

1. BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS.
 2. USE LETTER QUALITY TYPE, NOT "DOT MATRIX" TYPE.

IDENTIFICATION DATA

A. Reporting A.I.D. Unit: Mission or AID/W Office <u>USAID/Indonesia</u> (ES# _____)		B. Was Evaluation Scheduled in Current FY Annual Evaluation Plan? Yes <input checked="" type="checkbox"/> Slipped <input type="checkbox"/> Ad Hoc <input type="checkbox"/> Evaluation Plan Submission Date: FY <u>Q</u>	C. Evaluation Timing Interim <input type="checkbox"/> Final <input checked="" type="checkbox"/> Ex Post <input type="checkbox"/> Other <input type="checkbox"/>
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D. Activity or Activities Evaluated (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report.)

Project No.	Project /Program Title	First PROAG or Equivalent (FY)	Most Recent PACD (Mo/Yr)	Planned LOP Cost (000)	Amount Obligated to Date (000)
497-0305	Village Family Planning/Mother-Child Welfare Project (VFP/MCW), 1990	1980	5/31/90	14,000	14,000

ACTIONS

E. Action Decisions Approved By Mission or AID/W Office Director	Name of Officer Responsible for Action	Date Action to be Completed
<p>Action(s) Required</p> <ol style="list-style-type: none"> Ensure final financial reports are submitted and unused funds re-funded to USAID. Disseminate copies of the research abstracts and other documents generated by the project to JICA, UNICEF, WHO and World Bank colleagues. Channel future research and development efforts for village level services on the priority topics identified by the evaluation. 	R.Kurniawati	2/91
	R.Kurniawati	8/90
	JRiggs-Perla	7/91

(Attach extra sheet if necessary)

APPROVALS

F. Date Of Mission Or AID/W Office Review Of Evaluation: _____ (Month) _____ (Day) _____ (Year)

G. Approvals of Evaluation Summary And Action Decisions:

	Project/Program Officer	Representative of Borrower/Grantee	Evaluation Officer	Mission or AID/W Office Director
Name (Typed)	JOY RIGGS-PERLA	Dr. Abdullah Cholil, MPH	GEORGE LEWIS	LEE TWENTYMAN
Signature				
Date	7/12/90	7/24/90	7/16/90	7/27/90

ABSTRACT

H. Evaluation Abstract (Do not exceed the space provided)

This final evaluation assessed the USAID Village Family Planning/Mother Child Welfare Project Amendment 497-0305 in Indonesia. The Project's purpose was to reinforce the National Family Planning Program objective of a small, happy, prosperous family, accomplished by a) a village-based health services system linked to the Village Family Planning Program that would decrease the prevalence of malnutrition and diarrheal disease among under five; and b) community development and evaluation activities. The 1986 Amendment secured additional AID funding for assisting a delivery program (called Posyandu), research and evaluation, program and policy determination, and to extend the project from August, 1986 to May, 1990.

Five areas for Posyandu integration were; nutrition, family planning, immunization, diarrheal disease management, and mother-child health care. The GOI is expanding the Posyandu nationwide during Repelita V (1989-94). By 1990, there are over 200,000 Posyandu throughout Indonesia's 67,000 villages.

Methodology: The evaluation team reviewed documents and interviewed Key BKKBN and MOH officials and researchers at Central, Provincial and District levels as well as those involved with services. Visits were also made to Health Centers and Posyandu in rural areas to observe service delivery and discuss operations.

Inputs and Activities: Funding was channelled through the BKKBN and MOH and directly through USAID for technical assistance. Activities were focused in 8 provinces and included: 58 research projects (based upon established priority management problems); training for trainers, kaders and village leaders, program managers and regency and sub-district leaders; dissemination through a Posyandu Newsletter, and meetings, conferences, and official letters.

Major operational policy changes included: refinements to the Posyandu model; attention to accessibility of services, replication of innovations and a shift of overall responsibility for Posyandu to the Ministry of Home Affairs. The USAID VFP/MCW Project had a key role in promoting change: broadening services; and improving in-country research skills. The Project helped directly link researchers and their findings to policy-makers and program managers.

Recommendations were made in areas of training and supervision for kaders, linkage between sub-health centers and the Posyandu, continuing research and development, further policy development for allocation of staff and budget to maintain integration, and targeting of high risk groups.

C O S T S

I. Evaluation Costs

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (U.S. \$)	Source of Funds
Name	Affiliation			
Sheila J. Ward, Team Leader	TvT Associates	IQC-PDC-0085- I-00-9087-00	\$73,458	A.I.D. Project No.497-0305
Lily P. Kak	TvT Associates			
Kemal N. Siregar	TvT Associates			
Ignatius Tarwotjo	TvT Associates			
2. Mission/Office Professional Staff Person-Days (Estimate) _____ 30 p/d		3. Borrower/Grantee Professional Staff Person-Days (Estimate) _____ 60 p/d		

A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)

Address the following items:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Purpose of evaluation and methodology used • Purpose of activity(ies) evaluated • Findings and conclusions (relate to questions) | <ul style="list-style-type: none"> • Principal recommendations • Lessons learned |
|--|--|

Mission or Office: USAID/Indonesia	Date This Summary Prepared: June 13, 1990	Title And Date Of Full Evaluation Report: Evaluation of the Village Family Planning/ Mother-Child Welfare Project
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This final evaluation assessed the USAID Village Family Planning/Mother Child Welfare Project Amendment 497-0305 in Indonesia. The project purpose was to reinforce the National Family Planning Program objective of a small, happy, prosperous family, with a corresponding increase in the level of family planning acceptance and continuance. This purpose was to be accomplished by a) a village-based health services system linked to the Village Family Planning Program that would decrease the prevalence of malnutrition and diarrheal disease among under fives; and b) community development and evaluation activities. The purpose of the 1986 Amendment was to secure additional AID grant funding to allow for the continuation of innovative support for a community-based family planning-health services delivery program, research and evaluation, and program and policy determination, and to extend the project from August, 1986 to May 1990.

In March 1984, a Memorandum of Understanding was signed by MOIH and BKKBN which provided the legal basis for future joint projects and cooperation in family planning and health under the proposed VFP/MCW Project Amendment. Five areas for integration and cooperation were; nutrition, family planning, immunization, diarrheal disease management, and mother-child health care. The delivery of the five services was conducted under the Integrated Family Planning-Health Services Program, or KB/Kes. During Pelita IV (1984-1989), KB/Kes became the national program for decreasing fertility and maternal-child mortality through the expansion of weighting posts (Pokbang) to integrated family planning-health services posts (Posyandu). The 1984 Memorandum also established an Integrated Task Force (ITF) to coordinate all inputs and plans and to formulate all policy for the KB/Kes program: to provide an objective analysis of integration issues, identify problems and seek solutions to problems through collaboration, and provide recommendations for improvements in the integration of services across the nation.

The VFP/MCW Project was designed to be flexible and to provide for research and development needed by the GOI to test, refine, and modify various strategies and approaches which provide input for policy formulation and implementation. The GOI demonstrated its commitment to the integrated KB/Kes service delivery approach through its decision to expand the Posyandu nationwide during Repelita V (1989-94). Because of the complexity of the process and inputs involved in successfully integration a complex set of services for mothers and children to a nation-wide basis, USAID and the GOI have placed emphasis on the design and conduct of research and development to overcome the remaining problems in the delivery system. By 1990, there are over 200,000 Posyandu throughout Indonesia's 67,000 villages.

Methodology: An evaluation team consisting of 2 Indonesians and 2 ex-patriates were contracted for this assignment through Tvt Associates in Washington. Interviews were held with ITF and its Secretariat, BKKBN and MOH officials at Central, Provincial and District levels and with researchers, kaders and village volunteers involved with Posyandu. Visits were also made to Health Centers and Posyandu in rural areas to observe service delivery and discuss operations. Project documents were also reviewed.

Inputs and Activities: The ITF made up of the Steering Body, the Organizing Body and the Secretariat coordinated all activities related to the PIL mechanism channelled through the BKKBN and MOH. Other inputs were funded directly through USAID for technical assistance. Funds supported activities in 8 provinces:

1. Operational coordination by the ITF.

2. Research - The VFP/MCW Project contributed toward the development of a replicable prototype of Posyandu. Posyandu needed greater description of program elements and operational problems. It evolved so quickly that management problems posed were very large. A Research and Development Agenda was developed to establish priorities. These were: a) improving community participation; b) kader and health worker performance; c) improving quality of Posyandu; d) improving MIS and supervision; e) improving coverage; and f) innovations such as TBA's, cost-analysis studies and soft-ware for computer-assisted data collection.

3. Training was supported for: training of trainers; kaders and village leaders; and program managers and regency and sub-district leaders.

4. Dissemination: The development, publication and distribution of a Posyandu Newsletter every two months to regency and district levels and meetings, conferences, and official letters were the main channels for information dissemination. A major policy change to promote the continuation of integration arose from a national meeting on Posyandu held in October, 1989. It was decided to shift the overall responsibility for Posyandu to the Ministry of Home Affairs and to create a coordinated working group called POKJANAL to be the operating mechanism.

Conclusions: The USAID VFP/MCW Project had a key role in overall development of improved service delivery. Working closely with the GOI, major problems affecting the well-being of mothers and children were identified and effective solutions to improving management of Posyandu services were derived. Substantive developments occurred in: shifting family planning services from only clinic-based to field level; village-based, income-generating activities were designed and supported to decrease poverty; and village-based health promotion services were broadened. The main achievement of the Project has been its success in raising the issue of Posyandu as a problematic one at the national level and in taking actions such as the development of a national coordinating body, the POKJANAL to sustain the activities of the program.

Research and field trials of interventions have contributed to shaping the Posyandu as a community-based service delivery model; some research projects had an impact on operation policy decisions while other provided opportunities for improving in-country research skills. Through the ITF, the Project created a unique mechanism for directly linking researchers and their findings of policy-makers and program managers. A total of 58 studies were funded (both operations research and problem description or assessment) and critical linkages between researchers and program managers were established in some provinces. Highlights of innovations and refinements tested were in a) MIS, b) training modules, c) supervision, d) village medicine posts, e) role of TBA's, f) child development scales, g) antenatal cards, and h) IEC.

There is an impressive communication network where people from all levels and agencies seem to be versant in the issues surrounding Posyandu. The Posyandu Newsletter seems to be a quality publication that is widely read and should be continued. At the village level, data flow and feedback with respect to involvement of village leaders with useful service indicators about Posyandu services need to be strengthened. Similarly, kaders and voluntary leaders need to be included in data feedback to see that their efforts are making a difference to mothers and children.

Training and supervision for kaders should focus on guidance for how they should deal with identified problems. Supervision and monitoring need to be strengthened through further development. The area that needs greatest strengthening is the linkage between sub-health centers and the Posyandu.

While an impressive level of coordination of various program elements has been achieved, there is room for further progress in integration of services, application of improved management concepts, and continuing research and development. The GOI gave early attention to concepts of accessibility during the Pelita IV. In Repelita V, greater emphasis will be given to quality of service in Posyandu.

FINAL REPORT

**EVALUATION OF
VILLAGE FAMILY PLANNING/MOTHER-CHILD WELFARE PROJECT
USAID/INDONESIA**

Delivery Order No. 1

under

QC PDC-0085-I-00-9087-00

June 13, 1990

**Sheila J. Ward, Team Leader
Lily P. Kak
Kemal N. Siregar
Ignatius Tarwotjo**

TvT Associates

PREFACE

This report is based on findings of a final evaluation which assessed the USAID Village Family Planning/Mother-Child Welfare Project Amendment 497-0305 in Indonesia from April 2, 1990 to May 14, 1990.

The evaluation team consisted of Ms. Sheila J. Ward, Team Leader, Dr. Lily Kak, Dr. Ignatius Tarwotjo, and Dr. Kemal N. Siregar, provided under an A.I.D. contract with TvT Associates.

The team worked under the technical direction of Dr. Widyastuti Soerojo, Project Officer, USAID and Debbie Ellickson-Brown, consultant to USAID. In addition, considerable assistance with planning and logistics was provided by the Secretariat staff of the Integrated Task Force for Posyandu.

ACKNOWLEDGMENTS

The evaluation team would like to express appreciation to the Government of Indonesia officials, researchers, village leaders, mothers, kaders, PKK and other donors who provided information, background, and views about their experience with the posyandu program and interaction with the USAID Village Family Planning/Mother-Child Welfare Project. In the short space of time during which this final evaluation was conducted, people responded by making time in their busy schedules for interviews and gathering of documentation. Dr. Soerojo Moelyodihardjo of the BKKBN, and Dr. S.L. Lemeina of MOH, both members of the Steering Committee of the Integrated Task Force provided important background, direction, and communication in regard to this evaluation. The team is grateful to them also for arranging opportunity for the May 15th presentation and discussion of this evaluation at the National Posyandu Meeting.

A special thanks is directed toward Dr. Bambang Winardi, Dr. Sonya Rahardjo, Dr. Hasan M. Husni, and Ms. Umie Samekto and support staff of the Secretariat for orientation to the project and the extensive arrangements made in order for us to meet key informants at the central level as well as in field visits to West Java, Central Java, and West Nusa Tenggara.

The field visits enabled the team to gain a greater appreciation of the extensiveness of the project and its impact at the village level. We are grateful to the BKKBN, DEP-KES, PKK, and LKMD officials who organized our information gathering at provincial, kabupaten and kecamatan levels as well as in the villages of Sembung in Kabupaten West Lombok, Cikancung in Kabupaten Bandung, and Karangayu in Kabupaten Kendal.

Finally, we would like to express our appreciation to USAID for facilitating all aspects of this evaluation. Joy Riggs-Perla, Head of the Child Survival Division, has been helpful at all stages of this Project. Dr. Emmanuel Voulgaropoulos, Chief of the Office of Population and Health, conceptualized the 10-year project and has overseen its implementation from beginning to end.

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GLOSSARY

Bangdes	Rural Development
Binkesmas	Community Health Development
BKKBN	National Family Planning Coordinating Board
Depkes	Ministry of Health
CSF	Community Systems Foundation
GOI	Government of Indonesia
IEC	Information, Education and Communication
IMR	Infant Mortality Rate
ITF	Integrated Task Force
JICA	Japan International Cooperation Agency
Kabupaten	Regency/District
Kader	Cadre (Voluntary community worker)
KAP	Knowledge, Attitude and Practice
KB-Gizi	Family Planning-Nutrition
KB-Kes	Family Planning-Health
Kecamatan	Subdistrict
LKMD	Institute for Village Community Resilience
MCH	Maternal Child Health
MOH	Ministry of Health
NFPCB	National Family Planning Coordinating Board
OR	Operations Research
PELITA	Five Year Development
PIL	Project Implementation Letter
PKK	Family Welfare Promotion
PKMD	Village Community Health Development
Pokbang	Weighing Post
Pokjanal	Operational Working Group
Posyandu	Integrated Services Post
Puskesmas	Community Health Center
REPELITA	Five Year Development Plan
SEAP	Posyandu Escalation and Acceleration Study Project
TBA	Traditional Birth Attendant
UPGK	Family Nutrition Improvement Program
UPPKA	Income Generating Activities of Family Planning Acceptor Groups
VCDC	Village Contraceptive Distribution Center
VFP/MCW	Village Family Planning/Mother Child Welfare
VMP	Village Medicine Post

BASIC PROJECT IDENTIFICATION DATA

1. Country: Indonesia
2. Project Title: Village Family Planning/Mother-Child Welfare
3. Project Number: 497-0305
4. Project Dates:

a.	First Project Agreement:	Mar 21, 1980
b.	Project Amendment:	Aug 25, 1986
c.	Completion Date:	May 30, 1990
5. Project Funding:

a.	USAID Pre-Amend. Obligation	US\$ 10,000,000
	Post-Amend. Obligation	US\$ 14,000,000
b.	Other Major Donors	US\$ -0-
c.	Host Country	
	Counterpart Funds	<u>US\$ 18,150,000</u>
	Total	US\$ 42,150,000
6. Mode of Implementation: PILs to GOI, BKKBN & MOH and
PIO/Ts, PIO/Cs, PIO/Ps, IQCs
7. Project Designers: The Government of Indonesia (BKKBN & MOH) and
USAID/Indonesia
8. Responsible Mission Officials:

a. Mission Directors:	Michael Philley	1979 - 1980
	Thomas Niblock	1981 - 1982
	William Fuller	1982 - 1986
	James Anderson	
	(acting)	1986 - 1987
	David Merrill	1987 - 1990
b. Project Officers:	Rebecca Cohen	1980 - 1981
	Julie Klement	1981 - 1986
	Joy Riggs-Perla	1986 - 1988
	Widyastuti Soerojo	1988 - 1990
9. Previous Evaluations: Mid-Term Evaluation 1982/83, Final Evaluation, 1986,
Mid-Term Evaluation for Amendment

EXECUTIVE SUMMARY

BACKGROUND: The project purpose was to reinforce the National Family Planning Program objective of a small, happy, prosperous family, with a corresponding increase in the level of family planning acceptance and continuance. This purpose was to be accomplished by (1) a village-based health services system linked to the Village Family Planning Program that would decrease the prevalence of malnutrition and diarrheal disease among children under five; and (2) community development and evaluation activities.

