

OFFICE OF POPULATION AND HEALTH

USAID/INDONESIA

STRATEGIC PLAN

1987

## INTRODUCTION

A brief description of the organization of this document is necessary to direct readers to material which may be of more or less interest depending on the level of detail the reader desires on the technical information used in developing the strategy itself. The most important part of the document is the first chapter, which presents the details of the USAID/Indonesia population and health sector strategy for the years 1989 to 1993. The chapter includes the rationale for the focus of the strategy, the strategy's goals and objectives, the planning assumptions used, and a delineation of the strategy itself. Chapters 2 through 5 present information and analyses that are essential background to the strategy. Chapter 2 includes a brief overview of the fertility and mortality patterns in Indonesia and information on the organization of health and family planning services, including a discussion of issues that are particularly important in the areas of policy, manpower, and financing these services. The section entitled "Challenges and Constraints Facing Indonesia's Health and Population Programs", is an analysis of the problems in the sector from USAID/Indonesia's point of view. Chapter 3 presents the Government of Indonesia's (GOI) policies and priorities in the health and population sectors. Chapter 4 very briefly reviews, AID's world-wide strategy for development assistance as well as its population and health sector strategies. Chapter 5 reviews the current USAID/Indonesia population and health sector strategy with an overview of accomplishments during the present CDSS period.

## GLOSSARY

APBD I	- Provincial routine and development budget
APBD II	- District Routine and Development Budget
APBN	- Central Routine and Development Budget
ARI	- Acute respiratory infections
AsKes	- Civil Servant Health Insurance Program
BAPPEDA	- Regional Planning Boards
BKKBN	- National Family Planning Coordinating Board
BUPATI	- Administrative Officer at the District Level
BAPPENAS	- National Development Planning Board
BANJAR	- Smallest rural administrative unit in Bali
BCG	- Tuberculosis vaccine
CAMAT	- Administrative Officer at the Sub-district Level
CDSS	- Country Development Strategy Statement
CHIPPS	- Comprehensive Health Improvement Project - Province Specific
CS	- Child Survival Project
DEPKES	- Department of Health
DepDaGri	- Department of Home Affairs
DepDikBud	- Department of Education and Culture
DIK	- Routine budget
DIP	- Development budget
DESA	- Village
DPR	- People's Consultative Assembly
DINAS KESEHATAN	- Ministry of Home Affairs Provincial Health Service
DUKM	- A government-sponsored health insurance program for private sector employees financed through employer contributions
DPT	- Diphtheria, Pertussis and Tetanus Vaccine
DDC	- Diarrheal Disease Control

EPI	- Expanded Program on Immunization
FKM	- Faculty of Public Health
FPDS	- Family Planning Development and Services Project
FPH	- Faculties of Public Health Project
GBHN	- Broad Guidelines for State Policy
GOI	- Government of Indonesia
HMO	- Health Maintenance Organization
HSF	- Health Sector Financing Project
HTRD	- Health Training Research and Development Project
IFY	- Indonesian Fiscal Year
IMR	- Infant mortality rate
InPres	- Special Presidential Program
IMM	- Immunization
KB/Kes	- Integrated Health and Family Planning Strategy
KLH	- Ministry for Population and Environment
KaDiNasKes	- Department of Home Affairs, Provincial Health Office
KaDiNasKesKab	- Department of Home Affairs, District Health Office
KanDep	- Department of Health District Office
KanWilKes	- Department of Health, Provincial Office
KABUPATEN	- District/regency level
KECAMATAN	- Sub-district
KEPALA DESA	- Village Chief
KADER	- Village and subvillage volunteer health and nutrition workers
LKMD	- Village Community Development Institute
MCH	- Maternal and Child Health
MOH	- Ministry of Health
ORS	- Oral rehydration solution
ORT	- Oral rehydration therapy
PKK	- Family welfare organization
PKMD	- Village Community Health Development
PLKB	- Family Planning Field Worker

PPKBD - Village Contraceptive Distribution Center  
 PPLKB - Family Planning Field Worker Supervisor  
 Pos Penimbangan - Village Weighing Post  
 Pos Imunisasi - Village Immunization Post  
 PosYanDu - Integrated village health services post  
 PusKesMas - Sub-district health center  
 PUSAT - National Level  
 PANCASILA - Indonesia's National Philosophy of:

1. Belief in One Supreme God
2. Just and Civilised Humanity
3. The Unity of Indonesia
4. Democracy Wisely Led by the Wisdom of Deliberations  
Among Representatives
5. Social Justice for the Whole of the Peoples of  
Indonesia

PSFP - Private Sector Family Planning Project  
 PosKB - Village Contraceptive Distribution Center .  
 PKK - Local Women's Organization  
 RP3JPK - Long Range Plan for Health  
 RaKerKesNas - National Coordinating Meeting for Health  
 RaKerNas - National Coordinating Meeting for Family Planning

Repelita - Five Year Development Plan  
 Repelita IV - Fourth Five Year Development Plan (1984-1989)  
 SKN - Indonesia's National Health System  
 SUPAS - GOI Intercensile survey  
 TBC - Tuberculosis  
 TBA - Traditional Birth Attendance  
 UPGK - Family Nutrition Improvement Program  
 UUD 45 - Undang-Undang Dasar 1945 (Basic Laws of 1945)  
 VFP/MCW - Village Family Planning/Mother Child Welfare Project

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## 1. USAID OFFICE OF POPULATION AND HEALTH STRATEGIC PLAN

### 1.1 INTRODUCTION

This document represents the first comprehensive strategic plan of USAID's Office of Population and Health (O/PH). It is intended to be a coherent statement of USAID's population and development assistance goal and objectives and the means to be employed in reaching these. The strategic plan will guide project development and provide a framework for all O/PH activities.

The strategic plan has been designed to respond to the predominant public health problems facing Indonesia, AID's strategy for development assistance, and AID's health and population assistance developed during the past twenty years of close collaboration with the National Family Planning Coordinating Board (BKKBN), the Ministry of Health (MOH) and other Indonesian institutions.

For the 1989-93 CDSS period, the O/PH has been forced into a substantial reorientation and redesign of its strategy due to several important developments in recent years. These developments are: (a) severe contractions in the overall GOI development budget especially for health programs and, to a lesser degree, for family planning, which is likely to remain constricted over the coming CDSS period, (b) a realization that there are some major health and population sector policy issues arising which USAID is in a position to help influence, and (c) USAID itself is faced with budgetary cut-backs and staffing constraints which force consolidation of the portfolio and the development of less staff intensive ways of managing the portfolio.

Declining GOI budgets for health and family planning programs have profound implications for the sustainability of services, for the GOI's ability to provide counterpart funding to USAID projects and more fundamentally, for the mandate of the Ministries involved. In this

environment, the GOI has realized that the government alone cannot possibly continue to finance all services and that private sector resources can be mobilized to help achieve government health and family planning sector goals. Because of this realization, USAID has the opportunity to help shape new policies and provide the financial resources for the analysis and experimentation work that must precede major changes in the way government views its mandate in the sector.

## 1.2 O/PH SECTOR GOALS AND OBJECTIVES

USAID's goal is to assist the GOI to reduce fertility and improve the rates of infant and child survival.

The specific USAID objectives are consistent with GOI objectives as stated in its Fourth Five-Year Development Plan (Repelita IV, 1984-89), preliminary plans for the Fifth Development Plan (1989-94), and the National Health System (SKN) targets for the year 2000. The GOI objectives which relate to child survival and fertility reduction are presented below:

### CHILD SURVIVAL OBJECTIVES

- (1) Reduce infant mortality rates to 70/1000 live births in 1989 and 45/1000 live births by 2000.
- (2) Reduce child mortality rates to 14/1000 children ages 1-4 in 1989 and 9/1000 by 2000.

### FERTILITY REDUCTION OBJECTIVES

- (3) Increase the prevalence of effective contraceptive use to 65 percent in 1989 and to 75 percent by 2000.
- (4) Reduce the total fertility rate to 3.4 per woman of reproductive age in 1989 and to 2.1 by 2000.

The USAID objectives also respond directly to Congressional and Agency policies that emphasize child survival, fertility reduction, and greater private sector involvement in development.

### 1.3 PLANNING ASSUMPTIONS

In developing the strategic plan, USAID has made the following planning assumptions about conditions during the Fifth Development Plan (1989-94):

- (1) Economic growth in Indonesia will continue to be constrained by depressed prices and flat world demand for Indonesia's fossil fuel and other natural resources.
- (2) GOI budget allocations for health and population will increase only marginally in Rupiah terms compared to the 1986/87 budgets.
- (3) GOI policies regarding health and population, as outlined in the SKN and policy directives promulgated since the development of the SKN will continue to guide MOH and BKKBN programs, namely: (1) the President's commitment to expanding the MOH PosYandu (integrated village health services posts) program through Repelita V, (2) a strong political commitment to fertility reduction, and (3) increasing reliance on the private sector.
- (4) The magnitude of USAID development assistance to Indonesia will not increase, and funds for health and population activities will reflect USAID's general resource picture.
- (5) USAID is unlikely to provide recurrent and capital assistance to expand coverage of child survival and family planning services on a national basis.

- (6) AID's overall strategic plan and the sector specific policies governing the health and population sectors will remain similar to current policies.
- (7) Some donor agencies are emerging who may be better positioned than USAID, by virtue of their funding mandate and the magnitude of resources available, to assist the GOI in expanding the infrastructure and coverage of its health and family planning programs.
- (8) AID/W funded cooperative agencies will continue substantial support for health and population activities.

#### 1.4 POLICY AGENDA

The primary issue over the medium and long term in the health and family planning sector in Indonesia is that of sustainability of programs which reduce fertility and improve rates of child survival. As in many other developing countries, Indonesia is faced with the challenge of how to maintain levels of recurrent cost financing for important child survival and fertility reduction programs in the face of declining resources and too broad a mandate which results in the government providing services which could be organized and financed privately. Analysis of the health budget shows that a large proportion of the routine budget is mortgaged to the hospital and pharmaceutical sectors which severely restricts the government's ability to adequately finance public health services which affect child survival and fertility. In addition, the government is probably not the best provider of curative and personal health services because the demand for such services relative to public health programs makes them more suitable for private financing. Privately financed and privately provided services can have the advantage of being more efficient as well relieving the government of the responsibility of financing such services. Government can then devote its resources to programs which are difficult to finance privately and which have national development implications.

USAID will help the government achieve long term sustainability of its fertility reduction and child survival programs by encouraging policies which support the following three major reforms:

(1) Improve operational efficiency of government investments in health and family planning programs.

There are acknowledged inefficiencies in current spending particularly for hospital and pharmaceutical services, which if improved could result in significant savings in these areas. USAID will help provide the analysis and experimentation which will demonstrate the feasibility of changing policies to improve efficiency and cost recovery within government programs. These policies will involve changes, for instance, to enable hospitals to retain revenues and operate with less subsidy from the national government and the ability to enter into pre-paid, capitation methods of payment which will make services more affordable to the public.

(2) Develop more rational resource allocation policies which favor an increased proportion of the population and health budget devoted to fertility reduction and child survival programs.

USAID will work with the government to develop specific strategies for how to decrease government spending for personal and curative services and increase its allocations for programs which support their national development objectives of decreasing fertility and improving rates of infant and child survival. The GOI has already been moving in this direction as evidenced by an increasingly larger percentage of their development budget being allocated to community health and family planning activities. Encouragement and support from USAID can help accelerate this shift which will contribute substantially to the longer term sustainability of such programs.

(3) Encourage a shift toward the privatization of as many functions as possible in order to improve the quality and sustainability of child survival and fertility reduction programs.

While government may need to assume primary responsibility for ensuring the availability of family planning and child survival services in the near term, many activities within such programs can be improved by involving the private sector. Social marketing activities to improve the demand for child survival and family planning services are a natural function for the private sector and in many instances, the actual provision of services is better done by the private sector. It is important that the government provide a supportive policy environment and direct encouragement for this to happen. In the family planning sector, the government has stated explicitly that by the year 2000, it expects that 80% of the population will be serviced through private and commercial channels. To make this goal more than rhetoric, the government will need USAID's support for the pilot activities, policy analysis and other development work necessary to make greater private sector involvement a reality.

For general health services, a rapid increase in the private sector's role is a real possibility if the government provides the supportive policy environment. USAID will work with the government in the development of policies to encourage the growth of a pluralistic health care system, including the health insurance industry, in a way which helps support national objectives of affordable, accessible and high quality health care for all of the people.

With respect to each of these policy areas, it is important to keep in mind that the primary objective for USAID's involvement is to help develop realistic ways of improving the sustainability of programs which will contribute to reductions in fertility and improvements in rates of child survival. USAID is convinced that further investments in child survival or fertility programs will not be productive until the critical issue of recurrent cost financing is addressed in a highly practical fashion. USAID is also in a uniquely good position to assist in this critical area because of the GOI's recognition of the problem and its receptive attitude toward USAID involvement given the long history of assistance in the sector.

#### 1.5 PROGRAM ISSUES

Epidemiologic and demographic data indicate that high rates of fertility and infant and child mortality are the predominant problems facing the health and population sector. The USAID's policy agenda for the upcoming CDSS period will focus upon sustainability of programs which have

the greatest impact upon reducing fertility and increasing child survival. The USAID strategy also considers several cross cutting programmatic issues which affect all programs and which impede achievement of the sectoral objectives. These are described briefly below.

#### 1.5.1 Demand for Services

Tremendous progress has been achieved in the health and population sectors in Indonesia over the past 15 years. Infant Mortality Rates (IMR) are in the range of 70-80/1000 live births, and the Crude Birth Rate is in the range of 30/1000 population. More than 50% of eligible couples practice some form of contraception, 40% of children are fully immunized, and most people have access to health and family planning services either from health centers or integrated health posts.

However, further reductions in fertility and mortality and increases in service coverage will be more difficult and expensive to achieve. Once IMR falls below 80/1000, further reductions are more difficult to achieve with public health interventions alone. The increasingly large cohorts which will be entering their reproductive years during the next 10 years will require recruitment of larger numbers of new family planning acceptors yearly just to keep contraceptive prevalence constant. The family planning, immunization, and ORT coverage rates which have been achieved to date are probably largely due to spontaneous demand for these services. Given the relatively high coverage rates which have been achieved for family planning and preventive health programs, it is safe to assume that spontaneous demand has been largely exhausted.

To achieve the higher service coverage levels necessary to effect requisite reductions in fertility and mortality, greater emphasis and attention must be given to generating demand for preventive health and family planning services among target populations. Considerable effort has been expended to improve the availability and accessibility of these services. More attention must now be given to making them more acceptable and desirable. Using modern communications and marketing techniques, the

private sector in Indonesia has developed a proven track record in generating demand for goods and services. The USAID strategy will take advantage of this expertise to generate demand for preventive health and family planning services.

#### 1.5.2 Decentralization

With such immense ethnic and geographic diversity and the considerable regional variation in fertility, mortality, and underlying causality, the health and family planning infrastructures in Indonesia have been gradually evolving from highly centralized bureaucracies to more decentralized, semi-autonomous, and pluralistic systems more responsive to local conditions and needs. This trend has been bolstered by the recent Presidential decree which makes the local government ultimately responsible for health and family planning programs in each province.

Decentralization is intrinsic to effective health and family planning programs in Indonesia. However, a great deal more needs to be done before planning, budgetary, and program responsibility can be delegated to peripheral administrative levels. Information systems which can access region specific epidemiologic data bases will be essential for planning purposes. Central level administrators must relinquish budgetary authority to their provincial counterparts. With central budgets contracting, the provinces and districts must assume more responsibility for financing health and family services, and mobilizing resources from both the public and private sectors. USAID will take advantage of the favorable policy climate for decentralization which exists at present to provide the information systems, management systems, and human resources which are essential to make decentralization work.

#### 1.5.3 Manpower

The success of health and family planning programs is directly proportional to the quality of human resources who manage and implement the programs. Physicians, nurses, and paramedics exist in abundance to deliver

the preventive health and family planning services which will impact mortality and fertility. The public health technocrats, i.e., the public health administrators, statisticians health educators, demographers, epidemiologists, communications and training specialists, etc. who must plan, design, supervise, monitor and evaluate these programs, especially at the more peripheral administrative levels so essential for decentralization, are in short supply. As new health financing schemes proliferate in Indonesia, personnel with a host of new skills will be needed. Given the critical role that human resources play in successful health and family planning programs, and the current stage of their development in Indonesia, human resource development demands continuous attention and will assume a central role in USAID's strategy to support the health and population sectors in Indonesia.

#### 1.6 PROGRAM STRATEGY

The current strategy has been developed to capitalize upon previous successful efforts. It responds to the changing policy and programmatic environment in the health and population sectors and takes into consideration the severe budgetary restrictions which the health sector in particular, and the population sector to a lesser extent, will face during the upcoming CDSS period. While child survival and fertility reduction remain the hallmarks of the O/PH strategy, attention is directed toward long term sustainability of programs which support those objectives. While traditional avenues of public sector support will be continued, that support will be targetted toward to those areas where, by virtue of previous experience and existing infrastructures, the public sector possesses a comparative advantage to provide services efficiently. The private sector will be encouraged to participate both in financing and delivering those services for which it possesses a comparative advantage, thereby relieving the government of some of its burden for providing care, and ultimately contributing to the sustainability of fertility reduction and child survival services. The O/PH program strategy consists of four individual strategies:

(1) Improve the operational efficiency of public sector child survival and fertility reduction programs, concentrating on those areas where the public sector has a demonstrated comparative advantage to provide services efficiently. The components of this strategy are:

- o intensify efforts to control communicable diseases. Progress made in controlling diarrheal diseases and the Expanded Program for Immunization (EPI) will be consolidated and institutionalized. A comprehensive strategy for the prevention and control of Acute Respiratory Infections (ARI) will be designed and tested. Government efforts to develop a national policy for the prevention and control of Acquired Immune Deficiency Syndrome (AIDS) will be supported. Assistance will be provided on a limited basis for research on other infectious diseases with potentially serious consequences in Indonesia e.g., Malaria, Hepatitis B and Dengue Fever.
- o improve the quality and availability of Maternal Child Health (MCH) programs. Government efforts to bring basic MCH services to the whole population through the PosYandu will receive continuing support.
- o promote enhanced use of long term effective contraceptive methods. Assist BKKBN's efforts to motivate new and current contraceptive acceptors to use long term effective contraceptive methods such as IUDs, progestogen implants, and voluntary sterilization; and to deliver these services through public sector channels.

(2) Ensure sustained levels of recurrent financing for child survival and fertility reduction programs. This strategy complements and reinforces the first strategy by addressing the critical issue of sustainability of child survival and fertility reduction programs, thus making them mutually interdependent. The components of this strategy are:

- o explore ways to reallocate public sector resources away from the hospital and pharmaceutical budget, which together consume nearly 60% of the public sector health budget, and toward child survival and fertility reduction programs.

- o develop the information base needed by the MOH and BKKBN to demonstrate the benefits of investments into preventive health and family planning programs, and enable both agencies to secure proportionately larger central government allocations for health and population.

(3) Encourage greater private sector involvement in financing and delivering health and family planning programs, concentrating on those areas where the private sector has a demonstrated or potential comparative advantage to function efficiently. The components of this strategy are:

- o develop private sector channels of contraceptive delivery for all contraceptives available through the national family planning program. Focus special attention upon developing private sector channels to deliver long term effective contraceptive methods such as IUDs, progestogen implants, and voluntary sterilization.
- o finance the demand for health and family planning services through pre-paid health insurance schemes which pool risk among the insurers or financiers, providers, and enrollees to contain costs. Private sector participation will be elicited both as insurers and providers. Health insurance programs can shift the burden of financing and providing care for significant segments of the population from the government to the private sector; thus freeing government resources for those members of the population in greatest need.
- o apply modern advertising and marketing principles, which have been pioneered in the private sector, to the delivery of child survival and fertility reduction services and concepts in order to generate greater demand, and ultimately increased utilization, of these services and acceptance of these concepts. Private sector agencies will be encouraged to participate in campaigns which market abstract concepts (importance of breastfeeding, delayed age of marriage, or small family size) or tangible products (oral rehydration solutions, contraceptives, or immunization) available through either public or private sector channels.

(4) Develop the human resources needed to manage, operate, and sustain health and family planning programs in the public and private sector. The components of this strategy are:

- o develop the public health technocrats who will be essential to facilitate decentralization of health and family planning programs to peripheral administrative levels through continued support to developing new Faculties of Public Health in Indonesia.
- o developed specialized expertise in both the public and private sectors needed to support the first three strategies through long and short term training programs integrated into specific projects.

### 1.7 PROJECT DEVELOPMENT STRATEGY

As the 1984-88 CDSS period draws to a close, there are eight active projects in the O/PH portfolio. These projects and their relationship with the O/PH strategy during the 1984-88 CDSS period are shown in Figure 1. During the upcoming CDSS period, the USAID expects reductions in the number of full time staff. The project development strategy for the 1989-1993 CDSS period will follow the program strategies described above. The project development strategy will consolidate several simultaneously terminating projects which support USAID's child survival and fertility reduction objectives into comprehensive projects supporting those objectives, reduce the number of projects in the USAID portfolio, and develop less staff intensive methods to manage these projects.

Figure 1 illustrates the transition from the 1984-88 O/PH project portfolio to the projected O/PH portfolio at the end of the 1989-93 CDSS. Five projects from the present health portfolio respond directly to the 1984-88 CDSS objective of reducing infant and maternal mortality. Two projects from the Population portfolio respond directly to the 1984-88 CDSS objective and strategy for reducing fertility. The Faculties of Public Health project will produce the human resources to support both the 1984-88 mortality and fertility reduction objectives.

As depicted in Figure 1, the five current projects in the health portfolio will all terminate in 1990. At that time components of these projects will be incorporated into a comprehensive Child Survival Project which will respond to the following components 1989-93 of the USAID

strategy: (a) intensify efforts to control communicable diseases; (b) improve availability of MCH programs and (c) apply modern advertising and marketing principles to generate demand for child survival services.

The issue of sustainability of child survival programs supported through the Child Survival Project will be addressed by the Health Sector Financing (HSF) project which is scheduled to commence in 1988. This project responds to the following components of the 1989-93 USAID strategy: (a) ensure sustained levels of recurrent financing for child survival programs; and (b) encourage greater private sector involvement in financing health care. The HSF project and CS project represent USAID's two major initiatives to achieve its 1989-93 CDSS objective of reducing infant and child mortality.

On the population side, the two existing population projects will terminate during the 1989-93 CDSS period. These will be replaced by a comprehensive Private Sector Family Planning Project which will respond to the following component of the 1989-93 USAID strategy: (a) promote enhanced use of long-term, effective, contraceptive methods; (b) encourage greater private sector involvement in financing and delivering family planning services; and (c) apply social marketing principles to the delivery of fertility reduction programs. The project represents USAID's primary initiative to increase contraceptive prevalence and to reduce fertility.

The Faculties of Public Health (FPH) project represents the O/PH's primary initiative to develop human resources for both the health and family planning program and supports both the USAID's child survival and fertility reduction objectives for the 1989-93 CDSS period. This project will terminate in 1992.

