

**The Impact  
of the  
Asian Financial Crisis  
on the  
Health Sector in Thailand**

# Table of Contents

<b>ABBREVIATIONS.....</b>	<b>4</b>
<b>SUMMARY AND RECOMMENDATIONS.....</b>	<b>6</b>
<b>RECOMMENDATIONS .....</b>	<b>7</b>
<b>BACKGROUND.....</b>	<b>9</b>
<b>BEGINNING OF THE CRISIS.....</b>	<b>9</b>
<b>FIGURE 1 HEALTH IMPACT OF ECONOMIC CRISIS IN THAILAND.....</b>	<b>11</b>
TABLE 1 KEY ECONOMIC INDICATORS .....	12
<b>OUTLOOK (UPDATE -NOVEMBER 1999).....</b>	<b>12</b>
<b>IMPACT.....</b>	<b>12</b>
SOCIAL IMPACT .....	12
JOB LOSSES.....	13
TABLE 2 UNEMPLOYED AND RETURNED WORKERS, DECEMBER 1997 .....	13
EDUCATION .....	14
WOMEN AND CHILDREN .....	14
DROUGHT.....	15
CONSUMER PRICES.....	15
TABLE 3 GENERAL CONSUMER PRICE INDEX (CPI) –SELECTED ITEMS.....	15
TABLE 4 RETAIL PRICE IN BAHT OF SELECTED ITEMS.....	16
<b>IMPACT ON HEALTH.....</b>	<b>16</b>
HEALTH FINANCING .....	16
<i>Public Health Sector Budget Cuts</i> .....	16
TABLE 5.1 THE FY 1998 BUDGET REVISION IN RESPONSE TO ECONOMIC CRISIS, A B182 BILLION REDUCTION .....	18
TABLE 5.2 MOPH BUDGET AND FREE MEDICAL CARE AS A PROPORTION, SELECTED YEARS .....	19
PRIVATE HEALTH SECTOR.....	19
HOUSEHOLD EXPENDITURE ON HEALTH .....	19
HEALTH EXPENDITURE ON PROGRAMS AND SERVICES.....	20
TABLE 5.3 MOPH BUDGET ALLOCATION BY DEPARTMENTS: 1996-98 (MILLION BAHT).....	20
TABLE 5.4 MOPH DEPARTMENT OF HEALTH BUDGET OF REPRODUCTIVE HEALTH PROGRAMS, 1996-2000 (MILLION BAHT) .....	21
COST OF DRUGS .....	21
TABLE 5.5 BUDGET FOR FAMILY PLANNING DRUGS, DOH 1996-99 (MILLION BAHT ) .....	22
<b>II. HEALTH PROGRAM UTILISATION AND COVERAGE .....</b>	<b>22</b>
UTILISATION OF HEALTH CARE SERVICES.....	22
<b>COVERAGE.....</b>	<b>23</b>
CHILD IMMUNISATION.....	23
FAMILY PLANNING.....	23
NATIONAL HIV/AIDS PROGRAM.....	23
HEALTH PERSONNEL .....	23
<b>SUMMARY.....</b>	<b>24</b>
<b>III. HEALTH OUTCOMES .....</b>	<b>24</b>
MENTAL HEALTH.....	25
TABLE 6 MENTAL HEALTH PROBLEMS FROM ECONOMIC CRISIS .....	25

<b>SECTION II.....</b>	<b>25</b>
<b>RESPONSES TO THE ECONOMIC CRISIS BY MOPH.....</b>	<b>25</b>
DRUGS MANAGEMENT REFORM .....	26
TABLE 7    NUMBER OF HOSPITAL FORMULARIES: MOPH DRUG MANAGEMENT REFORM, FEBRUARY 1998 .....	27
SAVINGS TO OPERATING COSTS .....	27
OTHER MATERIAL COST SAVINGS .....	27
SAFETY NET EXPANSION .....	28
<b>II    REFORM OF CIVIL SERVANT MEDICAL BENEFIT SCHEME (CSMBS).....</b>	<b>28</b>
TABLE 8    EXPENDITURE ON CSMBS, 1990-1998 .....	29
POLICY CONCORDANCE .....	29
<b>III.    HEALTH SECTOR REFORM.....</b>	<b>29</b>
REDEPLOYMENT OF HEALTH PERSONNEL TO RURAL AREAS.....	30
TABLE 9    DISTRIBUTION OF HEALTH PERSONNEL-1996-97 .....	30
RATIO PERSONNEL: POPULATION.....	30
COST CONTAINMENT AND COST EFFICIENCY .....	30
<b>IV.    MONITORING PROGRESS AND RAPID RESPONSE .....</b>	<b>31</b>
MONITORING MECHANISM.....	31
PRIVATE SECTOR RESPONSES .....	31
MAJOR BANKS AND DONORS .....	32
TABLE 10    OVERALL EXTERNAL ASSISTANCE TO THAILAND, 1995-1998 .....	33
PERCEIVED POSITIVE IMPACT OF THE CRISIS.....	34
<b>GAPS .....</b>	<b>34</b>
<b>RECOMMENDATIONS .....</b>	<b>35</b>
<b>REFERENCES .....</b>	<b>38</b>

## **Abbreviations**

ADB	Asian Development Bank
AIDS	Acquired Immunodeficiency Virus
ANU	Australian National University
ARIC	Asia Recovery Information Centre
ARV	antiretroviral (drugs)
BOT	Bank of Thailand
CDC	Centers for Disease Control and Prevention
CPI	consumer price index
CSMBS	Civil Servant Medical Benefit Scheme
DOH	Department of Health
FY	fiscal year
GDP	Gross Domestic Product
GNP	gross national product
HIU	Health Intelligence Unit
HIV	Human Immunodeficiency Virus
HP	health program
IMF	International Monetary Fund
IUDs	intrauterine devices
MCH	Maternal and child health
MOPH	Ministry of Public Health
NGO	non-government organisation
ONEC	Office of the National Education Committee
OI	opportunistic infections
PTC	Pharmaco-Therapeutic Committee
SAP	Structural Adjustment Program

STD	sexually transmitted disease
UK	United Kingdom
USA	United States of America
USD	United States Dollars
VAT	value added tax
VHC	Voluntary Health Card
WHO	World Health Organization

## Summary and Recommendations

### *Effects of the Crisis*

The Asian Economic Crisis emerged from a complex set of factors that had begun to affect economic performance in several countries in the region during 1997. One critical milestone in the evolution of the crisis occurred on July 2, 1997 when the Thai Baht was floated and devalued. By December 1997, the Baht had depreciated by 128% compared with its mid-1997 value. In 1998, the GDP growth rate was a negative 8% compared with annual growth rates averaging +8% between 1986 and 1996. The monthly inflation rate leaped from 0.1% in June to 2.3% in August 1997. Annual inflation increased from 5.7% in 1997 to 8% in 1998 and the cost of drugs and other medical supplies increased significantly. Unemployment increased from 0.9% in 1997 to 5.3% in 1998, with almost one million jobs lost during the first year of the crisis. **The proportion of the population below the poverty line increased from 11.4% in 1996 to 13% in 1998**, while in the Northeast region the increase was from 19% to 23%. Overall decreases in real household income and expenditure capacity appear to have affected the urban poor most severely.

By the second quarter of 1999, the GDP growth rate had returned to 3.5%, inflation had been negative for most of the year, and the currency exchange rate had stabilised around 65-70% of its mid-1997 level.

Following the crisis, **household expenditure on health care decreased by 41% compared with 1996 levels** (35% in urban areas and 46% in rural areas). Most of the decrease was on medical and institutional care while expenditure on self-medication increased slightly. The overall decrease in household health expenditure was greater among the non-poor (-29%) than the poor (-13%), possibly reflecting a shift among the non-poor from private to public health care as part of the general “belt-tightening” among the middle and upper socio-economic classes. **The 1998 budget of the Ministry of Public Health (MOPH) was almost 10% lower than the 1997 budget**; however, the proportion of the national budget allocated to the MOPH increased slightly. Actual expenditure by the MOPH during 1998 was higher than the allocated budget and was only 2% less than 1997 and 28% higher than in 1996.

Within the MOPH budget, the allocation to the Food and Drug Administration increased by almost 14% compared with cuts in other departments. Overall, the greatest reduction was in health promotion (-54%) representing an interruption of the policy trend in Thailand to increased emphasis on disease prevention, including the development of strategies to address non-communicable diseases and injuries. **The HIV/AIDS control budget was reduced by 33% in real terms** affecting, in particular, the program to provide antiretroviral drugs to HIV-positive pregnant women to prevent transmission of the virus to their infants. Reproductive health program budgets were also cut.

**Utilisation of public health facilities increased by about 15% in 1998 due to an increase in government support to the Public Assistance and Voluntary Health Card Schemes**; a reduction in private hospital entitlements in the Civil Service Medical Benefit Scheme; and a general shift from private health facilities to the public sector. No significant changes in health outcomes have been detected since the crisis except for an increase in the incidence of anaemia in pregnant women. The number of malnourished children reported during 1998 reflected a continuing long-term decline. One interesting finding by the MOPH is a decrease in demand for commercial sex services (expressed in numbers of clients per sex worker). **Overall, both the ADB and World Bank have**

**concluded, the health impact of the crisis has been less than anticipated.** However, the impact monitoring system relies largely on macro-level indicators and may not be able to detect adverse health effects in localised populations.

