THE SOCIAL SAFETY NETWORK IN HEALTH SECTOR (SSN-HS): ARE HEALTH RESEARCH USED TO IMPROVE ITS POLICIES?

A CASE STUDY FROM INDONESIA

(FIRST DRAFT)

By:
Agus Suwandono and
Triono Soendoro

Collaboration :
Center for Health Systems/Services Research and Development, MOH R.I.,
National Board of Planning ("BAPPENAS"), R.I.,
and
Council on Health Research for Development (COHRED)

Jakarta, February 2000

CONTENTS

I. INTRODUCTION ....

II. METHODS ....

A. Literature and Document Review ....

B. Regional Workshop ....

C. In depth interview ....

D. Small group discussions ....

E. Health policy expert group meeting ....

F. National workshop ....

III. THE CRISIS, HEALTH SECTOR REFORMS AND SSN-HS

A. Background ....

B. Impact on Health and Nutrition ....

C. Key Policy Issues ....

1. Maintain Access of Vulnerable Groups to Essential Health Services ....
2. Mobilize Additional Resources for Essential Health and Nutrition Services ....
3. Maintain Quality of Essential Health and Nutrition Services ....
4. Enhance Decentralization, Participation, and Transparency
5. MOH Organizational Change and Development ....

D. Policy and Reforms ....

IV. THE PROCESS OF SSN-HS PROGRAM DEVELOPMENT ....

V. NATIONAL HEALTH RESEARCH POLICY AND RESEARCH INSTITUTION (AND INDIVIDUAL RESEARCHERS) CONDUCTING RESEARCH RELATED TO S SN-HS PROGRAMS ....

A. National Health Research Policy ....

B. Health Research Information Need In Relation To Available Resources Allocation For Health Research ....

C. National Health Research And Development Networking ....

D. Research Institution (And Individual Researchers) Conducting Research Related To Ssn-Hs Programs ....

VI. THE PROCESS, RESULTS, ADEQUACY AND OWNERSHIP OF RESEARCH IN SUPPORTING THE SSN-HS

A. Longitudinal study of SSN-HS

B. Other Studies

VII. COMMUNICATION AND DISSEMINATION OF THE RESEARCH RESULTS FOR PROGRAM IMPROVEMENT

A. Director General (DG) Meeting

B. Presentation to the Ministry of Health, Other Related Health Ministries, Donor Agencies, Professional Organizations, Senior Scientists and NGOs

C. Presentation to the President, Representative of Parliament Members and Coordinating Minister of Social Welfare

D. Presentation to the Governor, District Administrator, and other related health provider at the Province and District levels

E. Scientific Journal

F. News Paper

VIII. THE CONTRAINT AND SUPPORTING FACTORS TO THE USE OF RESEARCH IN IMPROVING THE SSN-HS PROGRAMS

IX. THE POLICY CHANGES RELATED TO THE RESEARCH FINDINGS

X. RECOMMENDATIONS FOR DEVELOPING RESEARCH INTO POLICY

REFERENCES

FIGURE AND TABLE CONTENTS

Figure 1. Conceptual Framework Of Working Mechanism Of The NHRDNET (Jppkn)........

Figure 2. Sampling Frame........

Figure 3. Number of Poor Families, Health Card and Visit to HC by Round of Data Collection........

Figure 4. Percentage of Visit by Health Services and Round of Data Collection........

Figure 5. Coverage of ANC for Pregnant Women........

Figure 6. Number of Deliveries and Deliveries Assisted by Village Midwife by Round of Data Collection........

Figure 7. Number of Pregnant Women and Number of Pregnant Women Obtaining Supplementary Food by Round of Data Collection........

Figure 8. Number of Children Under-five and Number of Under-five Obtaining Supplementary Food by Round of Data Collection........

Figure 9. Usefulness of SSN-HS by Medical Doctors........

Figure 10. Proportion of Selected Morbidities by Round of Data Collection........

Figure 11. Proportion of Mild Malnutrition among Under-five by Round of Data Collection.........

Figure 12. Proportion of Severe Malnutrition among Under-five by Round of Data Collection........

Figure 13. Proportion of Malnutrition among Pregnant Women by Round of Data Collection........

Figure 14. Budget Accepted by Health Center by Month........

Table 1. Survey Population........

Table 2. Validation of Proportion of Poor Families Based on the Criteria........

Table 3. Verification of Poor Families by Community........

THE SOCIAL SAFETY NETWORK IN HEALTH SECTOR (SSN-HS): ARE HEALTH RESEARCH USED TO IMPROVE ITS POLICIES? A CASE STUDY FROM INDONESIA (FIRST DRAFT)

By: Agus Suwandono[*] and Triono Soendoro[**]

I. INTRODUCTION

The COHRED (Council on Health Research for Development) has developed a Working Group of Research to Policy to support the research to policy link in developing countries by conducting some country-case studies. This working group is trying to analyse and improve the use of health research for equity promotion and rational decision-making in health sector.

Indonesia has been used as one of the country-case studies with particular concentration in the program of Social Safety Network in Health Sector (SSN-HS). This SSN-HS has been launched by the Government of Indonesia in maintaining the community health status due to the economic and political crisis attacking this country since July 1997. In maintaining the health status of the community, the Government in collaboration with aid agencies has developed a strategy which is to reach the vulnerable groups and maintain delivery of essential health services to the poor. This strategy involves measures to bypass ordinary bureaucratic systems to ensure direct and expeditious support to health service providers and beneficiaries. The strategy also presents opportunities to accelerate reforms in the health and nutrition sectors. To maintain access to, and quality of health services requires well-focused and targeted project support supplemented by a program of systematic policy reforms.

The SSN-HS has entering the second year of implementation, there have been some critics to the application of this program, especially in the equity and quality impacts. There have also been some changes of this program in the second year of its implementation in improving the equity and quality of

[*] Director, Center for Health Systems/Services Research and Development, MOH R.I
[**] Chief, Bureau for Social Welfare, Health, and Nutrition, Bappenas.

health services of this program. It is important to analyse this case in learning more how research has been involved in improving the program and the constraints facing in putting the research recommendations to be used for program implementation.

The ***general objective*** of this study is to describe the process of development of the SSN-HS programs and to analyse factors influencing the use of research in improving the programs. The ***specific objectives*** are: 1. to describe the decision making process in developing the SSN-HS programs in Indonesia; 2. to identify the roles of various research institutions and individual researchers in conducting the research related to the SSN-HS; 3. to determine the process and adequacy of research in supporting the SSN-HS; 4. to determine how communication and dissemination of the research results for program improvements; 5. to assess the factors constraining and supporting to the use of research in improving the programs; 6. to describe the policy changes related to research results; and 7. to develop recommendations for developing research into policy and how they can be related each others.

II. METHODS

Several methods are used in achieving the specific objectives of this study. The methods are as follows:

A. Literature and Document Review

In order to describe the decision making process in developing SSN-HS programs and to identify the major research institutes as well as individual researchers in conducting the research concerning SSN-HS, literature and document search and review are conducted. The literatures and documents are as follows:

1. Proposal on SSN-HS developed by the National Planning Body and Ministry of Health.
2. Program guides on SSN-HS developed by Ministry of Health and other related ministries.
3. Workshop documents, minute of meetings, report and other documents on SSN-HS developed by Ministry of Health and related ministries
4. Research proposals on SSN-HS developed by various major research institutions and researchers

5. Unpublished papers, monographs, seminars, workshop proceedings and published articles on SSN-HS conducted by different kinds of research institutions and researchers

B. Regional Workshop

Four regional workshops conducted in five major cities: Jakarta (covers 5 Provinces: Jakarta Metropolitan, South Sulawesi, Lampung, East Java, and West Java Provinces), Yogyakarta (covers 4 Provinces: Special Province of Yogyakarta, Central Java, East Kalimantan and South Kalimantan Provinces), Medan (covers 4 Provinces: North Sumatera, West Sumatera, Jambi and Aceh Provinces) and Mataram (covers 2 Provinces: West Nusatenggara and East Nusatenggara Provinces). These regional workshops attemps to obtain additional research on SSN-HS; to discuss the lesson learn particularly constraints and supports on SSN-HS implementation; to compile process, communication as well as dissemination of the research on SSN-HS; to discuss the process and adequacy of research on SSN-HS; to analyse the implication of SSN-HS programs and policy improvement resulted by reseach; and to develop the recommendation in improving the use of research in SSN-HS programs. The participants are researchers, universities staffs, province decision makers (health and health related), province administrators, district health officers, NGOs staffs and professional organization representatives.

C. In depth interview

This method is conducted 20 selected high rank of decision makers from Ministry of Health as well as health related ministries and 12 respected researchers to obtain more detail information in regard to the study objectives.

D. Small group discussions

Several small group discussions and workshops are conducted to sharpen and focussing the information resulted by literature and document review, regional workshop and in depth interviews.

E. Health policy expert group meeting

Several health policy expert group meetings are carried out to extract the results of small group discussions and to develop the policy paper regarding the improvement of SSN-HS.

F. National workshop

This workshop is carried out in order to get agreement and commitment about the results of this study.

Some descriptive data analysis and qualitative data analysis are conducted by the researchers in order to derive some specific conclusions of this study.

III. THE CRISIS, HEALTH SECTOR REFORMS & SSN-HS

A. Background

The incidence of poverty in Indonesia, measured against the official poverty line, declined from about 40 percent in 1976 to 11.3 percent in 1996, a remarkable decline given that the population increased from 120 million to 195 million over the same period. The percentage of poor in rural areas declined from about 13.8 percent in 1993 to 12.2 percent in 1996: the percentage of poor in urban areas declined more rapidly, from 13.5 percent to 9.8 percent. However, sharp price accelerations since November 1997 have increased the incidence of poverty. High inflation rates, devalued currency, and increased unemployment and underemployment have increased substantially the number of persons below the poverty line, and those already below are relatively worse off than before.

The financial shock was expected to multiply the number of unemployed, up to 20 million persons (22 percent of the labour force) by the end of 1998 (Government estimates). The proportion of under-employed persons, 37 percent in 1996, was also expected to increase. Limited data suggest that underemployment rose faster than unemployment through informal work -and burden- sharing arrangements: in many businesses, reducing the number of employees has been avoided or postponed through reducing the wage rates (or working hours) of all employees. Given the sharp contraction in construction, services and manufacturing, urban unemployment, underemployment and hence poverty rates have increased more rapidly than rural poverty rates. The impact of the crisis has been particularly severe in urban areas where the unemployed does not have the opportunity to revert to, subsistence agriculture as a means of support.

Indonesia has achieved significant progress in improving the health of its population over the last two decades but health indicators still lack behind

neighbouring countries. The infant mortality rate (IMR) declined from an estimated 1,45 infant deaths per thousand live births in 1970 to 52 in 1995; over roughly the same period, the under-five mortality rate declined from about 217 to 75. Not only is the IMR high, but it differs substantially between regions, between urban and rural areas, and between income groups reflecting the socio-economic gap between the poor and the rich. The maternal mortality rate (MMR), estimated at 390 maternal deaths per hundred thousand live births, is very high by international standards.

The general improvement in health indicators since 1970 results from the policy followed by the Ministry of Health (MOH) of providing access to modern health services through a network of health centres and implementing major public health programs (immunisation, communicable diseases programs, health education etc). MOH has adopted a basic community health model, providing accessible, low-cost ambulatory care at the village or sub-district level (through health centres), supported by acute medical care at the district level (through district hospitals). Health policy was, and is, centrally determined with limited consideration of the wide regional variation in types of health problems, or social, environmental, or cultural factors.

Historically greater emphasis was placed on providing health centres in rural areas, implicitly assuming that urban populations would receive adequate care from urban-based hospitals and the growing numbers of private medical practitioners. The current economic downturn has reduced the availability and accessibility of health services but most acutely in urban areas as the costs of hospital outpatient or private care have escalated. Access to health services, particularly primary services for prevention and treatment for common childhood illnesses, such as diarrhoea and acute respiratory infections, is crucially important for enhancing child health and survival.

Progress has been achieved despite relatively low public expenditures on health. Low expenditures on health are due partly to the low civil service salaries. Health sector staffs are implicitly encouraged to supplement their income from other sources, principally private practice outside 'normal' clinic or health centre hours. The low wage policy makes it difficult to introduce higher professional standards, to generate increased commitment or to reduce the encroachment of private practice on public health service hours. At the same time, however, staff resources are being used inefficiently with many relatively highly paid doctors filling essentially

administrative posts in health centres, district hospitals or in the MOH administrative structure.

A high proportion of health care expenditures - 70 to 80 percent by most estimates - are met from private sources (i.e., from individuals and households). Sharp price increases have undermined people's ability to meet routine expenses and to allocate adequate resources for preventative or curative health care. Those near or below the poverty line are most affected as they spend 85 percent of their income on food alone. Although the demand for health care is elastic at all income levels, price rises will reduce the demand of the poor. Delays in seeking treatment can turn simple illnesses into catastrophic events. Poorer health and nutrition will result in people becoming ill more frequently, reducing productivity for adults and learning capacity for children, and increasing morbidity and risk for pregnant women and children.

B. Impact on Health and Nutrition

Households in Indonesia today are significantly worse off than they were before the crisis. In the urban sector, particularly in Jakarta, per capita expenditure has contracted dramatically. Reduced income and purchasing power is causing tremendous dislocation for individuals and communities. The crisis has resulted in poor families being less able to provide an adequate level of nutrition for themselves an especially serious problem in the case of infants and pregnant women and to afford curative care in the event of medical emergencies. Many households are coping with lower wages and a loss of income by 'pushing' their young women into the labour force.

The cost of basic preventive and curative care has more than doubled in the past few months. Surveys undertaken by the Population Council and by WHO indicate that the selling prices of generic drugs increased from 40 to 200 percent between September 1997 and July 1998. The cost of medical supplies and consumables increased even more, by 300 to 600 percent. Reduced supplies of essential drugs, medical equipment and materials have a direct impact on the quality and the effectiveness of the health services. The distribution of contraceptives has also suffered. The quality of primary care services will worsen, e.g., if health workers economically by re-using disposable syringes, or by disregarding standard infection control procedures or drug protocols.

Recent survey data indicate a sharp drop in the use of public health facilities. Even prior to the crisis, outpatient attendance at health centres had been declining; partial figures suggest a reduction in 199711998 of about

15 percent compared to the year earlier. One cause of the drop in use by the poor was likely an increase in user fees in June 1997 from Rp 700 to Rp 2000 per consultation. Reduced household income due to the crisis makes the payment of even such modest amounts more difficult. As incomes have fallen and prices have risen, there is some evidence that the non-poor are switching from more expensive private sector health care to public sector services. The growing demand for free or near-free public health services from the non-poor and the overall decline in utilisation of public health facilities suggest that the poor be at risk of being 'crowded out'.

As public health services become unaffordable (or their quality deteriorates), the poor will not seek treatment despite recognised need, will turn in larger numbers to traditional healers (whose methods and techniques are unregulated and vary in safety and effectiveness), or will resort to self treatment. In the early 1990s there was a marked shift, particularly in urban areas, away from the public health system to self-treatment. Between 1993 and 1996 the proportion of those 'in urban areas seeking treatment from public facilities in cases of illness declined from 31.7 percent to 24.9 percent; self treatment increased from 34.5 percent to 39.1 percent. The proportion seeking care from private providers increased only slightly, from 23.9 percent to 24.2 percent.

