### **APPENDIX**

REVIEW OF NATIONAL POLICIES
RELATED TO THE HEALTH SECTOR
IN LAO PDR

# APPENDIX 1 PAST FIVE-YEAR NATIONAL DEVELOPMENT PLANS

After the founding of the People's Democratic Republic in 1975, the first development plan implemented was the 3-Year National Development Plan from 1977 to 1980. The Plan aimed at strengthening the basic foundations for a centrally planned economy. However, most of the targets were not achieved due to poor agricultural performance and a chronic shortage of goods.

The next development plan was the first 5-Year National Development Plan (1981-1985). Its main targets included food self-sufficiency, infrastructure development including transport and communications, stabilisation of currency and prices, and the improvement of the education level. Agriculture and infrastructure received high priority and nearly 70% of the total national budget was designated for these sectors. As a result of an extensive campaign for increased rice production based on the development of irrigation systems, a great recovery was seen in agricultural production to such an extent that the country attained food self-sufficiency, albeit temporarily. In contrast, the development of infrastructure, which had been seriously underdeveloped before then, did not come anywhere near reaching its target. Other sectors also produced rather unsatisfactory results and many were carried over to the next 5-Year Plan.

The second 5-Year National Development Plan (1986-1990) was implemented in the midst of the transition period from a centrally planned to a market orientated economy. It was prompted by the introduction of the New Economic Mechanism (NEM), which aimed to reduce both fiscal and trade deficits. The plan gave high priority to stable production of food and food security, the promotion of mining and manufacturing industries, the development of infrastructure, such as transport and communications, and the distribution of goods and services, in order to strengthen the national finances. However, the results fell short of the targets set, with average annual real GDP growth of 5% against a target of 10%, largely due to the poor performance of the agriculture and hydropower sectors after a serious drought occurred from 1987 to 1988. A series of monetary and fiscal reforms were carried out as part of the NEM, including the liberalisation of prices and exchange rates, the opening up of trade and foreign investment and improved taxation and tariff systems. However, the national economy remained weak.

The proposed third 5-Year National Development Plan (1991-1995) was not approved due to the confusion caused by the introduction of a market-oriented economy system. Nevertheless, the socio-economic development plan was actually carried out. The first two 5-Year National Development both gave central command roles to government agencies and state-owned enterprises in implementing clearly defined policies. In contrast, in the third 5-Year Plan, based on the principles of the NEM, the private sector was expected to play an active role in achieving its goals, while the role of the public sector diminished slowly. Its major objectives included the implementation of economic reforms to facilitate a smooth shift to a market-oriented economy, streamlining the public sector, human resource development and the effective utilisation of natural resources and environmental conservation.

During this period, the macro-economy grew steadily with average GDP annual growth of 6.4%, to which the agriculture and forestry sectors contributed 4.1%, the industrial sector 12.3%, and the services sector 6.7%. Between 1991 and 1994 the nation's finance also stabilised with 15% average annual growth in government revenue, a stable exchange rate around 720 Lao kip to the US dollar, and a stable inflation rate around 6 to 7%. While the development of infrastructure progressed steadily according to the public investment plan, public investment in the social sectors did not go as planned with education receiving only about 50% and health about 60% of the planned expenditure for the 1990-1995 period.

Effectively the fourth 5Year National Development Plan was the 1996-2000 Socio-Economic Development Plan (SEDP). However, most of its major targets were not met due to the Asian financial crisis in 1997. The revenue and foreign investment shortfalls required reductions in planned current expenditures on social and human resource development, especially in the health and education sectors.

The fifth 5-Year National Development Plan (200-2005) was adopted by the seventh Party Congress. The key objectives of the Plan include liberation of the country from the group of least developed countries (LDC) by the year 2020, 7-7.5% average annual GDP growth, abolition of slash-and-burn cultivation and eradication of opium cultivation, and reduction of current poverty levels by half by 2005 though the implementation of poverty alleviation programmes. In the health sector, it aims at increasing life expectancy, raising awareness on hygiene at the grassroots level, expansion of maternal and child health care.

## APPENDIX 2 REVIEW OF THE NATIONAL ECONOMY

#### A2.1 INDUSTRIAL STRUCTURE

#### (1) GDP/GNP

The GDP of Lao PDR was 13,495 billion in 2000 (provisional)<sup>1</sup>, or 1,682.6 million USD at the annual average market exchange rate. The GDP per capita in 2000 was 322.40 USD, and compared to the GDP per capita in 1999, which was 260.50 USD, the growth rate of GDP per capita between 1999 and 2000 was 23.8%.

Compared to the situation of neighbouring countries, the GDP per capita of Lao PDR is lower than those of Thailand (2,008.10 USD), and Vietnam (369.00 USD), and at the same level of Cambodia (262.70 USD)<sup>2</sup>. The ranking of Lao PDR with respect to GNP per capita in 1999 was 181 among 207 countries in the world<sup>3</sup>.

The present situation of GDP or GNP is still among the lowest in the world, but the growth rate of GDP indicates the recent good economic performance of Lao PDR (see Table A2.1). The annual growth rate of real GDP in Kip in the 1990's was in the range between 4.0% and 8.1%. The GDP in USD at current price showed a big negative growth in 1997 and 1998, but this was because of the fall of the exchange rate of Kip against USD caused by the Asian Financial Crisis, which started in 1997. However, the GDP in USD started to grow again in 1999, and in 2000, it could recover more than the level of 1995, before the Crisis.

Regarding the composition of GDP by industrial origin (see Table A2.2), agriculture (including livestock, fishery, and forestry) is still the leading economic sector and the percentage of agriculture in total GDP was 51.9% in 2000 (provisional), followed by services (25.2%), and then by industry (including electricity, 22.4%). However, the manufacturing sector, wholesale and retail trade sector, and hotel and restaurant sector are growing faster than the agriculture sector in recent years, and the economy of Lao PDR is gradually shifting from the unbalanced structure depending on the primary industry to the well balanced structure among the primary, secondary, and tertiary industries. The public wage bill, which indicates the trend of salary of civil servants, decreased up to 1997 and has been maintained at the level of 2.9-2.8% of GDP.

<sup>&</sup>lt;sup>1</sup> National Statistical Centre: Basic Statistics of the Lao PDR 2000, 2001

<sup>&</sup>lt;sup>2</sup> World Bank, World Development Indicators 2001, World Bank, 2001

The major agricultural product in Lao PDR is rice, and the production has been increased both by cultivation of farming land, especially of irrigated land, and by improvement of productivity (see Table A2.3). However, the trend of rice production in the uplands is opposite.

Table A2.1 Trend of GDP (at 1990 constant price)

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000*
GDP in Kip									
(1990 constant price)	004 707	704.040	700 057	005 000	000.050	055.000	000 450	4 005 445	4 407 040
(million Kip)	681,797	721,842	780,657	835,690	893,256	955,009	993,159	1,065,445	1,127,640
GDP Growth Rate in Kip									
(1990 constant price)									
(%)	7.0	5.9	8.1	7.0	6.9	6.9	4.0	7.3	5.8
GDP per capita in Kip									
(1990 constant price)									
(Kip)	157,820	163,570	173,172	181,474	188,945	197,080	199,956	209,276	216,093
GDP in USD									
(current price)									
(million USD)	1,150.7	1,306.2	1,525.2	1,677.8	1,813.4	1,629.9	1,195.6	1,326.2	1,682.6
GDP Growth Rate in USD									
(current price)									
(%)	14.4	13.5	16.8	10.0	8.1	-10.1	-26.7	10.9	26.9
GDP per capita in USD									
(current price)									
(USD)	266	296	338	364	384	336	241	260	322

Source: JICA Study Team using information in the following documents: National Statistical Centre: *Basic Statistics of the Lao PDR 1975-2000'*, 2000; National Statistical Centre: *Basic Statistics of the Lao PDR 2000'*, 2001; National Statistical Centre: *Basic Statistics of the Lao PDR 1998*, 1999; Bank of the Lao PDR: *Economic and Financial Sector Statistics*, 1997; Bank of the Lao PDR: *Economic and Financial Sector Statistics 1995-2000*, 2001.

Note: \*Provisional

It is notable that the production of 'vegetables and beans' has grown drastically in recent years. Moreover, we can confirm the spread of cash crops such as sugarcane, coffee, etc. in the agricultural sector.

#### (2) Labour Force

The total labour force of Lao PDR in 1995 was 2.3 million<sup>4</sup>, and 85.5% of the total labour force was engaged in agriculture (see Table A2.4). There is a trend for the labour force to shift from the primary industry to the secondary and tertiary industries, but 'service and administration' which contains civil servants decreased from 5.7% of total to 3.9% of the total between 1985 and 1995.

Comparing the GDP per worker in the agricultural sector and other sectors in 1995, productivity was around 231,000 Kip (at 1990 constant price) in the agricultural sector and

<sup>4</sup> National Statistical Centre: *Population Census* 1995

<sup>&</sup>lt;sup>3</sup> The rankings of Thailand, Vietnam, and Cambodia in 1999 were 103, 170, and 187 respectively.

1,083,000 Kip (at 1990 constant price) in other sectors. This means the productivity of agricultural sector measured by money value is less than 25% of that of other sectors.

Table A2.2 Trend of GDP Composition by Industrial Origin

	1992	1993	1994	1995	1996	1997	1998	1999	2000*
Agriculture	58.0	56.3	56.4	54.3	52.2	52.2	51.8	52.2	51.9
Crop	32.4	27.3	28.4	25.9	24.9	26.5	27.2	28.7	30.7
Livestock and fishery	23.3	22.9	22.1	21.4	20.6	19.7	19.4	18.5	18.0
Forestry	2.3	6.1	5.9	7.0	6.7	6.0	5.2	4.9	3.1
Industry	16.7	17.4	17.8	18.8	20.6	20.8	21.9	22.0	22.4
Mining and quarring	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.6
Manufacturing	12.6	12.8	12.7	13.9	15.4	15.7	16.6	16.5	16.8
Construction	2.8	3.1	3.3	3.3	3.5	3.4	2.8	2.6	2.2
Electricity and water	1.1	1.3	1.6	1.3	1.4	1.3	2.1	2.3	2.7
Services	23.9	24.3	23.7	24.5	24.8	25.0	25.3	25.2	25.2
Transportation, commun. and post	5.0	4.9	4.7	5.2	5.4	5.5	5.7	5.6	5.8
Wholesale and retail trade	7.2	8.1	8.1	8.3	8.6	8.9	9.4	9.4	9.4
Banking	1.0	1.1	1.1	1.4	1.3	1.3	1.3	1.3	1.2
Ownership and dwelling	3.4	3.5	3.5	3.4	3.4	3.2	3.2	3.0	2.9
Public wage bill	4.6	4.3	3.7	3.3	3.1	2.9	2.9	2.9	2.8
Nonprofit institution	1.7	1.5	1.3	1.2	1.2	1.1	8.0	0.8	0.8
Hotel and restaurant	0.8	0.8	1.2	1.5	1.7	1.7	1.8	2.0	2.2
Other services	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Import duties	1.4	2.0	2.1	2.5	2.4	2.0	1.1	0.6	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: JICA Study Team based on the information in National Statistical Center: Basic Statistics of the Lao PDR 1975-2000, and Bank of the Lao PDR, Annual Report 1997 and 1999. Note: Figures in %. \*Provisional

Regarding unemployment rate, the rate of the unemployed economically active population<sup>5</sup> to the total economically active population was 2.4% in 1995 according to 'the Population Census 1995'. The rate in urban areas was 7.9%, much higher than in rural areas (1.5%). This means that the low average unemployment rate of whole country is explained by the low unemployment rate of rural areas where the major occupation is subsistence agriculture, and it is conjectured that there may be a large percentage of latent unemployed people in that sector.

There was no big difference between unemployment rates of male and female in the whole country in 1995, but the unemployment rate of female in urban areas was 8.6% and higher than

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<sup>&</sup>lt;sup>5</sup> 'Economically active population' means the population who are 10 years old or above and not students, people under household duties, retired people, nor sick/handicapped people.

that of male (7.5%), and there is an employment gap between male and female in employed labour both in public sector and private sector.

**Table A2.3** Plant Area and Production

	19	95	20	00	Gro	wth
	Production (1,000Ton)	Area (1,000Ha)	Production (1,000Ton)	Area (1,000Ha)	Production (%)	Area (%)
Rice	1,417.8	559.9	2,201.7	719.5	55.3	28.5
Season rice	1,071.3	367.3	1,552.8	475.6	44.9	29.5
Irrigated rice	50.4	13.6	390.2	91.8	674.2	575.0
Upland rice	296.1	179.0	258.8	152.1	-12.6	-15.0
Maize	48.3	28.3	117.0	49.0	142.2	73.1
Starchy roots	99.2	14.0	117.5	19.4	18.4	38.6
Vegetables and Beans	55.7	8.6	636.0	104.7	1041.8	1117.4
Manufacturing product	121.6	57.9	378.4	70.3	211.2	21.4
Mungbeans	2.3	3.3	1.1	1.3	-52.2	-60.6
Soybeans	4.8	5.8	5.4	6.4	12.5	10.3
Peanut	8.4	8.3	13.2	12.8	57.1	54.2
Tobacco	26.6	7.4	33.4	6.7	25.6	-9.5
Cotton	8.8	9.6	4.6	4.7	-47.7	-51.0
Sugarcane	61.3	2.7	297.0	8.4	384.5	211.1
Coffee	8.6	20.0	23.5	29.4	173.3	47.0
Tea	0.8	0.6	0.2	0.6	-75.0	0.0

Source: National Statistical Centre: *Basic Statistics of the Lao PDR 1975-2000*, 2000. National Statistical Centre: *Basic Statistics of the Lao PDR 2000*, 2001

Table A2.4 Labour Force and Percent Distribution of Employment by Industry

Items	1985	1995
Labour Force (million)	1.6	2.3
Composition (%)		
Agriculture	89.2	85.5
Industry*	3.4	8.1*
Commerce, hotels and restaurants	1.7	2.5
Service and administration	5.7	3.9

Source: JICA Study Team based on the information in 'Labour Markets in Transitional Economies in Southeast Asia and Thailand', Development Analysis Network, 2001.

