Effects of the

Financial crisis

on the Health Sector

in the

Lao People's Democratic Republic
(Lao PDR)

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Abbreviations

ADB Asian Development Bank

AIDS Acquired immunodeficiency virus

BCG Bacille Calmette-Guerin vaccine

CAG Cash assistance to government

DPT Diphtheria Polio Tetanus (vaccine – also known as triple antigen)

EPI Expanded Program on Immunisation

FPS Family Planning Service

GDP gross domestic product

GR general resources

H&N Health and Nutrition

HIV Human immunodeficiency virus

MCH Maternal and child health

MOPH Ministry of Public Health

NGO Non-government organisation

ODA Overseas development assistance

OP Outpatient

PHC Primary Health Care

SF specific funding

TT2 Tetanus toxoid (vaccine)

UNDP United Nations Development Program

UNICEF United Nations Children's Fund

USD United States dollars

WB World Bank

WES Water and Environmental Sanitation

WHO World Health Organization

Summary and Recommendations

Effects of the Crisis

The Lao economy has been affected by the regional financial crisis through significant depreciation of the local currency even after the stabilisation of other currencies in the region. By mid-1998, the Lao Kip had lost 70% of its 1997 value. This has led to rapid increases in inflation, reaching 150% in early 1999. Wages have been relatively stagnant and purchasing power has plummeted as consumer prices have increased. Although civil servant salaries have been increased by up to 100%, their income is far lower than people in the private sector. Reports indicate that incomes and savings have increased among a significant majority of rural farmers. requirements of farmers and the depreciation of the kip against the baht led to a surge in informal sector agriculture exports to Thailand with farmers paid in baht. Improved roads in the northern part of the country have facilitated transport of products to the border. Official statistics show a 3.5% increase in agricultural production during 1998. Exports of other goods have decreased, especially timber products, however exports of garments are recovering. Direct foreign investment in the Lao PDR decreased by 48% in 1998 compared with 1997, mainly due to reduced Thai investments. Foreign aid grants and loans also decreased during 1998 by 27% and 19%, respectively.

The social effects of the crisis in Lao PDR may not have been as dramatic as has been in other Asian countries, partly because the real sector effects have overall been limited and also because the majority of the population is engaged in subsistence activities. Nevertheless, there have been some adverse effects, evidenced in real wage erosion and the inability of some households to meet their minimum food requirements. The lack of recent reliable data limits the ability to assess the real social effects of the crisis. Most observers agree that the social impact of the crisis has been greater in urban populations and that civil servants have been particularly affected.

From available information, total official health expenditure as a share of GDP declined during the 1980s and recovered only recently. External aid has increased during the past decade (though decreased in 1998) and domestically financed government expenditures have declined as a share of the total official expenditures. The proportion of total public investment in public health was expected to increase from 1.8% to 2.2% in the coming years; however, this commitment was made prior to the crisis and may prove difficult to implement.

There is no information on private sector funding or changes over the period since the crisis. There are multiple donors in the health sector, ranging from multilateral and bilateral agencies to over 50 non government organisations, however, foreign aid grants declined in 1998. Effects on the health sector of decreased donor interest are largely unknown, but a decrease has occurred in funds from international agencies to the expanded program on immunisation (EPI) [US\$ 800,000 in 1998 as compared to US\$ 1,200,000 in 1997]. Overall, the health sector remains highly dependent on foreign assistance, even for the maintenance of routine, basic health services.

Data collection and statistical analysis capacity remains weak across all sectors, including health, and there is continuing difficulty in gaining access to reliable and timely data. The national capacity for health monitoring and surveillance is still below what is required for a comprehensive measure of trends in health indicators. Since the crisis, there has been no change in the use of family planning services and EPI coverage appears stable. There has been no disruption of training programs for health workers in government and NGO programs except for delays in implementation of projects due to lengthy administrative procedures.

Decreased purchasing power among certain population groups as a result of high inflation may have adversely affected household food security. Prior to the crisis, nearly one-third of Lao households experienced insufficient food intake, and as a result many adults and children suffer from chronic energy deficit. As a consequence of heavy work loads, food insecurity, and frequent pregnancies, women (15 per cent) suffer undernutrition more than men (12 per cent). Low birth weight (under 2.5 kg) is a major obstacle for infant survival and occurs in about 20 per cent of births. While there is no hard evidence that the situation has changed since the economic crisis, several household and nutrition surveys have called attention to the high prevalence of both acute and chronic malnutrition. Chronic malnutrition is widespread and evenly distributed throughout the population. Overall, nutritional status in the Lao PDR ranks well below the mean for Southeast Asia. An FAO diagnosis of the country's nutritional status records the prevalence of wasting (weight for height) at 10 per cent, and of stunting (height for age) at 48 per cent in children 0-5 years.

The cost of drugs and travel related to health service delivery and training is directly linked with the inflation rate and the value of the local currency. Exchange rate depreciation and inflation have reached alarming proportions. In general, prices have risen in all regions of the country. Since 1997, the cost of essential drugs has more than doubled, adversely affecting both self-medication through purchases from private pharmacies and the supply of drugs to public sector facilities. No shortages in the supply of vaccines have been reported.

The social effects of the crisis probably cannot be effectively addressed piecemeal. International assistance to help revive the Lao economy is urgently needed along with greater efforts to implement macro-economic reforms. The recent trend in decreasing foreign aid grants and loans to the PDR needs to be urgently reversed. Otherwise, it is unlikely that the government's goal of graduating from the rank of least developed nation will be achieved.

Responses to the Crisis

Responses to the crisis include the government's request to the population to increase savings and the production of goods and services that can be made locally at competitive prices and to encourage use of local products. The government has emphasised public investment in the agricultural sector, which grew by 3.5% in 1998. The governor of the Bank of the Lao PDR has recently announced tight fiscal policies.

