The Impact

of the

Asian Financial Crisis

on the

Health Sector

in Indonesia

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Abbreviations

ADB	Asian Development Bank
AIDS	Acquired Immune Deficiency Virus
BAPPENAS	National Planning Bureau
BCG	Bacille Calmette-Guerin vaccine
BKKBN	National Family Planning Board
BLN	Foreign Aid
BPS	Central Statistics Bureau
CHD	Centre for Health Data, Ministry of Health
DEPKES	Ministry of Health
Dinas	Provincial government health department
FP	family planning
GDP	gross domestic product
GOI	Government of Indonesia
HBV	hepatitis B vaccine
HIV	Human immunodeficiency virus
HKI	Helen Keller International
HNSDP	Health and Nutrition Sector Development Program
HSFP	Health Sector Financing Project
ICRC	International Committee of the Red Cross
IFLS2	Indonesia Family Life Survey, Round 2
IMRs	infant mortality rate(s)
INPRES	Presidential instruction (infrastructure and drugs allocations)
IUD	intrauterine device
JICA	Japanese International Cooperation Agency
JKB	Jakarta-based NGO
JPKM	community health insurance scheme
Kanwil	provincial office of the Ministry of Health

Kartu Sehat	Health card which provides free of charge health services for the poor
Kasehatan	Health
MCH	maternal and child health
MDM	Medicins du Monde
MMR	maternal mortality ratio
MoH	Ministry of Health
MSF	Medecins sans Frontieres
NGO(s)	non-government organisation
NTB	West Nusa Tenggara province
NTT	East Nusa Tenggara province
OCP	oral contraceptive pill
PMI	Indonesia Red Cross
PMTAS	School Snack Program
Posyandu	Community Integrated Health Services Post
Puskesmas	Health centre
RI	Republic of Indonesia
Rp	Rupiah
Rumah sakit	hospital
SKRT	Households Health Survey
SMERU	Social Monitoring and Emergency Response Unit (World Bank supported officer to study effects of economic crisis)
SPSDP	Social Protection Sector Development Program
SSN	Social Safety Net
STD	sexually transmitted diseases
Surat miskin	certificate letter of poor
SUSENAS	National Socio-Economic Census
TB	tuberculosis
TBA (dukun)	traditional birth attendant
UN	United Nations

UNDP	United Nations Development Program
UNFPA	United Nations Family Planning Agency
UNICEF	United Nations Children's Fund
UNSFIR	United Nations Support Facility for Indonesian Recovery
USD	United States dollar
WFP	World Food Program
WHO	World Health Organization

Summary and Recommendations

The economic crisis affected Indonesia from 1997 and was probably more complex than for other East Asian countries due to the political and social dimensions which complicated economic difficulties and the responses. Examples of this include the ethnic unrest in Maluku, NTB and other provinces, and the various independence movements, such as in Aceh, West Irian and East Timor. In the case of the East Timor, although it is now a fully independent state following the referendum on independence, discussion is included in this chapter as it was for the greater part of the period under consideration an Indonesian province.

One of the first effects of the economic crisis was that the currency depreciated strikingly – from Rp 2,000 per USD to more than 10,000 per USD within 6 months. Companies and factories closed down and unemployment rose. The crisis was further compounded by El Niño, which caused a severe drought in the eastern part of the country and serious fires in other areas.

Effects of the Crisis

Real expenditure on public health has declined. Indonesia's health expenditure is relatively low as a percentage of public spending. Rising Government spending on health was observed until 1996/7. During 1997/98 total expenditure on health fell, despite a 34% increase in foreign aid input in real terms.

Overall, **the crisis has a strong urban bias.** Using the BPS official poverty line definition of poverty, it is estimated the proportion in (absolute) poverty increased from 11% to around 14%. The main effects can be summarised as follows:

- **The impact of the crisis has been serious, but much less severe than that predicted.**
- **The impact has been very uneven geographically;** Java is hard hit even in rural areas, large parts of Sumatra and Sulawesi have experienced minimal negative impact from the financial crisis; and other areas show negative impact, but it is unclear whether problems are economic crisis-related or result from ethnic unrest (Maluku, NTB) or drought (East Timor, NTT, NTB) and fires (East Kalimantan).
- Pre-crisis economic status is not a good indicator of impact

Information on the crisis on health in Indonesia is scattered and largely anecdotal, however the effects are likely to be in the following areas:

- Nutritional status, especially on the very young, reproductive age women and the elderly
- Availability of drugs and other medical supplies
- Rise in some communicable diseases, e.g. STDs, diarrhoeal diseases
- Switching by users to cheaper forms of health care provision
- Delays in or failure to take up medical treatment

As the crisis developed, it was predicted that there would be a general shift from private sector facilities to the subsidised public sector. Instead, it appears that **use of both public and private**

sector health facilities has been falling steadily and being replaced by higher rates of self-treatment. However utilisation rates, which were never high in Indonesia, appear to have been falling at least since 1995. A decline of about two percentage points has been observed in the use of public services by adults between 1997 and 1998 and a decrease of 6% was also found in the overall use of health care among children. **Decreased use of health facilities was seen in both urban and rural areas.**

Childhood immunisation had been nearly universal pre crisis in Indonesia. Reports suggest that thus far **decreasing rates of participation by children in the posyandu program** have not produced significant declines in immunisation coverage. **A decline in Vitamin A coverage has been observed.**

There has been **little change in the prevalence of contraceptive use** or in the method mix between 1997 and 1998 although prices of services at both public and private providers have risen considerably with the exception of the oral contraceptive pill (OCP). There has also been a reported increase of the use of IUDs. Reliance for MCH services appears to be on less expensive services and there has been almost 5 fold increase, (from 1.6% to 7.1%), in family members delivering babies.

BPS figures on changes in the consumer price index between early 1996 and August 1998 show **an overall price increase for services and drugs of 61%.** Some antibiotics doubled in price, as did chloroquine.

Health and nutrition indicators from national surveys demonstrate the complexity of investigating health effects using routine data. Overall, these data are consistent with the evidence of a complex and heterogeneous crisis, with pockets of serious health effects. **The percentage of persons experiencing serious health problems has increased substantially** from 12.8% in 1997 to 14.6% in 1998 with urban areas more affected than rural. With regards to gender, the data show **greater effects on women.**

The Watching Brief analysis demonstrates that **malnutrition among under 5s has decreased** overall from 34.9% in 1992 to 29.8% in 1998. Urban rates have remained at around 28%. Overall, this study considers child malnutrition a greater problem in rural areas. The HKI reports show **increased prevalence of micro-nutrient deficiencies (especially vitamin A) and increased wasting among under 5s and women.** IFLS2 data show a mixed picture and indicate that hemoglobin levels have actually improved on average between 1997 and 1998 and that children have experienced an increase in weight for height. However, **adult Body Mass Index has declined.**

TB is ranked as the number one infectious disease in Indonesia. DOTS has been adopted as the national policy, but problems existed with the program even pre crisis. **The economic crisis may affect availability of treatment and compliance rates for TB treatment**.

To date there has been no evidence of serious STD public health risks arising from the crisis so far, however, **an increase in STDs may become apparent later.** There is an urgent need to improve basic surveillance through sentinel site monitoring and other means of rapid epidemiological assessment. The number of reported cases of HIV reported to date is lower than earlier estimates, but there is an increasing trend and the potential for epidemic spread exists both due to sexual transmission and also IDU (there are an estimated 100,000 users of illicit drugs in Jakarta alone).

Responses to the Crisis

The major response to the crisis by the Indonesian Government was expansion and restructuring of the Social Safety Net (SSN) with support from major donors, in particular the World Bank and the ADB. Approximately 55.5% of the development budget (about Rp 17.3 trillion) was allocated for SSN schemes, implemented through four broad categories. Approximately 11.5% of the SSN allocation is for health.

All SSN funds are supposed to be targeted exclusively on poor households. Poor households are issued with health cards (kartu sehat) which can be used to obtain free health services. Services are offered under the following programs: Basic Health Services, JPKM/Health Card, Health Services for Pregnant women, Food and Nutrition Interventions, Hospital Operational Costs.

There is great confusion in the Ministry of Health as to what the impact will be of the proposed district level decentralisation. Central level program managers are at a loss to explain what decentralisation will mean for health program design, management, coordination, or evaluation.

There is currently little to no capacity for district level health staff to take on the responsibilities of program management as envisaged in the decentralisation plan. To date, it is unclear what plans there are to develop that capacity. There is currently a discussion to dissolve the provincial level offices of the ministry of health (Kanwil Kesehatan), and have all provincial level activities operate from the Home Affairs Health Services Offices (Dinas Kesehatan Tk I). This possibility adds additional confusion about respective roles of central, provincial, and district health offices in a decentralised environment.

The World Bank and the ADB are the two largest international donors contributing to financing the SSN. Assistance is by way of long term loans rather than grants. The loans provide general GOI support, specific support for the social and nutrition sectors, and funds for other designated projects. The UN agencies provided funds and expertise in a number of areas including emergency food assistance (WFP), nutritional support to infants and mothers (UNICEF), subsiding drugs and other supplies (UNDP) and maternal health programs (UNFPA). Support from bilateral donors has ranged from small programs undertaken by NGOs to resources for the SSN. Australia, Japan and the USA provided food aid. Japan has subsided drugs and other essential supplies. Bilateral donors have also funded design and evaluation projects.

Recommendations

The economic crisis has highlighted many of the weaker links of the Indonesian health care system, in particular access to health care by the poor. However, it is difficult to assess the true impact of the crisis due to a lack of reliable data coming from the health information systems. In responding to the crisis, efforts should not weaken or replace existing structures, and should be based on principles that will promote community development. Therefore, donors should build on the existing programs. Effective program design is crucial and priority should be given to funding services that serve the poor in deprived urban poor areas or remote rural areas. Special attention should be given to ensuring free access by the poor to health services.

Recommendation 1: Programs of micro-nutrient supplementation should be supported, to minimise the impact on vulnerable groups.

- Children and pregnant and lactating women are at greatest risk of serious health effects as a result of the crisis.
- Micro-nutrient supplementation (Vitamin A/Zinc, Iron/Folate, Iodine) for vulnerable groups is vital to minimise excess mortality, in particular in urban areas. Where possible, support should be given to strengthen national supplementation programs. This could be, for example Vitamin A/Zinc (+ iodine in areas of iodine deficiency) for all children 6 months to 5 years in association with National Immunization Days.
- Because antenatal and postnatal care coverage is decreased, access to post-partum women for micro-nutrient interventions is now more difficult. Strategies for accessing this group should be a priority.

Recommendation 2: The supply and rational use of drugs should be ensured.

- Foreign exchange pressures, coupled with the reorganistion due to decentralisation, may adversely effect the supply and use of essential drugs.
- Donor activites could support a review of current policy and practice, the promotion of rational use of drugs, the increased use of generic drugs, and the use of standardised prescribing practices.
- Logistics systems also need improving.

Recommendation 3: Communicable disease surveillance activities should be supported, especially at peripheral levels.