Note: \*'Industry' means Manufacturing, Construction, and Transport and communication . \*\* Estimated by calculating the difference between total and sum of other items

#### **A2.1.1 Structure of Public Finance**

#### (1) Overall National Budget

According to the national budgetary exercise in 1999/2000 reported by State Planning Committee in September 2000, the current situation of national budget is as shown in Table A2.5. The government revenue and expenditure in 1999/2000 were 12.2% of GDP and 19.6% of GDP respectively, and it caused a 1,025 billion Kip or 7.4% of GDP of budget deficit. However, there was an inflow of grants and loans from foreign countries/organizations to support the Public Investment Program amounting to 1,195 billion Kip in total, and it balanced the budget deficit.

Regarding the breakdown of government expenditure in 1999/2000, 13.0% was salary, 5.7% was other current expenditures, 3.3% was intervention payments, 11.6% was debt services, and the remaining 63% was spent for the Public Investment Program.

Table A2.5 Government Revenues and Expenditures in 1999/2000 and 2000/2001

	( -1 /	% of total revenue / expenditure		2000/2001 (Planned) (billion Kip)	% of GDP (16,800 bil. Kip)
Total Revenue	1,680	100.0	12.2	2,279	13.6
Tax	800	48	5.8	1,304	7.8
Custom duties	192	11	1.4	288	1.7
Revenue from state property	402	24	2.9	546	3.3
Land tax	10	1	0.1	16	0.1
Non-tax revenue	6	0	0.0	10	0.1
Revenue collection of Localities	270	16	2.0	115	0.7
Total Expenditure (including foreign investment)	2,705	100.0	19.6	3,531	21.0
Total Expenditure (excluding foreign				-	
investment)	1,510	55.8	11.0	2,331	13.9
Salaries	351	13.0	2.5	422	2.5
Current expenditures	155	5.7	1.1	306	1.8
Intervention payments	88	3.3	0.6	233	1.4
Foreign debt services	239	8.8	1.7	344	2.0
Domestic debt services	75	2.8	0.5	185	1.1
Public Investment Program	1,701	62.9	12.3	2,005	11.9
Domestic investment	506	18.7	3.7	805	4.8
Foreign investment	1,195	44.2	8.7	1,200	7.1
Other provisions	96	3.5	1	36	0.2
Balance					
(including foreign investment)	-1,025	-	-7.4	-1,252	-7.5
Balance					
(excluding foreign investment)	170	-	1.2	-52	-0.3

Source: JICA Study Team using the information in 'Fighting Poverty through Human Resource Development, Rural Development and People's Participation', Government of the Lao PDR, 2000. Note: The categories of this table have no compatibility with those of the table of 'General Government Budget' provided by Bank of the Lao PDR. Figures of 2000/2001 are constant market price.

#### (2) Public Investment Program

The Public Investment Program (PIP) is the integrated program which is actually promoting the socio-economic development in Lao PDR, and the government is spending around two thirds of the total budget in PIP as mentioned above. Table A2.6 shows the allocation of PIP budget by centre and provinces in 1999/2000, and around 70% and 30% of PIP budget were used in central level and provincial level respectively. However, it is under discussion that the rate of the budget of PIP for provincial level should be increased to achieve the goals of the ongoing decentralization process.

We also should pay attention to the allocation of PIP budget among provinces. The PIP budget per person in each province varies a lot, and the largest allocation was to Vientiane M. (508,600 Kip/person) which was followed by Savannakhet (261,000 Kip/person) and by Champasack (180,400 Kip/person). On the other hand, the smallest allocation was to Huaphanh (8,100 Kip/person), which was followed by Phongsaly (16,500 Kip/person) and by Xaysomboun SR (19,200 Kip/person).

Table A2.6 Allocation of Public Investment Program by Centre/Provinces

		Invest	ment (billior	ı Kip)	% Domesti	c / Foreign	% in Total	Provincial Revenues per capita
		Domestic	Foreign	Total	Domestic	Foreign	Investment	(1,000 Kip)
Cent	tral Government	367.03	850.54	1217.57	30.14	69.86	71.58	
Prov	rinces	138.97	344.46	483.42	28.75	71.25	28.42	
	Phongsaly	5.50	26.26	31.75	17.32	82.71	1.87	16.5
	Luangnamtha	6.00	5.60	11.60	51.72	48.28	0.68	92.8
_	Oudomxay	6.70	32.85	39.55	16.94	83.06	2.33	26.4
North	Bokeo	6.50	57.81	64.31	10.11	89.89	3.78	82.3
_	Luangprabang	7.26	10.75	18.01	40.31	59.69	1.06	28.6
	Huaphanh	5.50	51.20	56.70	9.70	90.30	3.33	8.1
	Xayabury	6.52	3.88	10.40	62.69	37.31	0.61	30.3
	Vientiane M.	16.00	68.35	84.35	18.97	81.03	4.96	508.8
	Xiengkhuang	7.00	19.72	26.72	26.20	73.80	1.57	74.5
ᡖ	Vientiane P.	8.13	8.73	16.86	48.22	51.78	0.99	40.8
Center	Borikhamxay	7.50	5.34	12.84	58.41	41.59	0.75	139.3
0	Khammuane	7.00	12.00	19.00	36.84	63.16	1.12	122.8
	Savannakhet	13.00	11.51	24.51	53.04	46.96	1.44	261.0
	Xaysomboun SR	5.50	1.05	6.55	83.97	16.03	0.39	19.1
	Saravane	7.30	14.20	21.50	33.95	66.05	1.26	38.8
South	Sekong	6.60	10.08	16.68	39.57	60.43	0.98	39.7
Sol	Champasack	10.31	5.13	15.44	66.77	33.23	0.91	180.4
	Attapeu	6.65	0.00	6.65	100.00	0.00	0.39	52.3
Grar	nd Total	506.00	1195.00	1701.00	29.75	70.25	100.00	•

Source: JICA Study Team using the information in 'Fighting Poverty through Human Resource Development, Rural Development and People's Participation', Government of the Lao PDR, 2000. Data are for 1999-2000.

Around 70% of total PIP budget is covered by grants and loans both in central level and in provincial level. However, some provinces such as Huaphanh, Bokeo, and Oudomxay are depending on foreign sources of funds, while others such as Attapeu, Xaysomboun SR, and Champasack depend on domestic budget.

Table A2.7 shows the allocation of PIP budget by sector in 1999/2000. First, 69.9% of PIP budget was spent in the economic sectors, and 18.5% was spent in the social sectors. The largest part of the budget (56.4% of the total PIP budget) was used for improving transportation followed by agriculture (12.5% of the total PIP budget); this indicates the high priority level given to the agricultural sector and related infrastructure development in PIP. Regarding the percentage between the budget from domestic source and from foreign source, agriculture and industry are depending on domestic budget, and transport and social sector, especially public health and social welfare, are depending on foreign source.

Table A2.7 Allocation of Public Investment Program by Sector in 1999/2000

	Inve	estment (billion	Kip)	% Domestic	% in Total	
	Domestic	Foreign	Total	Domestic	Foreign	Investment
Economic Sector	351.36	837.86	1,189.22	29.5	70.5	69.9
Agriculture	177.28	35.33	212.61	83.4	16.6	12.5
Industry	16.66	0.00	16.66	100.0	0.0	1.0
Transport	157.42	802.53	959.95	16.4	83.6	56.4
Social Sector	54.74	259.13	313.87	17.4	82.6	18.5
Education	21.91	67.46	89.37	24.5	75.5	5.3
Public Health	13.20	96.05	109.25	12.1	87.9	6.4
Information and Culture	14.06	39.01	53.07	26.5	73.5	3.1
Social Welfare	5.57	56.61	62.18	9.0	91.0	3.7
Rural Development	16.11	27.72	43.83	36.8	63.2	2.6
Others (Office, etc.)	82.70	70.29	152.99	54.1	45.9	9.0
Grand Total	506.00	1,195.00	1,701.00	29.7	70.3	100.0

Source: JICA Study Team using the information in Government of the Lao PDR: Fighting Poverty through Human Resource Development, Rural Development and People's Participation, 2000.

Table A2.8 shows the planned allocation of PIP budget by sector in the mid-term plan (2001-2003). The government has planned to reduce the percentage spent for the economic sectors and increase that for the social sectors gradually, which was announced in the 6th Round Table Meeting but has been postponed up to now because of the Asian Financial Crisis. However, the budget for industry is planned to increase to promote trade, to create jobs, etc.

Table A2.9 shows the percentages of current expenditure and capital expenditure in PIP. Most of the budget for economic sectors (97.6% on the average in 19992000) is used as capital expenditure, but for the social sectors a larger part of the budget (44% on average in 1999/2000) is used for current expenditure. The balance between capital expenditure and current

expenditure is disputable, but recently, there are some cases where the efficiency of capital expenditure has dropped because of lack of operation and maintenance cost. Therefore, the allocation to current expenditure is planned to increase in the mid-term plan (2001-2003).

Table A2.8 Future Trend of Public Investment Program by Sector

		% in Gra	and Total	
	1999/2000	2000/2001	2001/2002	2002/2003
	(actual)	(planned)	(planned)	(planned)
Economic Sector	69.9	69.3	63.5	60.5
Agriculture	12.5	23.4	19.0	18.0
Industry	1.0	4.5	6.0	7.5
Transport	56.4	37.5	35.0	32.0
Other economic sectors	-	3.6	3.5	3.0
Social Sector	18.5	25.2	28.0	30.5
Education	5.2	7.1	8.0	9.0
Public Health	6.4	3.5	6.0	7.0
Information and Culture	3.1	2.6	3.0	3.5
Social Welfare	3.6	3.7	5.0	6.0
Other social sectors	-	8.2	6.0	5.0
Rural Development	2.6	4.6	7.5	8.0
Others (Office, etc.)	9.0	0.9	1.0	1.0
Grand Total	100.0	100.0	100.0	100.0

Source: Government of the Lao PDR, 2000.

Table A2.9 Allocation of Public Investment Program by Current/Capital in 1998/99

(%)Current Capital Economic Sector 2.4 97.6 Agriculture 5.6 94.4 Industry/Energy 3.8 96.2 Transport and Com. 1.0 99.0 44.0 Social Sector 56.0 46.1 53.9 Education Public Health 40.3 59.7 Others 43.1 56.9

Source: Government of the Lao PDR: Macro-economic Policy and Reform Framework, 2000.

#### **A2.1.2** Balance of International Accounts

#### (1) Balance of Payments

The current account of Lao PDR in 1999 had a deficit of 90.3 million USD, which was 30% less than the deficit in 1995 (see Table A2.10). This deficit was covered by the surplus in the capital account made mainly of loans and foreign direct investment.

The main reasons of the decrease of current account deficit are:

- Decrease in imports caused by the reduction of total scale of international trade after the Asian Financial Crisis broke out
- Increase in income from services (non-factor income)

During the same period, official transfers (mainly composed of grants) were reduced, and the current account balance excluding official transfers improved from a deficit of 232.6 million USD in 1995 to a deficit of 160.0 million USD in 1999.

The main cause of the current account deficit is the trade deficit (248.7 million USD in 1999), and the present negative trade balance cannot be improved in the short-term because Lao PDR still has a huge demand for investment both for economic development and for social development, which needs a larger input of imported goods than the country's present export capacity. Therefore, the continuous financial support from the development partners, the effective utilization of the limited financial resources including grant and loan, and the promotion of foreign direct investment, are the prerequisites to improve and maintain the balance of international accounts.

**Table A2.10** Balance of Payments

	1995 (million USD)	1999 (million USD)
Trade Balance	-275.0	-248.7
Total exports (fob)	313.2	305.5
Total imports (CIF)	588.8	554.3
Services (net)	27.2	98.3
Factor income (net)	-5.8	-39.2
Transfers	127.1	99.4
Private	21.7	29.6
Official	105.4	69.8
Current Account	-127.2	-90.3
Current Account		
(excluding official transfers)	-232.6	-160.0
Long-term loans	82.4	56.9
Disbursements	97.8	95.3
Amortization	-15.4	-38.4
Convertible area	-5.9	-31.4
Non-convertible area	-9.5	-7.0
Foreign direct investment	95.1	79.0
Commercial banks	10.2	-46.9
Assets	-1.5	-43.2
Liabilities	11.8	-3.7
Errors and omissions	-46.1	-1.6
Capital Account	141.6	87.4
Overall Balance	14.5	-2.9

Source: Bank of the Lao PDR: Economic and Financial Sector Statistics 1995-2000, 2001

#### (2) International Trade

Table A2.11 shows the trend of international trade of Lao PDR. The scale of international trade of Lao PDR expanded and the trade deficit also expanded until 1996, but the deficit decreased in 1997 and 1998. That was partly because of some import substitution, but mainly because of the reduction of overall trade volumes after the Asian Financial Crisis. Therefore, after the economy recovered in 1999, the trade deficit started to increase again and it is estimated that this tendency will continue for several years.