The government has aimed to keep budget deficits at a minimum; therefore, public health expenditure is unlikely to increase in the near future. Bi/multilateral and NGO donors have not revealed specific crisis related programs. In fact, foreign aid grants and loans decreased during 1998, possibly as a result of increased donor commitments to countries directly affected by the crisis.

Recommendations

Recommendation 1: Provide support for a social impact monitoring system and focused studies on the social effects of the economic crisis in the Lao PDR, especially among vulnerable groups such as the urban poor and certain ethnic minorities, including the Khmou.

 The extensive network of development NGOs and bilateral health and education project staff could contribute to the implementation of these studies and an ongoing monitoring system.

Recommendation 2: Provide support to the government health surveillance and monitoring system.

• The current system is weak and needs long-term assistance to enable the generation of reliable, timely, routine data for the assessment of trends in key health indicators and service coverage and utilisation.

Recommendation 3: Long-term continued support should be provided to the health sector, focusing in particular on primary health care, including the provision of water, sanitation, and nutrition.

• The public health budget is unlikely to increase in real terms in the near future as a government budget squeeze is likely. The delivery of basic health services, especially in rural areas is already highly dependent on foreign assistance. Greater efforts should be made to promote donor coordination in the health sector and to revive efforts made by AusAID in 1997 to develop concrete mechanisms for such coordination.

Recommendation 4: Increased support should be provided for EPI programs.

- Child immunisation coverage rates remain low in the Lao PDR compared with neighbouring countries. There is evidence that donor support for EPI has declined recently.
- This trend should be reversed and support increased to this cost-effective prevention program. The MOPH currently plans to introduce *routine Hepatitis B vaccination* into the EPI program. However, given the post-crisis increase in vaccine costs and the likely government budget squeeze, implementation is unlikely without substantial donor assistance.

Recommendation 5: Provide increased support to HIV/AIDS/STD prevention programs.

 Rapidly emerging problems, such as HIV/AIDS, may be affected by various factors related to the economic crisis, such as returning migrant labour, prostitution, and increased drug use.

Recommendation 6: Provide support to a safety net scheme to ensure access by the poor to basic health services.

• Such a scheme does not currently exist in the Lao PDR. While the overall task of building an effective public health system is challenging, initiatives should include the development of programs such as the Public Health Assistance and Voluntary Health Card Schemes used in Thailand. Faced with diminishing, or stagnant, government revenues, it is unlikely that the Government could finance such schemes. Donor support would be essential.

Recommendation 7: Provide support to the development of innovative urban primary health care programs.

• This support is necessary given the indications that the economic difficulties have disproportionately affected the urban poor.

Recommendation 8: Provide support to the development of micro-finance projects.

The ADB concludes that rural farmers may have benefited from the crisis by
increasing exports of rice and other agricultural products to Thailand. Increased
rural incomes and savings provide an opportunity to develop micro-finance
projects, including those relevant to the health sector, such as drug banks and
water and sanitation revolving funds.

Recommendation 9: Provide support to health promotion and disease prevention programs to improve cost efficiency in the health sector.

• A move towards concentrating resources on health promotion and disease prevention would increase cost efficiency in the medium and long term. The Lao government currently focuses expenditure almost entirely in the hospital sector while donors fund most prevention programs, such as EPI.

Recommendation 10: Provide support to improve nutrition monitoring systems.

• Food security and nutrition should be a major focus of donor efforts. An improved nutrition monitoring system is needed and studies should identify the most vulnerable groups for malnutrition in the population.

Background¹

Since 1993, the Lao PDR has experienced GDP growth rates averaging approximately 7% per annum raising hopes that the country might graduate from the ranks of the least developed countries by the year 2020. Nevertheless, the country remains one of the poorest in the world, ranked 138th in the world according to per capita income (USD 330). In recent years, the country had experienced steady growth in exports, which are mainly to neighbouring countries in the Southeast Asia region (67%). Approximately 40% of all trade is with Thailand. Timber products account for 33% of export earnings and 5% of GDP and timber royalties are a significant source of government revenue (OkonjoIweala et al, 1999).

There had been a rapid increase in direct foreign investment, increasing from USD two million in 1988 to more than two billion in 1996. Approximately 75% of foreign investment came from Thailand (World Bank, February 1999). The economic improvements have been attributed to the implementation of the New Economic Mechanism (NEM) that was introduced in 1985. The key elements of the NEM included price liberalisation, liberalisation of agricultural production and distribution, increased autonomy for private enterprises, tax reform, liberalisation of internal and external trade, and the unification of multiple exchange rate systems. Regional links have been strengthened through the recent admission of the Lao PDR to ASEAN.

Social indicators remain poor, especially in education and health. Life expectancy (53 years), infant mortality (101 per 1000) and maternal mortality (650 per 100,000) rates, morbidity rates for communicable diseases, and undernutrition rates remain among the highest in the East and Southeast Asian regions. The adult illiteracy rate in the Lao PDR is 43% overall and 56% among women (World Bank, 1999). Most of the population is rural, with subsistence agriculture accounting for 50% of GDP and employing about 86% of the population. Most of the rural population has poor access to public health services and a high proportion continue to rely on traditional healers and self-medication for health care.

Economic Effects of the Asian Financial Crisis

The impact of the Asian financial crisis on the economy of the Lao PDR has been mediated through three major mechanisms:

¹ *Note on Data Sources:* Although macroeconomic data are available for perusal, mainly from the World Bank, IMF, and ADB, there is an almost total lack of timely, reliable data on the social impact of the regional economic crisis in the Lao PDR. Both the World Bank and ADB conducted rapid qualitative impact assessments, including assessments of a small sample of rural villages. However, there are few data available on recent trends in health service utilisation or health outcomes. The July 1999 ADB Briefing Notes on the Social Consequences of the Financial Crisis in Asia (Knowles et al) contains no original data on the social effects of the crisis in the Lao PDR. The paper briefly cites findings of the ADB Finalisation Conference report prepared by James Chamberlain. Economic data cited in this section derive mainly from two sources: "Effects of the Asian Economic Crisis on Lao PDR: A Preliminary Assessment" by the World Bank (February 1999) and the Chamberlain paper.