- Poorer nutritional status, sanitation, and public health services may promote the outbreak of communicable disease.
- Any assistance that would address development of surveillance systems should only be considered after a more comprehensive review of the existing systems. Given that Pusat Data is currently working with significant World Bank funding, and other donor support and input into surveillance, it would be critical to assess the current status of these efforts before any additional support were to be proposed.
- Assistance with improving public health surveillance would be better focussed at developing capacity at peripheral levels (district and province) to analyse, interpret, and use surveillance data for health program evaluation and planning.
- With the uncertainties created by the impending decentralisation of health planning to district levels, increasing the skills of program managers at peripheral levels to better use whatever data they have access to would derive the most benefit.

Recommendation 4: HIV/AIDs and STD surveillance should be strengthened and expanded.

- Harm reduction activities should be supported and STD treatment services strengthened at PHC level.

- Capacity and strengthened roles of NGOs in this area should be supported.
- Government activities should be supported especially in key areas where budget savings may be attempted by the Government.
- A second phase of the current AusAID HIV/AIDS project would be highly desirable.

Recommendation 5: Support should be given to strengthen the collection of health status indicators, especially in poor communities.

- There is a major problem of lack of good information on the impact of the crisis. Even prior to the crisis little was known about health seeking behaviour of the poor and causes for their low utilisation of services.
- Given the urgent need to have an informed basis for policy making in health planning and financing, this represents a loss to the planning process.
- Strengthening the collection of health information would allow the government to better monitor the impact of the crisis and the response to the crisis. It would also better inform the planning process.

Recommendation 6: Support should be given to reverse the decrease in the provision of basic health services.

- In areas where the government is unable to provide adequate coverage, donors should supplement activities and funding requirements.
- Potential areas where shortfall could occur include immunisation, maternal and child health, family planning services, and tuberculosis treatment and control.

Recommendation 7: Primary health care services in urban areas should be a priority:

- Available data on the effects of the crisis indicate a particularly strong impact on the urban poor.
- Most previous activities by donors in the health sector have emphasised rural primary health care.
- There is a need for additional donor support to the development of appropriate and innovative urban primary health care services.

Recommendation 8: Research on risk behaviours related to chronic diseases and injuries should be supported.

- Indonesia has made a partial entry into the "epidemiological transition" from communicable to non-communicable diseases.
- Support needs to include the use of research data to develop appropriate health promotion programs that in the long run will lead to greater cost-efficiency in the public health sector.
- Prevention of non-communicable diseases (eg, cardiac, renal, cancers, diabetes) has been proven to be more cost-effective than greater investment in more sophisticated medical services to provide treatment of chronic conditions.

Background

In terms of health status, Indonesia has made great progress between the 1960s and 1990s in terms of life expectancy (61 years in 1995) and infant mortality (50 per 1000 live births in 1995) see *Appendix 1*. However, it still lags behind its Asian neighbours and much of the progress was recorded prior to this decade. The progress has also not been nationwide, with some districts still recording IMRs of over 100 and others between 25-30. Although Indonesia is entering the transitional epidemiological phase, with the leading cause of death now cardiac disease, the next four leading causes of death remain communicable diseases.

Table 1: Comparative health indicators in SE Asia (1998)

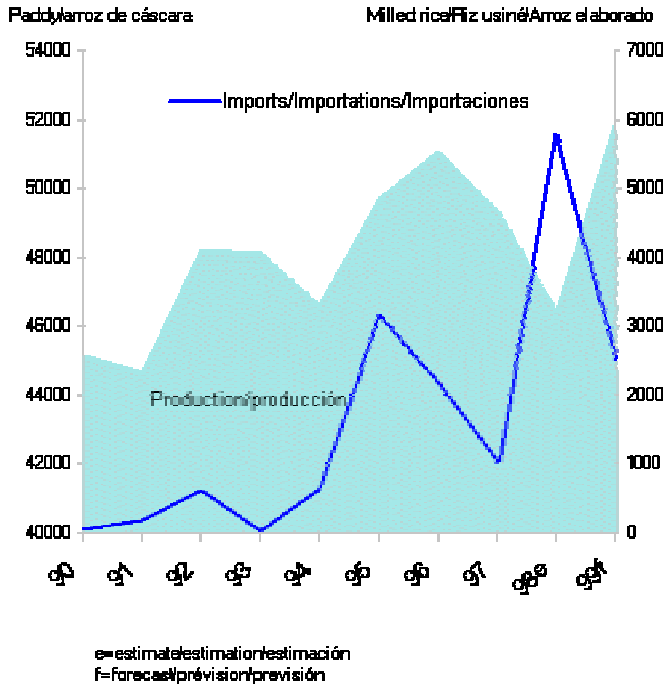
Country	IMR (per 1000 live births)	Life expectancy at birth (years)	MMR (per 100,000 live births)	<5 mortality rate (per 1000 live births)	Fertility rate (births per woman)
Indonesia	52	64	390	75	2.8
Malaysia	12	71	34	14	3.4
Philippines	40	67	208	53	3.8
Thailand	35	69	200	42	2.1

Source: Asian Development Bank, in The Health Sector in Indonesia: The Road to Reform. Prepared by PT Hickling Indonesia under a contract from The Canadian International Development Agency. 1999.

The economic crisis has affected Indonesia since 1997 and was probably more complex than other East Asian countries due to the political and social dimensions which have complicated current difficulties and the responses.

One of the first effects was that the currency depreciated strikingly – from Rp 2,000 per USD to more than 17,000 per USD within 6 months. Companies and factories closed down and unemployment rose – about 8 million have been estimated to have lost jobs since 1997. The crisis was further compounded by El Niño which caused a severe drought in the eastern part of the country and serious fires in other areas during 1997. This resulted in reduced agricultural production and increased environmental degradation. One result of this was the increased requirement for imported rice (*Figure 1*) at inflated prices due to the collapse of the rupiah.

Figure 1: Rice production and imports 1990 to 1999 (Indonesia)



Source: Food and Agriculture Organisation (UN Rice market monitor) 1999.

One of the significant shortages experienced during the crisis was that of raw materials for drug production. Due to the lack of confidence in the banking sector the pharmaceutical industry was not able to open letters of credit. About 90% of raw materials for pharmaceuticals were imported and production was severely affected during the crisis. Provinces and district health offices had a reduction in operating budgets resulting in cuts in preventive programs. Government hospitals were faced with increased operating and drug costs.

Health has been identified by the Government as one of the national priorities during the crisis and 13 susceptible groups have been identified as target populations for assistance – including the poor, new born infants, pregnant women, the elderly, malnourished and people from the eastern part of Indonesia affected by El Niño.

The Indonesian Government's response to the crisis was not to expand capital investment on health but, with the support of international donors to provide services for the poor and elderly, maintain MCH services, and ensure supply of essential drugs. Expansion of the social security safety net formed a major component of the overall response. (SMERU 1998, Ministry of Health Nov 1998, Asian Development Bank Nov 1998, Canadian International Development Agency 1999, BAPPENAS 1998, UNSFIR 1999).

Section 1 – Indicators of the Effects of the Crisis

1.1 Health Financing

International Comparisons

The Indonesian Health sector usually has a relatively low allocation of resources, especially when compared with other Asian countries. The 1990 World Development Report indicates the public and private share of GDP allocated for health in Indonesia was 2.5%, compared to 4.5% in other Asian countries. The World Bank's Health, Nutrition and Population Sector Strategy Paper (1998) shows similar findings for more recent years, with Indonesia's health expenditure (particularly public spending on health) remaining relatively low as a per cent of GDP. The IMF's 1998 annual statistical yearbook indicates that Indonesia's health expenditure is also relatively low as a percentage of public spending, 2.5% (1996) in comparison with Malaysia (6.3% in 1997), Thailand (8.58% in 1997) and Philippines (3.21% in 1997).

Recent Trends in Indonesian Health Sector Funding

Despite the relatively low comparative figures for health expenditure, Indonesia's commitment to the health sector has been rising as a share of all public spending (Health Sector Financing Consultancy Report. Institute for Health Sector Development/The World Bank. 1999.). *Table 2* shows the allocations for total Government spending and public expenditure on health. These figures are for allocations and include foreign aid. They therefore show intentions rather than actual spending.

Table 2: Health budget allocation as a share of total public expenditure (in billion rupiah)

Year	Health allocation	Total public expenditure	Percentage
1992/93	1,971.0	59,960.5	3.29
1993/94	2,225.5	66,865.6	3.33
1994/95	2,599.6	74,760.7	3.48
1995/96	2,803.0	82,352.5	3.40
1996/97	3,352.6	90.616.4	3.70
1997/98	4,560.8	100,317.6	4.55

Sources: 1985/6 (Prescott et al), other years (Malik et al, 1997).

Table 3 shows the pattern of actual spending for both Government and foreign aid funds.

Table 3: Actual central government and aid expenditure (realisation) compared to allocation in million rupiah

Year	Earmarked Govt. Health Budgets		Foreign Donor Assistance for Health		Other Govt. Spending	Total estimated realisation in current prices	Total estimated realisation in real terms in 93/4 prices	Percentage change to previous year
	Allocation	Realised	Allocation	Realised	Estimated realisation			
1994/95	1,354,593	1,648,840 *122%*	373,271	142,415 *38%*	492,883	2,284,138	2,114,944	
1995/96	1,673,475	1,918,589 *115%*	397,483	157,046 *40%*	589,992	2,665,627	2,259,007	+6,8%
1996/97	1,930,745	2,079,683 *108%*	451,238	154,503 *34%*	690,741	2,924,927	2,285,099	+1,5%
1997/98	2,453,333	1,933,334 *79%*	771,529	267,739 *35%*	814,678	3,015,751	1,816,717	-21%

Source: DEPKES data, compiled by the World Bank Notes: Earmarked Government health budgets are DIK, DIP, INPRES for health, SBBO, & OPRS. Other Government includes estimates for SDO, military & other non-DEPKES health expenditure.

Table 3 shows a rise in expenditure in nominal terms in each year, with rising government spending until 1996/7 and the increase in 1997/8 due to the rise in foreign aid. In real terms, total expenditure fell in 1997/8, despite a 34% increase in foreign aid input in real terms.

There is lower expenditure than allocations in the majority of provinces (except Jakarta, West Java and East Timor), particularly in 1997/8. Reasons for lower than allocated expenditure include:

- some under-spending on health service construction, may have been due to delays in capital expenditure for facility development; this could explain low performance in particular provinces but not general low spending in 1997/8;
- provincial and district governments may be diverting part of the budgets intended for health for other purposes. This assumes the full allocation was released from Ministry of Finance.
- the impact of the crisis is presumably the cause of the change in spending patterns in 1997/98, in particular underspending across all foreign aid development funds. There is a combination of factors leading to the slow disbursement of funds; including the devaluation of the Rupiah, administrative arrangements relating to use and disbursement of funds (some dating back prior to 1994/5), and the lack of skilled staff at local district level able to manage

or act autonomously. The result is that there is a large cumulative underspend of development funds, and extrapolation to year end indicates a 32% rate of expenditure against budget. This is lower than in previous years (which spent 34-40% of external aid budgets), although the total amount spent is likely to increase.