### ***Responses to the Crisis***

Health budget cuts have been compensated by preferential allocations to the most essential health programs, reducing the range of drugs available to public patients (probably a positive development anyway); charging fees for some medications, including contraceptives; reducing the medical care entitlements of civil servants; and reducing operating and travel costs. Overall, the crisis may have provided momentum for health sector reform; however, there is a danger that this process will adversely affect poor families with reduced incomes. Ironically, the crisis has led to decreased utilisation of private health services; however, this sector most likely had been operating at over-capacity levels for some time.

Government responses have been emphasised in published reports on the social impact of the crisis; however, local NGOs have also been active. There is a need to better document their experiences. The international donor community increased its development assistance five-fold following the crisis. Most of this increase was in the form of loans and credit by international development banks. Most bilateral donors, including Australia, increased their assistance, in particular Japan (450% increase) and the US (\$1 billion in 1998 from zero in the previous three years).

## **Recommendations**

### **Recommendation 1: Provide support for a strengthened and expanded health monitoring system.**

- This would increase the capacity to assess the impact of the crisis on the quality of life of families in rural and poor urban areas including surveillance of child and maternal nutritional status. Studies should focus on particular disadvantaged groups, such as the urban poor, unemployed, female-headed households, homeless and abandoned children, and children living in welfare institutions. Priority areas would appear to be slum areas of Bangkok and the poor rural areas of the Northeast region.

### **Recommendation 2: Provide support for further focussed studies of the longer-term social impact of the crisis.**

- Particular attention should be paid to women and their families, changes in the transmission of HIV and other STDs, domestic violence, drug use, mental health, and abandoned children. Studies should be supported to document and analyse more thoroughly those responses implemented by local NGOs and communities.

### **Recommendation 3: Ensure that the role of women during economic recovery is closely monitored.**

- Support mechanisms to ensure that women, especially those heading families, do not experience long-term difficulties in employment and access to essential social services.

### **Recommendation 4: Provide support for monitoring systems and health service studies on utilisation rates, service costs, etc.**

- This should include assessments of the quality of health services being provided.

**Recommendation 5: Provide support to expanding health promotion programs, especially those aimed at preventing non-communicable diseases and injuries.**

- This support should initially be in the form of applied health research, especially formative and intervention research studies, and carried out in the context of building relevant Thai institutional capacity in the areas of research, development of health communication strategies, management of interventions, and monitoring & evaluation of outcomes.
- Support to health promotion programs will eventually lead to increased cost-efficiency in the health sector as healthier communities require less expensive clinical services to manage chronic diseases.

**Recommendation 6: Provide increased support for the development of effective primary health care programs for the urban poor that focus on health promotion and disease prevention.**

- Available data suggests that urban poor may have suffered disproportionately as a result of the crisis.

**Recommendation 7: Provide program support for elements of the HIV/AIDS control program that are currently inadequately covered by the government budget.**

- Elements needing support are provision of antiretroviral drugs and other effective interventions to HIV-positive pregnant women to reduce the risk of perinatal transmission of the virus.

**Recommendation 8: Provide either technical assistance to the policy process and/or material support to the provision of essential drugs to poor and disadvantaged communities.**

- Assistance in rational drug policy might be linked to technical assistance in the further development of relevant health insurance and cost-recovery schemes. These should ideally continue to be community-based, building on Thailand's extensive experience.

**Recommendation 9: In the longer term, provide technical assistance to the health sector reform process with an emphasis on ensuring and monitoring equity.**

- The health sector response to the crisis by the Thai Government appears to have promoted equity through its support to safety net schemes, focus on the use of essential drugs, maintenance of budget support for essential programs, and reducing private health care entitlements to privileged groups.

**Recommendation 10: Provide support in practical ways that provide the necessary skills at the district level to plan and implement both clinical and disease control programs.**

- The key conditions of major lending institutions (decreased public sector personnel, decentralisation, and greater cost-efficiency) may be inhibited by the increased demands for public health services. Experience across the world with decentralisation of health services has demonstrated the need for extensive training programs in health program management, including needs analysis, monitoring, and evaluation. The district community hospitals created in the



1980s across the country provide an ideal focus for further decentralisation of policy and management.

## Background<sup>1</sup>

Between 1985 and 1994, the Thai economy recorded the highest growth of GNP per capita in the world. The average annual growth rate in GDP between 1991-95 was over eight percent (World Bank Atlas, 1996). The proportion of the rural population living in poverty declined from 36% in 1988 to 11.4% in 1996 (Thailand Board of Investment, 1998). The extremely rapid growth led to concerns about infrastructure availability, labour shortages and reliance on migrant labour, environmental degradation, and income distribution. Increased competition in the export of manufactured goods (especially from China) led to a slowdown in exports in the early 1990s.

In 1993, the government granted permission to establish the Bangkok International Banking Facilities (BIBF) which led to over-borrowing for investment in non-productive activities such as real estate, the automobile industry, private hospitals etc. The majority of external debt was incurred by the private sector.

In 1997, there was marked over-supply of private hospital beds (300%) and Bangkok housing over capacity (200%). Over consumption of imported luxury goods and reduced competitiveness resulted in rapidly increasing trade and current account deficits. The current account deficit rose to 8% of GDP in 1995 and 1996. Rapid depletion of national foreign reserves put pressure on the Bank of Thailand (BOT) to devalue the currency (Baht).

In 1997, exports were stagnating, the quarterly GDP growth rate dropped to 1.1% in the first quarter, the stock market continued a gradual fall, and non-performing loans, particularly in the real estate sector, reached unsustainable levels. After an extended and expensive effort to support the currency, the Baht was eventually floated.

## Beginning of the crisis

- On 2 July 1997, the Bank of Thailand (BOT) announced a policy “*Managed Floating of the Baht*” which marked a key milestone in the evolution of the crisis.
- By December 1997, the value of the Baht had dropped more than 50% from B25 to B57 per US\$1. In May 1998, the exchange rate was B40 per USD. Between June and November 1999, the rate had stabilised and fluctuated between 36-39 baht per US dollar.
- Value Added Tax (VAT) increased from 7% to 10%.

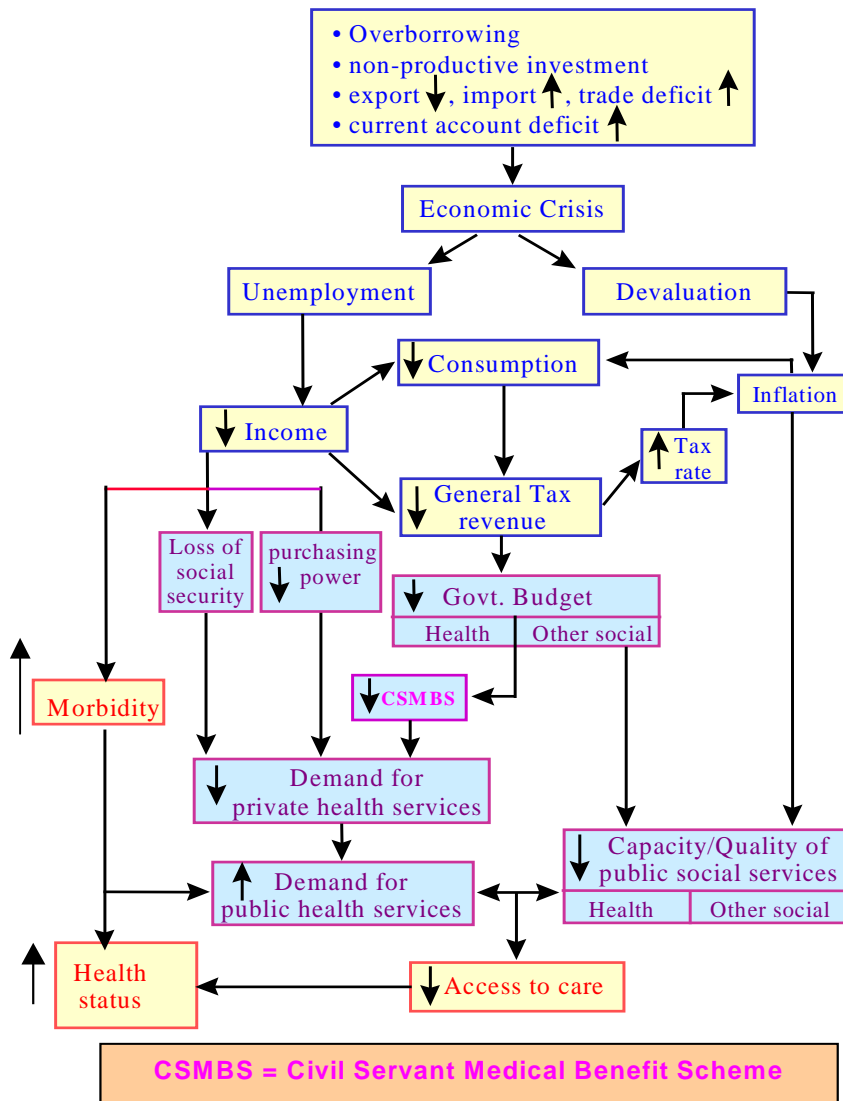
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<sup>1</sup> **Note on Data Sources:** The economic crisis in Thailand has generated numerous documents, reports, and articles related to both economic and social data. In general, economic data are more readily available than solid social data. Nevertheless, there are significant discrepancies in economic indicators between different sources, eg, between the World Bank and the ADB, and between different Thai sources. Data derived from the National Economic and Social Development Board were constantly being updated during the course of this study. In this final document, we have tended to quote figures derived from the ADB database and published on the Asia Recovery Information Centre website that is supported by AusAID. This database cites the NESDB as its primary source for Thai economic data.

