	30	71	3	0	6	23	74
<b>South</b>	<b>80</b>	<b>88</b>	<b>1.9</b>	<b>7</b>	<b>62</b>	<b>2</b>	<b>9</b>	<b>6</b>	<b>23</b>	<b>64</b>
14 Saravane	83	91	2.0	5	65	2	11	8	7	61
15 Sekong	90	96	1.7	21	56	1	2	3	10	66
16 Champasack	76	84	2.0	7	59	3	10	5	30	62
17 Attapeu	91	92	1.3	1	78	0	1	7	37	85

## 2.8 Infrastructure

The infrastructure is still very low in Lao PDR, particularly in the rural areas. Only 19 % of the rural villages have electricity and 9 of 10 villages lacks any kind of market. Less than half of them are accessible by truck in the rainy season. In all provinces in the North, except Bokeo and Xayabury, half or more of the villages cannot be reached by truck in the dry season either. The South is better off.

In 4 provinces (Vientiane M. Vientiane Province, Borikhamxay and Xayabury) , more than half of the villages have scheduled passenger transport services. Attapeu, Phongsaly and Luangnamtha are most disadvantaged. The South and the North are at the same level.

Rather small changes seem to have taken place since 1992/93, e.g. electricity from 28 to 31 % of the villages (about 360 villages).

Electricity 1997/98

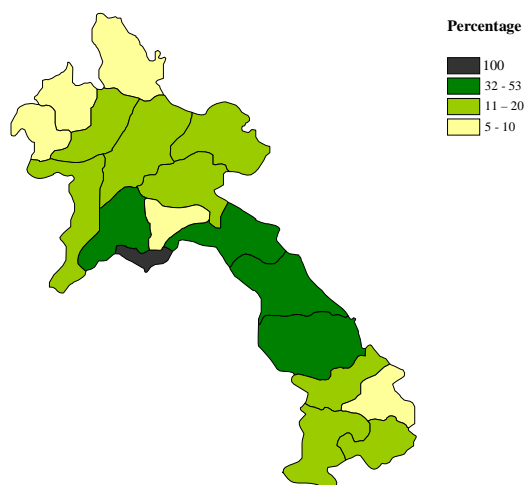


Table 22: Electricity, communication and market access by provinces and regions in 1997/98.

	Electricity % villages	Permanent market % villages	Periodical market % villages	6+ km to main road % villages	Access in rainy season % villages	Access in dry season % villages	Scheduled passenger tr. % Village	Bus fare to com- mon market KIP/one way
<b>Lao PDR</b>	<b>31</b>	<b>9</b>	<b>5</b>	<b>35</b>	<b>53</b>	<b>79</b>	<b>50</b>	<b>950</b>
<i>Urban</i>	91	33	4	9	100	100	93	400
<i>Rural</i>	19	4	5	41	44	75	42	1 100
<b>North</b>	<b>14</b>	<b>6</b>	<b>6</b>	<b>45</b>	<b>40</b>	<b>56</b>	<b>40</b>	<b>660</b>
1 Phongsaly	5	4	6	42	32	44	25	400
2 Luangnamtha	7	9		42	31	41	27	430
3 Oudomxay	14	0		66	36	50	32	320
4 Bokeo	8	9	20	38	41	77	37	720
5 Luangprabang	19	2		48	45	49	47	330
6 Huaphanh	16	15	18	66	36	40	36	1440
7 Xayaboury	15	8	6	27	47	82	57	780
<b>Center</b>	<b>50</b>	<b>12</b>	<b>4</b>	<b>29</b>	<b>66</b>	<b>96</b>	<b>61</b>	<b>1100</b>
8 Vientiane M.	100	14		21	100	100	91	640
9 Xiengkhuang	18	9	7	11	43	85	41	980
10 Vientiane P.	53	11	2	47	74	95	58	1440
11 Borikhamxay	34	18	12	23	49	89	51	1120
12 Khammuane	33	14		38	44	95	45	1440
13 Savannakhet	32	7	4	31	57	100	38	1270
14 Xaysomboon SR	8	27	17	39	45	68	36	1600
<b>South</b>	<b>17</b>	<b>6</b>	<b>5</b>	<b>32</b>	<b>46</b>	<b>78</b>	<b>42</b>	<b>750</b>
15 Saravane	15	5	3	19	51	100	47	750
16 Sekong	10	7		39	57	69	30	410
17 Champasack	20	5	7	37	43	68	46	770
18 Attapeu	11	17		32	35	78	18	850

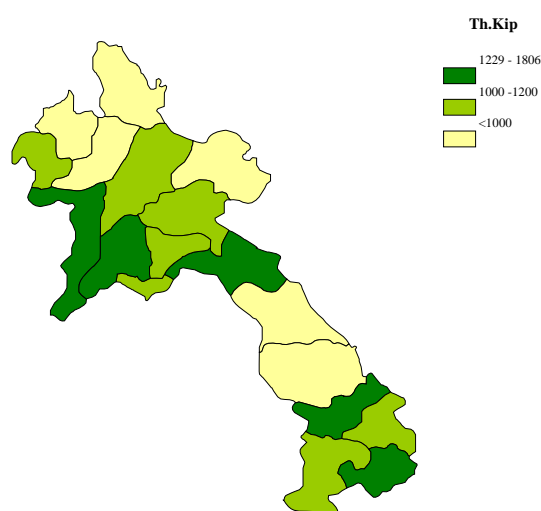
### 3. Agricultural production

Most households are engaged in agricultural activities, in urban areas also as a garden activity (fruits or vegetables). Two thirds of all households have some market sale of their products, and one fourth are purely subsistence farmers. Among rural households the market penetration is 70 percent on average, lowest in Luangnamtha (9) and Sekong (20), highest in Xayabury (85) and Luangprabang (85).

Agriculture is generally the most profitable activity in the South. Six provinces, four in the North and two in the Center have relatively low outcome, while Xayabury and Saravane are far beyond the others.

Grain stand for around 50 % of the output. The Centre has the most diversified output. Sekong and Champasack are the provinces where other products than grain dominate.

**Agricultural profits 1997/98**



**Table 23: Agricultural production, by provinces and regions in 1997/98, '000 Kip/household**

	Revenues From						Costs for				Profit
	Grain	Fruit, vegetable	Meat	Fish	Wood	Others	Seed, fodder	Equip.	Wages	Others	
<b>Lao PDR</b>	<b>605</b>	<b>154</b>	<b>286</b>	<b>163</b>	<b>9</b>	<b>82</b>	<b>98</b>	<b>21</b>	<b>46</b>	<b>46</b>	<b>1 089</b>
<b>Urban</b>	267	99	112	61	7	77	98	22	56	37	408
<b>Rural</b>	676	165	323	184	10	83	98	21	44	47	1 230
<b>North</b>	<b>616</b>	<b>155</b>	<b>277</b>	<b>83</b>	<b>8</b>	<b>91</b>	<b>79</b>	<b>12</b>	<b>22</b>	<b>25</b>	<b>1093</b>
1 Phongsaly	427	104	213	92	13	74	39	4	2	5	872
2 Luangnamtha	471	158	200	60	7	59	29	1	40	20	866
3 Oudomxay	464	113	156	76	2	68	42	21	16	9	790
4 Bokeo	564	218	266	104	10	70	67	8	29	25	1104
5 Luangprabang	504	147	237	70	9	114	43	9	7	18	1003
6 Huaphanh	505	85	262	74	4	73	150	1	15	4	833
7 Xayaboury	1119	247	487	109	9	124	141	28	48	71	1806
<b>Center</b>	<b>574</b>	<b>156</b>	<b>313</b>	<b>178</b>	<b>13</b>	<b>78</b>	<b>128</b>	<b>21</b>	<b>73</b>	<b>75</b>	<b>1015</b>
8 Vientiane M.	462	206	552	92	8	186	160	6	126	57	1157
9 Xiengkhuang	670	166	399	162	14	49	336	2	4	20	1096
10 Vientiane P.	871	206	289	189	27	68	139	39	155	88	1229
11 Borikhamxay	619	204	224	324	28	28	78	17	21	61	1250
12 Khammuane	394	116	212	235	25	37	74	44	28	21	852
13 Savannakhet	584	100	178	178	1	32	82	20	51	126	795
14 Xaysomboon SR	489	122	261	279	10	112	58	42	26	107	1039
<b>South</b>	<b>662</b>	<b>146</b>	<b>237</b>	<b>253</b>	<b>5</b>	<b>75</b>	<b>58</b>	<b>35</b>	<b>19</b>	<b>10</b>	<b>1257</b>
15 Saravane	1254	116	228	123	5	23	89	18	39	10	1593
16 Sekong	370	281	259	159	2	142	22	100	7	2	1083
17 Champasack	418	149	216	335	5	91	35	41	10	11	1116
18 Attapeu	626	116	368	214	3	84	123	11	17	4	1255

LECS 2 has captured economic activities within the households, and can provide estimates on household production by activity. One such activity is agriculture, forestry, fishing and hunting, others are activities in manufacturing and services industries. If an activity entirely takes place within the households, LECS 2 gives a total estimate of the production of that activity. Fishing is, for instance, a household activity. (Production can also take place by private and public corporations, etc.) Households do most of the agriculture production, although some important cash crops such as tobacco and coffee seem to be produced by other institutional units. The figures presented here are thus not the entire agricultural production, but confined to the household sector. As the overwhelming part of the forestry production (logging) takes place outside the household sector and hunting is a minor activity, agriculture is used as a common name including forestry, fishing and hunting.

There are several measures of the importance of the agriculture among the household income or production or in a country's economy, as share of the number of hours worked, of the labour force, and of total production.

In the time use module of the LECS, there are a number of income-generating activities that household members take part in. The following table shows how the percentage of time that an average LAO household spend on those activities:

**Table 24: Adult on income generating activities**

Activity	Average number of hours per day	Percent
Work as employed	0.8	12
Own business work	0.9	13
Agriculture work	3.1	47
Collecting firewood/fetching water	0.4	6
Hunting/fishing	0.9	13
Construction	0.1	2
Handicraft	0.5	7
<b>Total: Income generating activities</b>	<b>6.6</b>	<b>100</b>

The table indicates that a household in Lao PDR on average spends almost half of its working time (on income generating activities) on agriculture. The time used on hunting and fishing is of the same size as the time spent on business activities and work as employed. Agriculture, hunting and fishing use 60 percent of the total number of hours worked – one way of measuring the size of the sector.

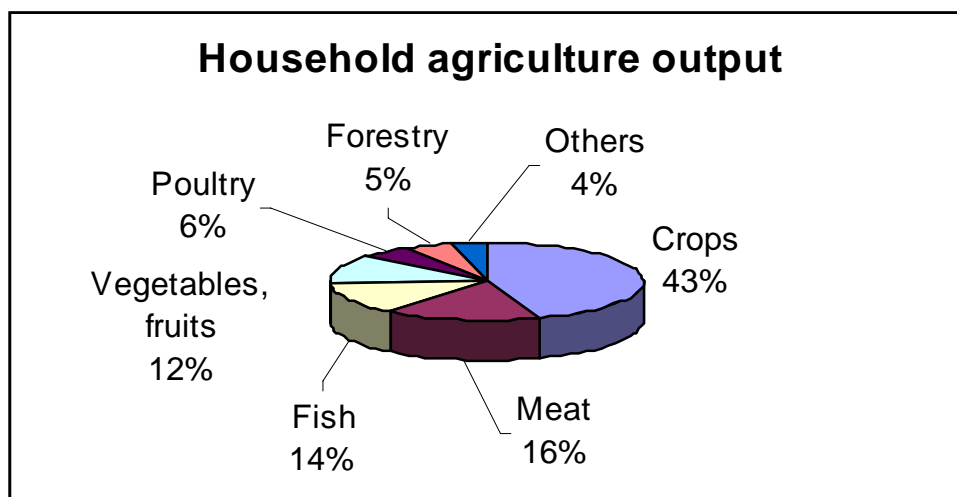
LECS 2 also shows that about 95 % of all households (75 % of urban and 99 % of rural households) in Lao PDR are engaged in some agricultural production either as the main activity or as a side activity (urban household growing fruits or vegetables or catching fish). Agriculture occupies about 80 % (83 % in 1992/93) of the income earning population (15 years and above less students, home workers, retired and sick persons). Measured from the income side agriculture is not that dominant, it provides 45 % of all household income.

Fishing is a wide spread activity. More than 80 % of all households have income (sale or for own final use) from fishing, 37 % in urban and 92 % in rural areas.

Of all households, 78 % own or have free access to dry land with an average of 1.6 hectares. 25 % own or have free access to irrigated land with an average of 1 hectare.

In 1992/93 there was a total of 100 000 hectares of irrigated area which has increased to 180 000 hectares in 1997/98.

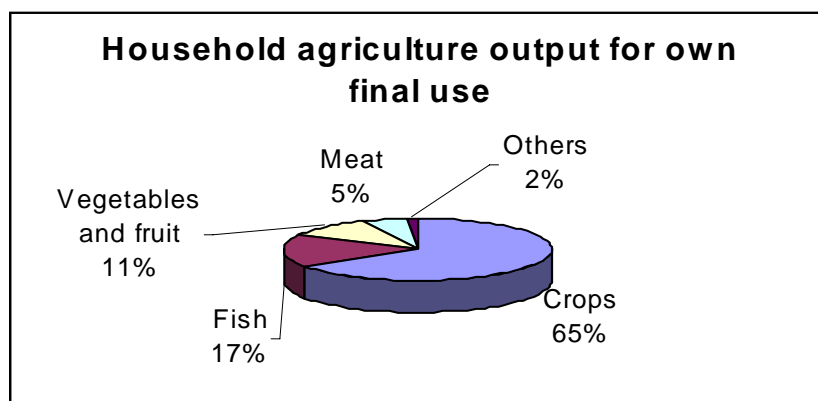
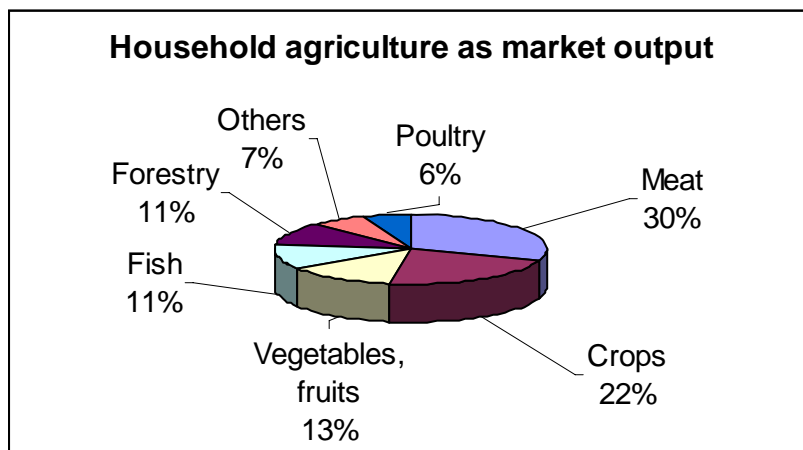
Production and value added in agriculture, forestry and fishing will be estimated within the national accounts. The household gross production value of 1997 can be preliminary estimated to almost 1 100 billion Kip. As mentioned above, this figure does not measure the whole production value as some production is outside the household sector.