Nutrition status is directly correlated with maternal, infant and child mortality rates, and is linked strongly to cognitive development, school achievement and adult productivity. A Child malnutrition rate in Indonesia has remained high relative to those of other countries of comparable GDP per capita. In 1992, about 40 percent of infants aged 6 to 12 months, and 60 percent of children aged 12 to 36 months were undernourished. About 40 percent of pre-schoolers were underweight and suffered from protein-energy malnutrition; this improved to about 35 percent in 1996. Disorders in growth and development, particularly of the brain, are sometimes irreversible. This has a long-term 'negative effect on educability, acquisition of skills, and physical fitness and reduces productivity as these children become adults.

Crisis-related decreases in consumption of high-quality foods are reflected by increases in protein-energy malnutrition and anaemia among children. For at least a decade prior to 1997, cases of severe malnutrition among children, such as kwashiorkor (oedema due to severe protein malnutrition) and marasmus ("wasting" and "stunting" due to the combined effects of severe

protein and calorie malnutrition), were rare in Indonesia. Cases of severe malnutrition among children are now increasing in urban and peri-urban areas of East Java and other vulnerable areas coincident with the increasing length and severity of the crisis. The proportion of children with good nutrition has decreased, while the proportions with moderate and severe malnutrition have increased. The majority of severe malnutrition cases that have been reported are from families of lower economic and educational status. Increasing numbers of severe hospitalized cases suggest a much larger number of cases in the community that do not reach hospital attention.

C. Key Policy Issues

1. Maintain Access of Vulnerable Groups to Essential Health Services

Indonesia's high MMR and poor maternal health and nutrition standards are indicative of inadequate antenatal care. Providing ready access to qualified health providers and adequate health services, and improving maternal health care will have a strongly positive impact on the health of the women and children concerned and on their families. During the crisis, it is particularly important to protect the health and nutrition of pregnant women, nursing mothers 'and children under two years of age. But since these groups are less likely to visit health centres, strengthened community outreach activities are critical. In rural areas, Government efforts to reduce maternal mortality have focussed on deploying trained village midwifes to displace untrained traditional birth attendants. Outreach activities in rural areas are supported by village midwife. Community acceptance of the village midwife and effective integration of the midwife into the community increases the likelihood that outreach programs will be successful. However, in urban areas, the outreach of public health services is more limited with little effective coverage of densely populated slum areas. Measures to improve outreach in urban areas are necessary, in part through mobilizing the support of community-based organizations and urban NGOs. The looming nutrition crisis will impact vulnerable group's nation-wide but there will be wide variation among provinces. An effective nutrition surveillance system (NSS) is needed to identify the geographical areas where food insecurity and mortality risks are greatest so that resources can focus on the disadvantaged groups.

2. Mobilize Additional Resources for Essential Health and Nutrition Services

Historically, public resources allocated to health and the share of Government budgets to maintain the public health system have been low compared to neighbouring countries or countries of similar per capita GDP. Limited past resource allocations for health may be due, in a part, to a tendency in the central planning and budgeting agencies to regard expenditure on health as consumption rather than as a long-term investment. The lack of adequate analytical capacity has limited MOH's ability to mount strong cases for additional budgetary funding for specific programs or to seek an increased level of health funding as a percentage of GDP. Mobilization of additional resources for health services (and measures to improve efficiency of resource use) is essential to improve the health care delivery system.

The crisis will create new challenges for health care financing. While expansion of partial cost-recovery through user fees may be considered where patients can afford it, across-the-board implementation of user fees will further reduce utilisation of health services by the poor unless protective measures are introduced to guarantee their access to essential health services. Clearly, it will also be difficult to develop community health insurance schemes in communities with reduced income, where scarce household resources will be - rightly - allocated to meeting basic needs. In the short term it seems likely that public health services will need to rely primarily on Government budget allocations. With limited resources, allocation of budgetary resources among activities must be analysed, and where necessary revised, with a clear objective of targeting subsidies to primary health care, and to providing basic health services to vulnerable groups. Resource allocation must also aim at reducing inequities and geographical disparities among provinces and districts.

Declining revenues and spiralling costs could undermine or further delay the process of devolving financial and management responsibility to hospitals and health centres, a key approach to improving the quality of care and sustainability of the health delivery system. The unit "swadana" approach', introduced so far in 49 hospitals, has been successful but has not been fully implemented. Unit "swadana" hospitals have increased revenue fivefold on average, but these revenues have been added to budget allocations, rather than substituting for them. In principle, budget resources allocated to "swadana" hospitals should be reduced, with the 'savings' reallocated to priority poverty focused public health services.

Additional resources for health care must also be mobilized from the private sector. Coverage of company-funded health insurance and contributions of employers to the health care of employees are low. Currently, there is no incentive for employers to provide better access to health services for their employees. Health care expenditures by corporations on employees are not considered as a legitimate element of production costs but are treated on the same basis as expenditures on entertainment (i.e., health care expenditures come out of after-tax profits). Additionally, there is a high rate of occupational injuries and workplace accidents, but no incentives for employers to invest in the occupational safety and health of employees (or penalties if they do not). Individual health insurance expenditures cannot be deducted from income tax.

3. Maintain Quality of Essential Health and Nutrition Services

A major issue in the health services delivery system even before the crisis was a relatively low utilisation of services related to low quality of care and low system efficiency. Poor service quality, probably the main reason for low utilisation of many health facilities, must improve. This complex issue involves health personnel attitudes and qualifications, and the availability of basic medical equipment, supplies, essential drugs, etc. Effective training and monitoring programs, and the introduction of best practice protocols in health centres, can improve the quality of basic services but sustained improvement will need more fundamental change in health provider attitudes through introduction of appropriate incentives.

4. Enhance Decentralization, Participation, and Transparency

Indonesia has been moving towards greater decentralization, devolving political and financial responsibilities to provincial, district, and local authorities. Decentralization is a long-term investment to improve allocates efficiency as well as to respond better to local needs. District and municipal government units should have more authority and responsibility to decide on locally relevant programs within broad national frameworks. Decentralization and autonomy would encourage creativity and real community participation to meet local health needs and priorities. Local health units should have flexibility to utilize resources and manage services consistent with national guidelines. Bottom up approaches to planning and budgeting capitalize on the more detailed knowledge of operating staff of the local environment.

Decentralization will require adoption of clearly defined objectives, a clear set of indicators to monitor decisions made and outcomes achieved, and effective monitoring and reporting mechanisms. Responsibilities and accountabilities for management and delivery of services will need be to be established and enforced. Effective monitoring will require that health information systems provide timely and reliable data upon which to base operating decisions. The traditional, highly centralized administrative system tends to discourage timely information flow and prompt reporting of problems (e.g., food shortages, malnutrition) since public recognition of problems might reflect poorly on the performance of local government officials.

5. MOH Organizational Change and Development

MOH has a very complex structure and a strong, highly formalized, organizational culture. A tradition of central control and parallel but independent vertical programs have resulted in organizational rigidity, compartmentalisation, segmented administration and lack of integration and co-ordination. Strong top-down management has sometimes resulted in a lack of co-ordination and integration in the planning and delivery of health care services in the districts where programs actually come in contact with the community. Structural relationships within MOH was strictly adhered of rules and instructions, both formal and informal, limit the discretion staff have to do their tasks. Internal rigidities, frequent (and sometimes inconsistent) instructions and directives encourage attitudes of passivity, upward orientation and repression of bad news. Power retention strategies discourage innovation or development of risk taking attitudes.

D. Policy and Reforms

The strategy of the Government in collaboration with aid agencies is to reach the vulnerable groups and maintain delivery of essential health services to the poor. This strategy involves measures to bypass ordinary bureaucratic systems to ensure direct and expeditious support to health service providers and beneficiaries. The strategy also presents opportunities to accelerate reforms in the health and nutrition sectors. To maintain access to, and quality of health services requires well-focused and targeted program support supplemented by a program of systematic policy reforms.

The Government has adopted a comprehensive set of policy measures to help alleviate the impact of the crisis on the most vulnerable groups while laying the foundation for longer term, sustainable health sector reform. The policy reform concentrate on six broad areas:

(1) Maintaining access for the poor and improving equity (regional and socio-cultural) i.e :
- 1.1 Facilitate access of the poor to essentials health and family planning services,
- 1.2 Develop proactive activities targeting the poor,
- 1.3 Better identify and target vulnerable groups at risk from malnutrition,
- 1.4 Strengthen preventive and health promotion programs;

(2) Mobilizing additional resources i.e :
- 2.1 Increase the share of Government resources allocated to health, family planning and nutrition,
- 2.2 Maintain priority allocation of public resources to basic health services,
- 2.3 Increase resource allocation to poor communities,
- 2.4 Encourage greater private sector expenditure on health care (prevention and promotion).

(3) Maintain quality of essential health and nutrition services i.e :
- 3.1 Maintain supervision and monitoring activities for basic health services,
- 3.2 Maintain training programs for basic health personnel,
- 3.3 Maintain family planning programs for the poor.

(4) Enhance decentralization, participation and transparency i.e :
- 4.1 Delegate further authority to local levels for planning and resource allocation in health sector,
- 4.2 Develop local management capacity,
- 4.3 Strengthen community oversight of basic health and nutrition services.

(5) Introducing organizational change in the Ministry of Health (MOH) i.e :
- 5.1 . Strategic development plan for Ministry of Health,
- 5.2. Legislative and regulatory framework,
- 5.3. Information systems development.

(6) Reforms in Health Care Financing – JPKM
- 6.1 'Compulsory' JPKM

  make JPKM compulsory; collect contribution through payroll deductions and taxation of the informal sector; pool the funds for

health at national level and allocate them to bapel on equitable grounds; standardize the minimum service package; regulate other health insurance as a top up option.

6.2 'Voluntary Plus' JPKM
encourage development of JPKM by offering incentives to join; gradually develop capacity of bapel; gradually phase out direct public sector funding; regulate private insurance.

6.3 JPKM in the Public Sector
focus on improving the quality and efficiency of the public sector health providers by improving performance through service agreements, contracting; increasing direct funding and accountability; expanding Swadana; regulate and encourage gradual development of managed care; regulate other health insurance.

6.4 JPKM in Transition
a staged introduction of 'Compulsary' JPKM by preparing public providers for the change in funding; develop capacity for contracting and Quality Assurance; field testing collection efficiency and administrative feasibility of scenarios 2 and 3; regulate private health insurance.

To maintain access, the Government will adopt measures to ensure that essential health services continue to function, to reduce barriers to use by the poor, and to develop incentives for village midwives to better assist poor families. The Government will increase budgetary allocations to the health sector, ensure continued priority is given to the basic the basic health services used primarily by the poor, and explore incentives to encourage greater private sector expenditure on health care. To maintain service quality, the Government will maintain budget allocations for health services at least at 1996/1997 levels, ensure effective supervision and monitoring, and develop a formula linking resource allocation directly to poverty. To enhance decentralization, the Government will extend the system of block grants to health centers and give these units the authority to plan and manage their resources. Organizational change in MOH is inevitable in decentralization and necessary to improve responsiveness and internal efficiency. To improve efficiency, greater authority and responsibility will be delegated to the heads of health centers and the wasteful use of drugs curtailed.

Policy reforms to be implemented under the Program will mitigate the impact of the crisis on vulnerable groups and provide a framework to help strengthen decentralization, giving autonomy and responsibility to local health service committees to better meet local needs. Reforms will also

improve the targeting of Government subsidies to the poor. The program will benefit an estimated 780.000 infants by providing complementary feeding, thereby ensuring normal mental and physical development. Supplementary feeding will benefit about 3.08 million children under two, and 790.000 pregnant and nursing women. By ensuring provision of basic health services to about 15.3 million families, and safe motherhood services to about 1.9 million women, to whom such services would not be available or would not be affordable, the program contributes directly to maintaining the health and well-being of vulnerable groups.

IV. THE PROCESS OF SSN-HS PROGRAM DEVELOPMENT

Due to the critical problems mentioned above, the National Development Planning Agency, the Ministry of Health and several donor agencies such as ADB, World Bank and IMF have agreed to conduct Social Safety Net for Health Sector immediately. The decision to conduct the SSN-HS is based on the above analysis mentioned in the background of this study. There is no study that used for the policy decision, however they used data which originally are resulted from studies, donor analysis and province health officer inputs.

However, in the project document they include a longitudinal studies that is used to monitor and to evaluate the SSN-HS programs. They also agreed that the changes should be made based on the findings of the studies.

V. NATIONAL HEALTH RESEARCH POLICY AND RESEARCH INSTITUTION (AND INDIVIDUAL RESEARCHERS) CONDUCTING RESEARCH RELATED TO SSN-HS PROGRAMS

A. NATIONAL HEALTH RESEARCH POLICY

Since 1997, based on the Government Regulation no. 39/95, the NIHRD, under the leadership of Professor Umar Fahmi Achmadi, MPH, MD, PhD has developed intensively the **National Health Research System or NHRS** as the application of the above Government Regulation for national health research policy. Some major policies mentioned in the NHRS will be discussed in brief.

The **vision of NHRS** is the realization of healthy, intelligence and productive Indonesian through the utilization of competitive health technologies and information (sciences). The **missions** are: 1. to produce health technologies and sciences based on systematic and sustainability of partnership and collaboration among all potential health research resources; 2. to stimulate decision makers and communities in utilizing health technologies and sciences resulted by health research and development in overcoming obstacles and in improving qualities, equities and accessibilities of health development programs; and 3. to develop conducive atmosphere and environment conditions for researchers in developing their professionalism and in working professionally.

The **objectives** of NHRS are 1. improvement of utilization of health research findings by the stake holders, industries and communities; 2. acceleration of dissemination of health research results in country and abroad; 3. increasing the utilization of health research resources (private, public, community and bilateral/multilateral donor agencies); 4. improvement of accessibility of health research results through the NHRD Net; 5. increasing number and quality of researchers and their partnerships; and 6. acceleration of number and quality of health research facilities and equipments.

The **strategies** in achieving objectives of NHRS are: 1. Health research and development is carried out based on the needs and priorities of health development with carefully considering the principles of partnership in sciences and technologies, community values as well as within the context of valid Indonesia regulations and laws; 2. Health research and development should be carried out within the aspects of the quality improvement, equity and sustainability of health services in achieving the higher community health status and in promoting the health paradigm; 3. Health research and development activities should be carried out based on the research agenda developed and committed upon the researchers and the stake holders; 4. Health research and development should be carried out inter sectorally and multidisciplinary, with involvement of professional organization and supported by the communities; 5. Development of quality and total number of researcher should be carried out systematically and continuously through education, training and partnership; and 6. Improvement of health research infrastructure and sufficient budget allocation for health research and development is conducted through close partnership with the stakeholders.