The purpose of the 1986 Project Amendment was to secure additional A.I.D. grant funding to allow for the continuation of innovative support for a community-based family planning-health services delivery program, research and evaluation, and program and policy determination, and to extend the project from August 1986 to May 1990.

In March 1984, a Memorandum of Understanding was signed by MOH and BKKBN which provided the legal basis for future joint projects and cooperation in family planning and health between the two agencies under the proposed VFP/MCW Project Amendment. Five major areas for integration and cooperation between MOH and BKKBN were identified under the Integrated Family Planning-Health Services Program, or KB/Kes: (1) nutrition, (2) family planning, (3) immunization, (4) diarrheal disease management, and (5) mother-child health care. During Pelita IV (1984-1989), KB/Kes has become the national program for decreasing fertility and maternal-child mortality through the expansion of weighing posts (Pokbang) to integrated family planning-health services posts (Posyandu).

The 1984 Memorandum also established an Integrated Task Force (ITF) to coordinate all inputs and plans and to formulate all policy for the KB/Kes program; to provide an objective analysis of integration issues, identify problems and seek solutions to problems through collaboration; and to provide recommendations for improvements in the integration of services across the nation.

The VFP/MCW Project was designed to be flexible and to provide for research and development needed by the GOI to test, refine, and modify various strategies and approaches which provide input for policy formulation.

Because of the complexity of the process and inputs involved in successfully integrating a complex set of services for mothers and children on a nationwide basis, USAID and the GOI have placed emphasis on the design and conduct of research and development efforts to overcome the remaining problems in the delivery system.

METHODOLOGY: The final evaluation team for the amended VFP/MCW Project consisted of four consultants: two Indonesians and two expatriates. Interviews were held with

ITF and its Secretariat, BKKBN officials and Ministry of Health officials at Central, Provincial and District levels, and with researchers who had been involved in studying various aspects of the Posyandu system. Visits were also made to Health Centers (Puskesmas) in rural areas and to distant villages to see the sites of Posyandu and talk with the kaders, who are the women responsible for conducting the work of the Integrated Service posts. Discussions also were held with the PKK, and project documents were reviewed.

CONTEXT: To appreciate the achievements of the 497-0305 Project Amendment, it is important to understand something about the larger context in which such projects operate. Indonesia is a vast country with many differences in cultural and religious beliefs. Such differences mean that approaches to problem solving are likely to vary from province to province and from village to village.

The need to establish equity in program availability is of very high priority. The village leaders and village people share responsibility in assisting service development by taking an active role. The ultimate objective is to have posyandu that are "village-owned" and backed up by technical support from the government health and family planning services.

The national program of Posyandu is an ambitious undertaking. The early program beginnings of the 70's were accelerated in the 80's and have reached the stage where major progress toward the initial goal can be observed and partially measured. In 1990, Indonesia is a healthier place for mothers and babies than it was a decade earlier.

There are over 200,000 posyandu established around the country scattered throughout Indonesia's 67,000 villages. Each puskesmas has to serve, on average, 40 posyandu. Posyandu are in various stages of development and currently attention is directed toward achieving improvements in quality of services.

INPUTS: (1) The Integrated Task Force is made up of the Steering Body, the Organizing Body, and the Secretariat. Together these groups have assumed the roles and tasks of policy formulation for strengthening Posyandu service delivery.

(2) Funding for project activities was administered through the PIL mechanism through the BKKBN and MOH, and directly through USAID for technical assistance and other inputs. These funds supported a series of activities.

ACTIVITIES: Coordination has been directed to the central level as well as provincial levels in the eight designated provinces.

(1) **Operations.** A large part of the functioning of the ITF has been in coordination activities.

(2) **Research.** Through its support of the KB-Gizi and then the KB-Kes strategy, the VFP/MCW has been instrumental in contributing to the development of a replicable prototype of Posyandu. The posyandu program needed greater description of program elements and operational problems. It was evolving so quickly that very large management problems were posed. *A Research and Development Agenda* was developed in order to establish priorities among the six problem areas:

- Improving community participation
- Kader and health worker performance
- Improving the quality of Posyandu
- Improving the MIS and supervision
- Improving coverage of Posyandu services
- Innovations such as TBAs, cost-effectiveness studies and software for computer-assisted data collection.

(3) **Training** has been supported through the project in a number of areas: training of trainers, for kaders and village leaders, for program managers, and for regency and sub-district leaders.

(4) **Dissemination:** A main vehicle was the development, publication and distribution of a *Posyandu Newsletter*, published every two months, and distributed to regency and district levels. Meetings, conferences and official letters provided other channels for dissemination of information. A significant national meeting was held in October 1989, a National Conference on Posyandu.

Field visits were conducted by BKKBN, MOH, and Ministry of Home Affairs (Bangdes) staff as well as ITF Secretariat staff and consultants to assess program efforts and monitor progress.

A major policy change designed to promote the continuation of integration arose from a national meeting on Posyandu held in October 1989 to summarize and discuss the results of the 497-0305 Amendment and related experiences. It was decided at that meeting to shift the overall responsibility for Posyandu to the Ministry of Home Affairs under the direction of the Director General for Rural Development and to create a coordinated working group, called *Kelompok Kerja Operasional*, or *Pokjanal*, to be the operating mechanism. The national meeting planned for mid-May 1990 will be opened by the Director General of Rural Development from the Ministry of Home Affairs. The PKK, the predominant driving force for Posyandu activities, will share in the responsibility from the central level down to the village level.

A review of the research subprojects and an analysis of progress achieved to date was completed. While still requiring further research and development, in-country knowledge and skill in applied research methods was increased as was program managers' understanding of the use of research as a management tool.

A total of 58 studies were funded including two types: (1) operations research, and (2) problem description or assessment which was considered vital to program managers. A critical element of operations research is the linkage between the program managers and researchers. The strength of these linkages varied across project sites. In some provinces active coordinating teams were created.

Highlights of the innovations and refinements/modifications tested were in the areas of (1) MIS (health information and income-generating activity monitoring), (2) training modules, (3) supervision, (4) village medicine post, (5) role of TBAs, (6) child development, (7) antenatal card, and (8) IEC.

CONCLUSIONS: As the USAID Village Family Planning/Mother-Child Welfare Project draws to an end, it is important to acknowledge the key role it has had in the overall development of improved service delivery in Indonesia. This project has worked closely with the GOI in identifying major problems affecting the well-being of mothers and children and has attempted to respond flexibly in contributing to effective solutions. Through Project support and creative leadership (both from USAID and the GOI (BKKBN and MOH)), a number of substantive developments occurred: family planning services were developed at field level moving beyond the previous pattern of clinic-based only; village-based, income-generating activities were designed and supported to impact positively on poverty; and village-based health promotion services were broadened.

There are no illusions that the Project Amendment was completely successful. A great deal has been learned both in process and content by many participants that has major impact on policy, planning, management, guidance and delivery of Posyandu services.

The integration of the KB-Kes program has involved four major agencies, with the BKKBN historically taking the lead role in integration. During the 497-0305 Amendment, the MOH has played an equal role, while the PKK has been actively involved in the implementation. At the end of the project, the leading sector will shift to the Ministry of Home Affairs as described in Instruction #9 of 1990.

Research and field trials of interventions have contributed to shaping the Posyandu as a community-based service delivery model; some research projects had an impact on policy decisions while others provided opportunities for improving research skills without having any direct impact on policy.

The main achievement of project 497-0305 is its success in raising the issue of Posyandu as a problematic one at the national level, and in taking some actions such as development of a national coordinating body, the Pokjanal, to sustain the activities of the program.

Through the ITF, the project created a unique mechanism for (1) directly linking the researchers and their research findings with the policy makers and program managers; and

(2) establishing priorities to guide researchers. Thus, an effort was made to understand the problems and define some components of the Posyandu through research.

There is an impressive communication network where people from all levels and agencies seem to be well-versed in what the issues are surrounding Posyandu management and service delivery. The *Posyandu Newsletter* seems to be a quality publication that is read by a wide selection of people around the country, leading to a higher knowledge level.

Data flow and feedback to the village leaders with useful indicators about Posyandu service results needs to be strengthened. The village kaders and leaders need to be included in data feedback in order for them to see that their efforts are contributing to the improvement in the quality of life for the mothers and children of their community.

Training and supervision for kaders should focus on guidance for how they should deal with identified problems.

Supervision and monitoring of Posyandu activities still need to be further developed and institutionalized.

The area that needs greatest strengthening is the linkage between sub-health centers and the Posyandu which is currently underutilized.

While an impressive level of coordination of various program elements has been achieved, there is room for further progress with respect to integration of services, application of improved management concepts, and continuing research and development.

Attention was given to accessibility of services during Pelita IV. In Repelita V, a greater emphasis will be given to the quality of Posyandu services.

The proportion of program cost borne by the community is about 40 percent on average. The cost analysis studies completed by the MOH on Posyandu were the first of that nature to be conducted and served as an excellent management tool.

The chosen method of step-down training where staff from higher administrative levels have responsibility for training those at lower administrative levels is generally only partially successful.

RECOMMENDATIONS:

- Further policy development and allocation of central secretariat staff and budget are needed to support the Pokjanal to maintain the focus of integration and follow-through as well as to provide continuity of project.

- There is a need to continue to bridge the manpower gap between Puskesmas and Posyandu.
- Simple indicators such as the number of infants and children under five years who have lost weight should be shared with the village leader on a regular and specific schedule.
- Focused research and development efforts on priority issues should be continued.
- Attention to developing incentives for kaders should be continued.
- Training for data analysis and program management at the provincial, kabupaten, and kecamatan levels should continue to be replicated based upon the valuable lessons learned in the report, "Evaluation of KB-Kes Data Management Training for Kabupaten Managers."
- It may be the best use of resources to identify and to focus services on (1) infants, (2) children who have not reached 11.5 kg. by age three, and (3) pregnant women who have high risk factors.

Almost all mothers do the best they can to raise healthy children. What they are able to do depends on their knowledge and resources.

I. INTRODUCTION

A. PROJECT PAPER, AMENDMENT 1 - VILLAGE FAMILY PLANNING/MOTHER-CHILD WELFARE 497-0305

The project purpose was to reinforce the National Family Planning Program objective of a small, happy, prosperous family, with a corresponding increase in the level of family planning acceptance and continuance. This purpose was to be accomplished by (1) a village-based health services system linked to the Village Family Planning Program that would decrease the prevalence of malnutrition and diarrheal disease among children under five, and (2) community development and evaluation activities.

The purpose of the amendment was to secure additional A.I.D. grant funding to allow for the continuation of innovative support for a community-based family planning-health services delivery program, research and evaluation, and program and policy determination, and to extend the project from August 1986 to May 1990.

B. PROGRAM HISTORY

The concept on which the development of village health began in Indonesia dates back to 1970 with the beginning of the Pembangunan Kesehatan Masyarakat Desa (PKMD). The PKMD is basically a series of self-help, mutually cooperative activities carried out by the community in order to maintain health. As the concept spread within Indonesia, several different types of PKMD were developed. In 1978, at the Alma Ata conference on primary health care, the PKMD approach to achieving health for all by the year 2000 was presented as an example underway in Indonesia. By 1983, PKMD programs were implemented in all provinces of Indonesia although they had not reached all districts and sub-districts.

The PKMD is founded on several factors which still continue to be significant:

- mutual cooperation of village inhabitants
- leadership
- training
- freedom in expressing opinions
- community participation in all steps of planning and implementation
- community willingness to accept changes and development which focus on a better quality of life
- providing formal and informal education
- role of the village social institutions
- regular technical guidance and supervision
- coordination and friendliness of working relationships
- utilization of traditional health manpower
- government policy

- national stability in improving village development.

Also in 1970, the Government of Indonesia (GOI) established its National Family Planning Program, beginning with a clinic-based system to distribute reversible contraceptive methods in the provinces of Java and Bali using Ministry of Health (MOH) facilities. The National Family Planning Coordinating Board (BKKBN) developed and replicated a community-based contraceptive delivery system during Pelita II (1974-78). By 1979, this community-based system distributed oral pills and condoms through a Village Contraceptive Distribution Center (VCDC) staffed by volunteers drawn from influential community groups and established in all villages in six provinces. Further expansion to the other provinces occurred during Pelita III and IV.

The GOI attempted to consolidate nutrition efforts under the Family Nutrition Improvement Program (UPGK) established at the beginning of Pelita II in 1975. During that time, a strategy and package of nutrition-related services was developed by UPGK but coverage was hampered by the lack of a delivery system which could bring services to mothers and children under five years in rural areas. By the end of Pelita II, services were underway in about 1400 villages.

A community-based approach for linking nutrition and family planning services using BKKBN's village family planning network as the delivery system was initiated in 1979 when the GOI (MOH, BKKBN, Ministry of Agriculture and Ministry of Religious Affairs) signed a joint agreement to implement the KB-Gizi program. In 1980, this approach was supported by USAID Project 497-0305 VFP/MCW through the BKKBN as the KB-Gizi program and was implemented in areas where family planning acceptor rates were already high. At the same time, UNICEF continued to assist the UPGK TERPADU (integrated) program, which was the GOI agreement mentioned above. This integrated community-based approach was used by the Ministry of Religious Affairs to motivate mothers to participate in the program and by the Ministry of Agriculture to encourage and educate village people in the development of home gardens.

The nutritional package consisted of monthly weighing of children under five years, information and education for mothers, food preparation demonstrations, nutritional supplements (high dosage Vitamin A capsules to children every six months, oral rehydration therapy, and iron tablets for pregnant and lactating mothers), referral of severely malnourished children to health centers, and education to increase home gardens. In addition, simple family planning services were provided for married women.

The village weighing post (Pos Penimbangan or Pokbang) was the center for these activities. Trained village nutrition volunteers, or kaders, managed the activities at the Pokbang. Kaders were drawn from the VCDC and from family planning "acceptor" groups in an attempt to integrate both nutrition and family planning activities.

The USAID-supported KB-Gizi program which integrated family planning and

nutrition services focused its efforts on developing replicable delivery systems for the integrated program in 2000 villages in provinces of East Java, Bali, and West Nusa Tenggara. UNICEF also provided support for similar activities through the MOH and BKKBN. By the end of Pelita III (1984), both programs covered 34,000 villages.

A mid-term process evaluation of the VFP/MCW project in 1982-83 and the final evaluation in 1986 (both evaluations were under the auspices of BKKBN with technical assistance from universities and the Community Systems Foundation) identified conceptual and operational constraints in the KB-Gizi strategic design. Recommendations were made to improve the training, reporting and recording, IEC, and income-generating components of the project. Constraints in service availability also were identified.

In March 1984, a Memorandum of Understanding was signed by the Directorate General of Community Health, the Directorate General of Communicable Diseases and Environmental Health (both from MOH), and the Deputy for Program Planning and Analysis (from BKKBN) which provided the legal basis for future joint projects and cooperation in family planning and health between the two agencies under the proposed VFP/MCW Project Amendment. Five major areas for integration and cooperation between MOH and BKKBN were identified; nutrition, family planning, immunization, diarrheal disease management, and mother-child health care. The delivery of these five services was to be conducted under the Integrated Family Planning-Health Services Program, or KB/Kes. During Pelita IV (1984-1989), KB/Kes has become the national program for decreasing fertility and maternal-child mortality through the expansion of weighing posts (Pokbang) to integrated family planning-health services posts (Posyandu).

Responsibilities were divided functionally with MOH providing technical support including the development of information, training, and supplies such as weighing scales, and the BKKBN providing motivation and information and education. The BKKBN was to assume primary responsibility for developing the recording and reporting, monitoring and evaluation indices for the entire KB/Kes program. Concurrently, it was understood that the MOH line agencies responsible for the delivery of services (the Directorate General for Communicable Diseases and Environmental Health, and the Directorate General for Community Health) would continue to record, report, monitor and evaluate specific information on Posyandu activities related to their areas of concern. Similarly, it was understood that the involvement of the Ministries of Religious Affairs and Agriculture would continue to be important in motivating program participants, motivating kaders (the village level volunteers staffing the Posyandu), providing information, and developing home gardens through the integrated nutrition program.