As the chart illustrates, crops are the most important product group. Meat also includes wild animals. The group “others” includes cash crops such as cardamom but also some production of alcohol and spices.

The output consists of production for own final use and market sale. Out of the total gross output, just below 40 % of the production value are for the market. This fairly low share is due to the fact that as less than 13 % of the rice production are distributed through the market and rice crops stand for 40 % of the total output. Fish is also mostly for own final consumption, 27 % reach the market. As a contrast, meat from cattle and pigs has a market share of almost 90 %. Of all rural households 70 % sell some of their output to the market. There are rather large differences between provinces. In Luangnamtha the market share is only about 10 %, while Xayabury, Luangprabang and Vientiane M. have got over 80%. The differences between the North, Center and South are small.

The structure of the market output is, of course, much more diversified than the output for own final use. In generating cash revenue to Lao farmers, livestock products, not rice, are the most important output. About 30 % of all revenue from agriculture was from livestock, more than 50 percent in Phongsaly and Huaphanh to 17 percent in Saravane. Only in Oudomxay rice gave more revenue to the farmers. All in all fruits and vegetables was the second most important cash revenue product as well as in six provinces ( Luangnamtha, Bokeo, Vientiane Municipality, Vientiane Province, Borikhamxay, and Sekong )



In Xayabury and Saravane “other crops than rice and fodder” was second in importance, and fish in Khammuane, Champasack and Attapeu. Rice stood for about 11 % of all revenue, ranging from 15 % in the North, 11 % in the Center and 5 % in the South. Fish accounted for 11 % of the cash income ranging from 6 % in the North, 10 % in the Center and 20 % in the South.

The production of glutinous rice for own final use is 30 % of the total agricultural household production. Almost all (97 %) rural villages produce glutinous rice. All villages produce vegetables and fruits, poultry and poultry products and fish. Ordinary rice are produced in 58 % of the rural villages, other crops (maize) in 77 % and cassava in 69 %. Livestock is raised in 97 % of the rural villages and wood in 36 %.

Glutinous rice is the most important output (final own use and sale) in 69 % ( 76% of ordinary rice is included) of the rural villages (65 % of all villages). In many provinces as much as about 90 % of the villages have rice as the most important output, all provinces in the North except Luangprabang and Xayabury, Vientiane P. and Savannakhet in the Center. In Vientiane M. and Khammuane around 50 % of the villages are mainly rice producers. The dependence on rice is far less in the South where glutinous rice is most important in 58 % of the villages, compared to 73 % in the North and 71 % in the Centre. In Sekong just above 40 % of the villages are mainly rice producers and there are 35 % of the villages having fruits, vegetables including cassava as most important output. Livestock and meat are most important in 8 % of the villages, fish and ordinary rice in 7 %.

The productivity seems to be low. See Table 26. Several factors explain this, low capitalization, little use of fertilizers and pesticides, etc. Contributing to the low performance in the North is comparatively low rice prices. As was already noticed in 1992/93 the lowest rice prices are found in provinces with borders to China, Huaphanh, Phongsaly and Luangnamtha.

## 4. Household businesses

The Laotian strategy for survival is not only subsistent farming, but also “subsistent business”. Of a total of 164 489 households with income from businesses, 110 377 are in rural areas. An even spread informal sector engages 21 % of the households, 40% in urban and 17% in rural areas. Xayabury and Vientiane P. are the most business dense provinces. Only 7 % (13 % in urban areas and 4 % in rural areas) have employees. Of those 7 %, 5 % have 1-5 employees, 1 % has 6-10 employees and the rest percentage has 10 or more. More than half of the employees are in urban areas, however the wages generated are to almost 90 % in urban areas. 70 % of the gross revenue stem from trade. Production activities are concentrated in Vientiane M. and Champasack provinces. Work on commission basis flourishes in Xayabury. The surplus generated per business household is 4 times higher in urban than in rural areas.

Household business revenues 1997/98

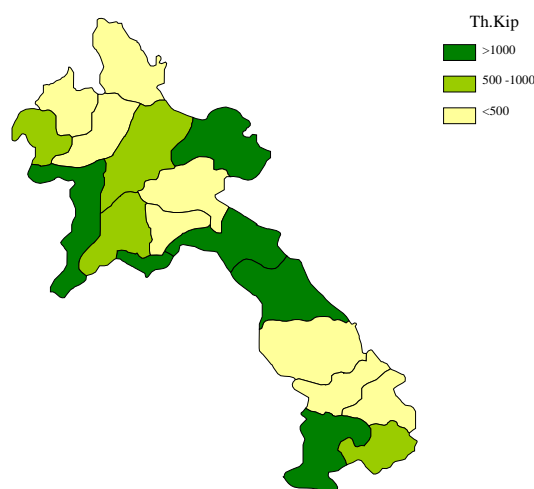


Table 25: Household business, by provinces and regions 1997/98, '000 Kip/household

	Business Revenues From					Costs for						Operat- ing Sur- plus
	% HHs	Trade	Produc- tion	Comm. Work	Others	Materials	Goods resale	Operational cost	Wages	Equip. tools	Others	
<b>Lao PDR</b>	<b>47</b>	<b>2 880</b>	<b>680</b>	<b>400</b>	<b>220</b>	<b>100</b>	<b>2420</b>	<b>420</b>	<b>70</b>	<b>50</b>	<b>70</b>	<b>1050</b>
<i>Urban</i>	64	7230	2200	850	550	330	6150	1250	270	70	210	2540
<i>Rural</i>	44	1560	220	260	120	30	1290	160	10	50	30	590
<b>North</b>	<b>49</b>	<b>1860</b>	<b>280</b>	<b>350</b>	<b>170</b>	<b>70</b>	<b>1460</b>	<b>150</b>	<b>20</b>	<b>70</b>	<b>50</b>	<b>840</b>
1 Phongsaly	40	600	80	40	30	0	410	20	0	0	0	310
2 Luangnam- tha	27	1310	150	90	170	10	1150	40	0	40	0	480
3 Oudomxay	47	830	160	80	70	90	770	70	0	0	10	200
4 Bokeo	44	1310	170	190	40	10	970	110	10	10	10	590
5 Luangpra- bang	57	1820	460	170	430	150	1530	230	20	110	20	830
6 Huaphanh	42	3730	70	110	10	0	2390	30	0	0	50	1450
7 Xayabury	63	2140	360	1010	100	50	1800	240	70	140	140	1170
<b>Center</b>	<b>49</b>	<b>3630</b>	<b>810</b>	<b>420</b>	<b>300</b>	<b>150</b>	<b>3360</b>	<b>620</b>	<b>100</b>	<b>30</b>	<b>70</b>	<b>820</b>
8 Vientiane M.	58	7100	1700	540	770	420	6600	1220	170	60	140	1490
9 Xiengkhuang	48	850	160	120	20	0	800	230	20	20	10	80
10 Vientiane P.	62	3550	520	300	110	20	3000	370	80	10	40	970
11 Borikhamxay	40	1830	460	110	370	0	1460	210	20	10	0	1070
12 Khammuane	42	2310	330	960	150	50	2340	210	90	20	30	1030
13 Savannakhet	43	1990	550	300	60	70	1950	570	80	10	80	130
18 Xaysomboon	38	860	350	170	70	0	620	250	0	350	0	230
<b>South</b>	<b>39</b>	<b>2700</b>	<b>1090</b>	<b>410</b>	<b>90</b>	<b>20</b>	<b>1550</b>	<b>330</b>	<b>90</b>	<b>60</b>	<b>100</b>	<b>2140</b>
14 Saravane	45	1430	370	220	110	0	1470	310	10	110	110	130
15 Sekong	16	1190	120	140	50	40	950	20	30	0	10	450
16 Champasack	37	3790	1690	590	60	30	1760	390	160	40	110	3650
17 Attapeu	43	1330	480	150	150	20	880	220	40	40	30	890

Almost half of the households have reported income or costs from business activities, 10 percentage points less in the South. Vientiane Province, Xayabury, Vientiane Municipality and Luangprabang have relatively more businesses than other provinces. About 60 % of the households have income from businesses. Sekong with 16 percent and Luangnamtha with 27 % have the lowest frequencies. On the question whether the household operates a household business, 21 percent admitted that. This figure represents an estimate of the more permanent operated household business. Of all households 15 % had permanent business operations in the North, 26 % in the Center and 18 % in the South. In Sekong, Luangnamtha and Phonesaly less than 5 % of the households had such businesses, compared to 48 % in Vientiane Municipality., 37 % in Vientiane Province and 32 % in Xayabury.

Household business is an urban far more than a rural phenomenon. In urban households 40 % of all households operate businesses compared to 21 % in rural areas with access to road and 14 % in rural areas without access to road. There are far more households, which have recorded revenue and cost from household business. About 60 % of all households in urban areas have some income from household businesses compared to 50 % in rural areas with access to road and 40 % in rural areas without access to road. The average household business in urban areas obtains a value added that is 8 times larger than in rural areas without access to road and 3 times larger compared to rural areas with access to road.

The total number of employees (both permanent and temporary) were 49 000, of which 80 % in urban areas. Almost 90 % of the wages and salaries are generated by urban businesses. Two thirds of all employed and wages and salaries were generated in three provinces, Vientiane Municipality., Savannakhet and Champasack.

The net income from household business gives the households on average 20 % of all income. The proportion is higher (30 %) in the South, lowest in the Center (15%) because they rely on other income sources as well. Businesses in the North stand for 21 % of all household income.

The total gross income from household businesses was estimated to 1 500 000 million Kip and the value added (the contribution to the Gross Domestic Product, GDP) to 400 000 million Kip. That is about 2.4 million Kip per business household and year. The average gross revenue per business household (those reporting income or cost from business) was 350 000 Kip per month, the operational surplus 87 000 Kip, and the value added 93 000 Kip per month. The operational surplus generated per business household is 3 times higher in urban areas than in rural areas with access to road and almost 8 times higher than in rural areas without access to road. Most of the value added recorded represents the informal sector, not included in the present GDP. The sector is almost 20 percent of the recorded GDP.

Trade is the most frequent business activity. 70 % of the gross revenue were generated from trade. Production activities are concentrated to Vientiane Municipality and Champasack provinces. Work on commission basis flourishes in Xayabury.

Investments in buildings for household businesses were estimated to 6.400 million KIP, roughly 25 000 KIP per household with business. This amount illustrates that the business activities are operated with very little capital involved.

The time use data collected in the LECS tell that Lao households spend less than one hour per day on business activities, from 0.1 in Huaphan to 2 hours in Vientiane Municipality on average. Of all hours spent on business, 45 % were related to retail trade and 23% to services, 15 % to manufacturing, 2 % to mining and 16 % were activities related to agriculture, forestry and fishing. The households in the North spent approximately 50 % on trade, compared to 66 % in the South and 74 % in the Center.

**Reference tables in appendix 2 and appendix3 (table 6 and 8)**

**LECS 1997/98**

Table 1. Number of household businesses by province

Table 2. Percent of households with business by province and region

Table 3. Percent of households with any income or cost from business by Province and region

Table 4. Revenue and costs from household businesses

Table 6. Work as employed, Number of hours and percent by sector and province

Table 8: Household business, by activity. Percent hours. Number of hours by region

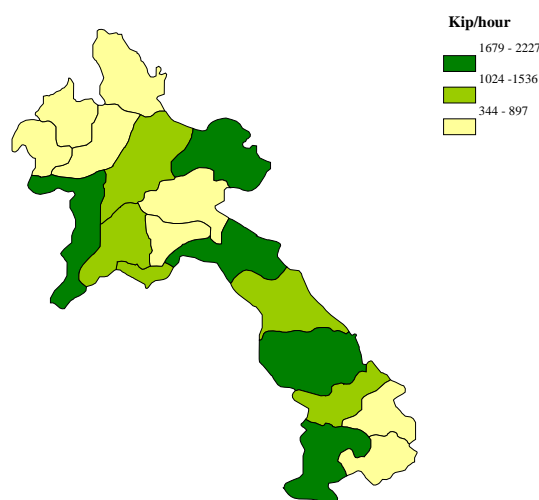
## 5. Productivity

Productivity is defined as the gross revenue per hour of work. The return is to cover costs for inputs into the business and the owner's remuneration and profit. The figures for agriculture cannot be compared with other business as this mainly is trade with high gross revenue compared to net revenue.

In agriculture the productivity is by far highest in Vientiane Municipality. The Center is generally better off than the North and the South which are fairly equal. Phongsaly, Khammuane, Oudomxay, Huaphanh and Sekong have low performances.

In household businesses urban areas is far off rural areas, and some provinces are far behind the others, Phongsaly. Luangnamtha, Oudomxay and Bokeo in the North, Xiengkhuang and Xaysomboon in the Center and Sekong and Attapeu in the South.