- The IMF agreed to provide a rescue package in the form of a “*Structural Adjustment Program (SAP)*” loan of USD17,200 million.
- The devaluation of the Baht and the increase in VAT affected the prices of all commodities and services, including health. In January 1998, wholesale prices of imported drugs increased by 20-25%. The price of locally produced drugs increased by 15%-18%.

**Figure 1 Health Impact of economic crisis in Thailand**

(Wibulpolprasert et al, 1998)



**Table 1 Key economic indicators**

Indicators (Source)	1996 (1)	1997 (1)	1998 (1)	1999e (2)
GDP growth (%)	5.9	-1.8	-10	1.0
GDP/capita US\$	2,960	2,740	2,200	2,258
Consumer Price Inflation (%)	5.8	5.7	8.1	0.8
Current account deficit (%GDP)	-8.1	-2.0	12.6	2.8

e = estimated

Sources: (1) ADB, Asia Recovery Information Centre [ARIC], November 1999. (2) Pongsapich and Brimble, June 1999.

## Outlook (Update -November 1999)

There are positive signs of economic recovery during 1999. The industrial production index showed signs of growing, with figures of 9.2% in March and 7.7% in April and reaching 96% of the mid-1997 level during the second quarter of 1999. Consumer price inflation was -0.4% in May and 0.1% in July 1999 and the overall inflation forecast for 1999 was 0.8%. The exchange rate on November 1999 was 38.7 B per USD. GDP growth was 0.8% and 3.5% in the first and second quarters of 1999, respectively. The ADB monitoring report, updated in November 1999, concluded that there were signs of economic improvement; however, full recovery may take many years to come. Of note, the gross domestic investment index has remained flat since mid-1998 at less than 70% of mid-1997 levels (ARIC, accessed November 20, 1999).

## Impact

### Social Impact

Prior to the onset of the economic crisis, there was already extensive social inequity with large variations in income and access to social services between and within the geographic regions. The North and Northeast regions had the highest poverty rates. Rapid economic growth brought with it rapidly increased urbanisation and internal migration, widened income disparity, increased drug use, as well as fuelling an active sex industry, violence, and pollution.

The financial crisis had an impact on the social sector through three main mechanisms: (i) job losses, unemployment, and underemployment in the absence of a comprehensive safety net; (ii) devaluation of the currency, falling real value of wages, and increases in prices of medical and educational supplies and services; and (iii) government budget cuts.

The proportion of the population with incomes classified below the poverty line increased from 11.4% in 1996 to 13% in 1998. In the Northeast region, the poverty proportion rose from an estimated 19% to 23% during the same period.

## **Job losses**

### **Unemployment (% of labour force)**

1996	1.1%
1997	0.9%
1998	5.3%
February 1999	5.4%

(ARIC, November 1999 and World Bank, July 1999)

(Note: Different reports may give different figures on unemployment due to differences in the methods of calculation).

According to Pongsapich and Brimble (1999), 853,000 jobs were lost in 1998 during the dry season (-2.8%) and 1.02 million in the wet season (-3.1%). The construction sector accounted for the greatest loss in employment, with a 32% decrease between the dry seasons of 1997 and 1998. However, employment in the services sector actually increased by 5.6% in 1998. ARIC data (November 1999) show an overall loss of jobs in 1998 of 805,000 of which 13% were in the manufacturing sector. The highest rates of unemployment and returned migrant workers were in the North and Northeast regions of the country (Table 2).

**Table 2 Unemployed and returned workers, December 1997**

Region	Number of workers living in the area				Returned workers	
	No. of unemployed in agricultural sector	% of total	No. of unemployed in industrial sector	% of total	Number	% of total
Central	17,830	2.6	36,319	27.0	19,935	11.9
Northeast	458,539	67.2	46,862	34.9	91,851	54.7
North	188,388	27.6	39,617	29.5	44,281	26.3
South	18,008	2.6	11,632	8.6	11,966	7.1
<b>Total</b>	<b>682,7650</b>	<b>100</b>	<b>134,430</b>	<b>100</b>	<b>168,033</b>	<b>100</b>

Source: Wibulpolprasert et al 1998

Total per capita income (in Baht) actually increased in both urban and rural areas in all areas by 2-3% between 1997 and 1998. However, households that experienced declines included households headed by young persons, divorced persons, and women, and large households. The number of Thais living in indebted households increased from 52% to 60% in the same period. Migration to Bangkok and other cities increased which contributed to higher national average per capita incomes. **However, incomes in poor rural households declined 13% between mid-1997 and late-1998.**

Looking at the overall effect of changes in income and consumer prices, an estimated 40% of Thai

households were worse off by the end of 1998. The greatest impact was reported to be in Bangkok and its environs (Pongsapich and Brimble, 1999).

### **Education**

Pongsapich and Brimble report that school enrolment figures increased and dropout rates at all levels of the education system declined each year between 1992 and 1997. Although overall school enrolment rates improved during 1998, there may have been an increase in school dropouts. There is a discrepancy between data gathered through household surveys, which show a decline of 2% in primary school dropouts between 1996 and 1998, and statistics from the Office of the National Education Committee (ONIC), which show an increase of 5.5% in the overall dropout rate between the 97/98 and 98/99 school years (Shivakumar J, World Bank Thailand Social Monitor, 1999). The ONIC data indicate that 129,330 students either did not proceed to the next grade or graduate in the 1998/99 school year. The household survey data indicate that dropout rates were highest in lower secondary school children, especially in the Bangkok area, possibly reflecting a return of migrant labour families to their home villages. Shivakumar reports that between 1996 and 1998, the overall literacy rate and the average educational attainment in the population over 15 years of age both increased.

### **Women and children**

The social impact may have been more severe on women than men. The number of laid-off female workers was higher than that of their male counterparts, even in service and export-oriented industries, which were perceived as “women’s jobs”. The economic crisis has not only affected female workers, but also their families. There was a reported 50% reduction of remittances to the families of female workers in rural areas (Bangkok Business in Thai, 9 April 1998). In urban areas, there are reports of negative effects of the economic crisis on family coherence. A seminar organised by Chulalongkorn University in March 1998 heard that some women experienced domestic violence from husbands who had lost their jobs.

The incidence of child labour (defined as children age 13 to 17 years inclusive) showed no significant rise according to the ILO (World Bank Thailand Social Monitor, 2<sup>nd</sup> issue, 1999).

The economic crisis is believed to have led to an increased rate of infants and children being abandoned by their mothers. The Thai newsletter “Situation” reported that the numbers of abandoned children 0-5 years and 6-18 years received by 21 welfare organisations had increased substantially during 1996 and 1998. The rate of infants abandoned by their mothers at 40 public hospitals increased from 100 per 100,000 population in 1996 to 120 per 100,000 population in 1998. These infants will be looked after by welfare organisations (Pongsapich and Brimble, 1999).

While the rate of abandoned children increased, the budget allocated for welfare organisations decreased substantially. The 1997, 1998, and 1999 budgets allocated for welfare organisations were 494, 486, and 452 million Baht, respectively. (Thawonwongchai, 1999).

- Surveys by the MOPH indicate a **reduction in the demand for commercial sex services** in 1998 compared with 1997. The number of clients per sex worker dropped from four per day in 1997 to three every two days in 1998 (Pongsapich and Brimble, 1999). There have been no published follow-up studies looking at the reasons for this decline. It may be that there has been an increase in the absolute number of sex workers and stable demand for their services, resulting in a reduction in the average number of clients per worker.

## **Drought**

The economic problems were exacerbated by drought. In December 1997, a total of 12,831 villages in 472 districts of 57 provinces involving 7.7 million people were affected by drought. The worst hit were 4.5 million villagers in 17 provinces in the Northeast and 1.4 million villagers in 15 provinces in the North. The negative effects on rice production of El Nino and La Nina were largely felt during 1998; however, since then, the rice yield situation has improved.

## **Consumer Prices**

The currency crisis and the increase in VAT led to a general increase in a range of consumer items, including drugs. However, the situation has been easing since 1998 (Tables 3 and 4). There has actually been a decrease in the price of rice between 1998 and 1999.