- Decreased stability of the Thai economy and depreciation of the Thai currency.
- Decreased external investment.
- Decline in demand for Lao exports in Thailand and other regional countries.

Currency depreciation and effects

Following the depreciation of the Thai Baht in July 1997, the closely linked Lao Kip suffered similar depreciation pressures. Between July 1997 and June 1998, the kip lost 70% of its value vis a vis the US dollar (OkonjoIweala et al, 1999). While other regional currencies began to stabilise in mid-1998, the Lao kip continued to depreciate against the US dollar and, in addition, lost considerable value in its exchange rate with the Thai baht (Tables 1 and 2).

Table 1: Kip/Baht Exchange Rates from December 1998 to August 1999

	Dec. 98	Jan.	Feb.	Mar.	April	May	Jun	July	Aug.
Commercial ¹	117.2	117.6	118.4	139.4	179.8	212	258	255	255
Black Market ²	180	185	186	190	200	220	240	260	260

¹ Commercial Bank (Thai Military Bank); ² Thongkhankham Market, Vientiane.

Table 2: Kip/Dollar Exchange Rates from December 1998 to August 1999

	Dec. 98	Jan.	Feb.	Mar.	April	May	Jun	July	Aug.
Commercial ¹	4 118	4 338	4 428	5 240	6 680	7 640	9 390	9 300	9 300
Black Market ²	4 500	5 200	5 800	6 800	7 200	7 800	8 500	9 000	9 600

¹ Commercial Bank (Thai Military Bank); ² Thongkhankham Market, Vientiane.

Since August 1999, the exchange rate has fluctuated wildly as a result of attempts by the Lao Government to control the rate and to limit the activities of the currency black market. In October, the rate increased to just over 5,000 kip/USD; however, by early November, the rate was between 7,400 and 7,600 kip/USD (Source: Bank of Laos).

Consumer price inflation increased rapidly from 13% in 1996, 19% in 1997, 88% in 1998, to an annualized rate in January 1999 of greater than 150% (World Bank, Feb 1999). The effects of price increases were felt hardest in Vientiane, especially among civil servants on fixed kip incomes, which remained unchanged through 1998. To some extent, rural farmers have been shielded from the price increases and compensated by increased prices of agricultural products. Table 3 presents changes in selected commodity prices in Vientiane since 1996. To view these changes in

perspective, the average monthly wage of a mid-level civil servant during 1998 was about 45,000 kip.

Table 3: Increase of Commodity Prices in Vientiane (approximate, in kip)

Commodity	1996	1997	1998	1999
Beef (kg)	3 500	10 000	18 000	22 000
Buffalo meat (kg)	2 500	9 000	17 000	21 000
Pork (kg)	3 000	9 500	18 000	22 000
Fish (kg)	4 000	10 000	15 000	20 000
Sticky rice (kg)	667	1 000	1 335	2 100
White rice (kg)	1 000	1 417	2 100	2 920
Noodle soup (bowl)	2 500	4 000	5 000	7 000
Papaya Salad (plate)	500	1 000	1 500	2 000

Source: Thongkhankham Market, Vientiane.

Employment and Wages

There are few reliable data available on employment rates and wages from official sources (Indavong, 1999 and Chamberlain, 1999). Salaries of civil servants were increased by 100% at the end of 1998 (Vorachith, 1999); however, reports in early 1999 indicated that few government employees had actually received this increase (Chamberlain, 1999). In late 1999, there was a shortage of cash available and some civil servants were not receiving salaries on time. For example, Ministry of Public Health employees in Thong Mixai district of Sayabouly had not received October salaries (Perks C, personal communication, November 5, 1999).

Chamberlain reports that in March 1999, monthly salaries for mid-level government employees averaged K72,000, mid-level state enterprise salaries averaged K376,000, and those of mid-level private sector employees averaged K2.2 million. There is a stark disparity between salaries of government employees compared with others in the salaried economy.

There has been a significant repatriation of migrant workers, mainly from Thailand, as a result of the regional economic crisis; however, this has not been quantified (Indavong, 1999). However, since the depreciation of the kip, there has been a decrease in foreign workers in Laos (mainly Vietnamese, Chinese, and Thai) creating new employment opportunities for returning Lao workers. There has been a marked increase in Lao employed in the construction industry, once considered to be too menial for Lao workers (Chamberlain, 1999). Nevertheless, the ability of the Lao economy to absorb newly available Lao workers is limited. An estimated 73,000 new

people enter the labour market each year; however, at current rates, there are only about 3,000 new jobs available (Indavong, 1999). One relatively stable demand for labour is in the garment industry following the restoration of the Generalized System of Preferences given to garments produced in the Lao PDR by the European Union, which represents 70% of the market for these exports (Vorachith, 1999).

Decreased foreign investment

There was a decrease in direct foreign investment of 30% during 1997 (World Bank, 1999). There was a further decrease from USD 142 million in 1997 to only USD 45 million in 1998 (Chamberlain, 1999). This adverse situation, together with a drop in exports, led to an *economic growth rate of only 4%* in 1998 (Vorachith, 1999). Most of the decrease was due to declining investment from Thailand, which provided 74% of foreign investments prior to the crisis. This may particularly hinder further development of the important hydropower sector. In addition, foreign grant aid actually decreased by 27% and loans by 19% in 1998 (Chamberlain, 1999).