**Table A2.11** Trend of International Trade

(million USD)

Year	1992	1993	1994	1995	1996	1997	1998	1999
Export (fob)	132.6	247.9	305.4	313.2	321.4	316.8	340.8	305.5
Import (CIF)	265.5	431.9	564.1	588.8	689.6	647.9	552.8	554.3
Trade balance	-132.9	-184.0	-258.7	-275.6	-368.2	-331.1	-212.0	-248.7

Source: Bank of the Lao PDR, 1997; Bank of the Lao PDR, 2001

Table A2.12 shows the breakdown of export value in 1995/96 and in 1999/2000 by items. The largest export item was electricity (33.0%), and the increase of electricity export has led the increase o total export for these years. The second largest item was garment (29.1%), and this item achieved around 30 million USD increase of export in the period between 1995/96 and 1999/2000. The next item was timber and furniture (22.0%), and this item could not grow for these years because of the decrease of demand in neighbouring countries during the Asian Financial Crisis, and of the government's policy for preservation of the forest. To improve the export of this item, it is necessary to develop industries which can add high value on forestry products such as processed timber and furniture for export. Regarding other items, coffee, gypsum and other mineral, handicrafts, non forestry products (benzoin, cardamom, etc.) also increased during the same period.

Table A2.12 Exports of Lao PDR

Items	1995/1996	1999/2000	Share (%)
Electricity	29,693.0	107,000.0	33.0
Garment	64,100.0	94,370.0	29.1
Timber and furniture	70,582.3	71,270.0	22.0
Coffee	25,000.0	29,030.0	9.0
Gypsum and other mineral	411.3	5,993.2	1.8
Handicrafts	118.3	5,100.2	1.6
Animal/Agricultural Products	19,963.7	5,092.5	1.6
Non Forestry Products	2,278.7	4,163.2	1.3
Others	34,950.0	1,955.5	0.6
Total	247,127.3	323,974.6	100.0

Source: JICA Study Team based on the information provided by Ministry of Commerce, 2001. Data in 1,000 USD.

Table A2.13 shows the breakdown of imports value in 1999/2000 by item. 50.1% of total import was imported for investment, and 41.6% of total imports was for consumption. But the imports for consumption also contains many items related to productive activities such as fuel and gas (14.3%), construction equipment (5.7%), and agriculture and animal equipment (4.6%), and Lao PDR has maintained a sound structure of imports so far.

**Table A2.13** Imports of Lao PDR (1999/2000)

Items	1999/2000	Share (%)
Fuel and gas	77,190.0	14.3
Construction equipment	30,831.0	5.7
Agriculture and animal equipment	25,000.0	4.6
Vehicles and spare part	21,210.0	3.9
Clothes (garment staff)	17,430.0	3.2
Commodities (food, vegetables)	16,440.0	3.0
Office and sport equipment	11,270.0	2.1
Luxury products	8,000.0	1.5
Electricity	8,000.0	1.5
Medicine and equipment	2,480.0	0.5
Electronic and spare part equipment	2,010.0	0.4
Other products	4,800.0	0.9
Total import for consumption	224,661.3	41.6
Import of foreign investment	184,000.0	34.0
Import of raw material	86,900.0	16.1
Total import of investment	270,900.0	50.1
Smuggle	45,000.0	8.3
Total	540,561.3	100.0

Source: JICA Study Team based on the information provided by Ministry of Commerce, 2001. Data in 1,000 USD.

Table A2.14 shows the trend of imports value by item. Total imports decreased from 686 million USD in 1995/1996 to 497 million USD in 1998/1999, but 'vehicle and spare parts' increased its share, and 'fuel and gas' accompanied it. 'Medicine and equipment' and 'luxury products' also increased their imports, and 'clothes (garment staff)' and 'commodities (food, vegetables...)' reduced their imports remarkably, which shows import substitution is going on to a certain extent.

#### (3) Services (Non-Factor Income)

Table A2.15 shows the breakdown and trend of 'services (non-factor income)' in the international accounts. The net surplus of this sector has increased remarkably after 1996, and it has contributed to the improvement of the current account balance. Regarding the breakdown, the rapid growth of 'travel' income up to 1996, and probably this trend contributed to the recent increase of this sector also. Regarding the payments, besides 'travel', a large part of the total payment (36.1% in 1996) was paid for 'construction of hydropower and other projects', and this sector has also a sound structure for further development.

**Table A2.14** Import of Lao PDR (1995/1996-1998/1999)

(1,000 USD) Items 1995/1996 1998/1999 1995/1996 1998/1999 111,560.0 Vehicles and spare parts 100,411.6 14.6 22.4 Construction equipment 165,000.0 86,007.3 24.0 17.3 Fuel and gas 70,250.0 69,535.0 10.2 14.0 61,022.8 12.3 Electronic and spare part equipment 98,526.7 14.4 Clothes (garment staff) 109,503.9 48,875.0 16.0 9.8 Commodities (food, vegetables...) 61,425.4 35,948.0 9.0 7.2 Medicine and equipment 18,500.0 2.7 32,868.2 6.6 Agriculture and animal equipment 32,630.0 22,562.0 4.8 4.5 Electricity 14,699.7 15,549.4 2.1 3.1 Luxury products 6,722.6 8.0 1.4 5,600.0 1.3 Office and sport equipment 6,392.2 1.4 9,546.0 497,042.5 100.0 100.0 Total 686,093.3

Source: JICA Study Team based on the information provided by Ministry of Commerce, 2001

Table A2.15 Composition of Services (1991-1996)

(million USD)

						(1111)	IIIUII USL
	1993	1994	1995	1996	1997	1998	1999
Services (net)	35.6	35.0	27.2	25.0	27.6	70.7	98.3
Total Receipts	91.1	85.7	96.6	104.3			
Transportation	19.2	11.4	15.2	16.0			
Travel	34.0	42.7	51.4	62.3			
Communication	2.6	0.0	0.4	0.4			
Insurance	0.3	0.4	0.4	0.4			
Embassies (non salary) and int. organizations	35.0	31.2	29.2	25.2			
Total Payments	55.5	50.7	69.1	79.3			
Transportation	6.0	7.9	4.0	7.1			
Travel	11.0	18.0	29.6	22.2			
Communication	1.1	8.0	0.4	0.6			
Construction (Hydropower)	3.0	2.9	7.4	16.9			
Construction (Other Projects)	15.2	7.9	16.6	19.2			
Technical assistance (50% inflow)	16.4	10.5	8.4	9.9			
Lao Embassies abroad (non salary)	2.8	2.7	3.0	3.4			

Source: Bank of the Lao PDR, 1997.

Note: '...' means unknown.

#### (4) ODA (Grant and Loan)

In recent years, Lao PDR has expanded its public investment with considerable support from foreign countries/organizations in the form of ODA, and the financial inflow of ODA has also contributed to maintain the national budget balance and the international accounts balance. Therefore, it is also a prerequisite of sound economy of Lao PDR to secure the stable financial support of the development partners.

In the 7th Round Table Meeting held in 1997, Lao PDR presented 'Fighting Poverty through Human Resource Development, Rural Development and People's Participation' as a strategic approach for further socio-economic development and poverty alleviation, and this initiative was strongly supported by the partners. Then, in the meeting, 23 countries/organizations made pledges of ODA contribution to Lao PDR which amounted to 386 million USD<sup>6</sup>. After the meeting, Lao PDR has been able to secure the financial support continuously, even though there is a decreasing trend in grants from UN agencies, as shown in Table A2.16. However, because of the pressure of debt services for the outstanding external debt, the agreed amount of loans (most of ODA from international financial institutions) shows a tendency to decline.

Table A2.16 Trend of Total Value of ODA Agreed

(million USD, current price of each year)

	•··· • • • ; • • • · ·			
Source	1997	1998	1999	2000
Bilateral (Grant)	136.0	110.7	207.9	137.9
UN Agencies (Grant)	26.5	15.7	9.8	4.9
EU (Grant)	23.0	11.0	4.8	9.0
Mekong River Commission (Grant)	0.0	7.9	8.0	4.6
International Financial Institutions*	177.0	97.2	68.7	75.7
Total	362.5	242.5	299.2	232.1

Source: JICA Study Team based on the information in State Planning Committee: *Foreign Aid Report 1999-2000*, 2001. Note: International Financial Institutions include bilateral financial institutions such as IFAD, NDF, and JBIC. Most of the amount agreed by International Financial Institutions is Loan.

Table A2.17 shows the inflow of ODA in the balance of payments provided by Bank of the Lao PDR between 1992 and 1999. According to this information, the total inflow of ODA in the international accounts increased until 1997 with the increase of loans, but in 1998, it started to decrease. The disbursed amount of ODA counted in the international account in 1999 was 165.1 million USD (gross) or 126.7 million USD (net), which was much lower than the agreed value mentioned in Table A2.16. This gap can be explained by the following reasons:

- There is a time lag between agreement and disbursement
- There is some part of ODA, especially of grant, which skips the international account because the partners may procure goods or services for the projects/programs directly outside of Lao PDR

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<sup>&</sup>lt;sup>6</sup> National Steering Committee of the Round Table Process 2000-2002: *Report of the 7th Round Table Meeting for the Lao PDR*, 2000.

**Table A2.17** Trend of ODA Inflow in Balance of Payments

(million USD)

							(11111)	(שפט ווטו
Year	1992	1993	1994	1995	1996	1997	1998	1999
Grants (Official Transfers)	62.9	103.5	124.7	105.4	81.7	97.5	73.6	69.8
Long-term loans (net)	61.4	69.5	54.3	82.4	138.3	160.7	124.3	56.9
Long-term loans (Disbursement)	71.1	77.8	62.6	97.8	154.9	179.0	149.6	95.3
Total of ODA Inflow (net)	124.3	173.0	179.0	187.8	220.0	258.2	197.9	126.7
Total of ODA Inflow (Disbursement)	134.0	181.3	187.3	203.2	236.6	276.5	223.2	165.1

Source: Bank of the Lao PDR, 1997. Bank of the Lao PDR, 2001

Therefore, the decrease of inflows in the balance of payments does not mean a decrease of total ODA, but the replacement of loans with grants may cause a negative impact on the international accounts, even though the decrease of loans saves the debt service which makes a positive impact on the international accounts at the same time.

Table A2.18 shows the source of ODA disbursed in 1999/2000 by country/institution. The big donors which disbursed more than 10 million USD in the year were Japan, China, Germany, Sweden, Australia, Mekong River Commission, UNDP, ADB, JBIC, and IDA, and these 10 partners covered more than 80% of the total ODA disbursed. In addition to this, 28 international NGOs disbursed around 12.61 million USD as grant in the same year<sup>7</sup>.

Regarding the distribution of ODA among sectors, as shown in Table A2.19, the transportation sector received the largest amount of ODA in 1999/2000, followed by energy, social development, development administration, and education/HRD. Grant covers all sectors, and loan is concentrated in transport and energy which need a large scale investment.

The regional distribution of ODA is shown in Table A2.20. 52.3% of the total ODA was used for nation-wide projects/programs through the central government, 14.2% was used for multi-provincial projects/programs through provincial administrations, and 33.5% was disbursed to specific provinces directly. The distribution among regions/provinces was not equal, and the central region received a higher amount per person (35.1 USD) than the northern region (12.1 USD) and the southern region (12.0 USD).

#### A2.1.3 Stability of Macro-economy and Structure of Finance

In this sub-section, the recent macroeconomic history of Lao PDR is reviewed by observing some time-series indicators.

<sup>&</sup>lt;sup>7</sup> State Planning Committee: Foreign Aid Report 1999-2000, 2001.

#### (1) Exchange Rate

Table A2.18 ODA Disbursements by Country/Institution 1999/2000

Grant	(million USD)
Bilateral	
Japan	90.82
China	38.88
Germany	23.42
Sweden	13.63
Australia	11.36
France	6.66
Thailand	5.88
Norway	5.59
Luxemburg	1.68
Belgium	1.51
Finland	1.18
Denmark	0.86
USA	0.63
New Zealand	0.54
Korea (Republic of)	0.30
Multilateral	
Mekong River Commission	12.79
EU	8.75
UN Agencies	
UNDP	16.63
UNICEF	4.94
UNDCP	2.53
FAO	1.69
UNFPA	1.42
WHO	1.21
UNHCR	0.24
Financial Institutions	
ADB	0.34
IFAD	0.03
Total	253.52

Loan	(million USD)
ADB	54.80
JBIC	19.27
IDA	15.90
OPEC	9.91
NDF	3.87
IFAD	1.94
Total	105.69

Source: JICA Study Team based on the information in State Planning Committee, 2001

The exchange rate of Kip against USD was quite stable until 1997, but after the Asian Financial Crisis broke out, the Kip came down drastically until 1999 (see Table A2.21 and Figure A2.1). After the exchange rate recorded the lowest price (9,747.5 Kip/USD, monthly average) in August 1999, it recovered up to 7,592.0 Kip/USD (monthly average) in January 2000. After that, the Kip has gradually fallen until now, but it is relatively stable (the monthly average of March 2001 was 8,424.0 Kip/USD).