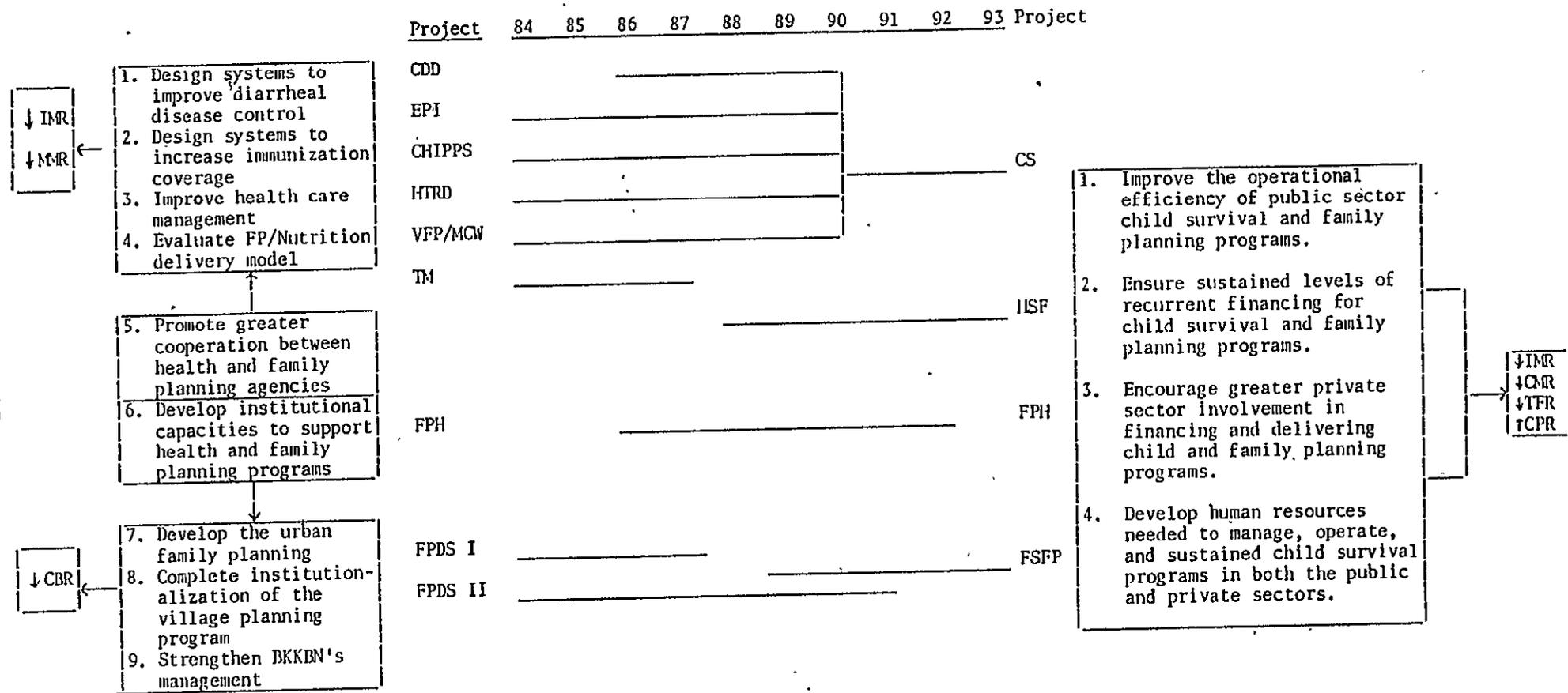
Figure 1: O/PH Portfolio Transition from 1984-88 CDSS to 1989-93 CDSS

OPH Strategy  
1989-1993 CDSS

OPH Goals  
and Objectives  
1989-1993 CDSS

OPH Goals  
and Objectives  
1984-1988 CDSS

OPH Strategy  
1984-1988 CDSS



LEGEND

- CDD Control of Diarrheal Diseases
- EPI Expanded Program for Immunization
- CHIPPS Comprehensive Health Improvement Project Province Specific
- HTRD Health Training Research and Development
- VFP/MCW Village Family Planning/Maternal Child Welfare
- FPH Faculties of Public Health
- FPDS I Family Planning Development Services I
- FPDS II Family Planning Development Services II
- CS Child Survival
- HSF Health Sector Financing
- FPH Faculties of Public Health
- PSFP Private Sector Family Planning Project Amendment
- TM Timor Malaria

## 1.8 DEVELOPMENT ASSISTANCE STRATEGY

Since the early 1970s, USAID has provided assistance for activities which expand the coverage and availability of health and family planning services to the rural poor. A case in point is Indonesia's village family planning program, which expanded services outward from Java-Bali into ten provinces of Outer Islands I and selected Outer Islands II, using USAID assistance for routine and development expenditures. During this period USAID was also a major donor contributing to the geographic expansion of Indonesia's health program, and provided substantial assistance to the Ministry of Health for malaria control, environmental sanitation, and communicable disease control.

That era is over and USAID is faced with fewer staff and curtailed budgets. Therefore, the USAID health and population development assistance strategy has been modified accordingly. The new strategy stresses operations research, program design, testing and evaluation, and policy formulation. With limited resources, USAID will attempt to maximize its development impact by taking the lead in funding activities which seek to influence government policy by demonstrating the advantage of introducing certain changes in health and family planning programs. Thus, in view of the assumptions presented in Section 1.3, USAID has concluded that its assistance can be most appropriately used to:

- (1) Conduct careful analyses of problems in the selected program areas corresponding to the USAID's program strategy which impede attainment of the GOI's fertility and mortality reduction objectives.
- (2) Design a variety of possible programmatic solutions.
- (3) Field test on a pilot basis those solutions which exhibit greatest potential in terms of cost effectiveness and impact.
- (4) Refine the most promising delivery systems, programs, and strategies from the field test phase, and demonstrate these in a large operational area.

- (5) Evaluate results of large demonstration projects, and communicate findings to GOI decision makers.
  
- (6) Engage the GOI in policy level discussions regarding the meaning and ramifications of these findings with a view toward formulating policies which will guarantee their institutionalization and lead toward wider scale replication.

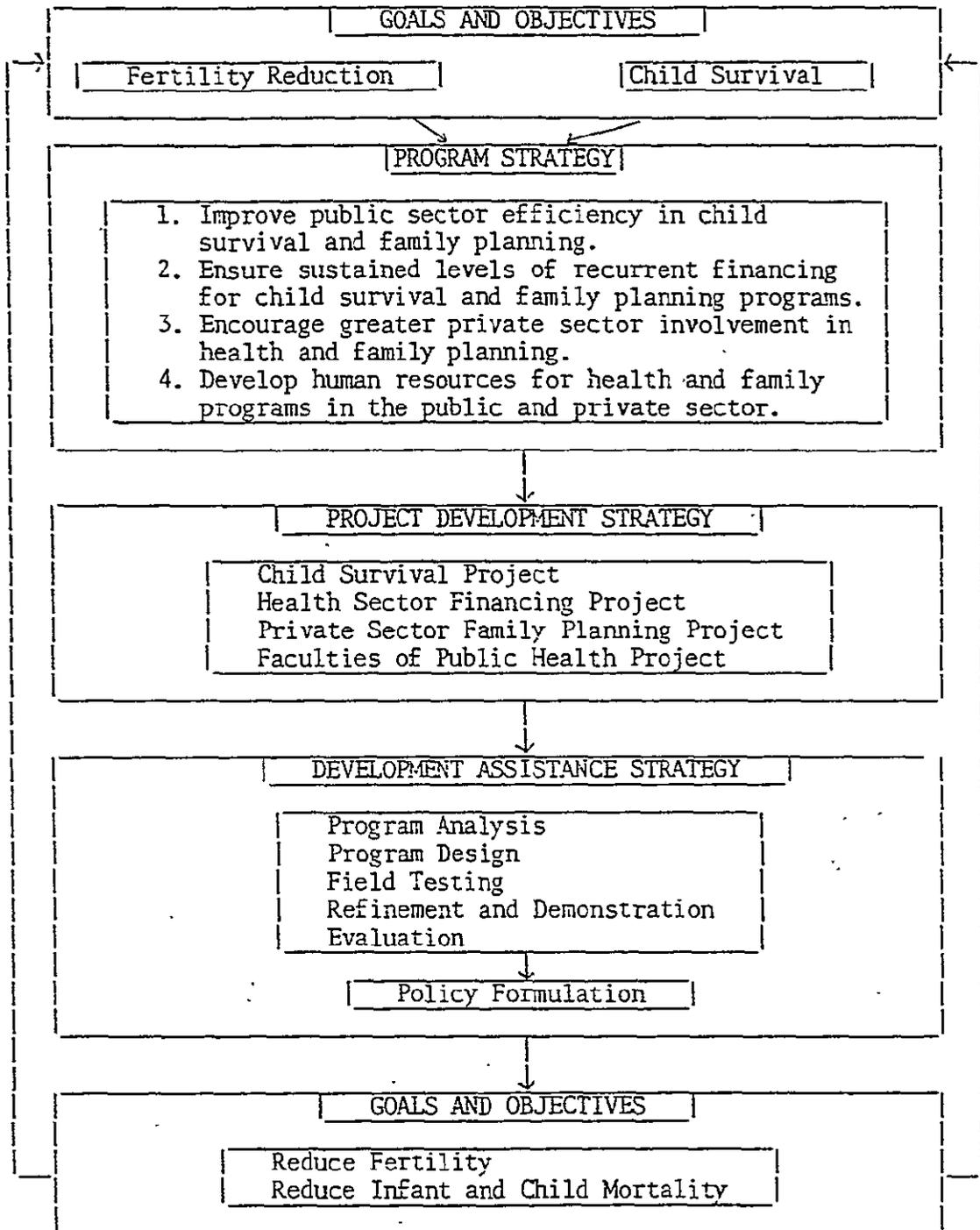
The approach described above means a much greater emphasis on supporting the analytical work for policy change, field testing new solutions to problems, and institutionalizing the ability to carry out such work in the future. Eventually this development work may lead to opportunities for large scale sector support programs to support policy changes which have been instituted. While it appears now that there are other donors like the World Bank and the Asian Development Bank which are in a better position to provide such program support funds, should more resources than expected be available to USAID, it could also provide sector support programs as a second phase to the policy and development activities which are now anticipated.

An important feature of the new USAID development assistance strategy in the population and health sector is that it involves an increased emphasis on building up the analytical and development capacity of Indonesian institutions, both government and non-government. USAID has already begun the process of helping build this capacity within the BKKBN and within academic institutions involved in the Faculties of Public Health Project. During the new CDSS period, such institution building efforts will be accelerated and broadened to include the MOH and private sector organizations which can serve the needs of the MOH and BKKBN. Linkages with US institutions will be encouraged to help with this capacity building process. There will be an increased need for technical assistance and training activities.

## 1.9 CONCLUSION

The linkage between the O/PH CDSS goals and objectives, the program strategies, the project development strategy, and the development assistance strategy form a comprehensive O/PH strategy for the 1989-93 CDSS period. Through these activities, USAID will continue to be a significant actor in the population and health fields in Indonesia, despite reduced resources. USAID is uniquely positioned to assist the GOI in the innovative areas outlined above because of its long history of development assistance to Indonesia, the unusually solid relationships that have grown between USAID's Office of Population and Health and the GOI's Ministry of Health and BKKBN through the variety of activities USAID has supported, and, very importantly, because of the degree of openness and receptivity to USAID initiatives demonstrated by the GOI. Throughout the coming CDSS period, USAID will remain committed to careful analysis and scrutiny of its strategy and, if warranted, change directions in order to assure that the goals shared by the GOI and USAID can be accomplished within the next five years.

Figure 2: Schematic Depiction of USAID Jakarta OPH Comprehensive Strategy for 1989-93 CDSS Period



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## 2. HEALTH AND POPULATION SECTOR REVIEW

### 2.1 FERTILITY AND MORTALITY PATTERNS IN INDONESIA

Data from the Government of Indonesia's 1985 intercensile survey (SUPAS) indirectly indicate that very definite reductions in fertility have taken place in Indonesia in the last fifteen years. The average population growth rate between 1980 and 1985 was 2.13%, down from an average of 2.32% for the 1971-1980 period, as shown in the 1980 census. Even more encouraging was the average growth rate of 1.74% in the six densely populated provinces on the island of Java, where 61% of the population resides. The reduction in population growth rates is reflected in the country's age-specific growth rates. The percentage of the population in the 0-4 age group has decreased continually since the 1971 census. By 1985, the percentage of Indonesia's population in the 0-4 age group had decreased to 12.9%, and for the first time was significantly less than the percentage of the population in the 5-9 age group. The contraction in the base of Indonesia's population pyramid will have positive demographic implications in the future.

However, high fertility during the 1960s and 1970s has left Indonesia's age structure skewed toward younger age groups: 40% of the population was less than 15 years old in 1985. The growth momentum generated by Indonesia's youthful age structure will result in continued absolute growth into the 22nd century, when the population is anticipated to level off in the range of 338-400 million persons, even with an aggressive family planning program.

The number of eligible couples is expanding by about 600,000 to 800,000 each year, due to the high crude birth rates of the early 1970s, making it that much more difficult to reach fertility targets. To keep contraceptive prevalence at the same level as April 1985, 3.3 to 3.7 million new family planning acceptors must be recruited in IFY 1986/87. To reach Repelita IV targets for 1989, 4.4 to 5.0 million new acceptors must be recruited each year. Both targets present a formidable challenge to Indonesia's family planning program.

Indonesia's National Family Planning Program is renowned as one of the world's most successful. The National Family Planning Coordinating Board (BKKBN) was established by Presidential Decree in 1970 to coordinate the implementation of the national program. By 1985 BKKBN's community-based family planning program reached every village in Indonesia. BKKBN's service statistics for March 1986 reported that 5.1 million new family planning acceptors had been recruited in IFY 1985/86 and recorded 15.3 million current users of contraception, or a national contraceptive prevalence rate of 59.8% (using an estimate of 25.6 million as the total number of eligible couples). These data deviate significantly from the SUPAS data for October 1985, which reported 10.2 million current users and a contraceptive prevalence rate of 38% (utilizing 26.8 million as the estimate of total eligible couples).

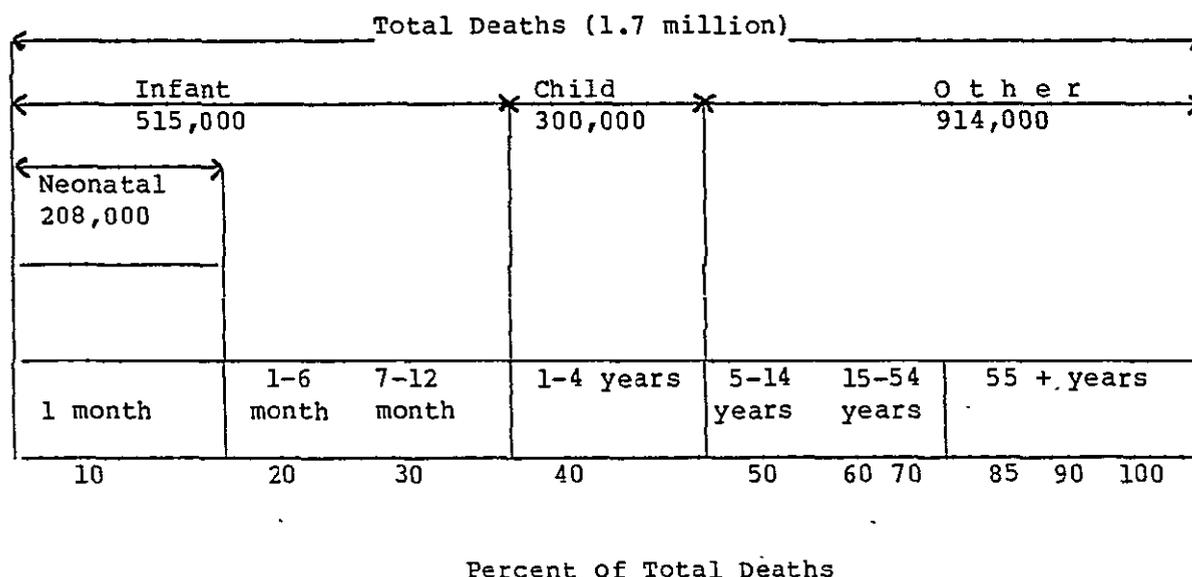
Rural areas continue to receive priority attention under the program because about 75% of Indonesia's people currently live in rural areas. However, the urban/rural ratio is changing. Over the ten years between the 1971 and 1980 censuses, this ratio shifted from 82.6% rural and 17.4% urban to 77.6% rural and 22.4% urban. The ratio for 1985 is 75.6% rural and 24.4% urban and it is projected to reach 70%/30% by the year 2000. Until recently, family planning program services have not been extended effectively to the country's major urban areas. Where they do exist, particularly in Jakarta, they have largely been clinic-based service programs. It is clear that innovative and intensified approaches to urban family planning are essential if major impact is to be obtained quickly. Extending effective services, especially to the urban poor, poses a serious challenge to BKKBN.

While reductions in the crude birth rate (44/1000 population in 1971 to 32.4/1000 population in 1984) have had a moderating effect upon absolute population growth, equally impressive reductions have been achieved in crude death rates (19.1/1000 population in 1971 to 11.7/1000 population in 1984). However, a disproportionate number of deaths still occur in children less than 5 years of age (see Figure 3). In 1980, there were 1.7 million total deaths in Indonesia, with 48% occurring in children less than 5 years of age

(childhood deaths), 30% in children less than one year of age (infant deaths), and 12% in children less than one month of age (neonatal deaths). Another 2.5% of deaths are caused by diseases of pregnancy and the puerperium. Together, infant, child, and maternal mortality comprise more than 50% of total annual mortality in Indonesia.

Figure 3. Age Distribution of Total Deaths in Indonesia, 1980

Source: UNICEF, August 1984.



The major causes of death in the neonatal (0-1 month), post neonatal (1-11 months), and childhood (1-4 years) groups are shown in Table 1. Tetanus neonatorum and birth and other perinatal injuries comprise 66% of all mortality in the neonatal period. Respiratory ailments and diarrheal diseases cause 62% of post-neonatal and childhood mortality. Technologies currently exist to prevent or treat nearly all of those diseases. Accidents, malignant neoplasms, and cardiovascular diseases are major causes of the remaining mortality, occurring predominantly in older age groups.

Table 1. Principal Causes of Infant and Child Mortality in Indonesia, 1980

	Neonatal (%) (0-1 month)	Postneonatal (%) (1-11 months)	Child % (1-4 years)	Total % (0-4 years)
Infectious and parasitic diseases	54	45	46	47
- Diarrheal	( 9)	(33)	(34)	(28)
- Tetanus	(43)	( 5)	( 2)	(13)
- Other	( 2)	( 7)	(10)	( 6)
Influenza and pneumonia	11	29	28	24
Birth injuries & other perinatal	23	-	-	6
Meningitis	2	11	14	10
Nutrition	-	1	1	1
All other causes	10	14	11	12

Source: Budiarmo, et al., 1980.

Indonesia's infant mortality rate (IMR) has declined steadily over the past five years. The IMR showed an average annual decline of 1.5% during the 1960s, from 150/1000 live births in 1961 to 135/1000 live births in 1971. During the 1970s the average annual decline in the IMR was twice as fast, about 3.2% annually, and the IMR had been reduced to 98/1000 live births in 1980. Indonesia's rapid economic growth, which averaged 8% per year in the 1970s, was certainly a factor in this decline, as was expanding health infrastructures and services. However, compared with other ASEAN countries of similar per capita GNP levels, the IMR decline in Indonesia is still slow. Between 1960 and 1980, the percent decline in IMR was 47% in Thailand, 48% in the Philippines, and only 35% in Indonesia. Even Sri Lanka, which has a lower per capita GNP than Indonesia, experienced a 38% decline in its IMR during the same period.

Long range plans stipulate a decline in the IMR to 45/1000 live births by the year 2000, which would require an average annual reduction of 4%. A further reduction in Indonesia's IMR from the current level of about 90/1000 live births to the level of the target set for the year 2000 will be much more difficult to achieve, requiring that plans by the Ministry of Health (MOH) and BKKBN to expand the delivery of critical child survival interventions be accompanied by continued economic growth and profound social change. The short-term prospects for economic growth are not good, and the necessary social change will be difficult in its absence. Whether the health system can achieve such ambitious annual reductions in IMR under unfavorable social and economic conditions is problematic.

The data on fertility and mortality presented in this section are all national averages, and do not reflect the tremendous regional variations that exist in all fertility and mortality indices in Indonesia. Table 2 presents province-specific data for total population, population density, population growth rates, and IMR. These extreme differences are caused by different geographic, social, cultural, and economic conditions, all of which have a significant bearing on how health and family planning services are delivered.

Table 2. Population Size, Density, and Growth Rates, and IMR by Province

	Population* (000)	Density* (person/Km2)	Growth Rate (%)* (1980-1985)	IMR** (per 1000 live births)
<u>JAVA</u>	<u>99,502</u>	<u>753</u>	<u>1.74</u>	<u>-</u>
1. DKI Jakarta	7,829	13,270	3.78	80
2. West Java	30,733	664	2.28	129
3. Central Java	26,934	787	1.20	96
4. Yogyakarta	2,966	936	1.52	62
5. East Java	31,038	648	1.24	99
<u>SUMATRA</u>	<u>32,667</u>	<u>69</u>	<u>3.12</u>	<u>-</u>
6. Aceh	2,981	54	2.68	91
7. North Sumatra	9,444	133	2.47	89
8. West Sumatra	3,666	74	1.48	121
9. Riau	2,514	27	3.00	113
10. Jambi	1,727	38	3.62	118
11. South Sumatra	5,410	52	3.17	98
12. Bengkulu	935	44	4.03	106
13. Lampung	5,987	180	5.30	97
<u>SULAWESI</u>	<u>11,598</u>	<u>61</u>	<u>2.18</u>	<u>-</u>
14. North Sulawesi	2,375	125	2.34	94
15. Central Sulawesi	1,539	22	3.60	128
16. South Sulawesi	6,599	91	1.71	108
17. Southeast Sulaw.	1,083	39	2.83	114
<u>KALIMANTAN</u>	<u>7,781</u>	<u>14</u>	<u>2.97</u>	<u>-</u>
18. West Kalimantan	2,815	19	2.52	116
19. Central Kaliman.	1,139	7	3.61	100
20. South Kaliman.	2,288	61	2.08	121
21. East Kalimantan	1,538	8	4.77	99
<u>NUSA TENGGARA</u>	<u>9,338</u>	<u>106</u>	<u>1.93</u>	<u>-</u>
22. Bali	2,638	474	1.32	88
23. West Nusa Teng.	3,040	151	2.26	187
24. East Nusa Teng.	3,029	63	2.05	124
25. East Timor	624	42	2.37	-
<u>MALUKU + IRIAN</u>	<u>2,990</u>	<u>6</u>	<u>2.95</u>	<u>-</u>
26. Maluku	1,632	22	2.96	124
27. Irian Jaya	1,358	3	2.94	106
<u>INDONESIA</u>	<u>163,876</u>	<u>85</u>	<u>2.13</u>	<u>98</u>

\* Source: 1985 Intercensile Survey (SUPAS)

\*\* Source: 1980 Census Data

## 2.2 HEALTH AND POPULATION SERVICES DELIVERY SYSTEM

The design and delivery of health and population services in Indonesia is a multi-agency, multi-disciplinary effort. Since the establishment of "The New Order" Government in 1967, primary responsibility for this effort has been delegated to the Ministry of Health and in 1970 the National Family Planning Coordinating Board, with assistance from the Ministry of Home Affairs (DepDaGri), the Ministry for Population and Environment (KLH), the Armed Forces, and a substantial contribution from the private sector.