Activities to be conducted in achieving the objectives of NHRS are as follows:

1. ***Setting of Health Research Priorities and Development of Research Agenda.*** Health research priority setting and research agenda development have been conducted by the assistances of several international organization such as COHRED and Policy Project **(APPENDIX A and B. Executive Summary and Some Examples)**. The steps of developing health research priority setting and research agenda are as follows:
   a. Situation analysis of health development and research in Indonesia
   b. Stakeholders' needs assessment
   c. Resource flow assessment of health research and development
   d. Development of priority setting criteria for health research
   e. Workshop for priority setting of health research and development
   f. Working group for finalizing the priority setting of health research
   g. Agreement and commitment from stakeholders
   h. Development of 5 years health research agenda
2. ***Guidance formulation of health research management*** in conducting health research at national, province, district and community levels.
3. ***Development of several mechanisms for conducting health research*** as follows:
   a. **Guided Research**, there are three levels of guided research:
      (1) Guided Health Research or "RISBINKES" for young researchers from NIHRD, School of Public Health, School of Medicine (Public Health Division), School of Nursing, School of Pharmacy, Province Health Officers, District Health Officers, Non-teaching Hospital, Health Center and so forth.
      (2) Guided Medical Science and Technology Research or "RISBIN-IPTEKDOK" for young researchers from the School of Medicine other than Public Health Division and Teaching Hospital.
      (3) Guided Research for Health Providers or "RIBINAKES" for ealth providers under the health academic belongs to Ministry of Health
   b. **Routine Health Research**. This is a small scale health research which is funded by routine national budget of NIHRD. The routine health research is conducted on the competitive based selection. The priority of this research is a small scale research in which the results can be used as program improvement or emergency and urgent health analysis in solving unexpected health problems.
   c. **Advanced Health Research and Development**. Usually this research is proposed by senior researchers on the competition based selection. It

is funded by the development national budget of NIHRD.

d. **"Contract" Health Research**. It is a health research carried out by NIHRD, Universities or other research institution in which the budget is allocated under stakeholders' program budget. The stakeholders' budget can be originated from stakeholders' development national budget or loan budget or grant budget from various donor agencies. Mostly the priorities of health research are already decided by stakeholders and donor agencies. The NIHRD is now managing several "contract health research" such as: (1) Non-communicable diseases research funded by WHO-Indonesia budget; (2) Intensified Communicable Disease Control funded by ADB loan; (3) Decentralization of health development research (WHO-SEARO); (4) Research on Social Safety Net in Health Sector (GOI Budget) etc.

4. ***Establishment of National of Health Research and Development (NNHRD Net)***. It is a forum of communication, coordination, monitoring, as well as evaluation among health researchers and it is a forum for collaboration, partnership and decision making between health researchers and health stakeholders. Detail information regarding the NNHRD Net will be discussed in specific chapter about this network.
5. ***Capacity building of researchers and research institutions under the NIHRD***. Most of this capacity building has been decentralized by NIHRD to the six centers under the NIHRD (Center for Health Systems Research and Development, Center for Nutrition Research and Development, Center for Pharmaceutical Research and Development, Center for Health Ecology Research, Center for Non-communicable Disease Research, and Center for Communicable Disease Research). NIHRD only conducts capacity building concerning managing the formal higher education, formal short-term and long-term courses as well as national seminar or symposium related to health research and development. Some national awards have been given to the selected researchers with high performances and dedication in conducting the health research and development.
6. ***Development other supporting mechanisms and committees*** such as ethical clearance and ethical committee for health research, scientific clearance and committee and so forth,
7. ***Monitoring and evaluation.*** Monitoring and evaluation can be divided into: 1. monitoring and evaluation of research institutes or institutions which carried out health research; and 2. monitoring and evaluation of health research project or individual health research project. The **monitoring**

and evaluation of institutes or institutions are carried out by NIHRD by developing a series of parameter. These series of parameters cover input, process and output of health research in a research institution or institute. The proposed parameters are as follows:

a. The increase in utilization of the results of health research and development by decision makers, industry, and community.
b. The publication (accredited) and dissemination of results of health research and development at local, national and international.
c. The increase in research funding particularly non-government sources.
d. The increase in quantity and quality of researchers (education, level of seniority and so on)
e. The increase and use in quantity and quality of resources and infrastructure for health research.
f. The increase in quantity and activities of health research and development which are categorized as intellectual properties.
g. The existence and availability of national research agenda/provincial research agenda, networking, ethical system, working group for analyzing (incorporating) research results into position/policy papers, working groups for quality assurance, periodical meeting etc.

In Indonesia **mechanism of monitoring and evaluation of national health research project** mostly carried out by the research managers and it has been built up in a health research project. For example, in the Guided Health Research Project, monitoring and evaluation mechanism has been conducted by the national team since the beginning of the project. Monitoring and evaluation covers input, process and output of the research project.

B. HEALTH RESEARCH INFORMATION NEED IN RELATION TO AVAILABLE RESOURCES ALLOCATION FOR HEALTH RESEARCH

Several health research information are significantly needed in relation to available resources allocation for health research policy. The needed health research information can be obtained from various procedure and mechanism as follows:

1. ***Analysis of Situation Concerning Health Development***
2. ***Analysis of Stakeholders' Research Needs***
3. ***Analysis of Health Related Sectors and Universities Research Needs***
4. ***Analysis of NGO and Private Sector Research needs***

5. ***Analysis of Resource Allocation and Flows on Health Research***
6. ***Analysis of Capacity and Management of Health Research Institutions***
7. ***Health Research Priority Setting and Agenda Development Process***

Priority setting and research agenda need to be developed in focussing health research and development. There are several techniques that can be used, for example COHRED (Commission of Health Research and Development), UNFPA, Columbia University and so forth.

C. NATIONAL HEALTH RESEARCH AND DEVELOPMENT NETWORKING

The National Health Research and Development Network (NHRDNet or "JPPKN") has been developed on the basis of the existing Laws and Regulations:

1. Health Laws 23/1992 Chapter 69 and 70;
2. Government Regulation No.39/1995 on Health Research and Development;
3. Health Minister Decree No. 558/1984 on the Organization of the Ministry of Health;
4. Health Minister Decree No. 937/1998 on the development of "JPPKN".

Based on the above law enforcements, the working definition of the NHRDNet is formulated as a forum or "non structural organization whose members consists of high ranking officials and experts who represent various health and/or health related research institutions in Indonesia". As it is mentioned in the Ministerial Decree No.937/1998, at the National level it is called the "National Committee on Health Research and Development" (abbreviated as National Committee), whereas at the Provincial level it is called the "Regional Committee on Health Research and Development" (abbreviated as the Regional Committee). In the first stage, the Regional Committees have been formed in 5 Provinces (North Sumatra, Jakarta, Central Java, East Java and South Sulawesi). Those are the provinces that are expected to develop collaborating activities with the Faculty of Public Health of the local State Universities.

The vision of the NHRDNet is to enhance the empowerment of the national potencies and resources of health research and development to become a system of institutional and information network through which the national management of health research and development activities can be implemented effectively.

Based on the above vision, both the National Committee and the Regional Committee serve the following missions :

1. To form national stakeholders of health research and development with its main function is to decide a national policy on health research and development;
2. To enhance the empowerment of monitoring, control and evaluation of health research and development through a mutual benefit cooperation among members of the network;
3. To empower the national potencies and resources of heath research and development in deriving alternative health policies based on results of health research and development;
4. To operationalize a system of information networking of health research and development;
5. To empower the national management of health research and development in supporting the national health development;

To realize the missions, the following strategies are implemented:

1. To develop a system of institutional networks on health research and development which act as a "national stakeholders of health research and development" for empowering the monitoring, control and evaluation;
2. To develop a system of information networks on health research and development which is unique, specific, open, compatible and complementary to the existing information systems which is further aimed at supporting the national health development;
3. To develop a national management of health research and development in supporting the formulation of health policy and planning at the national and provincial levels.

To set up the proper functions of the National Committee and the Regional Committee, the following development plans are envisaged:

1. Short-term development plans (1999/2000 – 2003/2004)

The objective of this short-term development plans are:

a. Assigning personnel for the functioning of the Committee both at the national and provincial level, namely the advisory board, expert

committee and the executive secretariat of the Committee;

b. Developing collaborative research and development activities with Universities of USU Medan, UI Jakarta, UNDIP Semarang, UNAIR Surabaya and UNHAS Ujungpandang;
c. Developing an effective information networks on health research and development as part of the development of health information system.
d. Developing an effective national management of health research and development as an integral part of the health management;
e. Setup and operationalize the system;
f. Backup the system with a proper budgeting;

2. Long-term development plans (2004/2005 upward)

The long-term development plans will depend on the achievements of the short-term programs. It is mainly aimed at optimal operation of the system and expansion of the coverage areas of the Regional Committee to other provinces.

Both the National Committee and Regional Committee have three levels of organizational hierarchy, they are:

a. The Advisory Board

The advisory Board which consist of high ranking officials (Eselon I) act as the national stakeholders of health research and development to form a decision making forum on strategic national issues such as national policy and agenda of health research and development, empowerment of national potencies and resources, monitoring, control and evaluation of the activities.

b. The Executive and Expert Committee

The Executive and Expert Committee which consist of CEO (Eselon II) and experts form various expert groups to produce policy papers and alternative health policies based on the results of health research and development in Indonesia.

c. The Executive Secretariat

The Executive Secretariat act as an extra organization which is attached to the NIHRD to support duties and functions of the Committee in terms of management of information, networking of information system, technical support and logistics.

The conceptual framework, working mechanism, hierarchy and relationship among the three levels components can be seen in **Figure 1.**

As mentioned in the Ministerial Decree No.937/1998, the main duties of the Committee is giving advice and suggestions to the Minister of Health through Director General of NIHRD about strategic policy issues deal with the empowerment and supervision of health research and development activities in Indonesia.

The elaboration of the **main duties** of the Committee has been stated in the Ministerial Decree as follows:

a. To formulate policy options of the National Health Research and Development to support health development;
b. To formulate policy and development plans of the NHRDNet;
c. To formulate various health policy options based on synthesis and analysis of results of health research and development;
d. To formulate policy on optimal utilization of the national potencies and resources of health research and development;
e. To formulate a national research agenda which is oriented towards current health priorities;
f. To formulate policy on monitoring, supervision and evaluation of all health research and development activities;
g. To formulate a development strategy for a national management of health research and development;
h. To give technical support for improving the quality of health research and development;
i. To develop an information system networks of health research in line with current progress of related science and technologies;
j. To initiate various studies and policy analysis in an effort to formulate alternative health policies;
k. To produce guidelines and standard procedure to implement the networking of information systems.

The **substances** of the National Health Research Information which is managed by the secretariat of NHRD Net are as follows:

a. General information about NHRD Network and how to become a member of the Network,
b. Health and medical research data base,
c. Literature searching (national and international library webs)

d. Raw data of some National Health Survey such as: National Health Household Survey (1992 and 1995), Demography Health Survey (1971, 1974 and 1997), Indonesian Family Life Survey (1993 and 1997), etc.
e. Analysed data of some National Health Survey mentioned in d.
f. News letter: ethical clearance, announcement of education, training, seminar, workshop, career opportunity, offering for various research funding, guidance in proposal development and so forth
g. e-mail service
h. Hotline service to decision makers
i. List of health research expert and consultant
j. Facilities to access and communication with other network (i.e. Indonesian Epidemiology Network, Asia Pacific Health Economy Network and so forth)

D. RESEARCH INSTITUTION (AND INDIVIDUAL RESEARCHERS) CONDUCTING RESEARCH RELATED TO SSN-HS PROGRAMS

The main responsible institution in carrying out the research related to SSN-HS programs is the NIHRD. However, there are some institutions concern about the impact of the crisis and the applications of SSN-HS programs.

The main study concerning the SSN-HS has been conducted by the 5 major universities in Indonesia in 5 provinces with the coordination of NIHRD. The study is a two year longitudinal study and a time series study. It is carried out in 5 provinces:

1. Central Java Province is carried out by University of Diponegoro, Semarang;
2. Yogyakarta Special Province is carried out by University of Gajah Mada, Yogyakarta;
3. East Java Province is implemented by University of Airlangga, Surabaya;
4. South Sulawesi Province is implemented by University of Hasanudin, Makasar; and
5. West Nusatenggara Province is carried out by University of Mataram, Mataram).

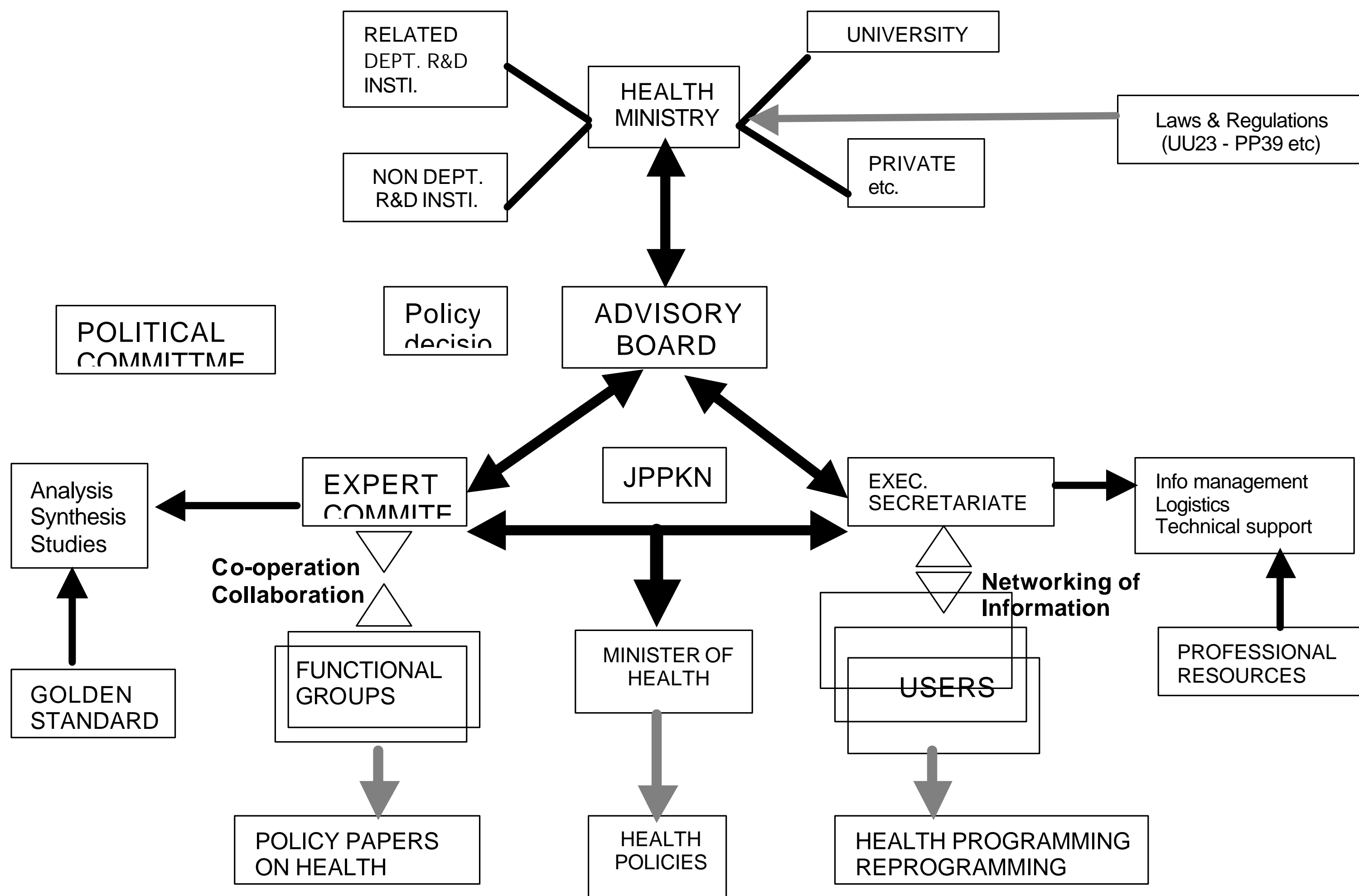
The study has been started since October 1998 and will be ended on

September 2000. Five times cross sectional survey with in-depth interview are used as the main methodologies. This is a community and a provider based cross-sectional survey.