(Institute for Health Sector Development/World Bank 1999.)

Specific Impact of the Crisis on Expenditure on Health

It is not yet clear what the impact of the economic crisis has been on public expenditure on health or provision of services. The crisis has had an impact on the 1998/9 health sector budget, which went through various amendments even after the fiscal year had started, due to cash injections from donor assistance. The aid has been used to counterbalance the consequences of the crisis and devaluation of the rupiah. The nominal health budget was cut by 4%, but with the high levels of inflation existing in 1998 (increased 8 fold from 1997) this adversely affected the ability of the government to maintain services (UNESCAP 1999)

External financing has increased in response to the crisis - as *Table 3* shows, the share of foreign aid in central government managed health spending has risen from 6.2% in 1994/5 to 8.9% in 1997/8. The figure for 1998/9 is expected to be much higher because of the increased support received to counteract the impact of the crisis.

The allocation of expenditure across different activities is shown in *Table 4*, based on analysis of expenditure data from DEPKES for two years - 1994/5 and 1997/8. Data indicates that the largest share is devoted to primary health care, although the share has declined. The decline for PHC is mainly due to the fall in INPRES (health service construction) funding in 1997/8.

Table 4: Functional breakdown of central Government and external aid funds, 1994/5 & 1997/8 in million rupiah

	Central & foreign aid expenditure		**% of total**	
	1994/5	**1997/8**	**1994/5**	**1997/8**
Primary Health Care	942,984.6	778,102.8	53.2%	35.6%
Secondary & Tertiary Hospitals	391,841.5	699,125.4	22.1%	32.0%
Education & Training	111,037.6	183,655.9	6.2%	8.4%
Research & Development	10,395.5	27,356.3	0.6%	1.2%
Management	237,410.9	499,741.6	13.4%	22.8%
Total	1,693,670.2	2,187,982.0	100%	100%

Source: Institute for Health and Development 1999 Key Health Financing Issues in Indonesia.

On a per capita basis and taking into account inflation, the level of expenditure per capita has remained roughly constant for hospitals, health education and training and research. The fall in

PHC expenditure is marked, but much of the fall is due to decline in a few provinces – particularly funding to Jakarta (PHC funding down from 524,345 m Rp in 1994/5 to 208,144 m Rp in 1997/8) – in real terms, a fall by 75%. Irian Jaya, Maluku and NTT also experienced real falls greater than 60% while Aceh saw a large real increase.

Many health programs have been discontinued including some programs on preventive health (UNESCAP 1999). In addition the HIV/AIDs budget was cut by 50% in 1998-1999 largely due to the withdrawal of the World Bank HIV project.

1.2 Impact of Economic Crisis on Coverage and Utilisation of Health Services

Utilisation of health services and private expenditure on health

There is a strong dichotomy in the use of health services in Indonesia. Pukesmas and posyandu are situated at the sub-district or village levels and are used mostly by low income people for health treatment. Public and private hospitals are located mostly in the cities and are used more by the middle and high income groups. (Asian Development Bank, June 1999)

Although only about 18% of Indonesian doctors work exclusively in private practice, it is accepted practice for most government employed doctors to run private clinics in the afternoons and evenings. Most drugs are paid for directly by patients. There is also a significant use of traditional healers and self-treatment accounts for quite a high proportion of illness episodes. (Institute for Health Sector Development/ World Bank. 1999.)

Reports of private hospital and clinic use being substituted with the less expensive services provided by Government hospitals and increased use of traditional healers are widespread (UNESCAP 1999). It is also likely that low income groups are switching to traditional healers or letting health problems go untreated (ADB June 1999). In addition, the poorest populations appear likely to cut consumption of health services as the crisis increases the opportunity cost of health care. Any reduction in the use of private health facilities places a further burden on government by increasing use of public facilities. Nearly all public health facilities charge user fees to supplement their revenue. Studies report that more managerial attention is placed on increasing user fees and recovering costs than reducing waste and inefficiency. (UNESCAP 1999)

There are no good data sources on health seeking behaviour, but there are now a number of sources of data on health facility utilisation. Data on private expenditures and service use can be obtained from several sources, including the Indonesian Family Life Survey, the Households Health Survey (SKRT) and the National Socio-Economic Census (SUSENAS). SUSENAS is the most general and, for estimating expenditures, the most useful of these. (Institute for Health Sector Development/ World Bank. 1999.)

As the crisis developed, it was predicted that there would be a general shift from private sector facilities to the subsidised public sector as the middle class and non-poor felt the squeeze on their incomes (Wilopo 1999). Instead, it appears that use of both public and private sector facilities is falling steadily across the board and being replaced by higher rates of self-treatment. Furthermore, utilisation rates seem to have been falling at least since 1995, when there was a

SUSENAS module on health (*Table 5*). Rates have fallen more overall in public sector facilities than in private ones, but in urban areas, there have been similar declines in both. The early indication is that private expenditure has declined, and now represents roughly 65% of total expenditure. It also suggests that the changes in private spending have been very uneven between provinces, a finding which is consistent with other effects of the crisis.

SUSENAS data indicates that there has been a 2.5% decline overall in the use of health facilities since 1997 and that the greatest decline has been in the use of public health facilities (2% drop), compared to private facilities (0.5% drop).

Table 5: IFLS2+ Use of health services, particularly public health services and SUSENAS data on contact rates

IFLS2+			
	1997	1998	Change
% of Adults using any services	14.4	13.3	-1.1
% of Adults using any public services	7.2	5.4	-1.8
% of children using any services	25.8	19.9	-5.9
% of children using public services	20.3	13.2	-7.1
SUSENAS data			
	1995	1998	Change
Total	14.6	12.1	-2.5
Private	7.0	6.5	-0.5
Public	7.6	5.6	-2.0
Health centres	6.4	4.5	-1.8

Data from the IFLS2 survey broadly support the findings from SUSENAS, ie there has been a decline of about two percentage points in the use of public services by adults between 1997 and 1998. There was a very slight, but non-significant rise in the use of private services and a rise of 75% in the use of traditional practitioners (although the numbers involved are very small). A decrease of 6% was found in the overall use of health care among children (unfortunately, the IFLS survey aggregates all children under 15). This decrease was mainly in relation to visits to the posyandu (integrated health post - village level) rather than the puskesmas (primary health care centre), and raises the question of what services children are missing. The decline in use of the posyandu by children is of concern because it is an important source of preventive care, such as growth monitoring, immunisations and vitamin A. Decreased use was seen in both urban and rural areas.

The Rand report (Rand Corporation 1998) analyses IFLS data from 1997 and 1998. For the report the same 1,934 households interviewed during 1997 were re-interviewed during 1998. The results illustrate the relationship between economic resources and the use of health care in Indonesia during the crisis. For adults the proportion using public services has declined from 7.4% in 1997 to 5.6% in 1998. For children the overall use of health services has decreased significantly from 27% to 17%. The study reports that it is children from the poorer and middle income households who are switching out of private providers. In contrast children from higher income households are increasingly relying on private care.

Table 6: Impact on the use of health services

Accessibility	1997	1998	% change
% use of health services by adults	14.6	13.4	-1.2
% use of health services by children	26.9	16.7	-10.2

Source: RAND report 1998

The Indonesia TAG report a recent rise in the use of public services – this highlights the difficulties of assessing a complex and heterogeneous situation using different data sources although it may also indicate that the social safety net subsidies are encouraging increased utilisation of services among the poor.

According to some NGOs utilisation of their services by the poor is higher. SUSENAS data suggest that utilisation of all health services (even prior to the crisis) is low compared with other countries at a similar level of economic development. The issue of low utilisation of health services was discussed with a number of Ministry staff and NGOs, and the following explanations were offered:

- cost of services and / or transport to the services and difficulty of obtaining surat miskin or kartu sehat or lack of awareness about eligibility and use of these mechanisms;
- attitude of government health staff – the poor do not feel welcome, rarely get to see a doctor, and are rushed through the clinic
- low level of education
- lack of trust in western / modern medicine
- limited outreach efforts by government staff - not popular, insufficient incentives or funding

(Institute for Health Sector Development/The World Bank. 1999.)

Immunisation Coverage

Childhood immunisation had been nearly universal pre crisis according to the WHO Immunisation profile for Indonesia which is based on Government reports to WHO (Table 7). However this view of universal coverage pre crisis is challenged by the Rand Corporation report based on IFLS2 data (Table 8). The impact of the crisis is still unclear although common

vaccinations for measles, mumps and rubella may have become too costly for poor families and they have stopped buying them, according to some reports (UNESCAP 1999).

Table 7: Vaccine coverage of target populations

	1997	1995
BCG	100%	100%
Polio	90%	94%
Diphtheria	91%	92%
Pertussis	91%	92%
Tetanus	91%	92%
HBV	62%	-
Measles	92%	92%

Source: WHO Immunisation profile Indonesia

The RAND report suggests that although coverage was not universal pre crisis, thus far decreasing rates of participation by children in the posyandu program have not produced significant declines in immunisation coverage. There are only two vaccinations for which uptake appears to have changed significantly; polio for which the rate is significantly lower in 1998 than 1997 and HBV for which the rate is significantly higher (*Table 8*) (Rand Corporation 1998).

Table 8: Immunisation uptake for children less than 3 years of age

	1997	1998	Change (%)
BCG	75%	74%	-1
Polio	87%	80%	-7
DPT 1	70%	72%	+2
DPT 2	54%	60%	+6
DPT 3	39%	42%	+3
HBV	40%	49%	+9
Measles	55%	52%	-3

Source: IFLS 2 data, RAND report 1999

Family Planning Services

UNFPA undertook provision of contraceptives to cover the effects of the crisis (Asian Development Bank, June 1999). The RAND report using IFLS2 examined the impact of the crisis on family planning and found little change in the prevalence of contraceptive use or in the method mix between 1997 and 1998 (*Table 9*).

Table 9: Changes in contraceptive use between 1997 and 1998

	1997	1998
% use any method	57%	57%
% use pill	34%	34%
% use injection	39%	36%
% use condom	0.8%	0.9%
% use IUD	7%	8%
% use Norplant	10%	11%
% use sterilisation	6%	7%

Source: IFLS data, Rand Report 1998

MCH Services

In rural areas the majority of people (55%) still rely on traditional helpers to assist at delivery of infants. In urban areas the reliance is on trained midwives (65%). The role of the doctor is still minor, especially in rural areas (only 4%) and in urban areas (17%).

The crisis has made rural people rely more on traditional helpers (increased by 1.1%) and family members (increased by 5.4%), while use of doctors, midwives and paramedics to deliver the baby decreased by 1.7%, 5.3% and 0.3% respectively. The reliance appears to be on less expensive services and the increasing proportion of family members delivering babies has been almost 5 fold from 1.6% to 7.1%.