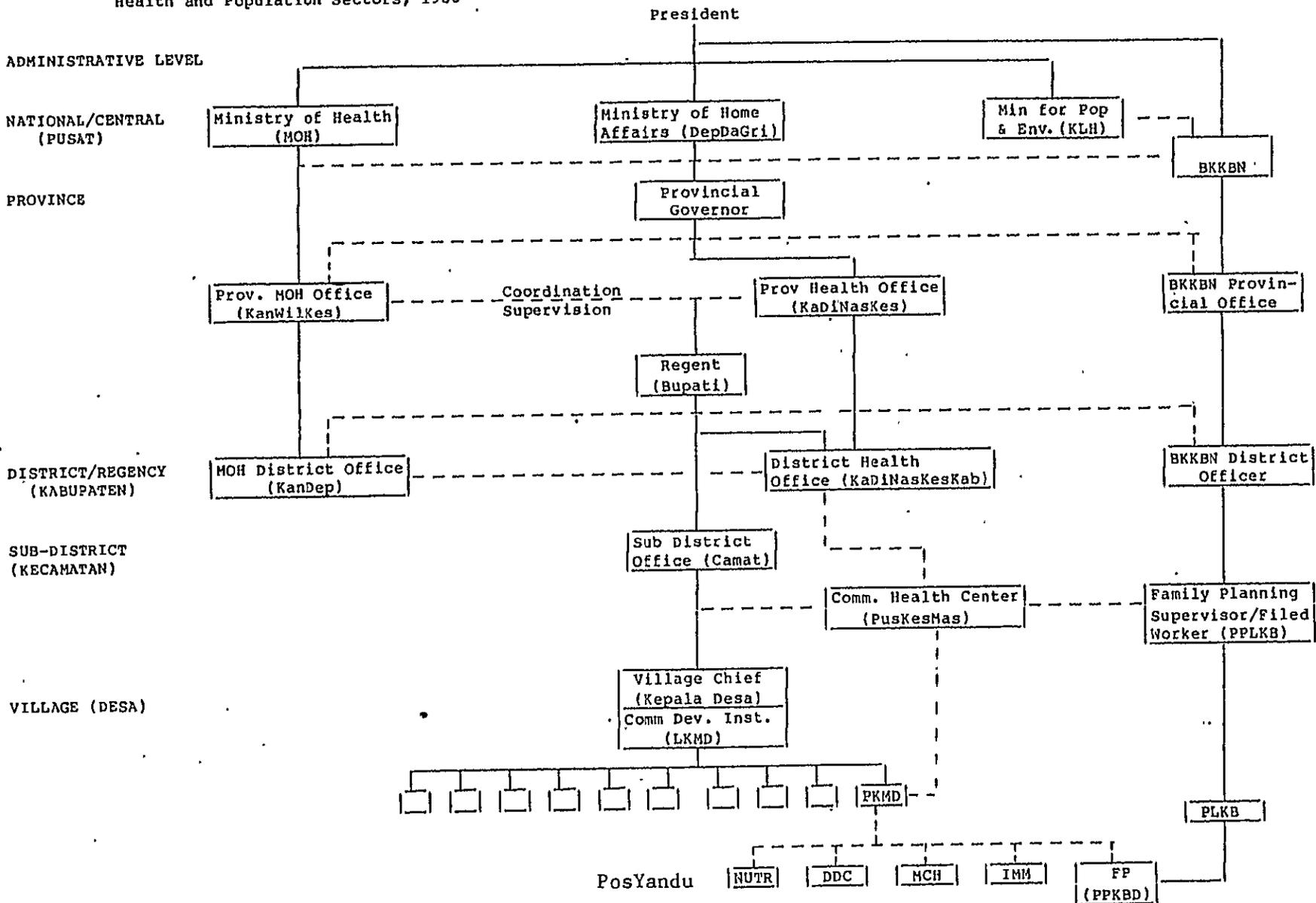
A host of organizational, political, manpower, financial, and public health considerations affect how policy decisions are made and how services are delivered. A brief description of these will facilitate an understanding of the health and population sectors.

### 2.2.1 Organization Service Delivery at Various Levels

Although contributing a minority portion of health expenditures annually, the public sector health and population infrastructure dominates the delivery of services. Through a complex series of organizational interrelationships at each administrative level as depicted in Figure 4, MOH, BKKBN, and DepDaGri, and to a lesser extent KLH, collaborate to develop policies and strategies, plan activities and services, implement them, and monitor their impact.

The Ministries of Health and Home Affairs are the major line agencies with peripheral administrative infrastructures. BKKBN was created by Presidential Decree in 1970 to coordinate population and family planning programs. As such, BKKBN is a non-ministerial agency that is responsible directly to the President and has its own infrastructure at each administrative level. KLH is a state ministry which coordinates population and environmental policy among BKKBN, MOH and other ministries, but has no line authority or infrastructure. The Ministry of Home Affairs, through the Governor at the provincial level, the Regent at the district level, the subdistrict officer at the sub-district level, and the village chief at the

Figure 4. Primary GOI Organizational Relationship in the Health and Population Sectors, 1986



village level is the predominant Ministry at the peripheral levels. A description of the organizational interactions and responsibilities at each administrative level provides a clearer picture of how health and family planning services are delivered.

Central Level. MOH, BKKBN, and KLH have extensive central organizations, as depicted in Figures 5, 6, and 7, respectively, and play the major role in the policy formulation, planning, coordination, and supervision of health and family planning services. The Ministry of Home Affairs has only a perfunctory role in health and population at the central level.

Provincial Level. The Provincial Governor is responsible for the activities of all sectors within his administrative and geographic jurisdiction. There are two types of organizational units responsible to the Governor:

- o Autonomous units such as the provincial health office in Figure 1, which is a unit of the Ministry of Home Affairs and receives all of its budget from the provincial routine and development budgets (APBD I).
- o Vertical units such as the BKKBN provincial office which, though operationally responsible to the Governor, receive only a small portion of their budget from the APBD I. The BKKBN provincial office is organizationally responsible to the central BKKBN, from which it receives policy direction and most of its budget. The MOH is represented by the MOH provincial office at the provincial level. Though nominally subordinate to the Governor, the provincial office is organizationally linked to the MOH central office, from which it receives all of its budget. It is neither a vertical nor an autonomous organizational unit.

The Ministry of Home Affairs' provincial health office is operationally responsible for the delivery of all health and family planning services. The MOH provincial office supervises and coordinates its activities, but has no operational authority or responsibility except in the case of epidemics

Figure 5: Organizational Structure, Ministry of Health

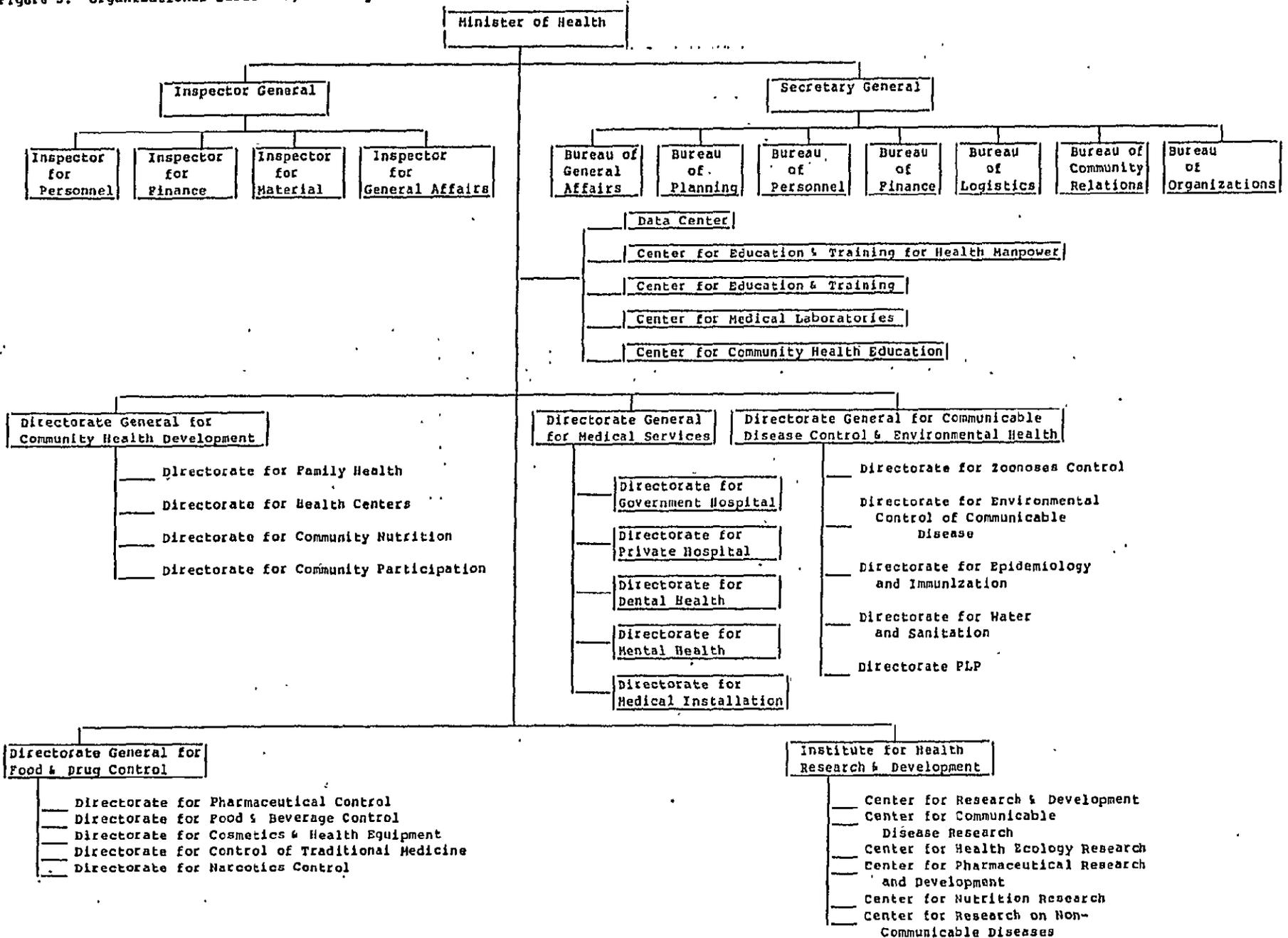


Figure 6. Organizational Structure, BKKBN

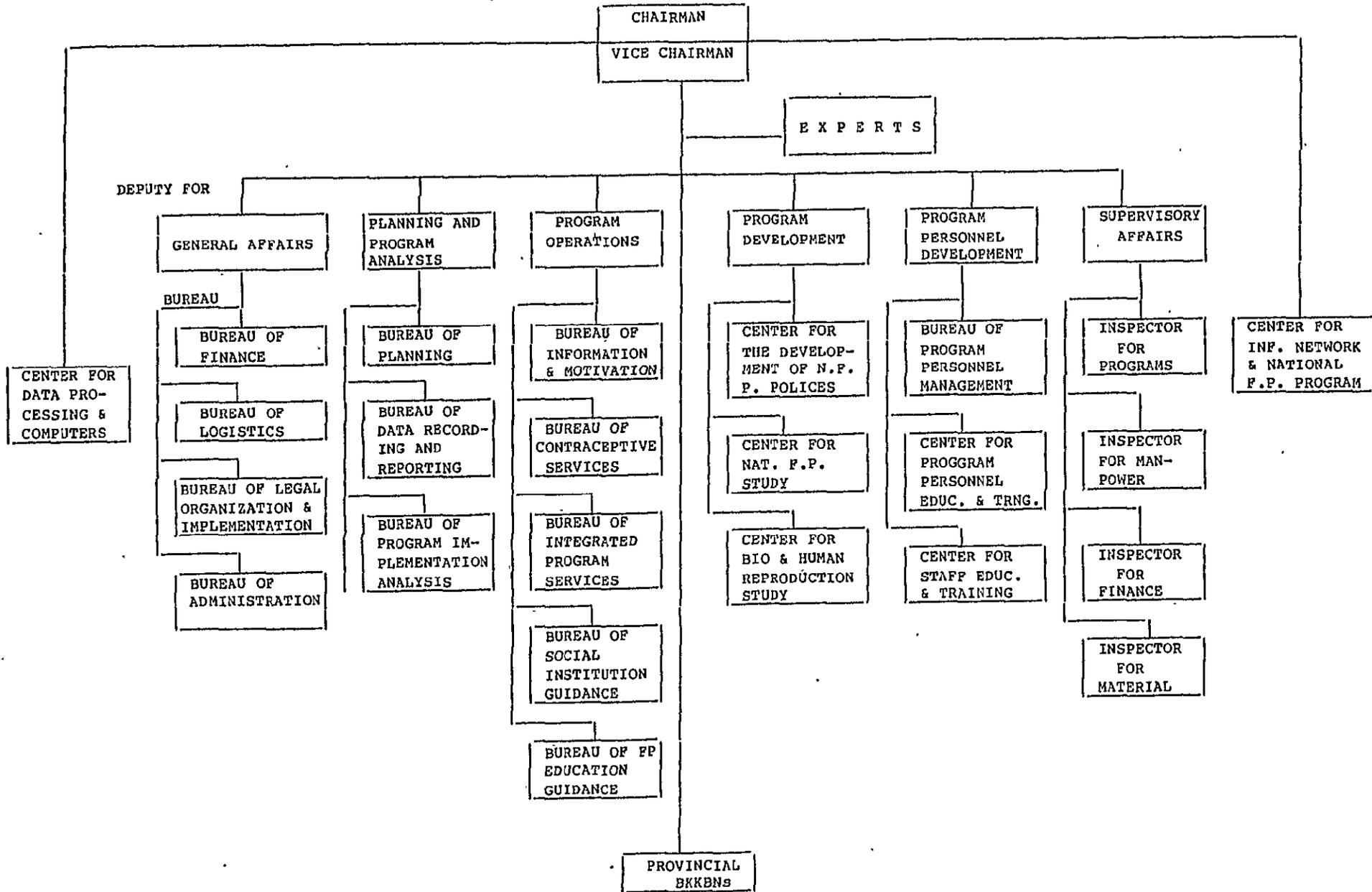
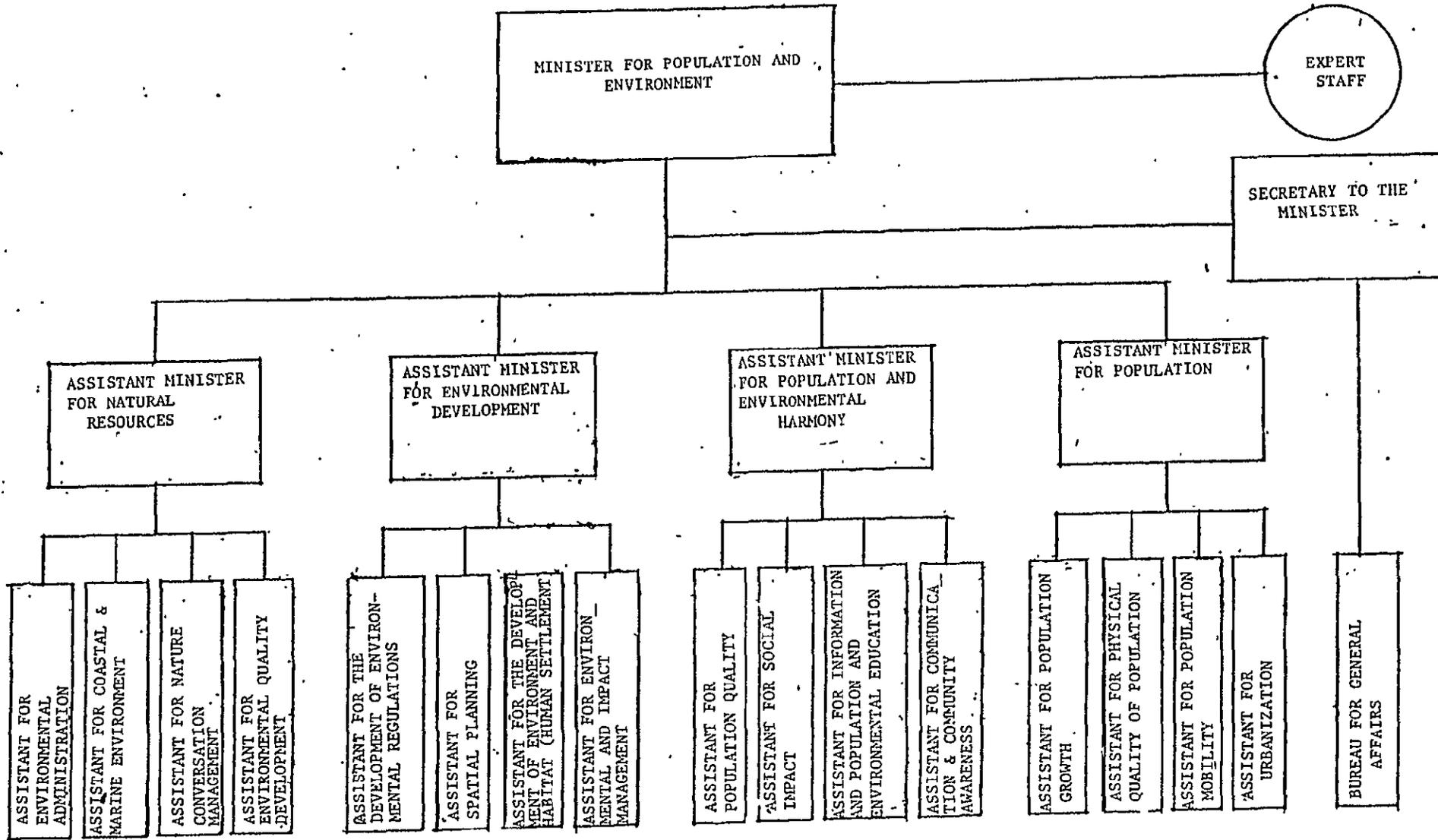


Figure 7. Organizational Structure, Ministry for Population and Environment



or natural disasters. The Director of these two provincial offices is the same person, but the staff are separate and independent.

District Level. The organizational interrelationships of this level are similar to those at the provincial level, except that all units are responsible to the Regent. The district health office of the Ministry of Home Affairs has operational responsibility for the implementation of health and family planning services (see Figure 4). The MOH district office supervises and coordinates the delivery of health services. The BKKBN district office coordinates the delivery of family planning services. The director of both ministries' district offices is the same person. Staff are separate in the large provinces, but the same staff hold both positions in smaller provinces.

Sub-district Level. The Community Health Center (PusKesMas) is the focal point of health and family planning services at this level. Because it is a service delivery site, the PusKesMas has no administrative position within the sub-district organizational structure, but is considered an implementing unit. As such, the PusKesMas functions within the Ministry of Home Affairs bureaucracy, and its staff are employees of this ministry. However, its budget comes from many sources: the Ministries of Home Affairs and Health, BKKBN, and the special presidential program called Inpres. BKKBN has no infrastructure at the sub-district level, but has full time staff (family planning field workers and their supervisors) who use the PusKesMas as their base of operation.

Village Level. Every village in Indonesia is expected to have a Village Community Development Institute (LKMD) under the supervision of the village chief. Each LKMD has ten sub-divisions, one of which is responsible for Village Community Health Development (PKMD). The PKMD has five posts - a weighing post for nutrition, an immunization post, a maternal/child health post, a post for diarrheal disease control and a village contraceptive distribution center for family planning. These five posts comprise the government's Integrated Village Health Services Post (PosYanDu) concept, which is the hallmark of Ministry of Health's primary health care strategy

for Repelita IV. It should be noted that all five posts do not exist in every village. The most prevalent is the village contraceptive distribution center, because it receives direct financial support and supervision from BKKBN. The other posts receive the bulk of their support from the LKMD, whose sole source of revenue is community contributions. The Puskesmas provides technical and commodity support (oral rehydration therapy, vaccines, weighing scales, growth monitoring cards, contraceptives) to the PosYanDu for the delivery of services, but no financial support.

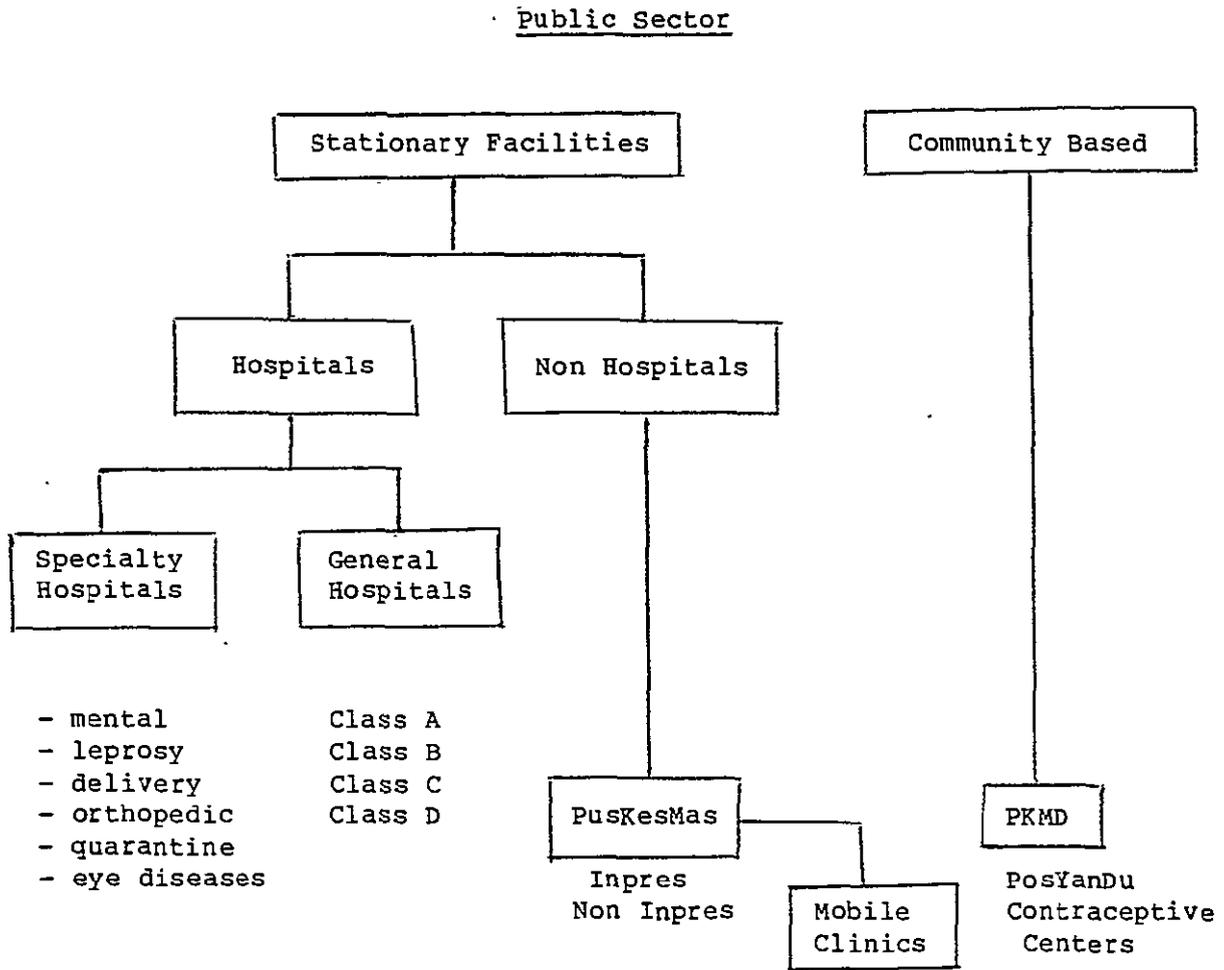
### 2.2.2 Health and Family Planning Services Delivery Infrastructure

The health and population services delivered by BKKBN, MOH, and Ministry of Home Affairs can be divided into two categories, those delivered at stationary facilities and those delivered via a community-based delivery system. These are depicted in Figure 8. In addition, there is a vigorous private sector operating, especially in health. There are currently about 20,000 physicians in Indonesia, fully 30% of whom live and work in Jakarta. Although nearly all physicians work for the government, it is estimated that 90% have private practices, either concurrent with their government practice or after hours. There is also ample opportunity for paramedics to engage in private practice, and they comprise a major segment of the curative health services delivery system below the sub-district administrative level.