Another big study is carried out by the British Council. It is a cross-sectional survey to the providers and it is related with the achievement of SSN-HS. The study has been carried out since October 1999.

At least 20 other small scale studies related with the application of SSN-HS programs have been identified through this study. These studies are carried out mostly by the Universities, NIHRD, professional organizations and non-government institutions. These studies mostly have only a small sample size, located in specific areas or small areas (1 province or 1 district), a cross sectional survey and implemented by a single local institution.

FIGURE 1. CONCEPTUAL FRAMEWORK OF WORKING MECHANISM OF THE NHRDNET (JPPKN)



VI. THE PROCESS, RESULTS, ADEQUACY AND OWNERSHIP OF RESEARCH IN SUPPORTING THE SSN-HS

A. Longitudinal study of SSN-HS

Since the SSN-HS is only implemented for 3-5 years, the stakeholders have agreed that the longitudinal study of the SSN-HS is only carried out within the first two years started at the beginning of the program. Three rounds of data collection have to be implemented during the first year of program implementation and the other two rounds have to be carried out during the second years of program application. In the realization of the surveys and in depth interviews, there are a time delayed for 2-3 months as compared to the study plan. The schematic of the study design is as follows:

X1 ---- O1 ---- X2 ---- O2 ---- X3 ---- O3:

P: Oct. 99 Feb. 99 June 99

R: Nov. 99 April 99 Sept. 99

First year (October 1998 – September 1999)

X4 ---- O4 ---- X5 ---- O5 ---- X final:

P: April 2000 Sept. 2000

R: ? ?

Second year (October 1999 – September 2000)

X = program implementation; O = Cross sectional survey and in depth interviews; P = planed; R = realization

This study has been designed to answer at least four questions: 1. Does the SSN-HS program really reach the poor communities?; 2. Are health services access and health provider performances improved?; 3. What are the provider perception to the application of SSN-HS?; and 4. Does SSN-HS improve the health and nutrition status of the poor communities?

The household and provider samples of this study are big enough. However, this study is implemented in the 6 provinces only. This is due to the budget shortage, there has been an agreement between the stakeholders (Department of Health, Department of Finance; National Board of Planning and donor agencies) and the researchers (5 Universities and NIHRD) that the longitudinal study of SSN-HS is only carried out in the 6 provinces in which the SSN-HS programs are budgeted by the IMF.

The population of this study is as follows:

Table 1. Survey Population

No.	PROVINCE	DISTRICT	SUB DISTRICT	HEALTH CENTER	POPULATION (million)
	INDONESIA	*327*	*4.058*	*7.236*	*209,0*
1.	D.I. YOGYAKARTA	5	75	123	2,9
2.	CENTRAL JAVA	35	533	822	30,2
3.	EAST JAVA	37	615	925	34,5
4.	WEST NUSA TENGGARA	7	61	111	4,1
5.	SOUTH SULAWESI	24	185	336	7,9
	TOTAL	108	1.469	2.317	79,7

There are 6 sample group: 1. Poor Community; 2. Mid-wife at the village maternity clinic; 3. Medical Doctor at the Health Center; 4. Hospital Director and 5. Chairman of Crisis Center Team at the District level. Those sample groups are drawn as follows:

Figure 2. Sampling Frame

* From each district of the 5 provinces, random selection of:
  - 3 health centre (HC) catchment areas (359 HC)
  - 3 villages in each catchment areas (1008 villages)
  - 20 poor households in each village (same each cycle)

  Total poor household samples are 22,323 families
* All Hospital Directors (108) and Chairman of Crisis Center (108) in all districts in the province samples are interviewed
* All HC Doctors (359) and Mid-wives (1008) at the HC samples are selected as the samples

In order to improve the scientific validity of this study, a scientific advocacy group has been established by NIHRD at the national level. This

scientific advocacy group consist of senior scientist from University of Indonesia, Bureau of Planning MOH, WHO, National Board of Planning, National Board of Statistics, Institute of Indonesian Science and Research, NIHRD and Directorate General of Community Health Development MOH. The members of this scientific group involve actively in all steps at the beginning of this study to the end of this study, particularly in sampling and questionnaire designing, monitoring of data collection, analysis of data and report writing.

After the second round of data collection the summary of findings is as follows:

1. In first round of data collection, 60% of the poor families are obtained health card as compared to 85% of the poor families who own the health card in the second round of data collection. Among them, 91% are validated and verified to be a true poor families (Table 2). Communities and key leaders actively participate in the data verification (Table 3). However, the study concludes that about 20% of poor communities or 10 million poor people are still unreached by the SSN-HS programs.

Table 2. Validation of Proportion of Poor Families Based on the Criteria

PROVINCE	CRITERIA A	CRITERIA B
Middle Java	90.8%	92.0%
Yogyakarta	89.1%	91.3%
East Java	92.0%	94.0%
West Nusatenggara	94.3%	96.7%
South Celebes	95.2%	97.2%

Note:

Criteria A: ***Criteria of National Coordinating Board of Family Planning which is used officially and mix quantitative and qualitative***

Criteria B: ***Criteria of National Bureau of Statistic which is mostly quantitative***

Table 3. Verification of Poor Families by Community

	COMMUNITY LEADERS	CRITERIA A (POOR
FALSE POSITIVE	**11,8%**	**9,8%**
FALSE NEGATIVE	**7,6%**	**19,9%**

2. The total access to the formal health service units increase from 67.5% to 75%. The access to HC and Sub-HCs have increased from 32% to 39%, while the access to hospital has been slightly decrease in second round of data collection. HC and Sub-HCs have accepted the biggest part of additional services for poor families (see Figures 3 and 4).

Figure 3. Number of Poor Families, Health Card and Visit to HC by Round of Data Collection

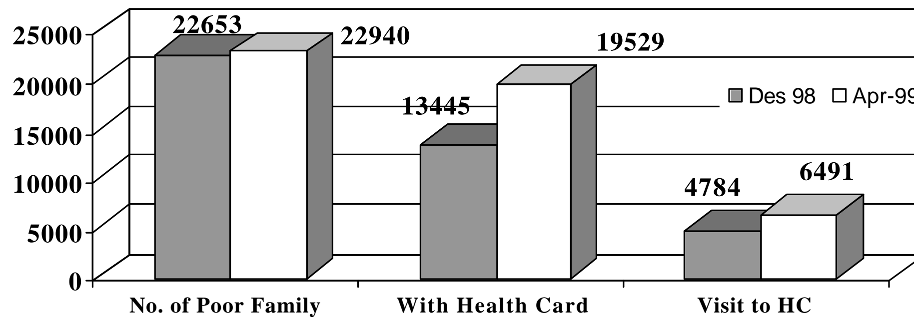
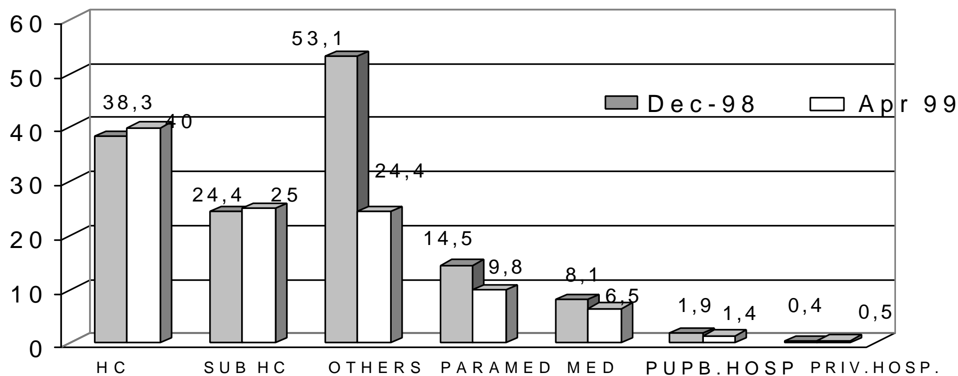
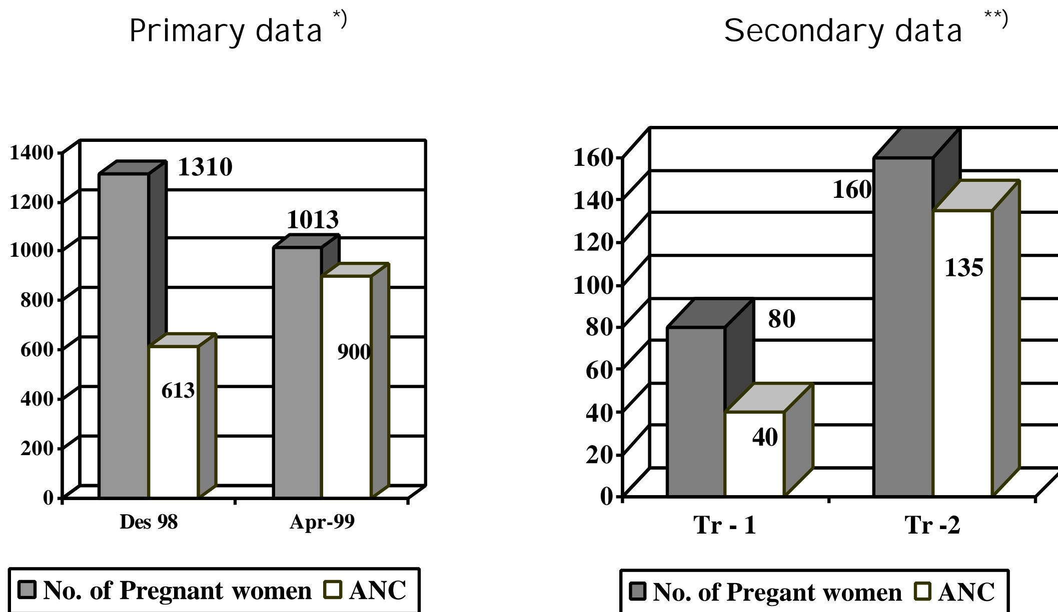


Figure 4. Percentage of Visit by Health Services and Round of Data Collection



3. Improvement of total number of ANC among the pregnant women can be seen in Figure 5. Figure 6 shows improvement of the deliveries assisted by the village mid wife. Improvement of under five and pregnant mother with complementary food. Improvement of ANC coverage. Increasing of the pregnant women and children obtaining supplementary food are indicated by Figure 7 and 8.

Figure 5. Coverage of ANC for Pregnant Women



Note : *) Data resulted from the two round of data collection in this study
**) Data from HC reports (Tr-1 = First Tri-monthly Report; Tr-2 = Second Tri-monthly Report)

Figure 6. Number of Deliveries and Deliveries Assisted by Village Midwife by Round of Data Collection

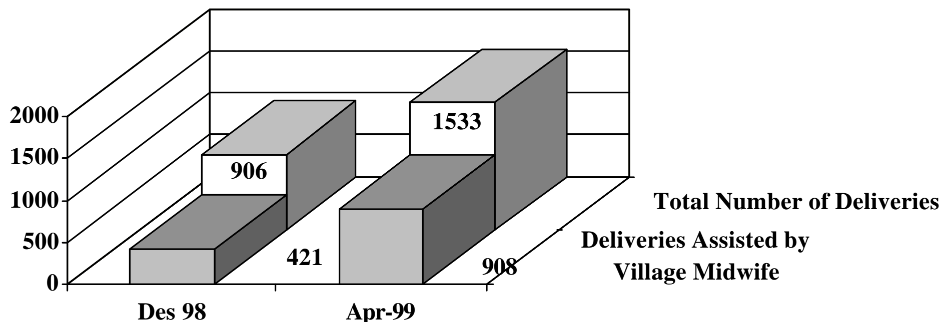
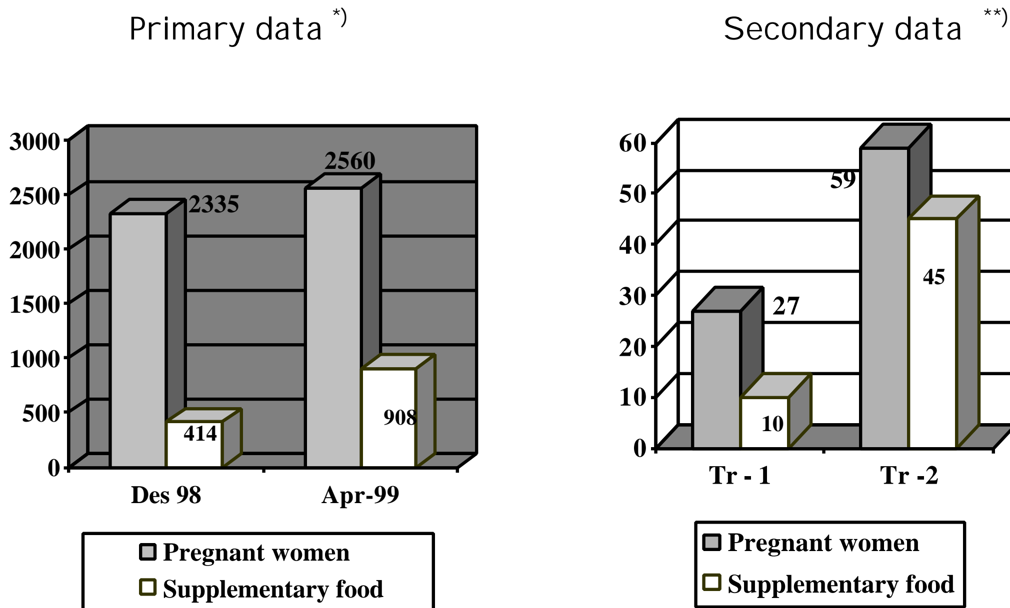
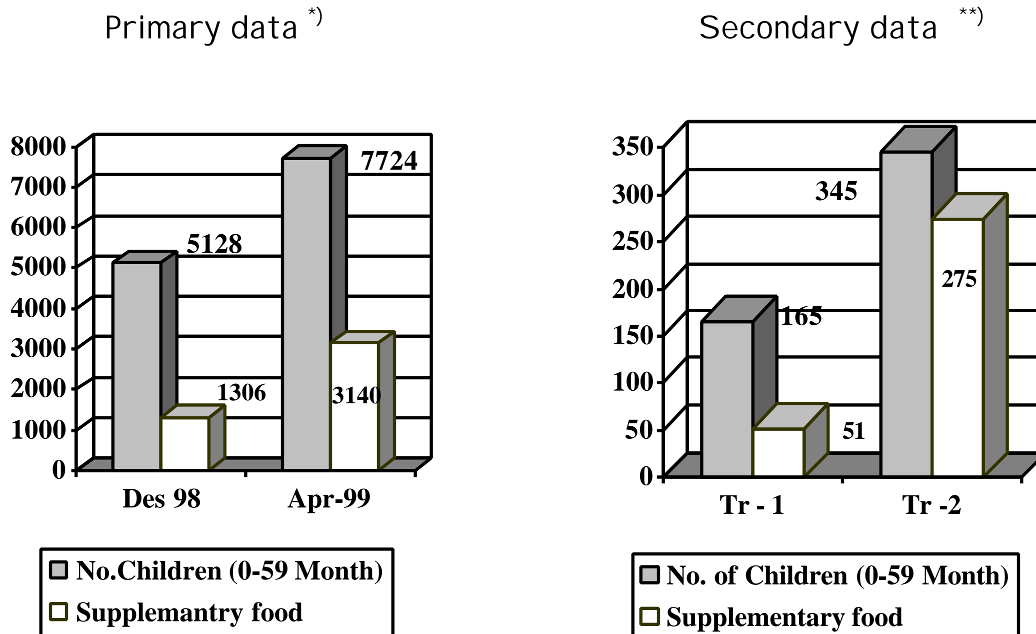