The 1984 Memorandum also established an Integrated Task Force (ITF), representing the three signatories, to coordinate all inputs and plans and to formulate all policy for the KB/Kes program. The ITF, composed of the Directorate Chiefs for the programs and other support services to be integrated at the Posyandu, was developed to provide an objective analysis of integration issues, identify problems and seek solutions to

problems through collaboration, and provide recommendations for improvements in the integration of services across the nation. It was also established to lead coordinated efforts among the line agencies to identify policy options and support policy developments for the integrated program.

The VFP/MCW Project was designed to be flexible and to provide for research and development needed by the GOI to test, refine, and modify various strategies and approaches which provide input for policy formulation and implementation.

In July 1986, the USAID and the GOI developed the Project Paper for the amended VFP/MCW Project to focus efforts that would be funded until May 30, 1990. That paper declared that the original project purpose and the means for achieving it, as well as the original project goal, would continue to be supported. The GOI demonstrated its commitment to the integrated KB/Kes service delivery approach through its decision to expand the Posyandu nationwide during Repelita V (1989-94). In Pelita IV, the number of Posyandu rapidly increased from around 90,000 in 40,000 villages to 200,000 Posyandu in 52,000 villages. Operational support for the replication phase was provided with assistance from the World Bank in all 27 provinces and from UNICEF. Both donors have different but complementary functions and the provinces covered, therefore, may overlap. There are more than 67,000 villages in Indonesia.

Because of the complexity of the process and the inputs involved in successfully integrating a complex set of services for mothers and children on a nationwide basis, USAID and the GOI have emphasized identifying and defining remaining problems in the integrated service delivery approach and devising solutions before the final delivery model is approved for replication. The design and conduct of research and development efforts to overcome these problems in the delivery system are based on four assumptions held by the GOI and USAID regarding rural health services in Indonesia:

1. Mothers are the primary catalysts in programs designed to improve the health and nutritional status of children.
2. A strong community support system exists in rural health care that can be used to motivate mothers.
3. Kaders are the primary vehicle for transferring knowledge to mothers about the children's health.
4. A program of integrated services can be developed through a constantly evolving process, with services added at each village post as the village is able to support them.

These assumptions formed the basis for the activities undertaken in the project amendment. The amendment provided for time and additional resources to support operations research

aimed at testing and redesigning various program components including: the Posyandu, the monitoring system, management and supervision, policy development, and the replication of program innovations.

II. METHODOLOGY OF FINAL EVALUATION

The TvT final evaluation team for the amended VFP/MCW Project consisted of four consultants: two Indonesians with knowledge of the health care delivery system and policy development (Dr. Kemal Siregar had been involved with the mid-term review of this project); and two expatriates with background in operations research and public health management. The scope of work for the evaluation team is attached in Appendix A.

The team was provided with a briefing by the ITF Secretariat and USAID Project Manager at the initiation of the review. Following the briefing, the team met alone to become acquainted with one another, to clarify roles and responsibilities, and to agree on procedures for acquiring the needed information. After discussions with the evaluation team, the Secretariat staff also provided major assistance in setting up interview appointments, accessing project-related reports and documents and organizing field trip logistics. A list of persons contacted and places visited is attached in Appendix B. One key person, the head of the PKK at the national level, was not available for interviewing by the team.

Previous evaluations had been completed as scheduled, including an extensive report by the BKKBN, Universities of Udayana, Brawijaya and Airlangga and the Community Systems Foundation (from Ann Arbor, Michigan) in October 1986. USAID recommended that this evaluation team focus mainly on the Project Amendment period; that is, the last three years of the Project. USAID and the ITF requested that the evaluation team have a draft summary of findings, conclusions and recommendations prepared by May 4, 1990 for review and consideration before a National Meeting scheduled for mid-May. The complete draft report would be ready two weeks later and the final report by the end of May 1990 to correspond with the date of termination of the project.

After one week of interviews with ITF Secretariat staff, BKKBN officials and Ministry of Health officials, the team travelled to three provinces in succession to meet with some of the people involved in organizing and delivering services of Posyandu, and researchers, and to observe, where possible, Posyandu in operation. Additional interviews were arranged with other key donors, such as UNICEF and the Japanese International Cooperation Agency (JICA).

The first visit was to Bandung in West Java to meet with Ministry of Health and BKKBN staff as well as with a number of the researchers who had been involved in studying various aspects of the Posyandu system. Visits also were made to Health Centers (Puskesmas) in a rural area and to distant villages to see the sites of Posyandu and talk with the kaders who are the women responsible for conducting the work of the Integrated Service posts. Discussions also were held with the PKK (the wives of elected leaders who organize the kaders' work). Central Java was the second province visited. Semarang, the provincial capital and Kendal Regency (Kabupaten), to observe a Posyandu in operation, were the sites selected. The third field visit was to West Nusa Tenggara Province in Mataram (the capital

city) and a nearby Kecamatan (sub-district), Sembung. Various staff of the ITF Secretariat accompanied the team for purposes of assisting with arrangements. In some instances, they sat in on the interviews conducted by the team, and in other instances they were involved with other tasks.

Between interviews and visits, the team met frequently to discuss impressions and assist in assuring that Indonesian terminology and organizational relationships were clearly understood. In many cases, interviews were conducted in English. In some instances, where respondents spoke Bahasa Indonesian only, translations were given to the team leader by one of the other three Indonesian-speaking team members or by other English speakers involved in the meeting.

Indonesian documents were reviewed and summarized by the two Indonesian team members and the Indonesian-speaking expatriate consultant. Documents in English were reviewed by the two expatriate consultants. The team met to discuss all reports and documents reviewed. In addition, most team members attended all interviews, and frequent team meetings were held to consolidate findings and discuss conclusions and recommendations.

III. POLITICAL, SOCIAL, CULTURAL, AND DEVELOPMENTAL CONTEXT

To appreciate the achievements of the Project 497-0305 Amendment, it is important to understand something about the larger context in which such projects operate. This section will attempt to explain some of the salient features that have a bearing on how decisions are made, and what actions are ultimately taken. It should be emphasized that the following description is based upon interpretations made by this consultant team from interviews with respondents, from review of documents, and from past experience and is not derived from any one source.

A. GEOGRAPHICAL, DEMOGRAPHIC AND CULTURAL VARIATION

Indonesia is a vast country comprised of over 13,000 islands covering a large geographic area. There are five main islands. The population of more than 175 million people is concentrated on the islands of Java and Bali (which make up six provinces) and is less concentrated in the other islands (which make up the remaining 21 provinces). In addition to an uneven population distribution, there are more than 300 ethnic groups, resulting in many differences in cultural beliefs which need to be considered in program development. While 90 percent of Indonesians are of the Muslim faith, there are other practicing religious groups including Christians, Hindus and Buddhists. These differences mean that approaches to problem solving are likely to vary from province to province and from village to village and, therefore, add a large degree of complexity to the process of replication of innovations and development of national policy. Furthermore, external donors tend to assist programming in designated provinces, although as stated previously, there is often overlap. The USAID Project Amendment tended to focus on activities within 8 provinces, the World Bank in 11 provinces, and UNICEF provides support for basic operation of Posyandu for all provinces.

The geographic distance among provinces has contributed toward some GOI policies of decentralization. And, the strong role that religion holds in the lives of Indonesian people means that involvement of religious leaders and their institutions has been an important part of promotion of successful programs.

To promote the health communication and development network throughout rural Indonesia, a system of "dasa wisma" has been introduced and promoted. The dasa wisma system attempts to identify units or groups of 10 to 20 households. This unit appoints a leader and that leader becomes responsible for communicating important information both up and down the structure. In September 1989, the Minister of Health inaugurated an intensive training course for dasa wisma in South Sumatra, which was the first such course in the country. The recording of birth and death data within the unit is expected to be a part of the role assumed by the dasa wisma leader. The Peningkatan Kesejahteraan Keluarga (PKK, or Family Welfare Promotion) assume an important role in implementing this system.

The Chairperson of the Central Executive Committee of PKK also had a role at the official opening of this training program.

B. POLITICAL STRUCTURE AND NON-GOVERNMENTAL AGENCY SUPPORT

Political leadership begins with the President at the central level. He appoints a Governor for each province from a small group of elected candidates. The Governor, in turn, appoints regency (kabupaten) leaders who appoint subdistrict (kecamatan) leaders. At the village level, leaders are elected by the people of that village. This governing structure relates most closely to the Ministry of Home Affairs.

The wives of the governing leaders at each level are the heads of a non-governmental organization concerned with family welfare called the PKK. The PKK is a women's organization and is one of the 10 development sections/departments under the LKMD (Institute for Village Community Resilience). They assume responsibility for contributing toward Section 10 of the LKMD. One of the PKK functions is responsibility for assisting in selection, training and organization of kaders for the Posyandu. The PKK has ten basic programs:

1. comprehension and practical application of Pancasila (the basic national belief system),
2. mutual self-help,
3. food,
4. clothing,
5. housing and home economics,
6. education and handicrafts,
7. health,
8. promotion of cooperatives,
9. protection and conservation of the environment, and
10. appropriate domestic planning.

C. THE DEVELOPMENT APPROACH AND SUSTAINABILITY

In approaching various program sectors, the government is committed to a set of values termed, the "trilogy of development." These values are described as: "equal distribution of development and its benefits; in the course of creating equal justice for all members of society, an economic growth at sufficient proportion; and a sound and dynamic stability." ¹ The trilogy of development is implemented through eight channels of equity. Health is one of these channels.

¹Rural Development, GOI, Department of Home Affairs, 1981.

These values are widely held among government officials throughout the country and have a profound bearing on program development. For example, the need to establish equity in program availability is of very high priority. Hence, assuring that Posyandu program coverage is extended nationwide was given an early and major focus.

Developmental resources have their limits, and difficult choices have to be made in developing program plans (Repelita) and allocating scarce funds. To extend the potential availability of resources, the GOI is promoting a number of programs to involve the private sector in ways that can contribute to self-sufficiency and sustainability. There is increasing consciousness on the part of government to identify ways and means of achieving important goals and objectives through developing partnerships with the private sector and, in some instances, encouraging program participants to carry an affordable share of the cost of service. One of the major fields of endeavor, in this regard, has been income-generating projects which have focused on assisting women to increase their economic well-being. Some of these projects are established to create the basis for revolving loans which can help increase income and self-sufficiency.

The "urgency" associated with developmental needs is acutely felt by many government leaders. As a result, these leaders follow plans, activities and results closely and are quick to identify and experiment with promising innovations. At the same time, they are most interested in those innovations that are cost-efficient, effective, and have potentially broad significance and impact. They have a practiced eye that can quickly separate the unrealistic, high-cost interventions from those with practical merit.

D. VILLAGE-OWNED SERVICES

The GOI also recognizes the role it has in facilitating program development for services offered to mothers and children within village settings. The government's role is to do what is needed to make the services available; the recipient's role is to use the services in order to promote their health and that of their children. In this regard, the village leaders and village people share responsibility in assisting service development by taking an active role, wherever possible, in contributing space for the Posyandu service, selecting and supporting kaders to staff the service, and encouraging village residents to use the services. The ultimate objective is to have Posyandu that are "village-owned" and backed up by technical support from the government health and family planning services. The underlying philosophy of the government with respect to the village-owned concept is that services should evolve from a pattern of being provided *for* the people, to being provided *with* the people, to being provided *by* the people.

E. BRIDGING RESEARCH AND SERVICE PROGRAMS

Bridges between university researchers and government program managers, almost

universally, require a great deal of building. This is a dynamic process involving the interest and will of both parties, the establishment of communication patterns where information and skills are shared or exchanged, and development of common goals and mutual trust and respect. These are not always easy paths to follow and are subject to external conditions such as leadership, availability of funding, competition with other job responsibilities, opportunity for meetings, and prevailing knowledge and skill. Within the Indonesia health and family planning Posyandu context, this type of bridge-building between program managers and university researchers was largely a new experience. The Project contracted with a large number of Indonesian consultants to facilitate the bridge-building between program managers and researchers.

F. EVOLUTION OF POSYANDU SERVICES

The Government of Indonesia's goal of decreasing infant, child, and maternal morbidity and mortality throughout Indonesia is a complex undertaking of vast magnitude. To achieve the objective of a small, happy and prosperous family requires political will; organizational planning and coordination; deployment of resources (manpower, technology, supplies, equipment, training); and community readiness. Further, operational programming must be targeted appropriately to an effective mix of individual, group, and environmental services which lead to healthy populations.

The national program of Posyandu, a community (village) based, integrated service mix of growth monitoring; nutrition; oral rehydration; immunization; family planning; and mother child care targeted to expectant mothers, lactating mothers and their children under five years of age, is an ambitious undertaking. The program beginnings of the 70's were accelerated in the 80's and have reached the stage where major progress toward the initial goal can be observed and partially measured. In 1990, Indonesia is a healthier place for mothers and babies than it was a decade earlier.

Contributing towards these achievements has been a number of major Government of Indonesia agencies, nongovernmental organizations (such as the PKK), and a variety of international donors. One portion of the effort towards improved service delivery has been the USAID's Village Family Planning/Mother-Child Welfare Project begun in 1979 and amended in 1986. The amendment (497-0305) was largely to support a research and development program aimed toward policy development and improved management of Posyandu through increased integration of services, replication of innovations and promotion of self-sustaining, village-owned projects.

The impact of the USAID project has to be viewed within the context of overall progress the Government of Indonesia has made towards the goal of reduced morbidity and mortality for mothers and children and the stages of achievement within the national five year plans (Repelita). As one senior government official cautioned, "Posyandu is only one program and cannot be expected to solve all problems facing mothers and children."

There are over 200,000 Posyandu established around the country scattered throughout Indonesia's 67,000 villages. Relatedly, there are 5,500 Puskesmas (1988) and 18,000² sub-health centers. Since health centers and sub-health centers are located in villages, this leaves about 43,500 villages without regular, daily government health services. (The GOI has plans to redress this imbalance which is discussed in a later section of this report.) Traditional birth attendants and traditional healers practice throughout the country, largely as private practitioners.

The average health center (puskesmas) has a very small staff (about 12 people not all of whom assist Posyandu). Each puskesmas has to serve, on average, 40 Posyandu. The range is from 10 to 100 Posyandu per puskesmas. Since Posyandu services are usually scheduled once in a month, this scheduling is a major task. Further, budgets for transportation, equipment and supplies are necessary to assure staff are able to reach the Posyandu at scheduled times. In some provinces, mobile health services (either by boat or land vehicle) help to distribute provision of care. The GOI recommendation is to have one Posyandu for each 100 children under the age of five. With the population size increasing, this means that more Posyandu will need to be established creating a larger demand for technical assistance from the health and family planning sectors.

Posyandu is in various stages of development, and currently attention is directed toward achieving improvements in quality of services. Improving quality of Posyandu services starts with the concept of quantity; that is, before quality can be improved, a Posyandu needs to be established and operating. Once a Posyandu is established, it needs to move toward providing the full complement of five services. Once the five services are in place, attention can be directed toward assuring that the five services offered are delivered correctly according to the official guidance provided. Within the definition of more developed Posyandu, BKKBN believes that income-generation, hybrid coconut incentives, child development stimulation activities, KB-Mandiri activities, the Antenatal Card, home gardens, etc., should be included.

There is also considerable discussion about adding services to Posyandu that are either of a curative nature or that respond to the particular needs as viewed by the village leaders. Since one of the five services is "mother/child" care, it would seem that any service needed would be within the stated category.

²Information from Depkes, April 1990.

IV. INPUTS FOR PROJECT IMPLEMENTATION

A. INTEGRATED TASK FORCE

The Steering Body for the Integrated Task Force (ITF) is comprised of four Echelon I members: the Director General for Community Health and the Director General of Communicable Disease Control and Environmental Health (both from the Ministry of Health) and the Deputy of Program Operations and the Deputy of Planning (both from the National Family Planning Coordinating Board).

The Organizing Body of the ITF is made up of 10 health and family planning Echelon II members from related units of the MOH and BKKBN. When the Chair is held by a BKKBN member, the Vice Chair is from the MOH and vice versa. Special tasks were divided among smaller "working groups" at various points in time.

Supporting the guidance established by the Steering Committee and the direction provided by the Organizing Body, is the Secretariat. The Secretariat is made up of a small number of paid staff whose activities have been coordinated by the Chief of Party and whose operations have been financed with Project 497-0305 funds. In addition, there have been several short-term and long-term consultants.

Together, these groups have assumed the roles and tasks of policy formulation for strengthening Posyandu service delivery through the research and development goals of the Project. The Secretariat has carried out the operations of the program and assumed oversight responsibility for the sub-projects financed by the USAID Project Amendment 497-0305.