### Business Productivity 1997/98



**Table 26: Productivity by sector, by provinces and regions 1997/98, millions of KIP and hours. Persons 10+.**

	Agriculture			Household business			Home activities		
	Revenue	Hours	Rev./hrs	Revenue	Hours	Rev./hrs	Own labor	Hours	Value
<b>Lao PDR</b>	<b>1018100</b>	<b>4680</b>	<b>217</b>	<b>1538130</b>	<b>1048</b>	<b>1467</b>		<b>8.7</b>	<b>1890</b>
Urban	83860	354	237	929600	493	1884		1.7	400
Rural	934250	4288	218	608540	582	1045		7.1	1550
<b>North</b>	<b>310100</b>	<b>1566</b>	<b>198</b>	<b>331100</b>	<b>248</b>	<b>1334</b>		<b>2.5</b>	<b>500</b>
1 Phongsaly	23500	197	119	7730	12	627		0.3	40
2 Luangnamtha	19570	71	275	9350	15	613		0.2	60
3 Oudomxay	29650	202	147	17980	30	597		0.3	40
4 Bokeo	25800	138	187	15570	18	848		0.3	60
5 Luangprabang	67590	367	184	103180	67	1536		0.6	110
6 Huaphanh	38460	252	152	63110	37	1685		0.5	80
7 Xayaboury	105500	339	311	114170	68	1680		0.3	90
<b>Center</b>	<b>490100</b>	<b>2000</b>	<b>245</b>	<b>943490</b>	<b>620</b>	<b>1522</b>		<b>4.9</b>	<b>1200</b>
8 Vientiane M.	137800	265	520	531480	354	1501		1.0	520
9 Xiengkhuang	46540	195	239	17570	20	897		0.5	120
10 Vientiane P.	81990	301	273	138290	103	1345		0.5	140
11 Borikhamxay	39410	164	240	30620	17	1756		0.2	50
12 Khammuane	52300	401	131	80540	79	1026		0.4	50
13 Savannakhet	120480	592	203	139960	63	2227		2.1	430
18 Xaysomboon SR	11560	50	229	5027	15	344		0.1	20
<b>South</b>	<b>217900</b>	<b>1105</b>	<b>197</b>	<b>263560</b>	<b>184</b>	<b>1436</b>		<b>1.4</b>	<b>280</b>
14 Saravane	75170	284	264	41550	41	1024		0.6	160
15 Sekong	12990	88	147	2560	3	790		0.1	10
16 Champasack	107810	630	171	205310	122	1679		0.6	100
17 Attapeu	21930	103	213	14150	19	756		0.1	20

## 6. Household investments/construction

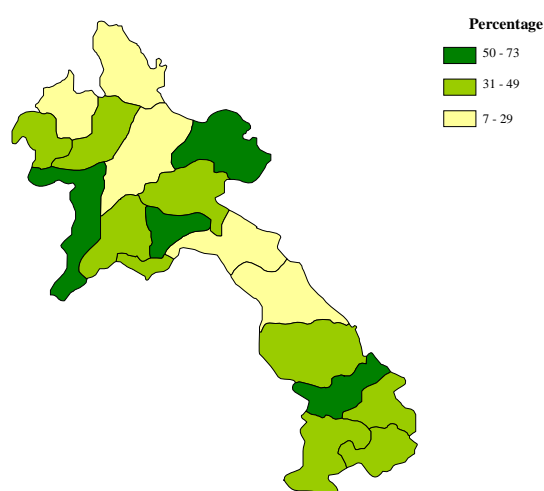
The household investments in buildings reached close to 175 billion Kip in 1997/98, about 95% of their total expenditure. Almost 40 % of the households made investment this year, with an exceptional high 73 % in Xayabury and a low 7 % in Phongsaly.

Except for Phongsaly, there were relatively low investments also in Luangnamtha, Borikhamxay, Xaysomboon Sepecial Region, and Attapeu.

One third of all investments were made in Vientiane Municipality And Vientiane Province and another third in Xayabury, Savannakhet and Champasack.

The South spent relatively more on building investments than the North. Investments in agriculture and business buildings are only 5 percent of total investments.

Household investment 1997/98



**Table 27: Household investments in housing, agricultural and business buildings, by provinces and regions in 1997/98, '000 Kip/ investing household**

	Engaged % HHs	Costs for Material	Hired labor	Mixed	Own labor	Total Investment	Percent invested in		
							Res house	Agriculture	Business
<b>Lao PDR</b>	<b>38</b>	<b>403</b>	<b>63</b>	<b>40</b>	<b>76</b>	<b>582</b>	<b>95</b>	<b>3</b>	<b>2</b>
<i>Urban</i>	36	958	157	159	128	1403			
<i>Rural</i>	38	294	44	17	66	421			
<b>North</b>	<b>39</b>	<b>300</b>	<b>47</b>	<b>31</b>	<b>94</b>	<b>472</b>	<b>95</b>	<b>3</b>	<b>2</b>
1 Phongsaly	7	428	30	139	175	772	100	0	0
2 Luangnamtha	29	147	12	1	40	200	88	7	5
3 Oudomxay	34	246	27	4	52	328	97	2	1
4 Bokeo	39	93	17	2	300	412	99	1	0
5 Luangprabang	25	441	65	8	34	547	95	1	4
6 Huaphanh	50	100	21	8	135	265	96	3	1
7 Xayaboury	73	424	73	68	70	635	95	5	1
<b>Center</b>	<b>34</b>	<b>518</b>	<b>83</b>	<b>58</b>	<b>65</b>	<b>724</b>	<b>94</b>	<b>3</b>	<b>3</b>
8 Vientiane M.	36	892	130	196	124	1342	95	3	2
9 Xiengkhuang	38	262	11	3	33	309	97	1	1
10 Vientiane P.	49	467	66	1	61	595	93	5	1
11 Borikhamxay	25	217	18	9	20	264	97	3	0
12 Khammuane	25	551	92	43	62	749	89	0	10
13 Savannakhet	31	397	95	10	37	539	95	4	1
18 Xaysomboon SR	55	115	19	6	37	178	84	13	3
<b>South</b>	<b>44</b>	<b>336</b>	<b>46</b>	<b>20</b>	<b>73</b>	<b>474</b>	<b>96</b>	<b>2</b>	<b>2</b>
14 Saravane	50	412	34	8	94	548	95	3	2
15 Sekong	33	329	53	10	245	637	99	1	0
16 Champasack	43	322	55	30	49	457	97	1	3
17 Attapeu	42	166	24	5	44	239	88	7	5

## 7. Economic activity and employment

The Laotian society is highly dependent on agriculture. Although the farmers as percent of the total work force do not increase, they have increased in number by 350 000 since 1992/93. As share of total work force the employed are also fairly constant.

There are small differences between the North and the South. In the Center the Vientiane Municipality, with farmers less than 50 % and employed 36 % is the exception.

Most farmers produce for their own consumption as well as for the market. The market penetration is lowest in Luangnamtha, Sekong and Phongsaly, and highest in Xayabury and LuangPrabang (among mostly rural population). The time module showed that 53 % of all hours work as employed were in Government, 29 % in private sector, 12% as farm workers and 6 % in other areas.

The Population Census showed that almost 30 % of the employed were self employed, and that 60 % of those were engaged in trade ( see chart labor force )

Farmer 1997/98

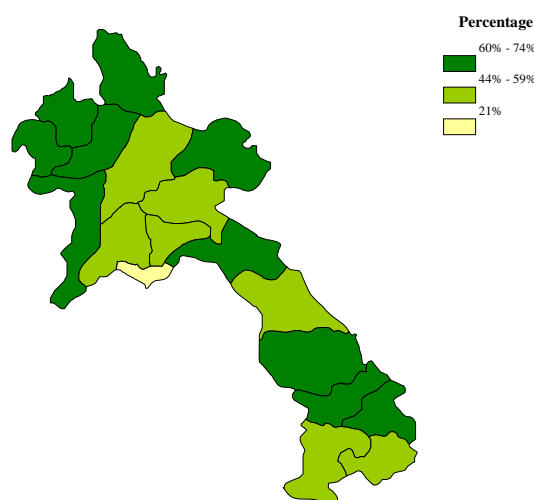
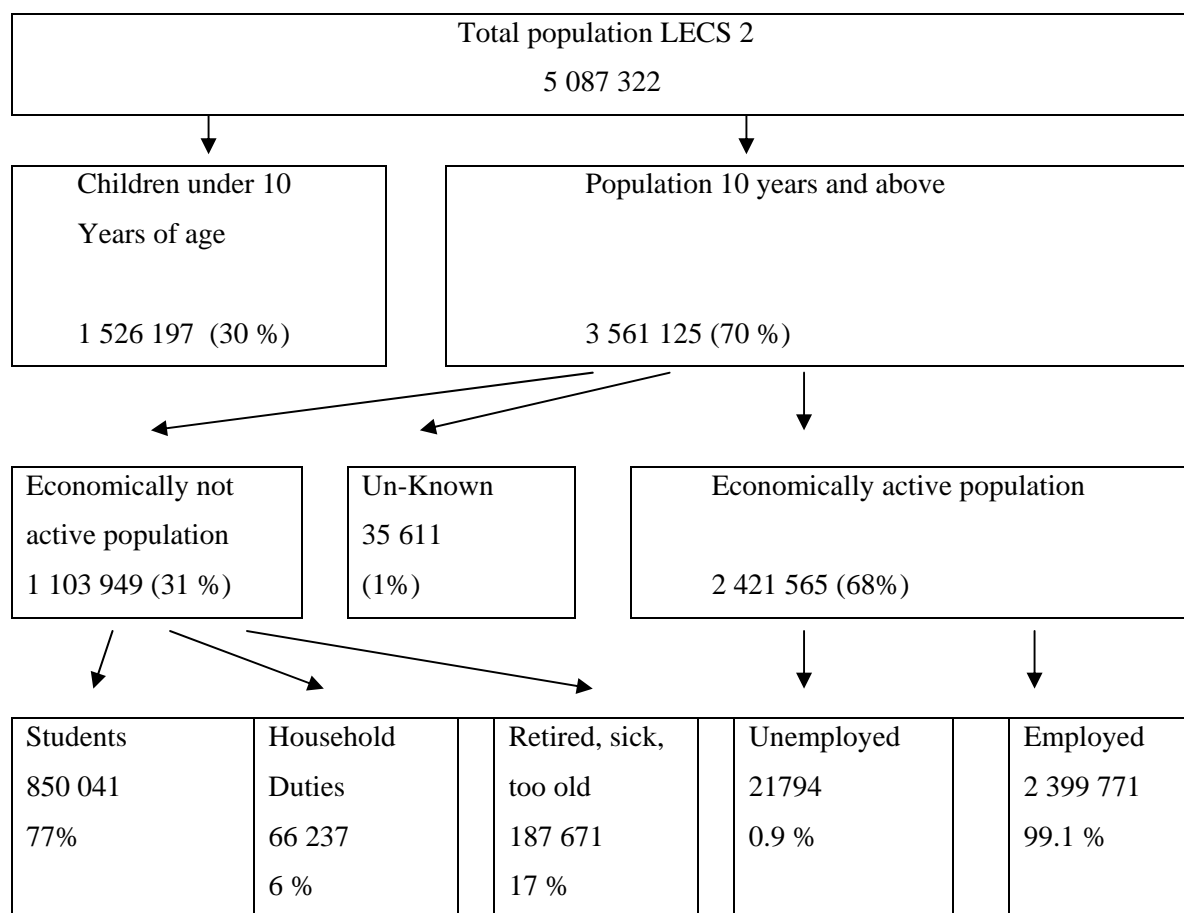


Table 28: Main economic activities for population 10+, by Provinces and regions in 1997/98.

	Main economic activity last 12 months						Employed and farmers by main activity last 7 days					
	Em- ployed	Farmer	Unem- ployed	Student	Home- maker	Retired/ too old	Unable to work	Paid employee	Em- ployer	Self em- ployed	Subsistence farmer	Unpaid family worker
<b>Lao PDR</b>	<b>13</b>	<b>54</b>	<b>1</b>	<b>24</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>10</b>	<b>0</b>	<b>13</b>	<b>67</b>	<b>10</b>
<i>Urban</i>	39	17	2	32	4	4	1	37	1	24	26	12
<i>Rural</i>	8	63	0	23	2	5	1	6	0	11	74	9
<b>North</b>	<b>8</b>	<b>62</b>	<b>0</b>	<b>23</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>8</b>	<b>80</b>	<b>5</b>
1 Phongsaly	6	66	0	19	5	3	2	4	0	8	83	6
2 Luangnamtha	7	74	0	15	1	3	0	4	0	8	80	8
3 Oudomxay	6	69	0	20	1	4	1	5	0	4	88	3
4 Bokeo	10	60	0	22	3	4	1	7	0	16	68	9
5 Luangprabang	13	49	0	28	4	4	2	11	0	11	72	6
6 Huaphanh	4	69	0	21	2	3	1	2	0	9	85	5
7 Xayaboury	8	62	1	24	1	5	1	8	1	5	82	5
<b>Center</b>	<b>18</b>	<b>48</b>	<b>1</b>	<b>26</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>14</b>	<b>0</b>	<b>17</b>	<b>56</b>	<b>3</b>
8 Vientiane M.	36	21	2	33	4	4	1	35	0	19	35	10
9 Xiengkhuang	9	52	0	29	2	7	1	10	0	7	76	6
10 Vientiane P.	15	46	2	31	1	5	1	8	0	20	51	21
11 Borikhamxay	7	62	1	27	1	2	0	5	0	4	79	12
12 Khammuane	13	59	0	23	1	3	1	7	1	12	65	14
13 Savannakhet	10	63	1	18	1	6	1	8	0	22	57	13
18 Xaysomboon SR	10	59	0	26	1	3	1	7	0	6	85	2
<b>South</b>	<b>11</b>	<b>59</b>	<b>0</b>	<b>23</b>	<b>2</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>0</b>	<b>11</b>	<b>72</b>	<b>8</b>
14 Saravane	10	64	0	19	1	5	2	9	0	8	78	5
15 Sekong	6	71	0	19	1	2	1	5	0	4	87	3
16 Champasack	12	55	0	25	2	5	1	10	0	13	66	10
17 Attapeu	11	57	0	25	1	6	1	9	0	7	78	6

LECS 2 estimates that the population at mid 1997 was 5 087 322 persons of which children under 10 years of age and population 10 years above is covered 30% and 70% respectively.



The distribution of the population by main activity gives the same picture as the 1995 Population Census. LECS 2 has relatively more students and less in household duties but this probably reflects differences in how the surveys were made. The share of unemployed is lower but this is not a clear concept in a economy where most people are self-employed. Since LECS1 1992/93, the economically active population (aged 15 and above) has increased with 380 000 people or with 3.7 % per year. The farming population has increased by 240 000 (15%) people since 1992-93, working as paid employee, employer, self employed or unpaid family worker with 140 000 (43 %).

With employed is meant paid employees, employer, (subsistence) farmer and unpaid family worker. A person can work as a farmer but temporarily as self-employed in household business or as paid employees. He/she can also be a student and at the same time work on a farm. LECS2 has estimated the distribution of the employed in two ways, (1) as the main activity during the last 7 days reported by the respondents in table 29 and (2) as number of working hours ( for detail information see appendix 3, time use )

**Table 29: Number of persons by main activity during the last 7 days. Percentages.**

Region	Percentages					
	Paid employee	Employer	Selfemployed	Subsistence Farmer	Unpaid family worker	Total
North	6	0	8	80	5	100
Center	14	0	17	56	13	100
South	9	0	11	72	5	100
Lao PDR	10	0	13	67	9	100
Urban	36	1	24	26	12	100
Rural	6	0	11	75	9	100

Measured from the number of hours worked (the time use) 80 % of the employed are selfemployed. Agriculture takes 55 % and household business 25 %. The Government encompasses 12 % and the private sector as employed 7 %. Self-employment is largest in Huaphanh (98 %), Xaysomboon SR (96%) and Bokeo (96%) and lowest in Vientiane Municipality (59%), Borikhamxay (73 %) and Khammuane (74 %). The provinces in the North have 88 %, the Center 73 % and the South 83 % self-employed.

Subsistence farming is the main occupation in all provinces except Vientiane Municipality (21 %), Vientiane Province. (46%) and Luangprabang (49 %). It is highest in Luangnamtha (74%), Sekong (71%), Huaphanh and Oudomxay (69 %). Of all households about 95 percent have some agricultural production. There are almost 600 000 households with production of rice and almost half of them produce rice enough for their own consumption and half of them have to buy some additional rice. The average amount bought was 37 000 KIP per month, approximately 50 kg per month.