The impact of the crisis is more severe in urban areas. The percentage of doctors and midwives attending deliveries has declined by 3% and 7%, respectively. There has been an increased reliance on traditional helpers and family members by 3% and 7% respectively. This increased reliance on untrained persons is likely to affect pre and postnatal morbidity. (Asian Development Bank Report. June 1999).

The Midwives Association has conducted some research on choice of traditional birth attendants and government midwives with the following conclusions:

- TBA (dukun) provides comprehensive service. Stays for 40 days as general home help, performs female circumcision (very widely practiced);

- Traditional practice is accepted. For example, if a mother or infant dies and a TBA was involved it is accepted as 'natural' but if such deaths occur with the government midwife or at a government centre then the provider is blamed;
- TBA is cheaper than government midwife.

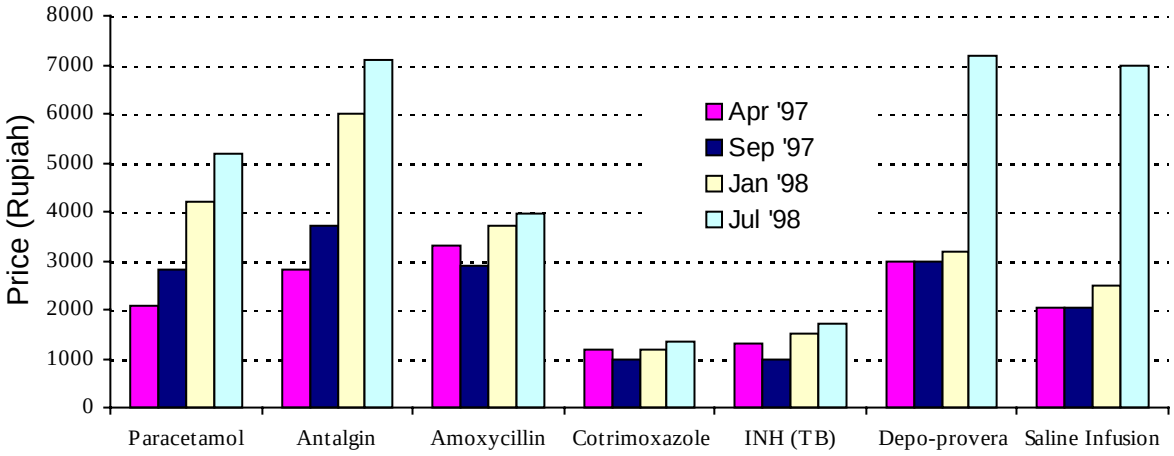
(Institute for Health Sector Development/ World Bank. 1999*)*

1.3 Impact of the Crisis on Availability and Costs of Health Care, Drugs and Consumables

From April 1998 to July 1998 the Consumer Price Index increased by 25.2%, and the increases in drug prices paid by retailers to distributors between July 1997 and June 1998 ranged between 16% to 69% according to the Ministry of Health (DEPKES). The rupiah devaluation against the US dollar has ranged from 2,450 to over 17,000, and appears to be becoming more settled over the last quarter of 1998 and in late 1999 was around 7,000.

It is difficult to estimate exactly how this has affected the price of goods and services to the poor. BPS figures on changes in the consumer price index between early 1996 and August 1998 show an overall price increase for services and drugs of 61%. This compares with rises of between 200-300% for various foodstuffs, over 200% for clothing and 36% for education. Prices of some generic drugs, which are generally more affordable to the poor, rose very steeply between 1997-8. Some antibiotics doubled in price, as did chloroquine. (Institute for Health Sector Development/ World Bank. 1999. Kashiwagi 1999*).*

Figure 1: Trends in generic drug prices (in rupiah) 1997-1998. (Hull 1998.)



The Ministry of Health reports that only about 20% of drugs and consumables requested by health centres and hospitals were supplied centrally in 1998. They also report changes in usage

of antibiotics from relatively expensive to the less expensive (and potentially less effective) and from the penicillin group to other potentially less potent, but cheaper groups. (Kashiwagi 1999).

Private and NGO clinics have borne the greater brunt of the price rises as they do not receive subsidies. While the MoH has received a special subsidy for drugs as well as an increase in funding through SSN, which far outweighs the increased cost of imported medical supplies, private NGOs have been hit hard by rising prices and this has affected their ability to provide services to the poor. Most have not received any new financing either from government or donors.

Other medical supplies have also been affected. Shortages of syringes, gloves, medical equipment and laboratory supplies have been reported (Wilopo 1999). However, indications are that the problem may also be logistical rather than just a supply one .

Table 10: Factors affecting provision of services changes between 1997 and 1998

	% experiencing change		% now have difficulty providing services	
	public	private	public	private
Availability of drugs	60%	65%	49%	49%
Availability of supplies	36%	26%	43%	41%
Price of drugs	40%	87%	51%	49%
Price of supplies	25%	33%	44%	39%
Price of fuel	24%	13%	55%	55%
Availability of FP supplies	48z5	35%	71%	64%

Source: RAND report 1999

Cost/lack of availability of contraceptives may increase the conception rate and produce a rise in unsafe abortions and maternity related health problems. Doubling of the cost of some contraceptives on the open market has been reported. Wilopo (1999) notes some shifting to cheaper methods, particularly in the case of injectables. There is anecdotal evidence of women switching to the pill as it is cheaper.

Method choice at private facilities appears to have changed between 1997 and 1998 with a higher fraction of private providers offering IUDs (27% of facilities in 1997 and 33% in 1998). Prices of services at both public and private providers have risen considerably (*Table 11*) with the exception of the OCP.

Table 11: Median prices at family planning services. (Source IPLS2 data: Rand Corporation 1998)

	Public		**Private**	
	1997	1998	1997	1998
IUD insertion	1,000	2,000	15,000	20,000
Depo-provera injection	3,500	7,500	5,000	10,000
OCP - microgynon	900	1,000	2000	2,000
OCP - marvelon	900	900	1,500	2,000
Norplant implant	3,500	7,500	10,000	25,000

For both public and private providers the frequency of stock outages increased significantly between 1997 and 1998 (*Table 12*).

Table 12: Proportion of facilities reporting stock outages

	Public		**Private**	
	1997	1998	1997	1998
IUD	-	5%	-	13%
Depo-provera injection	11%	46%	6%	20%
OCP - microgynon	-	40%	-	27%
OCP - marvelon	-	40%	-	19%
Norplant implant	-	20%	-	19%

Source IPLS data: Rand Corporation 1998

1.4 Social Impact of Economic Crisis

The first reports on the effects of the crisis were alarming. BPS estimated that poverty would increase from 11% of the population (22m) to 40% (80m). The Minister for Food announced that 17 million were likely to suffer food shortages. The ILO projected an increase in the official poverty rate of 11% to 66% by 1999. It has become clear that the most dramatic projections have not been borne out. (Institute for Health Sector Development/ World Bank. 1999

Overall, the crisis has a strong urban bias where the depreciated rupiah, corporate debt, illiquid banks, exorbitant interest rates, exit of foreign investment and lack of trade finance, have to a large extent paralyzed the formal economy.

The preliminary data from the IFLS 2+ household survey in seven provinces shows that *average* per capita household expenditure had decreased by 24 percent (*Table 13*). The average spending in urban areas *fell* by 34 percent with the median falling by 5 percent. In contrast, rural expenditures fell by much less, in both mean and median, have risen, with mean expenditure falling 13 percent, but median expenditures falling by only 1.6 percent.

Table 13 Household Per Capita Expenditures: 1997,1998 & Changes - rupiah per month ('000)

	Mean	Change in 1998		Percent Change	
	1997	Mean	Median	Mean	Median
Urban	319	-108	-7	-33.9%	-5.0%
Rural	194	-26	-2	-13.4%	-1.6%
All respondents	246	-60	-2	-24.4%	-1.5%

Source IFLS2

Recent reports from World Bank researchers (Poppele et.al., Sumarto et.al. 1999) attempted to triangulate three key sources. These are the Indonesian Family Life Survey (IFLS2), which tracks household level changes between August/September 1997-8; the 100 villages survey, which tracks household level changes between July 1997 and August 1998; and the Kecamatan Rapid Poverty Assessment, in which expert respondents from 4,000 sub-districts gave qualitative assessments of the impact of the crisis. Using the BPS official poverty line definition of poverty, they estimate the proportion in (absolute) poverty will increase from 11% to around 14%.

These studies suggest a major revision of the crisis scenario. The main findings can be summarised as follows:

- The impact of the crisis has been serious but much less serious that the most dire forecasts predicted.
- The impact has been very uneven – agricultural exports have boomed in some areas as a result of the devaluation of the rupiah.
    - ◊ Java is hard hit, even in rural areas,
    - ◊ Some of the other islands, particularly large parts of Sumatra, Sulawesi, and Maluku, have experienced minimal negative crisis impact and areas that escaped the drought may actually be booming from export crop earnings (due to the currency depreciation);
    - ◊ Other areas show negative impact, but it is unclear whether problems are economic crisis-related or result from drought (East Timor, NTT, NTB) and fires (East Kalimantan).
- Pre-crisis economic status is not a good indicator of impact - some poor areas have not been hit particularly, while some well off areas have been very hard hit. Equally, some of the poor are doing even worse
- The crisis has hit the affluent disproportionately harder than the poor, with the newly emergent middle class the "worst" hit. (Institute for Health Sector Development/ World Bank. 1999)

1.5 Impact of Economic Crisis on Health

Studies on the impact of the economic crisis on the health sector in areas such as South America demonstrate that whereas mortality and morbidity in the short term were somewhat independent of economic conditions, child malnutrition and infant mortality increased appreciably. (Pan American Health Organisations. 1989)

Information on the crisis on health in Indonesia is scattered and largely anecdotal. From existing studies and hypothetical assumptions, the effects are likely to be in the following areas:

1. Nutritional status, especially on the very young, reproductive age women and the elderly
2. Availability of drugs and other medical supplies, due to inflationary pressure
3. Rise in some communicable diseases linked with economic indicators and deterioration of infrastructure, e.g. STDs, diarrhoeal diseases
4. Effects of increased exposure to less safe working conditions as workers move from formal to informal sector employment, e.g. rise in accidents
5. Increased domestic and gender violence
6. Switching by users to cheaper forms of health care provision
7. Delays in or failure to take up medical treatment, relinquishing treatment before completion.

To improve monitoring the effects and impact of the crisis several initiatives are already under way including: monitoring of nutritional status of under 5s; recording of utilisation by kartu sehat holders at Puskesmas level; repeating the nutrition module of SUSENAS annually to monitor nutritional effects of the crisis (funded by the World Bank); and epidemiological monitoring through health facility utilisation.

General Indicators of Health and Nutrition

Health and nutrition indicators from the IFLS 2+ survey and from SUSENAS ’98 demonstrate the complexity of investigating health effects using routine data. Overall, these data are not inconsistent with the evidence of a complex and heterogeneous crisis, with pockets of serious health effects. There is also clear evidence of a cutback in visitation rates to public clinics, but how exactly to interpret that is unclear.