Decreased exports

Export earnings decreased by 10% in 1997 and there was a decline of 30% in the export of timber products. Prices for timber have plummeted since the crisis as Indonesia and Malaysia have relaxed export controls. The demand for timber in the construction industry in Thailand has virtually vanished. Garment exports have remained stable. Overall, decrease in exports has contributed to a decrease in government revenue which was 1.5% of GDP in 1997 (World Bank, 1999). The balance of payments has deteriorated with a reduction in official foreign reserves from 2.7 months of imports at the end of 1997 to only 2.2 months at the end of 1998 (Vorachith, 1999).

Agricultural production increased by 3.7% during 1998 (Vorachith, 1999). Chamberlain believes that the crisis has actually stimulated the agriculture sector and increased exports to Thailand through informal channels. The devaluation of the kip against the Thai baht led to an increase in commodity prices in the Lao PDR resulting in increased cash requirements by farmers. Prices in Thailand increased more than in Laos (valued in kip) thus stimulating increased exports of Lao produce. Farmers received payment in baht (at high kip exchange rates) leading to an increase in rural farming incomes and reinvestment in increased production and the opening up of new land for cultivation. An ADB survey found that the average monthly income for rural farming households in 1998 was K 552,657, with a broad regional range, from K799,106 in the central region to 295,833 in the eastern region. This represents an increase in income of 101% compared with 1997. Clearly, affluent rural farmers have been able to compensate for inflation much more easily than Lao on a fixed salary income, especially civil servants. The same ADB study found that in the 29 villages surveyed, almost all households experienced incomes greater than expenditure (Chamberlain, 1999). Nevertheless, poor rural families have not shared this experience, especially those in the large ethnic group, the upland Khmou.

Impact on education

Published reports on the social impact of the crisis in the Lao PDR have not reported any changes in either school enrolment or dropout rates; however, there are little available data to verify this impression. School teachers have been affected by loss of purchasing power, as have other civil servants, and need to find supplementary sources of income. Most rural teachers live in the village where they teach and are able to share in the reported increase in agricultural earnings of their families. Urban teachers may not be so fortunate. Chamberlain reports mass resignations of teachers in provinces such as Champassak.

Impact on Health

1.1 Health Financing

Health Financing budgets

Changes in Public/government funding

From available information, total official health expenditure as a share of GDP declined during the 1980s and recovered only recently (*Table 1*). External aid has increased and domestically financed government expenditures have declined as a share of the total official expenditures. In 1992-3 government resources represented only 44% of the sectoral total.

The largest share of total per capita expenditures on health is paid by households themselves. In 1993, household per capita expenditure represent 57%, external aid is the second largest with 24%, and domestic resources comprise only 19% (Source: LECS, 1993; Work Bank, Lao PDR: Country Economic Memorandum).

Data on trends in public health expenditure since 1997 were unable to be obtained. However, one report indicated that the public health budget had decreased in 1998 (Knowles et al. 1999).

Table 4: Health Sector Financing 1986 to 1993

Fiscal Year	Total Health % GDP	Domestic Health Expenditure % GDP	Total Kip health expenditure per capita (current terms)
1986/87	2.8	1.6	571
1987/88	2.5	1.5	648
1988/89	2.0	1.2	986
1992/93	3.2	1.4	2856

(Government + External, excludes household expenditures)

Source: Lao PDR: Basic Statistics, 1992; World Bank, 1994 and 1990.

The proportion of total public investment in public health is expected to increase from 1.8% to 2.2% (*Table 2*). In nominal terms, investments are expected to increase by six-fold on public health between the two periods.

Table 5 Comparison between the 1991-1995 Public Investment

Programs and the 1996-2000 Public Investment Programs,

presented to the 1995 RTM, Geneva. (In Billion Kip)

	1991-1995		1996-	-2000
Agriculture, Forestry & Irrigation	82.2	15.4%	168.9	12.0%
Industry & handicrafts	92.9	17.4%	217.7	15.5%
Communication	273.5	51.2%	513.5	36.3%
Education	35.4	6.6%	145.3	10.4%
Public Health	18.8	3.5%	120.9	8.6%
Information & Culture	9.4	1.8%	30.4	2.2%
Social Welfare	2.3	0.4%	102.0	7.3%
Housing Offices	13.5	2.5%	47.1	3.4%
Rural Development	6.4	1.2%	55.8	4.0%
Total	534.3	100.0%	1,401.7	100.0%

"Weak production, low international competitiveness and increasing import - and donor - dependency are the major problems of the Lao economy. In order to develop its abundant resources the country is desperately dependent on foreign aid. Foreign assistance in its various forms increased steadily from 6.25% of GDP in 1986 to about 16% in 1997" (Hans U. Luther, 1999).

Changes in Private Sector Funding:

Private health facilities are used widely across the country, mainly in the form of private pharmacies. Clinicians at hospitals have rights of private practice to supplement their meagre income. There are no private hospitals. There is no information on private sector funding or changes over the period since the crisis.

Changes in Bi/multilateral donor budgets

There is a multiplicity of donors to the health sector, ranging from multilateral and bilateral donors to over 50 non-government organisations (*Table 6*).

Table 6: Outline of external assistance from donors in health sector to Lao PDR

Multil	ateral	Bilateral		
ADB	PHC delivery and management	Sweden	Institutional and Management Support	
	Health sector	France	HIV/AIDS prevention Hospital Improvement	
	Health and Nutrition Malaria Control	EU	Malaria Control MCH	
	Tuberculosis Control Health Education	NGOs	PHC HIV/AIDS	
UNICEF	Institutional Capacity building PHC delivery	Japan	Hospital Equipment Health Service delivery/hospital	
WHO	Health Improvement in Northern	Belgium	Malaria Control	
WB	Province.	USA	Prosthetics assistance.	
UNDP		Australia	PHC – 3 provinces	
			HIV/AIDS	
			Family Planning	

Review of external assistance

Overall, there was a cut of 27% in foreign aid grants in 1998; however, a breakdown by sector is not available. There is no indication of increased health sector assistance in the Lao PDR since 1997. Several major donors, including the EU, JICA, AusAID, and GTZ continue to provide generous assistance in the health sector. Loans by ADB and IFAD also assist the health sector; however, there have been no new health sector loans since 1997.