#### (2) Consumer Price Index

In association with the drop of the exchange rate, the consumer price index (CPI) went up drastically because of the Asian Financial Crisis (see Table A2.22 and Figure A2.2). The inflation rate increased continuously in 1998 and 1999, and it recorded the highest rate of 167% (twelve month percentage change of CPI) in March 1999. This high inflation was mainly caused by excessive money supply and high prices for imported goods. After March 1999, the inflation rate dropped and the CPI is presently quite stable (inflation rate is 10 %).

Table A2.19 ODA Distribution by Sector 1999/2000

	(million USD)	)	
	Total	Grant	Loan*
Transport	90.56	53.33	37.23
Energy	49.66	5.19	44.47
Social Development	40.52	30.73	9.79
Development Administration	31.09	29.27	1.82
Education / HRD	28.89	25.54	3.35
Industry	27.43	27.43	-
Agriculture, Forestry and Irrigation	27.24	25.74	1.50
Area Development	24.38	19.02	5.36
Health	16.81	15.39	1.42
Natural Resources	9.71	8.60	1.11
Economic Management	6.06	6.06	-
Communications	2.91	2.91	-
Humanitarian Aid and Relief	2.43	2.43	-
Disaster Preparedness	1.52	1.52	-
Total	359.20	253.15	106.05

Source: JICA Study Team based on the information in State Planning Committee, 2001. Note: \*ODA amount disbursed by Financial Institutions are counted as 'Loan'.

#### (3) Long-term Loans

The outstanding amount of external debt of Lao PDR in 1999 was 1,168.6 million USD in convertible currency debt, and around 785 million Rouble of non-convertible currency debt, on which the government is now negotiating a rescheduling of payments and a reasonable exchange rate to convert it into convertible currency. Table A2.23 shows the trend for the debt service, which increased after 1997 at a high rate. In 1999 it represented 22.4% of the total exports, and this high rate has become a big pressure on the macro-economy of Lao PDR. However, around 46% of the debt service in 1999 was payment for hydropower related loans, and this payment has a different character from the other general loans for basic infrastructure or social development because hydropower in Lao PDR is the most promising export industry, helping in fact the country in earning foreign currency to repay its debt. The debt service rate excluding hydropower related in 1999 was 12.1% and was within a sustainable range. Under such a conditions, Lao PDR must not depend on new loans carelessly, but new loans should be utilized flexibly to maintain the on-going development efforts.

Table A2.20 ODA Distribution by Province 1999/2000

Province	Disbursement (million USD)	Share (%)	Population* (1,000 persons)	Disbursement per person (USD)
Central (National)	187.96	52.3	(1,000 percenta)	(002)
Multiple Provinces	50.99	14.2		
Central Region	87.17	24.3	2,480	35.1
Borikhamxay	19.63	5.5	187	105.0
Vientiane	32.37	9.0	327	99.0
Xiengkhuang	10.34	2.9	229	45.2
Vientiane Mun.	22.79	6.3	598	38.1
Xaysomboun SR	0.30	0.1	62	4.8
Savannakhet	1.72	0.1	766	2.2
Khammuane	0.02	0.0	311	0.1
Northern Region	20.60	5.7	1,703	12.1
Luangnamtha	2.65	0.7	131	20.2
Xayabury	6.08	1.7	333	18.3
Luangprabang	6.78	1.9	416	16.3
Phongsaly	2.52	0.7	174	14.5
Bokeo	1.23	0.3	130	9.5
Oudomxay	0.83	0.2	240	3.5
Huaphanh	0.51	0.1	279	1.8
Southern Region	12.48	3.5	1,037	12.0
Champasack	10.94	3.0	572	19.1
Sekong	1.28	0.4	73	17.5
Attapeu	0.26	0.1	100	2.6
Saravane	0.00	0.0	292	0.0
Total	359.20	100.0		

Source: Made by JICA Study Team based on the information in 'Foreign Aid Report 1999-2000', State Planning Committee, 2001, and 'Basic Statistics of the Lao PDR 1975-2000', National Statistical Centre, 2000.

Note: \*Provisional

Table A2.21 Trend of Exchange Rate between Kip and USD

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
Exchange Rate (yearly average)									
(Kip/USD)	733.8	728.1	726.3	852.5	951.6	1,350.2	3,546.7	7,769.5	8,020.3
Annual Change (%)	2.3	-0.8	-0.2	17.4	11.6	41.9	162.7	119.1	3.2

Source: 'Economic and Financial Sector Statistics', Bank of the Lao PDR, 1997. 'Economic and Financial Sector Statistics 1995-2000', Bank of the Lao PDR, 2001

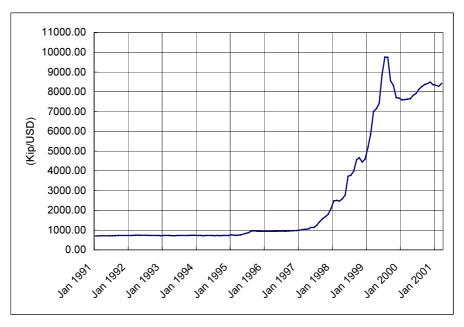


Figure A2.1 Trend of Market Exchange Rate

Source: 'Economic and Financial Sector Statistics', Bank of the Lao PDR, 1997. 'Economic and Financial Sector Statistics 1995-2000', Bank of the Lao PDR, 2001. 'Economic and Financial Sector Statistics March 2001', Bank of the Lao PDR, 2001

Year 1992 1993 1994 1995 1996 1997 1998 1999 2000 Consumer Price Index (December) (1995=100) 68.41 74.53 79.58 100.00 107.28 142.75 345.41 644.05 711.93 Annual Change 6.00 8.95 6.78 25.66 7.28 33.06 141.97 86.46 10.54 (%)

**Table A2.22** Trend of Consumer Price Index

Source: Made by JICA Study Team using the information in 'Economic and Financial Sector Statistics 1995-2000', Bank of the Lao PDR, 2001

#### (4) Short-term International Reserves and Borrowing

As shown in Table A2.24, short-term international reserves decreased in 1997 because both the central bank and commercial banks released their assets to mitigate the lack of foreign currency in the domestic market under the Asian Financial Crisis, but commercial banks bought back foreign assets in 1998 and 1999, and the total international reserve recovered to the level before the Crisis. At the same time, liabilities decreased in 1998 and 1999.

#### (5) Foreign Investment

As shown in Table A2.25, the foreign direct investment increased between 1993 and 1996 because of the increase in large scale investment on hydropower projects, but it has decreased in 1998, 1999, and 2000 mainly because investments on hydropower projects were postponed

due to the Asian Financial Crisis. The investments on other sectors were not harmed by the crisis so much, and there is a continuous inflow in the range of 25 - 45 million USD.

180.00 170.00 160.00 150.00 140.00 130.00 120.00 110.00 100.00 90.00 80.00 70.00 60.00 50.00 40.00 30.00 20.00 10.00 

Figure A2.2 Trend of Twelve Month Percentage Change of Consumer Price Index

Source: 'Economic and Financial Sector Statistics', Bank of the Lao PDR, 1997. 'Economic and Financial Sector Statistics 1995-2000', Bank of the Lao PDR, 2001. 'Economic and Financial Sector Statistics March 2001', Bank of the Lao PDR, 2001

**Table A2.23** Trend of External Debt Service

(million USD)

(minor cob)						
	1995	1996	1997	1998	1999	
Amortization	17.1	18.8	18.3	25.3	41.8	
Bilateral	2.5	4.4	2.1	7.2	17.4	
Multilateral	5.2	5.2	9.2	11.1	14.0	
Non-convertible	9.4	9.2	7.0	7.0	7.0*	
Interest	6.2	5.9	18.8	26.7	26.7	
Bilateral	0.9	0.7	11.9	18.3	18.7	
Multilateral	5.3	5.2	6.8	8.4	8.0	
Non-convertible	0.0	0.0	0.0	0.0	0.0	
Total Debt Service	23.3	24.7	37.1	52.0	68.5	
Total Debt Service						
(excluding hydropower related)	22.7	24.7	25.9	28.4	37.1	
Export (fob)	313.2	321.4	316.8	340.8	305.5	
Debt Service Ratio (%)**	7.4	7.7	11.7	15.3	22.4	
Debt Service Ratio (%)**						
(excluding hydropower related)	7.2	7.7	8.2	8.3	12.1	

Source: Bank of the Lao PDR, 2001. Bank of the Lao PDR: *Annual Report*, 1999. Note: \*provisional. \*\*(Debt Service Ratio)=(Total Debt Service)/(Export) (%)

**Table A2.24** Short-term International Reserves and Borrowing

(million USD)

(חוווווסו טטט)							
	1995	1996	1997	1998	1999		
Central Bank							
Assets	93.0	170.3	110.7	112.8	106.2		
Liabilities	63.6	68.3	61.7	56.4	52.8		
Net	29.4	102.0	48.9	56.3	53.4		
Commercial Bank							
Assets	98.6	112.7	84.8	107.8	151.0		
Liabilities	41.7	49.2	35.7	40.4	36.7		
Net	56.9	63.6	49.1	67.4	114.3		
Total							
Assets	191.6	283.0	195.5	220.5	257.2		
Liabilities	105.3	117.5	97.5	96.8	89.6		
Net	86.3	165.6	98.0	123.7	167.7		

Source: Bank of the Lao PDR, 2001

**Table A2.25** Foreign Investment

(million USD)

									/	011 000
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000*
FDI on Hydropower	0.0	0.0	12.0	22.2	58.4	117.2	59.9	18.1	6.3	2.6
FDI on Others	0.0	0.0	23.8	37.0	30.0	10.8	26.4	27.2	45.3	31.3
FDI Total	0.0	0.0	35.8	59.2	88.4	128.0	86.3	45.3	51.6	33.9
Capital of foreign banks	0.0	0.0	17.0	0.0	6.7	2.6	0.0	0.0	0.0	0.0
Privatization proceeds	1.1	1.2	13.3	1.0	0.0	45.0	2.4	0.5	0.0	0.0
Portfolio investment Total	1.1	1.2	30.3	1.0	6.7	47.6	2.4	0.5	0.0	0.0

Source: 'Economic and Financial Sector Statistics', Bank of the Lao PDR, 1997; 'Economic and Financial Sector Statistics 1995-2000', Bank of the Lao PDR, 2001; 'Economic and Financial Sector Statistics March 2001', Bank of the Lao PDR, 2001

Regarding the portfolio investment, Lao PDR does not have a stock market as yet, and it is limited in capital of foreign banks and privatisation proceeds.

Table A2.26 shows the percentages of amount of approved investment projects between 1997 and 1999 by sector and by country. Regarding its sectoral distribution, 'electric power' dominates, with 63.8% of total amount approved. 'Telecom, transport, and post' (9.0%) and 'hotel/tourism' (8.5%) followed it. These are capital-intensive sectors, and the direct investment on more labour-intensive sectors such as 'processing industry and handicrafts' should be promoted to create jobs for the increasing population.

As for investment origin, projects by Thailand accounted for 41.5% of the approved amount, and USA (21.1%) and South Korea (9.0%) followed.

Table A2.26 Amount Share of Licensed Foreign Direct Investment 1997-1999

Sect	or	(%)
1	Electric Power	63.8
2	Telecom, Transport, and Post	9.0
3	Hotel/Tourism	8.5
4	Processing industry and handicraft	7.3
5	Wood processing	2.4
6	Mining	2.0
7	Agriculture	1.9
8	Banking/Insurance	1.2
9	Textile and garments	1.0
10	Trade	1.0
11	Construction	0.9
12	Services	0.9
13	Consultancy	0.1

Country	(%)
1 Thailand	41.5
2 USA	21.1
3 South Korea	9.0
4 Malaysia	4.1
5 China	1.2
6 United Kingdom	1.0
7 Taiwan	1.0
8 Australia	0.6
9 France	0.5
10 Others	20.0

Source: Bank of the Lao PDR, 2001

#### (6) Money Supply

As shown in Table A2.27, the money supply increased drastically in 1997, 1998, and 1999. This was caused by budget deficit brought by the Asian Financial Crisis. The deficit was covered by advances provided by Bank of the Lao PDR, and in 1998, the increase rate of M2 became 113.3% compared to the previous year. To stabilize the economy, the government stopped to receive advances from Bank of the Lao PDR, and froze non-urgent expenditure, and Bank of the Lao PDR increased sales of Treasure Bill and Central Bank Bill since 1998 and introduced the Attractive Interest Rate Bill in October 1999 to absorb the excess liquidity. These measures helped to stabilize both the CPI and the exchange rate.