Government employed is largest in the Centre (16 %), highest in Vientiane Municipality (23%). Huaphanh and Xaysomboon have the lowest share of Government employment. The Center also has the largest share working in household business (31 %). The South and the North has a share of around 20 %, . Sekong has by far the most one-sided employment structure with 85 % working in the agriculture.

**Table 30: Household employment by activity. Percentage of hours**

	Percent work				
	Agriculture	HHS business	Employed		
	Self-employed and employed	Self- employed	Govern- ment	Private sector	Others
<b>North</b>	<b>69.3</b>	<b>19.0</b>	<b>7.6</b>	<b>2.4</b>	<b>1.8</b>
Phongsaly	83.6	9.2	6.3	0.5	0.3
Luangnamtha	78.2	14.4	5.2	1.1	1.1
Oudomxay	75.8	15.1	6.4	1.0	1.7
Bokeo	80.4	15.1	3.2	1.2	0.1
Luangprabang	58.3	19.9	12.8	6.1	2.9
Huaphanh	75.8	21.7	1.7	0.6	0.2
Xayabury	56.0	28.8	9.9	1.9	3.4
<b>Centre</b>	<b>42.0</b>	<b>31.1</b>	<b>15.8</b>	<b>9.8</b>	<b>1.3</b>
Vientiane M.	14.4	44.6	23.2	17.8	0.0
Xiengkhuang	62.4	19.7	15.9	0.7	1.3
Vientiane P.	43.7	36.8	10.2	8.1	1.2
Borikhamxay	50.0	22.8	14.8	7.3	5.0
Khammuane	46.6	27.4	14.1	7.6	4.2
Savannakhet	71.5	13.7	10.3	3.7	0.8
Xaysomboon SR	59.8	35.8	3.3	0.1	1.1
<b>South</b>	<b>61.1</b>	<b>21.4</b>	<b>10.8</b>	<b>6.2</b>	<b>0.5</b>
Saravane	64.7	20.9	11.0	1.9	1.4
Sekong	84.6	5.6	9.4	0.2	0.2
Champasack	57.0	23.1	10.3	9.4	0.3
Attapeu	61.2	23.8	14.4	0.6	0.0
<b>Lao PDR</b>	<b>54.7</b>	<b>25.2</b>	<b>12.1</b>	<b>6.7</b>	<b>1.3</b>

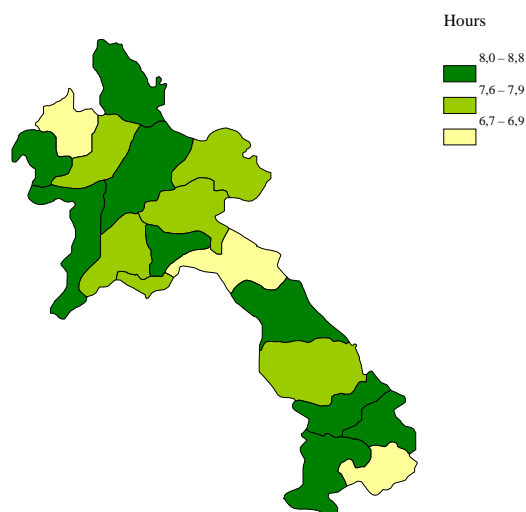
## 8. Time use for economic activities

On average a person 10 years and above spend 8 hours per day on economic activities. 6.3 hours are income generating and the rest refers to home activities. Agriculture, collecting firewood, water, fishing and hunting take up 60 % of the time in rural household, while work as employee or business work take 10 %. Urban households spend 50 % of their time on business or as employee and 20 % on agriculture and related activities.

There are small differences between the North and the South. Sekong is the most dependent on agriculture and related activities. Savannakhet and Xiengkhuang have relatively more time spent on home activities than in other provinces.

See Appendix 3 for short analysis of time use in a gender perspective.

**Time use for all economic activities 1997/98**



**Table 31: Time use for economic activities, by Provinces and regions in 1997/98, hours per day .**

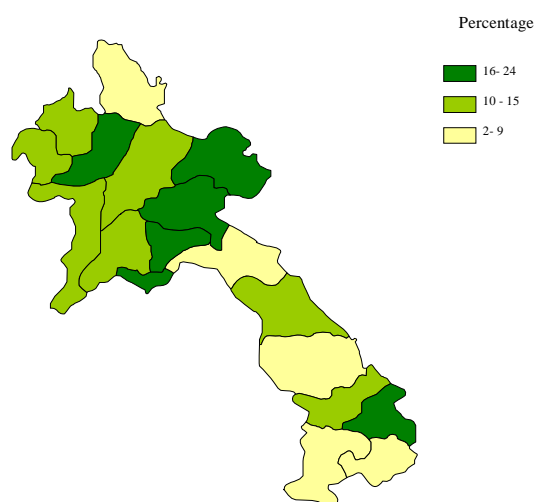
	Work as employed	Own business	Agricultural work	Collecting firewood	Fetching water	Hunting, fishing	Construction	Handicraft etc.	Cooking cleaning	Care	Total
<b>Lao PDR</b>	<b>0.7</b>	<b>0.8</b>	<b>3.0</b>	<b>0.2</b>	<b>0.2</b>	<b>0.8</b>	<b>0.1</b>	<b>0.5</b>	<b>1.0</b>	<b>0.6</b>	<b>7.9</b>
<i>Urban</i>	2.1	2.1	1.3	0.0	0.1	0.2	0.0	0.3	1.1	0.6	7.9
<i>Rural</i>	0.4	0.5	3.3	0.2	0.3	1.0	0.1	0.5	1.0	0.6	7.9
<b>North</b>	<b>0.5</b>	<b>0.6</b>	<b>3.5</b>	<b>0.2</b>	<b>0.2</b>	<b>0.9</b>	<b>0.1</b>	<b>0.6</b>	<b>0.9</b>	<b>0.6</b>	<b>8.0</b>
1 Phongsaly	0.3	0.3	4.6	0.3	0.1	1.0	0.0	0.4	1.2	0.5	8.8
2 Luangnamtha	1.4	0.5	1.9	0.2	0.3	1.0	0.1	0.2	0.6	0.5	6.7
3 Oudomxay	0.4	0.6	3.4	0.2	0.2	0.8	0.1	0.7	0.9	0.6	7.6
4 Bokeo	0.3	0.6	4.3	0.1	0.3	0.6	0.0	0.2	1.0	1.0	8.4
5 Luangprabang	0.8	0.7	2.9	0.1	0.1	1.5	0.1	0.6	0.8	0.6	8.2
6 Huaphanh	0.1	0.6	3.6	0.2	0.1	0.5	0.1	0.7	1.1	0.7	7.7
7 Xayaboury	0.6	0.8	3.8	0.2	0.3	0.7	0.2	0.7	0.7	0.2	8.1
<b>Center</b>	<b>0.9</b>	<b>1.0</b>	<b>2.5</b>	<b>0.2</b>	<b>0.2</b>	<b>0.7</b>	<b>0.1</b>	<b>0.4</b>	<b>1.1</b>	<b>0.7</b>	<b>7.8</b>
8 Vientiane M.	2.0	2.1	1.3	0.0	0.1	0.3	0.0	0.5	1.1	0.4	7.8
9 Xiengkhuang	0.3	0.3	3.1	0.4	0.2	0.5	0.0	0.5	1.4	0.7	7.6
10 Vientiane P.	0.7	1.1	2.8	0.2	0.3	0.8	0.1	0.3	1.0	0.3	7.6
11 Borikhamxay	0.5	0.4	3.1	0.2	0.3	0.9	0.0	0.2	0.8	0.5	6.9
12 Khammuane	0.9	0.9	3.4	0.4	0.3	1.5	0.1	0.4	0.5	0.5	8.8
13 Savannakhet	0.4	0.3	2.5	0.2	0.3	0.7	0.1	0.5	1.5	1.2	7.8
18 Xaysomboon SR	0.2	1.1	3.1	0.3	0.2	0.8	0.1	0.3	1.4	0.7	8.1
<b>South</b>	<b>0.7</b>	<b>0.7</b>	<b>3.4</b>	<b>0.2</b>	<b>0.2</b>	<b>1.0</b>	<b>0.1</b>	<b>0.4</b>	<b>0.7</b>	<b>0.5</b>	<b>8.0</b>
14 Saravane	0.5	0.6	3.4	0.2	0.3	0.7	0.1	0.4	1.1	0.8	8.1
15 Sekong	0.3	0.2	4.6	0.3	0.5	0.7	0.0	0.3	0.7	0.7	8.2
16 Champasack	0.9	0.8	3.2	0.2	0.2	1.2	0.1	0.4	0.5	0.4	8.0
17 Attapeu	0.5	0.7	2.9	0.2	0.2	1.1	0.1	0.2	0.7	0.2	6.9

## 9. Restrictions

Lack of natural water resources to irrigate land is the most common obstacle to generate more income in the village. On average there is less than 20 % of the villages that lack of water with small variations between the regions. Lack of land is considered as a problem mostly in urban areas, more in Xiengkhuang, Vientiane Municipality and Xaysomboon Special Region than in other provinces. Soil fertility is considered as a problem in 10 to 15 out of 100 in Luangnamtha, Phongsaly, Sekong and Savannakhet.

Insects create problems in 13 % of the villages, more than 20 % in Luangnamtha and Sekong. The Center is less affected. Luangnamtha and Saravane were in particular hit by drought, flooding in Khammuane , Attapeu, Borikhamxay, Savannakhet and Champasack.

**Lack of agriculture land 1997/98**



**Table 32: Main restriction for not earning more money, by provinces and regions in 1997/98, Percent of village lack of different resources and other restrictions**

	Knowledge	Transports	Market	Jobs	Savings	Credits	Land	Soil fertility	Water	Seeds	Insects	Vermin	Drought	Flooding	Mines/ bombs
<b>Lao PDR</b>	<b>7</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>7</b>	<b>11</b>	<b>6</b>	<b>17</b>	<b>1</b>	<b>13</b>	<b>5</b>	<b>11</b>	<b>8</b>	<b>1</b>
<i>Urban</i>	8		1	10	3	8	20	5	14	2	10	6	4	8	1
<i>Rural</i>	7	5	3	2	1	7	10	7	18	1	14	5	13	9	1
<b>North</b>	<b>9</b>	<b>7</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>7</b>	<b>13</b>	<b>7</b>	<b>15</b>	<b>1</b>	<b>16</b>	<b>7</b>	<b>12</b>	<b>2</b>	
1 Phongsaly	11	3	9		1	10	4	10	11	2	13	14	11	3	
2 Luangnamtha	5						10	14	12		27	11	21	1	
3 Oudomxay	10	9	4	2		4	18	6	18	3	12	6	9		
4 Bokeo	17	8	3			3	12	6	20		14	6	6	4	
5 Luangprabang	6	4		2		12	15	7	12		18	8	16	2	
6 Huaphanh	8	19	4	1		2	16	6	19		12	4	8	1	
7 Xayaboury	10	6	10			12	10	2	15	2	16	4	11	3	
<b>Center</b>	<b>7</b>	<b>0</b>	<b>3</b>	<b>6</b>	<b>1</b>	<b>5</b>	<b>12</b>	<b>6</b>	<b>18</b>	<b>1</b>	<b>11</b>	<b>4</b>	<b>9</b>	<b>12</b>	<b>2</b>
8 Vientiane M.	3		1	17	3	5	20	4	12	3	8	8	7	10	
9 Xiengkhuang		3	1				24	1	22		18	19	3	1	9
10 Vientiane P.	6	4	3	2		7	15	2	20	1	16	2	10	9	
11 Borikhamxay	8	3	3	5	2	4	7	4	20	4	19	4	1	15	1
12 Khammuane	12	5	3	2		2	10	9	17		6	1	10	20	2
13 Savannakhet	10	3		3	2	7	5	11	19		10		13	15	3
18 Xaysomboon SR	1	11	2	2		10	21	4	28		16	6			
<b>South</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>10</b>	<b>6</b>	<b>6</b>	<b>19</b>	<b>1</b>	<b>14</b>	<b>5</b>	<b>15</b>	<b>11</b>	<b>0</b>
14 Saravane	3	3	3			10	11	5	22		13	6	24	2	1
15 Sekong	7	1				3	17	15	11		22	1	7	4	1
16 Champasack	5	2		4	2	12	2	6	19	1	14	5	14	15	
17 Attapeu	10	7		1	5	4	9	1	16	2	12	6	8	20	

## 10. Income, redistribution and social safety nets

The households are to a large extent dependent on their net income from informal businesses. Only in Vientiane Municipality are other income sources larger and in Savannakhet of similar size. Income from employment is the second most important source of income, for the central provinces in particular, but even for Luangnamtha and Attapeu.

Remittances, of which a large part come from abroad, seem to be the lifeline for in particular provinces in the South and for the affluent Vientiane Municipality. This safety net may, due to the international financial crises, be considered insecure. If so, the safety nets of the South are not as good as they look.

Redistribution of income is almost non-existent.

Sekong and Phongsaly are beyond all doubt the most disadvantaged provinces.

Net income agriculture 1997/98

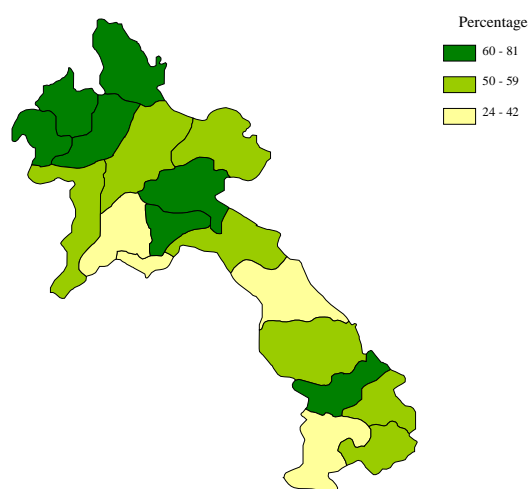


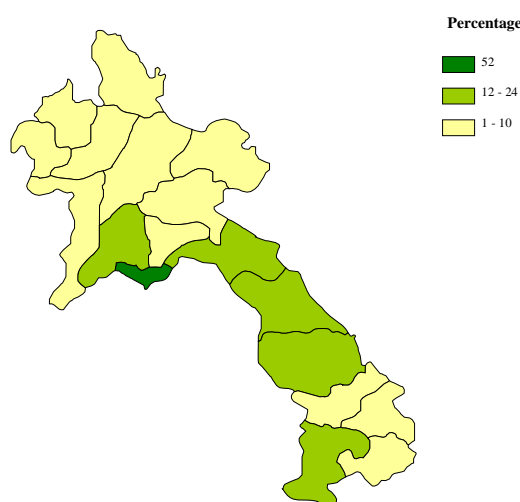
Table 33: Income, redistribution and safety nets, by provinces and regions in 1997/98.