UN Agencies

The World Health Organisation (WHO) has not substantially changed its budget for assistance to the MOPH. UNICEF's budget has actually decreased in recent years; however, UNFPA has increased its assistance in the MCH and reproductive health areas. Table 7 illustrates WHO assistance between 1996 and 1999. There has been an overall decline in the budget during that time. Table 8 provides similar information on the UNFPA budget in the Lao PDR.

Table 7: WHO Assistance for Lao PDR (USD) 1996 to 1999

Program	Regular	· Budget	Other 1	Sources of Funding	
	1996-1997	1998-1999	1996-1997	1998-1999	Funaing
Technical cooperation with countries	697,800	638,600			
National health systems & policies	406,100	372,900		23,900	UNICEF
Human resources for health	211,600	251,000			
Action Program on essential drugs	107,400	77,000			
Traditional medicine	26,200				
Reproductive health	77,400	70,000			
Health Promotion	82,300	92,300	10,600		unspecified
Water supply and sanitation	81,800	45,800			
Leprosy	30,000	35,000			
Vaccine preventable diseases	261,100	268,000	200,000		AusAID
			44,700		Nertherlands
Tuberculosis	43,600	38,200			
Emerging diseases inc. cholera, zoonoses and	73,000	41,000	107,700		AusAID
antimicrobial resistance			16,400		Austria
			36,300		Germany
			105,000		Norway
			20,000		ODA/UK
Control of tropical diseases	30,000				
Malaria	240,000	294,000			
Prevention of blindness/deafness			195,300		Republic of Korea
Control of non communicable diseases	32,000				
Total	2,401,000	2,241,800	759,900	23,900	

Source: WHO Program Budget, 1999

Table 8: UNFPA Project budget

Executing Agency	1997	1998	1999	2000	Total
Government	197,383	518,212	248,576	126,456	1,090,627
JOICFP	27,000	212,200	171,200	49,400	459,800
UNFPA	553,416	656,081	549,124	131,425	1,890,046

UNICEF

While there has been an increase in the planned UNICEF budget for health and nutrition between 1997 and 1998, actual expenditure was only 67% of the allocated budget (Table 9).

Table 9: UNICEF Budget Allocation, Commitments, and Expenditure, Health and Nutrition, Lao PDR, 1998

	Allocation	Commitments	Expenditure
GR (General resources)	•	•	
Annual Management Plan	134,400	130,400	121,684
Early Child Community Development	328,000	319,746	270,500
Health & Nutrition	483,500	323,330	300,000
Water and Environmental Sanitation	50,000	46,323	41,180
Cross-Sectoral	57,500	47,845	37,189
SF (Specific funding)			
Annual Management Plan	342,766	223,931	201,537
Early Child Community Development	927,756	544,109	489,698
Health & Nutrition	373,440	369,100	328,499
Water and Environmental Sanitation	551,200	462,363	416,126
Cross-Sectoral	18,319	18,319	18,319
Total	2,213,481	1,617,822	1,454,179

Source: UNICEF Annual Report, 1998.

There was a decrease in funds from international agencies to the Expanded Program on Immunisation (EPI) to US\$ 800,000 in 1998 as compared to US\$ 1,200,000 in 1997 (MOPH, 1998).

There is low expenditure in some areas (eg, water and sanitation) due to a number of reasons:

- (1) Late arrival of funds, e.g. SF funds for Water and Sanitation (US\$ 3,344,660) received only at the end of September, likewise for Health & Nutrition funds (US\$ 300,000) that arrived in November
- (2) Cash Assistance to Government (CAG) being stopped to Institutes,
 Departments, Projects that have outstanding CAGs of more than 6 months, e.g.
 no advances were made to the Control of Diarrhoeal Diseases/Acute
 Respiratory infections (CDD/ARI) project in 1998
- (3) Delays in processing of document by government for requests for funds (this is across the board for all programs).

The delay in processing of documents by the government is one of the two biggest constraints in program implementation. For example, a cheque from UNICEF takes a minimum of two months to reach the provincial level and longer to reach the district level. The same runs true for liquidation of CAG, which has to go through the whole process in reverse.

Health expenditure on programs/services

Changes in:

- *Public/government expenditure:* Due of the lack of detailed government health expenditure data, we could not analyse recent trends in expenditure. In general, the government has few funds available for either capital investment or maintenance of services. *Most operational funds are provided by donors*.
- Private sector expenditure: There is no official information, however anecdotally pharmacists told us that the rate of re-investment is much lower than two years ago.

Health Program patterns of coverage and utilisation

Data collection and statistical analysis remain weak across sectors and there is a continuing difficulty in gaining access to reliable data. The national capacity for monitoring and data collection is still below what is required for comprehensive measure of progress.

EPI coverage

The coverage rate of childhood vaccines is considered to be in the medium range by UNICEF according to global standards (approximately 80% of the world's children

aged 1-4 years are currently fully vaccinated). Although rates in 1998 were slightly lower than 1997, it would be presumptuous to link this with the regional economic crisis.