**Table 3**      **General Consumer price Index (CPI) –Selected items**

<b>Items</b>	<b>Index (1994 = 100)</b>		
	<b>July 1998</b>	<b>July 1999</b>	<b>% change</b>
Total index	128.9	127.5	-1.1
Food & beverage	139.5	136.3	-2.3
Rice & Flour & rice products	197.4	159.9	-19.0
Meat, Poultry & seafood	132.4	138.0	4.2
Fruits & vegetables	138.2	114.6	-17.1
Non-alcoholic beverage	124.3	126.7	1.9
Clothing	122.6	122.3	-0.2
Housing	118.2	116.7	-1.3
Health care and personal services	119.4	122.1	2.3
Transportation & communication	117.0	116.7	-0.3
Entertainment, books and education	129.0	128.3	-0.5
Tobacco & alcohol	153.2	154.8	1.0

*Source:* NESB, 1999. Base year: 1994

**Table 4**      **Retail Price in Baht of selected items**

<b>Items</b>	<b>August 1998</b>	<b>July 1999</b>
Rice (long grain 100%), 5kg	84-104	70-86
Pork ( kg)	78-80	82-88
Uncooked chicken (whole)	48-50	46-50
Cabbage (kg)	14-20	12-18
Chicken egg No 3 (each)	2.3-2.4	2.1
Chillies	4-6	2-7

## **Impact on Health**

### **Health Financing**

#### **Public Health Sector Budget Cuts**

- The rapid decline in tax revenue resulted in a central government budget deficit of one percent of GDP in 1997. This was the first budget deficit in the past decade.
- The national budget for FY 1998 (Oct-Sept) was revised and cut three times. The 1998 Fiscal year budget was revised from the 982 billion Baht approved in the Parliamentary Bill to 800 billion Baht, a reduction of 18.5% (Table 5.1). The 1998 national budget was less than those of 1996 and 1997, which were 843,200 billion Baht and 984,000 billion Baht, respectively.
- While reducing the national budget, the government tried to raise revenue by increasing the tax on non-essential goods such as tobacco, alcohol and other luxury goods. Value added tax (VAT) was increased from 7% to 10%.
- Ministries that are responsible for social services and development were relatively protected from the budget revision. The MOPH budget was cut by 14.58% compared with the original proposed budget; however, it increased its share of the national budget from 7.14% in 1997 to 7.49% in 1998. The 1998 MOPH budget of B59.92 billion in 1998 compared with B66.544 billion in 1997 (Table 5.2).
- Although the overall budget of the MOPH was cut the portion allocated to free medical care was increased. This was to cushion the effect of health care costs on the low-income population. The 1998 health budget still represented an increase of 10% over 1995 and actual expenditure in 1998 was only 2% lower than 1997 and 28% higher than 1996.
- The most significant reductions within the health budget were in health promotion programs consisting of a 54% cut in nominal terms compared with 1997 (Thailand Social Monitor, 2<sup>nd</sup> Issue, 1999).



- In Thailand, public hospital operations rely heavily on non-tax revenue such as user charges or third parties, e.g. the Civil Servant Medical Benefit Scheme (CSMBS), social security and out-of-pocket. Big hospitals rely on non-tax revenue more than smaller hospitals. The main sources of non-tax revenue were out-of-pocket and CSMBS.
- A budget cut of 44% for the CSMBS from the planned budget of B 18 billion to B10 billion in 1998 put further financial strain on public hospitals. Some provincial hospitals were found to have serious liquidity problems.
- The influx of demand from previously private hospital patients brought to the public hospitals a higher caseload of patients with reduced purchasing power.
- The distribution of new low-income health cards accounted for about two-thirds of new users of public health facilities. Health centres and district hospitals reported a large increase of free health care cards between 1997 and 1998. These new cards accounted for two-thirds of the outpatients visiting public health facilities. This probably contributed significantly to the increased use of public facilities and likely mitigated the impact of the crisis on the health care demands of the poor (Pongsapich and Brimble, 1999).

**Table 5.1 The FY 1998 budget revision in response to economic crisis, a B182 billion reduction**

Ministry	Budget Bill	% Total	After Adjustment	% Total	Adjustment	% Adjust
Central Fund*	82,051,605,400	8.36	76,589,967,747	9.57	-5,461,637,653	-6.66
PM Office*	7,993,717,000	0.81	6,588,348,300	0.82	-1,405,368,700	-17.58
MO Defense	105,238,348,000	10.72	80,998,594,000	10.13	-24,239,754,000	-23.03
MO Finance*	44,797,897,900	4.56	42,752,981,000	5.34	-2,044,916,900	-4.56
MO Foreign Affairs*	4,131,846,000	0.42	3,503,160,300	0.44	-628,685,700	-15.22
MO Agriculture	80,864,696,300	8.23	62,580,531,400	7.82	-18,284,164,900	-22.61
MO Communication	102,108,099,500	10.40	67,786,410,000	8.47	-34,321,689,500	-33.61
MO Commerce*	178,540,267,700	0.44	3,746,802,600	0.47	-617,780,700	-14.15
MO Interior	11,155,173,000	18.18	132,710,229,353	16.59	-45,830,038,347	-25.67
MO Labor & Soc Welf*	11,155,173,000	1.14	9,437,204,500	1.18	-1,717,968,500	-15.4
Mo. Justice*	5,962,532,400	0.61	5,269,090,400	0.66	-693,442,000	-11.63
MO Science & Tech	16,595,700,900	1.69	10,945,590,300	1.37	-5,650,110,600	-34.05
MO Education*	166,308,911,800	16.94	148,577,152,500	18.57	-17,731,759,300	-10.66
<b>MO Public Health*</b>	<b>70,145,500,000</b>	<b>7.14</b>	<b>59,920,895,000</b>	<b>7.49</b>	<b>-10,224,605,000</b>	<b>-14.58</b>
MO Industry	5,461,664,200	0.56	4,057,343,000	0.51	-1,404,321,200	-25.71
University Affairs*	39,337,350,800	4.01	32,900,884,800	4.11	-6,436,466,000	-16.36
Other organisations*	5,035,514,700	0.51	4,686,293,600	0.59	-349,221,100	-6.93
State Enterprises	29,660,591,100	3.02	26,932,521,200	3.37	-2738,069,900	-9.2
Revolving fund	22,246,000,000	2.26	20,016,000,000	2.50	-2,230,000,000	-10.02
<b>Total</b>	<b>982,000,000,000</b>	<b>100</b>	<b>800,000,000,000</b>	<b>100</b>	<b>-182,000,000,000</b>	<b>-18.53</b>

Source: Budget Bureau Office (in Wibulpolprasert et al 1998)

\* reduction below average

**Table 5.2** *MOPH budget and free medical care as a proportion, selected years*

Year	MOPH budget	Free medical care budget	
	(million Baht)	(million Baht)	% of MOPH budget
1984	8,617.6	659.7	7.6
1989	12,167.4	800.0	6.5
1995	45,102.7	4,273.5	9.4
1996	55,236.2	4,819.9	8.7
1997	66,544.0	6,370.0	9.5
1998	59,920.9	7,029.0	12.0

Source: Boonyoen et al, August 1998.

### **Private Health Sector**

During the period of economic boom (first half of 1990s), private hospitals expanded rapidly. Between 1993 and 1997, a total of 86 new private hospitals were opened and a further 85 facilities were expanded. This resulted in a 300% over-supply of hospital beds. By 1997, there were 491 private hospitals in the country, 143 of which were in Bangkok. In 1995, a survey revealed that there was 42%-60% bed occupancy in private hospitals (Wibulprasert et al 1998).

Between October and December 1997, there was a significant reduction in demand for private hospital care due to decreased purchasing power of upper and middle-income earners as a result of jobs lost or under-employment. In April 1998, the government terminated the entitlement of inpatient care in private hospitals for beneficiaries under the Civil Servant Medical Benefit Scheme (CSMBS), which further reduced demand for private hospital care.

Many private hospitals had foreign currency loans of more than US\$100 million. A survey by the Medical Registration Division in January 1998 revealed a loss of B10.298 million as a result of devaluation. The debt was postponed as a result of negotiations between the Ministry of Finance and foreign lenders. Newly established hospitals were most affected. It was predicted that 35% of these facilities would close operation within 2-3 years following the onset of the crisis.

### **Household Expenditure on Health**

The expected decrease in health expenditures by households was realised. Household expenditure on both public and private health services declined. There was a 36% decline in expenditure on medical and institutional care. However, expenditure on self-medication increased by 12%. It is difficult to interpret whether this represents an overall decline in the use of health services or a reduction in charges for services as a result of improved cost efficiency or reduced quality. The decrease in out-of-pocket expenditure was more marked among the non-poor (-29%) than among the poor (-13%) supporting a general shift in the population to less costly sources of health care. The poor may also have benefited from access to public health insurance schemes (Shivakumar, 1999;

data from the National Statistics Office Socio-Economic Survey).