Table A2.27 Money Supply (in December of each year)

(million Kip)

					(million Kip)
Year	1995	1996	1997	1998	1999*
Money	67,177	75,557	79,936	168,983	216,895
Currency outside banks	41,955	42,968	53,306	63,164	77,786
Demand deposits	25,222	32,589	26,630	105,819	139,110
Quasi-money	126,089	169,371	326,065	696,951	1,328,471
Time and Savings deposits	44,448	70,163	96,345	116,181	96,776
Foreign currency deposits	81,641	99,208	229,720	580,770	1,231,695
Liquidity	193,266	244,928	406,001	865,933	1,545,366
					(%)
Exchange Rate (Annual Average) Annual Change	17.4	11.6	41.9	162.7	119.1
Annual Change of Money Supply (M2)	16.4	26.7	65.8	113.3	78.5
CPI (Annual Average) Annual Change	25.7	7.3	33.1	142.0	86.5

Source: Bank of the Lao PDR: Annual Repor', 1996, 1997, 1998, and 1999. Bank of the Lao PDR, 2001

Note: \*Estimation

#### (7) Interest Rate of Commercial Banks

Table A2.28 shows the mean interest rate of commercial banks after 1995. Both the interest rates for deposit and lending increased in 1998 responding to the high inflation in that year, and after the inflation rate started to decrease, the interest rates also went down. Commercial banks introduced two-year time deposit in 1999, and they have kept the high interest of the long-term time deposit even after they reduced those for short-term time deposits and savings. This is due to an intention for commercial banks to mobilize long-term savings and reinvest them on productive sectors.

**Table A2.28** Trend of Interest Rate at Commercial Banks

(%)2001 Mar 1995 Dec 1996 Dec 1997 Dec | 1998 Dec | 1999 Dec | 2000 Dec 16.00 16.25 16.00 22.00 14.00 9.00 6.00 Savings Time (3 months) 11.25 11.25 16.50 21.00 13.50 13.50 9.50 11.50 Time (6 months) 16.50 17.00 17.00 17.00 16.50 21.50 Time (12 months) 17.50 17.50 18.00 22.00 20.00 20.00 13.50 Time (24 months) 24.00 22.50 22.00 17.50 20.00 17.00 17.00 13.00 Agriculture and Forestry 18.00 16.50 Industry and Handicrafts 25.00 25.00 22.00 32.00 28.00 22.00 17.00 Construction and Transport 25.50 24.00 32.00 26.00 20.00 25.50 30.00 Commerce and Services 26.50 26.50 25.50 34.00 30.00 28.00 21.00 25.66 7.28 33.06 141.97 86.46 10.54 8.41 CPI Annual Change (%)

Source: JICA Study Team using the information in the following documents. Bank of the Lao PDR, 2001.

Note: Mean rate.

#### (8) Deposits of Individuals

For the private sector to participate in economic development, one of the key conditions is that banks can mobilize enough deposits from individuals to lend to the private sector. Table A2.29 shows the deposits of individuals, and we can find a rapid increase of total deposits especially in the form of foreign currency deposits. Regarding the deposits in Kip, the increase in amount is moderate because of the low interest rate compared to the high inflation rate.

#### **A2.1.4 Household Economy**

#### (1) Income

Most of the people in Lao PDR largely depend on the income from agriculture even in urban areas. According to estimations based on the information available in the LECS II<sup>8</sup>, full-time farm households are around half of the total number of households (53% of the total, in 1997/98), of which only around half (25% of the total, in 1997/98) are pure self-sufficient farm

<sup>&</sup>lt;sup>8</sup> National Statistical Centre: The Households of Lao PDR (LECS 2), 1999

households. Around 26% of the total households are part-time farm households, and the remaining 21% of the total households are estimated to live only on non-agricultural income sources such as employment in the public sector and private companies, self-employment in small businesses, etc.

Table A2.29 Trend of Deposit of Individuals (including Social Organizations)

(billion Kip)

at current price	1995 Dec	1996 Dec	1997 Dec	1998 Dec	1999 Dec	2000 Dec	2001 Mar
Current Deposit	3.43	3.54	4.51	11.38	12.09	19.40	18.85
Time and Saving Deposit	26.89	53.74	75.13	85.58	86.86	192.26	227.46
Foreign Currency Deposit (Residents)	13.99	14.09	114.85	430.67	869.40	1,182.77	1,231.89
Total	44.32	71.37	194.49	527.63	968.35	1,394.43	1,478.20

at 1990 constant price	1995 Dec	1996 Dec	1997 Dec	1998 Dec	1999 Dec	2000 Dec	2001 Mar
Current Deposit	3.43	3.30	3.16	3.29	1.88	2.72	2.34
Time and Saving Deposit	26.89	50.09	52.63	24.78	13.49	27.01	28.28
Foreign Currency Deposit (Residents)	13.99	13.14	80.46	124.68	134.99	166.14	153.15
Total	44.32	66.53	136.25	152.75	150.35	195.87	183.77

Source: JICA Study Team using the information in the following documents. Bank of the Lao PDR, 2001. Bank of the Lao PDR: *Economic and Financial Sector Statistics March 2001*, 2001.

Table A2.30 shows the proportion of time spent for economic activities by provinces. In the whole country, 54.7% of the total time for economic activities was spent in agriculture, 25.2% was spent in self-employed business (except agriculture), 12.1% was spent in government work, 6.7% was spent in jobs for employed workers in the private sector. Comparing among regions, the households in the northern region spent more time in agriculture than those in the other regions.

Table A2.31 shows the average income by consumption unit <sup>9</sup> across provinces and its composition by source of income. Regarding the amount of income, the average income of the northern region is the lowest, and that of the southern region is the highest. Regarding the source of income, 45% of the total income came from agriculture in 1997/98 on average for the whole country, 20% came from business, and 15% came from wages. Here again, we can find the high dependence on agriculture in the northern region where 56% of income came from agriculture.

#### (2) Consumption

According to the LECS II, conducted between March 1997 and February 1998, the average monthly consumption per consumption unit including own production was 38,090 Kip. This indicator was higher in urban areas (59,260 Kip) than in rural areas (33,670 Kip); it was 30,730 Kip in the northern region, 45,210 Kip in the central region, and 32,310 Kip in the southern

<sup>&</sup>lt;sup>9</sup> A consumption unit is calculated as 1.0 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.

region (see Table A2.32). However, this indicator is influenced by the price level in each area and we cannot really compare it across regions.

Table A2.30 Composition of Household Economic Activity in 1997/98

(% of hours)

	(% of nours)				
	Agriculture (including employed)	Self- employed Business	Employed by Government	Employed by Private Sector	
Lao PDR	54.7	25.2	12.1	6.7	1.3
North	69.3	19.0	7.6	2.4	1.8
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
Center	42.0	31.1	15.8	9.8	1.3
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
Xaysomboun SR	59.8	35.8	3.3	0.1	1.1
South	61.1	21.4	10.8	6.2	0.5
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

Source: National Statistical Centre, LECS II, 1999

Therefore, by looking at the Engel's coefficient<sup>10</sup>, one can presume that households in urban areas are richer than in rural areas because the Engel's coefficient in urban areas (50.6%) is lower than that in rural areas (64.6%), and the central region is the richest (58.5%), the northern region is in the middle (62.0%), and the southern region is the poorest (67.3%).

Next, we compare the estimated daily food intake measured by rice quantity. The indicator for the whole country is 2,319 grams/person, which means one person spends a value equivalent to 2,319 grams of rice for food everyday. According to this indicator, food consumption is 3,424 grams/person in urban areas and 2,069 grams/person in rural areas, which means the people in urban areas are generally richer than the people in rural areas. In the same way, people in the

<sup>&</sup>lt;sup>10</sup> Engel's coefficient is the percentage of food consumption in total consumption, and a larger coefficient indicates lower real income.

central region are found to be generally richer (2,467 grams/person) than in the northern region (2,394 grams/person), and people in the southern region are poorest (1,759 grams/person).

**Table A2.31** Household Income in 1997/98

	Total Monthly	Source of Inc	come (%)				
	Income*		Imputed				
	(Kip/cu**)	Agriculture	rent	Business	Wages	Property	Transfers
Lao PDR	40,300	45	4	20	15	2	13
Urban	68,000	10	6	37	24	6	17
Rural	34,200	60	3	12	12	1	10
North	33,200	56	4	21	14	1	4
Phongsaly	19,600	81	2	12	4	0	2
Luangnamtha	26,100	60	3	9	26	1	2
Oudomxay	18,900	71	8	8	10	0	3
Bokeo	34,800	60	10	14	12	1	4
Luangprabang	32,300	54	2	25	13	1	5
Huaphanh	25,200	51	5	35	4	0	4
Xayabury	60,200	51	4	21	18	2	5
Center	42,500	39	5	15	20	3	17
Vientiane M.	80,300	24	5	18	22	3	28
Xiengkhuang	26,800	62	7	2	20	1	8
Vientiane P.	40,200	49	6	24	13	1	6
Borikhamxay	43,400	51	4	17	26	1	1
Khammuane	34,500	42	6	21	13	3	15
Savannakhet	26,000	50	5	3	22	8	10
Xaysomboun SR	22,400	79	3	6	5	0	6
South	46,400	46	2	30	9	1	11
Saravane	34,500	77	2	3	4	4	11
Sekong	30,100	59	2	4	4	0	32
Champasack	55,400	35	2	42	10	1	10
Attapeu	37,300	56	3	17	17	1	6

Source: JICA Study Team using information in National Statistical Centre, LECS II, 1999.

Note: \*Estimated by the following formula: (Total Income: Kip/cu) = (Profit from Agriculture: Kip/household) / (Percentage of Agriculture) / (Average Consumption Unit in a household: cu/household). This estimate includes own consumption.

\*\*Consumption Unit: Consumption Unit is calculated as 1.0 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.

Regarding the level of self-sufficiency, 36.2% of the total consumption comes from own production on average, and households in rural areas are more self-sufficient (45.5%) than those in urban areas (10.0%). Self-sufficiency is lower in the central region (30.3%) than in the northern region (45.3%) and in the southern region (42.3%).

**Table A2.32** Household Consumption in 1997/98

	Consumption	Food (%) (Engel's coefficient)	% of which: Rice	1% OT O\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Daily Rice Intake (gram/person)	Daily Food Intake measured by Rice Quantity (gram/person)
Lao PDR	38,090	60.9	25.1	36.2	582	2,319
Urban	59,260	50.6	14.4	10.0	493	3,424
Rural	33,670	64.6	29.0	45.5	600	2,069
North	30,730	62.0	26.9	45.3	644	2,394
Phongsaly	24,020	72.9	21.4	56.6	660	3,084
Luangnamtha	26,890	71.6	20.9	56.2	658	3,148
Oudomxay	23,500	65.5	31.7	50.5	666	2,101
Bokeo	32,360	66.3	26.3	49.5	621	2,361
Luangprabang	30,290	62.0	28.3	38.7	601	2,124
Huaphanh	22,370	68.6	31.3	56.4	616	1,968
Xayabury	47,320	52.3	25.1	38.2	704	2,805
Center	45,210	58.5	22.9	30.3	565	2,467
Vientiane M.	68,430	50.9	14.9	13.2	489	3,282
Xiengkhuang	35,530	65.6	16.3	48.7	659	4,043
Vientiane P.	45,730	57.0	24.9	33.6	612	2,458
Borikhamxay	40,780	72.0	33.2	48.1	629	1,895
Khammuane	37,470	65.6	29.4	35.7	589	2,003
Savannakhet	35,010	61.4	30.3	40.9	546	1,802
Xaysomboun SR	28,090	70.0	25.0	51.0	588	2,352
South	32,310	67.3	29.9	42.3	526	1,759
Saravane	31,760	68.6	36.0	46.5	594	1,650
Sekong	29,820	76.0	23.1	58.1	433	1,874
Champasack	33,480	64.7	28.1	36.1	513	1,826
Attapeu	29,130	73.2	26.9	55.3	465	1,729

Source: JICA Study Team using the information in National Statistical Centre, LECS II, 1999. Note: \*Consumption Unit: Consumption Unit is calculated as 1.0 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.

#### (3) Poverty

According to the simple analysis using Engel's coefficient and estimated daily food intake measured by rice quantity, it seems that people in the southern region are the poorest. However, according to the percentages of people living in poverty<sup>11</sup> in 1997/98, poverty in the northern region (52.5%) is more serious than in the central region (34.9%) and the southern region (38.4%) (see Table A2.33). (According to this statistics, Huaphanh and Oudomxay are in the most serious situation, with three quarters of the population living in poverty.)

<sup>&</sup>lt;sup>11</sup> People living in poverty corresponds to those who cannot reach the minimum food line of 2,000 calories/day.

Table A2.33 Percentage of Population in Poverty by Regions and Provinces (1997/98)

	(%)
Lao PDR	38.6
Vientiane M.	12.2
North	52.5
Phongsaly	64.2
Luangnamtha	57.5
Oudomxay	73.2
Bokeo	37.4
Luangprabang	49.4
Huaphanh	74.6
Xayabury	21.2

	(%)
Center (except Vientiane M.)	34.9
Xiengkhuang	34.9
Vientiane P.	24.3
Borikhamxay	25.8
Khammuane	41.6
Savannakhet	37.1
Xaysomboun SR	55.0
South	38.4
Saravane	39.6
Sekong	45.7
Champasack	35.6
Attapeu	45.3

Source: Government of the Lao PDR: Fighting Poverty through Human Resource Development, Rural Development and People's Participation, 2000.