B. PROJECT FUNDING

Project Implementation Letters (PILs): One of the established mechanisms for funding the conduct of the Project Amendment 497-0305 has been through a series of Project Implementation Letters (PILs). Each PIL contains a description of activities to be funded, a budget and a means of accounting for expenditures. In the course of this project, many different PILs were established. The following is an abbreviated list of a few of the more recent ones:

PIL 45/45A - KB-Kes Operations

PIL 47 - Operations of KB-Kes Secretariat - '87 - '88

PIL 50/50A - SEAP (Posyandu Escalation & Acceleration Study)

PIL 53 - KB-Mandiri

PIL 55/55A - Weaning Project

PIL 57 - VFP/MCW '89-'90 Umbrella Operations Research

PIL 58 - Operations of KB-Kes Secretariat '88 - '89.

PIL 58A - Operations of KB-Kes Secretariat 89 - '90

PIL 60/62 - Training for Data Analysis and Integrated Program Management

PIL 50 and PIL 55 were administered through the MOH; and the remainder through the BKKBN.

Overall, the combination of PILs provided a major part of the funding resource base to conduct activities of research and development including operations, research sub-projects, training, information dissemination, and coordination.

Other Funding Mechanisms: In addition to the PILs administered by the BKKBN and MOH for this project, other funding mechanisms have included Project Implementation Orders for Technical Assistance (PIOTs), Project Implementation Order for Participants (PIOPs) and Indefinite Quantity Contracts (IQCs). All of the other funding is administered by USAID.

USAID experienced staff cutbacks and staff turnover during the later stages of the project which resulted in some lack of continuity at various points in time.

V. PROJECT ACTIVITIES

A. OPERATIONS

Under the policy direction of the ITF Steering Committee, the Secretariat staff has undertaken a series of activities directed towards operationalizing the Project, defining actions needed to carry out the objectives, and monitoring and supervising the conduct of the many subprojects. In the process, they have accumulated a series of letters, reports, manuals, and files documenting the experience, achievements and progress toward the overall goals. This collection represents a valuable set of historical material.

A large part of the operational tasks has been related to coordination with respect to the various government agencies and departments, the research communities, the non-governmental organizations, and other USAID projects. Coordination has been directed to central level as well as provincial levels in the eight designated provinces. Of necessity, a great deal of staff travel has been required as well as subcontracting with selected consultants for specific services.

B. RESEARCH

Through its support of the KB-Gizi and then the KB-Kes strategy, the VFP/MCW has been instrumental in contributing to the development of a replicable prototype of Posyandu. Evolving and developing a definite shape through expansion and research, the Posyandu program still needed greater description of program elements and operational problems. It was evolving so quickly, that it encountered very large management problems.

The problems identified in the mid-term evaluation of 1982/83 and in the final program evaluation of 1986 were summarized in the Project Paper of the VFP/MCW Project Amendment 5:

- Underutilization of the monthly weighing posts by mothers and children, because of the distance from home, inconvenient schedules, boredom with the weighing routines, and the incomprehensibility of the KMS growth card.
- Low program impact on mothers' KAP levels due to the lack of IEC materials or the use of untested and inappropriate materials.
- Low motivation and effectiveness of the kaders related to the method of selection, level of supervision, and type of compensation.
- Questionable accuracy and utility of the data collected by the kaders.

- Ineffective MIS.
- Poor program integration at the provincial and district levels due to budget and manpower shortages, uneven budget allocations and sectoral priorities.
- Little impact on coverage of essential services.
- Absence of a clear plan to transfer responsibility to the villages (self-sufficiency or alih peran).

The Project Amendment emphasized the research component of the project. The main thrust of the project was the improvement of the Posyandu through research and development.

A *Research and Development Agenda* was developed in order to establish priorities among the problems of the Posyandu, and to identify the critical components of the operations. The Agenda was a result of an intensive inventory of problems of the Posyandu many of which had been identified in the 1982 Mid-term Evaluation as well as the Final Evaluation of 1986. These problems were discussed at a national meeting held in Bali in July 1987 in concert with the MOH, the BKKBN and the USAID. Subsequently, the Agenda was finalized by the members of the ITF. The establishment of priorities was a major accomplishment because it allowed the program managers and researchers to sort out a plethora of problems and focus on a key set of issues.

Six priority areas were described in the Agenda. These were:

1. Improving community participation in and commitment to the Posyandu program, including (a) political commitments from community leaders, (b) social and cultural stability of the Posyandu, (c) how to support Posyandu through existing community institutions, (d) developing criteria for stratifying Posyandu by level of development, and (e) how to mobilize community resources to support Posyandu.
2. Kader and health worker performance including their (a) selection, (b) supervision, (c) training, and (d) skill development.
3. Improving the quality of Posyandu programs and services through (a) improvement of IEC, (b) evaluation of the Posyandu program in East Java NTB, and (c) secondary data analysis of KB-Gizi program.
4. Improving the MIS and supervision systems.
5. Improving coverage of Posyandu services including (a) acceleration of new

Posyandu, and (b) introduction of Posyandu in remote and transmigration areas.

6. Innovations such as (a) inclusion of TBAs for IEC activities, (b) cost-effectiveness studies, and (c) development of software for computer-assisted data collection.

It was decided that research would be done in 6 regions comprising about 11 priority provinces. The provinces were grouped for administrative convenience as follows:

- Group I: Central Java
- Group II: West Java
- Group III: East Java
- Group IV: Riau, Aceh, West Sumatra
- Group V: N. and S. Sulawesi
- Group VI: Bali, Nusa Tenggara Barat (NTB) and Nusa Tenggara Timur (NTT)

Three provinces (Aceh, West Sumatra and NTT) were excluded in order to avoid duplication of efforts with the CHIPPS project.

As stated in the Project Paper, the project consisted of the system design phase, characterized by discrete operations research projects on the elements of the operations, supervision and monitoring sub-systems. The second phase of the project focused on the refinement and modification of these three sub-systems. The refinements were then to be presented to the ITF either to approve them for demonstration projects or refer them directly to the Steering Committee for expansion in the national KB-Kes program during Repelita V.

The plan of implementing the three phases (that is, the system analysis phase, refinements and modifications phase, and replication and integration phase) did not occur as discrete phases in the timeline, but overlapped as individual subprojects were in different stages of implementation and completion.

C. TRAINING

Training has been supported through the project in a number of areas: training of trainers, training for kaders and village leaders, training for program managers and regency leaders, orientation to computer software to monitor income-generating projects and short-term study travel to other developing countries for selected program managers.

Training of trainers took place both for trainers of kaders and trainers of program managers. This was an important innovation for the project since because other funding is

generally not available to improve the knowledge and skills for staff actually doing the teaching/training.

Training for kaders involved continuation of earlier programs to provide orientation to Posyandu services using a set of modules prepared by the Directorate for Community Participation and the KB-Kes. Figures available at the Office of Population and Health during fiscal year 1989 showed approximately 9,000 kaders trained or retrained under the project. With the turnover in kaders, there is an on-going need for both the basic training provided by the PKK and for Posyandu training that is specific to the role of kaders.

Training for program managers in data analysis and program management is an extensive project which is currently continuing to be implemented. At the start, it was recognized that there was a great deal of data available to KB-Kes program managers but little use was made of the data to improve management. A model training plan for program managers in the analysis of data to improve management practice was designed. MOH, BKKBN, and the Bureau of Statistics were involved in developing a set of learning modules covering topics of family planning and health integrated services, demography, recording and reporting, statistics, epidemiology, teaching methods, research methods, and group dynamics.

The pilot program was designed to test the efficacy of the training to improve the kabupaten managers' job performance in data analysis and management. The first phase involved training trainers from five provinces (4 from MOH, 3 from BKKBN and 1 from Statistics). These trainers then trained 24 people from the kabupaten level who in turn trained kecamatan level managers. Kecamatan level managers included sub-district leaders (camat), physicians and midwives. There were a total of 525 people trained in the pilot project. An evaluation was completed at the end of the pilot and results used to modify the training materials and the training schedule. Replication for other provinces is now underway.

Training for use of computers at the kabupaten level was a part of a larger project dealing with monitoring and supervision of income-generating projects. Orientation to a computer software program involved activities continued from a previous multi-stage project. Specific training involved the travel of two Indonesians to Ann Arbor, Michigan, to work with the Community Systems Foundation staff who were associated with designing, testing and replicating a software package for a management information system (also referred to as "Computer-Assisted MIS") to be used as an aid in supervision of community-level income-generating groups (UPPKA). The Indonesian staff and the CSF consultants trained workers at the kabupaten level in the use of the software.

Short-term study tours were supported for five government officers to visit Brazil and Mexico for purposes of developing comparative insight into methods employed in rural health development and policy in other countries. Also, support was given to two people to attend an International Nutrition Congress in Korea and for small groups to attend management training in the Philippines and Hawaii. Other short-term travel related to

project goals was also funded in relation to safe motherhood planning and cost/effectiveness research methodology in Boston.

D. DISSEMINATION

Posyandu Newsletter: Information about services and events related to Posyandu and integration were disseminated in a number of ways. A main vehicle was the development, publication and distribution of a Posyandu newsletter. Following a needs assessment completed by an external consultant, it was determined that a newsletter geared toward puskesmas staff, key agencies (including Religious Affairs, Information Departments and NGO's), and others in the governing structure would provide the most cost-effective way of disseminating information. Most of the newsletters, published every two months, were distributed to regency and district levels because of the information gap among middle-level Posyandu managers and technical support staff. As of September 1989 the distribution was shifted to include physicians, PKK, and family planning field work supervisors at the sub-district level. Considering the extensive number of kaders throughout Indonesia, it was recognized that publication and distribution costs would be too great if the newsletter were targeted directly to the kaders.

Responsibility for the newsletter was assigned to an Indonesian consultant who had a proven capability and experience in writing and publishing. Creativity was brought to bear on the design of the newsletter, on summarizing key events and findings, on involving and highlighting service-level people through interviews and photographs, as well as in testing readers' comprehension of information.

A crossword puzzle that could be answered correctly only after reading the newsletter was a clever addition. It also provided a partial means of evaluating the impact and distribution of the newsletter. Answers were returned from readers in 20 provinces and from all levels, including a number from village kaders indicating that the distribution filtered down, in some instances, to the basic service level. Prizes were awarded for correct answers. Full results from this evaluation are yet to be completed. In addition, the newsletter triggered many letters raising questions about Posyandu service delivery. All letters were answered and are on file.

To take the best advantage of recent issue mailings, inserts such as "A Summary of the Facts of Life" were added with the request that the materials be passed down to Posyandu staff. An unresolved question arising out of this distribution pattern is: "To what extent can the regular supervisory visits to the field by program managers and technical personnel be used as vehicles for transporting important IEC and other printed materials?"

Three special issues of the newsletter are currently in process. Two of these issues will focus on kaders and maternal child health care and the third on the research findings and the results of the national meeting scheduled for mid-May 1990.

Currently, ways and means for continuing *Posyandu Newsletter* and making it a self-sufficient project are being explored. It is possible that advertising, especially of health-related products, would contribute some support. It is also possible that other external donors will continue further support of the newsletter. Printing and distribution is estimated to cost Rp. 12,300,000 for 30,000 copies. That works out to about Rp. 410 or 21 cents per copy.

Other methods of information dissemination: Meetings, conferences and official letters provided other channels for dissemination of information. Notable among the meetings was the Bali Conference in 1987 at which the research agenda was presented. A printed booklet describing the research agenda was later distributed more broadly.

Also a significant national meeting was held in October 1989 (a National Conference on Posyandu) where the achievements of the 497-0305 project were summarized and plans put into motion to assure the continued development of integrated services. A two-volume publication was prepared following the October meeting which was published in two waves. The first printing was distributed to conference participants and to all the MOH, Ministry of Home Affairs and BKKBN heads of the 27 provinces. The second printing included, along with the original papers, the results of conference discussions.

Most Project Implementation Letters have a built-in mechanism for two reviews: one at the mid-term and the other a final review. If the PIL is nationwide in application, there is a national review meeting held. If the PIL deals with provincial activities, a provincial-level review meeting is held. For example, the PIL that covered the research and development group of sub-projects, called for special dissemination meetings at provincial and, occasionally, district levels. These meetings were established to exchange information between researchers and program managers and were carried out in regional meetings in all eight provinces.

Field visits were conducted by BKKBN, MOH, and Ministry of Home Affairs (Bangdes) staff as well as ITF Secretariat staff and consultants to assess program efforts and monitor progress. Regular on-going supervisory visits have noted the activities of the research and development subprojects and helped form impressions which have added detail to the general understanding of the work.

In addition to the direct meetings and conferences arranged by the Project Amendment Secretariat, additional forums for dissemination of information were the national meetings and workshops of both the MOH and the BKKBN at which attention was given to discussing research and development (a part of which were 497-0305 subprojects). A national meeting of BinKesMas very specifically dealt with the content of the ITF research agenda.

The national meeting planned for mid-May 1990 which will be opened by the Director General of Rural Development from the Ministry of Home Affairs will include discussion of the draft findings of this final evaluation team's report.

Other donors: While there is no fixed schedule for disseminating information to other donors associated with Posyandu, some ad hoc communication has taken place. For example, UNICEF, World Bank and WHO representatives were invited to participate in the development of the research agenda and attended the Bali meeting at which it was shared and discussed. Secretariat staff are aware of WHO, UNICEF and World Bank contributions in the area of Posyandu through the sharing of reports, manuals, and other developed materials.

The Weaning Project was presented at the International Nutrition Congress in Korea in August 1989. There may be future possibilities for further international dissemination of the research.

E. EVALUATION

The overall project supported a great deal of evaluation activity. There were the scheduled evaluation activities that are usual with all USAID projects as well as a number of special evaluative studies to assess particular problem areas or progress of project activities. A complete listing of evaluation reports consulted during this evaluation is found in the Bibliography at the end of this report.

F. COORDINATION

A large part of the functioning of the ITF has been in coordination activities. The integration of the KB-Kes program has involved four major agencies, with the BKKBN taking the lead role in integration. During the 497-0305 Amendment, the MOH has played a role equal to BKKBN, while the PKK has been actively involved in implementation.

In order to establish the research agenda and to develop the research subprojects, considerable activity was generated to promote coordination of research among universities and program managers of both BKKBN and MOH at central, provincial and regency, and district levels.

VI. PROJECT IMPACTS

In evaluating a project such as the USAID-sponsored Village Family Planning/Mother-Child Welfare Project, it is not always easy to separate clearly the achievements of the project from the inputs and achievements of other GOI agencies and operations, other projects, and other donors. The resources being organized to promote community development and mother-child well-being involve a complex set of inputs. For example, it is recognized that the programs of the Ministry of Agriculture have a strong role in increasing food production and, therefore, the availability of food. The Ministry of Religious Affairs has a key role in communicating spiritual values and communal discipline which affect attitudes and beliefs of the people about life and change. The Ministry of Home Affairs is charged with overall governance and organization of a comprehensive set of responsibilities, including health and family welfare. All of the MOH and the BKKBN systems ultimately target their operations and activities to the families and the children of Indonesia.

Bearing in mind the complex set of contributions made toward the development and operations of Posyandu, judgments with respect to the impact of the 497-0305 Amendment have to be made. These judgments are made with several criteria in mind. These include effects on policy development, replication and institutionalization of innovations, development of improved levels of knowledge and skill in research and management, and ultimately, the effect on mothers and children at the Posyandu level.

A. POLICY DEVELOPMENT

The objectives of the Project Amendment 497-0305 were clear, and it is apparent that the GOI is committed to goals of integrated service delivery for mothers and children. With the closure of this project scheduled for May 30, 1990, a series of actions was undertaken to anticipate what policy would be needed to continue this commitment. A major policy change designed to promote the continuation of integration arose from a national meeting on Posyandu held in October 1989 to summarize and discuss the results of the 497-0305 Amendment and related experiences. It was decided at that meeting to shift the overall responsibility for Posyandu to the Ministry of Home Affairs under the direction of the Director General for Rural Development and to create a coordinated working group, called Kelompok Kerja Operasional, or Pokjanal, to be the operating mechanism. The PKK, the predominant driving force for Posyandu activities, will share in the responsibility from the central level down to the village level. Figure 1, on page 24, shows the newly created organizational chart reflecting these shifts. A national meeting for the final project review which will be attended by representatives of 11 provinces and researchers is scheduled for May 14 - 18, 1990.

These shifts support the basic philosophy that Posyandu should be community-owned

and should be technically supported by the Ministry of Health and the National Family Planning Coordinating Board. It also allows for the active, coordinated participation of the PKK, giving that organization more visibility and access to authority.