### **Health Expenditure on programs and services**

Compared to 1997, the internal distribution of the 1998 MOPH budget allocation was modified (Table 5.3). Most of the cuts were in the areas of capital investment and infrastructure. The Department of Food and Drug Administration budget was increased compared with 1997. This was to reflect the higher cost of drugs and supplies resulting from the effects of inflation and devaluation of the Baht.

The 1998 MOPH HIV/AIDS budget suffered a more severe cut than non-HIV/AIDS programs. The 1998 National HIV/AIDS budget was cut by 24.7%, in nominal terms, or 33% in real terms after adjusting for inflation, compared with an average reduction of 5.5% in non-AIDS programs. However, this did continue a downward trend in actual expenditure on HIV/AIDS that began in 1997 prior to the crisis. In the 1999 budget, in contrast, the cut will be slightly higher on non-AIDS programs than the AIDS budget. Within the HIV/AIDS budget, some activities suffered the cuts more severely than others. Programs involving health promotion (HP), coordination, and empowerment experienced a significant reduction (27-34%) while programs involving social services received an increased budget share (+20%). The 1998 HIV/AIDS budget showed a reduction in the use of antiretroviral (ARV) drugs to reduce the transmission of HIV from mothers to their children (vertical transmission) of 76.4%. The budgets of the four reproductive health programs of the MOPH were reduced from 1,509 million baht in 1997 to 1,325 million baht in 1998. This was a 12% nominal and a 19% real cut between the pre-crisis and post-crisis period (Table 5.4).

**Table 5.3 MOPH budget allocation by departments: 1996-98 (million Baht)**

	1996	1997	1998	97-98% changes
Office of Permanent Secretary	41,240.5	51,107.0	45,245.4	-11.5
Dept of Health	5,129.3	5,380.8	4,799.2	-10.8
Dept of CDC	3,577.1	3,646.7	3,713.5	+1.8
Dept of Medical Services	3,058.7	3,519.0	3,307.4	-6.0
Dept of Mental Health	1,425.8	1,514.9	1,438.1	-5.1
Dept of Medical Science	518.0	893.2	877.0	-1.8
Food and Drug Administration	286.8	422.5	480.2	+13.7
Health System Research Institute	0	60.3	60.0	-0.5
<b>Total</b>	<b>55,236.2</b>	<b>66,544.3</b>	<b>59,920.9</b>	<b>-10.0</b>

Source: MOPH Health Policy and Plan Bureau (in Pothisiri et al 1998)

**Table 5.4 MOPH Department of Health Budget of Reproductive Health Programs, 1996-2000 (million Baht)**

Program	1996	1997		1998		1999	
			% change		%		%
HIV vertical trans	40.17	49.93	24.3	55.64	11.4	118.12	112.3
MCH & Nutrition	557.30	629.3	12.9	585.53	-7.0	524.21	-10.5
HP for school age and youth	213.07	248.49	16.6	258.86	4.2	260.52	0.6
HP for adults and family planning	610.91	581.82	-4.8	424.71	-27.0	314.87	-25.9
Total budget	1,421.44	1,509.54	6.2	1,324.75	-12.2	1,217.72	-8.1
DOH budget	5,140.03	5,644.20	9.8	5,355.05	-5.1	4,228.71	-21.0

Source: Department of Health, MOPH 1998 (adapted from Boonyoen et al 1998)

### **Cost of Drugs**

- Like other consumer items, drugs increased in price following the currency devaluation.
- Seventy-two percent of health centres and district hospitals claimed that their budget for medicines and drugs in 1998 was either cut, delayed substantially, or insufficient to meet increased use of public facilities. Nearly four-fifths of health facilities reported that the budget cuts had lowered the quality of health care provided. Most blamed insufficient medical supplies on this quality loss. Private donations to public hospitals fell 36% and income from drug sales dropped 21% during the year following the crisis.
- Boonyoen et al (1998) suggested that the budget reduction in 1998 had no immediate effects on the operation of public health services because there was an inventory cushion of medical and family planning drugs and supplies. However, there might still be an impact in the long term as the inventory has been depleting.
- Although the MOPH budget for family planning drugs decreased compared with 1997, actual expenditure on those drugs represented an increase of 19.2% (Table 5.5). Increases in the 1998 price of family planning drugs were most significant for Prevenon (20.3% compared with 1997 price) and Microgest (95.5%) pills and the injectable Contracep (31.2%). The prices of other drugs, such as Eugynon pills and Depo Gestin and Depo Progesta injectables have remained stable since 1996.
- The cost of drugs used to treat opportunistic infections in AIDS patients increased during 1998 by between 2.7% and 50% and the increases varied between different hospitals (Pothisiri et al, 1998).

- The devaluation affected drug prices with effects more severe in rural areas than in Bangkok.

**Table 5.5 Budget for family planning drugs, DOH 1996-99 (million Baht )**

<b>Fiscal year</b>	<b>Budget allocation</b>	<b>% changes</b>	<b>Total purchased</b>	<b>% changes</b>
1996	377,258,600.00	na	273,532,458.26	na
1997	317,959,800.00	-15.7%	162,577,989.60	-40.6%
1998	211,297,900.00	-33.5%	193,838,500.00	19.2%
1999	230,992,000.00	9.3%	*	Na

Source: MOPH Department of Health (in Boonyoen et al 1998)

\* Under consideration by House Committee

## **II. Health Program Utilisation and Coverage**

### **Utilisation of Health Care Services**

- Between 1996 and 1998, the number of inpatients and outpatients in public facilities increased by 9% and 22%, respectively. Most of the increase occurred in district-level “community” hospitals. At the provincial level, there was a slight overall increase in patients; however, there was a 16% increase in surgical patients, again perhaps reflecting a shift to public services for high-cost procedures (Shivalumar, 1999).
- A survey conducted for the ADB in August-November 1998 reported a rise of 15% in new outpatients and an 11% rise in outpatient visits since July 1997. The increase may be due to:
  - Increases in the proportion of persons covered by some form of public health insurance, which rose from 56% to 77% between 1992 and 1996. Private insurance accounted for less than 2% of the total insured.
  - Increased use of the Public Assistance Scheme (+ 22% ), the Voluntary Health Card (+110%), and the Social Security Scheme (+28%) between 1996-1998 (World Bank, 1999).
- A survey conducted for UNICEF in hospitals and health centres of the poor North and Northeast regions concluded that the increased flow of patients to rural public health facilities was linked to increased unemployment and falls in disposable income from inflation and underemployment. Health staff also reported increased numbers of patients who were either returning migrants or patients switching from private health clinics.
- Anecdotal reports indicate a decrease in private sector medical service utilisation of 50% for inpatients and 30% for outpatients.
- Overall, 90% of Thai people have access to modern health services although people in remote communities may still have less access than in urban areas. A survey of seven provinces in the

North found that 78% of rural communities utilised facilities provided by hospitals, private clinics, health centres and trained primary health care volunteers. All sub-district are covered by health centres and more than 80% of districts have hospitals (Tontisirin & Bhattacharjee 1998).

- Free medical care or highly subsidised health care is available for low-income people. In 1998, the government increased the budget for free medical care to help cushion the impact on the poor. Health insurance for the unemployed was also introduced by the government following the crisis; however, uptake has been low, perhaps reflecting a stigma associated with this scheme compared with use of the other public insurance schemes, such as the Voluntary Health Card, which requires co-payment.

## **Coverage**

### ***Child Immunisation***

There has been no significant reduction in either the supply of vaccines or the coverage of children with the standard vaccines recommended by WHO.

### ***Family Planning***

The decline in the use of public family planning clinics has continued but has not accelerated. This long-term trend has been explained in terms of increased self-purchase of drugs at private pharmacies.

### ***National HIV/AIDS Program***

- The budget cut resulted in reduced activities. For instance, the budget for drugs to treat opportunistic infections (OI) met only 18% of potential demand, assuming that one-third of 60,000 AIDS cases needed OI drugs.
- The drug budget for the prevention of vertical transmission met only 14% of estimated total need, calculated at 2% infection rate among pregnant women.
- Inflation and devaluation also meant that the budget in 1998 could not purchase the same amount of drugs as in 1997.
- Condom distribution to brothels and commercial sex establishments reduced from 50 million pieces in 1996 to 11 million and 10 million pieces in 1997 and 1998, respectively. This may reflect, in part, increasing reliance on the social marketing of condoms through private vendors.

### ***Health Personnel***

- Health personnel including nurses, public health workers, medical doctors, dentists and pharmacists are contracted to work for government agencies. Approximately 6,000 of them graduate annually. They were not affected by the crisis because their contracts were respected. There has not been a decline in the number of public sector health personnel since the crisis.
- Boonyoen et al reported that the government cancelled any conferences, seminars and training that might incur travel costs.

## Summary

- It was believed that the crisis had no immediate effect on access and utilisation of health care and family planning services because there is a good system of infrastructure in place (Tontisirin & Bhattacharjee 1998) and there was an inventory cushion of family planning drugs and supplies (Boonyoen et al 1998). The impact of the crisis on the quality of services has not been adequately assessed.
- There was no evidence to assess the impact of the crisis on access relating to transportation. Although an attempt was made to maintain urban bus and rail fares at 1997 levels, the fares in rural areas may have increased as a result of inflation.