Table 14: Indicators of health and nutritional status derived from the IFLS 2+ data

	1997	1998	Change
Nutrition			
Low height for age (% of children under 9 with z score <-2)	50.68	45.66	-5.02 (improvement)
Weight for height (% of children under 9 with z score <-1)	35.56	35.20	-0.36 (improvement)
Body mass index of adults (% of population with kg/meter squared<18)	14.05	14.69	0.63 (worsening)
Inadequate Hemoglobin (% with level less than 12 mg/dl)	34.75	30.83	-1.66 (improvement)
Evaluated health status			
Number of seconds to move from sitting to standing 5 times	7.6	5.9	-1.64 (improvement)
Overall evaluation of health status by nurse	5.94	5.98	0.04 (slight improvement)
Self reported health status			
% reporting themselves in poor health: adults	13.64	13.83	0.19 (slight worsening)
% reporting their children in poor health	6.96	8.3	1.34 (worsening)
% reporting that they had been ill	21.01	21.95	0.92 (slight worsening)
% reporting their children had been ill	25.56	24.76	-0.8 (slight improvement)

Source: IFLS data

Table 14 contains a mix of indicators, both health and nutritional. There are some that show improvement, others that are worse, but overall the changes are small in either direction. The data from the 1998 SUSENAS (collected relatively early in the crisis) show some changes in self-reported morbidity.

Table 15: Self reported morbidity

Source of Income:	Morbidity			Disruptive Morbidity		
	1995	1998	Change	1995	1998	Change
Public	25.4	25.5	.1	9.6	10.6	1.0
Financial services	21.9	25.1	3.2	6.4	9.2	2.8
Construction	24.8	26.5	1.7	9.5	11.2	1.7

Source: SUSENAS

Other data sources, such as the "100 villages" survey and other specific nutritional data show similar complex patterns, with some indicators improving and others worsening, (Kamarcan Village Survey Report). Given the complex and regionally heterogeneous nature of the crisis itself, this is not surprising.

Nutrition

This is a controversial area. Nutritional experts remain divided about how to measure changes in nutritional status and how to interpret trends. It is also premature to draw any firm conclusions about impact as data are only just becoming available. In addition, there is a problem of what is the baseline, given the disruption in nutritional monitoring.

The main sources of information are the World Bank's Watching Brief (Jan 1999) using SUSENAS data, the ISFL2+ study and Helen Keller International Nutritional Survey (May 1999) on poor urban areas of Jakarta and Surabaya.

The Watching Brief analysis looks at trends from SUSENAS data comparing 1992 and January 1998. Its findings therefore relate to overall changes in levels of child malnutrition between these dates. This is relatively early in the crisis, so it is not the best indicator of crisis impact. It does show a progressive improvement in child nutrition over this period. Malnutrition among under 5s has decreased overall from 34.9% in 1992 to 29.8% in 1998, but malnutrition is still a serious problem particularly for vulnerable groups. The decrease in malnutrition has been almost entirely registered in rural areas, but from a much higher starting point. Urban rates have remained at around 28%. The documented increase in malnutrition in children aged 6-11 months in both the 1992 and 1998 surveys demonstrates that child feeding practices remain inadequate.

The most vulnerable children live in rural households without access to clean drinking water and in areas of limited infrastructure. Living in areas already identified as "backward" is a strong indicator for poor nutritional status. A strong positive correlation is also found between the educational level of the mother and the nutritional status of the child. This is a more powerful predictor than household economic level.

Unemployment is not found to have an impact on nutritional levels. The urban poor are not nutritionally worse off than the rural poor, but their numbers are considerably fewer. Overall, this study considers child malnutrition to be a greater problem in rural areas.

The HKI survey is of a sample of 1,100 – 1,200 households which have been monitored at regular points during the crisis. The HKI surveys were of a smaller nature than SUSENAS or IFSLS2, focusing on Jakarta and Jawa Tengah only. Unlike the Watching Brief analysis, HKI has argued strongly that the crisis is an urban one, as the urban poor have fewer coping mechanisms. Their data show increased prevalence of micro-nutrient deficiencies (especially vitamin A) and increased wasting among under 5s and women.

The key HKI findings included:

- The BMI of women of reproductive age has dropped by 0.45kg/m2.
- The gap in BMI between social groups has increased.
- The prevalence of maternal malnutrition has increased from 15% in 1996 to 18% in 1998
- Child hood anemia has increased from 50% to 65% from 1996-98 and maternal anemia from 15% to 19% during the same period.
- Prevalence of both child hood and maternal night blindness has increased significantly.
- The urban slums are worse off than rural areas.

IFLS2 data showed a mixed picture and reports that hemoglobin levels have actually improved on average between 1997 and 1998 and that children have experienced an increase in weight for height. However, adult Body Mass Index has declined. This sample is small for measuring nutritional impact and is rendered less useful by not separating out data on under 5s from under 15s.

Analysis of 1997 and 1998 IFLS data in the same households by the Rand Corporation illustrated that receipt of vitamin A in the six months by children aged less than 3years has declined substantially. In 1997, 55% of the children under 3 years had been given Vitamin A in the previous 6 months. By 1998 the proportion was less than 43%. This probably reflects decreased use of the posyandu by children (from 56.8% in 1997 to 41.3% in 1998) and reductions in availability of vitamin A at health facilities. (Rand Report, 1998)

There are a number of reasons why the urban v. rural impact debate is a difficult one. Studies are not comparable, HKI surveys are small, while SUSENAS data provide national coverage. The regional coverage of the IFLS2 is also broader than the HKI surveys. SUSENAS data is highly aggregated and seeks to draw broad conclusions about trends over time. HKI sampled urban slum dwellers, many of whom are not legally registered residents and thus overlooked by government or other official surveys. In that sense, the study provides a picture of child malnutrition as it relates to chronic poverty. It also demonstrates the very variable nature of the picture. In Jakarta, malnutrition rates are 22%, while in DI Aceh, they are 48%. It is difficult to draw any conclusions from it on the specific impact of the crisis on nutritional status in rural areas.

Micro level studies, on the other hand, are able to give a more detailed picture of specific areas and problems. The HKI study shows that *relative* to where they were before the crisis, the

urban poor may be experiencing a decline in nutritional status, which most affects vulnerable population groups – reproductive age women and children under 5. In addition the HKI surveys took place later than the SUSENAS 1998 survey so the timing of data gathering surveys may impact on the results.

There is other, more anecdotal information, on the impact of the crisis on food availability in qualitative studies. A number of studies indicate food substitution is being increasingly used to counter the rising price of rice. Some of the substitute foods are actually more nutritious than refined rice, others less so. There are reports of low income families in Jakarta having to double their food expenditure and so cutting out protein foods, and of meals being skipped or low income families having fasting days (Wilopo 1999). Little seems to be known about urban coping mechanisms, such as the extent to which urban households have access to rural food supplies through economic and social networks. (Institute for Health Sector Development/ World Bank. 1999.)

Implications of available information to date would seem to be:

- Improved monitoring needed for vulnerable groups – children, reproductive age women, the elderly
- Micro-nutrient/nutritional supplementation for under 5s, pregnant women

Surveillance Systems

Systems of monitoring are fairly undeveloped. Most epidemiological surveillance is piecemeal and done through vertical programs (such as diarrhoeal diseases control) or specific donor funded projects. UNICEF is now collaborating with the DEPKES crisis centre to carry out limited epidemiological surveillance, based on data from health facility utilisation, (Institute for Health Sector Development, 1999).

Disease surveillance is based on two main systems: SP2TP and SP2RS:

- SP2TP - Integrated Puskesmas Recording and Reporting System - national, centrally-designed comprehensive reporting format for puskesmas
- SP2RS - Integrated Puskesmas Recording and Reporting System - national, centrally-designed comprehensive reporting format for hospitals

These are developed and managed out of the General Directorate of Family Health. Data are shared with the Centre for Health Information (Pusat Data) which summarises the data into annual provincial and national health profiles. Pusat Data is also developing pilot computerised surveillance and reporting systems. With World Bank funding, their aim is to computerise all data collection and reporting at the puskesmas and district level.

Reviews of surveillance systems in Indonesia consistently find that reports are late, incomplete, inaccurate, and often filled with fictitious data. (Macfarlane Burnet Centre for Medical Research, March 1999).

"Orang tidak peduli angka.....

kecuali angka uang"

"People don't care about numbers....

except numbers on money"

Tuberculosis (TB)

TB is ranked as the number one infectious disease in Indonesia, with an estimated 450,000 new cases per year and 175,000 deaths. DOTS has been adopted as the national policy but problems exist with the program pre crisis – diagnosis poorly made, treatment schedules not implemented, volunteer supervisors of treatment difficult to find (AusAID 1999). There is also concern about a possible rise in multiple drug resistant TB. The economic crisis may affect compliance rates, with infected individuals not completing courses of treatment.

STDs

In relation to STDs, it is known that there are high rates of untreated STD infection in the general female population (around 10% for gonorrhoea and chlamydia). The problem is not therefore solely related to sex workers.

Wilopo (1999) suggests that there has been an increase in the numbers of commercial sex workers, possibly corresponding to layoffs in "female" areas of manufacturing industry and other female areas of the economy. The World Bank (1999) study on the gender impact of the regional crisis quotes data from the Jakarta based NGO, JKB, of 50-100 newcomers per month being absorbed into the red light districts in 1998, compared to 20 per month in 1997. Data from a STD clinic in Yogyakarta with a high percentage of sex worker clients show a doubling of visits between January 1998 and September 1998 and an increase in the number of confirmed STD cases (Wilopo 1999).

No evidence was found of serious STD public health risks from crisis so far. However, these may become apparent. There is an urgent need to improve basic surveillance through sentinel site monitoring and other means of rapid epidemiological assessment.

HIV/AIDS

The number of cases reported to date (1,000 reported, 51,000 estimated) is lower than earlier estimates (up to 250,000 by the year 2000) there is an increasing trend and the potential for epidemic spread exists both due to sexual spread and also IDU (there are an estimated 100,000 users of illicit drugs in Jakarta alone).

AusAID has been involved in HIV-AIDS activities, principally to date involving STD/HIV surveillance, information and risk reduction measures, strengthening local NGOs and development of STD services. The opportunity to increase activities in the area of harm reduction exists and a National workshop will be held in September 1999 to clarify areas of need.

1.6 Impact in Areas of Civil Strife

East Timor

By April 1999, the combination of economic and political factors had already had an impact on health services. In the provincial hospital in Dili, the daily number of outpatients had decreased from approximately 600 one year earlier to 110 and inpatients from 130 to 51 (UN Interagency report, April 1999). In contrast, attendance at church-run health facilities had increased. At the time of this assessment, there were 69 doctors in the province compared with more than 200 in 1998.