Another major policy development of the GOI (which is not directly attributable to Project 497-0305 but which will have a large impact on service delivery at the village level) is the Repelita V goal for training and placement of 18,900 midwives at the village level. Guidelines have already been developed by the MOH, and the first assignees will be placed during July and August of this year. It is planned that each midwife will be given a midwifery kit and a license to practice (in both public and private sectors); the village, in turn, will provide a facility which includes two patient care beds. Current guidance provides a long list of possible midwifery responsibilities, including functions associated with Posyandu.

Another policy change affecting Posyandu staff deals with the recording and reporting structure. The PKK leadership took a strong stand to limit the responsibility of the Posyandu kaders for reporting various service activities to the individual programs. A directive was sent from the MOH requiring puskesmas to collect the data directly from the Posyandu or village. The kaders' role now is only to record the data, not to prepare the various reports for sending to the individual programs. While this policy change is not directly attributable to Project 497-0305, it would seem that the various studies associated with the MIS system contributed to identifying the reporting overload on kaders.

Further project impacts on policy development relate to specific changes recommended as a result of various research and development subprojects. In some instances, policy development changes have preceded completion of research studies. Figure 2 is a matrix of the research subprojects that have been replicated, are being tested as demonstration projects, or have potential policy implications.

B. RESEARCH

The following section provides a review of the research subprojects and an analysis of progress achieved to date. As with any complex management process, achievements occur gradually with a system of definition, analysis, decision making, testing, and redefinition. With many of the problem areas for Posyandu management, this step-wise process is being employed. As the research process was operationalized, development of in-country knowledge and skill in applied research methods was increased, and program managers' understanding of the use of research as a management tool also increased.

The subprojects were in line with the research priorities established by the Agenda. While the initial target was 15-20 subprojects, a total of 58 studies were funded. The selection of a large number of projects (about three times as many studies as planned) was due to (a) the relatively modest budgets proposed by the principal investigators which enabled the funding of additional subprojects, (b) the effort of the ITF to include many

FIGURE 1
 INTERSECTORAL RELATIONSHIP IN
 THE MANAGEMENT OF POSYANDU

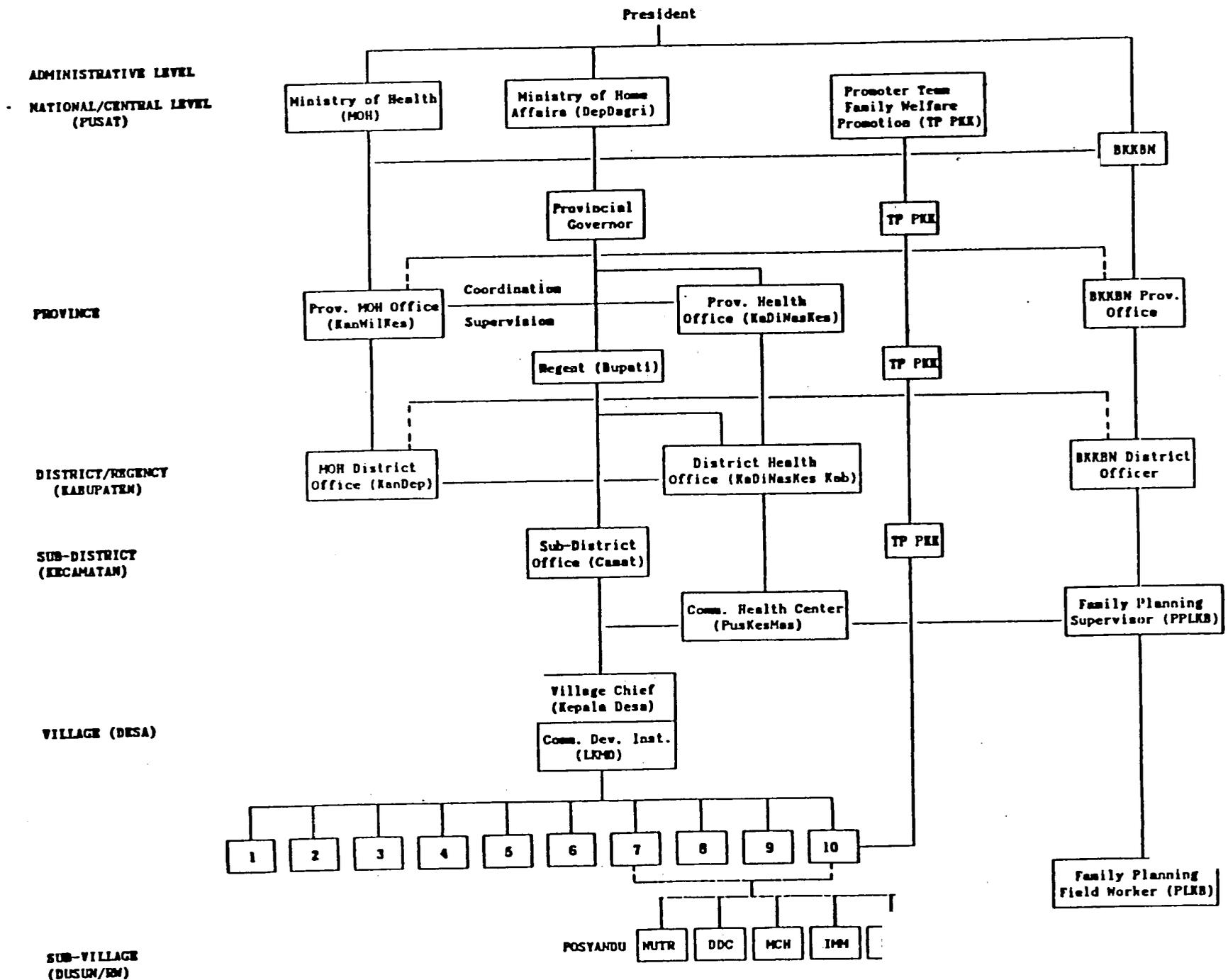
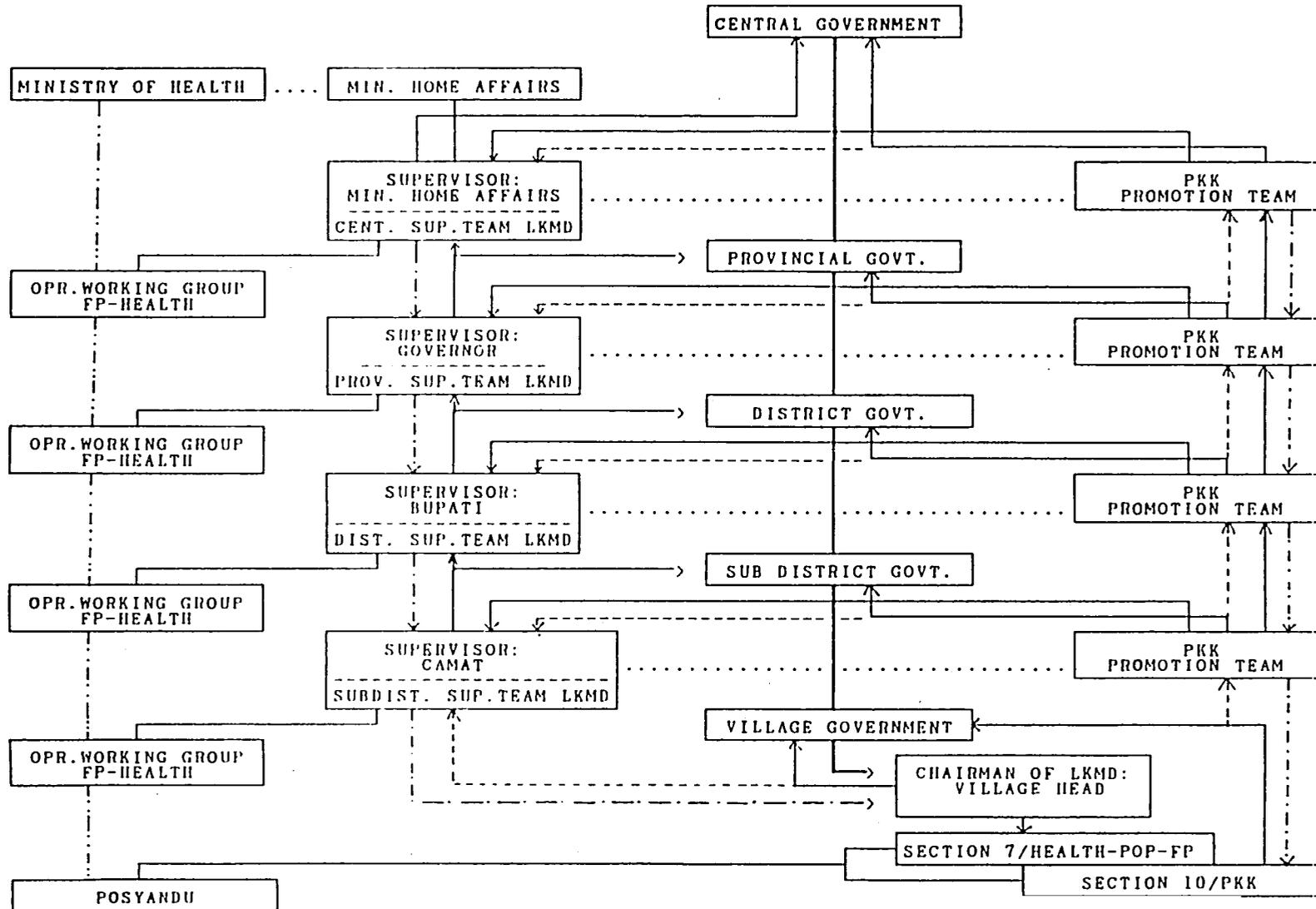


FIGURE 1 (contd.)

SUPERVISION MECHANISM OF THE INSTITUTE FOR VILLAGE COMMUNITY RESILIENCE (LKMD)



- Legend:
- General line
 - - - - - Technical Supervisory Line
 - Consultation Line
 - > Reporting Line
 - - - - -> CC Reporting Line
 - · - · - · Sectoral Direction, Technical Guidance

FIGURE 2

IMPACT OF OPERATIONS RESEARCH ON POLICY INTERVENTIONS

INNOVATIONS/REFINEMENTS	INTERVENTIONS	POLICY IMPLICATIONS
<p>1. MANAGEMENT</p> <ul style="list-style-type: none"> - MIS * Health Information * Income Generating (JIP Acceptors Grp.) - Training * Managerial * Data Management Training - Supervision - Personnel * Incentives * TDAs 	<p>Developed and tested various types of MIS forms. Forms were output-based rather than coverage-based, focusing on 4 target groups rather than vertical line programs.</p> <p>Developed a software package to assist provincial and district levels in monitoring IGA activities.</p> <p>Training modules were developed for managers, staff, cadres and informal leaders. These were tested in 4 provinces under the Escalation and Acceleration subproject at the subdistrict and village levels.</p> <p>Data mgmt. training modules developed for district and subdistrict levels</p> <p>Supervision was included in the training modules.</p> <p>Also manuals on management and supervision were developed for the head of the sub-health center (SHC).</p> <p>Developed and tested models for Village Medicine Post (Pos Obat Desa) in which cadres sell simple medicines at a marginal profit.</p> <p>Developed and tested models for the formal inclusion of TDAs in Posy.</p>	<p>Based on the preliminary findings of subprojects, a demonstration model has been developed by PKK and is being field tested in 3 provinces. Has received political commitment by DKKBN & MOH for national expansion if findings of field test allow.</p> <p>Will be replicated in 3 provinces.</p> <p>Has been replicated gradually on a nation-wide scale.</p> <p>Has been replicated in some provinces There are plans for national replication</p> <p>Need to strengthen the linkage between the SHC and the Posyandu to expand the coverage of supervision and technical support. Has been replicated in 3 provinces.</p> <p>Need to replicate the VMP model in order to make simple medicines more accessible to community and to provide an effective cadre-incentive.</p> <p>Develop formal linkage with TDAs through training, supervision, and referral.</p>
<p>2. SERVICE DELIVERY</p> <ul style="list-style-type: none"> - Child Development - Antenatal Card 	<p>Developed and tested indicators for monitoring child development, based on which manuals for outreach workers were tested.</p> <p>Refined and tested antenatal cards (KMS Ibu Hamil) for monitoring pregnant women's health and identifying high risk pregnancies.</p> <p>IEG materials on weaning were developed and tested.</p>	<p>An option for "advanced" Posyandu (Posyandu +). Transition from acceleration for achieving equity towards enhancement of quality of life.</p> <p>This card is being replicated in 11 provinces. Spontaneous replication has also occurred in Central Java</p>
<p>3. IEG</p>	<p>IEG materials on weaning were developed and tested.</p>	<p>These IEG materials are being replicated gradually on a nation-wide scale.</p>
<p>4. METHODOLOGY</p> <ul style="list-style-type: none"> - Sisterhood Method (NMR) - Cost Analysis 	<p>The first step in a trial is being conducted in both DKKBN and MOH. Findings not available yet.</p> <p>Cost analysis of the Posyandu was conducted for the first time at the MOH. It showed that up to 40% of the Posyandu costs are borne by the community.</p>	<p>To indicate the trends in maternal health status as more attention will be given to improvement of ANC.</p> <p>The cost analysis should be used for assisting with decision-making regarding the most efficient use of resources.</p>

researchers as a means of increasing and improving research capacities in operations research, and (c) the ITF's effort to provide an opportunity to local program managers to gain research experience.

The initial plan of 15-20 subprojects may have been sufficient to test some key innovations and to assess the major problems of the Posyandu. However, the large number of subprojects, selected for reasons of equity, as well as the unavoidable delays of funding and staffing, created an inadequate time frame and a problem of overload for consultants for monitoring subprojects.

Forty-one subprojects were conducted in the first round and 17 in the second round. Those in the first round were mostly university-based research projects. Most of the second-round projects were requested by program managers at the central level and implemented by university researchers and/or provincial MOH/BKKBN staff. The ITF felt that the program managers knew the health problems, and it was assumed that they would be able to conduct research that was relevant to needs.

The Research and Development Agenda included two types of subprojects: (1) operational types of research or studies with action, intervention or experimentation; and (2) other non-intervention types of studies (problem description or assessment only) which were considered vital to program managers for decision making. Twenty-six subprojects, most of which were conducted in the first round by university researchers, were descriptive studies that assessed problems and made recommendations. The remaining subprojects tested interventions or developed innovations to improve the service delivery system. Most of the latter were conducted by program managers.

The BKKBN and MOH offices were involved in the critical phases of the projects (that is, problem identification, implementation of study and presentation of the reports) which provided a basis for policy decisions. During the course of the project, the actual implementation process varied across the provinces. Priority problems were identified in advance through the Research Agenda. The implementation of the research was subject to supervision by a provincial coordinating team made up of both BKKBN and MOH officers. However, many of the studies that were conducted by the university researchers did not involve program managers during the implementation phase, although periodic contact was necessary because the funds were disbursed through the provincial offices of BKKBN.

A critical element of operations research is the linkage between the program managers and researchers. The strength of these linkages varied across project sites. In some provinces active coordinating teams were created; for example, in Central Java. In another province (West Java) such coordination grew beyond the subprojects of 497-0305. For example, in West Java the MOH/BKKBN coordinating team oversees and coordinates a number of additional research projects including those funded by Ford Foundation, WHO,

the World Bank and UNICEF. In other sites, the linkage was weaker; for example, some of the principal investigators of Jakarta did not coordinate their activities with the program managers of the research sites.

An effort was made to orient program managers to operations research through a one-day seminar. The participants comprised Echelon I and II officials. This strategy of familiarizing the central level decision makers about the value of OR was a step in the right direction. The researchers too would have benefitted from a workshop on the problem-solving elements of OR; that is, the method of analyzing a system, identifying problems, seeking solutions, and testing those solutions to improve the Posyandu program. Such a workshop should include (1) a general orientation to the OR approach as a means of improving management capabilities, and (2) the techniques of conducting operations research, using examples from the Posyandu program.

The following discussion highlights the innovations and refinements/modifications tested in the operations research projects and the perceived implications for or impacts on operational policy.

1. Management Information System

a. Health Information

The weakness of the MIS in current use is in the collection of data for each of the five programs of the Posyandu. It was recognized that as long as the MIS focused separately on the five programs, the plans of an integrated service delivery model would be unattainable.