### III. Health Outcomes

Two years after the onset of the crisis there is little or no evidence of a significant impact of the crisis on health outcomes. It may be too soon to assess this impact given the poor availability of recent health outcome data. Key health indicators quoted in World Bank, ADB, and other documents are largely from the years preceding 1998. Most date back to the early 1990s. The lack of evidence does not preclude the potential impact of the crisis on “hard to access” groups, both in remote rural areas and urban slums.

The Brooker Group (1999) identified the following issues relating to the impact of the crisis on maternal and child health:

- The number of children under 5 years of age utilising public health facilities increased by 22% and their total outpatient visits by 14% since the crisis. This indicates that this target group has increased its use of government facilities along with the poor in general.
- Deliveries of babies in district hospitals increased eight percent in 1998 and previous levels of antenatal and postnatal visits have been maintained.
- **Anaemia in pregnant women increased by 22%** in 1998 and might reflect increased utilisation of services by poorer women and/or a switch to less nutritious foods.
- There was no increase in the incidence of low birthweight babies.
- The steady decline in the rate of child malnutrition observed since 1986 has continued with a further reduction of reported cases in 1998.

A study by UNFPA and the ANU between July and October 1998 resulted in the following findings:

- Malnutrition in children declined from 17.6% in 1990 to 9% in 1997. The number of reported cases of child malnutrition decreased from around 280,000 in 1997 to approximately 260,000 in 1998.
- The number of child abuse cases rose at a considerably faster rate in 1998 than in 1997.
- Tontisirin & Bhattacharjee explained that the “food safety net”, a long term project initiated by the Royal Family, helped cushion the impact of the crisis. Also the support of rural communities to returning relatives helped sustain the level of food supply.



Despite recent AIDS budget cuts, the prevalence of HIV in the Northern region continues to decline, well documented in “sentinel” surveys among young male military recruits. This trend is probably similar in other regions.

### ***Mental Health***

A survey by the Department of Mental Health of 1,669 persons throughout the country in December 1997 found that 75% of respondents were affected by the crisis (Table 6). Of those 4.6% had suicidal ideas and 0.4% were prepared to take action, but had failed. Two cases attempted suicide, but were unsuccessful. There were more reports on social impact and stress by newspapers.

Crisis coping mechanisms (found in this survey) included:

- Accepted the problem 81%
- Took up new hobbies 78%
- Shared problems with close kin and friends 68%
- Gave alms to monks/ religious practice 65%
- Physical exercise 57%

**Table 6** *Mental health problems from economic crisis*

Population	Months after devaluation	%		
		Financial problem	Stress	Suicidal ideas
<i>BKK and vicinity</i>				
General pop	1	74.9	39.5	4.6
General pop	5 (12/97)	74.9	65.3	2.1
Business	1	69.2	36.2	4.6
Bankers	2	65.3	55.6	2.8
Unemployed	2	94.0	76.0	8.7

*Source:* Wibulpolprasert et al 1998 (page 8)

## **Section II**

### **Responses to the Economic Crisis by MOPH**

Prior to the crisis, rapidly increasing government and private expenditure on health care was not matched by comparable improvements in health indicators. For example, the infant mortality rate

has remained stable at about 28 – 30 per 1000 live births since 1990 despite a threefold increase in the government health budget. There has been a trend among policy makers to allocate a greater proportion of resources to primary health care programs rather than clinical services. However, the initial response to the crisis reversed this trend with budget allocations protecting hospital and health centre services while reducing the budget for health promotion and not expanding disease control programs. These same policy makers saw the crisis as an opportunity to increase the efficiency of the use of resources and this has happened to some degree.

In October 1997, the MOPH launched the “**Good Health at Low Cost**” strategy which was approved unanimously and was immediately effective. Components of the strategy included:

### ***Drugs management reform***

- Strengthening of hospital Pharmaco-Therapeutic Committee (PTC).
- Scaled-down hospital formularies ranked by size of hospitals. In the past, larger hospitals had more than 1,000-1,200 formularies. Teaching hospitals had 1,500-2,000 formularies.
- Increased proportion of essential drugs in the hospital formularies. In the past, less than half of drug formularies of large hospitals were essential drugs.
- Use of both tax and non-tax revenue sources to procure a higher proportion of essential drugs.
- Development of a common drug list for district and provincial hospitals.
- Reduced drug stock volume from more than 3 months to 2 months consumption reserves.
- Support for the increased use of generic names and generic drugs.
- Provincial “collective bargaining” has been implemented in 67 out of 75 provinces over the past 9 months. This has resulted in a saving of B154.03 million (24.76%). MOPH aims to further save more than 2.5 billion Baht by implementing this system.

*“After one year of implementation, the results are very promising and the financial status of provincial hospitals has improved greatly” (Dr Preeda Tae-ark, personal communication).*

**Table 7** *Number of hospital formularies: MOPH drug management reform, February 1998*

Level of hospitals	Essential drugs (ED)	Non-essential drugs (NED)	Total formularies
Regional hospitals	70	30	650
General hospitals	80	20	500
District hospitals	90	10	350
Health Centre	100	0	75

*Source:* Wibulpolprasert et al 1998

### ***Savings to operating costs***

- The government introduced a policy to reduce expenses on electricity, water and telephone by 5% in the first six months and by 10% by the end of 1998 fiscal year. The target was increased to 20% in 1998.
- In late 1997, the Cabinet resolved that all meetings, workshops, seminars and conferences organised by government agencies which incurred per diem and travelling costs be cancelled.
- In January 1998, a new regulation was introduced to reduce per diem and lodging costs by 50%.
- In September 1997 all delayed capital projects, which had not been signed, were cancelled. No new capital investment projects were undertaken in 1998 and 1999 except to complete existing obligations.

### ***Other material cost savings***

- Stricter control of MOPH vehicle use.
- Encouraged communication by e-mail.
- Published only necessary and long-term documents and reduced stationary stock.
- Terminated all overtime payment and capped travelling, loading, and per diem payments at lower rates.
- The Budget Bureau increased the budget transfer to the MOPH from two allotments (usual practice) to four allotments.
- Salaries and wages were safeguarded from the 1998 budget cut. However, the Civil Servant Commission introduced a 20% voluntary cut in non-salary (post adjustment) payments to high-

level government officers. There were no significant cost savings; however, this move was welcomed by the public.

### ***Safety Net Expansion***

A key response by the MOPH to the crisis and the decreased purchasing power of many Thais was to expand existing health insurance programs. Increased support was provided to the Public Assistance Scheme for low-income families through budget and external resources from the World Bank. The Government also offered a program of free health cards for the unemployed provided they register with the Ministry of Labour and Social Welfare. The Government subsidy to the Voluntary Health Card (VHC) doubled from 500 baht to 1,000 baht per card with the help of an ADB loan. An additional 900,000 families have purchased VHCs. The ADB study found an increase of 272% in card-holders which could account for two-thirds of new patients in public facilities (Shikakumar, 1999).

## **II Reform of Civil Servant Medical Benefit Scheme (CSMBS)**

- During the economic boom period, the CSMBS budget increased by 20% per year
- Costs of the CSMBS increased from B4.32 billion in 1990 to B13.6 billion in 1996
- The estimated 1998 cost of maintaining the scheme was B18.0 billion
- It is anticipated that the CSMBS reform will:
  - reduce drug costs through the introduction of co-payment for non essential drugs
  - enhance the use of essential drugs according to the National Essential Drug List
  - Improve efficiency in the use of public hospital beds through co-payment and overall improvement of the system.
- In April 1998, the government withdrew the privilege of accessing inpatient care in private facilities by beneficiaries of CSMBS

**Table 8 Expenditure on CSMBS, 1990-1998**

Fiscal year	Expense (million, Baht)	% increase
1990	4,316	-
1991	5,127	18.8
1992	5,964	16.3
1993	7,707	29.2
1994	9,954	29.2
1995	11,156	12.1
1996	13,587	21.8
1997	15,503	14.1
1998	18,000 (original budget)	16.1

Source: Wibulpolprasert et al 1998

In February 1998, the Cabinet approved the short-term strategy proposed by the Ministry of Finance, with immediate effect. The strategies included:

- Containing the scheme's expenditure at B10 billion (down from B18 billion) in 1998.
- Introduction of co-payment for non-essential drugs and extra-days for private room and board
- Termination of access to private care.
- Improving the use of public hospital beds by minimising the length of stay. Previously, the CSMBS paid B600 for each day of stay in a private ward with no time limitation. In the current reform, beneficiaries aged less than 60 years were eligible to receive B600 for the first 4 nights and B300 for days 5-9, and no payment after day 9. For those aged 60 years and over, B600 for the first 6 days and B300 for days 7-13. Full payment was allowed in the public wards.