Table A2.34 shows the Gini coefficient<sup>12</sup> for the Lao PDR (and some neighbouring countries), and it provides one possible explanation for the contradiction mentioned above, that is to say, which is poorer between the northern region and the southern region. The inequality of income distribution as measured by the Gini coefficient, or income gap, in Lao PDR is less serious than in Thailand and Cambodia, and at the same level of Vietnam. When we compare the coefficients inside the Lao PDR, we can find that inequality is more serious in the urban area than in the rural area, and it is most serious in the northern region and least serious in the southern region. Therefore, the conclusion would be that the southern region is the poorest relative to average income, but because of the greater inequality in the northern region, the population in poverty in the northern region is larger than that in the southern region.

#### (4) Land Ownership

Table A2.35 shows figures for household land ownership. Even though the households in the northern region are generally more dependent on agriculture as discussed in the sub-sections of (1) and (2), the percentage of households who have their own land is 44% and is much smaller than the average for the whole country (65%). This means that there are more tenant farmers in the northern region than in the other regions, and it may be one reason for the high inequality in that region.

In the southern region, around 80% of the households own their land, but accessibility to irrigated land is only 7%. It may be said that this lack of irrigation has caused the low food consumption in the southern region discussed in the sub-section (2).

<sup>&</sup>lt;sup>12</sup> The Gini coefficient is an indicator of inequality of income distribution, and 100% means pure inequality and 0% means pure equality.

Table A2.34 Gini Coefficient in 1997/98

	Gini Coefficient (%)
Lao PDR	35.0
Urban	39.4
Rural	32.2
North	35.1
Center	34.9
South	32.4
Thailand	41.4*
Vietnam	36.1*
Cambodia	40.4**

Source: Lao PDR: Labour Markets in Transitional Economies in Southeast Asia and Thailand, Development Analysis Network, 2001. For Thailand, Vietnam and Cambodia: World Bank: World Development Indicators 2001, 2001.

Note: \*Data for 1998, \*\*Data for 1997

Table A2.35 Percentage of Household Land Ownership

	Owning Land (%)	Access to irrigated land (%)
Lao PDR	65	25
Urban	42	21
Rural	70	26
North	44	44
Phongsaly	29	36
Luangnamtha	33	35
Oudomxay	37	38
Bokeo	61	61
Luangprabang	42	25
Huaphanh	3	59
Xayabury	87	62
Center	72	20
Vientiane M.	49	21
Xiengkhuang	64	62
Vientiane P.	82	31
Borikhamxay	86	8
Khammuane	87	4
Savannakhet	80	12
Xaysomboun SR	74	30
South	80	7
Saravane	83	5
Sekong	90	21
Champasack	76	7
Attapeu	91	1

Source: National Statistical Centre, LECS II, 1999.

#### **A2.1.5 Mid-term Macro-economic Targets**

The basic goals for socio-economic development in Lao PDR are to maintain public peace and political stability, to alleviate poverty by supplying enough food, and to achieve continuous economic growth. A stable macro-economic condition and the promotion of private sector economic activities, sound execution of the national budget and the efficient implementation of public investment, and decentralization are the prerequisites to achieve these goals.

The macro-economic targets of Lao PDR up to 2005 are summarized as follows<sup>13</sup>:

- Annual GDP growth: 7.0-7.5%
- Annual growth for agriculture: 4.0-5.0%
- Annual growth for industry: 10.0-11.0%
- Annual growth for service sector: 8.0-9.0%
- Inflation rate: less than 10%
- Stable exchange rate
- Annual fiscal revenue: increased to 18% of GDP
- Annual fiscal deficit: decreased to 5% of GDP
- Trade deficit: decreased to 6% of GDP
- Public investment: maintained at the level of 12-14% of GDP
- Public saving: increased to 12% of GDP
- GDP per capita: increased to 500-550 USD/person
- Poverty among the population: less than 50% of the current rate

#### **A2.1.6 Topics Related to the Regional Economy**

#### (1) Impact of the Asian Financial Crisis

The Asian Financial Crisis made a critical impact on the Lao economy, but this impact was comparatively smaller than in some other countries. First, the growth rate of real GDP dropped from the level of around 7 % to 4.0% in 1998 but positive growth rate could be maintained, even though many neighbouring countries suffered negative growth (Thailand -10.0%, Indonesia -13.7%, and Malaysia -5.8%)<sup>14</sup>. This was because of the intensive investment in the agricultural sector and related infrastructure development during the Crisis, which was decided by the government according to the following reasons:

- The government observed that the prices of rice and major agricultural products were comparatively stable in the early stage of the Crisis.
- The government judged that strengthening the leading industry in which the majority of the population were engaged was the best way to reduce poverty under the crisis.
- From a long-term viewpoint, the agricultural sector and related infrastructure especially in rural areas were substantial.

<sup>13</sup> Government of the Lao PDR: Strategy for Lao PDR Socio-Economic Development to the year 2020, 2001, and 5th Five-Year Socio-economic Development Plan (2001-2005), 2001.

<sup>&</sup>lt;sup>14</sup> Government of the Lao PDR: Macro-economic Policy and Reform Framework, 2000.

As a result, the agricultural sector could maintain its growth and contribute a lot to the positive growth of the GDP in 1997 and the following years.

However, this strategy caused a serious instability in the macroeconomic situation in the Lao PDR. While the intensive investment in agriculture and related infrastructure caused a large increase of expenditure in the national budget, government revenue decreased mainly because of a reduction in import tax and timber royalties. This budget deficit was covered by advances from Bank of the Lao PDR, and the money supply increased rapidly. The excess of money supply caused high inflation and the fall of the exchange rate of the Kip against the USD, and the price increases for imported goods influenced negatively inflation rates. As a result, inflation reached 167% (twelve month percentage change of CPI) in March 1999, and the exchange rate recorded 9,747.5 Kip/USD (monthly average) in August 1999. This instability led the government to adopt conservative financial policies.

The drop in exchange rate during the crisis also affected the trade balance. Originally the structure of trade of the Lao PDR had generated trade deficits for many years before the crisis happened, and the deficit had increased together with the expansion of trade scale until 1996 when the trade deficit reached 368.2 million USD. However, by that time the country's exports were reduced because of the decline in demand in the neighbouring countries, and at the same time, imports decreased more than the exports because not only the import of materials for export products decreased but also the import of consumption goods decreased because of the price increases. The final result was an improved trade balance from 331.1 million USD deficit in 1997 to 212.0 million USD deficit in 1998, even though there was no fundamental improvement of its trade structure.

The crisis also had a serious impact on foreign direct investment in Lao PDR. Foreign direct investment had grown after the New Economic Mechanism was introduced, and it was 128.0 million USD in 1996. However, some investments on hydropower were postponed after the crisis began, and it dropped to 86.3 million USD in 1997 and 45.3 million USD in 1998.

The increased budget deficit brought a reduction in current expenditure (it was reduced by 28.1% between 1996/97 and 1998/99<sup>15</sup>), and it affected especially government wages and salary expenditures (the government's wage and salary expenditures were reduced by 51% between 1996/97 and 1998/99 according to the same source). Moreover, the government could not keep the public pledge of increased budget allocation to current expenditure especially in the public health and education sectors, which had been announced in the 6th Round Table Meeting.

The inflation caused by the crisis brought a serious reduction of income to wage earners, especially employees in the public sector where wages were more inflexible. On the other hand,

<sup>&</sup>lt;sup>15</sup> Government of the Lao PDR: Macro-economic Policy and Reform Framework, 2000.

the influence of inflation on households who were mainly engaged in agriculture was comparatively small because they had a larger percentage of own-production in their consumption. Moreover, there seems to have been some people who benefited by trading agricultural products in border areas during the crisis.

#### (2) Open-door Policy

In 1997, Lao PDR became a full member of ASEAN and AFTA, and it is obliged to implement trade liberalization and harmonization of customs after 2008. And Lao PDR obtained the observer status of WTO in 1998, and it should become a formal member in the near future.

By joining AFTA, the Lao PDR can get access to a huge market which has a greater purchasing power than the domestic market. At the same time, the importance of the Lao PDR as a land-link in the Greater Mekong Sub-region, may bring the country many chances of new businesses. The regional economic integration is also likely to help reducing the gaps between Lao PDR and neighbouring countries. The economy of Lao PDR cannot grow without trade, foreign direct investment, and tourist inflows from neighbouring countries, and the open-door policy is a precondition to establish a sound relationship with countries in the region.

However, the open-door policy will bring some challenges. For example, free trade will cause a decline in revenue from import tax and the government needs to strengthen the revenue collection system to cover this decline. On the other hand, cannot take any measure to protect the economy such as increasing import tax to protect domestic infant industries and increasing export tax to maintain the prices of basic products low for the consumers.

To benefit from the regional integration, the government needs to formulate a clear strategy to strengthen the industrial sectors where the country is competitive, and concentrate the limited resources on these sectors. To formulate the strategy, public sector and private sector should establish a cooperative relation, and jointly develop initiatives especially in the field of human resource development. At the same time, the harmonization of the related actors in the public sector such as the Ministry of Commerce and Tourism, the Ministry of Finance, the Ministry of Communication, Transport, Post and Construction, is also crucial.

#### APPENDIX 3 SOCIAL-ECONOMIC REFORM

#### A3.1 New Economic Mechanism (NEM)

Through the implementation of the New Economic Mechanism (NEM), which was charted by the 4th Congress and formed as a part of the 2nd National Five-year Development Plan (1986-1990), the socio-economy of Lao PDR has been transformed from a command economy into a market-based economy.

The strategies of the NEM include rehabilitation of market mechanisms, privatisation and improving the efficiency of state owned enterprises, facilitation of public sector economic activities, strengthening of management capability regarding macro-economic policy and the national budget, strengthening of financial management, establishment of a rational system of tax collection, implementation of integrated development through the Public Investment Programme (PIP), etc.

In the direction of the NEM, many concrete actions were taken: financial autonomy was introduced to some pilot state owned enterprises in 1985, the market prices for rice and other staple food items were freed in 1986, internal and external trade barriers were significantly reduced in 1987, private land ownership was recognized by the Congress in 1987, a Foreign Investment Code was promulgated to attract international capital in 1988, the Kip was floated in 1989, the Bank of the Lao PDR was established in 1990, provincial branches of the Bank of the Lao PDR were transformed into commercial banks in 1991, international direct dialling was allowed for telephone owners in 1992, the government launched a gazette of regal documents and the national budget was announced in 1993, the ceiling of interest rate for lending by commercial banks was removed in 1995, etc.

These reforms brought several positive responses in the economy between the end of 1980's and the beginning of the 1990's, such as a change from negative growth to positive growth of real GDP, an increase of exports, lower inflation rate, and an expansion of foreign direct investment<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Institute of Development Studies: *Impact of Economic and Institutional Reforms on the Health Sector in Laos*, 1995.

In the 1990's, many efforts were made to implement and consolidate these reforms by establishing a legal and regulatory framework. The followings are the major laws related to NEM.

- Law on Foreign Investment, 1988
- Law on Property (Ownership), 1990
- Law on Establishing of the Bank of the Lao PDR, 1990
- Law on Labour, 1990
- Law on Insurance, 1990
- Law on Accounting System for Enterprises, 1990
- Law on Promotion, Protection and Management of Foreign Investment, 1990
- Law on Labour, 1994
- Law on Business (Company), 1994
- Law on Customs, 1994
- Law on Budget, 1994
- Law on Bankruptcy, 1994
- Law on Secure Transaction, 1994
- Law on Foreign Investment, 1994
- Law on Taxation, 1995
- Law on the Bank of the Lao PDR, 1995
- Law on Enterprise, 1995
- Law on Domestic Investment, 1995
- Law on Forestry, 1996
- Law on Water and Water Resources, 1996
- Law on Land, 1997
- Law on Electricity, 1997
- Law on Land Transportation, 1997
- Law on Commercial, 1997
- Law on Mining, 1997
- Law on Agriculture, 1998
- Law on Industrial Manufacturing, 1999
- Law on Environmental Protection, 1999
- Law on Urbanism, 1999
- Law on Highways, 1999
- Law on Drugs and Pharmaceutical Products, 2000
- Law on Education, 2000
- Law on Road Traffic, 2000<sup>2</sup>

Regarding the state owned enterprises (SOEs), most of them have already been privatised. In 1989, there were 640 SOEs, but only 34 remained in November 2000. Among these 34 SOEs, 24 are planed to remain in public hands, either because they are not making profits but the public sector should maintain them for the public interest and poverty reduction, or because even though they are making profits, they operate in strategic sectors in which the public

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<sup>&</sup>lt;sup>2</sup> UN Lao PDR: Lao PDR: *Common Country Assessment - Edited Final Draft*, 2001; Government of the Lao PDR: *Socio-Economic Development and Investment Requirements*, 1997; Government of the Lao PDR: *Macro-economic Policy and Reform Framework*, 2000.

sector should keep a leading role. However, even for those remaining SOEs, the government will introduce financial autonomy and an audit system to improve their efficiency and transparency.

The next challenge lies in the smooth implementation of these new systems and legal framework, and human resource development is the major requirement as well as securing the necessary equipment, facilities, etc. And a critical issue is the economic inequality which has increased after the market-based economy was introduced. A social security system in its different forms should be considered not only for civil servants, but also for the whole people.