Figure 7. Number of Pregnant Women and Number of Pregnant Women Obtaining Supplementary Food by Round of Data Collection



Note : *) Data resulted from the two round of data collection in this study
**) Data from HC reports (Tr-1 = First Tri-monthly Report; Tr-2 = Second Tri-monthly Report)

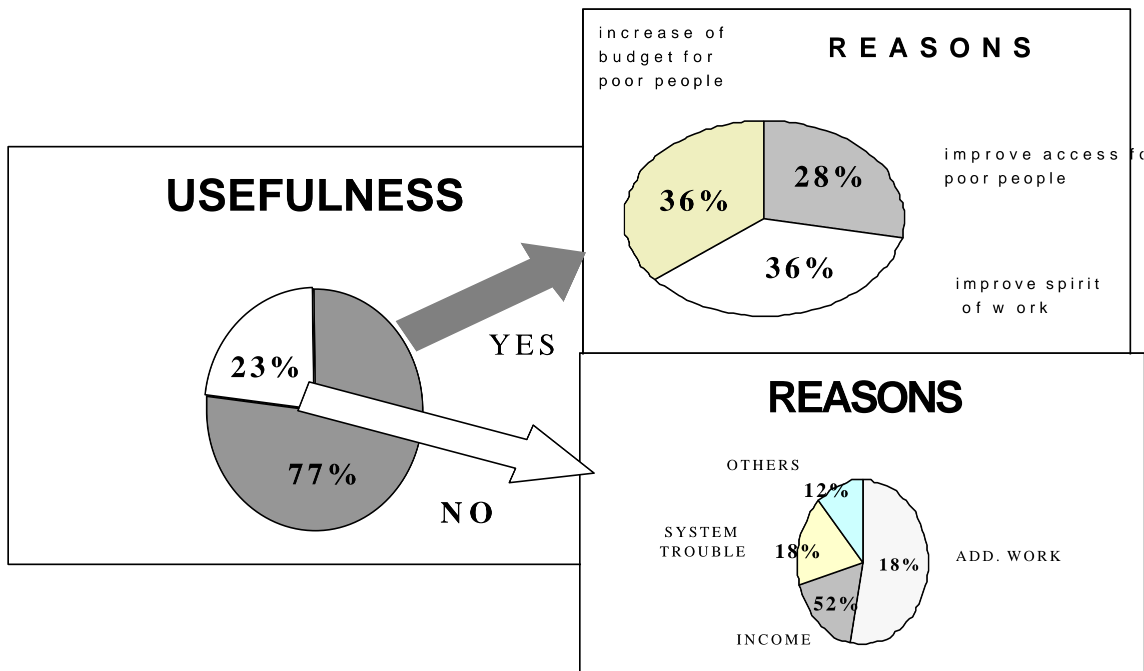
Figure 8. Number of Children Under-five and Number of Under-five Obtaining Supplementary Food by Round of Data Collection



Note : *) Data resulted from the two round of data collection in this study
**) Data from HC reports (Tr-1 = First Tri-monthly Report; Tr-2 = Second Tri-monthly Report)

4. Roughly 77% of doctors at the health center state that SSN-HS is very useful for the poor communities (Figure 9). The reasons are: a. improvement of operational budget (36%); b. increasing the spirit of work among the HC providers (36%); and c. improving the access of poor communities in getting health services. The remain 23% of them complain that SSN-HS are not benefit for them because of additional complicated works (50%), disturbing the normal health system, creating dependency of community and decreasing time for their private practice.

Figure 9. Usefulness of SSN-HS by Medical Doctors



5. The impact of the SSN-HS programs cannot be fairly judged by only using these two round data collection. The trend of morbidity and nutrition status of the under five and pregnant women are the only conclusion that can be drawn. Various morbidity proportion show increase of their trends such as pneumonia and fever. However, specific diseases such as diarrhoea and measles have indicated decrease of their trends (Figure 10). Total malnutrition among the under fives tend to decrease, and also severe malnutrition show a decrease proportion (Figures 11 and 12). Proportion of pregnant mother with malnutrition is also decrease (Figure 13).

Figure 10. Proportion of Selected Morbidities by Round of Data Collection

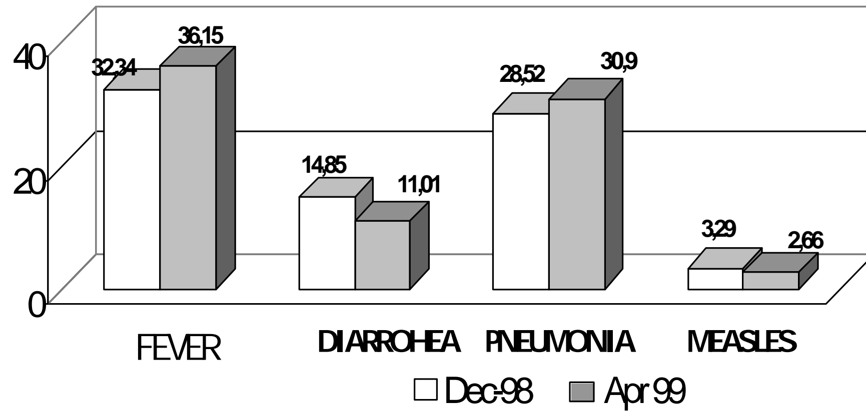


Figure 11. Proportion of Mild Malnutrition among Under-five by Round of Data Collection.

6-23 months

6-59 months

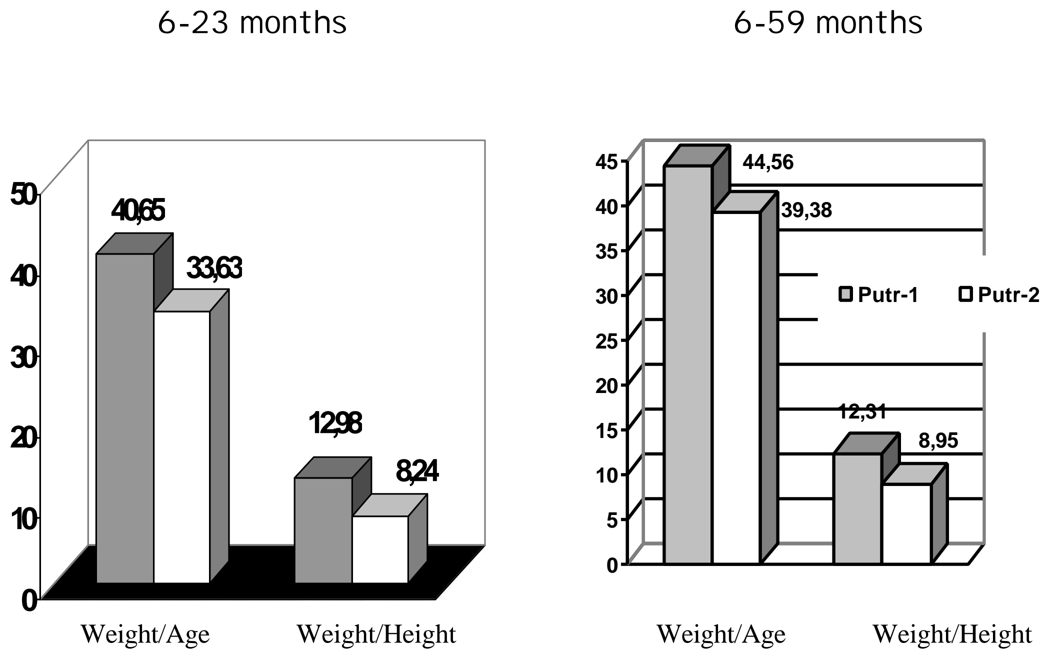


Figure 12. Proportion of Severe Malnutrition among Under-five by Round of Data Collection

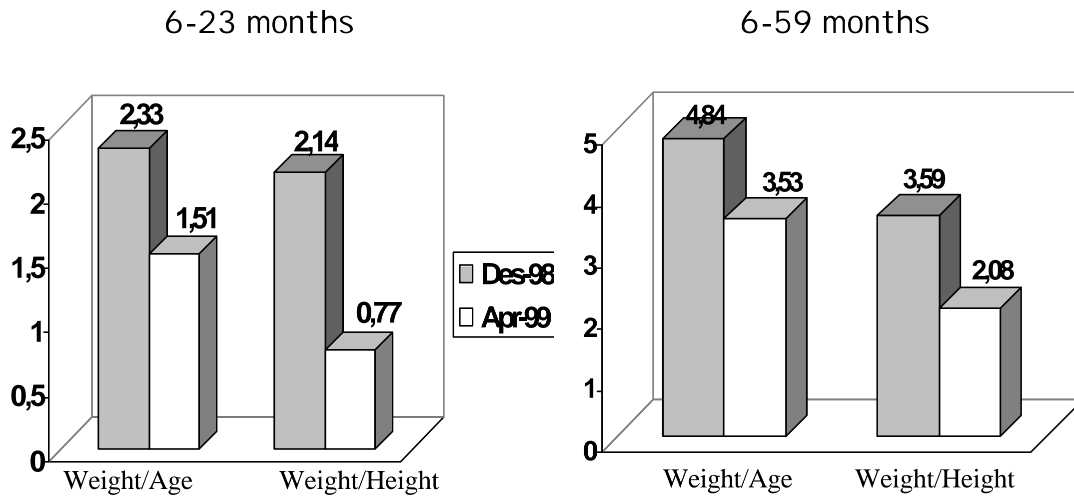
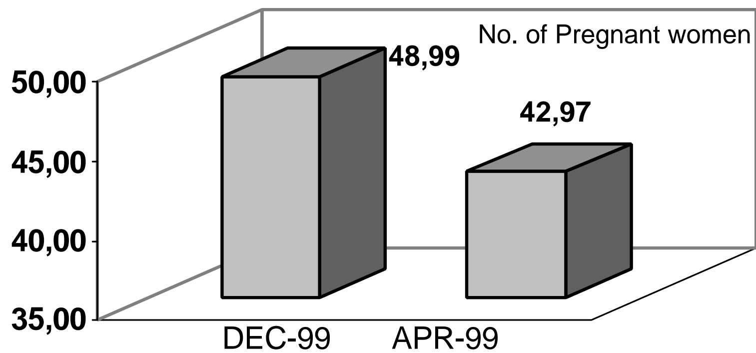
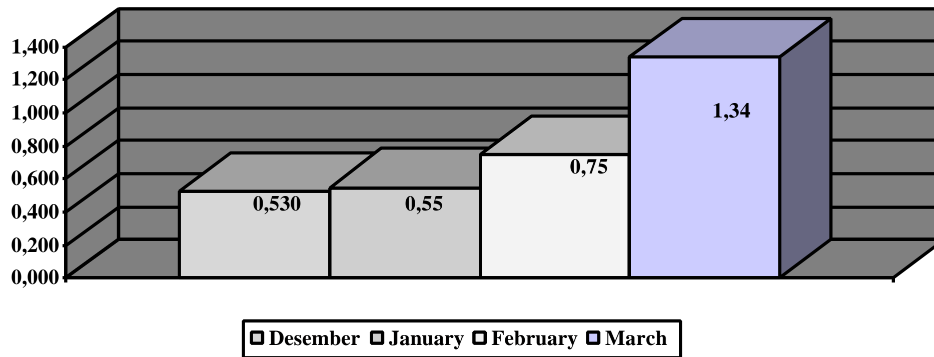


Figure 13. Proportion of Malnutrition among Pregnant Women by Round of Data Collection



6. Dropping of SSN-HS budget has been almost always delayed as seen in Figure 14.

Figure 14. Budget Accepted by Health Center by Month



The recommendations proposed by the researchers are as follows:

1. The SSN-HS should be continued for the second year as a rescue program with an effort of sustainability of the SSN-HS programs after the crisis.
2. Validation and verification of poor family's criteria should be carried out at least in every 6 months.
3. A study to improve the validity and reliability of poor family's criteria should be carried out in line with validation and verification efforts.
4. Socialization of SSN-HS to the health as well as health related providers and the community should be implemented immediately in order to avoid dependency to the SSN-HS programs.
5. A complain mechanism related to the implementation of SSN-HS needs to be developed and available in the second year of SSN-HS programs.
6. Specific intervention should be given to the under fives and pregnant mothers who have suffered from the severe malnutrition
7. Specific intervention should be given to overcome the high risk groups of under fives and pregnant mothers (with a certain disease, illiterate family and others). Integration to the other SSN programs should be realized.
8. Reward system (incentive and disincentive) should be developed in order to improve the working performance of the health and health related providers.
9. Community based activities such as Village Integrated Health Post and

others should be empowered and revitalized

10. Guidance for administrative and technical implementation of SSN-HS programs should be more appropriate, simple and operationalize.
11. Budget of SSN-HS for referral system should be given as a block grant system and mechanism
12. Monitoring, supervision and longitudinal study should be continuously carried out.