Under the KB-Kes project, there were 11 descriptive and intervention studies that focused on the problems and modifications of the MIS. All of these subprojects had one common theme: the vertical MIS of several programs, that collected information on coverage, did not lend itself to an integrated program, and a need existed for modification in the MIS. Thus, variations of output-based forms (rather than the coverage-based forms) were developed and tested by the researchers. Based on the preliminary findings of these studies and the MIS experiments of the CHIPPS project of West Sumatra, one of the consultants to the KB-Kes and PKK developed a simple and integrated MIS that is currently being field tested in three provinces (NTB, Central Java and South Kalimantan). In this experimentation, the focus of the information is not on the coverage of any one program, but rather the coverage of four target groups; that is, infants, children under five years of age, eligible couples, and pregnant women. Thus, the population was not fixed but was rather a changing one. This project has received political commitment from the government (MOH, BKKBN, and Ministry of Home Affairs) for conducting the demonstration field trial. Based on the review of the findings, the MIS may be replicated on a national basis.

b. MIS on Income-Generating Activities of FP Acceptor Groups

A software package was developed to assist the program managers at the provincial and district levels in monitoring income-generating activities among family planning acceptor groups.

2. Training Modules

Although the number of Posyandu had increased from 90,000 to over 200,000 during Pelita IV, the coverage and quality of services were still variable. There was a need for developing a service delivery model that would allow experimentation with "Acceleration" (increasing number of service points) and "Escalation" (improving quality by increasing number of services) of Posyandu services. Such a model was developed in the SEAP subproject (Studi Eskalasi dan Akselarasi Posyandu, or the Posyandu Escalation and Acceleration Study Project) which started after the 1986 Project Amendment was signed.

The SEAP subproject developed training modules based on the knowledge, attitudes and practices of mothers, informal leaders and kaders, as well as other information, such as the frequency and coverage of the Posyandu services. These manuals were targeted for the managers, the staff, the kaders, and the informal leaders. The module for training the kaders aimed at acceleration of the Posyandu, while the informal leader module aimed at escalation.

The training was linked to the idea that the community must identify and assess its own problems through the community self-survey and review. The results of the survey and review were discussed at the community meetings in which candidates for training were selected from among the kaders and informal leaders.

The training had an impact on the (1) improvement of knowledge and capability of the kaders, (2) involvement of the village leaders, (3) community participation, and (4) provision of technical support from the government in terms of supplies, IEC, guidance, supervision, and administrative support.

The SEAP subproject was a collaborative activity developed by MOH-Central and BKKBN-Central, and conducted by universities and program managers in the four provinces of Riau (for acceleration), and North Sulawesi, Central Java and West Java (for escalation). Since this project was developed at the central offices of the MOH and BKKBN, and also because of the overlap of the ITF membership with the key persons who developed and coordinated this subproject, the SEAP had relatively high visibility and therefore relatively great policy relevance. Nationwide replication of the modular training has begun.

3. Supervision

Lack of strong and supportive supervision of KB-Kes program activities at the lower levels of the administration has been well recognized. However, aside from the general guidelines, no clear definition exists of supervisory activities, a problem that is exacerbated by the shortage of personnel and funds for travel for supervisors.

As a means of mobilizing and utilizing existing resources, the sub-health center needs further strengthening to fill the gaps of adequate supervision. With this in view, two manuals were developed and tested in West Java, one providing information for the head of the sub-health center on Posyandu management and the other providing information for the head of the health center for guiding the sub-health center staff.

This study is being replicated in two other provinces.

4. Village Medicine Post

Studies in West Java, East Java, and NTB tested the feasibility of the Pos Obat Posyandu, or the Village Medicine Post (VMP). The VMP acts as a depot for over-the-counter drugs which the post sells at a marginal profit. The VMP lists the drugs that are most commonly used or which are in high demand in the community. She obtains the approval of the health center physician to buy these drugs and to sell them to the community.

Although such drugs are sold at most warungs (small multi-purpose shops) the VMP has distinct advantages over the warung: (1) the fact that she is a kader and that she has obtained the physician's approval to sell these drugs may give her greater credibility than the warung-owner, and (2) she is allowed to sell both green dot (obat bebas or over-the-counter) as well as blue dot (obat-terbatas or restricted over-the-counter) medicines, unlike the warung which may sell only the green dot ones.

These trials in West Java by a program manager have provided an effective incentive that has stimulated the kaders' interest in the Posyandu. It has increased the knowledge of the kaders about simple medicines and thus has improved their self-esteem. Through the VMP, these medicines are more easily accessible to the community, particularly in remote areas. Because of the link with the physician for replenishing supplies, the type and quality of medicines sold by the VMP can be controlled by the physician. Further, this is a means of generating funds within the community.

A similar project, testing the feasibility of selling contraceptives by the kaders and the VCDCs, was conducted in West Java. Replication of community-based distribution systems using the VCDCs has already occurred under the KB-Mandiri project.

The findings of the VMP studies were assessed by the Indonesian Pharmacist Association (Ikatan Sarjana Farmasi Indonesia or ISFI). The ISFI has indicated its interest in developing the VMP and has received a positive response from the President.

Replication of the VMP must deal with the questions of sharing the funds (percentages maintained by the kader and the Posyandu) and utilization of such funds.

5. Role of Traditional Birth Attendants

With the specific objective of enhancing the antenatal services at the Posyandu, the role of traditional birth attendants (TBAs) and their formal inclusion in the Posyandu is of most concern. Eighty percent of births are attended by TBAs in Indonesia. It is estimated that about 110,000 (about 80 to 90 percent) have been trained since Pelita I (beginning 1969) in improved antenatal, intranatal and post-natal care. Over the years, the training techniques have changed from classroom style lectures to a package of on-the-job training and supervision. Depending on their individual interests and community expectations, the TBAs occasionally attend the Posyandu as motivators and as informal assistants to nurse-midwives. Their role in the Posyandu has not been formalized.

Under the KB-Kes Project, a West Java subproject developed and tested alternative models for including TBAs in the Posyandu with and without the nurse-midwife. After specific training by the puskesmas, the performance of traditional birth attendants in detecting high risk pregnancies and in conducting pre- and post-natal examinations was found to be accurate. Further, the pregnant women responded positively to the inclusion of TBAs in antenatal care, and the TBAs cooperated well with the kaders. The TBAs interviewed by this evaluation team reported that the number of deliveries they attended was reduced but their network of clients increased, and they still continued to provide the in-home services to mother and baby postnatally.

While the above subproject has concluded positively about the inclusion of TBAs in the Posyandu, other studies (not under 497-0305) question the value of the TBA in the Posyandu. A uniform central-level policy that formalizes the inclusion of TBAs in all Posyandu would be overlooking the cultural variations of TBA midwifery. Such a decision would be best left to the provincial, district or sub-district government levels.

Efforts at linking TBAs with the health system should continue, given the fact that they assist with 80 percent of the births in Indonesia. Such efforts would include training in the use of antenatal cards for high-risk screening (see later section on Antenatal Cards), supervision and referral.

6. Child Development

During the Pelita IV and moving on to the Repelita V, the Posyandu program evolved from a simple two-service delivery model (family planning-nutrition) to an integrated five-service program. During the course of its growth the program has developed a varying range of maturity across the provinces. While some Posyandu are just beginning to establish the two core services of family planning and nutrition, others have developed into full-fledged Posyandu with additional services beyond the minimal five programs; for example, income-generating schemes and child development.

With the steady decline in the IMR from 112/1000 in 1980 to 71/1000 in 1985 (Central Bureau of Statistics), the quality of the infants' and children's lives has become a real issue in the health program of Repelita V. There is a new interest in enhancing the physical and mental development of children to their full potential.

In light of the above, the subproject that developed and tested indicators and manuals for child development came at an opportune time. The manuals focused on four indicators: gross motor development, fine motor development, intelligence, and self-esteem. The manuals were tested among 32 health workers who found them easy to use and understand, and well-illustrated.

The manuals form a packet for monitoring child development and should be field-tested in a wider area, modified and replicated for use in advanced Posyandu (or Posyandu Plus).

7. Antenatal Card

Since its inception, the thrust of the Posyandu activities has been child survival. As a result of the national Posyandu meeting of October 1989, it was decided that more emphasis must be given to maternal health as well. Targets for reducing maternal mortality have been established in Repelita V.

Under the current MCH program, pregnant women receive tetanus toxoid immunization, iron tablets, and occasionally pedal edema examination (feet are checked for signs of edema). The problem of referring high-risk pregnancies has remained a major obstacle impeding effective antenatal care. A large number of women are attended by TBAs for prenatal, intranatal and postnatal care. The TBA's failure to make an appropriate referral may result from her inability to identify a high-risk pregnancy, her lack of knowledge about the referral system, or her sense of failure in referring a patient. As a consequence, the TBA seeks the assistance of the health system as a last resort, often when the patient is in a critical condition.

Several institutions, both from the university sector (for example, Atmajaya University and University of Padjadjaran) as well as NGOs (for example, Perinasia) and the government (Center for Research and Development for Nutrition (CRDN) in Bogor and the Center for Research and Development for Health Services (CRDHS) in Surabaya) have, under separate projects, developed various types of antenatal cards for monitoring the pregnant woman's health and identifying high-risk cases for possible referral. These cards are home-based (that is, maintained by the pregnant woman) and pictorial so that illiterate traditional birth attendants can understand them.

Under the KB-Kes project, the card developed at the CRDN was further refined, pre-tested and replicated in 11 provinces. In a very recent discussion with an official from the MOH, it was stated that the antenatal card has been introduced to all provinces. A variation of this card also was modified and tested in Central Java. The latter has been replicated spontaneously in 12 neighboring subdistricts at the initiative of the district health center physicians.

8. IEC

There were three studies which recommended strengthening IEC management in Posyandu. The Weaning subproject focused on the improvement of infant feeding practices through IEC materials. This project began as early as 1985, with an assessment of problems impeding proper feeding and care of weaning-age children. The IEC materials were developed based on the research findings. These materials were adopted at a national meeting on nutrition in November 1989. It was decided that some modification of the materials would be made at the central level and that opportunity would be given to the local level for further adjustments based on local conditions. It is planned to replicate the materials during Repelita V on a phased-in basis.

VII. CONCLUSIONS

As the USAID Village Family Planning/Mother-Child Welfare Project draws to an end, it is important to acknowledge the key role it has had in the overall development of improved service delivery in Indonesia. While this evaluation team focused on the final three to four years of implementation, it is necessary to comment on the innovative focus of the overall project. Throughout its duration, this Project has worked closely with the GOI in identifying major problems affecting the well-being of mothers and children and has attempted to respond flexibly in contributing toward effective solutions. Through Project support and creative leadership (both from USAID and the GOI (BKKBN and MOH)), a number of substantive developments occurred: family planning services were developed at field level, moving beyond the previous pattern of clinic-based only; educational programs were developed for public health specialists; village-based, income-generating activities were designed and supported to impact positively on poverty; and village-based health promotion services were broadened.

During the Project Amendment phase begun in August 1986, progress toward the general goals of improved health and well-being of mothers and children and development of village communities continued. As stated earlier, Indonesia in 1990 is a healthier place for mothers and children. Infant mortality dropped from 98 per thousand live births (1980 Census) to an estimated 90.3 per thousand in 1984, to 71 per thousand in 1986 (data from a Household Survey in 7 provinces). Current MOH data estimate 58 infant deaths per thousand. With the completion of the next Census, estimates will be confirmed or corrected. Since more progress has been made in child survival activities, the GOI is also beginning to increase activities relating to maternal health.

The following conclusions of this evaluation provide the basis for recommendations for future action presented in the final chapter. Within the short time frame of this assignment, it has not been possible to assure that all of the important achievements of the project have been fully recognized or that sufficient analysis and detail have been provided. For example, a number of the inputs of the project are on-going, such as the replication of training in data analysis and management. The impact of this training will be measured in possible improvements in plans of action developed by program managers. This has long-term study implications. Similarly, the evaluation of *Posyandu Newsletter* is still in process; the results of all research projects are not in; and the effects of improved operational research skills for future development remain to be seen.

There are no illusions that the Project Amendment was completely successful. People associated with the Project were quick to acknowledge the difficulties and problems associated with implementation and attainment of objectives. They also acknowledge that learning proceeds both from successes and failures. It is dealing creatively with failures that distinguishes a sound project from an ineffective one. Much has been learned both of process and content by many participants that has major impact on policy, planning,

management, guidance, and delivery of Posyandu services. Learning has resulted from both successes and failures and, on balance, the program is further advanced because of the project.

1. The integration of the KB-Kes program has involved four major agencies, with the BKKBN historically taking the lead role in integration. During the 497-0305 Amendment, the MOH has played an equal leading role, while the PKK has been actively involved in the implementation. At the end of the project, the leading sector will shift to the Ministry of Home Affairs as described in the Instruction #9 of 1990.

The ITF has concentrated on developing mechanisms for effective integration of health and family planning services, communication and coordination, priority problem solving in service management, interpretation of evaluation findings, dissemination of innovations, and promotion of institutionalization of program-strengthening features.

2. Despite unavoidable delays in establishing the PIL mechanism for funding projects and operations, as well as in hiring consultant staff, the ITF and Secretariat have made remarkable progress in project implementation. Research and field trials of interventions have contributed to shaping the Posyandu as a community-based service delivery model; some research projects had an impact on operational policy decisions, while others provided opportunities for improving research skills without having any direct impact on policy. Research findings found their way to the policy-making bodies through various channels; that is, discussions at ITF working groups, mid-term meetings and a national policy meeting of researchers, program managers and policy-makers. The main achievements of project 497-0305 are its success in raising the issue of Posyandu as a problematic one at the national level, and in taking some actions such as development of a national coordinating body, the Pokjanal, to sustain the activities of the program.

Policy Implications of the Research: Through the ITF, the Project provided a unique mechanism for (1) directly linking the researchers and their research findings with the policy makers and program managers; (2) establishing research priorities for guiding researchers in selection of problem areas; and (3) conducting policy-relevant research. The ITF played a key role in reviewing and selecting project proposals, and met to discuss several research findings and replication of innovations. These deliberations took place in various ways: several small working group meetings; two mid-term meetings in 1988 and 1989, and in the national Posyandu meeting convened in October 1989. These meetings were attended by program managers, researchers and members of the ITF.

The problems identified in the Mid-Term Evaluation of 1982/83 and in the final evaluation of 1986 were addressed in the Research and Development Agenda. Thus, an effort was made to understand the problems and define some components of the

Posyandu through research. IEC materials were developed to improve mothers' knowledge, attitude and practice (Weaning Project); training modules were developed to improve kaders' skills (SEAP Project); incentives were field tested for motivating kaders (VMP Project); the MIS was refined and field tested (an appropriate tool for screening high risk pregnancies was refined and tested, the KMS Ibu Hamil or antenatal card); a strategy to strengthen the supervisory role of the sub-health center was field tested; efforts were increased toward inter-sectoral coordination at the provincial, district and sub-district levels through research coordinating forums; and, some major problems were described and analyzed.

While the above problems, refinements and innovations need continued research and modification, some of the priority problems that need on-going consideration are:

- Underutilization of the Posyandu by pregnant women for antenatal care is still a problem. While antenatal cards have been developed and guidelines have been drawn for antenatal, intra- and postnatal care, there still is no clear delineation of ANC services at the Posyandu.
- The problem of acute respiratory diseases and other area-specific diseases need to be integrated into the MCH services.
- A clear delineation of child development services needs to be made since the GOI is now complementing child survival issues with child development.
- Further policy discussion about target groups for Posyandu activity should take place. For example, some officials suggest that the target group for child survival activities should be narrowed down to children under three years of age, while child development activities should be targeted to all children under five years of age. If the main purpose of the Posyandu services is to identify children who are at risk and who need additional services, then perhaps the cut-off point for services should be made by child's body weight; that is, when the child has reached 11.5 kg. rather than by age. Children reaching three years of age but having a body weight less than 11.5 kgs. also should be continued in the target group for child survival.
- Supervision system: indicators for each health service have been developed by the respective sectors, but in the field they have not been collapsed into an integrated supervisory checklist. Such a checklist has been designed (see Appendix C) but has yet to be considered by the appropriate officials.
- Inter-sectoral coordination in varying degrees has occurred at the different levels of administration but remains a problem due to budget and personnel shortages, uneven budget allocations and sectoral priorities.

- Although the Posyandu is regarded as a community activity, there is still need as the project is transferred to the Ministry of Home Affairs to develop a clear plan for transferring responsibility to the villages (alih peran) to achieve self-sufficiency (kemandirian).

The findings of the subprojects have not been widely disseminated since the project has not yet come to a closure. Many of the studies cannot be replicated because they did not test any interventions. However, these problem assessment studies did bring about a clearer understanding of the complexities and obstacles of the Posyandu program, and were a useful base for the general discussions that took place at the October National Meeting on the Posyandu.