	Net income agriculture	Own cons.	Im-puted rent,	Business net income,	Wages	Property income	Income from Transfers	Total income	Taxes	Remittances	
	%	share	%	%	%	%	%			Received	Paid
<b>Lao PDR</b>	<b>45</b>	<b>0.6</b>	<b>4</b>	<b>20</b>	<b>15</b>	<b>2</b>	<b>13</b>	<b>100</b>	<b>0.2</b>	<b>11</b>	<b>2</b>
<i>Urban</i>	<i>10</i>	<i>0.5</i>	<i>6</i>	<i>37</i>	<i>24</i>	<i>6</i>	<i>17</i>	<i>100</i>	<i>0.3</i>	<i>15</i>	<i>2</i>
<i>Rural</i>	<i>60</i>	<i>0.6</i>	<i>3</i>	<i>12</i>	<i>12</i>	<i>1</i>	<i>10</i>	<i>100</i>	<i>0.1</i>	<i>10</i>	<i>2</i>
<b>North</b>	<b>56</b>	<b>0.6</b>	<b>4</b>	<b>21</b>	<b>14</b>	<b>1</b>	<b>4</b>	<b>100</b>	<b>0.3</b>	<b>4</b>	<b>1</b>
1 Phongsaly	81	0.8	2	12	4	0	2	100	0.0	2	1
2 Luangnamtha	60	0.9	3	9	26	1	2	100	0.1	2	2
3 Oudomxay	71	0.8	8	8	10	0	3	100	0.3	1	2
4 Bokeo	60	0.7	10	14	12	1	4	100	0.1	4	1
5 Luangprabang	54	0.6	2	25	13	1	5	100	0.2	4	2
6 Huaphanh	51	0.8	5	35	4	0	4	100	0.0	4	1
7 Xayaboury	51	0.5	4	21	18	2	5	100	0.7	5	1
<b>Center</b>	<b>39</b>	<b>0.6</b>	<b>5</b>	<b>15</b>	<b>20</b>	<b>3</b>	<b>17</b>	<b>100</b>	<b>0.1</b>	<b>16</b>	<b>2</b>
8 Vientiane M.	24	0.4	5	18	22	3	28	100	0.1	25	1
9 Xiengkhuang	62	0.8	7	2	20	1	8	100	0.0	7	5
10 Vientiane P.	49	0.6	6	24	13	1	6	100	0.1	6	4
11 Borikhamxay	51	0.7	4	17	26	1	1	100	0.1	1	1
12 Khammuane	42	0.7	6	21	13	3	15	100	0.1	14	7
13 Savannakhet	50	0.8	5	3	22	8	10	100	0.2	10	2
14 Xaysomboon SR	79	0.6	3	6	5	0	6	100	0.1	6	1
<b>South</b>	<b>46</b>	<b>0.5</b>	<b>2</b>	<b>30</b>	<b>9</b>	<b>1</b>	<b>11</b>	<b>100</b>	<b>0.1</b>	<b>9</b>	<b>2</b>
15 Saravane	77	0.5	2	3	4	4	11	100	0.2	11	2
16 Sekong	59	0.8	2	4	4	0	32	100	0.0	30	1
17 Champasack	35	0.5	2	42	10	1	10	100	0.0	7	3
18 Attapeu	56	0.7	3	17	17	1	6	100	0.0	5	1

## 11. Possession of goods

There is a significant difference between urban and rural areas and it has not diminished since 1992/3. Both urban and rural households have been able to increase their possession of most durable goods. Refrigerators, vacuum cleaners, washing machines, electric rice cookers and food processors are, as they were in 1992/3, more or less an urban phenomena. Vientiane Municipality is by far the most affluent province. The South is generally better off than the North.

**Possession of motor bike 1997/98**



**Table 34: Possession of durable goods, by Provinces and regions 1997/98.**

	Car	Motor Bike	Bike	TV	Radio	Video	Refrigerator	Vacuum cleaner	Washing machine	Rice cooker	Food processor
<b>Lao PDR</b>	<b>4</b>	<b>15</b>	<b>56</b>	<b>30</b>	<b>52</b>	<b>20</b>	<b>12</b>	<b>1</b>	<b>2</b>	<b>12</b>	<b>7</b>
<i>Urban</i>	12	49	80	72	64	36	48	3	8	47	29
<i>Rural</i>	2	8	52	22	50	16	4	0	0	4	2
<b>North</b>	<b>2</b>	<b>5</b>	<b>34</b>	<b>11</b>	<b>55</b>	<b>17</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>
1 Phongsaly	0	2	18	1	60	4	0	0	0	0	1
2 Luangnamtha	0	1	32	4	47	15	1	0	0	1	1
3 Oudomxay	1	3	27	5	46	15	2	0	1	2	1
4 Bokeo	0	6	29	21	39	17	2	0	1	2	1
5 Luangprabang	2	7	37	7	63	22	4	0	1	4	4
6 Huaphanh	0	3	30	4	60	41	3	0	1	4	3
7 Xayaboury	5	7	51	28	54	29	0	0	1	1	2
<b>Center</b>	<b>6</b>	<b>24</b>	<b>71</b>	<b>47</b>	<b>56</b>	<b>24</b>	<b>21</b>	<b>1</b>	<b>3</b>	<b>21</b>	<b>12</b>
8 Vientiane M.	14	52	82	86	64	43	60	4	8	58	35
9 Xiengkhuang	3	10	63	11	52	14	1	1	1	1	1
10 Vientiane P.	3	24	75	50	58	23	16	0	1	16	11
11 Borikhamxay	4	14	65	42	39	35	2	0	0	2	0
12 Khammuane	4	16	57	38	53	21	16	1	1	14	4
13 Savannakhet	2	13	74	23	38	8	7	0	1	7	3
18 Xaysomboon SR	0	2	32	8	54	9	1	0	0	2	2
<b>South</b>	<b>2</b>	<b>9</b>	<b>57</b>	<b>22</b>	<b>38</b>	<b>16</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>2</b>
14 Saravane	2	7	61	23	38	8	3	0	1	4	2
15 Sekong	1	3	33	6	19	30	0	0	0	1	0
16 Champasack	2	12	57	27	39	19	6	0	1	7	3
17 Attapeu	1	5	58	7	43	12	0	0	0	2	1

## 12. Sustainable use of land

Slash and burn was practised in 45 percent of all villages, more dominating in the North and in other regions. About 280 000 households practiced slash and burn and out of them were more than 70 % in the North. Of all farming households, 80 % were slash and burn farmers in the North, 13 % in the Center and 22 % in the South.

Shifting cultivation is more frequent in the Center, in particular in Savannakhet. Except for Sekong, it is little used in the South.

An overwhelming part of the villages are taking more firewood or cutting down more trees than the regrowth. Vientiane M. is an exception.

Almost half of the villages had a development project running during the survey. The provinces in the North, except Xayabury, had fewer projects running than the average. Attapeu also had relatively few projects.

Data mentioned above are obtained from LECS2, the detail information on agricultural practices could be seen in 1999 agriculture census .

Slash and burn practice 1997/98

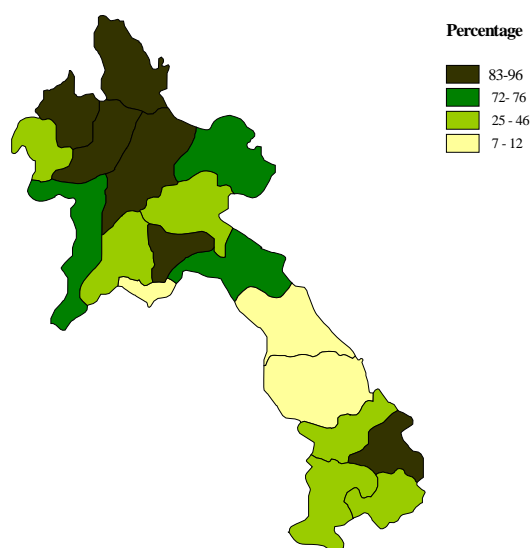


Table 35: Agricultural practices, by provinces and regions 1997/98, % villages

	Slash and burn pract	Shifting cultivation	Regrowth	Development project
<b>Lao PDR</b>	<b>45</b>	<b>37</b>	<b>83</b>	<b>44</b>
<i>Urban</i>	13	43	50	55
<i>Rural</i>	52	36	36	41
<b>North</b>	<b>83</b>	<b>23</b>	<b>89</b>	<b>29</b>
1 Phongsaly	84	15	88	22
2 Luangnamtha	84	18	100	23
3 Oudomxay	96	5	89	15
4 Bokeo	75	16	89	29
5 Luangprabang	89	31	75	25
6 Huaphanh	76	10	98	19
7 Xayaboury	72	47	96	57
<b>Center</b>	<b>24</b>	<b>50</b>	<b>75</b>	<b>52</b>
8 Vientiane M.	7	51	26	61
9 Xiengkhuang	46	10	97	55
10 Vientiane P.	45	55	87	54
11 Borikhamxay	73	44	80	47
12 Khammuane	12	51	87	43
13 Savannakhet	9	65	96	50
18 Xaysomboon SR	83		97	33
<b>South</b>	<b>37</b>	<b>29</b>	<b>90</b>	<b>47</b>
14 Saravane	44	18	96	48
15 Sekong	93	66	91	63
16 Champasack	28	32	87	51
17 Attapeu	25	12	88	15

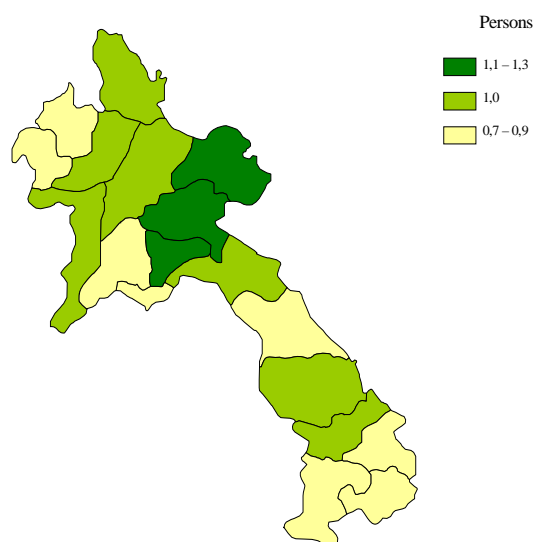
## 13. Dependency

The dependency ratio is the number of children below age 15 plus the number of people above 64 years of age divided by the number of persons in the household age 15-64. It indicates the burden of those of working age to be responsible for the children and aging population. The ratio of 1 (as in rural areas) thus tells that one adult on average is responsible for the well-being of one more person. The higher the ratio the more is the dependency.

It is only in Vientiane Municipality that the ratio is significantly lower than 1. In Xiengkhuang, Xaysomboon and Huaphanh one adult has on average more than one in the household to take care for.

Average number of consumption unit is calculated as 1 for the first adult in the household, 0,9 for other adults, 0,4 for children below age 7 and 0.7 for children aged 7-15. The consumption unit approach reflects the fact that members of a household can share some expenses and that small children needs less food than an adult or a teenager.

**Dependency rate 1997/98**



**Table 36: Dependency rate, by provinces and regions 1997/98.**

	Dependency Rate	Average no. of consumption unit
<b>Lao PDR</b>	<b>0.9</b>	<b>5.0</b>
<i>Urban</i>	0.7	5.0
<i>Rural</i>	1.0	5.0
<b>North</b>	<b>1.0</b>	<b>4.9</b>
1 Phongsaly	1.0	4.6
2 Luangnamtha	0.8	4.6
3 Oudomxay	1.0	4.9
4 Bokeo	0.9	4.4
5 Luangprabang	1.0	4.8
6 Huaphanh	1.1	5.4
7 Xayaboury	1.0	4.9
<b>Center</b>	<b>0.9</b>	<b>5.1</b>
8 Vientiane M.	0.7	5.0
9 Xiengkhuang	1.2	5.5
10 Vientiane P.	0.9	5.2
11 Borikhamxay	1.0	4.7
12 Khammuane	0.9	4.9
13 Savannakhet	1.0	5.1
14 Xaysomboon SR	1.3	4.9
<b>South</b>	<b>0.9</b>	<b>4.9</b>
15 Saravane	1.0	5.0
16 Sekong	0.9	5.1
17 Champasack	0.9	4.8
18 Attapeu	0.9	5.0

## **Appendix 1. LECS 2 estimates of population**

### *Population mid 1997*

LECS 2 estimates that the population at mid 1997 was 5 087 322 persons. Around 55 % of the total population are of age 19 or younger, and 30 % have not yet reached 10 years of age – the same proportion that was estimated in LECS1, 1992/93 and in the Population Census of 1995

The population in 1992/93 was estimated to 4 469 500 which means that the population has increased by 617 822 during 5 years. This is a growth rate of 2.6 percent per year. The LECS 2 estimate of population is slightly higher than in the 1995 Population Census. The average household size was 6.5 persons, slightly lower than in 1992/93 but 6.0 in the Census. Comparisons with the Census data indicates that LECS has more persons in the age groups below 10 years than extrapolated from the Census. One explanation to this is that children born during the last 12 months was underestimated in the Census, as was also mentioned in the Census report. LECS 2 seems to have captured newly born children better. LECS 2 also has higher number of persons in age group 35-39 and 45 – 49 compared to the Census.

The population by sex, age group, provinces urban and rural are presented in the following tables.