#### A3.2 DECENTRALIZATION

In March 2000, the Prime Minister signed Instruction No.01/PM and the country embarked on a new integrated reform of public administration focusing on decentralization. The Instruction was complemented by Recommendation No.128/SPC and Recommendation No.475/MF.

The goals of decentralization are to promote the well-being of multi-ethnic people by promoting 'people-centred' development, to maintain political stability at the local level, and to achieve rural development and poverty reduction. The decentralization policy is aimed at resolving the gap between plan and reality, to increase self-reliance, to improve utilization of the limited resources, and to develop the potential capability of everyone, by establishing a system by which planning and budgeting processes are conducted in the very places where people actually live their lives.

#### (1) Roles

In this new approach, provinces (including Vientiane Prefecture and the Special Zone), districts, and villages are assigned the following roles:

# 1) Province

Provinces are to be built up as strategic units, and should take responsibility for macro-economic stability at the regional level, security and public security, and all the cultural and socio-economic development in the provinces. Provinces are requested to formulate socio-economic 5-year plans and annual plans, execute revenue collection and budget operation to implement the plans, manage international co-operation and international affairs at their level, and approve and manage small-scale business investments. They also are required to categorize their districts into (i) districts with a budget surplus, (ii) self-reliant districts, and (iii) districts with a budget deficit, and guide the third group of districts to upgrade to self-reliant status before 2003-2005.

#### 2) District

Districts are to be built up as planning and budgeting units, and requested to formulate 5-year

plans and annual socio-economic development plans which are similar to those of provinces but more concrete, reflecting local characteristics. Then districts should implement and evaluate their plans.

### 3) Villages

Villages are to be built up as implementing units, and should collect data from family units or production groups regarding their products or services. Based on the data collected, villages should formulate development and revenue collection plans, implement them, and conduct periodical evaluation and monitoring.

Moreover, villages need to observe the living situation of each family unit, and categorize them into (i) wealthy, (ii) self-sufficient, and (iii) poor. Villages have to provide the framework whereby all families in the village should support the families in (iii) to improve their economic situation.

#### (2) Budget System

The conceptual distribution of roles and responsibilities among provinces, districts, and villages is based on the existing budgeting and planning system which is a combination of top-down strategic planning from the central level to the district level and a bottom-up program proposal process from the district level to the central level. However, in the new decentralization policy, the process is aimed to expand to the village level, and at the same time the bottom-up process should receive more importance.

The budget system proposed in the new decentralization policy points to a new relationship between the central government and localities. Before 1991, each province had its budgetary autonomy, but after 1992, all the government revenue and expenditures came under central government management and control. Provincial authorities were assigned the responsibility to collect taxes but just as agencies, and the provinces could not use those taxes collected by them.

Therefore, the new budget system can be called a 'financial re-decentralization', but it goes much further than the system in place before 1991. In the new budget system, revenue collection and expenditure responsibilities and authorities are as follows<sup>3</sup>.

#### 1) Province

Provinces have the following revenue sources:

<sup>&</sup>lt;sup>3</sup> The following information is based on unofficial translations of Instruction No.01/PM, Recommendation No.128/SPC, and Recommendation No.475/MF. Therefore, there may be some unintentional inaccuracies.

#### a. Ordinary Revenues

- Turnover tax, access tax, benefit tax on production, internal trade, and services are not collected at the central level
- Salary tax for small-scale business
- Entry fee
- Road fee, car registration fee, vehicle control fee, driving license fee
- Identity card fee

#### b. Non Fiscal Revenues

- Technical administrative revenue and public service fee at the provincial level
- Fines and revenue from sale of assets/commodities confiscated by the province
- Revenue from land rent, house leasing, leasing of other assets and state properties in which the province has shares
- Contributions by individuals and households

#### c. Revenues from Public Assets

- Revenue from sales of assets under provincial control
- Revenue from leasing/sale of assets which the central government entrust the province to generate revenues for the central government

# d. Revenue for Equilibration

- Subsidies from the central government
- Subsidies from districts
- Surplus from the previous year

#### Provinces can execute the following expenditures:

## a. Administration Expenditures

- Salaries including allowances for children and wives of provincial officials
- Retirement allowance, compensation for early retirement, and pension
- Assistance for students, monks, monks' teachers in the province
- Expenditures for economic regularization
- Expenditures for socio-cultural regularization
- Expenditures for security and disease preventions
- Expenditures for medicines, medical equipment, assistance for poor patients in provincial medical services
- Expenditures for provincial organizations' activities in sports, arts, and literature
- Expenditure for printing public newspapers of the province
- Expenditures for educational equipments in the provincial educational services
- Expenditures for sciences and technical studies in the province
- Assistance for victims of fires, natural disasters, and epidemics in the province
- Expenditures for foreign relations
- Expenditures for national defence and security (in the case of deficit provinces, this will be covered by the central government).

#### b. Capital Expenditures

• Expenditures for construction, restoration, and conservation of economic, cultural, social infrastructure and offices under the responsibility of provincial level line

- ministries
- Counterpart funds to grant/loan projects at the local level (in the case of deficit provinces, this will be covered by the central government)
- Repayment of loans for the projects at the local level (in the case of deficit provinces, this will be covered by the central government)
- Investments for public and joint venture enterprises in the province

# c. Expenditure for Equilibration

- Subsidies to the central government (in the case of surplus provinces)
- Subsidies to the deficit districts

# 2) District

Districts have the following revenue sources, and the revenue collection should be executed with the cooperation of villages:

# a. Ordinary Revenues

- Land tax
- Resource tax
- Benefit tax (from dependent entrepreneurs)
- Salary tax
- Tax on income from real estate leasing
- Rent from concession of small size markets
- Fees from fluvial transport
- Fees from animal registration
- Fees from TV and video
- Fees from registered letters and stamps

#### b. Non-fiscal Revenues

- Technical administrative revenue and public service fee at district level
- Fines and revenue from sales of assets/commodities confiscated by the district
- Revenue from land rent, house leasing, and leasing of other assets or state properties in which the district has shares
- Revenue from public share dividends
- Contribution of individuals and households

#### c. Revenues from Public Assets

• Revenue from sale of assets under district control

#### d. Revenue for Equilibration

- Subsidies from the provincial budget
- Surplus from the previous year

Districts can execute the following expenditures:

# a. Administration Expenditures

- Salaries including allowances for children and wives of officials of the district
- Retirement allowance, compensation for early retirement, and pension

- Assistance for students, monks, monks' teachers in the district, village committees, and militia
- Expenditures for economic regularization
- Expenditures for socio-cultural regularization
- Expenditures for medicines, medical equipment, assistance for poor patients in the district medical services (in the case of deficit districts, this will be covered by the provincial budget)
- Assistance for victims of fires, natural disasters, and epidemics in the district
- Expenditures for national defence and security (in the case of deficit districts, this will be covered by the provincial budget)

#### b. Capital Expenditures

• Expenditures for construction, restoration, and conservation of economic, cultural, social infrastructure and offices under the responsibility of district level line ministries

#### c. Expenditure for Equilibration

• Subsidies to the provincial budget (in the case of surplus districts)

#### 3) Village

Villages are assigned to collect the following revenue by the district:

- Land tax
- Resource tax
- Fees from fluvial transport
- Fees from animal registration
- Fees from TV and video
- Fines and revenue from sale of assets/commodities confiscated by the district
- Other fees assigned by the districts

Based on the collected revenue, villages can receive the following share of revenues according to their development category, which is decided by the district:

- Villages in high economic development zone: 4% of collected revenues
- Villages in medium economic development zone: 6% of collected revenues
- Villages in normal economic development zone: 10% of collected revenues
- Villages in low economic development zone and remote area: 15% of collected revenues

Villages can execute the following expenditures:

- Economic expenditures such as building access roads, anti-flood dams, irrigation and water supply systems, etc.
- Socio-cultural expenditures such as assistance to village committee, medical staff, teachers, security forces, school, dispensary, etc.

Budget management at the village level shall be operated by the village committee using volunteer assistants from the village with supervision from the District Finance Bureau.

## (3) Requirements for Implementation

To implement this decentralization reform, first of all, human resource development at the local level is the key requirement, and in the short-term, technical assistance and technical transfer are necessary from central staff to provincial staff, from provincial staff to district staff, and district staff to village staff. In the mid-term, there will be a need for reallocation of staff from central to local level, and at the same time, a new training system needs to be prepared at the district and the village level to maintain and upgrade local staff.

It is challenging that revenue redistribution function is included in this decentralization system among provinces and among districts. To implement the revenue redistribution function, it is necessary to develop rational methods to evaluate the economic potential of each locality, and to determine the appropriate level of subsidies.

#### A3.3 GOOD GOVERNANCE AND PUBLIC ADMINISTRATION REFORM

Good governance is one of the prerequisites for socio-economic development and poverty alleviation, and in 1997, the government started a 'Governance and Public Administration Reform Programme'. Now the conceptual development has almost been done, and implementation should follow.

The government has defined good governance as 'An incremental process aiming for the best possible state of institutional and structural arrangements, decision-making processes, policy formulation, implementation and co-ordination capacity, information flows, leadership and relationships between the Government and the people'. Therefore, good governance is a wider concept covering all of the actors involved in socio-economic activities, but as the precondition, at the present time the Lao PDR is concentrating on good governance in the public sector, and discussing the following issues.

#### (1) Financial Management

The following items should be considered and improved to maintain macro-economic stability, to reduce corruption, to increase government revenues, to reduce government expenditures, etc.

- Training for policy-making, planning, and budgeting
- Accountability and transparency
- Administrative/regulatory framework
- Monitoring and auditing system
- Mobilization of resources
- Public investment management
- Procurement management
- Record management and reporting system

# (2) Public Service Personnel Management

Regarding personnel management, the following issues should be considered and improved.

- Lack of appropriate organizational structures
- Inadequate staffing levels
- Low salaries
- Lack of job descriptions and job classification systems
- Weak establishment control and manpower planning systems
- Inadequate personnel management information systems and overall public service costs

To improve the quality of public services, the government has planned (i) to reduce the total number of public servants, (ii) to introduce a performance management and replace non-productive staff with results-oriented staff, (iii) to increase the salary level of public servants, and (iv) to reduce administrative staff and increase technical staff.

According to 'Socio-economic Development Strategy for 2020, 2010 and Five-year Socio-economic Plan (2001-2005)', the following numbers of human resources will be trained and inputted in the public sector until 2005.

• Post graduate level: 450 staff

• Under graduate level: 3,500 staff

• Associate diploma level: 7,500 staff

# (3) Judicial/Legal Reform

The government is committed to develop the legal framework continuously and improve the following issues:

- Quality of judicial decision-making
- Legal enforcement
- Public awareness on existing laws and regulations
- Simplification of legal procedures

# (4) Local Governance Reform for Urban Development

Under the pressure from rapid urban development, now in the capital of Vientiane and four provincial towns (Pakse, Savannakhet, Luangphabang, and Thakhek), new ways to deliver public services and communicate with people are under consideration.

#### (5) Human Resource Development

Human resource development is an inevitable element for good management, improving technical capabilities, enhancing participatory development, and building national ownership. At the same time, job creation is also the first priority to utilize the limited human resources and to alleviate poverty.

# APPENDIX 4 SPATIAL DEVELOPMENT AND ROAD DEVELOPMENT

#### A4.1 Spatial Development

Lao PDR is a land-locked country in the Indochina Peninsula, bordered by Thailand, Myanmar, China, Vietnam and Cambodia. Laos is the least populous country in the peninsula with a population of 5.2 million (2000) and a land area of 236,800 km<sup>2</sup>.

The mountainous geography of the country has always hampered territorial integration. Lao PDR has discarded a centralised model of territorial management, and development has been concentrated mainly along the Mekong Valley. While the population in urban areas accounts for only 17% of the total, the three main plains along the Mekong are all relatively populous.

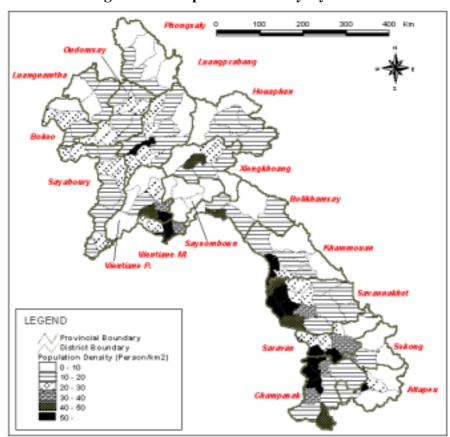


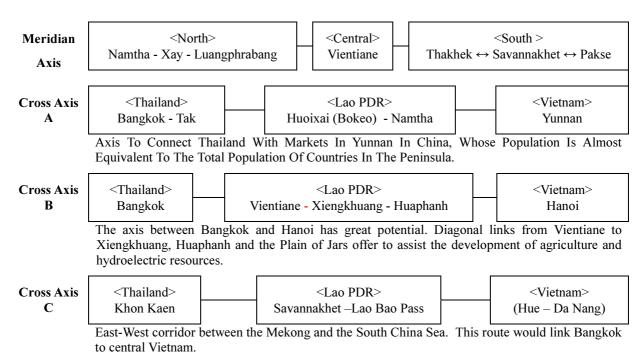
Figure A4.1 Population Density By District

Source: Population data from Paediatric Infectious Disease Prevention Projet(1999)

From the perspective of development of the Mekong subregion, the position of Lao PDR can be regarded positively as "a crossroads" linking the countries of continental South-East Asia rather than as land-locked. The vision of linking the countries in this region has a long history; and has been seriously discussed since the late 1980's. ADB has proposed the construction of major transportation axes through the subregion, including a Trans-Asian highway and a Trans-Asian railway, both of which would affect spatial development of Lao PDR.