Limitations of this study are as follows:

1. Province samples are not randomly selected, the provinces are selected because the SSN-HS in those provinces are budgeted by IMF
2. There is no control in this study
3. Level of capabilities of each university carried out this study are not in the same level
4. Impact of the SSN-HS cannot be concluded before the 5 rounds of data collection of the study are completed
5. Inputs for recommendation can only be implemented after 1 year of the SSN-HS program implementation

B. Other Studies

The analytical process of other studies is carried out as mentioned in the methods of this study. Each step has resulted some policy issues, options and implications to research and development. The results of final step which is a National Workshop in Bandung. The results of the workshop has been developed as a policy paper related to SSN-HS. The results are reflected into 3 sections as follows:

Policy issues:

1. Access to health facilities for families living below the poverty line
2. Health care insurance for families living below the poverty lines
3. Trans-sectoral target criteria
4. Decentralization and autonomy

Policy Options

1. Steps to maintain the demand and access to health services for families living both above and below the poverty line.

2. Creating an Identity Card for High Risk Families living below the poverty line to obtain free health services;
3. The need for standard criteria to determine poverty targets, which are valid on a national scale, but able to be adapted to specific local considerations;
4. An inter-sectoral agreement to formulate the criteria for targeting families living below the poverty line. Sectors to include are the Ministry of Health, The National Family Planning Board, the Central Bureau of Statistics and the Ministry of Social Affairs.
5. Policy on the implementation of SSN-HS in relation to the decentralization of health planning and implementation and regional autonomy.
6. Optimalization of health facility resources to improve access to health services for families living below the poverty line and to improve the quality of services including referrals;
7. Extending the types of SSN-HS services by including blood transfusions and other emergency services;
8. A policy on the utilisation of traditional drugs for families in poverty that have no access to health service facilities;
9. A policy on the sustainability and continuation of SSN-HS as a 'social security program' which is nationally valid and locally specific;
10. A policy and a new/special strategy to rehabilitate severe nutrition cases through the urban or rural social structure;
11. Changing the previously process-based audit supervision into an output-based audit supervision;
12. Improving the entrepreneurship of service providers to enable them to use policies in this field to improve creativity, innovation and leadership of the executing workers in the field.
13. A budgeting system capable of anticipating and adapting to decentralization and local autonomy policies;
14. Education and training of health workers to improve their accountability and the quality of health services provided through efficient team work;
15. A policy on the JPS-BK block-grant program management to empower social infrastructure and professional organisations in an appropriate manner.

R & D Requirements

1. Research on the health attitudes and patterns of utilization of services

among families living below the poverty line.
2. Empowering the community by implementing 'cross-subsidy' in the context of the Managed Health Care for SSN-HS.
3. Exploration of options for establishing criteria for the determination of targets, as seen from various biological, social, economic, and cultural aspects;
4. Research and development of a referral system appropriate to crisis and disaster conditions;
5. A cost analysis to produce rational interventions for combating problems encountered by high risk groups;
6. Entrepreneurship management study at Community Health Centers and Hospitals;
   - A study on output based and effective audit supervision mechanism;
   - A cost analysis study to develop a rational SSN-HS program;
   - Training needs assessment for health workers to improve their entrepreneurship;
   - Continued research and development on Managed Health Care to find a sustainable health protection model for families living in poverty should SSN-HS be terminated.

Limitations

1. Most studies are small scale studies or local specific studies
2. The sampling methods of the studies are mostly inappropriate. Most studies have their own sampling methods in which a comparative among those studies are quite unreasonable.
3. Some studies has only tried to describe the secondary data from the SSN-HS reports.
4. The analysis is not sharp enough for policy implications
5. The final report is written as a conventional report and it is not written as a policy paper

VII. COMMUNICATION AND DISSEMINATION OF THE RESEARCH RESULTS FOR PROGRAM IMPROVEMENT

A. Director General (DG) MEETINGS

The DG or Director General Meeting is carried out once in every week and it is chained by the Minister of Health or Secretary of Ministry of

Health. This forum is very important and effective field to communicate and to disseminate the results of a study. However, the time is limited, presentation of a study is usually given only 15 to 20 minutes. It is important to develop a policy paper of 2-3 pages and send it one week before the meeting with attention to be read and studied before the meeting. Most of the DCs usually provide some comments or suggestion to improve the possibility to be accepted as a policy or a change of a policy. The purpose is to disseminate the study results to the decision makers and to obtain a political commitment among the stakeholders for policy decisions.

B. Presentation to the Ministry of Health, Other Related Health Ministries, Donor Agencies, Professional Organizations, Senior Scientists and NGOs

After revising the results based on the inputs from all of the DGs, a presentation of the results of longitudinal study on SSN-HS is presented to the providers (participated by director and below director levels) from Ministry of Health, Health Related Ministries, Donor Agencies, Professional Organizations, Senior Scientists and NGOs. The objective of this presentation is to disseminate the study results to the implementers of SSN-HS and to get a political commitment among the implementers for substances and administration commitments.

C. Presentation to the President, Representative of Parliament Members and Coordinating Minister of Social Welfare.

Revision based on the discussion results and inputs of the meeting mentioned in no. VII. B., the research team of SSN-HS make another presentation to the President, Representative of Parliament Members, Coordinating Minister of Social Welfare and several Ministers under coordination of Coordinating Minister of Social Welfare. The objective is to provide general feed back to the highest decision makers and to obtain their highest commitment to the policy changes of SSN-HS.

D. Presentation to the Governor, District Administrator, and other related health provider at the Province and District levels.

This presentation has been carried out every round of data collection and analysis is done. The presentation is conducted by each university team with the assistance of NIHRD in each sample province. The purpose of

this presentation is to provide a feedback for program improvements and a local commitment to the improvement of SSN-HS.

E. Scientific Journal

All five universities, coordinator and advocacy team have written 15 articles and published in one of the famous scientific health and medical journal in Indonesia, the MEDIKA. The objective is to disseminate the scientifically results of the two round of data analysis of this longitudinal study to the scientists and others and to get feed back for study improvement from them.

F. News Paper

Some popular essays have been published to the national and local news papers by the researchers. The objective is to disseminate to the community and layperson about SSN-HS and to stimulate their awareness that the SSN-HS is only a rescue program in which the sustainability of this program needs community support and participation.

VIII. THE CONTRAINT AND SUPPORTING FACTORS TO THE USE OF RESEARCH IN IMPROVING THE SSN-HS PROGRAMS

1. **Weakness in planning of health research.** Most of research designs do not include planning for dissemination of research findings to stakeholders' concern and how to replicate the research results to other areas. Very often research is considered completed after submission its research report and after presenting the findings in a seminar or meeting. Recommendation resulted by this seminar or meeting will be only ended up as written documentation without any follow up. These problems are not only caused by improper research planning, but also due to limited budget availability.
2. **Research is only conducted in a limited area.** Due to limited budget, research is only sufficient to cover a limited area or population. Usually one of the recommendations of research findings is to replicate this research to other areas in order to be adopted and implemented as a policy change by the stakeholders. Another related problem is unclear suggestion of how and by whom the research should be replicated.

3. **Inadequate of communication and dissemination capacities.** The responsibility of researchers is not only to publish their research findings in journals but also to disseminate the findings to the general public. Researchers may face difficulties to communicate their findings due to lack of communication skills, particularly in writing or presenting effectively their research findings in the media. Moreover, given limited supports from their research institutions, the dissemination and replication efforts by their research institutions are not implemented properly.
4. **Unavailability/improper of suitable mechanism to disseminate research findings.** As mentioned before, common mechanism to disseminate research findings is to publish in a journal/newspaper or to present in a workshop. Suitable mechanisms to disseminate research findings, which lead to the implementation of positive finding, need to be considered.
5. **Pride of research institutions, NGO's or University may have an impact to the coordination of other research results conducted by other parties.** Operational research on Reproductive Health funded by many Research Institutions, NGOs or Universities may have their own priorities or interests on certain research subjects. In some instances may conduct the same or similar research at different area, without knowing each others. Lack of coordination in RH research planning may lead to the impact of the accommodation of research results.
6. **The health research results are inappropriate for use by stakeholders.** Mostly it is due to weaknesses in methodology of research or lack of appropriate conceptual framework.
7. **Lack of political commitment and support to expand positive finding to broader area.** Stakeholders as implementing parties at national, provincial and district levels may not fully involve in setting priority and planning of health research. Communication between researchers and stakeholders during research implementation is conducted superficially. This due to limited opportunity contact and limited budget available. In other condition, program managers are fully involved in planning of health research, but it still unclear that positive findings will be used for policy adjustment or for replication the health research recommendations since stakeholders may have their own considerations. Therefore, political commitment and support of stakeholders at national level, province and district levels to health research are compulsory.

IX. THE POLICY CHANGES RELATED TO THE RESEARCH FINDINGS

No.	Recommendation of Study	Policy Changes
A.	**Longitudinal Study of SSN-HS**	
1.	The SSN-HS should be continued for the second year as a rescue program with an effort of sustainability of the SSN-HS programs after the crisis.	It has been continued however an effort for sustainability is still uncertain
2.	Validation and verification of poor family's criteria should be carried out at least in every 6 months.	Validation and verification activities is carried out every three months, however the quality is questionable
3.	A study to improve the validity and reliability of poor family's criteria should be carried out in line with validation and verification efforts.	-
4.	Socialization of SSN-HS to the health as well as health related providers and the community should be implemented immediately in order to avoid dependency to the SSN-HS programs.	Socialization only for health and health related providers.
5.	A complain mechanism related to the implementation of SSN-HS needs to be developed and available in the second year of SSN-HS programs.	There is a policy to develop complain center in each village
6.	Specific intervention should be given to the under fives and pregnant mothers who have suffered from the severe	Additional intervention: 1. Supplementary food "plus" 2. Special care for severe mal nutrition patients

No.	Recommendation of Study	Policy Changes
	malnutrition	
7.	Specific intervention should be given to overcome the high risk groups of under fives and pregnant mothers (with a certain disease, illiterate family and others). Integration to the other SSN programs should be realized.	Additional intervention: 1. Surveillance of CDC 2. CDC programs as need by each district
8.	Reward system (incentive and disincentive) should be developed in order to improve the working performance of the health and health related providers.	-
9.	Community based activities such as Village Integrated Health Post and others should be empowered and revitalized	Revitalization of Integrated Village Health Post
10.	Guidance for administrative and technical implementation of SSN-HS programs should be more appropriate, simple and operationalize.	Improvement of guidance (qualitative and quantitative)
11.	Budget of SSN-HS for referral system should be given as a block grant system and mechanism	-
12.	Monitoring, supervision and longitudinal study should be continuously carried out.	Specific check list for budget dropping and program implementation
B.	**Other Studies**	
13.	Steps to maintain the demand and access to health services for families living both above and below the poverty line.	-
14.	Creating an Identity Card for	-

No.	Recommendation of Study	Policy Changes
	High Risk Families living below the poverty line to obtain free health services;	
15.	The need for standard criteria to determine poverty targets, which are valid on a national scale, but able to be adapted to specific local considerations;	Community participation and decision for poor family is increased
16.	An inter-sectoral agreement to formulate the criteria for targeting families living below the poverty line. Sectors to include are the Ministry of Health, The National Family Planning Board, the Central Bureau of Statistics and the Ministry of Social Affairs.	-
17.	Policy on the implementation of Managed Health Care SSN-HS in relation to the decentralization of health planning and implementation and regional autonomy.	Premium for poor families is paid by Government with intentive health education -
18.	Optimalization of health facility resources to improve access to health services for families living below the poverty line and to improve the quality of services including referrals;	-
19.	Extending the types of SSN-HS services by including blood transfusions and other emergency services;	-
20.	A policy on the utilisation of traditional drugs for families in poverty that have no access to	

No.	Recommendation of Study	Policy Changes
	health service facilities;	It is still considered seriously
21.	A policy on the sustainability and continuation of SSN-HS as a 'social security program' which is nationally valid and locally specific;	As mentioned before
22.	A policy and a new/special strategy to rehabilitate severe nutrition cases through the urban or rural social structure;	-
23.	Changing the previously process-based audit supervision into an output-based audit supervision;	-
24.	Improving the entrepreneurship of service providers to enable them to use policies in this field to improve creativity, innovation and leadership of the executing workers in the field.	-
25.	A budgeting system capable of anticipating and adapting to decentralization and local autonomy policies;	Intensive health education
26.	Education and training of health workers to improve their accountability and the quality of health services provided through efficient team work;	As mentioned before
27.	A policy on the SSN-HS block-grant program management to empower social infrastructure and professional organisations in an appropriate manner.	
	R & D Requirements	-
28.	Research on the health attitudes	

No.	Recommendation of Study	Policy Changes
29.	and patterns of utilization of services among families living below the poverty line. Empowering the community by implementing 'cross-subsidy' in the context of the Managed Health Care SSN-HS.	-

X. RECOMMENDATIONS FOR DEVELOPING RESEARCH INTO POLICY

Some recommendations for developing research into policy are as follows:

1. Political commitment of stakeholders all levels.

   Political commitment of policy maker at national, province and district levels should be developed particularly for setting priority, developing health research agenda and planning research activity. A national, province and district committee/communication forum or other partnership forms on health research may play important roles in strengthening the above political commitment.

2. Health research networking need to be established.

   Health research net working is necessary to be established to coordinate health research activities based on research agenda. A committed and powerful health research institute may coordinate health research with other institution, NGO's agencies and universities as the members.

3. Strengthening existing communication forum

   Existing communication forum may be adapted as health research forum for communicating and disseminating research results. This forum may be utilized as monitoring mechanism of health research implementation and utilization of the results. An agenda of forum activity need to be developed and to be supported by donor agencies.

4. Reform the strategy in research planning in which dissemination and utilization of research results is included in implicit ways.

   In health research planning strategy, communication, dissemination, utilization and replications of research results need to be included.

These activities should be clearly stated in research design and budget description. For this purpose, stakeholders and funding agencies support is required.

5. Training of researcher in communication, dissemination and transformation of research results to policy options.

It is important that research findings should be peer reviewed, published and distributed as quickly as is practicable. The information should be directed to stakeholders for policy decision, to scientists for additional scientific knowledge and to the general public who are likely to be affected by health research results. Efforts to improve communication skills of researchers are necessary to be conducted. Scientific writing, policy paper writing, media writing style, discussion in public TV workshop need to be conducted periodically. International health research agencies and other donor agency supports are needed.

REFERENCES

Ahmed, I. 1999. "Literature Review Indonesia's Crisis and Recovery: The Myths and Reality." International Labor Organization, Jakarta .

Ahmed, I. 1999 "Additional Insight on Indonesia's Unemployment Crisis" from papers presented at the Mini Workshop on Food and Nutrition on May 10-12, 1999, International Labor Organization, Jakarta.

Ananta, A. 1998. Indonesia after Soeharto: An Economic and Demographic Perspective. Center for International Studies on Population and Development, Jakarta, Indonesia.

Anas, S. 1999. "Crisis Impact and Health Policy in the Coping Efforts in the Medan Municipality, North Sumatra Province."

Andyansyah, A and Yoshiko Sato and Yasuhide Nakamura et al. 1998 Impact of the Economic Crisis to the Nutritional Status of Children under five in Central Java, Indonesia. JICA and NIHRD, Jakarta.

Basri, F. 1999 Implications of the Economic Crisis for Economic Cooperation in the Asia Pacific Region" in Economic Crisis in the Middle of the Globalization Wave. CSIS Analysis 28/1, Jakarta

Beegle, K, Frankenberg, E, Thomas, D, Suriastini, W, Beard, V, 1999. "Indonesia's Economic Crisis and its Effects on Health and Family Planning." Paper prepared for the 1999 Population Association of America Meetin, March 25-27, 1999, New York

Bernstein, R.S., 1998. Activating Integrated Surveillance Activities During the Crisis: Collecting, Analyzing and Using Data for Decision Making. Papers of a 2-day meeting on Health Sector Reform to Minimize the Impact of the Economic Crisis, Bandung.