Following the referendum on independence, supported by 78% of the population, widespread violence by anti-independence militia resulted in the displacement of between 300-400,000 people, most into neighbouring West Timor. In November, more than 90,000 displaced persons returned to East Timor and WHO has established disease surveillance. Malaria and possibly dengue fever, and acute respiratory infections have been the most common conditions reported. The situation is still evolving and it is too soon to make valid comparisons between disease incidence rates pre- and post-crisis. One report indicated that in October malaria accounted for 20-30% of morbidity in Dili compared with 10% in previous years (HINAP, October 14, 1999). The planting season was due to commence in November and a poor harvest is predicted for 2000 raising food insecurity as a major issue next year. A high number of measles cases have been reported since the returned of the displaced, both in East Timor and among refugees in Darwin, possibly reflecting a low immunisation coverage prior to the violence.

West Timor

More than 260,000 East Timorese displaced persons were registered by the GOI in November; however, the actual figure may have been higher. Living conditions in camps were poor, with inadequate access to water and sanitation and a high incidence of diarrhoeal diseases (ICRC, November 1999). Malaria and dengue have been reported to be increasing health problems. The increase in both the number of sex workers and the average number of clients per worker following the exodus from East Timor was noted above.

West Kalimantan

Violence between ethnic Madurese and Melayu in Sambas, West Kalimantan resulted in the displacement of some 30,000 Madurese, in Singkawang and Pontianak. ICRC did three surveys of nutrition in the area around Pontianak, using a QUAC stick. The first survey found 7% of children with severe malnutrition; the second survey found 5.5% with severe malnutrition; and the most recent survey, in August 1999, found 3.16% with severe malnutrition. In July, ACF-F conducted a survey and found that the prevalence of acute malnutrition among children less than 5 years was 14.1%, including 2.3% with severe wasting (RNIS, September 1999).

Ambon, Maluku

A series of riots and ongoing civil strife began in Ambon in January 1999 resulting in the loss of many hundreds of lives. The strife continues with major disturbances in other islands, including Tual and Tanimbar, into December. At least 60,000 people have been displaced and are scattered throughout the islands of the Moluccas. Ethnic violence spread to Ternate and

neighbouring islands in the newly created North Maluku province in November. In May/June 1999, ACF-F found the prevalence of acute malnutrition in Ambon to be 11.2%, including 0.8% severe wasting.

Section 2: Responses to the Crisis

Indonesian Government Response

The Social Safety Net (SSN)

Funding the Social Safety Net (SSN) in 1998/1999 was the subject of the most dramatic government budgetary revision ever. The entire portfolio of Rupiah-financed programs, including donor-assisted projects, were reviewed and major reallocations were made in order to increase the SSN budgetary allocations. Approximately 55.5% of the development budget, or about Rp 17.3 trillion was allocated for SSN schemes, implemented through four broad categories (food security, public health and education, employment and income generation, and the promotion of small and medium scale enterprises) in 17 sectors[1]. Approximately 11.5% of the SSN allocation is for health.

An independent SSN monitoring group reviewed the allocations, and reported that in fact, only Rp 9.3 trillion is considered to be pure SSN schemes, with the remaining Rp 8.6 trillion funding supplementary programs, some of which were considered to be of a non-SSN variety. Of the Rp 9.3 trillion, Rp 2.25 trillion (24%) was allocated to health.

Donors (bilateral and multilateral) are actively contributing to the SSN, through grants, loans, provision of supplies and equipment. The major contributors are:

ADB (Asian Development Bank)	Australia (AusAID)
Canada (CIDA)	EU (European Union)
Germany	ICRC (International Committee of the Red Cross)
Japan (JICA)	New Zealand
OCHA	UNDP
UNFPA	UNICEF
USA	WFP
WHO	World Bank

SSN funding has been given for two years in the first instance (1998-2000) for crisis rescue. A further round will run from 1999-2002. This offers a substantial increase in funding, mainly for existing programs and using existing targeting mechanisms. All SSN funds are supposed to be targeted on poor households only. As with other SSN programs, BKKBN (family planning) data

[1]Industry, agriculture, forestry, irrigation, manpower, domestic trade, foreign trade, cooperatives and small and medium enterprises, road infrastructures, energy, regional development, education, social welfare, health, housing/settlement, religious affairs, and law.

provide a basis for estimating numbers of poor households for funding allocation, as well as for identifying individual eligible households. In health, poor households are issued with health cards (kartu sehat) which can be used to obtain free health services. Services are offered under the following programs:

1. Basic Health Services
2. JPKM/Health Card
3. Health Services for Pregnant women.
4. Food and Nutrition Interventions
5. Hospital Operational Costs

Funding has been allocated directly to health service providers according to estimates of numbers of poor people served as follows:

- Rp10,000 per poor family client per year to each Puskesmas. This provides funds for 1, 3, and 4 above
- Rp10,000 per poor family client per year to each district level health authority
- Rp10,000 per poor family client per year to hospitals.

For food supplementation allocations are based on estimates of numbers of malnourished infants and children, based on Posyandu and Puskesmas data.

Nutritional SSN initiatives

To reduce the potential of malnutrition, there are three main nutrition activities being implemented as part of SSN :

a) Provision of supplementary feeding to children 0 – 24 month of age and anemic mothers

b) Revitalising the village nutrition centre ("Posyandu"), and

c) Revitalising Nutrition Surveillance System.

The specific objectives of these activities are to prevent any increase in prevalence of malnutrition due to the crisis; to reduce the prevalence of low birth weight, malnourished children, and micro-nutrient deficiencies in children and mothers particularly iron, vitamin A and Zinc; and to educate mothers on good infant feeding practices.

Using international loans, the government ordered 2.5 million tons of rice and plans to import a further 2.85 million tons before April 1999. The rice will be sold to the poor and other vulnerable groups at a subsidised price.

Initially activities were focused on 150 'high risk' districts, but in October 1998, with the economy failing to improve, all districts were included. The program involves a number of government agencies including Ministries of Planning, Health, Agriculture, Family Planning (data on poor households) and Nutrition Research Centre in Bogor.

Supplementary Feeding

Food supplements - local foods (ADB funded), blended foods (WFP) and locally blended (World Bank) are distributed to malnourished pregnant and lactating women, infants (6-11 months) and children (1-2 years). Prior to SSN there was a limited program of food distribution to school children. For school children, the food aid has been channelled through a special program called: PMTAS (School Snack Program). Other food supplement programs ceased in 1984.

Food supplements are distributed to infants through the Posyandu, Bidan di Desa or volunteers (Ibu Asuh). In addition to the usual monthly Posyandu sessions, extra weekly sessions are to held expressly for the distribution of food supplements to needy households.

A blended food of soya-rice-maize mixed produced by a domestic food industry has been introduced for supplementary feeding of infant 4 to 12 month of age as a nutrition component of SSN. The soya mixed package of 500 gram is distributed once in a week through village health centres and village nutrition centres (Posyandu).

For older children (6 to 24 months) and malnourished-pregnant mothers, SSN provides funds for supplementary food to be locally purchased and cooked at mothers' home (home made) or at a community kitchen at Posyandu.

Revitalisation of Nutrition Surveillance System

The early warning system (EWS) of data collection and dissemination covers:

- annual data on food production, consumption and prices for identification of 'crisis' districts (kecamatan).
- data on poor families (from BKKBN);
- data on nutritional status of pregnant and lactating women and children under five years;
- World Bank funding to repeat annually the nutrition component of SUSENAS

The objectives are to monitor food availability (and the economic crisis) and to increase capacity of district staff to manage food and nutrition programs. An Early Warning System (EWS) was in place in Indonesia until 1984 when the country became self-sufficient in rice and malnutrition was thought to have been minimised. Under SSN the old system will be revitalised. Once crisis areas are identified Districts are to develop their own programs, in coordination with Bappenas/Bappeda.

Other SSN health initiatives

Revitalisation of Posyandu

Posyandu is a village community organisation run by women volunteers to deliver basic nutritional services, primary health care (immunisation, pre-natal care, and health education), and family planning with technical support from health professionals (midwives and public health nurse) and nutrition professionals.

The posyandu has been the backbone of rural health care at village level, especially in remote areas, and by 1995 almost all villages in Indonesia (65,000 villages) at least had one posyandu. Indonesia with UNICEF assistance achieved Universal Child Immunisation including polio through the posyandu. Nutritional services include monthly weighing of children, high-dose vitamin A supplementation , nutrition and health education for mothers, and distribution of iodised-salt and/or iodised capsule to target groups. Unfortunately, at present many posyandu are not functioning and the Government of Indonesia is committed to revitalising the posyandu as a component of the Social Safety Net.

Kartu Sehat (health card for the poor) under SSN

SSN funding has provided an impetus to the kartu sehat scheme. Although started in 1994 it is recognised by MoH that the scheme was not functioning as envisaged. At most, card holders obtained free services at Puskesmas, but rarely did the services extend to hospitals or to delivery services for pregnant women. Under SSN, it is emphasised that all health services should be provided free of charge. The key difference is that health providers are for the first time to be reimbursed for services provided to poor people. At the same time there is much greater pressure on providers to play an active role in administering the scheme, including identifying poor families, recording details, and issuing cards to them.

Health Services for Pregnant women

Midwives are to identify and monitor all pregnant women and offer a minimum number of visits (3 pre-natal, delivery, 3 post-natal). All services are to be free for poor households.

Conclusions on SSN in Health

Table 16 summarises SSN progress to date.

Table16: Progress with SSN Programs

SSN Programs:	Funding to	Progress	Allocation/Target pop.
1. Basic Health Services (10 programs), includes Posyandu and Bidan di Desa	Puskesmas	1st tranche disbursed Oct 98	Rp10,000 per poor HH to Puskesmas
2. Health Services for pregnant women	Bidan di Desa (village midwife) and Puskesmas		Under review
3a. Early Warning System	Kabupaten	Training until Feb 1999	Not applicable
3b. Nutrition and Food Supplements	Puskesmas, Posyandu	For 6-12 months, 1-2 yrs 1st tranche disbursed, for 2-5 yrs Jan '98 disbursement	Not fixed, assessed monthly by TKK
4. JPKM / Health Card	JKPM manager (BAPELs)	Jan 1998 1st disbursement	Rp10,000 per poor HH to JPKM Bapel
5. Hospitals operation and maintenance	Hospitals	1st tranche disbursed	Rp10,000 per poor HH to hospital

Source: Institute for Health Sector Development/ World Bank. 1999

It is probably too early to come to any conclusions concerning the success of SSN in health. However, initial impressions are that SSN funding has stimulated efforts to reach the poor and increased incentives to disburse kartu sehat. However, more information is needed on how funds are being used in practice and whether service provision to the poor is cost-effective. This will require independent monitoring of the program.

(World Bank Watching Brief Jan 1999, Indonesia Crisis Bulletin 1998, Helen Keller International Oct 1998/May 1999, BAPPENAS 1999, Canadian International Development Agency 1999, Christian Children's Fund 1999, Jahari A et al 1999, Asian Development Bank. 1999, SMERU, March-April 1999, UNICEF 1998, Institute for Health Sector Development/ World Bank 1999, Asian Development Bank 1998, Ministry of Health 1998, Social Safety Net Technical Guidelines (in Indonesian) 1998.)