National Route 13, which follows the Mekong, has an important role as the only meridian axis that can be used all year around. The backbone of the national road network, it connects Vientiane (population: 233,000), with Luangphrabang (population: 31,800), Muong Xay (population: 15,000), and Namtha (population: 14,400) in the north, and with Thakhek (population: 25,800), Savannakhet (population: 62,200), and Pakse (47,600) in the central and southern regions.<sup>2</sup>

There are other potential transport axes besides the main north-south route. As far as links with neighbouring countries are concerned, the main axes for future development in Lao PDR are shown in Figure A4.2



<sup>1</sup> ADB, 1994, "Greater Mekong Sub Region", 1994

<sup>2</sup> NIAS, 2000, ATLAS OF LAOS

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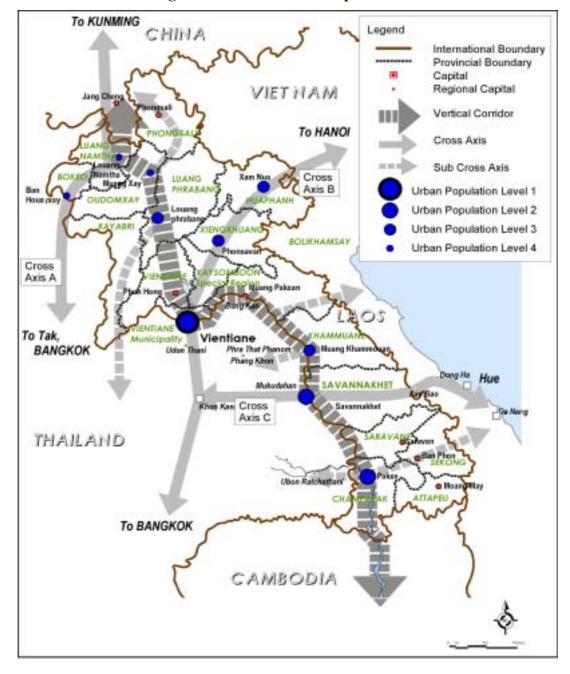


Figure A4.2 Future Development Plan

Source: JICA Study Team

# A4.2 Urban Planning

The Ministry of Communication, Transport, Posts and Construction(MCTPC) has been formulating town plans for a total of 63 town throughout the country, including 9 provincial capitals, 52 district capitals, and 2 focal sites.

MCTPC's objectives for the period up to 2020 are as follows<sup>3</sup>:

- Complete city plans for all levels and encourage urbanisation with 10% up.
- Develop Vientiane and other provincial capitals as clean, attractive, modern towns and cities.
- Assist socio-economic development of selected small towns in rural areas in order to reduce migration to the larger towns and cities.

In order to achieve these targets, city plans for 27 towns will be formulated by 2005, and for a further 25 towns by 2020. Further targets include providing an urban water supply to 30% of the population, and developing domestic production of construction materials to replace imports.

MCTPC is currently preparing guidelines for urban housing planning with the support of the Canadian Government. Planning of health and educational facilities will also be included in the guidelines.

# A4.3 Road Development

#### (1) Current Conditions

In Lao PDR, roads are the most important means of transportation, with more than 90% of freight and 85% of passenger traffic carried by road, but the road network is still relatively undeveloped due to the economic situation and geographical barriers.

Most of the road network, about 18,000km, was constructed before the 1940's, and not designed for the use of heavy commercial vehicles. Only about 18% of the road network is paved.4 It was planned to connect all provincial capitals by 2000, but the road between Oudomxay and Bokeo has yet to be paved. At present, about 80% of national road construction work relies on the support of donors and international organisations.

The total length of roads in Laos is shown in TableA4.1. The existing road network accessible by vehicle is shown in Figure A4.4 The Ministry of Communication, Transport, Posts and Construction(MCTPC) . As shown by the table and map, the proportion of paved road is very low.

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<sup>&</sup>lt;sup>3</sup> Ministry of Communication Transport Post and Construction, 2001: Development Plan on Communication, Transport Post and Construction to Year 2020, 2010 and 2001-2005

<sup>&</sup>lt;sup>4</sup> The Study on the Integrated Regional Development Plan for Savannakhet and Khammuane Region in Lao PDR

Table A4.1 Length Of Roads In Laos - 1999

	National Road		Provincial Road		Local And Urban		Total	
					Road			
Paved	3,134.5km	45.33%	116.3km	1.63%	443.4km	5.00%	3,694.2km	28.92%
Gravel	2,333.3km	33.74%	2,422.7km	34.03%	1.981.6km	22.37%	6,737.7km	52.74%
Earth	1,447.1km	20.93%	4,892.7km	68.73%	6,434.9km	72.63%	12013km	94.04%
Total	6,914.9km	100.00%	7,431.7km	100.00%	8,860.0km	100.00%	12,774.7km	100.00%

Source: Department Of Road, Ministry Of Communication Transport Post And Construction

Notes: National Road: Construction Is Done By The Central Office, Maintenance Budget Is Provided By Central Office, However Maintenance Is Managed By Provincial Office.

Provincial Roads: DCTPC (Provincial Road Office) Construct And Maintain Them.

IRAP (Integrated Rural Accessibility Planning) plans to organise community participation for the construction and maintenance of 'community roads'. In some provinces, routes for community roads have been selected as part of the IRAP programme, but funding is still needed to implement their construction.

# (2) Road Development Plan

# 1) Goals for the year 2020

The Development plan for communication, transportation, posts and construction to 2020 and 2010, and for 2001-2005" was completed in July 2001. The main components of the plan are as follows.

Table A4.2 Road Development Plan

	Goals for 2020	Goals for 2005		
National	Construction: 2,926km (Roads No. 3,	Construction: 600km (Roads No.13, No.8, and		
routes	No.13, No.2, No.8, No.12, No.18, and No.9)	No.9)		
Sub-regional	Complete construction	Construction of paved and 2-season roads		
roads		connecting to borders. (Roads No.11,13, 4)		
Provincial	Provincial capitals to District centers will be	Complete construction of roads from provincial		
roads	paved.	capitals to district centres (40% paved, 60%		
		2-season).		

CHINA VIETNAM Ben Yo JCT Na teu JCT. Paknam Nay JCT. Pak Nong JCT. Poulao JCT. Ban Tha Vieng JCT. Paka JCT. Bung Bao JCT. Houa Mob JCT Ban Vieng Kham Say Tha MouakJCT. Sikai JCT Na Sie JCT. Ban Na Dor Koun THAILAND KM 35 JCT. Ban Peer Mai Na Bong JCT Legend International Boundary Ban Houa Hair Provincial Boundary District Boundary Capital Ban Thang Beng Regional Capital JCT District Capital **Existing Road Network** Planned Road

Figure A4.3 National Road Network Plan 2020

Source: Information from Department of Road, Ministry of Communication, Transport, Posts and Construction

Road Surface Type Bituminous - Concrete - Earth -- Gravel
-- Road Planned Pongsaly angnamtha Oudomxay Huaphanh Bokeo B Luangphrabang Xiengkhuang Bolikhamxay Municipality Khammuane Savannakhet Sekong Champasa

Figure A4.4 National and Provincial Road Network

Source: Department of Roads Planning and Technical Division, MCTCP

## A4.4 Air Transportation

There are four airports – Vientiane, Luangphrabang, Pakse, and Savannakhet – with concrete runways, and 10 airfields, with regular services. Vientiane and Luangphrabang are international airports, used by Thai International Airways and Southern China Airways as well as Lao Aviation.

Goals to 2020 are to develop and improve air services and the national aviation company in order to open up flights to major Asian and European destinations.

Vientiane airport is to be upgraded to accommodate up to a Boeing 747, and airports in Luangphrabang, Xiengkhuang, Savannakhet and Pakse will be able to accommodate up to a Boeing 737. In addition, Phongsaly, Xayaboury, Xaysomboun and Huaphanh airports are to be completed, and Luangnamtha and Oudomxay to be improved.

#### A4.5 Railways

There is no railway service in Laos at present. The Trans-Asian Railway Project endorsed by ESCAP in Bangkok includes Lao PDR, and the following three lines are scheduled for construction as a part of the Asian Network.

- Vientiane Nong Khai (Thailand) : 30km
- Vientiane Boten (Border With China) : 510km
- Pakse Chong Mek (Thailand) : 30km

Before 2000, surveys and designs for the 14km from the Friendship Bridge to Ban Khamsavath, from Vientiane to the Chinese border, and from Vientiane to the Vietnamese border were completed.

The 5-year development plan (2001-2005) seeks funds for railway construction of Vientiane-Nongkhai(14km), Vientiane-Thakhek-Kiu Mouya(466km), ?Thakhek-Pakse, and Vientiane-Chinese Border.

#### **A4.6** River Transportation

In Lao PDR, the rivers have often been used for transport because of the difficulty of overland travel. For example in Bokeo, more than 75 % of goods are transported by river.

The MCTPC Development plan to 2020 aims to improve water transportation and a river port system along the Mekong River from the Lao-Chinese border to Savannakhet.

Smaller rivers are also very important for daily transport needs, especially for people living in remote areas not served by the road network.

#### A4.7 Post and Telecommunications

MCTPC has been making efforts to modernise the postal and telecommunications systems. At present, there are 68,054 telephone lines (land and wireless), and 144,485 kg of mail is delivered per year.

The postal network covers all provincial capitals and most districts, though 32 district capitals do not yet have a post office.<sup>5</sup> Post is delivered by road, air, and boat. By 2020, the postal service should provide a faster and more reliable service, while the number of post offices will be increased in order to extend postal services down to all villages with a population of 100 or more.

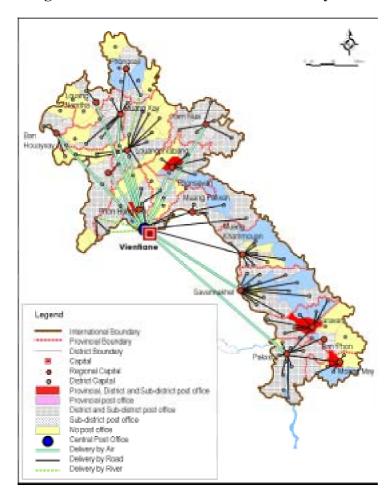


Figure A4.5 Postal Network and Hierarchy of Post Offices

Source: NIAS, ATLAS OF LAOS

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<sup>&</sup>lt;sup>5</sup> NIAS, ATLAS OF LAOS: Spatial Structures of the Economic and Social Development of the Lao People's Democratic Republic, 2000

The telecommunications network of Lao PDR is shown in Figure A4.4. There are 26 telecommunications centres<sup>6</sup> distributed throughout the country, located mainly along Route 13 from Luangnamtha in the north to Khong in the south. While all provincial capitals are connected to the telecommunications network, only some districts capitals are

MCPTC aims to install fixed and wireless telephone lines, permitting internet access, for all settlements with a population of 500 or more, and add 500,000 new telephone lines up to an average of 6 lines per 100 population by 2020.

#### A4.8 TV and Radio Network

At present, all broadcasting in Lao PDR is under government control, and is supervised by the Ministry of Information and Culture.

#### (1) Current Conditions

The Lao National Radio service began in 1960, and its network covered almost 90% of the country from nine MW (Medium Wave), sixteen FM and one SW (short wave) station. However, the Russian-made transmitters are now obsolete, and the parts necessary for their repair are no longer available. As a result, about half the transmitters have reduced power output by half, while some have stopped functioning completely, with the result that less than half of the country can receive radio transmissions.

Small scale television broadcasting in the Lao P.D.R. began in 1982. At present, TV service covers about 30% of the country, serving about 60% of population. While most provincial capitals are covered, TV service does not reach the mountainous areas where information is required the most.

The programmes produced by Lao National TV are transmitted via the Thaicom satellite to all local stations, which means that Lao TV is available anywhere in the country via a parabolic antenna and a satellite receiver. However, most people in more remote areas do not have television sets.

According to the LECS2, 30% of households possessed a television in 1997/98. A JICA report gives the following figures:

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<sup>&</sup>lt;sup>6</sup> Basic Statistics of the Lao PDR

Table A4. 3 State Of Communication Infrastructure

	Number	Proportion Of Households
TVs	340,000	33.7%
Radios	776,000	76.9%

Source: JTEC, 2001, Study Report on Rehabilitation and Expansion of TV/Radio Broadcasting Networks in Lao People's Democratic Republic.

# (2) Future Plans

Both TV and Radio are important sources of information for Lao people. Some international organisations are already using the broadcasting media for education and health campaigns, and Lao National TV plans to develop its educational broadcasting.

While television is a very effective medium for transmitting information, not all Lao families have a television set. Radios, however, have the advantage that they are relatively inexpensive, and can be used in areas without electricity and AM radio can be broadcast easily to remote areas. Therefore, Ministry of Information and Communications plans to expand and develop radio as well as television programming and broadcasting.