Stationary facilities are divided into hospitals and non-hospitals. The hospital sector dominates the health services delivery infrastructure in Indonesia and requires some elaboration here.

There are 1367 hospitals, both public and private, in Indonesia, possessing 110,426 beds. Hospitals are divided into specialty and general hospitals, as shown in Table 3. There are four classes of general hospitals. The Class A hospitals have highly specialized staff and equipment. Class B hospitals have a range of about 10 specialist departments. Most of the medical schools in Indonesia are attached to either Class A or Class B hospitals. Class C hospitals are staffed with specialists in the four basic clinical areas: general medicine, general

Figure 8. Health and Family Planning Services Delivery Infrastructure, 1986



surgery, pediatrics, and obstetrics/gynecology. Class D hospitals are staffed only by general practitioners, and lack effective medical service departments such as an operating theatre, X-ray, and laboratory services.

The total number of hospitals and beds by type, class and ownership is presented in Table 3. Hospitals in the government sector are operated by the MOH, provincial governments, local governments and other ministries. Of the 63,155 government general hospital beds, only 7,992 (13%) are operated by the MOH, 35,010 (55%) are operated by provincial and local governments, 11,428 (18%) are operated by the Ministry of Defense, and 8,725 (14%) are operated by other ministries.

Table 3. Total Number of Hospitals and Beds by Type, Class, and Ownership, 1985/1986

TYPE OF HOSPITAL	HOSPITAL	BEDS
GENERAL HOSPITALS	688	84,254
MOH/Prov. & Local Gov.	318	43,002
Class A	(4)	2,918
Class B	(16)	9,396
Class C	(79)	15,183
Class D	(219)	15,505
Defense Ministry	115	11,426
Other Ministry	80	8,725
Private	175	21,099
SPECIALTY HOSPITALS	679	26,172
Ministry of Health	44	8,354
Prov./Local Gov.	43	3,923
Defense Ministry	24	453
Other Ministry	10	167
Private	558	13,275
TOTAL	1,367	110,426

Source: Palekahelu 1986

Private hospitals provide 31% of total hospital beds and 25% of general hospital beds. Most of the bed capacity in the private sector is in the church related hospitals which provide about 90% of all private sector bed capacity.

Table 4. Hospital Performance in Indonesia, 1985/1986

TYPE & OWNERSHIP	DISCHARGES	BED DAYS	OUTPATIENT	BOR (%)	AV.LOS (days)
A. GENERAL HOSPITAL	2,382,376	16,724,620	36,117,508	53.1	7
MOH/Local Gov.	1,390,460	9,217,216	19,553,472	58.3	6
A Class	85,340	801,400	2,017,356	76.9	9
B Class	269,960	2,37,044	4,229,048	67.8	8
C Class	528,216	3,323,696	5,780,396	59.1	6
D Class	506,944	2,745,076	7,526,672	48.4	5
Defense Ministry	226,464	1,893,120	6,311,608	42.2	8
Other Ministry	182,472	1,409,772	4,457,140	43.7	8
Private	582,980	4,204,512	5,795,288	52.1	7
B. SPECIALTY HOSPITAL	373,944	4,962,864	3,561,380	52.1	14
MOH/Local Gov.	51,976	3,608,964	582,740	79.7	79
Defense Ministry	9,140	38,968	116,040	24.2	4
Other Ministry	3,416	15,152	28,140	23.3	4
Private	309,412	1,299,780	2,834,460	25.9	4

Source: Palekahelu 1986

For all hospitals the bed/population ratio is about 0.65/1000 population, and for general hospitals the ratio is 0.50/1000. There is, of course, great geographical variation in these figures from a high of 1.86 beds/1000 population in Jakarta to 0.29 beds/1000 population in Lampung. However, by most standards, all these ratios are quite lean. For example, Health Maintenance Organizations in the U.S., which consciously control hospitalization, operate at about 2.0 beds/1000 population. While Indonesia's bed/population rates are low, bed occupancy rates (BOR) are also quite low, running about 52% in the aggregate, as shown in Table 4. From these figures it would appear that the general hospital services sector in

Indonesia is over-bedded relative to demand. Whether the sector is also overbedded relative to need remains to be answered.

The sub-district Puskesmas is the health system's most peripherally situated non-hospital clinic facility staffed with medical and paramedical personnel, and provides technical support for the community-based health and family planning system. There were 5006 Puskesmas in Indonesia in December 1986. Of this number, 3096 are funded via a special Presidential funding allocation, Inpres, with the remainder usually funded from provincial and district government sources. Resource allocation and sources of funds for the Puskesmas are discussed in Section 2.3.

Two types of facilities comprise the community-based infrastructure. BKKBN reports 63,000 Village Contraceptive Distribution Centers (PPKBD) and approximately 180,000 sub-PPKBD. The MOH reported 79,412 Integrated Village Health Posts (PosYanDu) at the village level. A PosYanDu, by definition, is any village health post which simultaneously combines a minimum of two of the five essential health interventions: family planning, immunization, diarrheal disease control, nutrition and maternal/child health.

### 2.2.3 Services Policy Considerations

All government policies in Indonesia are founded upon the Basic Laws of 1945 and the national Pancasila philosophy. A National Health System (SKN) was developed in 1982 which provides overall policy until the year 2000 for the health sector in particular and the population sector to a lesser extent. The SKN is elaborated in the Long Range Plan for Health, which sets targets and outlines general strategies to achieve those targets. Both of these documents provide guidance to the People's Consultative Assembly in drafting the Broad Guidelines for State Policy for Health and Population which are issued prior to each Five Year Development Plan (Repelita). These Guidelines govern the formulation of the next Five Year Development Plan. Each governmental sector, coordinated by the National Development Planning Board, then drafts its sector-specific five year plans.

The five-year plans in health and population set specific quantifiable objectives and establish the broad policies and strategies to achieve them. Detailed policies, plans and service targets are formulated annually in accordance with the five-year plans.

Government policies are elaborated at national-level coordinating meetings about one year prior to the inception of the fiscal year. The Indonesian fiscal year (IFY) begins on April 1 and is completed on the following March 31. The policy directives guide the formulation of activities and budgets over the next 12 months.

Health policy developed at the national-level meetings will govern the formulation of budgets and the delivery of health services through the provincial health offices of the Ministries of Health and Home Affairs. Population policy developed at BKKBN's national-level meetings will govern the formulation of budgets and delivery of family planning services through the BKKBN infrastructure. The Ministry for Population and Environment provides technical input for policy development to both BKKBN and MOH, but has no policy-making authority of its own. The Ministry of Home Affairs establishes policies that govern programs for the provincial administration. This policy, called the Eight Successes for Development, is the barometer by which the success of all provincial programs is measured by this Ministry. Interestingly, family planning is explicitly mentioned as one of the Eight Successes. Health does not receive explicit mention, but is referred to implicitly as one of the Inpres (Special Presidential Program) activities, which is one of the Eight Successes.

#### 2.2.4 Services Manpower considerations

By the end of Repelita III (March 1984), there were 162,129 persons working within the MOH and Ministry of Home Affairs health infrastructure (Table 5), with an estimated requirement of an additional 121,768 persons by the end of Repelita IV (March 1989). BKKBN had 39,431 employees as of January 1986, of whom 16,871 were family planning field workers or supervisors. BKKBN estimates that it will need an additional 20,000 employees by the end of Repelita IV.

Table 5. Health Manpower Availability at the End of Repelita III (1984) and Projected Need by the End of Repelita IV (1989)

	Manpower: End of Repelita III	Estimated Manpower Requirement End, of Repelita IV	Additional Manpower Needed
1. Specialists	2,733	3,424	691
2. Physicians	7,529	13,614	6,085
3. Dentists	1,292	1,773	481
4. Bachelors in Public Health	1,219	5,283	4,064
5. Nurses	44,651	76,238	31,687
6. Paramedics	12,011	38,461	26,450
7. Assistant Paramedics	29,473	50,461	20,988
8. Non Medical	63,221	94,643	31,422
	----- 162,129	----- 283,897	----- 121,768

Source: Center for Health Manpower Development, MOH, 1986

The BKKBN and MOH projections for additional manpower are based upon need, calculated by developing ideal manpower to population ratios, and do not take into account the Civil Service System's ability to absorb them. When current manpower production capacity is viewed in light of the system's capacity to absorb the manpower, a serious problem of over production of key technical personnel, especially physicians, specialists and paramedics, becomes evident, which will have major policy implications for the MOH. There is, however, a serious shortage of persons with the technical, managerial, and administrative skills needed to function in structural positions within the health and family planning bureaucracy. These are explained below.

The two major producers of health manpower in Indonesia are the Ministry of Education and Culture and the Ministry of Health. The former produces the trained professional manpower (physicians, dentists, pharmacists, and graduates with bachelors degrees in public health, allied health, and social and physical sciences) while the latter produces nurses, midwives, and other paramedical personnel.

The figures for manpower production for 1984 and 1985, the first two years of Repelita IV, are shown in Table 6.

Best estimates indicate that 1500 physicians graduate each year in Indonesia from public and private medical schools. Approximately 220 specialists in surgery, obstetrics/gynecology, pediatrics, and internal medicine graduate annually from specialty residencies.

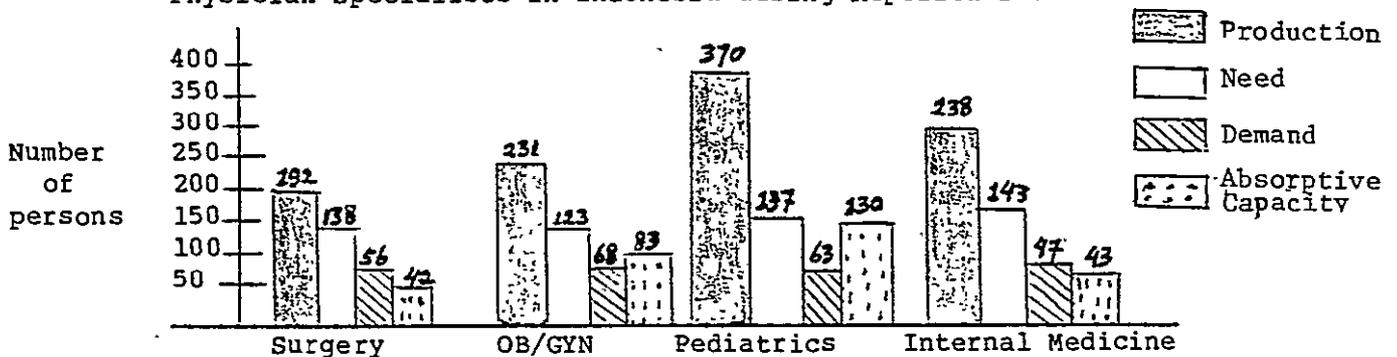
MOH policy requires that, following graduation from medical school, a physician must work in a salaried position within the government service or private sector before he or she can obtain a license to practice independently. The MOH Personnel Bureau estimates that, of the 1,500 physicians produced annually in Indonesia, only 800-1000 obtain salaried positions, either as PusKesMas doctors, in the military, clinical positions in other governmental departments, teaching positions in the Ministry of Education and Culture, or clinical positions in the private sector. The remaining 500-700 have no legal authority to practice medicine. Instead, these people move into a medical black market where they function outside of the legally-supervised medical system. The numbers of physicians practicing in this fashion is growing arithmetically each year.

Table 6. Production of Physicians, Specialists and Paramedics, 1984 and 1985.

	<u>1984</u>	<u>1985</u>	<u>Total</u>
Physicians	1,500	1,500	3,000
Specialists	220	220	440
<u>Paramedics</u>			
- Vocational and Technical Schools	7,772	10,450	18,222
- Academies	543	651	1,194
- Accelerated Programs	<u>943</u>	<u>1,927</u>	<u>2,870</u>
	9,258	13,028	22,286

As can be seen from Figure 9, the production of specialists exceeds even projected needs, and vastly exceeds the government health system's ability to absorb them. A significant budgetary allocation is made each year to train these specialists. The wisdom of those expenditures in light of this analysis needs further consideration.

Figure 9. Estimated Production, Need, and Absorptive Capacity of Physician Specialists in Indonesia during Repelita IV.



Source: Personnel Bureau MOH, 1985

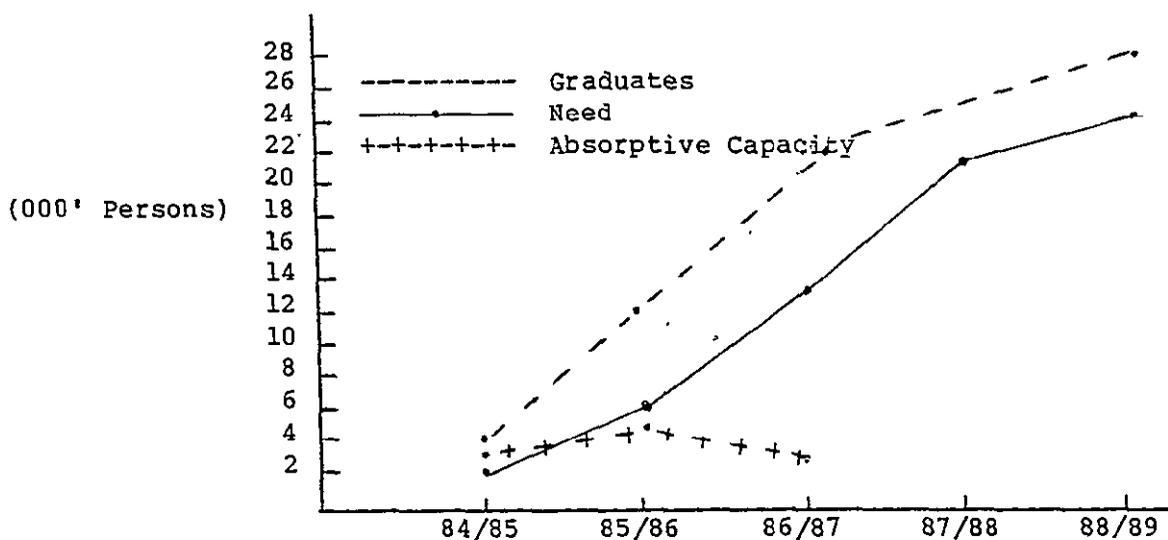
The MOH currently operates 379 specialized training institutes to produce paramedical personnel which can be broken down into three categories:

- (1) 280 Vocational Schools - Entrants must have a junior high school education. The length of training is three years. Graduates have technical expertise in midwifery, nursing, medical technology, nutrition, sanitation, dental hygiene, and other paramedical skills.
- (2) 42 Technical Schools - Entrants must have a senior high school education. The length of training is one year. Graduates have technical expertise similar to graduates of vocational schools.
- (3) 57 Academies - Entrants must have a senior high school education. The length of training is three years. There are currently academies for nursing, nutrition, sanitation, anesthesiology, physiotherapy and medical diagnosis.

The manpower production target set for paramedics during Repelita IV is 58,000 persons. An accelerated program for training specific categories of paramedics was inaugurated by the MOH in 1984 to assist in meeting this target.

As shown in Figure 10, at present levels of production, graduates of paramedical vocational schools, technical schools, and academies will exceed job availability by 1987/88. By 1986/87, production is expected to exceed absorptive capacity by nearly 13,000 persons. With the current economic situation, it is questionable whether there will be any new positions for these paramedics by 1987/88. Paramedics are produced exclusively for service within the government's health system. When positions are not available for them within the civil service system upon graduation, they have no legal alternative employment opportunity. Most eventually drift into private practice in the informal sector, i.e., practice without licenses and outside the purview of the MOH.

Figure 10. Estimated Number of Graduates, Need, and Absorptive Capacity for Paramedical Personnel during Repelita IV.



Source: Personnel Bureau, MOH, 1985

While civil service positions for paramedical personnel are in short supply, both BKKBN and MOH have had difficulty filling existing structural positions with persons with bachelors level education in the public health and allied health sciences. Projections based upon zero organizational growth indicate that BKKBN and MOH will need 1,680 and 4,200 bachelors degree graduates in the public health sciences, respectively, between now and 1999 only due to attrition. This demand far exceeds the Ministry of Education and Culture's ability to produce these personnel, even with the recent addition of four new schools of public health.

### 2.3 FINANCING HEALTH AND FAMILY PLANNING SERVICES

The pattern of funding government health and family planning services in Indonesia is complex. Through a complex allocation system, funds are appropriated, obligated, committed, disbursed, and finally accounted for yearly; the operation of this system has a profound effect upon planning, service delivery and, ultimately, the government's success in reaching its objectives.

#### 2.3.1 Funding for Health and Family Planning Services

It is difficult to obtain a clear explanation of how funds are allocated for health and family planning in Indonesia, even from persons who work within the system. The most comprehensive review was made by Wheeler in 1980, who traced government resource allocation channels in three provinces. It is not the purpose of this paper to reconstruct this system. However, an explanation of terms is necessary to understand its complexity.

Funds for health and population are derived from six major sources as shown below:

APBN	Central government routine and development budget
APBD I	Provincial government routine and development budget
APBD II	District/municipality government routine and development budget

Inpres	Special Presidential Program
Foreign Aid	Bilateral and multilateral
AsKes	Fees from Civil Servants Health Insurance

Funds from the APBN, APBD I and APBD II development (DIP) budgets are used for equipment, materials, land purchase, construction, honoraria, and incentives. Funds from the routine (DIK) budgets support recurring costs such as salaries, maintenance, utilities and supplies. Funds from these sources can be used at any administrative level at or below their source. For example, APBN funds are used at the district/municipality level, but APBD II funds are not used at the central level.

Inpres are special funds flowing directly from the President. Inpres funds are used for drugs, Puskesmas construction and renovation, vehicles, water supply and sanitation. Foreign aid expenditures mirror routine and development expenditures from the three administrative sources. AsKes are the funds the government receives from its civil servants health insurance program.

It is very seldom that any program or activity is financed entirely from one source, or even from one level of government. For most activities, a variety of funding sources is the norm. Even for a given type of input to the same activity, there is typically a multiplicity of funding sources. For example, drugs are provided with funds from APBN routine, APBN development, Inpres, AsKes, APBD I routine, and APBD II routine budgets.

The variety of funding sources that may contribute to a unit's operation can be seen at its extreme in the case of the Puskesmas. Given the Puskesmas' crucial role in the GOI's primary health care system, this is no trivial example. Original construction costs of the Puskesmas plus vehicles could come from any one of, or a combination of, InPres, APBN development, APBD I development or APBD II development. Once built, the Puskesmas is owned and managed by the district, with a specific budget from the APBD II routine budget. However, that budget will detail only a part of the total resources required to operate the Puskesmas: typically, some

basic salaries for staff, cost of materials, maintenance, and small amounts for travel. Other basic salaries may be included in APBN or APBD I routine budgets, while additional staff costs may appear in APBN development, APBD I development, APBD II development, AsKes or BKKBN.

First-year operating costs of vehicles are provided from InPres, but in subsequent years funds must come from APBD II routine. Drugs could come from any of the sources mentioned above, while contraceptives and drugs to treat their side effects come from BKKBN. While the medical service function of the Puskesmas is funded by APBD II routine, the preventive and promotive functions depend on other budgets, largely the APBD I development budget. With this unwieldy budgeting system, it is not surprising that the Puskesmas is routinely paralyzed by lack of funds. Even when funds exist, it is often difficult to mobilize them.

### 2.3.2 Expenditures on Health and Family Planning Services

Estimates for total expenditures on health and family planning in IFY 1982/83 are presented in Table 7. Of the Rp. 1,685 billion total gross expenditure (\$2.6 billion), 43.5% was public sector expenditure and 56.5% was private sector expenditure. The APBN, Inpres, and salaries comprise more than half of the public expenditure. Expenditures for hospitals, private practice and drugs comprise 86.5% of all private sector expenditures. Drugs alone constitute nearly half of the private sector expenditures. The public sector budget for family planning was Rp. 77.3 billion, while private expenditures in this area were too miniscule to estimate.

Focusing on the health sector, Rp. 1,482 billion were spent in IFY 1982/83. Of this 64% came from private sources, in this case payments directly from the household, and only 36% from public sources (including foreign aid). Private expenditure on health is generally ad hoc and poorly organized. When people become sick they generally seek services and drugs with out-of-pocket payments. There is no organized, structured way to direct private funds, which comprise the major segment of Indonesia's health

Table 7. Overview of Health and Population Sector Expenditures in Indonesia, IPY 1982/83

Public		Private	
Source	Rp. (billions)	Source	Rp. (billions)
I. Health	612.7	I. Private	869.5
1. APBN	198.0	1. Private Hospitals	186.2
2. APBD I	23.4	2. Private Practices	197.7
3. APBD II	17.5	3. Drugs	440.6
4. Inpres	98.5	4. Traditional Practitioners	40.8
5. Salaries (from M. of Fin.)	103.0	5. Universities/Schools	4.2
6. Armed Forces	40.9	6. Other Insurance	N/A
7. Ministry of Education	22.7	7. Donation	N/A
8. Crash Program	17.0	8. Family Planning	N/A
9. Other Departments and Enterprises	34.3		
10. Foreign Assistance	51.6	II. Fees Paid by Individuals to Public Institutions	53.0
II. Ministry of Public Works	42.5	III. AsKes	30.0
III. Family Planning	77.3		
Total Public Expenditure (gross)	732.5	Total Private Expenditure (gross)	952.5
Total Public Expenditure (net)*	654.1	Total Private Expenditure (net)*	947.9

\* Net of revenue received from AsKes and fees.  
Source: World Bank, 1983.

expenditures, toward promotive/ preventive health services.