Table 10 : EPI coverage in Lao PDR 1995 to 1998

	1995	1996	1997	1998
BCG < 1 year	59%	61%	58%	54%
DPT3 < 1 Year	54%	58%	60%	52%
OPV3 < 1 year	65%	68%	69%	64%
Measles 9-23 months	68%	73%	67%	67%
TT2+ Pregnant women	35%	31%	32%	32%
TT2+ women of CBA	48%	56%	54%	45%

Medical service utilisation

Table 11 provides trends in inpatient admissions and outpatients in five hospitals in the Lao PDR. There is a consistent increase in hospital utilisation between 1994 and 1998. The increase in outpatient visits probably reflects a long-term increase in access and utilisation of public health facilities and the fact that there are few private care options in most of the country. The dramatic increase in some facilities in 1998 may be due to the fact that people have less money to attend private clinics or pharmacies. There has also been a slight decrease in the average length of stay in most of the hospitals, possibly related to the economic crisis, as people do not have the funds for extended stays. The out-of-pocket costs include drugs and food for the patients and relatives who stay with them in hospital.

Table 11: Utilisation of services in five major general hospitals , 1994-98

Measure	1994	1995	1996	1997	1998
Friendship Hospital, Vientian	e				
Admissions	961	1,190	3,551	3,517	6,529
Occupancy percent	19.77	42.37	48.14	46.14	46.14
Out-patient visits	4,802	2,425	11,535	6,529	21,828
Delivery attendance	142	119*	374	349	291
Luang Prabang hospital					
Admissions	2,686	4,641	6,311	7,306	8778
Occupancy percent	33.36	49.33	51.87	64.84	72.45
Out-patient visits	16,727	27,006	33,578	29,445	31,578
Delivery attendance	383*	512*	800	785	873
Measure	1994	1995	1996	1997	1998
Mahosoth hospital					
Admissions	12,734	19,177	14,738	93,982	N.A
Occupancy percent	52.21	82.57	52.80	57.25	N.A
Out-patient visits	74,477	148,046	107,083	121,209	N.A
Delivery attendance	2,618	3,672	2,323	2,443	N.A
Setthatirat hospital					
Admissions	6,860	4,993	8,487	6,710	7,867
Occupancy percent	33.34	56.39	49.03	47.20	43.35
Out-patient visits	31,768	24,909	50,733	36,238	54,382
Delivery attendance	1,248	714*	1,530	1,357	1,285
Savannakhet hospital					
Admissions	10,155	8,623	13,438	14,094	13,058
Occupancy percent	69.9	57.98	67.32	61.01	63.12
Out-patient visits	22,177	20,477	36,192	34,397	35,022
Delivery attendance	459*	N.A	1,474	1,482	1,286
* Partial report	Source: MOPH, Health Statistics Service, 1998.				

Family planning services

Table 12 shows that demand for family planning services continues to steadily increase, although absolute utilisation rates remain low, reflecting the high Lao population growth rate of 2.5% per annum. This upward trend is in contradiction to the findings of the Chamberlain report (1999) that there had been weakened interest in family planning since the crisis.

Table 12: Utilisation of Family Planning Services, 1995 to 1998

	1995	1996	1997	1998
Acceptors	11,863	25,804	49,267	57,765
Contraceptive Prevalence Rate	4.8%	5.9%	9,6%	11%

Source: MOPH, MCH Institute, Annual Report 1998.

Health worker training

There have been no reported effects on training for health workers in government and NGO programs except for common delays in approval and implementation of health projects due to lengthy administrative procedures.

1.2 Health Outcomes

Published reports and MOPH statistics have not detected any unusual changes in health indicators since the onset of the regional financial crisis. The main causes of morbidity and mortality reported to the MOPH in 1998 are similar to those reported during the past five years (Tables 13 and 14). These figures most likely represent significant under-reporting.

Table 13: The Top 5 causes of morbidity, all ages, 1998

	Number
Malaria	43,303
Diarrhoea	16,125
Pneumonia	15,756
Dengue haemorrhagic fever	2,585
Tuberculosis	1,841

Source: MOPH, Health Statistics Service, 1998.

Table 14: The Top 5 causes of mortality, all ages, 1998

Cause	Rate per 100,000		
Malaria	7.62		
Pneumonia	3.02		
Meningitis	1.45		
Diarrhoea	1.23		
Tuberculosis	0.75		

Source: MOPH, Health Statistics Service, 1998.

Nutrition

Nearly one third of Lao households experience insufficient food intake, and as a result many adults and children suffer from chronic energy deficit (*FAO*, 1995). As a consequence of heavy work loads, food insecurity, and frequent pregnancies, women (15 per cent) suffer more than men (12 per cent). While extended breast-feeding practices (14-16 months on the average) are beneficial to the new-born, the practice can severely weaken the mother's nutrition where the quantity and quality of dietary intake is poor. Extended breast-feeding with inadequate food supplements may also impair child growth.

Low birth weight (under 2.5 kg) is a major obstacle for infant survival and occurs in about 20 per cent of births. One survey reveals that mothers erroneously think it is important not to eat too much during pregnancy in order to give birth easily (*LNT Primary Health Care Project*, 1995).

Several household and nutrition surveys (NSC, LECS/LSIS 1993; FAO, 1995) have called attention to the prevalence of both acute and chronic malnutrition and its relationship to family food security, poverty, low-level education, and clean water supply. Chronic malnutrition is widespread and evenly distributed throughout the population. Overall, nutritional status in the Lao PDR ranks well below the mean for Southeast Asia. An FAO diagnosis of the country's nutritional status records the prevalence of wasting (weight for height) at 10 per cent, and of stunting (height for age) at 48 per cent in children 0-5 years.

Effects of the crisis on nutrition

Knowles et al (1999) report that no signs of increased malnutrition have been detected in any of the SE Asian countries affected by the crisis, with the possible exception of Indonesia. Their survey included the Lao PDR. Chamberlain reported that the ADB qualitative survey of 29 villages did not provide any evidence of increased malnutrition.

Other social effects influencing health

Both government officials and anecdotal reports indicate that there has been a significant increase in theft, prostitution, glue sniffing, and amphetamine use during the past three years (Chamberlain, 1999). However, there is no evidence that this is linked to the economic crisis in the region. In addition, several reports indicate that the handicapped and ethnic minority children in boarding schools have been negatively impacted by cuts in government budgets. The health effects on these children have not been analysed.