Bloem, M, et al. 1999. "Urban Slums Worse off from Crisis than Rural Areas." Helen Keller International in Collaboration with the Center for Health Research and Development, Jakarta.

Bourgeois, R. 1999. "Impact of the crisis on Javanese Irrigated Rice Farmers." Papers of the Center for Agro-Socioeconomic Research (CASER) International Seminar on Agricultural Sector during the Turbulence of Economic Crisis: Lessons and Future Directions. Bogor

Bremen, J.C., 1999. "Monetary Crisis in Rural Java: The exclusion of the Poor from the Social Safety Net Program". Paper presented at a seminar at Indonesian Institute of Sciences. Jakarta.

Budiharto M. October 1998. "The Impact of Economic Crisis upon Drug Services at Several Cities in Indonesia." World Bank Jakarta.

Center for Health Information and Crisis Management and USAID Policy Project. 1999. "Study Findings on Malnutrition Cases in 4 Provinces of Indonesia." Jakarta

Central Bureau of Statistics of West Nusa Tenggara. 1997. "West Nusa Tenggara in Figures of 1996." Mataram.

Central Bureau of Statistics of West Nusa Tenggara. 1998. "West Nusa Tenggara in Figures of 1997." Mataram.

Central Bureau of Statistics of West Nusa Tenggara. 1999. "West Nusa Tenggara in Figures of 1998." Mataram.

Central Bureau of Statistics, 1996. "Indicator of People's Welfare 1995." Jakarta

Central Bureau of Statistics, 1997. "A Short Review" Development of People's Welfare in Indicator of People's Welfare 1997."
Central Bureau of Statistics, 1998. "Indicator of People's Welfare 1997." Jakarta
Central Bureau of Statistics, 1998. "The Development Level of Public Welfare: A Brief Review" in Report on the Crisis Impact: A Survey at the Subdistrict Level throughout Indonesia.
Central Bureau of Statistics, 1999. "Indicator of People's Welfare 1998." Jakarta
Central Bureau of Statistics. 1999. Quality of Human Resources and Social Changes at the Village Level (100 Village Survey), Series SSD No. 1-3, Jakarta
Central Bureau of Statistics. August 1999. "Brief Bulletin CBS."
Central Bureau of Statistics. "Development of the People's Welfare". Reports of Survey on the Impact of Crisis at Sub-districts in Indonesia 1998.
Dachlan, D and Thaha, A.R 1999. "A Study on the Validity of Determining Poor Families in the Implementation of the Social Safety Net Program in South Sulawesi." University of Hasanuddin, Center for Research on Food and Nutrition, Makassar.
Daimon, T. 1999. "Mitigating the Social Impact of the Indonesia Crisis; Lessons from Implementing the Presidential Decree for Underdeveloped Villages."
Daimon, T. 1999. "Mitigating the Social Impact of Indonesia Crisis: Lesson from IDT (Undeveloped Village) Experience (Mitigating the Social Impact of Indonesian Crisis: An Explanation and Description of IDT Program Experience)."
Dasukki, D, 1999. "Longitudinal Surveillance in Safe Motherhood." University of Gadjah Mada, Yogyakarta
Department of Health, Office of Yogyakarta Province, 1999. "A Report on the Impact of Crisis on Health." Yogyakarta
Department of Health, Office of Bantul District, 1999. "A Report on the Impact of Crisis on Health." Bantul
Department of Health, Office of Kulon Progo District, 1999. "A Report on the Impact of Crisis on Health.", Wates
Department of Health, Office of Gunungkidul District, 1999. "A Report on the Impact of Crisis on Health." Wonosari
Department of Health, Office of Sleman District, 1999. "A Report on the Impact of Crisis on Health." Sleman
Department of Health, DKI Jakarta Provincial Bureau. 1996. "DKI Jakarta Health Profile.", Jakarta
Department of Health, DKI Jakarta Provincial Bureau. 1997. "DKI Jakarta Health Profile.", Jakarta
Department of Health, DKI Jakarta Provincial Bureau. 1998. "DKI Jakarta Health Profile." Jakarta
Department of Health, Jakarta. 1999. "The Impact of Crisis upon Health." Jakarta
Department of Health, Office of Deli Serdang District, 1999. "Evaluation on the Crisis Impact for Health Policy Formulation in the Level II Region of the Deli Serdang Regency." Lubuk Pakam.
Department of Health, Office of Langkat District. 1999. The Crisis Impact upon the Health Sector in the Level II Region of the Langkat Regency." Langkat
"DKI Jakarta Health Profile 1996, 1997 and 1998."
Department of Health, Office of West Nusa Tenggara Province. 1999. "1998/1999

Evaluation Report on CDC Program." Mataram
Department of Health, Office of West Nusa Tenggara Province. 1999. "Recapitulation of F/III/Nutrition and F/SKDN Reports." Mataram.
Department of Health, Office of West Nusa Tenggara Province. 1999. "Review on the Impact of Economic Crisis on Health." Mataram
Djohan, E, et al, 1998. "Health Sector Social Safety Net: Health Crisis Management Policy in West and Central Java." Policy Paper No. 24. Indonesian Institute of Sciences. Jakarta
Djunaidi M, et al, 1999. "Study on Poor Family Determination Appropriateness in SPSBK Program Implementation in the Province of South Sulawesi." University of Hasanuddin, Center for Nutrition and Food Studies, Research Center. Makassar.
DKI Jakarta Central Bureau of Statistics. 1997. "DKI Jakarta Community Welfare Indicator." Jakarta
DKI Jakarta Central Bureau of Statistics. 1998. "DKI Jakarta Community Welfare Indicator." Jakarta
Eniarti, D. et al. 1998. "The Social Safety Net: Health Management Policy during the Crisis Period in West and Central Java." Policy Paper No.24, Indonesian Institute of Sciences. Jakarta
Environment Bureau Supervisory Secretariat for West Nusa Tenggara Province. 1996. "The Balance Sheet of Regional Environment Quality in 1996, the Province/District Level I West Nusa Tenggara, Book III p. 18. Mataram
Environment Bureau Supervisory Secretariat for West Nusa Tenggara Province. 1998. "The Balance Sheet of Regional Environment Quality in 1998, the Province/District Level I West Nusa Tenggara, Book III p. 19. Mataram
Erison. 1999. "Hubungan Pembinaan dengan Tingkat Penampilan Kerja Bidan Desa pada Wilayah Kerja Dinas Kesehatan Kabupaten Lima Puluh Kota Propinsi Sumatra Barat." Thesis, University of North Sumatra, Public Health Faculty. Medan.
Erwidodo, Handewi P. Saliem, and Mewa Ariani and Ening Ariningsih. 1999. Study on the Diversification of Main Food Groups in Indonesia.. Department of Agriculture, Center for Agro-socioeconomic Research, Agency for Agricultural Research and Development. Bogor.
Frankenberg, E. et al. "Health, Family Planning and Well Being in Indonesia During an Economic Crisis." Paper prepared for the Policy Project and is intended to provide early evidence on key changes in the health and family planning sector in Indonesia between late 1997 and late 1998. Jakarta
Frankenberg, E. et al. 1998 Health, Family Planning and Well-being in Indonesia during an Economic Crisis. Final Report by RAND to the Policy Project, The Futures Group International, Jakarta
Frankenberg, E. et al. March 1999. "The Real Cost of Indonesia's Economic Crisis." Preliminary Findings from the Indonesian Family Life Survey. Prepared from data by the National Institute of Aging, the National Institute of Child Health and Human Development. Jakarta
Frankenberg, E., Beegle, K, Thomas, D, Suriastini, W. March 1999. "The Real Cost of Indonesia's Economic Crisis: Preliminary Findings from the Indonesia Family Life Survey." Prepared for the 1999 Population Association of America Meetings March 25-27. New York.

Gani, A. 1998. "Effects of the Economic Crisis on Health" from papers presented at the 4th Asia Pacific Social Science and Medicine Conference, 7 – 11 December 1998. Yogyakarta, Indonesia.

Gani, A. 1998 "Proposed Health Sector Adjustment to Protect the Health Status of the Poor and Vulnerable" from papers presented at the workshop Health Sector Reform to Minimize the Impact of the Economic Crisis. Jakarta

Gani, A. 1999. "Structural Changes which are Needed as a Result of the Global Budget Policy on for Funding Hospitals." from one-day seminar Implementation Models for a Hospital Service Delivery Program for Poor People. Jakarta.

Hadju, V, Rasak Thaha, Djunaini M. Dahlan and Ramli, 1999. "The Nutritional Status of Children under the age of five in Poor Families of South Sulawesi." University of Hasanuddin, Food and Nutrition Research Center. Ujung Pandang

Hadju, V. et al. 1999. "The Status of Children Below-Five-Year Old Among Poor Families in the Province of South Sulawesi. University of Hasanuddin, Center of Food Nutrition Study. Ujung Pandang.

Hardjanto, T. 1999. "The Crisis Impact on Kecamatan Level in the Province of West Nusa Tenggara." Central Bureau of Statistics

Hartanto, F. et al. 1999. "Rasionalisasi Penggunaan Obat dan Penelahaan Ketidakcukupan Peresepan Alat Kontrasepsi Pada Masa Krisis di Nusa Tenggara Barat." Workshop Dampak Krisis terhadap Kesehatan. Mataram 9-12 August, 1999.

Health Crisis Information and Control Center of the Aceh Special Region Province. 1999. "Health Data Details of the Aceh Special Region." Banda Aceh

Helen Keller International, 1999 "The Importance of Accurate Anthropometric Assessment and Defining the Lost Generation" Indonesia Crisis Bulletin (Year One, Issue Five). Jakarta

Helen Keller International, 1999 "Role of High Dose Vitamin A Capsules in Preventing a Relapse of Vitamin A Deficiency Due to Indonesia's Current Crisis" Indonesia Crisis Bulletin (Year One, Issue Six). Jakarta

Helen Keller International, 1998 "Alarming Rise of Iron Deficiency Anemia may Herald 'Lost Generation'." Indonesia Crisis Bulletin (Year One, Issue Three). Jakarta

Helen Keller International, , 1998 "Have Thirty Years of Nutritional Improvement in Southeast Asia Disappeared in One Year of Crisis" Indonesia Crisis Bulletin (Year One, Issue Four). Jakarta.

Helen Keller International. 1998 Nutritional Surveillance in Indonesia: The Impact of the Safety Net Program on Nutrition and Health among Women and Children. Jakarta.

Hidayat, A. 1999. "Hubungan Kemampuan Manajerial Kepala Seksi dengan Tingkat Kepuasan Staf Seksi pada Dinas Kesehatan Propinsi Dati I Sumatra Utara." Thesis, University of North Sumatra, Public Health Faculty. Medan

Hidayat, S, 1999. "Social Safety Net Program". Paper Presented on National Nutritional Day. Jakarta

Husaini, M., et al. 1998. "Inputs for National Nutrition Program Restructuring." Paper at a Workshop on "Health Sector Reform to Minimize the Impact of Economic Crisis, 14-15 July 1998. Bandung

Ibrahim, H. et al. 1999. "Dampak Krisis Ekonomi terhadap Obat dan Alat Kesehatan." 19-24 August 1999. Medan

Iftikhar, A. 1999. Literary Review of Indonesia's Crisis and Recovery: The Myths' and

Reality." International Labor Organization Office, Jakarta.

Irawan, et al. 1999. "Impact of the Economic Crisis on the Number of People." A Paper Presented on the Seminar on Agricultural Sector During the Turbulence of Economic Crisis: Lessons and Future Directions. Agricultural Social Economic Research and Development Center, Bogor.

Irwanto. 1998. "Prediction of Monetary Crisis Influence and Draught upon Children and Teenagers Who Need Special Protection in Mental Physical Apprehension." In Total Concern: The Impact of Monetary Crisis and El Nino upon Families, Mother and Child in Indonesia. p.p. 99-124.

Iskandar, M. 1998. "The Impact of Monetary Crisis and Draught on Women's Health and Nutrition from Mental and Physical Apprehension." In Total Concern: The Impact of Monetary Crisis and El Nino upon Families, Mother and Child in Indonesia p.p. 149-166.

Ismail, D, 1999. "Longitudinal Surveillance in Child Survival." University of Gadjah Mada. Yogyakarta

Jahari, A. et al. 1999. "The Hidden Problem: The Nutritional Status of Underfives in Indonesia during the Period of 1989 to 1998 (Based on Susenas)." 7th Food and Nutrition Workshop, Jakarta 10-12 May 1999. Agency for Health Research and Development.

Joedyaningsih et al. (Regional Office of South Sumatra). 1999. "The Impact of Monetary Crisis on Malnutrition Status in South Sumatra Province."

Kosen, S, and Bloem, MW. 1999. "Crisis Surveillance Nutrition, Health, Economic Changes and Input for Policies." Presentation given by Litbangkes and HKI on Nutritional Surveillance in Central Java

Kuntoro, H, et al. 1998. "A Study on Poor Criteria through an Analysis of Women and Discrimination". University of Airlangga, Population and Development Research Center. Surabaya

Kuntoro, H. et al. 1996 "Poor Families within the Social Safety Net Program." University of Airlangga Research Center. Surabaya

Kuntoro, H. et al. 1998. "Study on Impoverished Criteria by Analysis on Cluster and Discriminant." University of Airlangga Research Foundation, Population and Development Research Center. Surabaya

Kusnanto, H. 1998. "Social Safety Net in National Perspective: In Proceeding Safety net, Development, Concept and its Application." University of Gadjah Mada, Faculty of Public Health. Surabaya

Kusnanto, H. 1998. "Target-Accurate Poor Families in the JPS-BK: Survey in Central and East Java Southern Region as well as the D.I. Yogyakarta." Yogyakarta

Kusnanto, H. 1998. "Accurate Targeting of Poor Families within the Social Safety Net: Survey in Central and Southeast Java and Yogyakarta." Faculty of Public Health, University of Gadjah Mada. Yogyakarta

Mewa, A. et al. 1998. "Product Diversity, Product Distribution, and Relative Price" Department of Agriculture, Center for Agro-socioeconomic Research Agency for Agricultural Research and Development. Bogor.

Ministry of Health, Directorate of Community/Public Nutrition. 1988. "Analisa Survey Konsumsi Gizi. Jakarta.

Ministry of Health, Directorate of Community/Public Nutrition. 1998. "Laporan Pemantauan Kasus Gizi Buruk." Jakarta.

Ministry of Health, Directorate of Community/Public Nutrition. 1999. "Laporan Analisis Pemantauan Status Gizi di Propinsi Jawa Barat dan Jawa Tengah." Jakarta.