Table 8. Public/Private Sector Contribution to Health Expenditures in Indonesia, IFY 1982/83

Source of financing	Rp. (Billions)	%
Household Payments		
1. Fees for private services	521.9	35.2
2. Purchase of drugs	343.0	23.1
3. Fee for public services	53.0	3.6
4. Contribution to AsKes	30.0	2.0
	947.9	63.9
Public Funds	482.7	32.6
Foreign Assistance	51.6	3.5
	1,482.2	100.0

Source: World Bank, 1983.

When these expenditures are broken down by provider categories (Table 9), it can be seen that the major single health expenditure is for hospitals, followed closely by drugs and then private medical practice. The majority of annual health expenditures are for curative and rehabilitative medicine, and probably have very little impact on the country's overwhelming problems of infant and child mortality.

Table 9. Health Expenditures by Provider Categories, Public and Private, IFY 1982/83

Providers of Health Services	(Rp. Billions)	%
<u>Public</u>		
Hospitals	211.4	14.3
Health centers	172.9	11.7
Special programs	60.2	4.1
Supporting services	93.0	6.2
Armed Forces facilities	40.9	2.8
Other facilities (non-MOH agencies and state enterprises)	34.3	2.3
Sub-Total:	612.7	41.4
<u>Private</u>		
Hospitals	205.0	13.8
Private practice	280.7	18.9
Traditional practitioners	40.8	2.8
Retail drug sales	343.0	23.1
Sub-Total:	869.5	58.6
Total:	1,482.2	100.0

Source: World Bank, 1983.

Indonesia spent only 2.7 percent of its GNP on health in 1981/82, or \$10/person/year, a relatively low figure for a country which experienced 8 percent annual GNP growth during the 1970s. For example, Table 10 shows that five countries with slightly lower per capita GNP (\$352-\$420) than Indonesia spent an average of 3.1% of their GNP in 1981 on the health sector. The five countries with a slightly higher GNP/capita (\$499-680) spent an average of 4% on health.

Table 10. Percentage of GNP Spent on Health, 1981

Country	GNP/Cap US.\$.	GNP/cap Spent on Health		Average
		US\$	%	
Maldives	352	5	1.4	3.1%
Lesotho	390	16	4.1	
T o g o	410	20	4.9	
Yemen	420	17	4.0	
Kenya	420	8	1.9	
Indonesia	450	10	2.7	2.7%
Tonga	499	22	4.4	4.0%
Zambia	560	24	4.3	
Zimbabwe	630	21	3.3	
Cameroon	670	31	4.6	
Swaziland	680	22	3.2	

Source: WHO, 1983.

It is unlikely that, in the short term, any significant increase in public expenditure on health or population will increase the sector's total expenditure as a percent of GNP. During the 1970s, while Indonesia's economy was experiencing vigorous growth, the MOH central government expenditure on health (APBN and Inpres) stagnated. Since 1982 there have been no real increases in the government health budget after inflation and its percentage of the total central government budget has decreased. In addition, in 1986/87 there has been a drastic decrease in the Rupiah value of the budget (Table 11).

Table 11. MOH Central Budget Allocation in Relation to Central Government Budget Allocation and as Percent of GDP, IFY 1974/75 to IFY 1986/87 (Rp. Billion)

Fiscal Year	Development	Inpres	Routine	Total	Total MOH as Percent of Total Central Government Expenditures
1974/75	8.6	5.3	12.3	26.2	1.3
1975/76	13.0	15.2	19.2	47.4	1.7
1976/77	15.7	20.9	17.4	54.0	1.5
1977/78	21.0	26.3	21.6	68.9	1.6
1978/79	23.8	26.9	26.0	76.7	1.4
1979/80	50.1	30.0	32.4	112.5	1.4
1980/81	78.2	50.0	50.1	178.3	1.5
1981/82	98.7	79.0	74.4	252.1	1.8
1982/83	119.0	98.5	78.5	296.0	2.1
1983/84	119.0	98.5	82.4	299.9	1.6
1984/85	119.0	98.5	93.5	311.0	1.5
1985/86	125.4	114.5	116.8	356.7	1.5
1986/87	65.4	114.5	137.6	318.8	1.5

Source: Bureau of Finance and Planning, MOH

BKKBN has fared slightly better in the budget battles since 1979/80, perhaps reflecting the government's commitment to family planning. During the lean years of the 1980s, BKKBN's share of the central government's budget has increased steadily, so that BKKBN's APBN development budget for 1986/87 is approaching the amount the MOH development budget (see Tables 11 and 12), and the reductions in its total budget have been minimal. In 1986/87 BKKBN's share of central government budget allocation has actually increased compared with 1985/86 (Table 12).

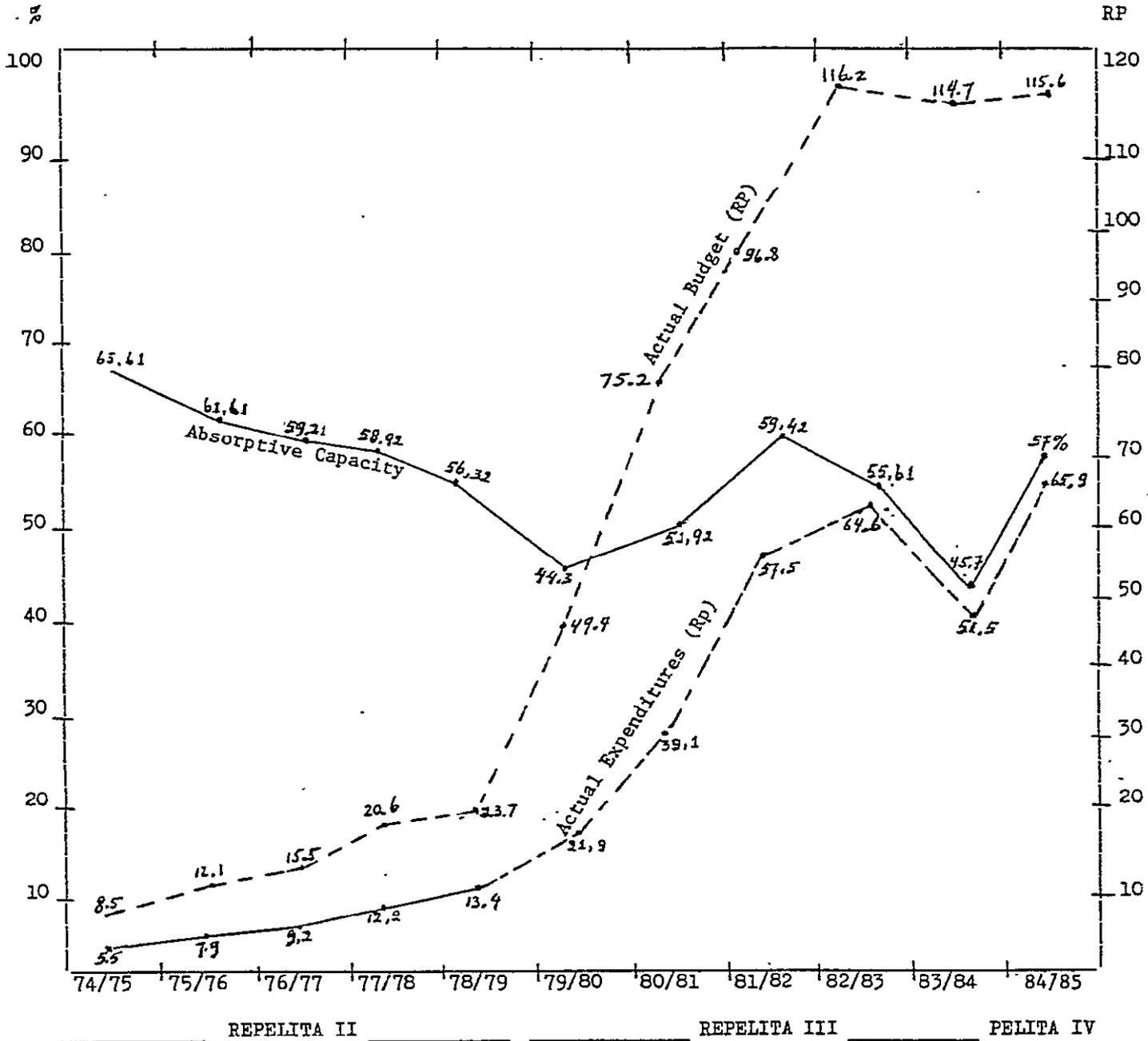
Table 12. BKKBN Development and Routine Budget Allocation as a Percent of Total Government Expenditures, IFY 1979/80 to IFY 1985/86 (Rp. Billion)

Fiscal Year	Development Budget	Routine Budget	Total	BKKBN as % of Total Government Expenditures
1979/80	11.8	1.2	13.0	.18
1980/81	21.9	4.4	26.3	.22
1981/82	29.6	5.3	34.9	.25
1982/83	39.9	8.5	48.4	.31
1983/84	48.0	11.4	59.4	.32
1984/85	53.4	16.5	69.9	.34
1985/86	55.4	23.4	78.8	.33
1986/87	55.0	21.2	76.2	.36

Source: Bureau of Planning, BKKBN.

Stagnation in the public sector's budgetary authority for health since 1980 has been exacerbated by MOH's inability to spend its available funds. Figure 11 illustrates MOH's absorptive capacity to spend its APBN development budget since 1974/75. Regardless of the size of the allocation, the MOH has only been able to spend about 50% of its central development budget annually. Prior to IFY 1986/87, unspent balances could be carried forward for three years before funds had to be deobligated, allowing for some flexibility with unspent balances, and to some extent alleviating the costs of inefficiency. Beginning in IFY 1986/87 unspent budget allocations must be deobligated at the end of the fiscal year. If MOH cannot absorb its budget, those funds are returned to the central treasury. Low absorptive capacity resulting from inefficiency will further deplete already-scarce public resources for health.

Figure: 11. Allocated Budget and Actual Expenditures for MOH APBN Development Budget, IFY 1985/75 to IFY 1984/85



Source: Bureau of Finance, MOH, 1986

2.4 CHALLENGES AND CONSTRAINTS FACING INDONESIA'S HEALTH AND POPULATION PROGRAMS

In its National Health System, the government has set very ambitious objectives for reducing infant and child mortality by the year 2000. The most important of these are summarized in Table 13.

Table 13. Health Indicators (1980) and Objectives of Health Development by the Year 2000

No.	Indicator	Health Status 1980	Objective by 2000
1.	Life expectancy	50 yrs	60 yrs
2.	IMR	98/1000 l.b.	45/1000 l.b.
3.	Death rate for children under 5 years of age	40/1000	15/1000
4.	Low birth weight	14%	7%
5.	Diarrhea	400/1000	200/1000
6.	Malaria		
	- Java-Bali	82 subdistricts	20 subdistricts
	- Outer Islands (priority I)	10%	2%
	- Outer Islands (priority II)	20%	5-10%
7.	Tuberculosis	3/1000	2/1000
8.	Tetanus (neonatal)	11/1000 births	1/1000 births
9.	Under 14-immunization coverage	40%	80%
10.	Mother-child health delivery	40%	80%
11.	Clean water supply	18% of pop.	100% pop.
12.	Crude birth rate	34/1000 pop.	18/1000 pop.

Source: The National Health System, MOH, 1982.

Achieving these objectives will require a significant expansion of current programs and marked improvements in efficiency. Some of the challenges that will be faced are discussed below.

#### 2.4.1 Fertility Reduction

Further reductions in crude birth rates will become increasingly more difficult and expensive to achieve as greater numbers of eligible couples choose to use contraception. Prevalence rates in Java and Bali are reaching upper limits, at which point, recruiting new acceptors will require more inputs. As the program moves further into the outer islands, topographic and geographic obstacles, combined with poor infrastructure, will also increase the cost per new acceptor. Simultaneously, for the next ten years increasingly large cohorts will be entering their reproductive years, a legacy of high fertility in the 1970s. Although the average age of contraceptive users has fallen regularly over the past ten years, average age and parity of contraceptive users are still high in Indonesia, indicating that couples tend to join the family planning program after achieving desired family size. Special efforts need to be made at earlier stages for reaching the large cohorts moving into their reproductive years. BKKBN will need more innovative strategies, more personnel, more contraceptives, and more equipment to meet this challenge.

#### 2.4.2 Urban Family Planning

Acceptance of family planning in urban areas has lagged behind acceptance in rural areas. In almost all other developing countries, the synergistic effect of better education and greater economic opportunities available to city dwellers has made the opposite case more customary. As the urbanization of Indonesia's population continues, special attention should be given to urban family planning. The community-based strategies that have been so successful in recruiting new acceptors and maintaining continuing acceptors in Indonesia's village family planning program will need to be reformulated and adapted to the unique demographic and socio-cultural characteristics of Indonesia's urban population.

### 2.4.3 Choice of Health Interventions for Mortality Reduction

Most mortality in Indonesia occurs in children less than five years of age. Intensified efforts in immunization, reducing diarrheal diseases, nutrition, family planning, and maternal/child health will have the greatest impact. But these five interventions have not always attracted a high proportion of available resources. A stronger policy emphasis is needed so that existing levels of participation in all of these programs can be significantly increased. Existing delivery systems and service sites will have to be expanded, or alternate systems developed to bring more of these services to the target population. IMR must be reduced by 4% annually to reach the target set by 2000. When infant mortality is in the vicinity of 100/1000 live births and most mortality is still caused by infectious disease, as is the case in Indonesia, public health interventions are very effective in reducing the IMR. As IMR falls to 70 and below, social and behavioral change must accompany the public health measures to effect further reductions in the IMR.

Such social change usually accompanies economic development and works in synergy to achieve further reductions in the IMR. Hence, the health sector cannot be viewed in isolation, but must be seen within the context of socio-economic development. Mature service delivery infrastructures must be in place to facilitate the projected annual reductions in infant mortality. This will require technically and administratively skilled manpower, operational management systems, and sufficient resources to provide the routine recurrent costs needed to sustain these programs. Delivery systems and infrastructures in nutrition, immunization, diarrheal disease control and mother/child health are being developed at the present time. These will need testing and refinement.

The choice of interventions to reduce infant and childhood mortality also requires careful consideration of how much investment should be made to develop sustainable service delivery systems and how much should be devoted to priority targeted interventions which will produce a large, but perhaps short term, impact on mortality. While both are recognized as important,

there is always a tension between the two objectives in the planning and budgeting process. In an environment of limited resources, MOH will increasingly be faced with difficult decisions about such issues as how to target resources geographically or to certain population segments which are contributing disproportionately to high infant/child mortality rates, whether to undertake campaign approaches to deliver certain services or strengthen routine programs, and how much of the total budget can be used for curative versus preventive care.

#### 2.4.4 Health Financing

Further reductions in fertility and infant, child, and maternal mortality will require greater expenditures on health and population. The flat demand for Indonesia's fossil fuel and other resources, however, precludes any significant budgetary increases in the public sector over the short term at least. Public expenditures on health and population will probably stagnate over the next five to ten years.

However, data indicate that there is a brisk private sector which could provide more assistance. Already accounting for about 60% of all yearly expenditures on health and population, the private sector shows considerable promise for increasing its contribution to the five priority interventions. However, unbridled private sector growth in its current form, with its predominant emphasis on curative medicine and hospital care, would not contribute strongly to reducing fertility and mortality. The private sector's financing potential needs to be tapped, but in a way that can direct it more towards promotion, prevention, and reaching national health objectives as stated in the SKN.

Public sector expenditures, as currently structured, are still overly directed toward hospitals and other stationary facilities. Government hospitals absorb about 35% of the government's yearly health budget. These hospitals are inefficiently run at less than minimum capacity. Strategies should be designed to improve hospital efficiency and divert more funds to promotive/preventive care with maximum impact on child survival.

Multiple funding sources for each service unit make sound financial planning nearly impossible. Managers have little or no control over where funds come from; hence, they cannot link services with budgets. Over-reliance on project-oriented funding has built up recurrent cost requirements, without a concomitant expansion in recurrent cost appropriations. As a result, recurrent costs are provided through the development budget or Inpres. Some way to consolidate budgets would greatly simplify managers' burden.

As budgets dwindle, efficiency will have to be increased to compensate. If in 1986/87 the MOH only spends 50% of its central development budget, the remainder of funds will revert to the central treasury. The bulk of preventive and promotive activities receive support from this source, and loss of these funds would even further restrict the government's ability to increase child survival.

#### 2.4.5 Manpower

Health manpower problems in Indonesia are primarily related to appropriateness rather than quantity. Adequate numbers of clinical manpower are being produced, but the government health system cannot provide adequate numbers of positions to employ the graduates. Also, producing and deploying more health and family planning manpower does not guarantee that services will be increased accordingly. In its "Functional Analysis of Health Services Management," the Faculty of Public Health at the University of Indonesia (1986) found that the Puskesmas being studied functioned at 53.2% of peak efficiency, and that fully 46.8% of staff time was non-productive. Of the time deemed productive, most was spent on administration and curative care.

In light of existing MOH licensing regulations, more physicians, nurses and other types of paramedics are being produced than the health system can efficiently absorb. However, this should not imply that Indonesia is overproducing physicians and paramedics. Physician/population ratios are still very lean, and the maldistribution of physicians in urban areas

results in even more disadvantageous ratios in rural areas. Rural populations, which comprise 75% of Indonesia's population, are still largely underserved by physicians. Reforming of present licensing regulations would contribute significantly towards alleviating the problem of a perceived oversupply of physicians and paramedics.

In light of the present economic situation and in view of the fact that fewer positions will be available for physicians and paramedics, consideration must be given to improving efficiency. One obstacle is the current system for allocating funds, especially at the Puskesmas.

Another is the emerging manpower bottleneck at the district level. The districts' critical intermediary role between the provincial health services and the Puskesmas and village PosYanDu is frequently overlooked, especially in terms of budget and manpower development. District health and family planning staff provide direct support and supervision to the Puskesmas and PosYanDu and the district is often the conduit for referrals from the peripheral health infrastructure to the province. Yet district staff frequently lack adequate educational background in the public health sciences. Manpower development and service inputs are most frequently aimed at the Puskesmas or the province, and inputs to the district are frequently incidental. This results in the "hourglass" effect which is discussed in Section 3.1.2.

While Indonesia has a surfeit of physicians and paramedics for the government's health system, there is a severe deficiency of administrators at the central, provincial, and district administrative levels with the requisite skills to effectively lead, manage, and administer a public health system. If the government proceeds with plans to place a public health manager in each Puskesmas, this shortage will be even more acute.

#### 2.4.6 Organizational Issues

The existence of parallel health infrastructures from the Ministries of Health and Home Affairs at the provincial and district levels has the

potential for creating organizational and managerial confusion. The development of this system and deployment of personnel are still incomplete, and clearly defined and circumscribed roles for the MOH district offices have not yet been formulated, frequently resulting in territoriality and competition between the two ministries. Employees within the provincial health infrastructure face the dilemma of having to serve two masters.

Combining health and population sector activities under the Governor provides for better cohesion and coordination. However, central domination of budgets and activities is still the prevailing pattern. The MOH/Ministry of Home Affairs district health office system, which was founded to facilitate decentralized resource allocation, has not yet reached that goal.

#### 2.4.7 National Policy

There is an extremely strong commitment to Indonesia's family planning program. Government officials at all levels have been convinced of the demographic, environmental, and health implications of unbridled fertility and population growth. Family planning is one of the Eight Successes by which all provincial programs are evaluated. Moreover, studies have documented the tangible benefits of a family planning program. Chao et al. (1985) have documented the total savings in health and education costs which have accrued to the GOI because of its family planning program. Based on these estimates, a government investment of Rp. 2,186 million in the family planning program between 1971 and 2001 will result in savings for government expenditures on health and education of Rp. 61,072 million, or a net savings of Rp. 58,885 million. This study clearly illustrates that investment in Indonesia's family planning program is one of the most effective ways to reduce government expenditures on health and education.

Commitment to the health program is not nearly so strong outside of the MOH. Government officials are not as well versed in the terminology and benefits of the health program as they are those of family planning. Health is not explicitly mentioned as one of the Eight Successes, and so it receives less attention and commitment from provincial and district level

officials. There have not been any studies quantifying the benefits of the health program in terms meaningful to economic planners; hence, the health sector has not been able to obtain an adequate portion of government expenditures. With political support and commitment equal to that which has been given to family planning, the health sector could justify substantially increased budgets and levels of effort. The Task Force on Integrated Services could assist this process.

Considerable progress was made in improving political commitment to Indonesia's health program on National Health Day, 1986. On that occasion, President Soeharto declared his official support for the MOH's child survival program, and he will issue a Presidential Decree making the PosYandu program Indonesia's official child survival strategy. The Presidential Decree will also state the roles and responsibilities of other ministries in the PosYandu program, thus raising child survival to a national priority with multidisciplinary involvement.

#### 2.4.8 Private Sector

Government policy has not encouraged organized private sector involvement in health and family planning. On the contrary, existing government policies discourage private sector involvement in any organized way to support the GOI's major child survival and fertility reduction objectives. The result is a substantial private sector contribution to overall health and family planning, the overwhelming majority of which is for curative services such as hospitals, private practice, and drugs, not for the GOI's priority child survival services. With favorable legislation and coordination, the private sector could probably play a constructive role in reducing fertility and mortality and improving child survival.

#### 2.4.9 Delivering the Five Priority Child Survival and Fertility Reduction Interventions to the Poor

The MOH has a strong commitment to extending delivery of the five priority interventions, particularly by developing the PosYandu system in

all communities. While this is welcome, there are several questions on the supply side of the PosYandu concept: to what extent can the public sector staff the enormous numbers of required PosYandu with well-trained health staff and volunteers every month on a continuing basis? Is a once-monthly meeting system an adequate method of educating mothers about the large number of primary health care topics implied in the policy of intensifying the five priority interventions? Can village volunteer workers be stimulated to volunteer their services month after month? There are also some important questions on the demand side of the concept: who are the mothers who hear about the PosYandu and use it? Do they understand the benefits to be derived? Are the poorest mothers benefiting from the PosYandu system? Or is their literacy level too low for them to benefit from discussions, posters and descriptions of weight charts?

While the PosYandu system will probably be successful in many communities, it is likely too much to hope that it will, by itself, increase coverage of the five priority interventions to a high enough level to meet the ambitious mortality and fertility reduction targets among the poor. A variety of systems which deliver supplies to poor remote populations on a regular basis are needed. Similarly, systems that educate and create demand through a variety of popular channels are needed. Innovative social marketing projects, such as the MOH's Central Java Health Education Project and the Garut oral rehydration therapy activity, have apparently been quite successful in raising supply and demand to high levels. It is important to note that these two projects were public sector projects where social marketing was used to increase both supply and demand. The Garut experience also provided valuable lessons about the benefits and difficulties of harnessing commercial sector expertise by the MOH. Given these successes, the social marketing of health care and family planning should be developed further.