The Impact of Decentralisation

There is great confusion in the Ministry of Health as to what the impact will be of the proposed district level decentralisation. Central level program managers are at a loss to explain what decentralisation will mean for health program design, management, coordination, or evaluation. Some have said they are considering applying for transfers to district level positions as they feel this is where control and resources will be focussed, and they are unsure about the future role of the central level ministry of health.

There is currently little to no capacity for district level health staff to take on the responsibilities of program management as envisaged in the decentralisation plan. To date, it is unclear what plans there are to develop that capacity. National level health staff are unable to answer this question.

It is extremely difficult to predict how any given model of decentralisation will play itself out in terms of developing locally credible systems of support for the poor. Decentralisation does not, of itself, guarantee greater local ownership. Much depends on the nature of the emerging political settlement and the degree of accountability which can be built into it.

There is currently a discussion to dissolve the provincial level offices of the ministry of health (Kanwil Kesehatan), and have all provincial level activities operate from the Home Affairs Health Services Offices (Dinas Kesehatan Tk I). This possibility adds additional confusion about respective roles of central, provincial and district health offices in a decentralised environment.

2.2 External Crisis Related Assistance to the Health Sector in Indonesia

World Bank

In July 1998, the World Bank extended a $1 billion Policy Reform Support Loan, a portion of which will support the purchase of food and essential drugs and the increased monitoring of health indicators in the coming months and years. The Bank conducted a review of the budget in January 1998, and recommendations were made in the negotiations leading up to the Policy Reform Support Loan. The health team is continuing to monitor the budget and the availability of funds for health expenditures.

In response to the crisis, the Bank re-examined its overall strategy in the health sector to address the immediate and medium-term needs of the poor. Projects which provide basic health services to the poor have been given a greater priority. An Early Childhood Development project, planned before the crisis, has been restructured to include $11 million in nutritional supplements to children between 6-24 months of age, when the most debilitating effects of malnutrition are felt. Projects designed to improve the efficiency and performance of the health sector have also been given greater priority – as government expenditures contract, efficiency gains will help maintain the Government's long-term investments in health.

The World Bank is assisting with loans to ensure adequate supply of food. The Government has ordered 2.5 million tons of rice and plans to import an additional 2.85 million tons before April 1999. The rice will be sold to the poor and other vulnerable groups at a subsidised price. As part of the Policy Reform Support Loan in April 1998, the Government is committed to providing adequate funds for essential drugs, including the vaccines and drugs needed for communicable diseases control. Additional funding is also being provided for drug and vaccine quality control, hospital and health centre laboratory work, and equipment necessary to sustain emergency room services.

The World Bank is also improving its monitoring abilities by undertaking a series of rapid assessments of health services, and accelerating the processing and analysis of the health

indicators contained in the annual socioeconomic household survey (SUSENAS). (*Source:* The World Bank web site).

Asian Development Bank

Since the advent of the crisis the ADB has targeted the health sector in Indonesia with two major loans; the Social Protection Sector Development Program (SPSDP) and the Health And Nutrition Sector Development Program (HNSDP). In contrast to the World Bank the ADP focus is significantly broader in scope. The total potential funding for these two loans alone is estimated at USD600 million. The bank proposes a comprehensive package of initiatives which would form the strategic basis for the reform of the health care system in Indonesia. The ADB proposes to convince the GOI to increase Government spending on health from its current level of 2% to 4% by 2001. (Government of Indonesia 1999, Asian Development Bank 1999).

UNICEF

In Indonesia, the Mid Term Review of the country program, which took place in 1998, provided the opportunity to completely revamp the structure of UNICEF's assistance. The new structure is specifically designed to respond to the crisis. Interventions include a new Rapid Response Complementary Feeding Program that provides low cost complementary food for infants in selected provinces with the aim of revitalising the village health post network and a community self-help approach to the crisis.

UNICEF, UNDP and WFP are cooperating on ways to provide emergency assistance to vulnerable groups. Efforts are also underway to expand the scope and coverage of Indonesia's existing community health financing activities, including saving schemes for maternal health and grants for emergency obstetric care.

In response to the increase in school drop-outs, UNICEF and the government have launched a national social mobilisation campaign aimed at keeping children in school. UNICEF is also expanding its support to existing government efforts to monitor the effects of the crisis. These include reactivating an early food security monitoring system at district level, refocusing of the100-village sentinel site surveillance and setting up an emergency crisis "hot-line" information system. (UNICEF web site).

World Food Program

WFP has extended its emergency operation in Indonesia (EMOP) until June 2000. Excluding the Government's contribution, the total WFP cost is now USD 135.8 million, against the initial requirement of USD 88 million. Originally implemented in rural areas in the eastern part of the country affected by drought, the operation will now expand to urban areas, mainly greater Jakarta, Surabaya, Semarang, Bandung and Yogykarta, where there are over 4 million out of the total 6 million beneficiaries.

In the cities, under the new EMOP extension, WFP will provide support to children who will receive a take-home ration. This is meant to encourage their parents to keep them in school, as school attendance will be seen as a way to supplement the family income.

WFP food-for-work activities will be implemented in the five cities as well as in rural areas that have either chronic food shortages, a high number of landless farmers or returnees following either civil strife or economic difficulties in the cities. International NGOs including CARE,

CRS have been collaborating with the WFP since 1997 to implement emergency food programs under Food for Work schemes in areas affected by drought and forest fires as well as by the economic crisis, including Irian Jaya, NTT, NTB, East Kalimantan and Java. Self-targeting under these schemes appears successful, as only the needy are prepared to work for food. High numbers of women from female supported households are coming forward.

Under the current emergency operation, WFP will provide support to the Government's subsidised rice program which will enable families to purchase 20 kilograms of rice a month at subsidised prices. Proceeds will be used to procure rice for activities in other programs.

Other activities included in the new EMOP extension are support to orphanages and shelters for street children, distribution of mineral and vitamin enriched blended food to pregnant and nursing mothers and children under five, support to IDPs and victims of religious and ethnic strife. (WFP web site, UNSFIR 1999).

AusAID

AusAID has taken a range of specific measures to assist Indonesia to address the impact of the crisis. Thus far Australia has committed almost A$50 million. This package includes:

- Food aid with support for the World Food Program emergency operation
- Emergency medical supplies in response to the drought and the economic crisis. Supply was mainly to the Eastern Provinces of essential drugs and medical supplies.
- Assistance with establishing a Social Monitoring and Early Response Unit (SMERU)
- Community level assistance eg supplementary feeding programs for vulnerable groups such as infants.
- Contribution to a World Bank program to assist the GOI with the SSN.
- Assistance with the Back to School Campaign (in collaboration with UNICEF).

Non Governmental and Community Based Organisations

Non governmental and community organisation in Indonesia have played an important role in the response to the crisis. NGOs have assisted with the JPS Program and also delivered separate initiatives including primary health and nutrition programs and food supplements for the most disadvantaged. NGOs may also play a role in monitoring of the JPS program (Centre for International Economics, 1999).

In West Kalimantan, ICRC did three surveys of malnutrition in the area around Pontianak, using a QUAC stick. The first survey found 7% of children with severe malnutrition; the second survey found 5.5% with severe malnutrition; and the most recent survey, in August 1999 found 3.16% with severe malnutrition. ICRC is finishing a supplemental and therapeutic feed program in one area of West Kalimantan. World Vision is beginning a supplemental and therapeutic feeding program in several areas of West Kalimantan. In ACEH, MSF Holland has reached agreement with the government to begin a diarrhoeal prevention program at two IDP camps, total population of 20,000. ICRC and PMI are working on other water and sanitation needs. In East Timor, MSF Belgium, MDM and ICRC have been working together to develop a comprehensive plan, in the event of a civil conflict. MSF is stockpiling surgical supplies. WHO

is helping facilitate this shipment into Indonesia and ICRC is stockpiling some supplies in West Timor. WHO is also coordinating an emergency health information system under its Geneva-based HINAP project.

Table 17: Summary of Donor Activity in response to the crisis (excepting World Bank, ADB and AusAID)

Agency	**Activity**	**USD millions**
United Nation Development fund	Survey of social and economic impact of the crisis	0.38
	Rapid humanitarian assistance	0.20
	Food security	0.08
	Supply of generic drugs	0.13
United Nations Children's Fund	Complementary feeding (6-24 months)	1.08
	Survey on social changes in 100 villages	0.45
	Back to school campaign	0.15
United Nations Population Fund	Emergency assistance	4.0
	Contraceptives needs assessment and supply	3.0
	Reducing maternal mortality	2
WHO	Policy and strategy development and support for monitoring crisis	13.7
	Specific health interventions	0.3
	Study on restructuring of the pharmaceutical industry	0.13
WFP	Emergency food assistance	135.8

Bilateral agencies		
Agency	**Activity**	**USD millions**
Canada	Drought mitigation	4.30
	SSN	2.57
Denmark	Supplementary food assistance	0.007
European Union	Health support to victims of drought	0.83
	Emergency medical assistance	0.35
	Short term food programs	0.33
	Improved drinking water supply	0.04
German Agency for Technical Development	Support to drought victims	0.75
Japan Internal Cooperation Agency	Sector program loan	1200.0
	Medical supplies, raw materials for drugs	30.0
United States Agency for Internal Development	Strengthening SSN	45.0
	Emergency food aid	25.0
	Contraceptives	7.4
	Essential medical supplies	4.0

Source: The Canadian International Development Agency (ADB data). 1999.

Section 3: Potential Areas for Donor Response

3.1 General

The problems exposed by the crisis in Indonesia are largely pre-existing problems. From available data the impact of the crisis has been serious, but much less severe than that predicted. In addition, the impact has been very uneven; Java is hard hit even in rural areas, large parts of Sumatra, Sulawesi, and Maluku, have experienced minimal negative crisis impact and other areas show negative impact, but it is unclear whether problems are economic crisis-related or result from drought (East Timor, NTT, NTB) and fires (East Kalimantan). Pre-crisis economic status is not a good indicator of impact

Information on the crisis on health in Indonesia is scattered and largely anecdotal, however the principal effects appear to be in the following areas:

- Nutritional status, especially on the very young, reproductive age women and the elderly
- Decreased use of health services ie of the posyandu by children
- Availability of drugs and other medical supplies
- Rise in some communicable diseases, e.g. TB, ?STDs
- Switching by users to cheaper forms of health care provision
- Delays in or failure to take up medical treatment

Donors should build on existing programs and aim to ensure that programs target the poorest and most vulnerable groups. Effective program design is crucial and must take into account gender issues and be relevant to cultural contexts. Priority should be given to funding services that serve the poor in remote areas or deprived urban poor areas and special attention should be given to ensuring free access of the poor to health services. Crisis responses should not weaken or replace informal support mechanisms and should promote community development.

AusAID should continue to concentrate efforts on the eastern islands. The use of NGOs should be considered to access vulnerable groups as the impact is often greater than through bilateral projects.

3.2 Specific Options for Donor Response

Minimising impact on vulnerable groups

Children and pregnant and lactating women are at greatest risk and the impact of crisis is already evident. General food subsidies are probably ineffective. Targeted supplements may be easier to implement and monitor in particular through NGOs. Micro-nutrient supplementation for vulnerable groups (especially children) are vital, in particular in urban areas where early signs of deficiency are appearing.