Most of the subprojects that have received attention from policy makers have a special place in the KB-Kes Project. Thus, the Escalation and Acceleration Project, the Weaning Project, and the Antenatal Card Project (KMS Ibu Hamil) were designed at the Ministry of Health and, therefore, had higher visibility in terms of effecting policy decisions. Other refinements that have policy implications are those developed by program managers. Thus, the subprojects that have the greatest impact on policy makers are those developed by program managers at the central, provincial and kecamatan levels.

An innovation that is inexpensive, simple and has potential may sometimes be replicated spontaneously. "Planned" replication differs from "spontaneous" replication in that the former occurs as a result of a formal process of deliberation and consensus at the central and provincial levels by high-level policy makers. For instance, the training modules of the SEAP study are being replicated nationally as a result of decisions made at the central level. On the other hand, "spontaneous" replication occurs when an innovation is adopted by a lower level (for example, subdistrict) program manager or health service provider without waiting for formal instructions from above. The value of the antenatal card was recognized and "spontaneously" replicated by the program managers of Central Java at the subdistrict level (in 12 subdistricts). Its value was also recognized at the highest policy-making levels where it was decided to replicate it nationwide.

Ideally, operations research includes close partnership between the researchers, the program managers and the policy makers. If there is a close partnership, it should enable the policy maker to make a timely judgment about the value of the innovation through process evaluation. If this occurs, the research site would not have to revert to the former pattern but would be able to continue to implement demonstrated innovations that have proven feasible and effective. Achieving this kind of partnership is more difficult for the integrated Posyandu services because more than one agency and more than one sector are involved; more time and communication are required to reach consensus on policy change where more than one agency is involved.

The development of coordinating forums in West and Central Java has contributed to bridging the gap between program managers and researchers by creating an opportunity for increased communication between them. Through this project, many program managers have been stimulated by research, and have found their affiliation with the project to be very positive and educational. The development of such forums and a continued effort at strengthening and sustaining them is highly desirable.

Despite the effort in bringing researchers and program managers together, a certain degree of skepticism remains regarding each other's capabilities. Thus, not all program managers have accepted the concept of operations research and many question the usefulness of the research projects developed by university researchers, criticizing them for being too academic and unrealistic. Similarly, university researchers question the research skills of the program managers. There is a need to continue to develop research skills both among program managers and among university-based personnel.

The general approach to operations research in Project 497-0305 has been to assess problems of Posyandu and to test service delivery innovations. The broader management-based process-oriented application of operations research was not the intent of the research agenda; hence, OR applications to improve management of service delivery and the techniques of incorporating these research skills into routine management were not emphasized. There is a need to institutionalize the OR approach among program managers with a view to solving problems that they identify in the program.

3. There is an impressive communication network in which people from all levels and agencies appear to be versant in what the issues are surrounding Posyandu management and service delivery. *Posyandu Newsletter* appears to be a quality publication that is read by a wide selection of people around the country leading to a higher knowledge level. One example of this increased awareness, noted in the interviewing process of this evaluation, was that non-health administrators were able to describe accurately what high-risk factors are in antenatal women. In many countries, this kind of information would be known only to physicians, midwives or nurses.

Data flow and feedback with respect to involvement of the village leaders with useful indicators about Posyandu service results need to be strengthened. With the addition of simple indicators related to progress of mothers and children in Posyandu, the village leaders information would be improved.

Attention needs to be given to health educational materials development and dissemination for mothers, village kaders, and village leaders. The village kaders and leaders need to be included in data feedback in order for them to see that their efforts are contributing to the improvement in the quality of life for the mothers and

children of their communities. For materials that have already been developed, there is a need to identify cost-effective distribution systems.

Training and supervision for kaders should focus on guidance for how they should deal with identified problems. It is not enough to say to kaders that they should refer children who have fallen below an acceptable growth curve or refer high antenatal risk women if it is unlikely that the child or the mother can reach a distant service. If the problems are based on limited food availability, other resources are needed to help solve the problem. Or it may happen that the mother can reach the service, but the staff or medical treatment, for any of a variety of reasons, is unavailable or unhelpful. These are the kind of problems with which good management, monitoring and supervision are designed to cope.

4. Supervision and monitoring of Posyandu activities still need to be further developed and institutionalized. As the nationwide service delivery program at the village level evolves it needs to be viewed in relation to the progress that has been made at the implementation level. The area that needs greatest strengthening is the linkage between sub-health centers and the Posyandu which is currently underutilized. The research in West Java on the possible role of the sub-health centers in management of technical support to Posyandu that is being replicated in two other provinces has great potential for contributing to this strengthening.
5. While an impressive level of coordination of various program elements has been achieved, there is room for further progress with respect to integration of services, application of improved management concepts, and continuing research and development.

In further supporting the GOI plan to place 18,900 newly trained midwives in villages without sub-health centers during the current 5-year period, guidance should be strengthened with respect to criteria for placement and the expected role of the midwives in supporting the Posyandu.

Monitoring and supervision at the Posyandu level still needs to be strengthened by clarifying expectations regarding technical supervision needed from puskesmas staff and the organizational supervision needed from the village level PKK and LKMD.

Since the inception of the KB-Kes services, the design of five core services has been maintained. To date, there has been no change in the basic set of services recommended for the Posyandu. In some villages, initiative has been taken to provide a wider array of services according to their own needs and wishes. Attention was given to accessibility of services during Pelita IV. In Repelita V, increased emphasis will be given to the quality of Posyandu services.

A number of activities or projects have been started to develop community health funds to support Posyandu services. Furthermore, the proportion of the costs of the program borne by the community is about 40 percent on average. The cost analysis studies completed by the MOH on Posyandu were the first of that nature to be conducted and served to be an excellent management tool. A side benefit of those studies was the increased skill level developed by personnel involved, not only in understanding costs but in improving their ability to evaluate and develop project proposals.

6. Effective training takes special skill and talent. Not all knowledgeable people make good educators or trainers. The best training programs are offered by a carefully designed mix of people, some of whom have special skills in training processes while others have depth of knowledge in a particular subject or content area. Rarely does an individual will have both sets of talents. The chosen method of step-down training, where staff from higher administrative levels have responsibility for training those at lower administrative levels, is generally only partially successful. Something gets lost at each step in the process. This was found in the evaluation completed on the data analysis pilot program for training of managers. Another problem is that the lower down the hierarchy one goes, the greater the need for training and the fewer the resources. It will be important to look for ways of resolving these types of problems, particularly if the training continues to be replicated in more districts throughout the country.
7. The impact of the project on women with respect to their increased role in decision making and policy formulation could not be measured. No data with respect to these variables have been gathered over the life of the project. People questioned in this regard reported that the project had a large impact on women, especially at the service level, because mothers were the target of services and most of the local service providers are female kaders and female PKK. Data on the number of women involved in management training or training of trainer programs are not available at this time. Generally, it was observed that most of the higher echelon government officials are men.

In summary, while a considerable amount has been learned during the course of the 10-year project, more could still be learned from it. There is an extensive set of documents dealing with reviews and evaluations at various stages, as well as many training modules, research papers, special studies, and yet-to-be completed reports. A focused, in-depth analysis could be made of all project documents to distill the lessons learned and prepare a synthesis for future consideration. Such a task might serve to circumvent unnecessary duplication of development efforts and resurrect important achievements that may have been buried in the course of progress. Such an in-depth analysis was not possible within the limited time frame of this evaluation.

VIII. RECOMMENDATIONS

1. Further policy development and allocation of central secretariat staff and budget are needed to support the Pokjanal to maintain the focus of integration and follow-through as well as to provide continuity of project objectives, files, and communications. In Figure 3 following this section, an organizational chart shows where the secretariat might be placed. The addition of input from the Ministry of Agriculture and the Ministry of Religious Affairs should be considered in order to gather their views and experience. The forum for this input could be through the Pokjanals at various levels. Periodic meetings of external donors should be considered as a means of coordinating information and potential resources for supporting Posyandu.

2. There is a need to continue to bridge the manpower gap between puskesmas and Posyandu, which promotes the policy of decentralization by strengthening local capability in management of Posyandu. The continuing strengthening of the role of the sub-health centers in managing technical inputs to the Posyandu should be encouraged.

3. Appropriate supervisory checklists should be developed to provide the guidance needed for both technical and organizational types of supervision by health and family planning staff and local PKK and LKMD. A sample checklist is provided in Appendix C of this report which might be useful with further refinements. Supervision should be oriented to problem solving related to kader work.

4. Simple indicators which are already collected in the management information system, such as the number of infants and children under five years who have lost weight or are not gaining weight adequately, should be shared with the village leader on a regular and specific schedule. It also would be helpful for the village leader to know how many high-risk antenatal women there are at any particular time. Such reports will provide a meaningful way of further involving village leaders in the Posyandu services and in further achieving alih peran. The old reporting system of SKDN4 does not help identify what percentage of children or mothers are at high risk.

In the villages, Posyandu data are aggregated into one village report (one village may have several Posyandu). To assist in the task of gathering individual Posyandu reports at the puskesmas level, the assistance of family planning field workers is recommended. Such field workers would have the capacity to collect data from the individual Posyandu in the village and give the data to his/her supervisor. The supervisor then would be able to transfer the reports to the Puskesmas.

5. Ways and means should be explored to continue research and development efforts focused on priority issues to assist in understanding the operations and difficulties of delivering Posyandu services and improving programs.

6. Attention to developing incentives for kaders should be continued, such as the village medicine posts (VMP), income-generating projects, and ways of according respect and recognition for their work.

7. Training for data analysis and program management at the provincial, kabupaten, and kecamatan levels should continue to be replicated based upon the valuable lessons contained in the report, Evaluation of KB-KES Data Management Training for Kabupaten Managers. The evaluation report should be used as an instrument for up-grading the training program for future use. Replication will involve securing further funding, but the skills developed in such training have potential for widespread application for many types of program management.

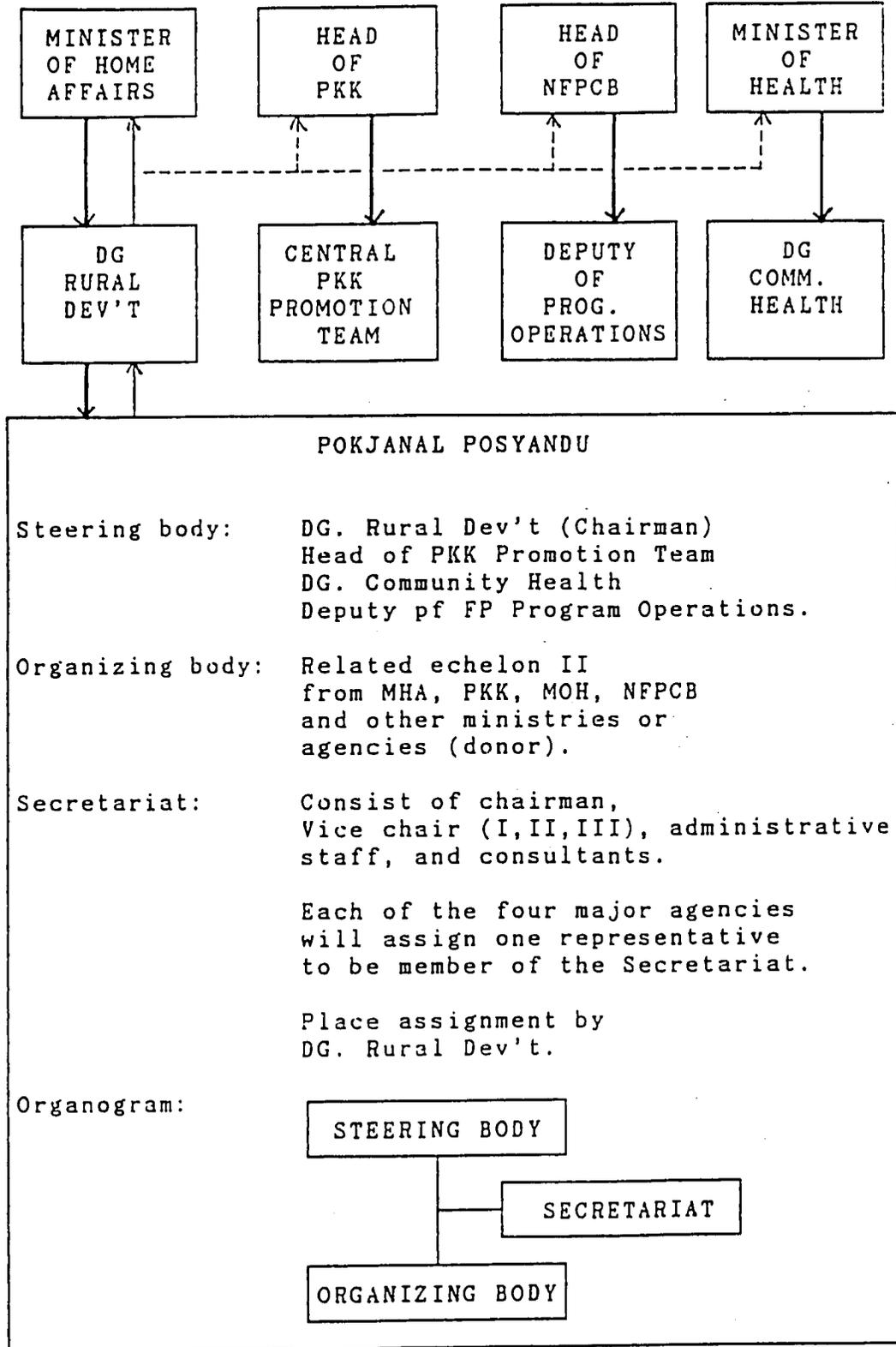
8. In future projects, expectations for maintaining records relating to discrete data on numbers of women involved at various stages and in various activities of USAID-funded projects need to be discussed, and procedures need to be designed at the onset of the project.

9. At some future point, further refinement may be needed in identifying high-risk populations among the Posyandu target groups. It may be the best use of resources to identify and to focus services on (1) infants, (2) children who have not reached 11.5 kg. by age three, and (3) pregnant women who have high-risk factors.

Whatever the level of effort of the various government agencies at central, provincial, regency, district and village levels, the final result of KB-KES Posyandu depends on the actions of the mothers at the village level. Almost all mothers do the best they can to raise healthy children. What they are able to do depends on their knowledge and resources. This is the absolute basis of the program and should be kept in focus by all people engaged in program inputs.

FIGURE 3

PLACEMENT OF THE SECRETARIAT
IN THE CENTRAL POEJANAL
OF POSYANDU



Legend:

- > Directing Line
- =====> Reporting Line
- > Cc Reporting Line

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APPENDIX A

SCOPE OF WORK

Scope of Work

Major areas of project contributions to be examined:

1. Developing modifications and refinements in the Posyandu service delivery system aimed at achieving greater program effectiveness in:

improved management system with respect to

- a) planning and political commitment
- b) training
- c) monitoring and supervision
- d) evaluation

service delivery with respect to

- a) types of services
- b) quality of services
- c) Information, Education and Communication

2. Establishment of a policy forum for management and decision making. The Integrated Task Force will be reviewed in terms of its role in:

- a) coordination
- b) policy development
- c) information dissemination

3. Development and testing innovations in the Posyandu through operations research

4. Replication and institutionalization of promising innovations as indicated by programs that will be or have been funded by either the Government of Indonesia at the national level or local level or by other donors

5. Examination of Women in Development issues where there is evidence of project support of women's involvement in village family planning/mother-child welfare programs. Documentation will include not only direct beneficiaries but also active participation of women at policy-making, program management, and service delivery levels.