#### 2.4.10 Demand for Health Services

One of the major constraints facing the health system is a lack of information about people's demand for various kinds of health care. In the

area of family planning, the government has paid considerable attention to the issue of how to increase demand for services and has devoted resources to public campaigns and community organization techniques to increase such demand. This has not been the case, however, with child survival services. It is generally assumed that the demand for curative services is fairly strong, but it is not known exactly how price and quality of service affect this demand. Most planners also assume that the demand for services such as immunizations and oral rehydration therapy is not especially high because the population is not well informed about the need for such interventions. Thus, it may be extremely difficult in the future to increase dramatically the coverage of immunizations, particularly for second and third dose of DPT, until there is greater demand for the services.

There is a great need to use modern mass communication techniques to encourage people to change certain health behaviors and adopt ones which will help protect vulnerable groups from risk of illness and death (e.g., prolonged breastfeeding, proper weaning). In Indonesia, as in most developing countries, the emphasis on changing behaviors and creating new demand for services has been on fairly traditional health education techniques and in labor intensive face-to-face communications between field workers and villagers. Some of these traditional methods can be costly, and, on their own, often not particularly effective.

There is a growing awareness within the MOH of the advantages of adopting a social marketing approach to the delivery of services. This approach implies a concern for looking after both the demand and the supply of health services and making sure that demand creation and supply provision are coordinated in a way that will increase utilization of the services. There is a need to demonstrate the power of social marketing approaches for critical child survival services and to build up the institutional capacity of MOH to provide services in this manner and to utilize private sector talent in marketing where it is advantageous to do so. At the same time, from the supply side, the recurrent costs of meeting increased demand must be anticipated and ways must be found to cover these costs.

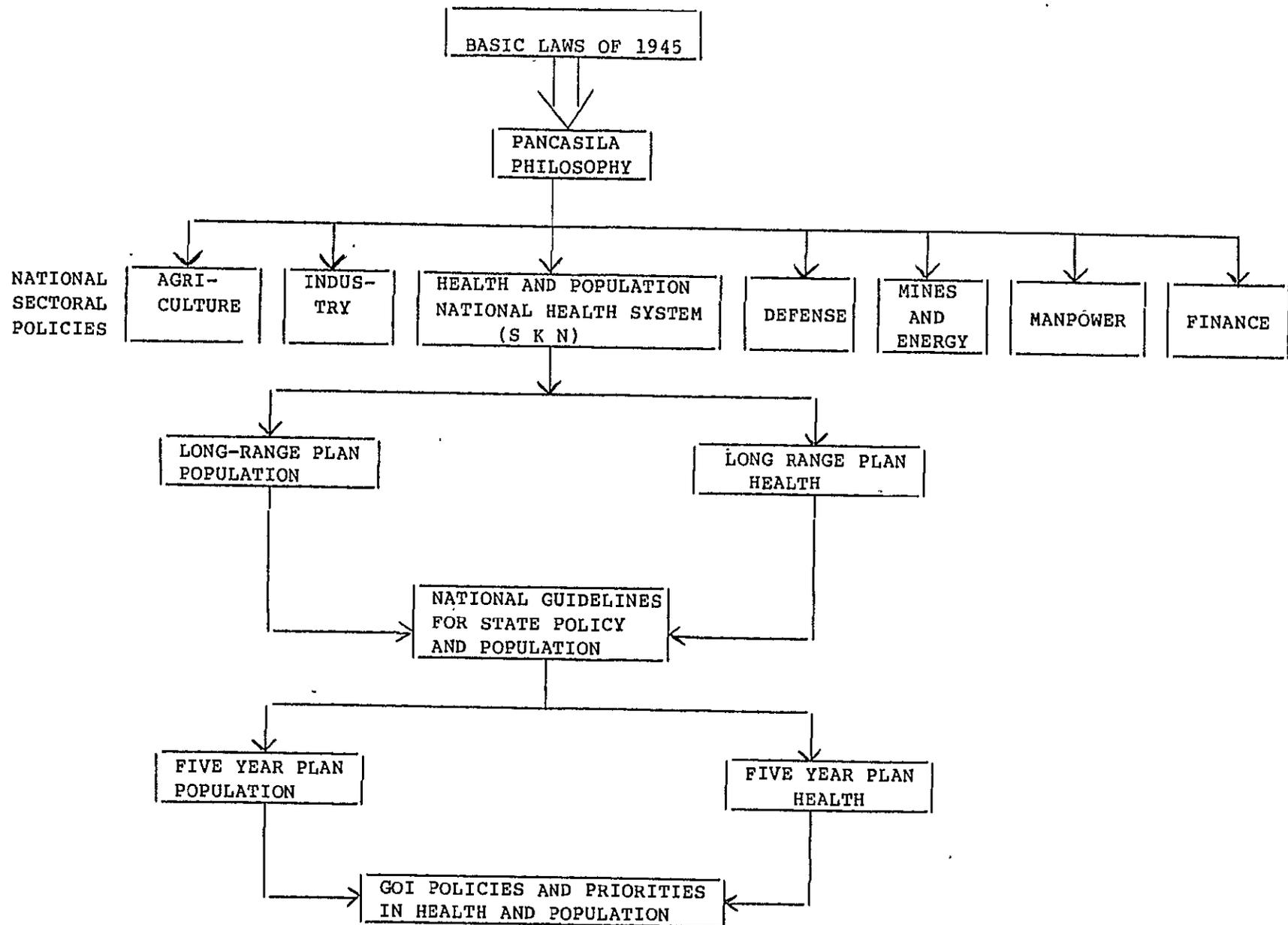
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### 3. GOI POLICIES AND PRIORITIES IN THE HEALTH AND POPULATION SECTORS

All GOI policies are based on the Basic Laws of 1945 and the national Pancasila philosophy. In 1982 the MOH promulgated its National Health System (SKN) which established the constitutional basis for all health activities, including family planning. An outgrowth of the SKN was the Long Range Plan for Health Development which formulates the policies, strategies, and specific objectives for the health and population sectors until the year 2000. Although the broad outlines of population policy and objectives are loosely elaborated in the SKN and the Long Range Plan, specific policy formulation remains the responsibility of BKKBN and the Ministry of Population and Environment. These two documents guide the Indonesian Parliament in developing the National Guidelines for State Policy which govern the formulation of the ensuing Five Year Development Plans in health and population. The GOI process of policy formulation and priority setting is presented schematically in Figure 12.

As the midpoint for Repelita IV approaches, the GOI has begun assessing the policies and strategies of Repelita IV and evaluating the results achieved to date. From preliminary assessments conducted in both the health and population sectors, priorities for Repelita V are beginning to crystallize and will be incorporated into the National Guidelines for Repelita V. From discussions with policy makers in both sectors, analyses of the SKN, the National Guidelines, and long-range population policy, and preliminary assessments of achievements during Repelita IV, a picture of future GOI policies and priorities in the health and population sectors begins to emerge.

Figure 12. Policy Formulation and Priority Setting for the Health and Population Sectors



### 3.1 THE HEALTH SECTOR

#### 3.1.1 Policy Context

The SKN affirms health as a basic right of every Indonesian citizen and establishes the government, through its Ministry of Health, as the guarantor of that right.\* Consequently, the SKN directs the government's health system to make health services available to all Indonesian citizens, regardless of their income levels or geographic remoteness, and to direct its activities primarily toward low income groups. The SKN does recognize, however, that government alone cannot meet the total health needs of the Indonesian people. In order to achieve the general objectives of national development and self reliance, the SKN states that health activities must be "integrated, evenly distributed, acceptable, and accessible ... and carried out with active community participation." Community participation is interpreted broadly, meaning community involvement in identifying problems and needs, planning health programs, delivering health services, and financing health care. In the delivery and financing of health services, the SKN clearly identifies the private sector within the rubric of community participation, and leaves the flexibility for developing multiple private and social financing schemes as long as they maintain standards of quality, effectiveness, and efficiency.

Based upon the principles contained in the SKN, a Long Range Plan for Health Development was promulgated by decree of the Minister of Health in 1983. It sets out the policies, strategies, and specific objectives in the field of health and population until the year 2000 (Table 14). The Five Fold Tasks in Health, which have been identified for special emphasis, in the Long Range Plans, are:

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\* The SKN adopts the WHO definition of health, as determined at the Alma Ata Conference of 1978, as "not only the absence of disease, but also physical, social, and psychological well-being."

Table 14. GOI Objectives in Health and Population by the End of Repelita IV and by the Year 2000

	(Actual Achievement) (Planned)		<u>Year 2000</u>
	<u>End of Repelita III (1983/1984)</u>	<u>End of Repelita IV (1988/1989)</u>	
* Crude Death Rate (per thousand population)	11.7	10.1	-
* Life Expectancy (at birth)	56 years (male 54.5; female 57.2)	59 years	68 years
* Infant Mortality Rate (per thousand live births)	90.3	70.0	45.0
* Child Mortality Rate (1-4 years) (per thousand children under five)	17.8	14.0	9
* Crude Birth Rate (per thousand population)	33.5	24.3-31.0	18.0
* Average Annual Population Growth Rate	2.3%	1.4-2.0%	-
* Low Birth Weight ( 2.5 kg)	14%	12%	7%
* Protein Calorie Malnutrition (among under fives)	30%	22%	15%
* Xerophthalmia (among under fives)	1.6%	1.2%	0.8%
* Nutritional Anemia During Pregnancy	70%	40%	35%
* High Dose Vitamin A Distribution to Children Under Five	45%	70%	-
* Endemic Goiter	n.a.	reduced 50%	reduced 80%
* Incidence Rate of Diarrheal Disease (per thousand population)	400	350	200
* Prevalence Rate of Malaria (Java - Bali)	10%	5%	2%
(Outside Java - Bali)	20%	17%	-
* Prevalence Rate of Tuberculosis (per thousand population)	3	-	2
* Prevalence Rate of Neonatal Tetanus (per thousand live births)	11	5	1
* EPI Coverage for Children Under 14 Months	40%	65%	80%
* Family Nutrition Improvement Prog. Coverage (Villages)	36,000	64,400	65,000
* Qualified Birth Attendants	40%	55%	80%
* Clean Water Supply (percent of rural population)	32	55	100
(percent of urban population)	60	75	100

- o stepping up and firmly establishing efforts in community health,
- o controlling and supervising the supply of medicines, drugs, and dangerous substances,
- o developing health personnel,
- o improving nutrition and environmental health, and
- o improving management.

This document clearly recognizes high levels of fertility and infant, child and maternal mortality as the most serious health problems facing Indonesia today. It also emphasizes the need for promotive and preventive community health efforts provided through community-based approaches supported by fixed health centers to combat the proximate and underlying causes of high fertility and infant, child, and maternal mortality.

During Repelitas I, II, and III, the MOH focused its efforts on developing the human resources and physical infrastructure needed to provide medical and health services to a geographically dispersed population. As was shown in Chapter 2, it has developed fixed facilities throughout the archipelago, and now has the educational infrastructure to provide the professional and paramedical manpower to staff those facilities. During Repelita IV, the MOH has turned its attention toward developing a community-based infrastructure that will more directly address the problems of high fertility and infant, child and maternal mortality. The result has been the Integrated Health and Family Planning (KB/Kes) Strategy, whose development is being pioneered during Repelita IV.

KB/Kes is a community-based approach that integrates the delivery of the five basic preventive health services considered most effective in reducing fertility and increasing rates of child survival. These services are provided at the village level at the integrated village health services post (PosyanDu). The organizational position of the PosyanDu vis-a-vis the government's total health and family planning administrative infrastructure was briefly described in Chapter 2. The five services that have been integrated in the PosyanDu are nutrition, maternal/child health,

immunization, diarrheal disease control, and family planning. The PosYanDu is planned as a community financed and operated unit receiving technical support from the PusKesMas. As such, it epitomizes the concept of community participation as presented in the SKN and defined in the Long Range Plan.

### 3.1.2 MOH Priorities in Health

Within this policy context, the MOH has identified six areas which it perceives as priority areas requiring specific attention in the near future. These are discussed in the following paragraphs.

#### 3.1.2.1 Resource Allocation

The resources available for the health sector are likely to stagnate in the near and medium term. The MOH sustained a 48% reduction in its development budget in 1986/87, a 65% reduction in its 1987/88 development budget, and planners expect similar cuts in the future. The overall budget in the sector will increase only marginally in Rupiah terms. It is clear that fewer financial resources will be available to provide the increasing numbers of services that will be needed to reach the MOH objectives for reducing fertility and infant, child, and maternal mortality by the year 2000.

Accordingly, MOH planners expect that emphasis must be placed on improving the operational efficiency (production of outputs with the least-cost combination of inputs), allocative efficiency (optimal allocation of resources to various vertical programs within the health budget), and equity efficiency (the optimal distribution of benefits and burdens of the national health services system) of the government's health services in particular, and the delivery of health services in general in Indonesia.

In these planners' view, operational efficiency can be most favorably and quickly effected by improving manpower productivity and financial management. Data from the University of Indonesia's functional analysis

study (1986) and other research indicate that the productivity of health manpower is low and personnel are not deployed in accordance with workloads or disease conditions in a particular area. Concurrently, the absorptive capacity of MOH development budgets has hovered at about 50% annually, which may be attributable to inadequate financial management. Both low manpower productivity and poor absorptive capacity are structural problems not amenable to quick-fix solutions, but are considered to be of primary importance as the resource picture worsens.

The analysis of health sector expenditures in Chapter 2 reveals that expenditures in both the public and private sectors are skewed toward curative and rehabilitative services. Fully 53% of the 1982/83 central government routine budget is allocated for hospital services. If the central government's administrative costs are subtracted, hospitals claim 75% of the remainder (Stevens and Doodoh, 1986). MOH planners project that a small diversion from the hospital budget would, as a percentage of expenditures, free up large amounts of funds for preventive services, and are advocating strategies which will allow for favorable internal reallocation of existing government budgets toward preventive- and promotive-oriented line items.

In line with the SKN's mandate to explore the potential for private sector involvement in the financing and delivery of health services, the MOH is studying health financing strategies that would shift the burden of financing health services to the segment of the population that is able to afford them. This strategy would harness the dynamism of the private sector to deliver and finance health services. Under consideration are various prepaid financing schemes which, through risk sharing capitation financing approaches, would improve the equity and efficiency of health services.

#### 3.1.2.2 Community Participation

As the MOH proceeds with the development and deployment of its KB/Kes strategy via the PosYanDu, the community will be requested to contribute more of its resources to support this effort. Active community involvement

in and support for the PosYanDu will support the basic goals of self reliance and community cohesiveness that underlie all development planning in Indonesia. In the PosYanDu model, human, material, and financial community resources will be the mainstay of operations. Government resources will only be used for monitoring and technical support by PusKesMas staff, and the provision of essential commodities such as immunizations and oral rehydration solution. One of the major challenges facing the government, in its view, is mobilizing greater community support for the PosYanDu program in particular, and for the general provision of health services.

For the PosYanDu program, efforts must be intensified to elicit more active involvement of community leaders, whose support has been shown to be absolutely critical for any community-based activity. Second, PosYanDu activities are heavily dependent upon community volunteers to promote the attendance of target families, deliver educational messages, distribute child survival commodities, and run the PosYanDu through registration, weighing, triage, education, and follow-up. High attrition rates among these volunteers has been a constant problem plaguing the PosYanDu and its precursors, and strategies will have to be devised to increase their commitment to the program, and hence increase their longevity of service. Third, local organizations such as the PKK and religious groups will have to be more actively involved. Finally, more community resources in the form of physical facilities and monetary contributions will have to be realized in order to defray the operating costs of integrated health posts throughout the country.

As interpreted by the SKN, community participation also involves increased private, commercial sector activities. In the Indonesian context, entrepreneurial activities, private practice, drug funds, employer-financed health care and insurance schemes are all considered community efforts. The increasing awareness that social marketing, aided by private marketing, communications and survey firms, can promote PosYanDu and positive health seeking behaviors, and contribute to the emphasis on the community as the leading edge of service delivery. To the extent that private enterprise is

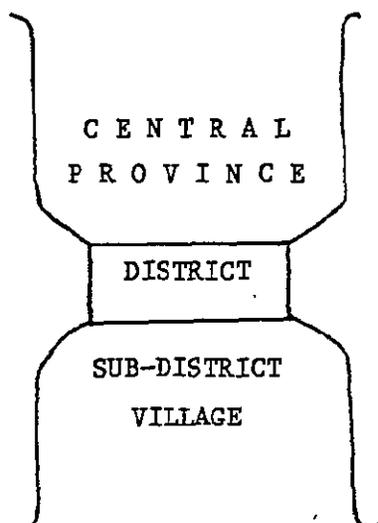
able to increase the quality and quantity of the services it provides so as to complement MOH activities, community participation advances the government's program aims.

### 3.1.2.3 Decentralization

During Repelitas III and IV the GOI has demonstrated a desire and willingness to increase provincial autonomy and self reliance in planning and implementing development programs. Regional planning boards (BAPPEDA) have been strengthened, and larger amounts of both APBN and Inpres funds have been channeled directly to the provinces. In order to address the vast social, cultural, economic, topographic and regional differences in Indonesia and the varied disease patterns these create, the MOH has actively followed a provincial decentralization strategy through the CHIPPS Project (Chapter 5 and Annex 1) and other efforts. Such strategies are within the guidelines of the basic Principles for Health Development in the SKN which states: "The Central Government will progressively transfer autonomy to the regions ... capability of local governments in health must be strengthened."

Organizational analyses by MOH planners have indicated that decentralization to the provincial level is only a first step in transferring greater autonomy to lower levels of government. They have identified a significant organizational bottleneck at the district level, which they refer to as the "hourglass effect," which hampers service delivery at the peripheral levels (see Figure 13). In the past MOH has directed copious resources toward developing central government infrastructure and capacities, sub-district physical and human resources infrastructure through building PusKesMas and sub-centers and providing paramedical training programs to staff them, and is now devoting resources to building a community-based infrastructure through the PosYanDu. Decentralization efforts in Repelita III and mainly in Repelita IV have directed much-needed resources for capacity building to the provincial level. Largely overlooked has been the district level, despite the important role district administrators play in channeling funds to the more peripheral levels and monitoring their activities.

Figure 13. Hourglass Effect of Physical and Human Resources  
Infrastructure Development by MOH



The MOH plans to address this perceived organizational bottleneck by experimenting with strategies to decentralize authority for planning and implementation to the district level, and by strengthening the technical and administrative capacities of district staff.

#### 3.1.2.4 Involvement of the Private Sector

Although the MOH has alluded to the need for greater private sector involvement in the financing and delivery of health services in the priority areas of resources allocation and community participation, private sector involvement as a priority area for DepKes deserves special mention because of its relationship to the GOI's general policy. Emphasis on the private sector is central to GOI policy as the economy prepares for its lepas landas (take off) in Repelita VI. The economic hardships imposed by the falling world prices for Indonesia's mineral and fossil fuel exports have accentuated this need. The GOI is urging all sectors to make greater use of the private sector to achieve Indonesia's development objectives.

This directive falls squarely within the policies advanced in the SKN, which states:

The potency of the community, including the private sector, to participate in health efforts, either as service provider or as service recipient, should be taken into account in the defrayment of health efforts. In the time to come, if this potency can be directed in such a way that it can alleviate the burden borne by the government, then the health budget can be spent more for promotive and preventive health efforts.

There is a growing awareness among MOH policy makers that the private sector is positioned to increase its activities in the financing and delivery of health services. The MOH has the responsibility of coordinating and guiding these activities so that they contribute to national development and health objectives. This role is critical given the ever-present potential that increased demand from the private sector could bid up the price of health care and capture human health resources in a way which would decrease access to quality care for low-income families.

In the health financing area, the MOH has assigned priority to the development of pre-paid, managed, health insurance schemes. Several pre-paid medical schemes exist now in large urban areas but are thinly capitalized and unstable. Indemnity or casualty health insurance schemes in the wage-based sector also exist, and changes in tax law will make such plans more attractive to employers who currently provide care for their employees. A major government sponsored program of health insurance for private sector employees financed through employer contributions (DUKM) is in the early testing stages. Assuring that such plans are oriented towards preventive services and provide adequate levels of care for both workers and their families are priority concerns of the MOH in developing guidance in this sector.

In the area of health service delivery, company-owned facilities have the potential to provide comprehensive care and act as outreach foci. Several hospitals in Jakarta have contracted exclusive

arrangements with factories. Should the Pertamina Oil Company establish a health maintenance organization for its employees, it would serve as an example and its success or failure would have repercussions on a wide number of financing projects.

Private-public sector cooperation in rural areas is seen as holding future possibilities. Plantation-based health schemes and other employee plans can be extended to benefit the whole community. Church hospital facilities (which constitute 90% of private hospital beds) need to coordinate with public facilities, especially if they are producing more efficient services. The availability of capital, development of managerial capacity, and investments in research and development involve coordination and cooperation between MOH and private sector providers.

#### 3.1.2.5 Quality of Care

This is a continuing area of MOH concern, especially because resources are diminished. Little controversy exists that the quality of services being delivered, particularly at PosYanDu, need improvement and that once improved, quality will need to be maintained.

The massive effort to establish and staff PusKesMas is gradually coming to fruition. The basic integration of nutrition and family planning services is beginning to be replaced by a more comprehensive package of services. Significant deficits in quality persist, however. For example, the use of oral rehydration solution remains inadequate, as physicians routinely prescribe expensive and inappropriate antibiotics while excessively utilizing intravenous solutions for the clinical treatment of mild dehydration. Physicians and other staff do not have the skills to organize and promote child survival in their catchment areas. Immunization coverage varies significantly among geographic areas, with measles and tetanus immunization of pregnant women still markedly low, and hygienic practices and vaccine potency not uniformly high. Mothers do not always understand the educational process underlying growth monitoring, thereby minimizing the effectiveness of preventive

nutritional care. Shortages of essential drugs plague the health system and drugs are often too expensive for the poor when they do reach the market.

Because of the important role the Puskesmas plays in Indonesia's health delivery system, the Puskesmas doctors in particular and their staff to a lesser extent are critical to the success of the GOI's health and family planning program. Yet because of the nature of their training and the way they are deployed, Puskesmas doctors are frequently inadequately prepared for the challenges they will face in managing and supervising the clinical and public health program of an entire sub-district. Medical training in Indonesia has a high technology, clinical emphasis. Students are prepared for the specialty training to which most aspire. Although a strong public health component exists in the medical curriculum, it generally pales in most students' eyes in comparison to the prestigious clinical and surgical rotations. Compulsory Puskesmas service is generally viewed as an enforced temporary hiatus needed to fulfill licensing requirements, in the inexorable march toward specialization. Medical school training neither adequately prepares physicians for their work in a Puskesmas, nor does it provide the necessary orientation toward preventive medicine and public health.

To improve the performance of Puskesmas physicians, the MOH has proposed on-site in-service training programs. These programs would provide the Puskesmas doctor with the managerial and epidemiologic skills needed to diagnose more adequately a community's needs, and plan Puskesmas clinical and outreach activities based upon the major disease entities extant in that community. Simultaneously, medical school public health curricula need reassessment to explore methodologies which would inculcate these skills in medical students.