Ensuring supply and rational use of drugs, medical supplies and lab reagents

- Review of current policy and practice
- Promote rational use of drugs
- Increase use of generic drugs and standardise prescribing practices
- Logistics systems need improving

Strengthening surveillance activities

Any assistance which would address development of surveillance systems should only be considered after a more comprehensive review of the existing systems. Given that Pusat Data is currently working with significant World Bank funding, and other donor support and input into surveillance, it would be critical to assess the current status of these efforts before any additional support were to be proposed.

Assistance with improving public health surveillance would be better focussed at developing capacity at peripheral levels (district and province) to analyse, interpret, and use surveillance data for health program evaluation and planning. There are already considerable (although possibly insufficient) resources devoted to developing systems at the national level, and the structure of the surveillance systems (both formal and informal) is complex and confusing. With the uncertainties created by the impending decentralisation of health planning to district levels, the most benefit would be derived by increasing the skills of program managers at peripheral levels to better use the whatever data they have access to.

Ensuring provision of basic health services

Donors should ensure universal coverage of basic health services with proven impact. In areas where the government is unable to meet coverage donors should supplement activities and funding requirements. Potential areas where shortfall could occur are:

- Immunisation coverage
- Maternal and child health
- Family planning services
- Tuberculosis treatment and control

Strengthening primary health care services in urban areas

Available data on the effects of the crisis indicate a particularly strong impact on the urban poor. Most previous activities by donors in the health sector have emphasised rural primary health care. There is a need for additional donor support to the development of appropriate and innovative urban primary health care services. In addition, there is a need to support research on risk behaviours related to chronic diseases and injuries that mark Indonesia's partial entry into the "epidemiological transition". Support needs to include the use of research data to develop appropriate health promotion programs that in the long run will lead to greater cost-efficiency in the public health sector. Prevention of non-communicable diseases (eg, cardiac, renal, cancers,

diabetes) has been proven to be more cost-effective than greater investment in more sophisticated medical services to provide treatment of chronic conditions.

HIV

There is a need to strengthen and expand HIV/AIDS and STD surveillance. Harm reduction activities should be promoted where a need is identified due to high prevalences of IDUs, in particular in urban areas. STD treatment services should be strengthened at PHC level. Capacity and role of NGOs in this area should be supported. Essentially all aspects of the HIV/AIDS program require assistance and support. Areas no longer supported by the Government due to HIV program budget cuts should be supported if appropriate.

The area of IDU cannot be ignored. There is a major risk that HIV, HCV and HBV will spread rapidly as a result of unsafe injecting practices. A recent workshop was held in Indonesia in September 1999. Jakarta is the main area affected at present. Interventions that international donors may be interested in assisting include; rapid assessment projects and ethnographic studies to inform the design of harm reduction programs, pilot projects of needle exchange programs, develop peer education programs, professional training in harm reduction and evaluation of initiatives.

Strengthening health information

There is a major problem of lack of good information on the impact of the crisis. Even prior to the crisis little was known about health seeking behaviour of the poor or causes for their low utilisation of services. Given the urgent need to have an informed basis for policy making in health planning and financing, this represents a loss to the planning process.

These studies need to be done by rapid assessment methods, perhaps through “sentinel site” type monitoring along the lines of rapid epidemiological assessment.

- covering people’s coping strategies for health needs during the crisis and how this affects short, medium and long term provision for health needs
- why utilisation of public facilities is low, what people want from health services, and how they think about and plan for minor and major health needs.

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Annexes:

Annex 1: An Overview of the Indonesian Health Sector

Annex 2: Key Health Financing Issues in Indonesia

Annex 3: The Health Insurance Market

Annex 4: Issues in improving access to health care by the poor

Annex 5: Financing health care for the poor - recent lessons

Annex 6: A Revenue Model - Illustrating Financing Options for JPKM

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Puskesmas Health Services (PT-1)

Midwifery Services and Hospital Referral (PT-2)

Supplemental Feeding with Local Food Sources (PT-3)

Supplemental Feeding with Blended Food (PT-4)

Food and Nutrition Alert System (PT-5)

Community Health Insurance within Social Safety Net (PT-6)

Appendix 1: Key Health Indicators in Indonesia Pre Crisis

	1986	1995
Health Expenditure		
Health as % of GDP	2.5	1.65
Govt. health expenditures as % of total health expenditure	1.26	2.0
Recurrent govt. health expenditure as % of total health expenditure	73.8	65.3
% of recurrent health expenditure devoted to salaries	43.6	57.3
International aid for health as % of total health expenditures	33.7	20.3
Physical infrastructure		
Health centres	5,174	7,076
Auxiliary health centres	12,550	20,353
Mobile health centres	5,623 (1992)	6,207
Public general hospitals	829	1,062
Total hospital beds	63,643	94,966
Health Services		
Physicians per 10,000 pop	0.6	1.63
Midwives per 10,000 pop	0.19	2.62
Nurses per 10,000 pop	1.6	5.0
Pharmacists per 10,000 pop	0.1	0.3
% access to health services	N/A	43%
% access to essential drugs	33%	50%
% of deliveries attended by health personnel	<20%	46.59%
Immunisation coverage	90.3% (1992)	88.6%

Demographic Trends		
Life expectancy at birth	58	63.5
Infant mortality rate (per 1,000 live births)	71	55
Under five mortality rate (per 1,000 live births)	111	81
Adult literacy rate (male)	87.8	91.3
Health and Nutrition		
% newborns at least 2500g	86% (1985)	89%
Vitamin A deficiency	1.2%	0.3%
% anaemia in children < 5	55.5 % (1992)	40.5%
Child malnutrition	54.&%	36.1%
Iodine deficiency (West Java)	13.2% (1990)	3.1% (1996)

Derived from WHO Health for All 2000, World Bank 1997. Presented in PT Hickling Indonesia under a contract from The Canadian International Development Agency. April 1999.

Appendix 2: *Surveys and Data Sources*

Helen Keller International

Helen Keller International's ***Survey Results on the Nutritional Impact of the Crisis*** provides a detailed analysis of nutrition, health, and other household and individual data collected through a range of HKI project interventions in Kalimantan, Sulawesi, and Java, with specific analyses on the impact of the crisis on health and nutritional status of women and children based on baseline data collected before *the crisis* began.

UNICEF 100 Villages Survey

UNICEF and BAPPENAS (with LIPI and BPS) are running an expansion of the 1994 and 1997 ***UNICEF 100 Villages Survey (Sentinel Sites)***, which was conceived as a network of 100 villages to serve as an early warning system on social development problems. Originally intended to focus on mother and child development issues, the instruments for this survey have been extended to a whole range of indicators that were collected this summer. Analysis will be undertaken in October and November, with results available in December 1998.

Poverty Analysis and Monitoring Unit

Within BAPPENAS, the World Bank-financed *Kecamatan* Development Project houses a ***Poverty Analysis and Monitoring Unit***, with responsibilities to target the KDP program and evaluate the impact of the KDP on the assisted areas. This unit will provide a stable home for the maintenance and analysis of data sets generated through a range of World Bank activities to monitor the crisis, in cooperation with the BAPPENAS data warehousing exercise.

Kecamatan Rapid Poverty Survey

The ***Kecamatan Rapid Poverty Survey***, is a qualitative impact assessment survey with 100% coverage (reaching all 4,000 *kecamatans* in Indonesia) which uses simple scaling by local-level officials (teachers, agricultural extension agents, and health workers) to assess various dimensions of the crisis in every *kecamatan*. Analytical results should be available in November 1998.

The Indonesia Family Life Survey

The ***Indonesia Family Life Survey*** (IFLS2+) is a panel (longitudinal) survey of 1,500 households being implemented by RAND and the Lembaga Demografi at University of Indonesia. Jointly financed by the World Bank and USAID, this is the third round of the survey (pre-crisis data generated a representative baseline, and re-interview rates were 92% in round 2) that will re-visit a set of urban and rural households visited previously to examine the impact of the crisis on those households, including questions on labor market, social capital, gender, geographical shifts, and access to poverty programs. Full analysis and data reports are due in December 1998 or January 1999.

UNDP On-The-Ground Monitoring Survey

BAPPENAS and the UNDP are collaborating to collect and coordinate data sources on a wide range of social indicators; they will implement and analyse data from an ***UNDP on-the-ground monitoring survey***" in late 1998 with localised coverage on: food security, social protection,

employment creation, small and medium enterprises. This effort by BAPPENAS also includes development of a "data warehouse" for crisis-related datasets.

SUSENAS

SUSENAS is the primary GOI monitoring and targeting tool for all national programs, with a 220,000-household nationally representative core sample, supplemented by a 50,000-household sample for specialised questions. SUSENAS is done annually as a nationally representative survey with a core and modules. It covers different topics on a three year cycle. These are housing, education, health, crime and socio-cultural issues. 1998 was health and education, so data can be compared with 1995. General opinion seems to be that it is about as reliable as anything available – it triangulates reasonably well with IFLS and with trends noted in other small scale surveys. It is limited by being expenditure and consumption based, but the lowest deciles probably do correspond to the poorest in the population.

Because of extreme budget shortfalls at BPS, the World Bank and AusAID have agreed to provide one-time technical assistance support to maintain the quality and rigor of this year's analysis; including improved sampling, additional disaggregation, and accelerated analysis..

BKKBN

BKKBN is one of the most widely quoted sources of population data and poverty banding and is used generally in the absence of alternatives. It is also being used for targeting in some SSN programs. It is currently the only source for lists of all households in Indonesia. The census, carried out every 10 years, does not include household names, while the Ministry of Home Affairs, responsible for registration of vital statistics, has incomplete data as it depends on voluntary registration.

Central Bureau of Planning (BAPPENAS)

Although it is not a data collection agency, BAPPENAS works closely with BPS to resource its own data needs. It carries out secondary analysis of sources, particularly using SUSENAS and BKKBN. BAPPENAS has developed its own working definitions and ways of identifying poverty, mainly as a result of its involvement since 1995 in the IDT, VIP and recently the KDP. As a result, it has experimented with using different combinations of variables and sources of data.

Ministry of Health

EWS data is being collected under SSN, using a method similar to that used in an earlier EWS project with Cornell University, which was halted in 1984 when Indonesia officially achieved self-sufficiency in rice, and claimed that malnutrition was no longer a serious problem. Consequently EWS data were no longer collected and there is a gap in EWS data sets.

Kecamatan Crisis Impact Survey

The nationwide Kecamatan Crisis Impact Survey was a subjective, expert respondent survey of three government officials in each of Indonesia’s 4025 *kecamatans*. In each sub-district three respondents with kecamatan-wide responsibilities were chosen and asked a standard set of questions about changes taking place in the *kecamatan*. The questions asked about the degree of different kinds of impacts (migration, access to health and education, food availability, etc.), the frequency of different types of coping strategies, and the most severe effects in each area.

All questions were designed to measure proportional change in indicators relative to the same time in 1997, to eliminate seasonal changes.