Health Care Costs

Health services and consumables

Drugs and Travel costs

The cost of drugs and travel costs are directly linked with the high inflation rate and the value of the local currency. Exchange rate depreciation and inflation have reached alarming proportions. By January 1999, the value of the kip had fallen to less than 30 per cent of its value in July 1997 and inflation had shot up to over 150 per cent on an annualised basis. In general, prices have risen in all regions of the country. The cost of living is considerably higher in urban areas, particularly in Vientiane, than in rural areas. Thus, private purchase of drugs from pharmacies and the ability of the government to purchase drugs for public services have been negatively affected by the crisis. Reports indicate that community-based revolving drug funds are experiencing difficulty in maintaining liquidity given the dramatic increase in the price of drugs and the decreased purchasing power of the people (Perks C. personal communication, November 1999).

There has been no discernible decrease in the supply of vaccines and family planning supplies. There have been no reported problems with the distribution of these supplies.

Section II: Responses to the Crisis

The response of the **Lao Government** to the crisis has largely been in the macroeconomic arena. The government has concentrated public investment in the agricultural sector, the base of the Lao economy, by expanding the irrigation network. The government appears to have acknowledged mistakes in fiscal and monetary policies during the early phase of the crisis and has committed to a tighter fiscal stance (Vorachith, 1999). The government aims to achieve a budget deficit in 1999 not exceeding 5-6% of GDP. The Bank of the Lao PDR intends to curb inflation by limiting credit in all sectors and the banking sector will be drastically reformed. These reforms can only mean that there is little likelihood of increases in the public health budget in the near future. No particular post-crisis initiatives by the MOPH have been reported. The Lao PDR lacks the extensive social safety net mechanisms that have helped Thailand protect access to health services by the poor. The health

sector will remain highly dependent upon the generosity of the foreign donor community, which has shown little sign of responding so far.

Other initiatives instituted by the government, as reported by the IMF, include:

- Increase in the valuation exchange rate in customs from 2,000 kip/USD to 4,000 kip/USD (November 1998).
- Increase in excise taxes.
- Rise in fuel prices to realistic levels.
- New tax measures, including raising the minimum rate of profit tax.

(IMF Quarterly Report on Lao PDR, April 1999).

Bi/multilateral and NGO donors

As reported earlier, foreign aid grants and loans have decreased since the crisis. UN agencies have either stabilised or even decreased expenditure on social programs in the country. No particular initiatives aimed at cushioning the social effects of the crisis in the Lao PDR have been identified. As the Governor of the Bank of the Lao PDR, the Hon. Boungnang Vorachith, has remarked, recovery in Laos is contingent upon the speedy recovery of those ailing economies upon which the Lao PDR depends for trade and investment. Understandably, the international community has been focusing on support to the recovery process in Indonesia, Thailand, Korea, and the Philippines.

The social effects of the crisis in Lao PDR may not have been as dramatic as in other Asian countries, partly because the real sector effects have overall been limited and because the majority of the population is engaged in subsistence activities. Many rural farmers may have experienced real increases in income and savings.

Nevertheless, there have been some adverse effects, evidenced in real wage erosion and the inability of some households to meet their minimum food requirements. Civil servants appear to have experienced the greatest absolute change in social circumstance over the past year. Poorer farmers unable to expand production may also have suffered, particularly among some ethnic minorities, such as the Khmou.

Gaps

- No mechanisms are in place to monitor the social impact of the regional economic crisis on the Lao PDR. World Bank and ADB monitoring systems have not included the Lao PDR in their scope. The Lao Government requires assistance in monitoring efforts; however, the presence of a substantial network of development NGOs throughout the country, as well as numerous bilateral health and education projects, could assist in the implementation of a monitoring system.
- No focused studies have been conducted to gather reliable data on the effects of the crisis on the quality of life of vulnerable groups, including women and

- children, unemployed urban and rural workers, returned labour migrants, and ethnic minorities, such as the Lao Theung.
- Government health information systems are inadequate to provide timely and reliable data on overall trends in morbidity, mortality, service utilisation, and program coverage.
- The overall public health system is inadequate to provide basic health care services to the majority of the rural population. The likely fiscal squeeze resulting from the crisis will prevent any increase in public expenditure on health in the near future. Already, the health system is highly dependent on foreign assistance to maintain primary health care services in most of the country.
- There is basically no effective social safety net in the Lao PDR. In the health sector, there are no programs comparable to the Thai Public Health Assistance Scheme or the Voluntary Health Cards. Most health facilities have inadequate supplies of essential drugs and patients have to purchase prescribed drugs at private pharmacies (often located outside the gates of hospitals).
- Almost total reliance on imported pharmaceuticals and other medical supplies
 places the Lao public health system in a very vulnerable situation. Local capacity
 in at least the assembly of medical supplies and the tableting and packaging of
 drugs needs to be strengthened.
- The reported increase in income and savings among the more affluent rural
 farmers creates an opportunity to build primary health care services that are based
 on extensive community participation and sharing of costs. Initiatives such as
 drug revolving funds and other micro-finance activities should be stressed in
 further rural development programs.
- The rapid social and economic change being experienced in the Lao PDR (both positive and negative) has led to an increase in social problems such as commercial sex work, illicit drug use, and crime. Lao institutions, including mass organisations like the Lao Women's and Youth Unions require support in order to assess and respond to these emerging problems, many of which have public health implications, such as increased transmission of HIV/AIDS.
- Food security remains a critical problem among certain vulnerable groups in the Lao population, including the urban poor, rural landless and unemployed, returned migrant workers, and certain ethnic minorities. Malnutrition needs to be addressed both as a public health issue and a development issue that requires further assistance by donors.
- The most common causes of morbidity and mortality remain communicable diseases such as malaria, diarrhoea, respiratory infections, including tuberculosis, and dengue (the so-called unfinished agenda of the international health community). Although some donors are focusing on these conditions (eg, EU on malaria), it is unlikely that these problems can be addressed without rapid expansion of basic primary health care services, expansion of health worker training, and the provision of adequate water and sanitation. The MOPH is not

- likely to increase expenditure on these programs in the near future; therefore, the donor community needs to be mobilised to increase assistance in these areas.
- While health development efforts have focused on rural areas, the economic crisis has highlighted the vulnerability of the urban population. Support needs to be provided to strengthening primary health care services in urban areas in addition to ongoing efforts to increase the quality of tertiary hospital care.