Significant improvements in the quality of care can only occur once medical workers, paramedical staff and volunteers are trained appropriately for their tasks, are supervised conscientiously to maximize their impact, and have the means at their disposal to provide services to

the community. Training programs which are oriented to child survival skills (clinical, epidemiological and managerial) remain to be implemented. Adequate monitoring systems which are used by trained supervisors can pinpoint those program aspects which require reinforcement. Many of the above problem areas can only be addressed by decentralized planning, adequate resources allocated to child survival, and training programs in professional schools which prepare students to meet the specific challenges they will surely face.

#### 3.1.2.6 Transfer of Technology

This is a general government policy which will receive greater priority in the future. The MOH would like to adapt certain health technologies for use in Indonesia. Primary among these are the new biomedical technologies for producing pharmaceuticals, vaccines, and diagnostics. Also important are industrial technologies to manufacture medical equipment and supplies. The transfer and adaptation of software technologies for research, management, and information management are also receiving attention.

### 3.2 THE POPULATION SECTOR

#### 3.2.1 Policy Context

Indonesia's national family planning program has an overall goal of developing a small, happy and prosperous family norm. Its demographic objective is to reduce the crude birth rate (CBR) to 22/1000 population by 1990 and reduce the total fertility rate to a level of replacement fertility by the year 2000.

Because of Indonesia's predominantly rural population base, BKKBN has focused its efforts on developing a community-based contraceptive distribution system throughout the country. By 1986 there were approximately 180,000 village contraceptive distribution centers throughout Indonesia, covering nearly every village in the country.

These centers can resupply contraceptive users with reversible contraceptives, usually oral pills and condoms. Indonesia's injectables, contraceptive implants, voluntary sterilization services, and the first cycle of oral pills are obtained through fixed MOH facilities or mobile family planning clinics. The government supplies about 80% of all contraceptives in Indonesia, with the non-governmental and commercial sector supplying the remainder.

The GOI views rapid population growth as a major constraint in its efforts to achieve national development objectives; hence, the population program is viewed as intrinsic to national development. During Repelita IV the GOI has stressed the importance of family planning to other development programs and encouraged its integration with other sectoral activities. Although BKKBN's demographic objective remains of paramount importance, the family and community welfare objectives of the national family planning program received greater prominence in Repelita IV. As in the health sector, community participation is strongly emphasized, and BKKBN has been very aggressive in testing strategies for shifting greater responsibility for program planning, implementation and management to the community level.

### 3.2.2 BKKBN Priorities in Population/Family Planning

Although widely recognized as one of the most successful national family planning programs in the world, difficult challenges now face BKKBN as it strives to maintain program momentum and improve the quality of its services. Because of the high birth rates of the early 1970s, large new cohorts of eligible couples are moving into their reproductive years. Increasing numbers of new acceptors will have to be recruited and continuing acceptors will have to be maintained just to keep contraceptive prevalence constant and prevent any escalation in birth rates. Although BKKBN's budget has been spared the draconian reductions experienced by the MOH, it will have to achieve its new and continuing acceptor targets with budgets frozen in the vicinity of Rupiah allocation

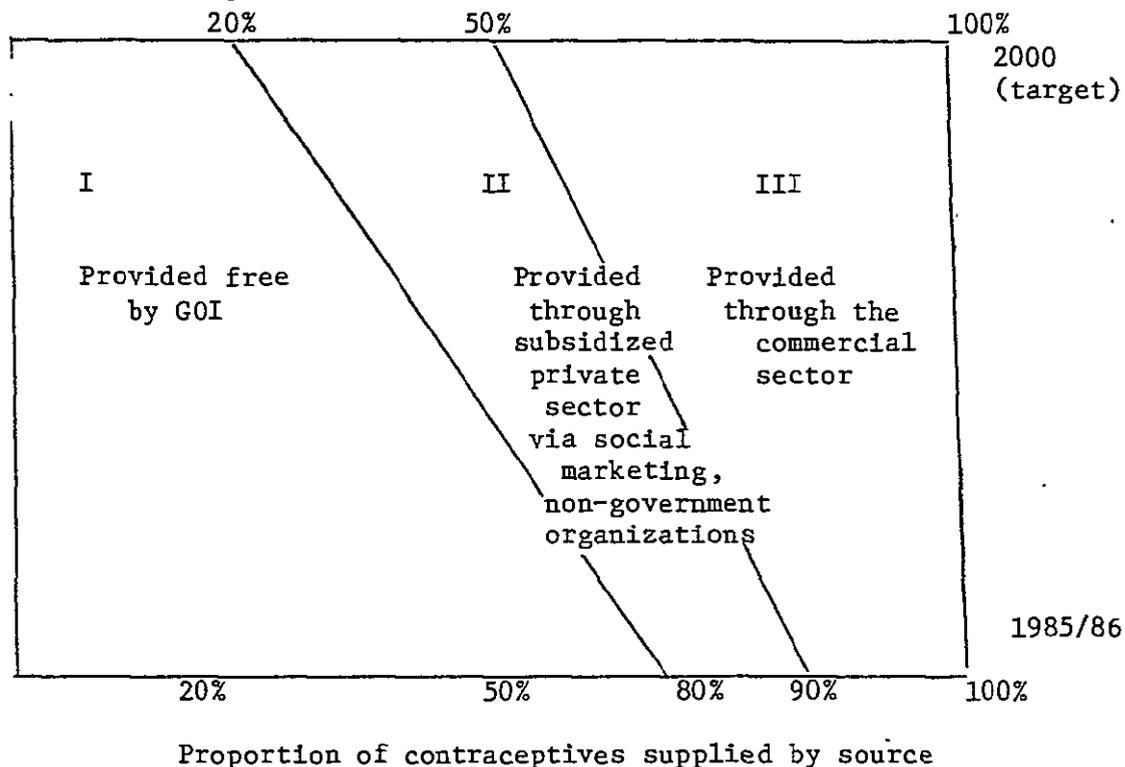
levels for 1985/86. The FY 1987 budget for BKKBN, for example, has sustained an 2.6% reduction from FY 1986 levels.

Within this context, BKKBN has identified three priority areas which it believes must receive specific attention in Repelita V. These are discussed below.

3.2.2.1 Transition to an Increase in Private Sector Distribution of Contraceptives

BKKBN feels that the community, through non-governmental organizations and the commercial sector, must assume greater responsibility for recruiting family planning acceptors and delivering contraceptive services. BKKBN's plans for this transition are shown in Figure 14.

Figure 14 Transition in Source of Contraceptives, 1985/86 to the Year 2000



The relative quantities of contraceptive supplies by source are graphically represented by the diagonal lines. The free contraceptives provided by the GOI (through BKKBN field staff, PosYanDu, PusKemas, etc.) are shown in area I. This proportion will decrease from 80% of all supply in 1985/86 to 20% in the year 2000. The provision of contraceptive supplies from the subsidized private sector will increase from its current 10% to 30% by the year 2000. The proportion of supply originating from commercial sector sources (retail outlets, etc.) will rise from 10% to 50%.

Such a transition will call for numerous program modifications which are still, by and large, in the investigation stage. Delivery questions will be paramount. How can the private sector be encouraged to take on production, quality control, and distribution responsibilities? How will BKKBN ensure that demand for commercial products is maintained once free

products become less available? Organizationally, what will this transition mean for BKKBN field staff and local volunteers? Clearly, new responsibilities in coordination will require intensified training efforts in planning and management skills. Effective communications will be critical if the shift in consumer demand to the private sector is to be successful. Maintaining effective, continuous use among those women using exclusively private sector sources will challenge those responsible for message development and broadcast strategy. Training/manpower development will not only affect BKKBN internally; BKKBN will also have additional responsibilities for ensuring that high-quality care and appropriate education are available from other organizations and private companies who will become active in the field.

Strategies to effect this transition have tentatively been formulated. In contrast to the initial family planning delivery system based upon a clinical facility with outreach community-based capacity which was initiated in the rural areas and then subsequently attempted in the urban areas, the BKKBN plans to introduce its private sector strategy in urban areas. Family planning services in urban areas, particularly the larger cities, are available through a wider range of public and private outlets than in the rural areas, which are served almost entirely by the government family planning program. In urban areas, family planning information and contraceptives are offered through government hospitals, clinics and family planning centers; through private hospitals and clinics; through pharmacies and other commercial channels; and through private physicians and midwives. The challenge facing BKKBN is how to involve more fully all existing and potential service points in providing better quality, urban-style information and services as they attempt to maintain current users, convert acceptors to more effective methods of fertility control, and develop attractive, affordable information and service activities aimed at present non-users. Basically, three approaches are under development to meet these challenges: the involvement of private health providers; service-oriented information, education and communication campaigns; and product-oriented social marketing.

### 3.2.2.2 Promotion of More Reliable Long-Term Contraceptive Methods

The oral contraceptive is the predominant method used by continuing family planning acceptors in Indonesia. Its use effectiveness, however, is low in Indonesia; hence, continuation rates, couple years of protection, and protection against pregnancy for couples using this method are compromised. BKKBN has and will continue to emphasize a shift from the oral pill to more reliable, long term, and more cost-effective methods. This policy becomes even more important in light of the current economic situation, where BKKBN must achieve reductions in fertility at lower cost. The methods that BKKBN feels must be more fully promoted and made available are IUDs, injectable contraceptives, progesterone implants, and voluntary sterilization.

### 3.2.2.3 Improving Quality of Services

A third priority of the BKKBN is to improve the quality of services. Quality of services is considered to be multifaceted. In addition to the provision of a range of contraceptive methods with high medical and technical standards, quality is related to adequacy of supervision, counseling and follow-up of acceptors, and effectiveness of communication and adequacy of the information reaching the clients. Improvements in the quality of services are thought to result in better continuation rates, improved use effectiveness, and appropriate method switching.

In line with the private sector initiatives described above, one approach BKKBN is developing to improve the quality of services is to shift emphasis from a community-based group dynamics approach to recruiting new family planning acceptors and ensuring continuing use, to a system based more on individual choice. Such a system would depend on advertizing and other forms of information and education to: 1) convince couples in the childbearing ages that it is in their own best interest to plan their families; 2) encourage them to pay for the contraceptive method of their choice; and 3) inform them that contraceptive methods

are available either from public sector service points or from the private sector. It is believed that more discriminating individuals will seek and select services from providers who offer better quality care.

#### 4. AID POLICY AND STRATEGIES IN THE HEALTH AND POPULATION SECTORS

While the preceding section discussed GOI priorities in the health and population sectors, this section describes the U.S. Agency for International Development's (AID) policies in general, and its specific priorities for health and population assistance. Such a description is essential for establishing the parameters and framework for a more specific country-oriented strategy.

##### 4.1 THE AID STRATEGY FOR DEVELOPMENT ASSISTANCE

AID's ultimate goal is a world in which economic growth and development are self-sustaining, basic human needs are being met, and the extremes of poverty have been eliminated (AID, 1985). AID has identified an overall target for economic growth and has established quantitative basic needs levels for achieving this growth. These levels were set with the realization that they can only be reached through the policies and collective efforts of the host country and all donors, AID being only one small part of the development process. The targets are:

- o Economic Growth: Attain an annual real rate of growth of per capita income of not less than 2%, reflected in increases in employment, income, and agricultural production.
- o Hunger: Achieve the FAO critical level of calorie intake for 90% of the population in each AID-assisted country, and reduce chronic and severe undernourishment to less than 20% of children less than five years of age.
- o Disease and Early Death: Reduce infant mortality to less than 75/1000 live births, reduce childhood mortality (children 1-4 years of age) to 10/1000, and achieve a level of life expectancy at birth of 60 years.

of approaching fundamental development problems. AID seeks to achieve systematic changes in recipient countries that reach far beyond the direct beneficiaries of specific projects. Its concern is with policies, institutions, technologies, free market forces, and involvement of the private sector. There are four aspects of AID's policy and strategy:

- o Policy Dialogue: Long-term equitable development depends heavily upon the nature of the domestic policies followed by developing countries. AID, by virtue of its field mission structure and assistance structure, is uniquely positioned to assist with policy analysis and engage recipient countries in policy dialogues.
- o Institutional Development: The principal objective is to develop human resources and use them effectively in sustainable institutions, i.e., structural frameworks that produce results. This may require decentralizing and encouraging greater reliance on private and community efforts rather than only building public institutions.
- o Private Sector: The private sector can play a greater role in delivering the goods and services vital to development. The private sector can become an engine of growth, achieving self-sustainability without requiring continued infusions of public funds. Healthy private sector economies exist in all the countries where AID operates, and where the free play of market forces is allowed to flourish, this sector can contribute substantially to rapid and sustainable development.
- o Technology Research, Development, and Transfer: AID will give priority to developing, transferring and disseminating new technologies. Increasing attention will be given to the commercialization of technologies as a method of sustainable dissemination.

- o Illiteracy and Lack of Education: Increase primary school enrollment to 90% for boys and girls, with 70% of the age group completing at least four years of schooling; provide skills training compatible with development requirements; and achieve an adult literacy rate of 50% for both men and women.
  
- o Unmanageable Population Pressures: Enable access for at least 80% of couples to a wide range of acceptable voluntary family planning services, thus enabling them to make their own family planning decisions.

AID has set the year 2000 as a reasonable time frame in which to focus efforts to move toward these levels of achievement, but acknowledges that these targets may not be attainable simultaneously in all countries, nor perhaps within this time frame for all AID-assisted countries. Success in achieving these targets will depend upon the domestic policies of host governments and general donor agency policies. AID also stresses that emphasis must be given to indirect approaches - such as the development of an indigenous private sector to broaden a country's resource base, increasing opportunities for women, and mitigating the negative effects of development on the environment - as well as more direct approaches which may yield results that are sustainable in the long term.

AID believes that all of the countries with which it collaborates have the inherent capability, through sound policies and their own efforts (stimulated by international assistance, trade, and investment) to become economically self-reliant and ultimately will be able to meet the basic needs of their own people on a sustained basis, using their own material and human resources. Hence, AID will support long-term development which helps to bring about fundamental and structural changes in economies that will continue to bring improvement in these five areas of basic need.

While AID continues its focus on basic needs, it has changed its way

To enhance the impact of AID's assistance, it will:

- o work towards closer cooperation with multilateral development institutions and other donors,
- o encourage recipient countries to take a more active role to assure coordination,
- o more fully integrate the variety of AID resources including development assistance, economic support funds, food aid (PL 480), American schools and hospitals abroad, and disaster assistance, and
- o seek better coordination of these resources with other U.S. Government economic assistance instruments.

#### 4.2 THE AID POLICY AND STRATEGY FOR ASSISTANCE IN THE HEALTH SECTOR

AID's goal in the health sector is to increase life expectancy in AID-assisted countries (AID, 1986b). Reducing infant and child mortality, which account for half of the yearly deaths occurring in most developing countries, is viewed as the most effective and expeditious way to increase life expectancy. AID's specific health sector objectives are to:

- o reduce infant and early childhood morbidity and mortality,
- o reduce maternal mortality,
- o use child survival interventions as the basis for building a more comprehensive health care system over time,
- o ensure that gains made in improving child survival are maintained, and
- o develop new technologies and improved systems for the delivery of child survival services.

##### 4.2.1 Child Survival Strategy

AID has formulated a Child Survival Strategy (USAID, 1986a) to address these objectives. The twin engines of this strategy are

immunization and oral rehydration therapy, which can purportedly prevent half of all deaths in children or one quarter of all deaths in the developing world. AID's focus will be on developing a sustained capacity in each recipient country to effectively provide oral rehydration therapy, immunizations and the two other important child survival interventions, nutrition and birth spacing, to its vulnerable population.

Three aspects of AID's child survival strategy are critical to achieving maximum impact and long-term sustainability. These are:

- o Institutionalization of Services: The existence of an indigenous capacity to manage and deliver child survival services is essential to ensure that children will continue to receive the necessary care.
  
- o Utilizing the Private Sector: In line with AID's general strategy, efforts should be made to explore opportunities for involvement of the private sector to complement and support public sector programs.
  
- o Modern Communications Strategies: It is viewed as essential that demand creation, using modern marketing and communication techniques, be incorporated into child survival programming.

AID will use a selected country-specific approach, chosen on the basis of morbidity and mortality rates, coverage levels, and resource indicators, to target resources to countries receiving priority for child survival assistance. Indonesia has been chosen as one of the priority countries.

#### 4.2.2 Secondary AID Health Strategies

AID recognizes the wide variations that exist in morbidity and mortality levels, disease patterns, environmental conditions, economic growth rates, and government policies throughout the world. Among recipient countries, it will thus support other health interventions

justified on the basis of particular conditions in host countries. These are:

- o Health Financing: The success of AID child survival programs will, to a large extent, depend upon the host government's financial commitment toward sustaining their recurrent costs. Where government budgets are exceptionally skewed towards curative care and fixed facilities, such commitments will be difficult to achieve unless concerted efforts are made to assure that the necessary resources are available. Accordingly, AID will support appropriate health financing systems that will free up otherwise committed resources, leverage new resources, and allocate scarce existing resources more efficiently toward the support of child survival and other preventive programs.
- o Water and Sanitation: These will be funded mainly from the Economic Support Fund account and through private voluntary organizations where justification can be made that these interventions will have a direct impact on child survival.
- o Vector Control: In areas where vector-borne diseases are major health problems, consideration will be given to support for vector control projects. Efforts will focus on malaria, onchocerciasis, endemic dengue hemorrhagic fever, schistosomiasis, malaria, and guinea worm, but AID support will be minimal.

#### 4.3 THE AID POLICY AND STRATEGY FOR ASSISTANCE IN THE POPULATION SECTOR

The objectives of AID's population assistance program are:

- o to enhance the freedom of individuals in developing countries to choose voluntarily the number and spacing of their children, and

- o to encourage population growth consistent with the growth of economic resources and productivity.

Unmanageable population pressures have been recognized as a prominent factor which influences economic growth, the health status of mothers and children, and ultimately, food availability and hunger. Hence, assistance in the population sector is considered integral in attaining AID's general development targets. AID acknowledges the reciprocal links between fertility and population growth on one hand, and general development on the other, and seeks to encourage programs that are mutually reinforcing.

AID policy for population assistance mirrors the general Agency development policy, and can be summarized as follows:

- o to initiate policy-level discussion with host countries to support the development of a clear population policy and institutional reforms which encourage voluntary family planning programs and reduced fertility;
- o to stimulate greater private sector involvement in the delivery of family planning services, especially through commercial retail sales and the social marketing of contraceptives;
- o to foster the involvement of local institutions in population programs and to strengthen their capabilities to deliver family planning services; and
- o to develop new contraceptive technologies and analytical methodologies to determine the impact of rapid population growth on economic progress, and to transfer these technologies to our host country counterparts.

## 5. CURRENT USAID/INDONESIA HEALTH AND POPULATION STRATEGIES

### 5.1 CURRENT USAID/INDONESIA CDSS SECTOR GOALS (1984-1989)

The USAID/Indonesia Country Development Strategy Statement (CDSS) reaffirms four major goals for all the Mission's development assistance programs in Indonesia: (1) strengthening food production, (2) increasing off-farm employment, (3) improving primary health care and completing the institutionalization of family planning, and (4) accelerating human resource development. Support for health and population sector activities thus remains a priority focus for USAID activities in Indonesia.

The health and family planning sector objectives set by the CDSS are to assist the GOI to (1) reduce morbidity and mortality among infants, children under five and women of reproductive age and (2) achieve the GOI's national goal of lowering the crude birth rate from 32 to 22 per 1000 by 1990.

### 5.2 ANALYSIS OF O/PH SUCCESS IN IMPLEMENTING STRATEGIES TO ACHIEVE SECTOR GOALS THROUGH PROJECT ASSISTANCE

In order to achieve the sector objectives, seven specific strategies are cited in the CDSS. These are listed below, along with the current O/PH projects designed to achieve each objective and a brief discussion of the status of each. A complete review of all current O/PH projects is included in Annex 1.

1. Design cost effective systems to reduce diarrheal disease and related morbidity and mortality, and to immunize children against selected diseases.

HTRD: A diarrheal disease control component was added to this project through a \$3 million amendment signed in August 1986, to promote the use of oral rehydration therapy as the principal intervention against

symptoms of dehydration. West Java was selected as an intensification area where ORT activities are being promoted through a program emphasizing education using mass media, communications and social marketing. Project components will later be selectively implemented on a nation-wide basis.

EPI: The joint GOI/WHO/UNICEF/USAID project evaluation just completed noted "remarkable progress" in this program, finding that in surveyed provinces, over 60% of children under 15 months of age had received at least one dose of vaccine and 33% of infants were fully immunized. This compared very favorably with results of the 1982 evaluation, in which low coverage rates were identified as a serious problem.

CHIPPS: After surveys identified neo-natal tetanus as the leading cause of infant mortality, tetanus immunization campaigns for women of reproductive age have been implemented in all three provinces.

## 2. Improve health care management

HTRD: This project specifically supports personnel planning, manpower development and the design of management information systems. Under this project, a manpower information system is now being incorporated into the overall health information system which includes the PusKesMas service statistics data system. The Bureau of Health Planning has completed the development of a methodology for calculating immediate manpower needs, which will soon be implemented nationally on a one year trial basis.

CHIPPS: CHIPPS supports the administrative decentralization of planning, budgeting and management to the provincial level. A number of operational field trials have been carried out in the three CHIPPS provinces of Aceh, West Sumatra and Nusa Tenggara Timur. In all of these trials, provincial health officials have used locally collected and analyzed data to target priority health problems, planned and implemented

interventions to solve these problems, and evaluated the results.

VFP/MCW: The objective of this project is to use BKKBN's extensive network of field workers to improve coverage of the MOH Family Nutrition Improvement Program. The August 1986 project amendment provides support for further research for delivery, supervision, monitoring and evaluation systems. Activities will focus on identifying problem areas, designing and testing solutions and establishing a policy framework which will incorporate the results of these activities into the KB-Kes service delivery model (PosYandu).

FKM: Manpower planning assessments identify a serious lack of qualified personnel with appropriate skills in the administration and management of health facilities. The FKM project is supporting the establishment of four new Schools of Public Health to develop needed public health manpower for middle management positions in the MOH and BKKBN bureaucracies.

EPI: This project has contributed to improved management of public health programs through the design and improvement of epidemiological surveillance and monitoring systems.

3. Complete testing and evaluation of a USAID-supported integrated family planning/nutrition program, and improve data on nutrition and nutrition interventions.

VFP/MCW: A comprehensive, two-year series of evaluation studies on this project was completed in September 1986. Results indicated that there are some fundamental problems with the PosYandu system related to volunteer workers' motivation, supervision and support, and program monitoring. The policy and program implications of these results are now being analyzed and will be used in making changes in the overall program.

4. Establish effective approaches to urban family planning.

Urban family planning is one of six major components to the FPDS-II

project. This component includes a variety of operational research activities and private sector initiatives, targeted in the eleven largest urban areas in Indonesia. It also includes the innovative Social Marketing of Contraceptives (SOMARC) effort, supported initially through AID/Washington. SOMARC began marketing condoms through private commercial outlets in three cities in April 1986; it has now expanded to ten cities and plans to begin marketing other kinds of contraceptives next year.