**Table 1: Population estimates by age and sex. Numbers and percentages.**

Age group	Sex				Total	Sex ratio
	Male	%	Female	%		
0 - 4	360335	14.3	353840	13.8	714175	1.02
5 - 9	402026	15.9	387883	15.1	789909	1.04
10 - 14	391919	15.5	358912	14.0	750831	1.09
15 - 19	264151	10.5	273497	10.7	537648	0.97
20 - 24	163831	6.5	193167	7.5	356997	0.85
25 - 29	155497	6.2	188707	7.4	344204	0.82
30 - 34	138495	5.5	160852	6.3	299347	0.86
35 - 39	165139	6.6	162110	6.3	327249	1.02
40 - 44	111255	4.4	102892	4.0	214147	1.08
45 - 49	104868	4.2	101690	4.0	206558	1.03
50 - 54	71771	2.8	73935	2.9	145706	0.97
55 - 59	61011	2.4	61096	2.4	122107	1.00
60 - 64	44018	1.7	50005	1.9	94022	0.88
65 - 69	38969	1.5	38148	1.5	77118	1.02
70 - 74	19781	0.8	24521	1.0	44302	0.81
75 +	27943	1.1	35058	1.4	63001	0.80
<b>Total</b>	<b>2521009</b>	<b>100</b>	<b>2566313</b>	<b>100</b>	<b>5087322</b>	<b>0.98</b>

**Table 2: Population estimates by provinces, urban and rural. Numbers and percentages.**

	Whole country		Total	Regional distribution, % of total			
	Male	Female		Male		Female	
				Urban	Rural	Urban	Rural
<i>North</i>	798112	814095	1612206	4.9	44.6	4.9	45.6
Phongsaly	78742	73580	152322	3.3	48.4	3.6	44.7
Luangnamtha	60282	62954	123237	8.4	40.5	8.7	42.4
Oudomxay	108122	113256	221378	8.3	40.5	8.4	42.8
Bokeo	60648	61694	122342	2.4	47.2	2.5	47.9
Luangprabang	195913	200055	395968	5.5	44.0	5.1	45.4
Huaphanh	137155	141266	278421	3.1	46.1	3.3	47.5
Xayabury	157249	161289	318538	3.6	45.8	3.7	47.0
<i>Centre</i>	1230853	1230872	2461725	12.2	37.8	11.8	38.2
Vientiane M.	289847	282152	571999	32.2	18.4	30.6	18.7
Xiengkhuang	116225	120684	236909	3.3	45.7	3.0	47.9
Vientiane P.	165286	167564	332850	7.9	41.7	8.5	41.8
Borikhamxay	83826	88150	171976	2.7	46.0	3.0	48.3
Khammuane	163994	167050	331044	7.7	41.8	7.0	43.5
Savannakhet	380974	374807	755781	6.7	43.8	6.5	43.1
Xaysomboon	30701	30466	61167	3.7	46.5	4.0	45.8
<i>South</i>	492045	521346	1013390	4.7	43.8	5.0	46.4
Saravane	137787	150130	287917	2.7	45.1	3.1	49.1
Sekong	34531	37462	71994	7.7	40.2	8.1	43.9
Champasack	271218	281534	552752	5.8	43.3	6.1	44.9
Attapeu	48508	52220	100728	2.5	45.6	2.6	49.3
<b>Total</b>	<b>2521009</b>	<b>2566313</b>	<b>5087322</b>	<b>8.4</b>	<b>41.1</b>	<b>8.3</b>	<b>42.2</b>

Table 3: Population estimates by age in urban and rural areas with and without access to road

Age group	Urban		Rural areas				Total	
	Number	%	with access to road		without access to road		Number	%
	Number	%	Number	%	Number	%	Number	%
0 – 4	87577	10.3	263677	14.4	363019	15.1	714273	14.0
5 – 9	115260	13.6	291434	15.9	383354	16.0	790048	15.5
10 – 14	130811	15.4	280402	15.3	339542	14.1	750755	14.8
15 - 19	102656	12.1	190586	10.4	244390	10.2	537631	10.6
20 - 24	68875	8.1	117546	6.4	170543	7.1	356964	7.0
25 - 29	62682	7.4	121083	6.6	160440	6.7	344204	6.8
30 - 34	56938	6.7	110728	6.0	131572	5.5	299238	5.9
35 - 39	60360	7.1	116102	6.3	150521	6.3	326983	6.4
40 - 44	39273	4.6	79239	4.3	95635	4.0	214147	4.2
45 - 49	36000	4.2	74402	4.1	96157	4.0	206558	4.1
50 - 54	26127	3.1	46703	2.5	72876	3.0	145706	2.9
55 - 59	19698	2.3	42037	2.3	60372	2.5	122107	2.4
60 - 64	14662	1.7	33727	1.8	45633	1.9	94022	1.8
65 - 69	10308	1.2	29864	1.6	37212	1.5	77384	1.5
70 - 74	17713	2.1	38212	2.1	51378	2.1	107303	2.1
75 +	848937	100.0	1835742	100.0	2402643	100.0	5087322	100.0

**Table 4. Number of households and household size in strata areas**

	Number of households				Persons per households		
	Urban areas	Rural areas		Total	Urban areas	Rural areas	
		With access to road	Without access to road			With access to road	Without access to road
<i>North</i>	24898	77072	149990	251961	6.3	6.3	6.5
Phongsaly	1796	2043	21700	25539	5.8	4.1	6.1
Luangnamtha	3297	5298	11889	20484	6.4	6.0	5.9
Oudomxay	5564	5878	22300	33742	6.7	6.5	6.6
Bokeo	1050	5321	14568	20939	5.8	5.4	6.0
Luangprabang	6758	12979	42807	62545	6.2	6.3	6.3
Huaphanh	2509	14648	21175	38333	7.1	7.0	7.5
Xayabury	3925	30903	15551	50379	5.9	6.2	6.7
<i>Centre</i>	94780	154667	123885	373332	6.3	6.7	6.7
Vientiane M.	58775	18868	13869	91513	6.1	6.5	6.5
Xiengkhuang	2303	13327	16259	31890	6.5	7.3	7.7
Vientiane P.	8557	26521	14610	49687	6.4	6.8	6.6
Borikhamxay	1634	13470	12498	27602	6.0	6.1	6.4
Khammuane	6699	21824	22775	51298	7.3	6.4	6.2
Savannakhet	16163	56645	39447	112256	6.2	6.9	6.8
Xaysomboon SR	648	4012	4426	9086	7.3	6.6	6.7
<i>South</i>	15162	48945	93975	158083	6.5	6.4	6.4
Saravane	2696	16611	23675	42983	6.2	6.4	7.0
Sekong	1707	4239	4752	10699	6.7	6.7	6.8
Champasack	9939	22720	56181	88840	6.6	6.4	6.1
Attapeu	820	5374	9367	15562	6.2	6.4	6.6
<b>Total</b>	<b>134841</b>	<b>280684</b>	<b>367851</b>	<b>783376</b>	<b>6.3</b>	<b>6.5</b>	<b>6.5</b>

## Appendix 3: Time use

### *The survey*

In each selected household one person and one weekday was selected randomly to provide data on what he/she has done in that particular day and night. The activities for 24 hours were thus recorded. The following activities were specified

1. Sleeping
2. Eating, drinking, personal care
3. School (also homework)
4. Work as employed
5. Own business work
6. Tending rice
7. Tending other crops
8. Tending animals
9. Fetching water
10. Collecting firewood
11. Hunting
12. Fishing
13. Buying/shopping
14. Construction
15. Weaving, sewing, textile care
16. Handicraft
17. Cooking, baking
18. Washing, cleaning, do the dishes
19. Care for children/adults/elderly
20. Travels
21. Leisure time
22. Others

For “work as employed” four codes were used for farm worker (only as employed), government sector, private sector and others. Own business work was coded according to the International Standard Industrial Classification of all Economic Activities (ISIC), 2 digit level. Tending rice and other crops were specified into planting, irrigating, tending, harvesting and converting. Finally for travel, a code for mode of travel was used to distinguish between travelling by foot, bike, motorbike, car, bus, aeroplane, boat, taxi/tuk-tuk, and in some other ways.

The time uses of 8 882 persons were recorded and they were distributed by age group, and sex like this:

<b>Age group</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
0-14	360	410	770
15-64	4307	3596	7903
65+	135	74	209
<b>Total</b>	<b>4802</b>	<b>4080</b>	<b>8882</b>

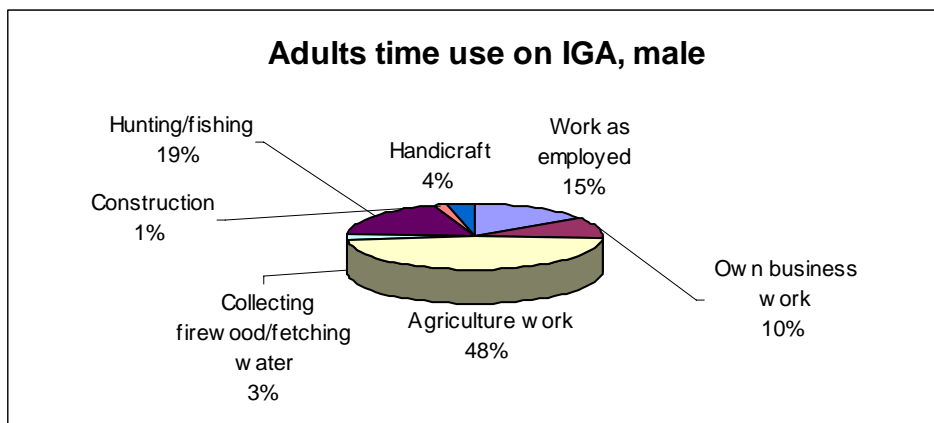
**All weekdays were included with the following percentages:**

Monday	16
Tuesday	15
Wednesday	16

Thursday	15
Friday	15
Saturday	12
Sunday	12

### Survey results

A Lao persons spend on average 6.3 hours per fortnight on income generating activities, 1.7 hours on household work, 0.7 hours on education, 14 hours as leisure time (inclusive of sleeping, eating and drinking) and 1.3 hours on others (inclusive of travels). Income generating activities (IGA) have been defined as activity 4 to 12, 14 to 16 mentioned.

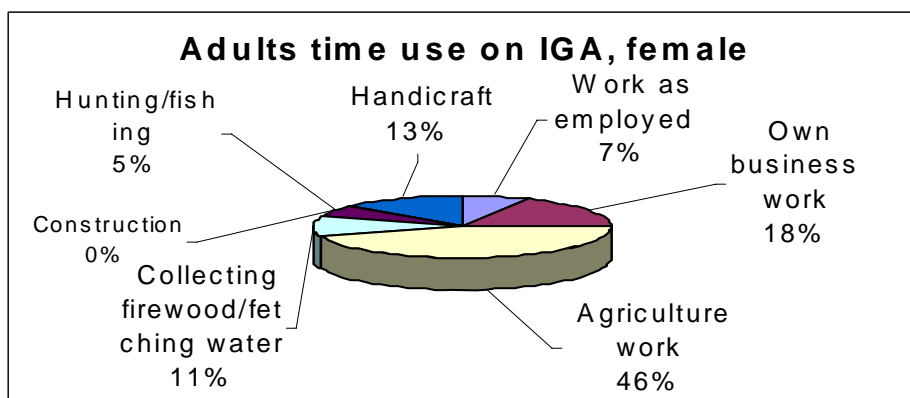


Adults spend on average 6.6 hours per fortnight on IGA, 1.8 hours on household work, 0.4 hours studying, 14 hours in leisure mood and 1.3 hours on other activities. There is no difference between members of urban and rural areas in how many hours are spent on IGA, but there are large differences in what these hours are spent on. Relatively high productive hours such as work as employed and own business work are more frequent in urban areas. The further away from centers and roads the fewer are these hours. In urban areas 4.5 hours are on average spent on work as employed and own business work compared to 1.4 and 0.8 hours in rural areas with and without access to road. On the contrary agriculture work dominates the IGA in rural areas and the remoteness means more hours used for collecting firewood, fetching water, hunting and fishing. Household work is more frequent in urban areas and lesser in remote areas, while hours on education grow with urbanization and access to road.

The time use thus tells that people in remote areas work as much as urban people, but on less productive activities.

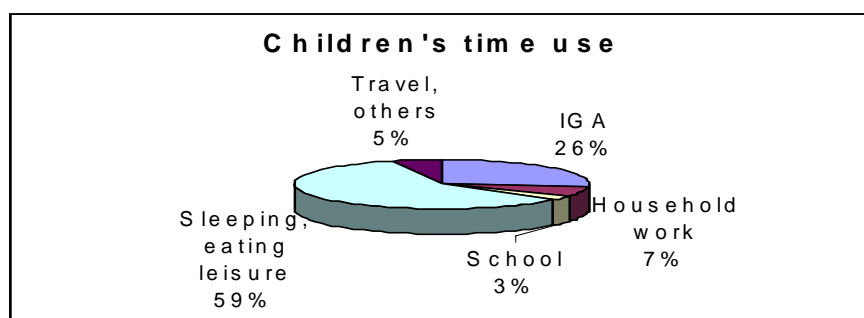
Male adult members of the households on average spend 1.5 hours more on IGA than women, as employed and in agriculture and hunting/fishing. Women are a little more active than men on own business works, collecting firewood/fetching water and handicraft. In total women are half an hour more active than men per day.

In household works women spend 2.4 hours more than men per day.



Children's time use is more or less a mirror of how the adults use their time. However, girls spend on average half an hour more than boys on IGA. Girls are more active in own business work, in agriculture, collecting firewood/fetching water, while hunting and fishing is more an activity of boys. Boys spend half an hour more at school per day, and girls one hour more on household work. In total, children spend about half the time on IGA as adults do.

Children aged 6 or lower spends almost 6 hours on IGA, a time that is halved when they reach school age. Agriculture work is the most common activity among children.



### *Time use and poverty*

On average a person spends 6.3 hours per day on income generating activities. Almost half of that time is for agriculture works, while the time used on hunting and fishing is of the same amount as for business work or work as employed, about 0.8 hours on average. Handicraft, finally, takes up 0.5 hour.

There is no difference between very poor, poor and non-poor on how much time is spent on income generating activities. A household is thus not poor because the members of that household work less. When comparing categories of poor, the main differences in time use are:

- Non-poor spends double the time as employed and own business as poor and very poor.
- Non-poor spends not so much time on agricultural work.
- There are little differences in how much time is used for collecting firewood/fetching water, hunting/fishing and handicraft, although hunting and fishing seems to be little more the poorer the households are.

The overall differences between how men and women use their time are more or less unchanged between poverty classes.

- Men spend substantially more on income generating activities than women in all poverty classes (regardless if poor or non poor)

- For own business work, women are more active than in all poverty classes, although equal among poor
- Men spend a lot more on agricultural work, but only a little more in households that are very poor.
- Women spend little on work as employed compared to men, in particular among the very poor
- Collecting firewood and fetching water are to a large extent women's work in all poverty classes
- Contrary, hunting and fishing are men's work, no differences among poverty classes
- Women spend much more on household works than men for all poverty classes

*Time use by region*

With breakdowns by region (strata) it appears that the number of hours spent on income generating activities more or less the same, but rural people use much more time on agriculture work, collecting firewood/ fetching water and hunting/ fishing than urban households. There is also a difference between rural households with access to road and those without access to road. Less time is used on business work and as employed, while the time for hunting/ fishing is substantially more. As an example, adults in rural areas spend 1.3 hours per day on hunting and fishing. This is more than one full working day per week.