APPENDIX B

LIST OF PERSONS INTERVIEWED

AND

AGENCIES CONTACTED

LIST OF PERSONS INTERVIEWED

JAKARTA

1. Dr. Agus Rukanda
Chief, Bureau of Program Integration, BKKBN
(ITF Member)
2. Drs. Abrar Agus
Research:
(Training in data analysis and management)
3. Dr. Ajamiseba
Consultant to KB-Kes
4. Dr. Agus Suwandono
Consultant to PKK
Research Staff, MOH
5. A. Fuse
Japan International Cooperation Agency,
Indonesia Office
6. Drs. Benny A. Kodyat
Director, Community Nutrition
(ITF Member)
7. Drs. Bambang Suroto
Chief, Division of Research Findings Collection-Observ.
8. Drs. Bambang Darmasetiawan
Research:
(MIS for income generation activities)
9. Dr. Bambang Winardi
Chairman, KB-Kes Secretariat
10. Brian Peniston
Consultant to KB-Kes
11. Mrs. Clotilde Marpaung
Nutrition, MOH

12. Drs. Eddy Purwanto
Research:
(FP Field Workers use in improvement of acceptance)
13. Dr. G. Hartono
DG, CDC-MOH
(ITF Steering Community)
14. Dr. Hasan M. Husnie
Vice Chairman, KB-Kes Secretariat
15. Husein, Skm
Family Health, MOH
16. Dr. H. Abdul Cholil, MPH
Deputy, Program Planning and Evaluation, BKKBN
17. Drs. Imam Hariadi
Research:
(Training in data analysis and management)
18. Drs. Joko Sulistio
Research:
(Software for monitoring income-generation activities)
19. Drs. Muchayat
Chief, Bureau of Program Evaluation, BKKBN
20. Drs. Mastoni Sani
Research:
(Training in data analysis and management)
21. Dr. Nardho Gunawan
Director, Family Health, MOH
22. Mrs. Rochbudiati
Bangdes, MHA
23. Dr. Rudi Perkerti
BKKBN
24. Drs. Soetedjo Moelyodihardjo
Deputy, Program Operation, BKKBN
(ITF Steering Committee)

25. Drs. Soebiyanto
Research:
(Contraceptive side effects, W. Java and S. Sulawesi)
26. Drs. Suyono
Research:
(PPKBD performance in POSYANDU)
27. Dra. Siti Priyati
Research:
(Training in data analysis and management)
28. Ir. Sutjitro
Bangdes, MHA
29. Dr. Indriyono
CDC, MOH
30. Sunawang
Unicef, Indonesia
31. Dr. Samhari Baswedan
UNICEF, Indonesia
32. Drs. Tjep Marku
Health Education, MOH
33. Dr. Titiek Indahyati
EPI, MOH
34. Dr. Widyastuti Wibisana
Director, Community Participation, MOH
(ITF Member)

CENTRAL JAVA

1. Dr. Fatimah
Fac. of Medicine
University of Diponegoro (UNDIP)
2. Prof. Dr. Hariyono Suyitno
University of Diponegoro (UNDIP)

3. Dr. Hertanto
University of Diponegoro (UNDIP)
4. Harwono Poerwito
BKKBN, Province
5. Dra. Herniwati R.H.
University of Diponegoro (UNDIP)
6. Dr. HM. Sulchan
Nutrition, Fac. of Medicine
University of Diponegoro (UNDIP)
7. Isbandi
University of Diponegoro (UNDIP)
8. Pia Widya Laksmi
Training Center BKKBN, Province
9. Rodhiyah
University of Diponegoro (UNDIP)
10. Suratman
MOH, Indonesia
11. Soekamto
BKKBN, Province
12. Sunarto
Training Center BKKBN, Province
13. Drs. Tahrodji
Training Center BKKBN, Province
14. Y. Warella
University of Diponegoro (UNDIP)

WEST JAVA

1. Dr. Mangiring Siburian
University of Padjajaran (UNPAD), Bandung

2. Dr. Dewi Rita Mintarsih
MOH, Bandung
3. Dr. Dadi S.A., MPH
MOH, Province
4. Drs. Endang Suryadi
BKKBN, Province
5. Dr. Joko Hestianto
MOH, Province
6. Dr. Suwanta
Health Center, Cirebon
7. Dr. Wulan Sari Sabana
MOH, Province
8. Drs. Weking
MOH, Province

WEST NUSA TENGGARA (NT)

1. Ajudin, BA
BKKBN, Province
2. Drs. Basuki Prayitnc
University of Mataram (UNRAM)
3. Dr. Hasan Zaini
BKKBN, Province
4. Drs. H. Lalu Burhan, MSC
BKKBN, Province
5. Drs. Imbang Syahrudin
BKKBN, Province
6. Drs. Lalu Muslihan
BKKBN, Province
7. Lalu Subeki, MA
BKKBN, Province

8. Said, SKM
MOH, Province
9. Drs. S. Putu Suardi
BKKBN, Province

APPENDIX C

POSYANDU MONITORING CHECKLIST

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Appendix C

POSYANDU MONITORING CHECK LIST

Are there kaders present for the following activities:

- 1) for registration
- 2) for writing down the child's weight on a piece of paper and attaching this paper to the child's KMS
- 3) for recording weight on KMS
- 4) for nutrition/diarrhea counselling and supplementary food
- 5) for giving Vitamin A, paracetamol and/or parasite medication and recording Vitamin A and immunizations on the KMS
- 6) for weighing and recording weights of pregnant women and offering them iron tablets and family planning counselling?

Is there a scale suitable for weighing infants/children?

Is the weighing cloth compensated for?

Is the scale calibrated before each child is weighed?

Is there a supply of new KMS and Kartu Hamil cards?

Are weights accurate and recorded correctly?

Are Vitamin A capsules available and unexpired?

Every six months are Vitamin A capsules cut open with a clean pair of sizzors and the contents squeezed into the mouths of all children 1-5 years old who attend?

During the intervening months are the children 1-5 years old who missed receiving Vitamin A during the scheduled months given it?

Is a kader counselling mothers of malnourished children giving appropriate messages, i.e. more nutritious (give examples), more often (5 x a day if 9 months or older), more fat (give locally available and acceptable examples) and displaying sample foods and teaching materials?

Are severely malnourished children given supplementary food?

- _____ Are mothers asked if they know: 1) the recipe for self-made oral rehydration solution (ORS) and 2) how to obtain and use commercial ORS and 3) the reason why rehydration is important?
- _____ Is commercial ORS (200 gr.) available at the Posyandu session?
- _____ Is the immunizer using one sterilized needle for each infant/child/woman who is immunized?
- _____ Are vaccines which are not immediately being used stored in a cold box containing ice packs?
- _____ Are vaccines unexpired?
- _____ Are the mothers of children who are immunized given paracetamol?
- _____ Are children screened for parasites and offered medication?
- _____ Are children screened for respiratory infections and treated by a nurse, midwife or physician or referred to the health center?
- _____ Are children/pregnant women screened for malaria and given medication by a health worker or referred to the health center?
- _____ Are all women 15 to 45 years of age asked if they use or plan to use a modern method of family planning?
- _____ Are women (especially lactating women) not using a method of family planning counselled (using samples and teaching materials) about the different methods of modern family planning?
- _____ Are family planning pills, injectibles and IUDs available and offered by health workers?
- _____ Are women referred for implants and tubectomies?
- _____ Are pregnant women weighed and their weights recorded?
- _____ Are pregnant/lactating women given iron tablets?
- _____ Does a health worker screen pregnant women and take their blood pressure?

ARE THE FOLLOWING SUPPLIES VISIBLE AT THE START OF THE POSYANDU SESSION?

- _____ A scale that is calibrated (weighing cloth compensated for)*
- _____ A supply of new KMS and Ibu Hamil cards
- _____ Vitamin A capsules (even in months not normally distributed)
- _____ Clean sizzors to cut open the Vitamin A tablets
- _____ A sample basket of nutritious, locally available weaning foods (include high caloric foods such as coconut milk, oil and peanuts)
- _____ Supplementary food for severely malnourished children
- _____ Teaching materials to be used for nutrition counselling
- _____ A sterilizer pot with one sterilized needle for each child/woman
- _____ A cold box with ice packs and sufficient unexpired vaccinations
- _____ Medication for fever, parasites, malaria & respiratory infections
- _____ Counselling materials to explain the importance of rehydration
- _____ Ingredients/utensils for self-made oral rehydration solution
- _____ Adequate supply of commercial oral rehydration packets (200 gr.)
- _____ Family planning teaching materials for all modern methods
- _____ Family planning pills, injectibles and IUDs
- _____ Iron tablets for pregnant/lactating women
- _____ A floor scale and blood pressure cuff for prenatal checkups

APPENDIX D

RESEARCH PROJECTS OF PIL 57

NO.	PRINCIPAL INVESTIGATOR	UNIVERSITY	PROG MANAGER	RESEARCH SITES	MTBS	FOCUS OF STUDY	RESEARCH DESIGN	DEVELOPMENT	PERSONNEL	TRAINING	SUBMISSION	MANAGEMENT	MCH	COMM PARTIC	IMPLEMENTATION	COMM EFFECT
1	JAKARTA DKI Dwidjo Seputro	*	Jakarta, E. Java	12	Child development	Intervention	*	*	*	*	*	*	*	*	*	*
2	Trihono	*	M. Java	13	Recording & reporting	Diagnostic	*	*	*	*	*	*	*	*	*	*
3	Sudarti	*	M. Java	12	Role of Community leaders	Diagnostic	*	*	*	*	*	*	*	*	*	*
4	Nico S. Kalangi	*	M. Java, N. Sula-	12	Socio-cultural factors in	Diagnostic	*	*	*	*	*	*	*	*	*	*
5	WEST JAVA Mehdir S Husaini	*	W. Java, S. Sula-	10	Refinement of antennatal	Intervention	*	*	*	*	*	*	*	*	*	*
6	Ardini S Raksa-	*	W. Java	13	Training TBAs for ANC	Intervention	*	*	*	*	*	*	*	*	*	*
7	Mien Bidayat	*	M. Java	16	Use of IBC to strengthen	Intervention	*	*	*	*	*	*	*	*	*	*
8	Boy Subiroga, S.	*	M. Java	12	Community KAP	Intervention	*	*	*	*	*	*	*	*	*	*
9	Mulendari Sabana	*	M. Java	12	Role of "Little Doctors"	Intervention	*	*	*	*	*	*	*	*	*	*
10	Dewi Rita M.	*	M. Java	12	Recording and reporting	Intervention	*	*	*	*	*	*	*	*	*	*
11	Suwanta	*	M. Java	10	Training TBAs for MCH	Intervention	*	*	*	*	*	*	*	*	*	*
12	CENTRAL JAVA Muhammad Syarif	*	C. Java	12	Cadre selection and train-	Intervention	*	*	*	*	*	*	*	*	*	*
13	Joko Poerwono	*	C. Java	9	Political commitment	Diagnostic	*	*	*	*	*	*	*	*	*	*
14	H.B. Sutopo	*	C. Java	9	Community perception and	Diagnostic	*	*	*	*	*	*	*	*	*	*
15	Sukardi	*	C. Java	12	Participation	Intervention	*	*	*	*	*	*	*	*	*	*
16	Salsamah Melyuni	*	C. Java	18	Cost-analysis of MCH	Diagnostic	*	*	*	*	*	*	*	*	*	*
17	Anton Sukarno	*	C. Java	10	Assessment of IBC materials	Diagnostic	*	*	*	*	*	*	*	*	*	*
18	Mulyoto	*	C. Java	13	Model supervision system	Intervention	*	*	*	*	*	*	*	*	*	*
19	Sugiyanto	*	C. Java	10	Optimizing use of local	Diagnostic	*	*	*	*	*	*	*	*	*	*
20	M. Yusuf	*	C. Java	13	Monitoring system	Intervention	*	*	*	*	*	*	*	*	*	*
21	Utomo	*	C. Java	13	Use of monitoring cards to	Intervention	*	*	*	*	*	*	*	*	*	*
22	Ibandi	*	C. Java	13	Forming an ideal Posyandu	Intervention	*	*	*	*	*	*	*	*	*	*
23	Y. Marcella	*	C. Java	6	Cadre training	Diagnostic	*	*	*	*	*	*	*	*	*	*
24	Setoto	*	C. Java	12	Evaluation of KB-Kes	Diagnostic	*	*	*	*	*	*	*	*	*	*
25	Taufiq F.A.	*	C. Java, NTB	12	Intervention	Intervention	*	*	*	*	*	*	*	*	*	*
26	Fatimah Nulis	*	C. Java	12	Intervention	Intervention	*	*	*	*	*	*	*	*	*	*
27	Bertanto W.S.	*	C. Java	12	Community perception of	Diagnostic	*	*	*	*	*	*	*	*	*	*
28	R. Bariyono	*	C. Java	12	Posyandu services	Diagnostic	*	*	*	*	*	*	*	*	*	*
29	Mohammad Sulcan	*	C. Java	12	Developing criteria to	Diagnostic	*	*	*	*	*	*	*	*	*	*
30	Rerniwati R.H.	*	C. Java	12	Secondary data analysis to	Diagnostic	*	*	*	*	*	*	*	*	*	*
31	Arif halim	*	C. Java	12	Cost analysis	Intervention	*	*	*	*	*	*	*	*	*	*
32	Rodhiya S.U.	*	C. Java	12	Cadre training	Intervention	*	*	*	*	*	*	*	*	*	*
33	B. Suherman	*	C. Java	12	Integrating vital events	Intervention	*	*	*	*	*	*	*	*	*	*
34	TOGJARABATA DIY Ruslan Adjie	*	C. Java, DI Yogyakarta	18	Recording and reporting	Diagnostic	*	*	*	*	*	*	*	*	*	*
35	EAST JAVA Soemarsono	*	E. Java, N. Sulawesi	9	Development of counseling	Intervention	*	*	*	*	*	*	*	*	*	*
36	Wasis Budiarso	*	E. Java	12	Recording and reporting	Diagnostic	*	*	*	*	*	*	*	*	*	*
37	BALI Nyoman D. R.	*	Bali	12	Trained cadre quality	Diagnostic	*	*	*	*	*	*	*	*	*	*
38	I. Meyan Darwata	*	Bali	12	Cost-effectiveness analysis	Diagnostic	*	*	*	*	*	*	*	*	*	*
39	I. Ketut Tanking	*	Bali	12	Recording and reporting	Intervention	*	*	*	*	*	*	*	*	*	*
40	Mayan G Supartha	*	Bali	12	Identifying potential	Intervention	*	*	*	*	*	*	*	*	*	*
41	NTB Titiek Herwanti	*	NTB	12	Community resources	Intervention	*	*	*	*	*	*	*	*	*	*
42	6-Province Study Suwanta	*	W. Java, E. Java, W. Sumatra, N.T.B, W. Kalimantan, S. Sulawesi	6	Cadre guidance Posyandu Cost Analysis	Diagnostic	*	*	*	*	*	*	*	*	*	*

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NO.	PRINCIPAL INVESTIGATOR	UNIVERSITY	PROG MANAGER	RESEARCH SITES	MTHS	FOCUS OF STUDY	RESEARCH DESIGN	DELIVERY	PERSONNEL	TRAINING	SUPERVISION	MANAGEMENT	INRC	COMM PARTIC	FINANCING	IMPLEMENTATION	COST EFFECY
JAKARTA DKI																	
1	Ratna Budiarmo	*		W. Java		Sisterhood method for MMR	Methodology					*					
2	Sri Sugati	*		E. Java, NTB		Village medicine post	Intervention	*							*		
3	Joko Sulistyono	*		W. Java	11	MIS for Income Generating	Software Devt					*					
4	Umar Fahmi	*		W. Java, C. Java, Bali	12	Environmental Health at the Posyandu	Diagnostic									*	
5	Pudjo Raharjo	*		W. Java, S. Sulawesi	11	PLKB and PPKBD case studies	Diagnostic	*									
6	Sumengen	*		C. Java, S. Sulawesi	11	IEC for nutrition	Intervention	*	*				*				
7	Rusdi Maslim	*		C. Java, Bali	12	Use of traditional healers to promote Posyandu	Diagnostic	*	*				*			*	
8	Soekidjo, N.	*		W. Java, E. Java	12	Reward system for cadres	Intervention	*					*				
9	Pudjo Raharjo	*		C. Java		Sisterhood method for MMR	Methodology					*		*			
WEST JAVA																	
10	Y. Suwanta S.	*		W. Java	11	Cadre incentives/medic.post	Intervention	*								*	
11	Weking	*		W. Java	11	Cadre incentives/medic.post	Intervention								*	*	
12	Djoko Hestiyanto	*		W. Java	12	Role of Sub-Health Center	Intervention				*	*					
CENTRAL JAVA																	
13	Elias Winoto	*		C. Java	11	Use of immunization feedback cards	Intervention					*					
EAST JAVA																	
14	Liliek Djuwarti	*		E. Java	9	IEC	?						*				
NORTH SULAWESI																	
15	Pamantung	*		N. Sulawesi	12	Cadre selection training, supervision	Intervention	*	*	*							*
16	J.W.P. Mandagi	*		N. Sulawesi	12	Cost analysis and socio-economic conditions	Diagnostic										

RESEARCH PROJECTS OF PTL 57
ROUND II

RESEARCH PROJECTS OF PILS 50 AND 55

1	Widyastuti W.	*		W. Java, C. Java, Riau, N. Sulawesi	12	Development of training modules for cadres, managers staff, community leaders	Intervention	*	*	*	*			*			
2	I. Tarwotjo, & Benny A. Kodyat	*		E. Java, NTB		Development of IEC materials on weaning							*				