5. Strengthen BKKBN's management capacity at the center and in the provinces

Two components of the FPDS-II project are directly involved with strengthening BKKBN's management capacity:

Management Technologies: Computer hardware, software and training plans are now in place to provide a comprehensive management information network among BKKBN's central and provincial offices.

Training: BKKBN has used its extensive in-country and overseas long-term training program to improve its institutional management and development capabilities at middle management levels and in implementing units. BKKBN has the capacity to manage its own model overseas training program, including recruitment and screening of candidates, provision of English language training, placement in universities, and the provision of financial support while participants are in school.

6. Develop closer ties between health and family planning agencies.

VFP/MCW: A major focus of this project is the strengthening of the Integrated Task Force for Health and Family Planning (KB-Kes) as a joint MOH and BKKBN program to manage the five priority integrated services of nutrition, family planning, immunization, diarrheal disease management and mother-child health care.

FKM: This project assists in providing appropriately trained manpower to meet future needs of both health and family planning programs in Indonesia.

FPDS-II: With BKKBN support, a national system of high quality voluntary sterilization services is being established in MOH hospitals.

7. Assist in overcoming specific problems with village family planning in selected densely populated areas.

The village family planning component of the FPDS-II project was expressly designed to improve low contraceptive prevalence among villages in 13 priority provinces. BKKBN internal service statistics indicate this has been achieved; an independent evaluation of this component is scheduled in the first quarter of CY 1987.

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CURRENT O/PH PROJECT PORTFOLIOA. HEALTH TRAINING RESEARCH AND DEVELOPMENT PROJECT (497-0273)

USAID Contribution: \$9,450,000 (Grant)

\$1,450,000 (Loan)

Project Agreement Signed: September 1, 1978 (Grant)

August 12, 1983 (Loan)

PACD: December 31, 1989

Objective: The core objective of this project is to strengthen the Ministry of Health's (DepKes) institutional capability to plan, implement and evaluate the recruitment, training and management of public health personnel; applied research; and community health education.

In trying to achieve its broad objective, the project was first designed to assist four selected DepKes institutions, emphasizing the need for improved manpower and research capacities. These institutions, which are responsible for different aspects of the health planning function, are: the Bureau of Health Planning (especially as related to the manpower information system); the Bureau of Personnel; the Center for Education and Training of Health Personnel (PusDikLat), charged with in-service training; and the National Institute for Health Research and Development (LitBangkes), especially as related to operations research on health management issues. In line with USAID/Indonesia's increasing emphasis on child survival activities, a Diarrheal Disease Control component was added to the project through a \$3 million amendment signed on August 25, 1986. This effort seeks to reduce high mortality rates from dehydration due to diarrhea, the principal cause of death for children under five in Indonesia (at least 24% of under-five deaths, a total of about 500,000 children per year).

The Project Paper and its Amendment include the following outputs for achievement by the end of the project: (1) the Bureau of Health Planning will have the capability to continue manpower and health planning, and will have improved evaluation capabilities; (2) the number, quality and relevance of research projects will be improved; (3) a more relevant, thorough, widespread and standardized health education system will be in place; and (4) the DepKes' capability to manage and coordinate activities associated with the promotion of Oral Rehydration Therapy will be strengthened.

### Current Status

1. Diarrheal Disease (CDD) Component - Efforts in this component are being focused on promoting mothers' and health personnel's acceptance and use of Oral Rehydration Therapy as a prevention against dehydration and as the principal intervention as against the symptoms of dehydration. West Java province has been identified as a special intensification area where ORT activities are being promoted, through a program emphasizing education through mass media, communications and social marketing. The program has begun in West Java and was launched in Kabupaten Garut in June 1986 after baseline and marketing design studies were completed there. Early implementation activities included training over 3,500 kaders and retailers about ORT. In addition to social marketing, other project activities include interventions for upgrading epidemiological surveillance, medical education, health worker training, a management information system, and supply management. Expansion plans call for covering most of West Java by 1989; project components will later be selectively implemented on a nationwide basis.
2. Health Planning Component - The mid-term evaluation team (1983) noted the accomplishment of establishing a Manpower Health Planning Unit within the Bureau of Health Planning, but emphasized a critical need for complete and useful job descriptions at all levels of the health system and for a comprehensive management information system (MIS) to assist personnel administration. These activities are well underway, with a manpower information system now being incorporated into a more

comprehensive MIS which includes a PusKesMas service statistics data system. The Bureau of Health Planning has now completed the development of a methodology for calculating immediate manpower needs based on present work load in over 8,000 service units. This new methodology will soon be implemented nationally on a one-year trial basis. The Ministry of Health is continuing development of a process to formulate useful job descriptions.

3. Health and Training Components - The 1983 evaluation team observed more serious problems with regard to the research component, and made several recommendations for its re-design. Funds for this component have now been expended and it has been effectively closed. The HTRD training component developed some potentially successful interventions, including the formation of a cadre of local management consultants; however, some aspects of the technical training provided were felt to be too theoretical or impractical and not cost-effective according to the February 1986 evaluation of this activity. This component is now being phased out on schedule.

B. EXPANDED PROGRAM IN IMMUNIZATION (EPI) 497-0253

USAID Contribution: \$ 9,200,000 (Grant)  
\$12,500,000 (Loan)

GOI Contribution: \$16,500,000

Project Agreement Signed: August 15, 1979

PACD: September 30, 1990

Objective: To reduce infant and child mortality by expanding the national program of smallpox and tuberculosis (BCG) immunization to cover a larger proportion of the population and include immunization for diphtheria, whooping cough and tetanus.

Expected project goals include improving DepKes capabilities for managing immunization programs, increasing local production of high quality vaccines, and strengthening the epidemiological surveillance system for vaccine-preventable diseases. The target population consists of women and children under five living in 76% of all Kecamatan. Anticipated end-of-project outputs include fully immunizing 57% of the targeted child population and 56% of the targeted population of pregnant women nationwide.

### Current Status

In measuring progress toward achieving these project's objective and goals, the 1982 evaluation team noted a number of significant accomplishments: (1) all provinces and Kabupaten/Kotamadya had focal EPI staff; (2) 60% of all Kecamatan had introduced an EPI program against pertussis, diptheria, TBC and tetanus; (3) vaccine production had expanded to the point where it could meet existing and anticipated program needs; and (4) all Kabupatens and some Kecamatan/Kotamadya had an effective cold chain.

The evaluation also cited some serious problems, however, most notably low coverage rates. The cluster survey showed that 8-33% of the targeted children received two DPT (diptheria/pertussis/tetanus) and one BCG (tuberculosis) immunization; and 2-22% of targeted women received two tetanus immunizations. The team identified several constraints contributing to these problems and made a number of recommendations for improving the program.

The Internal Program Review completed in May 1986 concluded that "Indonesia's EPI program has made exceptional progress during the last three years," stating that it is approaching Repelita IV targets and, with continued resources, may meet or exceed some of these targets. It noted particularly the important and increasing involvement of PKK, religious and education leaders in assisting this effort. The major weaknesses cited were in the PosYandu (health post), where it was observed that poor organization allowed some children to go unimmunized and incidents of unsterile practices

to go uncorrected. The joint GOI/WHO/UNICEF/USAID project evaluation completed in December 1986 also noted "remarkable progress" in the program, finding that in surveyed provinces, over 60% of children under 15 months of age had received at least one dose of vaccine and 33% of infants were fully immunized. Major recommendation for improvement included taking better advantage of "missed opportunities" for immunizing children (e.g., during visits for curative care at hospitals), additional and better training (especially in supervision, cold chain maintenance, sterile practices), and improved public education and information activities.

An amendment to this project was signed in August 1987. Activities under the Amendment will focus on reducing missed opportunities through better EPI program guidelines and incorporating EPI into clinical facilities; reducing dropouts by modern marketing demand generation techniques; supporting recentralized planning and implementation; and advocating greater GOI contributions to EPI.

C. FACULTIES OF PUBLIC HEALTH (497-0348)

USAID Contribution: \$4,000,000 (Grant)  
\$5,000,000 (Loan)

GOI Contribution: \$9,000,000

Project Agreement Signed: July 21, 1986 (Grant)  
July 26, 1985 (Loan)

PACD: June 30, 1992

Objective: The objective of this project are to help the GOI produce appropriately trained public health manpower to manage its National Public Health Program and to expand and regionalize public health education and research.

This project is assisting four regional faculties develop the capability to offer diploma, S1 (Bachelor's) and S2 (Master's) degree educations in public health: Hasanuddin University in Ujung Pandang, Airlangga University in Surabaya, Diponegoro University in Semarang, and the University of North Sumatra in Medan. Prior to the start of the project, only two universities in Indonesia had Faculties of Public Health, the University of Indonesia in Jakarta and Hasanuddin University in Ujung Pandang.

Project inputs include technical assistance; short-and long-term training for public health faculty members in Indonesia and abroad; library materials, micro-computers, teaching and administrative equipment, and funding for research; policy seminars and pilot demonstration projects.

Four major outputs are anticipated for achievement by the end of the project: (1) establishing four new faculties of public health in Indonesia, each of which will include a minimum teaching staff, expanded library and information resources, and educational, administration and management systems; (2) strengthening the capacity of FKM-UI (Faculty of Public Health - University of Indonesia) as a national resource center for public health; (3) completing research, pilot projects and feasibility studies on region-specific public health programs; and (4) producing 1,120 Bachelor's (S1) and 360 Master's (S2) graduates in public health.

#### Current Status

Project activities were initiated in November 1985. The Central Project Management Unit (PMU) and Local Management Units (LMU) at each participating university have been established, staffed and began operations in January 1986. Faculties have all received their first class of students into the two-year S1 program and existing curricula for S1 programs in public health have been reviewed, with some revision completed. Arrangements were completed with BKKBN to manage applications, English Language training and orientation for long-term overseas training candidates. The provision of core commodities, especially computer equipment, has been completed.

D. COMPREHENSIVE HEALTH IMPROVEMENT PROGRAM-PROVINCE SPECIFIC (CHIPPS) -  
(497-0325)

USAID Contribution: \$5,000,000 (Grant)  
\$6,000,000 (Loan)

GOI Contribution: \$9,000,000

Project Agreement Signed: August 27, 1981 (Grant)  
September 30, 1981 (Loan)

PACD: September 30, 1989

Objective: To strengthen the capacity of provincial health official to target, manage and evaluate health/nutrition interventions, improve child and maternal survival, and contribute to decentralization of health services in the three outer island provinces in Aceh, West Sumatra and East Nusa Tenggara (NTT).

This objective is being carried out through support for manpower development, training medical and paramedical personnel and conducting health intervention field trials on the basis of epidemiological data collected and analyzed in the provinces.

By the end of the project, it is anticipated that the participating provinces will have significantly increased the quality and quantity of professional rural health workers, especially primary health care nurses, and the provincial public health system will be better able technically, analytically and managerially to carry out sector programs adapted to the often unique circumstances in these provinces.

### Current Status

The 1984 CHIPPS Process Review documents early project implementation problems, particularly those resulting from an over-emphasis on loan funds and the consequent need to adhere to the cumbersome DUP/DIP process for obtaining GOI approval to fund project activities. The Project Amendment, signed on June 11, 1985, provided additional grant funding for technical assistance and field studies and trials. Since that time, project implementation has proceeded at a more active pace.

The CHIPPS "process" of identifying health problems and designing programs to solve them has been carried out, in different ways, in all three provinces. In Aceh, health officials conducted a series of small surveys that indicated neonatal tetanus was the leading cause of infant mortality in the province. On the basis of these results, they planned and subsequently carried out a tetanus immunization campaign for women of childbearing age, targeted particularly in those areas where prevalence was highest. In West Sumatra, CHIPPS efforts have focused on using existing, routine data collected in the PusKesMas to develop an accurate reporting system for births, deaths and cause of death. In NTT, community and political leaders have been successful in mobilizing community participation in health programs, particularly through indigenous women's organizations and the PKK (Community Welfare Movement). The success of some of these efforts has been significant; in Aceh, tetanus vaccination teams immunized 81% of a target population of 92,000 women; in NTT, tetanus immunization rates of 97.6% were achieved on a population of 8831 women.

Efforts are now underway to consolidate and document the experiences learned in these provinces and identify policy and planning implications for use by Jakarta health officials. It is hoped that these results will influence policy decisions at the central level to allow greater autonomy for local health authorities in planning and implementing health services delivery programs.

E. VILLAGE FAMILY PLANNING/MOTHER-CHILD WELFARE PROJECT (497-0305)

USAID Contribution: \$14,000,000 (Grant)

GOI Contribution: \$18,150,000

Project Agreement Signed: June 6, 1980

PACD: May 30, 1990

Objective: The purpose of this project is to reinforce the GOI National Family Planning Program (BKKBN) objective of a small, healthy family through innovative support for an integrated, community-based family planning/health services delivery program. Specific objectives include decreasing the prevalence of malnutrition and diarrheal disease among children under five while increasing the level of family planning acceptance and continuance.

By the end of the project, it is anticipated that the following will have been accomplished in participant villages: (1) new family planning (FP) acceptors will increase by 15%; (2) the percentage of children under five with protein calorie malnutrition and untreated diarrhea will decrease by 50% and 90% respectively; and (3) income generating activities will be established for participating villagers. The amended project plan includes meeting the following additional objectives:

(1) developing a research agenda for priority topics (e.g., kader incentives, means of increasing mothers' participation); (2) designing and field testing an effective service delivery model, especially one aimed at increasing coverage and efficiency of the PosYandu (health/FP posts); and (3) institutionalizing the Integrated Family Planning - Health Service Program's (KB/Kes) Integrated Task Force to make policy recommendations on the program to the highest echelons of DepKes and BKKBN.

### Current Status

The rationale of this project is to utilize BKKBN's extensive network of village field workers and FP posts to improve coverage of the DepKes Family Nutrition Improvement Program (UPGK - a services package including distribution of ORS, Vitamin A and iron, monthly weighing and nutritional education), which was previously only available at sub-district health centers. The program began in 1979, focusing on East Java, Bali and West Nusatenggara (NTB); by 1984 the AID program's coverage included 20,000 villages.

Results of the 1982 mid-project evaluation noted the major accomplishment of establishing an integrated family planning/nutritional services delivery system in East Java and Bali. There were a number of constraints, however; village-level participation in project management was limited and little institutionalization had occurred.

Following the evaluation, substantial policy changes and modifications were made, most significantly in establishing the KB/Kes Program as a joint DepKes and BKKBN operation to manage the five priority services of nutrition, family planning, immunization, diarrheal disease management and mother-child health care through the PosYandu system. At the same time, the Integrated Task Force was established, made up of Directorate chiefs for the five programs, to coordinate inputs and plans and formulate policies for KB/Kes. A number of successful efforts were subsequently made in the project to develop innovations at the local level that are uniquely tailored to the needs of the target areas.

A comprehensive two-year series of evaluation studies began in 1984 to measure overall project impact in East Java and Bali. Results of the studies (completed in September 1986) indicated there were "significant positive changes" during the period 1980-85; for instance, in Bali, the percentage of women who had used contraceptives increases significantly, as did immunization rates and such other practices as use of latrines and piped drinking water. It was difficult to know, however, to what extent

these changes resulted from the project as opposed to other factors. More important, evaluation results identified many variables that could be used to improve the program, e.g., the positive correlation between active PKK participation and mothers' attendance at weighing posts, factors influencing kader effectiveness, accuracy of village-level statistics, etc. The policy implications of these results are being analyzed and will be used in making changes in the overall program.

The USAID project amendment (signed August 25, 1986) will assist BKKBN and MOH to overcome identified project constraints through supporting further research to identify problems (especially in the PosYandu service delivery, supervision and monitoring systems), design and test solutions and establish a policy framework which will incorporate these results into the KB/Kes service model and, finally, into Repelita V plans. A major thrust of planned activity is to mobilize and strengthen the role of the Integrated Task Force as a policy-formulating body able to assess the implications of project research activities and influence needed policy changes.

F. TIMOR MALARIA CONTROL (497-0326)

Date of Original Agreement: September 29, 1980

USAID Contribution:   \$3,600,000 (Grant)  
                          \$1,450,000 (Loan)

GOI Contribution:     \$1,946,000

PACD: December 31, 1987

Objective: This project was designed to develop a self-sustaining Malaria Control Program on Timor Island that will lower the prevalence rate of malaria to less than 2% in 40% of the East Timor population and 30% of the West Timor population by the end of the project.

The expected outputs include the planning and implementation of a malaria control program with selected malaria studies and control measures; training personnel, spraying houses and taking other preventive measures including treating persons with anti-malaria drugs; establishment of a functioning logistical support and program management system; establishing a functioning surveillance system to monitor the incidence of malaria; and training laboratory technicians to recognize the malaria parasites.

Current Status

The mid-term project assessment noted that malaria prevalence had declined in areas where house-to-house spraying had occurred; however, the team identified several constraints that impeded progress. The most serious of these was the lack of trained personnel, especially in East Timor. The team made a strong recommendation that project officials develop an overall training plan for both East and West Timor to help resolve this problem. Other constraints included delayed release of funds for project implementation, lack of sufficient entomological information and lack of transport. As project disbursements had been very slow, and in order to provide more time to achieve project objectives, the assessment team recommended a 2-3 year un-funded project extension and the hiring of an Indonesian malariologist as a long-term consultant to the project. These recommendations have been carried out. The project is currently being phased out, with remaining procurements, especially of DDT, to be completed before the PACD next year.

G. FAMILY PLANNING DEVELOPMENT AND SERVICES PROJECT (I) (497-0270)  
ORAL CONTRACEPTIVE LOAN (497-0271)

FPDS PROJECT

USAID Contribution: \$25,920,000 (Grant)  
\$ 2,000,000 (Loan)

GOI Contribution:

Project Agreement Signed: April 7, 1978 (Grant)

April 24, 1982 (Loan)

PACD: December 31, 1988

CONTRACEPTIVE LOAN PROJECT

USAID Contribution: \$56,000,000 (Loan)

GOI Contribution: \$33,100,000

Project Agreement Signed: July 13, 1978

PACD: May 1988

Objective: To help decrease the crude birth rate by 50% to 22 births per 1,000 in 1990. Specific project objectives include doubling the use of contraceptive methods of all women of reproductive age (497-0270) and to triple the use of oral contraceptives in Indonesia by 1985 (497-0271).

The Project Paper cites the following major outputs to be achieved by the end of the project: (1) family planning service availability throughout the country; (2) an increase in trained manpower available to assist in the administration and management of the program; (3) an institutionalized in-country manpower development program; and (4) a series of population policy studies conducted.

### Current Status

AID's support for the Indonesian family planning program has long been recognized as an important contribution to its success, through providing flexible assistance to test innovative service delivery models and support new programs until alternative means of financing could be identified. As one example, the contraceptive loan component of the program began with AID/Washington carrying out all procurements. Over several years, the National Family Planning Coordinating Board (BKKBN) successfully assumed this responsibility as in-country capacity for producing oral contraceptives increased. Now, BKKBN has full responsibility for this function.

The 1985 three-part evaluation notes that much of BKKBN's success results from the fact that compared with other GOI institutions it is far more decentralized, with a history of encouraging and supporting local initiatives. A key feature of this effort is the Village Family Planning Program, through which proposals for new interventions originate at the provincial level and below.

With reference to the demographic impact of the family planning program, the evaluation observed that fertility rates in Indonesia fell in the 1970s in all major regions and in both rural and urban areas. It attributes much of this decline to the success of the family planning program, indicated by high and increasing rates of contraceptive prevalence. The report notes, however, that overall population growth remained high due to equally substantial declines in mortality and that future reductions in fertility will be difficult because of age distribution changes with larger groups of persons in the most fertile age groups.

In view of declining oil revenues, the GOI has voiced concerns about the continued high cost of supporting BKKBN. For this reason, the evaluation team examined the public expenditure impact of the Indonesian family planning program, specifically for education and public health.

This analysis concluded clearly that the program's long-term impact on population size will generate substantially more savings than costs to the government.

The evaluation team's recommendations for BKKBN's future strategies emphasized the need to develop a stronger urban program and improve family planning activities on outer islands. As FPDS I is now phasing out, these recommendations have been incorporated into the follow-on project, FPDS II.

H. FAMILY PLANNING DEVELOPMENT AND SERVICES PROJECT II (497-0327)

GOI Contribution: \$ 7,500,000 (Grant)  
\$15,900,000 (Loan)

Project Agreement Signed: June 16, 1983 (Grant)  
June 17, 1983 (Loan)

PACD: December 31, 1989

Objective: To increase the use of all legal types of contraceptive methods in Indonesia from 43% of all married women of reproductive age in December 1982 to 58% in March 1987.

This project was designed as a follow-up to FPDS I (497-0270) and incorporates many of the recommendations of the 1985 evaluation in the already highly successful program. It focuses on the expansion and improvement of family planning services and on strengthening BKKBN's management, training and research capabilities. The overall goals and purpose are the same as those of the GOI's national family planning program.

Current Status

According to BKKBN service records, the objective of achieving a contraceptive prevalence rate (CPR) of 43% of the targeted population was reached a year ahead of schedule. The purpose and status of the six project components are presented below:

1. Village Family Planning - The final phase of AID support for this component is aimed at improving the low performance of villages in 13 priority provinces. An independent evaluation of this component is scheduled in 1987.
2. Management Technologies - This component seeks to improve BKKBN management capabilities through the provision of modern technologies. Computers, software and training plans are now in place to expand the automated MIS to all provinces.
3. Research - This component provides support to measure program progress, test new ways of delivering information and services, and strengthen monitoring and supervision of program operations. New research management systems are in place and a major, nationwide contraceptive prevalence survey is planned for 1987.
4. Voluntary Sterilization (VS) - Implementation, as planned in the 13 priority provinces, has proceeded well, reflecting a nationwide trend toward more long-term methods of population control. A needs assessment has indicated, however, that many VS facilities require additional equipment and better trained personnel.
5. Training - BKKBN has continued using its model training to improve its institutional management and development capabilities. BKKBN has developed the capacity to manage its own overseas training program, including recruitment and screening of degree candidates, provision of English language training and logistic support. Future programming for this component includes increasing in-country training activities.

6. Urban Family Planning - This includes a variety of operational research activities and private sector initiatives, targeted in the 10 largest urban areas in Indonesia, as well as the Social Marketing of Contraceptives (SOMARC) effort, supported initially through AID/Washington. SOMARC began marketing condoms through private commercial outlets in three cities in April 1986; it has now expanded to ten cities and plans to begin marketing other kinds of contraceptives next year.

By June 1986, virtually all FPDS II project funds had been committed and USAID/BKKBN began developing an amendment to add \$6 million to the project and extend it for two more years, until December 31, 1992. The amendment, as proposed, seeks to increase contraceptive prevalence among the targeted population to 69% by December 1992, through additional support for three major interventions: (1) improving and expanding voluntary sterilization services, (2) expanding the urban social marketing of contraceptives and (3) training to upgrade the skills of population and family planning personnel.

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# INDONESIA

Scale 1 : 4,500,000