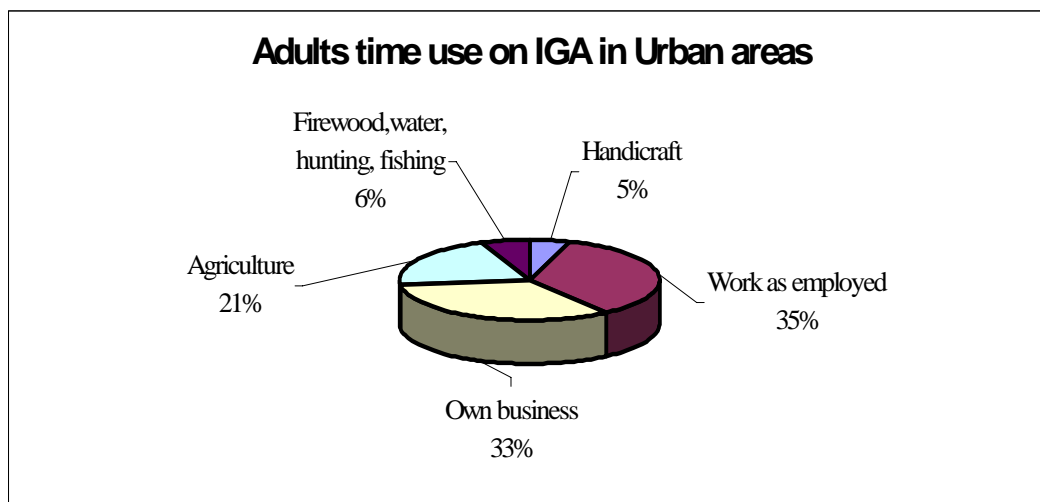
Household works take up more time in urban than in rural areas, while time spent at school decreases with absence from urban centers.

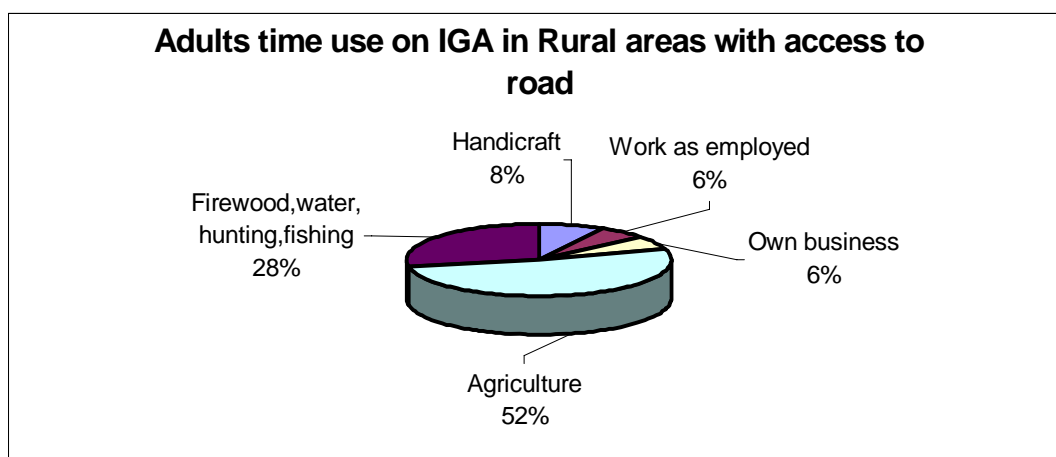
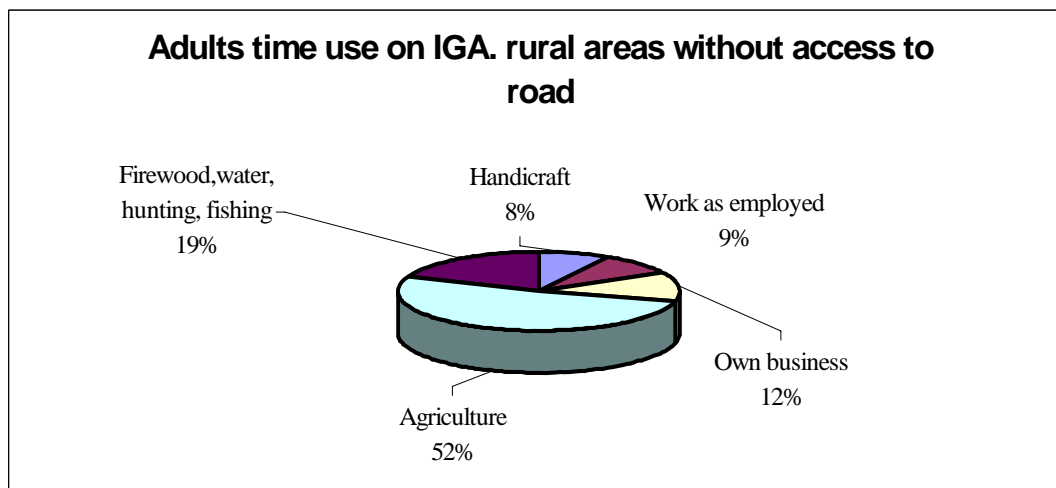
When distinguishing the categories of poor under the regions, it appears that there are little differences among very poor, poor and non-poor how they use their time. The only difference to be mentioned is that non-poor spends more time at school than poor people in urban areas. Given that access to road is the same, the time use can not explain why some households are poor or very poor while others are non-poor.

Comparisons between North, Center and South of LAO PDR show that the northern and southern provinces on average spend 10 % more on income generating activities per day than the center provinces. One hour more per day takes agriculture work in the northern and southern provinces compared to the center, while about half an hour less is spent on business work and work as employed. People in the center go to school up to half an hour more per day than in the other regions.

The differences between poor and non-poor in the three regions are that poor spend less time as employed and on own business work than non-poor and that agriculture work is a little more the activity for poor than non-poor. Collecting firewood/ fetching water and hunting/ fishing is activities with the same pattern. In the South the differences are less than in the other regions.

In all regions and all poverty classes, women work less than men do on income generating activities, except for own business work although the difference is less in rural areas than in urban areas, and collecting firewood/ water.





*Time use by sector and activity*

Hours worked can be divided into sectors and industrial activities. The results are given in table 6 to 9. Table 6 shows the distribution of hours worked as employed. The government is the most important employer in all provinces. (Luangnamtha is an exception but it seems possible that the high percent of employment as farm worker is mixed up with self-employment). Employment in the private sector is reached more than 29 % in Vientiane Municipality (43), Champasack (38), Vientiane Province (36), Kammuane (29) and Luangprabang (26).

Table 9 shows household total employment by adding hours worked as self-employed in agriculture and household businesses with number of hours worked as employed. Hours worked as employed by farmers have been added to hours worked as self-employed. With this adjustment, about 80 % of all hours worked are as self-employed, almost 90 % in the North, around 70 % in the Center and 80 % in the South. Hours worked as government employee are 12 % of all hours worked, almost double the amount worked in the private sector.

Trade is, as table 8 tells, the most important activity among own household businesses with 50 % of all hours worked there, manufacturing 15 % and to agriculture related work 10 %. There are some differences between provinces, retail trade is far less dominant in the North than other parts of the country, manufacturing relatively less in the South. Other services are more frequent in the Center and in the North compared to the South.

**Reference tables****LECS 1997/98**

Table 1. Time use. By children/adults and sex

Table 2. Adults time use by sex and by region

Table 3. Time use by classes of poverty

Table 4. Time use by classes of poverty and sex

Table 5. Time use by strata and poverty classes

Table 6. Work as employed. Number of hours and percent by sector and province

Table 7 . Work in agriculture by type of work and by province

*Table 8. Household businesses by activity. Percent of hours. Number of hours by region.*

*Table 9. Household employment by activity. Percent of hours*

**Table 1: Time use. By children/adults and sex**

Activity	Average number of hours per day				Total
	Children		Adults		
	Male	Female	Male	Female	
1. Sleeping	8.8	8.6	8.4	8.4	8.4
2. Eating, drinking, person care	2.7	2.6	2.7	2.6	2.6
3. School	3.7	3.1	0.4	0.5	0.7
4.. Work as employed	0.1	0.1	1.1	0.4	0.7
5. Own business work	0.1	0.3	0.8	1.0	0.8
6. Tending rice	0.8	0.8	2.0	1.3	1.7
7. Tending other crops	0.3	0.7	0.8	0.8	0.8
8. Tending animals	0.7	0.5	0.6	0.4	0.5
9. Collecting fire wood	0.2	0.5	0.1	0.4	0.2
10. Fetching water	0.1	0.3	0.1	0.3	0.2
11. Hunting	0.2	0.0	0.5	0.0	0.3
12. Fishing	0.6	0.2	0.9	0.3	0.6
13. Buying/shopping	0.0	0.1	0.1	0.2	0.1
14. Construction	0.1	0.0	0.1	0.0	0.1
15. Weaving, sewing, textile care	0.1	0.2	0.0	0.7	0.3
16. Handicraft (not textile)	0.0	0.0	0.2	0.1	0.2
17. Cooking and baking	0.2	0.7	0.3	1.3	0.7
18. Washing, cleaning, do the dishes	0.1	0.4	0.1	0.5	0.3
19. Care for children, adults, elderly	0.3	0.6	0.3	1.1	0.6
20. Travels	1.0	0.8	0.9	0.7	0.8
21. Leisure time	3.3	2.8	3.1	2.7	2.9
22. Others	0.4	0.4	0.6	0.3	0.5
<b>Total average</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>
Total: Income generating activities	3.4	3.9	7.2	5.7	6.3
Total: Household works (13, 17-19)	0.7	1.7	0.7	3.1	1.7
School	3.7	3.1	0.4	0.5	0.7
Total: Sleeping, eating, leisure time	14.8	14.0	14.1	13.7	14.0
Total: Others (travels, others)	1.4	1.3	1.5	1.0	1.3
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>

**Table 2. Adults time use by sex and by region**

	Male	Female	Total	
<i>Total: Income generating activities</i>	7.2	5.7	6.6	
Work as employed	1.1	0.4	0.8	
Own business work	0.8	1.0	0.9	
Agriculture work	3.5	2.6	3.1	
Collecting firewood/fetching water	0.2	0.6	0.4	
Hunting/fishing	1.3	0.3	0.9	
Construction	0.1	0.0	0.1	
Handicraft	0.3	0.8	0.5	
Household works	0.7	3.1	1.8	
School	0.4	0.5	0.4	
Sleeping, eating, leisure time	14.1	13.7	13.9	
Others (travels, others)	1.5	1.0	1.3	
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	
	<div style="display: flex; justify-content: space-between;"> <span>Urban ar- eas</span> <span>Rural areas</span> <span>Total</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <span></span> <span>with access to road</span> <span>without access to road</span> <span></span> </div>			
<i>Total: Income generating activities</i>	6.6	6.6	6.6	6.6
Work as employed	2.3	0.6	0.4	0.8
Own business work	2.2	0.8	0.4	0.9
Agriculture work	1.4	3.4	3.4	3.1
Collecting firewood/fetching water	0.1	0.4	0.5	0.4
Hunting/fishing	0.2	0.6	1.3	0.9
Construction	0.0	0.1	0.1	0.1
Handicraft	0.3	0.5	0.5	0.5
Household works	2.0	1.8	1.6	1.8
School	0.9	0.5	0.3	0.4
Sleeping, eating, leisure time	13.5	14.1	14.0	13.9
Others (travels, others)	1.1	1.1	1.5	1.3
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>

**Table 3. Time use by classes of poverty**

Activity	Average number of hours per day			Total
	Very poor	Poor	Non poor	
1. Sleeping	8.5	8.5	8.4	8.4
2. Eating, drinking, person care	2.5	2.6	2.7	2.6
3. School	0.6	0.6	0.8	0.7
4.. Work as employed	0.5	0.4	0.9	0.7
5. Own business work	0.5	0.2	1.0	0.8
6. Tending rice	1.9	2.2	1.5	1.7
7. Tending other crops	0.8	0.8	0.8	0.8
8. Tending animals	0.6	0.5	0.5	0.5
9. Collecting fire wood	0.3	0.2	0.2	0.2
10. Fetching water	0.2	0.3	0.2	0.2
11. Hunting	0.4	0.3	0.2	0.3
12. Fishing	0.7	0.6	0.6	0.6
13. Buying/shopping	0.1	0.1	0.1	0.1
14. Construction	0.1	0.1	0.1	0.1
15. Weaving, sewing, textile care	0.3	0.3	0.3	0.3
16. Handicraft (not textile)	0.2	0.2	0.1	0.2
17. Cooking and baking	0.7	0.8	0.7	0.7
18. Washing, cleaning, do the dishes	0.2	0.2	0.3	0.3
19. Care for children, adults, elderly	0.7	0.7	0.6	0.6
20. Travels	0.9	0.8	0.7	0.8
21. Leisure time	2.9	2.9	2.9	2.9
22. Others	0.6	0.6	0.4	0.5
<b>Total average</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>
<i>Total: Income generating activities</i>	6.2	6.2	6.3	6.3
Work as employed	0.5	0.4	0.9	0.7
Own business work	0.5	0.2	1.0	0.8
Agriculture work	3.2	3.5	2.8	3.0
Collecting firewood/fetching water	0.5	0.5	0.4	0.4
Hunting/fishing	1.1	0.9	0.8	0.8
Construction	0.1	0.1	0.1	0.1
Handicraft	0.5	0.5	0.4	0.5
Household works	1.7	1.7	1.7	1.7
School	0.6	0.6	0.8	0.7
Sleeping, eating, leisure time	14.0	14.1	14.0	14.0
Others (travels, others)	1.5	1.4	1.2	1.3
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>

**Table 4. Adults time use by poverty and sex**

	Very poor		Poor		Non poor		Total		Total
	Male	Female	Male	Female	Male	Female	Male	Female	All
<i>Total: Income generating activities</i>	7.0	5.7	7.0	5.5	7.3	5.8	7.2	5.7	6.6
Work as employed	0.7	0.1	0.7	0.3	1.3	0.6	1.1	0.4	0.8
Own business work	0.4	0.6	0.2	0.2	1.0	1.3	0.8	1.0	0.9
Agriculture work	3.5	3.1	4.2	2.9	3.4	2.4	3.5	2.6	3.1
Collecting firewood/fetching water	0.2	0.8	0.3	0.8	0.2	0.5	0.2	0.6	0.4
Hunting/fishing	1.6	0.4	1.3	0.5	1.2	0.2	1.3	0.3	0.9
Construction	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
Handicraft	0.4	0.7	0.3	0.8	0.2	0.8	0.3	0.8	0.5
Household works	0.8	3.0	0.6	3.1	0.6	3.1	0.7	3.1	1.8
School	0.3	0.3	0.6	0.3	0.5	0.6	0.4	0.5	0.4
Sleeping, eating, leisure time	14.2	13.5	14.0	14.0	14.1	13.7	14.1	13.7	13.9
Others (travels, others)	1.6	1.4	1.7	1.1	1.4	0.9	1.5	1.0	1.3
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>