### **Policy concordance**

Both the MOPH "Good Health at Low Cost" and the CSMBS advocate the use of essential drugs and the enforcement of the use of National Essential Drug List which are mainly locally produced drugs.

### **III. Health Sector Reform**

A loan of US\$500 million from the Asian Development Bank (ADB) has, as a condition, accelerated health sector reform, including reductions and redeployment of public sector personnel, decentralisation, and increased cost-efficiency.

## **Redeployment of health personnel to rural areas**

The crisis opened an opportunity for better distribution of doctors to rural areas. The number of newly graduated doctors who resigned from the MOPH dropped from 127 (22% of total new graduates) in 1997 to 41 (or 7%) of total graduates in 1998. (*Note: in Thailand, all doctors are expected to work for the MOPH, a condition outlined in their contract prior to commencing medical study. It is compulsory for newly graduated doctors to serve their first 2-year post in rural areas. If they don't want to go, they may choose to resign from the MOPH and pay a big fine for breaching the contract*). It is too early to assess any significant shift in human resources to rural areas.

**Table 9**      **Distribution of health personnel-1996-97**

Health personnel	Ratio personnel: population	
	1996	1997
Medical doctor	1:3,691	1:3,593
Dentist	1:17,518	1:17,433
Pharmacist	1:10,605	1:10,016
Graduated nurse	1:1,104	1:1,056
Assistant nurse	1:2,091	1:1992

*Source:* MOPH, 1998

## **Cost Containment and Cost Efficiency**

The crisis has halted the rapid increase in capital investment in both public and private health sectors. Post-crisis, the availability of private hospital beds more accurately reflects demand than pre-crisis. Most increases in public service utilisation have occurred at the community hospital level which is the target for decentralisation of services. Cost-per-service visit has remained stable or declined in real terms at these hospitals, representing a gain in cost efficiency. Hospitals have continued to increase extra-budgetary income from user-fees or insurance, with a 34% increase at the community hospital level between 1996 and 1998 (Shivakumar, 1999). Increased enrolments in the VHC scheme entails an increase in cost-sharing with patients and their families. Meanwhile, the poor have been protected through increased support to the Public Assistance Scheme. What has not yet been assessed is whether there has been any decrease in the *quality* of public health services. In summary, it appears that the twin goals of health sector reform—equity and efficiency—have been achieved in medical services to some extent during the period of economic downturn. However, the decreased support for health promotion and stagnating support for disease control may herald delays in cost efficiency that might be achieved in the mid-to-long term. Prevention programs have long been proven to be more cost-effective in reducing the burden of disease than clinical services, especially for chronic conditions.

## **IV. Monitoring Progress and Rapid Response**

### ***Monitoring mechanism***

In March 1998, the “**Health Intelligence Unit in Response to Economic Crisis [HIU]**” was formed. Both MOPH and WHO contributed to the operation. The HIU will be in operation from 1998-2000. Functions include:

- Coordinate concerned organisations
- Monitor immediate and long term impact especially on marginalised groups
- Suggest short term and medium term strategies to alleviate the effects on marginalised groups.

Aspects to be monitored include:

- Inflation of the price of health commodities
- Allocation of government budget to essential services such as MCH, Immunisation, HIV/AIDS
- Financial status of both public and private hospitals
- Progress and output of the “ Good Health at Low Cost” program
- CSMBS expenditure and service utilisation
- Social security coverage, impact of migration
- Access to care especially for vulnerable and disadvantaged groups
- Morbidity and mortality

### ***Private Sector Responses***

Responses in the private health sector have included the following:

- Maintenance of a minimum number of full-time core nursing and medical staff, but reduction in the number of part-time staff.
- Salary and wage reduction has been common.
- Closing down of some under-occupied wards.
- Purchasing of locally produced drugs and reduction in the use of non-essential drugs.
- Increased annual capitation rate from 800 to 1,000 Baht. The new capitation rate of 1,000 Baht was implemented in January 1998.
- Setting standard charges for certain conditions such as appendectomy, normal delivery, and Caesarian section to prevent open-ended expenditure that caused patients considerable concern.

### ***Major Banks and Donors***

- Major Banks and donors include the World Bank, the Asian Development Bank (ADB), the International Monetary Fund (IMF), Japanese Overseas Economic Operation Fund, and Bilateral assistance/loans. ***These loans have been instrumental in expanding the social safety net, especially in the health sector.***
- The IMF Structural Adjustment Program Loan (SAP) of US\$17,000 million.
- Soft Loans from WB and ADB were used to protect programs that serve vulnerable groups e.g. MCH, Free Medical Care, HIV/AIDS, Social welfare etc (Wibulpolprasert et al 1998)



**Table 10 Overall External Assistance to Thailand, 1995-1998**

External Assistance (US\$million)	Previous 3 year annual average (1995-97)		1998	
	<i>Loan/credit</i>	<i>TA</i>	<i>Loan/credit</i>	<i>TA</i>
<b>A. MULTILATERAL</b>				
Bank	370.5	3.6	900	4.5
IBRD	300	-	1,430	30
IMF	-	-	2,800	-
<b>TOTAL A</b>	<b>670.5</b>	<b>3.6</b>	<b>5,130</b>	<b>34.5</b>
<b>B. BILATERAL</b>				
Japan	902	37.4	4,000	N/A
Australia	-	6.7	10	N/A
Sweden	14.34	2.8	17	N/A
France	9.56	4.4	13	N/A
Germany	36.13	11.5	-	N/A
Denmark	16.07	10.7	2.27	N/A
USA	-	3.6	1,018	N/A
Netherlands	-	0.5	-	N/A
Austria	7.85	0.3	-	N/A
Norway	2.13	-	-	N/A
Nordic Investment Bank	8.33	-	206.57	N/A
European Investment Bank	8.04	-	-	N/A
<b>Total B</b>	<b>1004.45</b>	<b>122.2</b>	<b>5,266.84</b>	N/A
<b>GRAND TOTAL (A+B)</b>	<b>1,674.95</b>	<b>125.8</b>	<b>10,396.84</b>	<b>34.5</b>

Source: [www.adb.org/Work/Country/Assistance\\_Plans/THAcap98.PDF](http://www.adb.org/Work/Country/Assistance_Plans/THAcap98.PDF). Accessed 15/8/99

## ***Perceived Positive Impact of the Crisis***

The positive sides of the economic crisis have included:

- Opportunities for health sector reform. Almost everyone is in support of further rational development of health sector reform *so long as equity is maintained*.
- Increased sense of unity and common concern among the Thai people and reinforced social cohesiveness reflected in the highly positive responses to the Thai-Help-Thai Fund.
- Re-enforced social values. The family structure in village communities, which assisted and supported returning relatives, has helped cushion the effects of the crisis.
- Increased social awareness and a strong sense of commitment to more effective, representative and transparent governance. (Wibulpolprasert et al 1998)

## **Gaps**

- Assessments of the social effects of the crisis appear to have focused on quantitative outcomes and less on qualitative aspects of the impact on families, especially those in rural and poor urban areas.
- Recent, reliable data on the quality of life and the social impact of the crisis beyond job losses and school dropouts appear to be inadequate to fully assess the effects of the crisis.
- Data may not be sufficient to assess the impact on mortality and morbidity because the duration of the crisis has been relatively short. The real impact may not yet have become apparent. Macro-level data on utilisation of health services may not have detected problems in small pockets of poverty. There is a need to monitor the longer term impact of the crisis on family and community coherence. In the short term, it may appear that extended families and rural communities have been able to support returning relatives. However, it is not clear how long this situation can be sustained.
- While several reports claim that rural communities helped cushion the impact of the crisis on returning relatives, there are insufficient data on poor urban inhabitants who live in slums around Bangkok and have no rural relatives to whom to return.
- Nutritional status needs to be monitored carefully. The problem may not be apparent because of the relatively short period after the onset. Special attention should be given to vulnerable groups such as children living in slum areas, homeless children, children in social & welfare institutions.
- Few reports assess the impact on women and their family role (other than job losses). Some anecdotal evidence suggests that the wives of laid-off workers have experienced domestic violence. Many women who were the main earners of household income have lost their jobs. There is a great need to examine the role of women in the post economic crisis period.
- The government has shown its commitment to monitor the impact of, and responses to, the economic crisis. But the government has its own agendas and mandates. It hailed the crisis as an opportunity to pursue health and social reform. It is also in the government interest to create an environment that is attractive to foreign investors. These political mandates may influence

the official assessments of the impact and responses and the reporting of the outcomes. There is a need for independent assessments by non-government agencies, funded by the business sector or foreign donors.

- Assessments of utilisation of public health services have failed to include an assessment of changes, if any, in the quality of services provided by hospitals and health clinics.
- The Thai Government's efforts to maintain essential clinical services and to ensure equitable access to those services has been at the expense of further development of effective health promotion and disease control programs. This may have an effect on efforts to address the effects of the "epidemiological and demographic transition", including rapidly increasing rates of non-communicable diseases and injuries. Sustained public expenditure on medical services in the form that has occurred post-crisis may have little, if any, long-term impact on major health indicators, such as mortality rates and life expectancy.
- Economic and employment data indicate a disproportionate impact of the crisis on the lives of the urban poor. There is little evidence that focused efforts have been made to expand and improve primary health care services for this population group.
- The reports on health effects of the crisis rely on official statistics and figures. The social impact of the crisis may be difficult to quantify. There is a need for qualitative assessments; in particular, on the social impact related to crimes, sex industry, drug use and trafficking.
- Reports on official responses have made very mention of the responses or contributions by NGOs.