Ministry of Health, Directorate of Nutritionn. 1998. "An Analysis of Below-Five-Year Old Children Nutrition Status in the Provinces of West and Central Java." 1998 Implementation Report PSG (Nutritional Status Monitoring)

Ministry of Health, Food and Drug Administration. 1998-1999. "The Relationship between use of LPLPO (Report Use vs. Request Sheet) with Stock Sufficiency and Rational Drug Use at the Community Health Center." Jakarta

Ministry of Health, PPM and PLP section. 1998 "A Surveillance System to Support the Health Crisis" in papers from the National Meeting on Dealing with the Health Crisis through Consolidation of Monitoring and Implementation. Jakarta

Ministry of Health, Secretary General, 1999. "Report on the Implementation of Health Sector Social Safety Net in 1998/1999." Jakarta

Munandar, S. 1998. "Long Term Impact of Draught in Childcare in Development of Human Resources from Mental and Physical Apprehension." In Total Concern: The Impact of Monetary Crisis and El Nino upon Families, Mother and Child in Indonesia p.p. 125-132.

National Development Planning Board, 1998. Materials from the Meeting on Implementing the Social Safety Net Program. Jakarta

National Development Planning Board. 1998. "Guidelines for Implementing the District Development Program." Jakarta

National Development Planning Bureau, 1998. "Implementation Guideline of Sub-district Program Development Assistance (PPK) Fiscal year 1998-1999." Jakarta

National Family Planning Board, Bureau of Program Evaluation and Analysis, May 18, 1999. Monitoring Report Analysis of the Impact of the Crisis on implement the National Family Planning Program, Jakarta.

NFPCB, Regional Office Jakarta. 1999. "The Impact of Crisis on National Family Planning Program in Jakarta." Paper presented at Data Collection and on Site Workshop: Lessons Learned from Impact Crisis on Health. 5 – 8 September 1999. Jakarta

Nikujuluw, V. et al. 1999. "The Impact of Economic Crisis on Production and Export of fishery Sub-sector." In an International Seminar on Agricultural Sector During the Turbulence of Economic Crisis: Lessons and Future Directions." Ministry of Agriculture, Center for Agro-socioeconomic Research Agency for Agricultural Research and Development. Bogor.

Papilaya, A. July 14-15, 1998. "Proposed Interventions for Hospitals During the Crisis" from papers presented at the workshop Health Sector Reform to Minimize the Impact of the Economic Crisis. Jakarta

Poerwani, S.K, et al. April 1998. "The Effect of the Monetary Crisis on the Effort of Health Services at Hospitals and Community Health Centers in East Java." Center for Research and Development, Health Services Division. Surabaya

Poerwanto S., et al. 1999. "Economic Crisis and JPSBK: Policy Implication." Jakarta

Poppele, J, et al., 1999. Social Impacts of the Indonesian Crisis: New Data and Policy Implications. SMERU Draft Report. Jakarta

Puguh, I. 1999. "The Impact of the Crisis on Poverty and its Implication for Development Strategies." Presented at the Mini Workshop on Food and Nutrition on May 10-12, 1999, sponsored by International Labor Organization. Jakarta

Raharjo, et al. 1998. "Social Safety Net from the National Perspective in the Safety Net

Proceedings, Its Development, Concept and Application." Indonesian Institute of Sciences. Jakarta

Raharso, A. May 1999. "Family Strategies to Face the Crisis: Findings from the Field" Seminar Paper on Public's Empowerment and Social Safety Net in Jakarta, 17 May 1999. Indonesian Social Science Institute, Population and Labor Research and Development Center, Jakarta.

Ravallion, M and Quentin Wodon, 1998 "Evaluating a Targeted Social Program When Placement is Decentralized" Input Paper to The World Bank. Washington DC

Regional Office of Department of Health, Central Java Province. 1999. "The Impact of Economic Crisis on Health." Semarang

Regional Office of Department of Health, DKI Jakarta Province. "Report on JPS-BK in DKI Jakarta." Jakarta

Regional Office of Department of Health, DKI Province. 1999. "The Impact of Economic Crisis on Health." Jakarta

Regional Office of Department of Health, East Java Province. 1999. "The Impact of Economic Crisis on Health." Surabaya

Regional Office of Department of Health, East Kalimantan Province. 1999. "A Report on the Impact of Crisis on Health." Samarinda

Regional Office of Department of Health, Jambi Province. 1999. "Report on the Monetary Crisis Impact upon Health in the Jambi Province." Jambi

Regional Office of Department of Health, Lampung Province. 1999. "The Impact of Economic Crisis on Health." Bandar Lampung

Regional Office of Department of Health, North Sumatra Province. 1999. "Regional Meeting on Evaluation of the Crisis Impact for Health Policy Formulation." Medan

Regional Office of Department of Health, South Kalimantan Province. 1999. "A Report on the Impact of Crisis on Health." Banjarmasin

Regional Office of Department of Health, West Java Province. 1999. "Monetary Crisis Impact upon Health in East Java Province, Surabaya.

Regional Office of Department of Health, West Kalimantan Province. 1999. "Report on the Impact of Crisis on Health in the Province of West Kalimantan." Pontianal

Regional Office of Department of Health, West Nusa Tenggara Province. "Review Presentation on the Impact of Economic Crisis on Health in the Province of West Nusa Tenggara." Workshop on the Crisis Impact in Mataram on 9-12 August 1999. Mataram

Regional Office of Department of Health, West Sumatra Province. 1999. "Coping with the Economic Crisis Impact upon Health Status (Lack of Protein Energy, Marasmus/Kwashiorkor) in the West Sumatra Province. Padang

Regional Office of Department of Health, Yogyakarta Province. 1999. "Report on the Impact of Crisis on Health of Each Kabupaten and City in the Province of D.I. Yogyakarta." Yogyakarta

Rehears Aswatini, 1999. "Family Strategy in Dealing with Crisis: Fact Finding." Workshop on Social and Social Safety Net, 17 May 1999. Jakarta

Rusman, R. et al. 1998 "SKPG (Early Warning System for Food & Nutrition) to Overcome the Impact of Crisis in West Jakarta City." Jakarta

Rusman, R. et al. 1998. "Health and Nutrition Status on Food." In Total Concern: The Impact of Monetary Crisis and El Nino upon Community, Family, Mother and Children in Indonesia and Optional Intervention, ed. Jakarta

Sajogyo, et al (eds). 1998. "Economic Crisis Ad People's Economy at Nusa Tenggara Area." Aditya Mdia, Yogyakarta.

Sandjaja, et al. 1998. Laporan Akhir Studi Hubungan Status Gizi dengan Pola Konsumsi Makanan Keluarga, Karakteristik Keluarga dan Daerah. Analisi Data Susenas. Jakarta.

Santoso, B. et al. August 1999. "Dampak Krisis Ekonomi terhadap Obat dan Alat Kesehatan." Position Paper. Yogyakarta.

Scientific Magazine, Medical School, USAKTI, Vol. 17 Special Edition, 1998.

Seda, F. 1998. "Macro Economic Crisis and the Fate of Small Business." In Sajogyo and Mubyarto (eds) Economic Crisis Ad People's Economy at Nusa Tenggara Area." Jakarta

Sevenhuysen, G. 1999. "East Java Survey of Poor Families." National Planning Board, JPS Team, Jakarta

Sibarani, Nana. June 12, 1999. "The Impact of the Economic Crisis on the Nutritional Status of Children under the Age of Five." Professorship Inauguration Oration at the Faculty of Agriculture, Bogor Agricultural Institute, Bogor

Simatupang, P. 1999 Toward Sustainable Food Security, The Need for a New Paradigm. Department of Agriculture, Center for Agro-socioeconomic Research, Agency for Agricultural Research and Development, Bogor.

Singgih, D, 1999. Crisis, Mass Riots and the Social System Balance in Indonesia. Jakarta

Siregar, A. 1999. "Information Study on Health Service at the Level II Regional of Simalungun, Period of October 1998 – June 1999." Head of Health Service of the Level II Region of Simalungun. Simalungun

Siregar, N. 1999. "Monetary and Economic Impact upon the Consumer Buying Power in the Medan Municipality." Medan

Siswanto, A. April 15, 1998 "Impact of the Economic Recession on the Death Rate and Increased Life Expectancy Rate of Indonesia." Paper presented at the seminar for the Union of Demographic Experts. Jakarta

Sjahrir. 1999. In and Out of Crisis. Erlangga Offset. Jakarta.

Soelaiman, et al. "A Case Study of the Impact of Crisis upon Susceptible Society in Rural and Urban Areas." Indonesian Institute of Sciences, 1998-1999. Jakarta

Soelaiman, H. 1999. "Mapping Profile of Street Children and their Parents in Several Municipalities" p. 63 in Results from a Study on Street Children. Jakarta

Soendoro, T. 1999. "Indonesia and the Monetary Crisis: Strategic Action for Minimizing the Health Impact." National Development Planning Board. Jakarta

Soesilawati, et al. 1999. "Challenges to Target Mapping in Health Sector Social Safety Net in Indonesia and Alternative Solution." National Institute of Health Research and Development and 5 Universities. Yogyakarta

Sondakh, L. 1998. "National Monetary Crisis and Local solution (I)." In Sajogyo and Mubyarto (eds) Economic Crisis Ad People's Economy at Nusa Tenggara Area." Jakarta

Sudiro. 1999. "Community Health Center Service under the Social Safety Net Program." University of Diponegoro, Faculty of Public Health, Center for Health Development and Instruction. Semarang

Sudiro. 1999. "Poor Families within the Social Safety Net Program." University of Diponegoro, Faculty of Public Health, Center for Health Development and Instruction.Semarang

Sumarno, I. and Mewa Ariani. 1999. "The Impact of the Economic Crisis on Food Consumption." from papers of the 7th Food and Nutrition Workshop, May 10 to 12, 1999

ed. Agency for Health Research and Development, Jakarta

Sumarto, S, et al. 1998. "The Social Impact of the Crisis in Indonesia: Results from a Nationwide Kecamatan Survey." Preliminary Draft. Jakarta

Surjadi, C. et al. 1999. "Study on the Impact of Economic Crisis on the Health of the Urban Slum Population in DKI Jakarta." Jakarta

Surjadi, C. et al. 1999. "The Impact of the Economic Crisis on the Urban Slums Population in Jakarta." University of Atma Jaya, Center for Health Research, Jakarta.

Sutoto, et al. 1999. "Problem in JPSBK Service Management in Banyumas General Hospital." Banyumas General Hospital. Banyumas

Suwandono, A. et al. 1999 "Longitudinal Research on the Social Safety Net Program in Central Java, Jogyakarta, East Java, South Sulawesi and West Nusa Tenggara: Summary of the Preliminary Results and Target Group." Jakarta

Syarief, H. 15 Febuary 1999. "JPS Program" Paper Presented on the National Nutrition Day. Jakarta

Tambunan, T. 1998. "The Economic Crisis and Future of Reform." Ed: Faculty of Economics Publishing Foundation, University of Indonesia, Jakarta, Indonesia.

Tangendjaja, B and Tjeppy Soedjana 1999 "The Impact of the Economic Crisis on the Poultry Industry as a sub-sector of Indonesian Livestock: Challenges and Opportunities". Papers of the Center for Agro-Socioeconomic Research (CASER) International Seminar on Agricultural Sector during the Turbulence of Economic Crisis: Lessons and Future Directions. Bogor

Thaha, A. et al. 1999. "Experiences of a Community Health Center Doctor in Implementing the Social Safety Net Program: Case Studies from the Daya and Bajeng Community Health Center in South Sulawesi" from abstracts of study results on the Impact of the Crisis on Health. Jakarta

Thaha, R. et al. 1999. "Abstract of Study Result on the Crisis Impact upon JPS-BK Group Health: Physician Experience in the Program Implementation." Jakarta

Thomas, D. et al. 1999. "Household Budgets and Composition and the Crisis in Indonesia: Evidence from Longitudinal Household Survey Data." Prepared for the 1999 Population Association of American Meetings, March 25-27, 1999. New York

Tjondronegoro, S and Haryanto, R. 1999. "Proceedings from the seminar on Presenting Policy and Feedback on the Social Safety Net Program from Different Indonesian Sociology Association branches." Presented on ISI National Congress. Jakarta

United Nations Development Plan – National Bureau of Statistics. 1998. "Crisis, Poverty, and Human Development in Indonesia." Jakarta

United Nations Support Facility for Indonesian Recovery, 1999. "The Social Implications of the Indonesian Economic Crisis: Perception and Policy." Jakartaa

University of Airlangga Research Foundation, Research Team. 1999. "Abstract of Longitudinal Study Result on the JPS-BK Implementation." Surabaya.

University of Airlangga, Researcher Team. 1999. "Summary of Research Findings on Longitudinal Study of JPSBK Implementation, Province of East Java.", Surabaya

University of Indonesia, Center for Research and Development and the Laboratory for Social Development, Faculty of Science and Politics. 1999. "Pilot Project Penanganan Social Problems in Street Children Who Still Have Ties with their Families" p.p. 28-38. Results from a Study on Street Children.

University of Indonesia, Faculty of Social Science and Politics. 1999. "The Experiment in

Handling the Social Problems of Street Children Who Still Have the Families: A Research on Street Children" p.p. 28-38.

University of Mataram, Language and Cultural Study Center. 1999. "Longitudinal Study, Evaluation of JPKS-BK Program Implementation in West Nusa Tenggara." Mataram

UNSFIR. 16 April 1999. "The Social Implications of the Indonesian Economic Crisis: Perception & Policy." Jakarta

Uphoff, N. 1999 "Rural Development Strategy for Indonesian Recovery: Reconciling Contradictions and Tensions." Papers of the Center for Agro-Socioeconomic Research (CASER) International Seminar on Agricultural Sector during the Turbulence of Economic Crisis: Lessons and Future Directions. Bogor

Utomo, B. 1998. "Impact of the Monetary Crisis and Drought on the Health and Nutritional Status of Children." pp 133-148 In Total Concern: Impact of the Monetary Crisis and El Nino upon Families, Mothers and Children in Indonesia, ed. Jakarta

Warr, P. 1999. "Indonesia's Crisis and the Agricultural Sector" International Seminar on Agricultural Sector During the Turbulence of Economic Crisis: Lessons and Future Directions. Center for Social Economic and Agricultural Research, Bogor.

Wasisto, B. 1998. "The Impact of Economic Crisis on Health." Paper presented at the Policy Workshop on Health Sector Reform to Minimize Impact of the Economic Crisis in Jakarta, 14-15 July 1998. Ministry of Health, Health and Research Development. Jakarta

Wasisto, B. , 1998 "The Influence of the Economic Crisis on Health" from papers presented at the Policy Workshop Health Sector Reform to Minimize the Impact of the Economic Crisis. Jakarta

Wilopo, S. 15 April 1998. "Impact of Economic Recession in Reduced Mortality and Improved Life Expectancy in Indonesia." Paper at One Day Seminar of Demography Fans and Experts in Indonesia. Jakarta.

Wiyoto, S, 1998. "LPKM in Purworejo and Belu." In cooperation with Ministry of Health and University of Gadjah Mada. University of Gadjah Mada. Yogyakarta

Yusniwarti, et al. 1999. "Studi Demografis terhadap Penduduk yang Bermukim di Sekitar Wilayah Ekosistem Leuser Propinsi Sumatra Utara." University of North Sumatra, Public Health Study and Information Network Center. Medan

Zainuddin, W. 1999. "Implementation of Health Sector Social Safety Net in Puskesmas Sangkapura, Bawean, Gresik, East Java." Surabaya.

APPENDICES