**Table 5. Time use by strata and poverty classes**

	Urban areas			Rural areas with access to road			Rural areas without access to road			Total
	Very poor	Poor	Non-poor	Very poor	Poor	Non-poor	Very poor	Poor	Non-poor	
<i>Total: Income generating activities</i>	6.7	5.5	6.2	5.9	5.5	6.5	6.3	6.7	6.3	6.3
Work as employed	2.4	1.6	2.1	0.3	0.3	0.7	0.3	0.4	0.3	0.7
Own business work	1.9	0.9	2.2	0.5	0.2	1.0	0.3	0.2	0.4	0.8
Agriculture work	1.9	2.1	1.2	3.3	3.7	3.2	3.3	3.5	3.3	3.0
Collecting firewood/fetching water	0.2	0.1	0.1	0.6	0.5	0.4	0.5	0.6	0.5	0.4
Hunting/fishing	0.2	0.3	0.2	0.7	0.3	0.6	1.3	1.3	1.2	0.8
Construction	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Handicraft	0.2	0.4	0.3	0.5	0.4	0.5	0.5	0.6	0.4	0.5
Household works	1.8	2.5	2.0	2.0	1.8	1.6	1.5	1.6	1.7	1.7
School	0.6	0.8	1.2	0.8	0.7	0.8	0.5	0.6	0.6	0.7
Sleeping, eating, leisure time	14.3	14.0	13.5	14.1	14.5	14.2	13.9	13.9	14.0	14.0
Others (travels, others)	0.7	1.2	1.1	1.3	1.4	0.9	1.7	1.3	1.5	1.3
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>	<b>24.0</b>

**Table 6. Work as employed. Number of hours and percent by sector and province**

	Percentage distribution of hours working as employed					Total no of hours per day	Av. no of hours per day
	Farm worker	Government work	Private sector	Others	Total percent		
<i>North</i>	28.3	46.3	14.6	10.7	100.0	848814	0.5
Phongsaly	3.4	85.1	7.0	4.6	100.0	38975	0.3
Luangnamtha	82.8	12.2	2.5	2.5	100.0	176255	1.4
Oudomxay	4.9	66.5	10.8	17.8	100.0	78115	0.4
Bokeo	36.8	44.8	17.6	0.8	100.0	34550	0.3
Luangprabang	7.2	54.4	26.1	12.2	100.0	307789	0.8
Huaphanh	33.7	43.7	16.2	6.5	100.0	27612	0.1
Xayabury	24.2	49.5	9.5	16.9	100.0	185517	0.6
<i>Centre</i>	3.9	56.6	35.0	4.5	100.0	2129877	0.9
Vientiane M.	2.0	55.5	42.5		100.0	1140432	2.0
Xiengkhuang	1.3	87.8	3.9	7.0	100.0	76093	0.3
Vientiane P.	13.2	45.5	36.0	5.3	100.0	232861	0.7
Borikhamxay	11.1	48.6	24.0	16.3	100.0	91687	0.5
Khammuane	2.0	53.2	28.8	16.0	100.0	298076	0.9
Savannakhet	3.5	67.5	23.9	5.1	100.0	281014	0.4
Xaysomboon SR	16.8	61.4	1.8	20.0	100.0	9714	0.2
<i>South</i>	17.6	50.8	29.2	2.4	100.0	706911	0.7
Saravane	17.1	63.7	11.2	8.1	100.0	136274	0.5
Sekong	4.5	91.8	1.9	1.8	100.0	24068	0.3
Champasack	19.5	41.4	37.9	1.2	100.0	498467	0.9
Attapeu	5.5	91.0	3.5		100.0	48101	0.5
<b>Total</b>	<b>12.1</b>	<b>53.1</b>	<b>29.2</b>	<b>5.6</b>	<b>100.0</b>	<b>3685602</b>	<b>0.7</b>

**Table 7. Work in agriculture by type of work and by province**

	Percentage distribution of hours worked with crops in agriculture										Total no of hours per day	Av no of hours per day	
	Glutinous rice					Ordinary rice							Total
	Planting	Irrigating	Tending	Harvesting	Converting	Planting	Irrigating	Tending	Harvesting	Converting			
<i>North</i>	15.7	0.5	44.6	15.9	8.3	1.5	0.0	5.2	6.9	1.4	100.0	3361650.6	2.1
Phongsaly	13.4	0.4	40.6	1.5	1.3	0.7		20.5	21.4	0.1	100.0	438266	2.9
Luangnamtha	29.7		22.0	0.4	23.9	1.2		5.9	17.0		100.0	176954	1.4
Oudomxay	22.1	0.8	47.7	13.6	11.2	1.1		3.6			100.0	610150	2.8
Bokeo	17.1	0.1	37.5	20.9	6.2	5.6	0.1	3.2	9.3		100.0	380486	3.1
Luangprabang	9.3		65.4	18.0	2.9	0.6			3.9		100.0	742995	1.9
Huaphanh	5.6	1.5	31.6	32.9	12.9			6.6	7.9	1.0	100.0	539066	1.9
Xayabury	24.6	0.2	40.7	11.7	10.2	2.6		1.1		8.9	100.0	473735	1.5
<i>Centre</i>	32.4	0.0	18.8	35.1	1.9	5.6	0.0	2.1	3.3	0.7	100.0	3120419	1.3
Vientiane M.	22.8		15.8	56.7		4.8					100.0	371076	0.6
Xiengkhuang	33.5	0.3	4.9	32.0	18.5			5.4	1.5	3.8	100.0	260783	1.1
Vientiane P.	17.4		18.4	64.3							100.0	422419	1.3
Borikhamxay	47.3		35.3	13.2	1.7	2.5					100.0	140051	0.8
Khammuane	34.2		2.0	7.4		29.6		8.5	16.6	1.7	100.0	518503	1.6
Savannakhet	38.1		27.6	34.3							100.0	1299652	1.7
Xaysomboon SR	25.7		18.5	24.5	8.4			7.8	12.3	3.0	100.0	107934	1.8
<i>South</i>	9.2	0.0	24.4	44.6	13.7	1.4	0.0	5.4	0.3	1.0	100.0	1915609	1.9
Saravane	5.8	0.2	19.9	38.8	35.3						100.0	485504	1.7
Sekong	15.9		38.7	12.3	5.6			27.5			100.0	197569	2.7
Champasack	8.7		25.3	57.8	5.2	0.3		2.8			100.0	1049778	1.9
Attapeu	13.7		15.6	19.1	13.1	13.3		11.2	3.1	10.9	100.0	182757	1.8
<b>Total</b>	<b>20.4</b>	<b>0.2</b>	<b>30.4</b>	<b>29.6</b>	<b>7.2</b>	<b>3.0</b>	<b>0.0</b>	<b>4.1</b>	<b>4.0</b>	<b>1.1</b>	<b>100.0</b>	<b>8397678</b>	<b>1.7</b>

**Table 8. Household business, by activity. Percent of hours. Number of hours by region.**

Region, Province	Agr work	Fores- Try	Fish- ing	Min- ing	Manufac- turing	El. water, construc-	Trade, cars, repair wholesale	Retail trade	Hotels, rest.	Trans- port	Real es- tate business activities	Health & social work	Recreation cultural activities	Other services	Private HHs with employee	Percent No of hours per day
<i>North, %</i>	15.5	2.2	7.4	4.7	19.7	0.1	4.1	27.1	1.0	6.7	5.3	0.6	3.4	6.3	0.0	100.0
Hours	152957	21888	72886	46792	195238	930	40358	267900	9580	66450	51991	6295	33252	62447	0	988998
Phongsaly	2.5	13.7	0.6	6.3	16.4		0	52.6		6.1	0.0	6.7		1.4		100.0
Luangnamtha		1.1		3.1	43.3		0	43.4	6.0	0.0	0.9			5.3		100.0
Oudomxay	21.9		0.4	6.8	29.8		4	29.7	2.8	0.0	0.0			10.3		100.0
Bokeo	54.6	1.1	8.3	2.1	11.5		1	21.9		0.0	0.0			1.4		100.0
Luangprabang	8.3	0.5	3.5	0.0	17.0		2	23.1		16.6	5.1	0.5	12.1	11.0		100.0
Huaphanh	32.1	4.2	22.2	8.7	7.9		1	24.3		1.3	2.3					100.0
Xayabury	4.6	2.2	8.2	6.9	22.5		10	24.7	1.0	6.8	13.0	0.7	0.6	6.1		100.0
							0									
<i>Centre, %</i>	2.6	3.3	4.3	0.1	15.0	1.1	5	49.1	1.2	4.2	2.4	0.7	1.1	10.1	0.4	100.0
Hours	62074	77380	101247	2948	355719	26095	109226	1164598	27682	99971	57434	16766	25160	240589	9434	2373375
Vientiane M.	0.9	1.0	3.0	0.0	16.8		6	54.2	1.3	1.8	0.0	0.1		12.8		100.0
Xiengkhuang	38.5	12.4	5.7	0.6	22.0		0	16.2	1.8	2.3	0.0					100.0
Vientiane P.	0.8	5.2	3.5	0.6	21.7		4	34.5	1.9	6.1	10.1	1.5		7.7	2.5	100.0
Borikhamxay	7.1	4.4	14.3	0.0	26.1		0	40.2	4.7	0.0	3.2					100.0
Khammuane		1.9		0.0	0.4		1	67.3		15.1	0.0	3.1		9.7		100.0
Savannakhet	4.2	9.6		0.0	12.6		4	40.4		2.5	6.3		10.0	10.1		100.0
Xaysomboon SR	1.6	3.7	56.2	0.0	0.0		0	35.9		0.0	0.9			0.7		100.0
							0									
<i>South, %</i>	21.8	0.9	2.6	3.1	7.7	0.1	1	55.8	1.7	1.3	4.0	0.0	0.5	2.8	0.0	100.0
Hours	156011	6504	18620	22335	54734	862	5225	399320	12217	9535	28684	0	3463	20171	0	715347
Saravane	13.4			0.9	4.0		0	72.1	6.7	0.0	0.0		2.1	1.7		100.0
Sekong	9.5			19.8	26.1		6	47.1		0.0	11.7					100.0
Champasack	27.8	1.4	2.5	3.8	8.4		1	48.9		1.8	5.0			3.3		100.0
Attapeu	4.6		9.5	0.7	7.9		0	65.3	1.7	1.4	5.5			2.9		100.0
<b>Total, %</b>	<b>9.1</b>	<b>2.6</b>	<b>4.7</b>	<b>1.8</b>	<b>14.9</b>	<b>0.7</b>	<b>4</b>	<b>44.9</b>	<b>1.2</b>	<b>4.3</b>	<b>3.4</b>	<b>0.6</b>	<b>1.5</b>	<b>7.9</b>	<b>0.2</b>	<b>100.0</b>
Total, hours	371042	105772	192753	72075	605691	27887	154809	1831818	49479	175956	138109	23060	61876	323208	9434	4077719

**Table 9. Household employment by activity. Percent of hours.**

	Self employed		Employed		Others	Total
	Agriculture	Hhld business	Government employed	Private sector		
<i>North</i>	69.3	19.0	7.6	2.4	1.8	100.0
Phongsaly	83.6	9.2	6.3	0.5	0.3	100.0
Luangnamtha	78.2	14.4	5.2	1.1	1.1	100.0
Oudomxay	75.8	15.1	6.4	1.0	1.7	100.0
Bokeo	80.4	15.1	3.2	1.2	0.1	100.0
Luangprabang	58.3	19.9	12.8	6.1	2.9	100.0
Huaphanh	75.8	21.7	1.7	0.6	0.2	100.0
Xayabury	56.0	28.8	9.9	1.9	3.4	100.0
<i>Centre</i>	42.0	31.1	15.8	9.8	1.3	100.0
Vientiane M.	14.4	44.6	23.2	17.8	0.0	100.0
Xiengkhuang	62.4	19.7	15.9	0.7	1.3	100.0
Vientiane P.	43.7	36.8	10.2	8.1	1.2	100.0
Borikhamxay	50.0	22.8	14.8	7.3	5.0	100.0
Khammuane	46.6	27.4	14.1	7.6	4.2	100.0
Savannakhet	71.5	13.7	10.3	3.7	0.8	100.0
Xaysomboon SR	59.8	35.8	3.3	0.1	1.1	100.0
<i>South</i>	61.1	21.4	10.8	6.2	0.5	100.0
Saravane	64.7	20.9	11.0	1.9	1.4	100.0
Sekong	84.6	5.6	9.4	0.2	0.2	100.0
Champasack	57.0	23.1	10.3	9.4	0.3	100.0
Attapeu	61.2	23.8	14.4	0.6	0.0	100.0
<b>Total</b>	<b>54.7</b>	<b>25.2</b>	<b>12.1</b>	<b>6.7</b>	<b>1.3</b>	<b>100.0</b>

**Table 10. Mode of travel**

	Percentage distribution of hours spent on travelling by mode of travel									Total no of hours per day	Av. no of hours per day
	Foot	Bike	Motor-bike	Car	Bus	Aero-plane	Boat	Taxi, tuk/tuk, others	Total		
<i>North</i>	90.2	2.7	1.3	0.6	1.5	1.7	1.5	0.4	100.0	1630540	1.0
Phongsaly	95.2	1.6	0.6	0.8		1.9			100.0	193389	1.3
Luangnamtha	95.9	3.2	0.5		0.1	0.2			100.0	225151	1.8
Oudomxay	95.4	1.9	0.3	0.8		0.8	0.7		100.0	224833	1.0
Bokeo	86.9	2.0	2.3			3.9	3.2	1.6	100.0	122883	1.0
Luangprabang	76.1	6.4	2.9	1.1	3.4	7.7	2.3		100.0	204660	0.5
Huaphanh	94.4	2.0		0.8	2.7				100.0	466158	1.7
Xayabury	79.8	2.5	5.0		2.6	0.6	7.1	2.4	100.0	193465	0.6
<i>Centre</i>	59.7	16.8	14.8	1.2	1.3	2.3	3.3	0.6	100.0	1788904	0.7
Vientiane M.	24.7	22.6	38.1	3.6	2.1		8.8		100.0	522333	0.9
Xiengkhuang	78.5	14.7	5.6	0.4	0.9				100.0	123271	0.5
Vientiane P.	68.8	17.6	10.9		1.4	0.2	0.7	0.4	100.0	215002	0.6
Borikhamxay	75.9	13.2	3.9		3.3	3.3	0.2	0.2	100.0	190069	1.1
Khammuane	43.7	21.6	13.4	2.5		12.8	6.0		100.0	63307	0.2
Savannakhet	78.2	13.3	2.9			3.2	1.2	1.2	100.0	651844	0.9
Xaysomboon SR	54.1	4.5	1.7	4.3	5.6	26.7		3.0	100.0	23077	0.4
<i>South</i>	63.7	15.6	4.7	0.0	1.8	12.4	1.1	0.6	100.0	638298	0.6
Saravane	33.1	53.8	4.9		4.0	4.3			100.0	91021	0.3
Sekong	85.6	5.3	1.0	0.2	2.3	0.6		5.1	100.0	38863	0.5
Champasack	64.2	9.6	5.7		1.6	16.7	1.7	0.5	100.0	439613	0.8
Attapeu	88.2	8.9	0.5			2.3			100.0	68802	0.7
<b>Total</b>	<b>72.6</b>	<b>11.0</b>	<b>7.8</b>	<b>0.8</b>	<b>1.5</b>	<b>3.7</b>	<b>2.2</b>	<b>0.5</b>	<b>100.0</b>	<b>4057742</b>	<b>0.8</b>