## **Recommendations**

- Provide support for a strengthened and expanded health monitoring system that would increase the capacity to assess the impact of the crisis on the quality of life of families in rural and poor urban areas. This system should also include surveillance of child and maternal nutritional status. Decreased food availability during 1997-98 may lead to increases in the rate of chronic child malnutrition ("stunting"); this trend may not become apparent for several years. Studies should focus on particular disadvantaged groups, such as the urban poor, unemployed, female-headed households, homeless and abandoned children, and children living in welfare institutions. A priority for both strengthened monitoring systems and focussed studies (see below) would appear to be slum areas of Bangkok and the poor rural areas of the Northeast region.
- Provide support for further focussed studies of the longer-term social impact of the crisis, in particular on women and their families, changes in the transmission of HIV and other STDs, domestic violence, drug use, mental health, and abandoned children. In addition, studies should be supported to document and analyse more thoroughly those responses implemented by local NGOs and communities.
- As recovery continues, new employment opportunities may differentially benefit men rather than women. Trends in the role of women during economic recovery should be closely monitored and mechanisms supported to ensure that women, especially those heading families, do not experience long-term difficulties in employment and access to essential social services.

- Monitoring systems and health service studies on utilisation rates, service costs, etc. should include assessments of the quality of health services being provided.
- Support should be provided to expanding health promotion programs, especially those aimed at preventing non-communicable diseases and injuries (which already account for the majority of deaths in Thailand). This support should initially be in the form of applied health research, especially formative and intervention research studies that develop appropriate strategies in the context of the Thai health profile, culture, risk behaviours, and available resources. Such research should only be done in the context of building relevant Thai institutional capacity in the areas of research, development of health communication strategies, management of interventions, and monitoring & evaluation of outcomes. Support to health promotion programs will eventually lead to increased cost-efficiency in the health sector as healthier communities require less expensive clinical services to manage chronic diseases.
- Available data suggest that the urban poor may have suffered disproportionately as a result of the crisis. In addition to existing efforts to ensure access to medical services, there needs to be increased support for the development of effective primary health care programs for the urban poor that focus on health promotion and disease prevention.
- Provide program support for elements of the HIV/AIDS control program that are currently inadequately covered by the government budget. A focus of support might be the provision of antiretroviral drugs and other effective interventions to HIV-positive pregnant women to reduce the risk of perinatal transmission of the virus.
- Given the boost that the crisis has given to the process of developing a more rational drug policy and a focus on essential drugs, donor agencies might provide either technical assistance to the policy process and/or material support to the provision of essential drugs to poor and disadvantaged communities. Assistance in rational drug policy might be linked to technical assistance in the further development of relevant health insurance and cost-recovery schemes. These should ideally continue to be community-based, building on Thailand's extensive experience (though mainly in the poorer Northeast provinces with revolving drug funds (and "drug banks").
- In the longer term, provide technical assistance to the health sector reform process with an emphasis on ensuring and monitoring equity. The health sector response to the crisis by the Thai Government appears to have promoted equity through its support to safety net schemes, focus on the use of essential drugs, maintenance of budget support for essential programs, and reducing private health care entitlements to privileged groups. There is a danger that future reform efforts will be driven by the need to cut budgets at the national level and that disadvantaged sub-populations will suffer disproportionately.
- The key conditions of major lending institutions (decreased public sector personnel, decentralisation, and greater cost-efficiency) may be inhibited by the increased demands for public health services. Experience across the world with decentralisation of health services has demonstrated the need for extensive training programs in health program management, including needs analysis, monitoring, and evaluation. The district community hospitals created in the 1980s across the country provide an ideal focus for further decentralisation of policy and management. Donor agencies should provide support in practical ways that provide the

necessary skills at the district level to plan and implement both clinical and disease control programs.

## References

Asian Development Bank. [http://www.adb.org/Work/Country/Assistance\\_Plans/THAcap98.pdf](http://www.adb.org/Work/Country/Assistance_Plans/THAcap98.pdf). Accessed 15/8/99.

Asia Recovery Information Centre, ADB/AusAID. [www.aric.adb.org/](http://www.aric.adb.org/). Accessed 20/11/99.

Board of Investment of Thailand, Economy at a Glance, September, 1998 ([www.boi.go.th](http://www.boi.go.th)).

Boonyoen, Wongboonsin K, Tangcharoensathien and Wongboonsin P (1998). "Effects of the economic crisis in Thailand". Paper presented at the ANU-UNDP study on the effects of the economic crisis on attainment of ICPD goals in the East and South-East Asia, Jakarta 9-11 July 1998. [www.moph.go.th/OPS/hiu/information.indeht.html](http://www.moph.go.th/OPS/hiu/information.indeht.html) Accessed 2/8/99.

Brimble P, Fuller B, Kreiger E, Wedel Y, and Woodtikarn-Timm P. Impact of Thailand's Economic Crisis on the Social Sector. Report for National Economic and Social Development Board and the Asian Development Bank. March 1998.

The Brooker Group. Socioeconomic Challenges of the Economic Crisis in Thailand. Asian Development Bank. April 1999.

Bureau of Health Policy and Planning, The Royal Ministry of Public Health (MOPH). [www.moph.go.th/ops/bhpp/va/1.html](http://www.moph.go.th/ops/bhpp/va/1.html). Accessed 12/8/99.

Ministry of Public Health (MOPH). [http://www.moph.go.th/osp/bhpp/survey/hill/f\\_res.html](http://www.moph.go.th/osp/bhpp/survey/hill/f_res.html). Accessed 5/88/99

Ministry of Public Health (MOPH). [www.moph.go.th/osp/epi/aidshtm/aidstab1/htm](http://www.moph.go.th/osp/epi/aidshtm/aidstab1/htm) Accessed 2/88/99

MOPH. <http://www.moph.go.th/osp/bhpp/va.html> Accessed 2/88/99

MOPH. "Guidelines for 1998 Budget Adjustment". <http://www.moph.go.th/ops/bhpp/budg6.html>. Accessed 12/8/99

MOPH. "National Health Examination Survey -1996". [Http://www.moph.go.th/ops/bhpp/survey/fphs.html](http://www.moph.go.th/ops/bhpp/survey/fphs.html). Accessed 12/8/99

Pongsapich A and Brimble P, Assessing the Social Impacts of the Financial Crisis in Thailand. Presented at the Finalisation Conference, Assessing the Social Impact of the Financial Crisis in Selected Asian Developing Countries, Asian Development Bank, Manila, 17-18 June, 1999.

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Pothisiri et al (1998). "Funding priorities for HIV/AIDS Crisis in Thailand". <http://www.worldbank.org/aids-econ/thaifund.htm> Accessed 2/8/99.

Shivakumar J. World Bank Thailand Social Monitor, second issue. June 1999.

Tontisirin & Bhattacharjee (1998) “ Impact of economic crisis on nutrition in Thailand”. Paper presented at Asian Conference on Early and Childhood Nutrition”, 1-4 November 1998, Kuala Lumpur, Malaysia.

Wibulpolprasert et al (1998). “The economic crisis and responses by health sector in Thailand in 1997-1998” Paper presented at Regional consultation on Health Implications of the Economic crisis in the South-East Asia region, 23-25 March 1998, Thailand.  
<http://www.moph.go.th/present/life1/sear-crisis.doc>

World Bank Atlas, 1996. Washington, DC.

World Bank (1999) “Thailand Social Monitor: Coping with the Crisis in Education and Health-part 2”. [Http://www.worldbank.or.th/social/social\\_part\\_ii.pdf](Http://www.worldbank.or.th/social/social_part_ii.pdf). Access 13/8/99

World Bank (July 1999). “Update on Thailand”  
<http://www.worldbank.org/html/extdr/offrep/eap/jmsboard/71399/thailand.pdf>. Access 4/8/99.  
Accessed 2/8/99

World Bank (May 1999) “ Thailand Economic Monitor” Internal World Bank Document.  
<worldbank.org.th/welwbto/monitor/moni0599.doc>. Accessed 14/8/99

World Bank (March 1999) “ Thailand Economic Monitor” Internal World Bank Document.  
<Http://www.worldbank.org/html.extdr/offrep/eap/th2.htm>. Accessed 2/8/99

World Health Organization (WHO) “Immunization Profile-Thailand”. <http://www.who.int/gpv-surv/country/thailand.html> Accessed 5/8/99

Unicef. “Information statistics-Thailand” (last updated 04/01/1998). Website-  
[www.unicef.org/statis/country\\_1Page175.html](www.unicef.org/statis/country_1Page175.html). Accessed 5/8/99.