Recommendations

- There should be support for a social impact monitoring system and focused studies
 on the social effects of the economic crisis in the Lao PDR, especially among
 vulnerable groups such as the urban poor and certain ethnic minorities, including
 the Khmou. The extensive network of development NGOs and bilateral health
 and education project staff could contribute to the implementation of these studies
 and an ongoing monitoring system.
- The government health surveillance and monitoring system is weak and needs long-term assistance to enable the generation of reliable, timely, routine data for the assessment of trends in key health indicators and service coverage and utilisation.
- The public health budget is unlikely to increase in real terms in the near future as a government budget squeeze is likely. The delivery of basic health services, especially in rural areas is already highly dependent on foreign assistance. It would be realistic for the donor community to make a long-term commitment to continued support to the health sector, focusing in particular on primary health care, including the provision of water, sanitation, and nutrition. Greater efforts should be made to promote donor coordination in the health sector and to revive efforts made by AusAID in 1997 to develop concrete mechanisms for such coordination.
- Child immunisation coverage rates remain low in the Lao PDR compared with neighbouring countries. There is evidence that donor support for EPI has declined recently. This trend should be reversed and support increased to this cost-effective prevention program. The MOPH currently plans to introduce *routine Hepatitis B vaccination* into the EPI program. However, given the post-crisis increase in vaccine costs and the likely government budget squeeze, implementation is unlikely without substantial donor assistance. This would be an appropriate area for support by AusAID.
- Rapidly emerging problems, such as HIV/AIDS, may be affected by various factors related to the economic crisis, such as returning migrant labour, prostitution, and increased drug use. Increased support to HIV/AIDS/STD prevention and care is needed.
- A safety net to ensure access by the poor to basic health services does not exist in the Lao PDR. While the overall task of building an effective public health system

is challenging, initiatives should include the development of programs such as the Public Health Assistance and Voluntary Health Card Schemes used in Thailand. Faced with diminishing, or stagnant, government revenues, it is unlikely that the Government could finance such schemes. Donor support would be essential.

- Given the indications that the economic difficulties have disproportionately
 affected the urban poor, support should be provided to the development of
 innovative urban primary health care programs.
- The ADB concludes that rural farmers may have benefited from the crisis by
 increasing exports of rice and other agricultural products to Thailand. Increased
 rural incomes and savings provide an opportunity to develop micro-finance
 projects, including those relevant to the health sector, such as drug banks and
 water and sanitation revolving funds.
- Support is needed to improve cost efficiency in the health sector. A move towards
 concentrating resources on health promotion and disease prevention would
 increase cost efficiency in the medium and long term. The Lao government
 currently focuses expenditure almost entirely in the hospital sector while donors
 fund most prevention programs, such as EPI.
- Food security and nutrition should be a major focus of donor efforts. An improved nutrition monitoring system is needed and studies should identify the most vulnerable groups for malnutrition in the population.
- The social effects of the crisis probably cannot be effectively addressed piecemeal. International assistance to help revive the Lao economy is urgently needed along with greater efforts to implement macro-economic reforms. The recent trend in decreasing foreign aid grants and loans to the PDR needs to be urgently reversed. Otherwise, it is unlikely that the government's goal of graduating from the rank of least developed nation by 2020 will not be realised.

References

Asian Development Bank - Country Strategy Study for Lao PDR, Vientiane, 1996.

Chamberlain J. Assessing the Social Impact of the Financial Crisis in Selected Asian Developing Economies: Lao PDR. Presented at Asian Development Bank Finalisation Conference, Manila, 17-18 June, 1999.

Indavong N. Migration and Regional Interdependencies: The Labour Market in the Lao PDR. Manila Social Forum. November 9-12, 1999.

Knowles JC, Pernia EM, Racelis M. Social Consequences of the Financial Crisis in Asia: The Deeper Crisis. Economics and Development Resource Centre. Asian Development Bank. ADB/EDRC Briefing Notes, Number 16. July 1999.

Luther HU. Learning from the Asian Crisis: The Impact of Asian Crisis on the Lao PDR. Lao-German Economic Training and Advisory Project, Vientiane, 1999.

Ministry of Public Health. Strengthening Reproductive Health Services and National Capacity to Manage RH Programme in Lao PDR (Lao/97/PO1).

Ministry of Public Health, Centre for Paediatric Infectious Diseases, annual report. Vientiane, 1998.

Ministry of Public Health, MCH Institute, Annual Report 1998

Okonjo-Iweala N, Kwakwa V, Beckwith A, Ahmed Z. Impact of Asia's Financial Crisis on Cambodia and the Lao PDR. Finance and Development Magazine, International Monetary Fund, Volume 36, Number 3. September 1999.

UNDP Development Cooperation Report, Vientiane, 1995.

UNICEF. Lao PDR Annual Report. Vientiane, 1998.

Vorachith B. Statement to the World Bank/IMF Boards of Governors. Washington DC. September 28-30, 1999.

World Bank. Poverty Reduction and Economic Management, East Asia and Pacific Region. Effects of the Asian Crisis on Lao PDR: A Preliminary Assessment. February 25, 1999.

World Bank. World Development Indicators. Washington DC, 1999.