

# A.I.D. EVALUATION SUMMARY PART I

(BEFORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS)

IDENTIFICATION DATA

<b>A. REPORTING A.I.D. UNIT:</b> USAID/Indonesia, O/PH (Mission or AID/W Office)  (ES# )	<b>B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?</b> yes <input checked="" type="checkbox"/> slipped <input type="checkbox"/> ad hoc <input type="checkbox"/>  Eval. Plan Submission Date: FY <u>87</u> Q <u>  </u>	<b>C. EVALUATION TIMING</b> Interim <input checked="" type="checkbox"/> final <input type="checkbox"/> ex post <input type="checkbox"/> other <input type="checkbox"/>			
<b>D. ACTIVITY OR ACTIVITIES EVALUATED</b> (List the following information for project(s) or program(s) evaluated; If not applicable, list title and date of the evaluation report)					
Project #	Project/Program Title (or title & date of evaluation report)	First PROAG or equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost ('000)	Actual Cost ('000)
497-0325	"Evaluation of the Comprehensive Health Improvement Program-Province Specific," October 1987	FY 81	9/89	\$11m	\$11m

ACTIONS

E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR	Name of officer responsible for Action	Date Action to be Completed
Action(s) Required  1. Incorporate cost-effectiveness analyses into design and implementation of project interventions. Consult with Bappenas to determine the most important kinds of analyses.	Kathleen McDonald	September 1989
2. Consolidate gains made in decentralizing health planning and improving provincial capabilities through additional assistance in management, planning and development of system changes in financing and accounting for health programs.	Kathleen McDonald	September 1989
3. Improve dissemination of CHIPPS findings to better inform central-level GOI/MOH leaders about project performance in the provinces with respect to their own national health programs and priorities.	Kathleen McDonald	September 1989
4. Improve and strengthen on-going project monitoring and evaluation components.	Kathleen McDonald	September 1989
5. Strengthen efforts to institutionalize project approaches by focusing on low-cost interventions more likely to be continued once the project ends and seek local resources for recurrent costs.	Kathleen McDonald	September 1989

(Attach extra sheet if necessary)

APPROVALS

**F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION:** mo 2 day 5 yr 88

**G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:**

Project/Program Officer Signature <i>K. McDonald</i> Typed Name <b>Kathleen McDonald</b> Date: _____	Representative of Borrower/Grantee Signature <i>[Signature]</i> Typed Name <b>Dr. Brotowasisto</b> Date: <u>2/20/88</u>	Evaluation Officer Signature <i>[Signature]</i> Typed Name <b>Timothy Mahoney</b> Date: _____	Mission or AID/W Office Director Signature <i>[Signature]</i> Typed Name <b>David N. Merrill</b> Date: <u>3/8/88</u>
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2/22

## H. EVALUATION ABSTRACT (do not exceed the space provided)

By providing technical and financial assistance for manpower development and intervention field trials, the CHIPPS project is helping three provinces to develop epidemiologically-based problem solving capabilities to address their respective health needs. Through extensive interviews and examinations of project documentation, a seven-person team assessed the performance, strengths and weaknesses of the current CHIPPS project in each of the three provinces of Aceh, NTT and West Sumatra.

The major findings and conclusions of the evaluation team are that: 1) although progress has been made in implementing the CHIPPS four-step problem solving process, more attention must be paid to problem identification for non-disease specific problems, problem analysis, planning, and monitoring and evaluation. 2) Some excellent progress has been made in decentralization, but the districts (administrative level below the province) are not sufficiently involved. National financial management practices must be changed to accommodate the process of decentralizing health planning and implementation. 3) CHIPPS has supported the relationship of CHIPPS activities (e.g., the introduction of analytical techniques) to national programs and priorities. 4) CHIPPS has had some strong impact on community health and has worked closely with community groups. 5) The pace of institutionalization has been greatest with respect to manpower skills, followed by the generation of local financial resources. The least progress has been made with "system" changes. 6) CHIPPS provinces have been preparing to meet national priorities for decentralization, the efficient use of national resources, child survival and quality of life in Repelita V (1989-94 national development plan) for the past six years. 7) Despite the progress made in all these areas, the gains made are still fragile.

In addition to the over thirty specific recommendations made in this evaluation, the team found that greatest attention must now be placed on 1) consolidating the gains made in terms of extending them more widely throughout each province and providing more opportunities for staff at all levels to apply their newly-acquired skills, and 2) finding ways to sustain the new practices financially and institutionally. The team urged the government to make some facilitating systems changes quickly, to maximize technical and financial support for the provinces and to encourage provincial initiatives. Specifically, this would include emphasizing appropriate system changes in financing and accounting; encouraging provincial initiative by measuring performance by outputs, not inputs; strengthening the managerial capabilities of provincial health staffs to enhance their performance and the institutionalization of the four-step CHIPPS problem solving process; and introducing cost-effectiveness analyses for CHIPPS-sponsored activities.

## I. EVALUATION COSTS

1. Evaluation Team		Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
Name	Affiliation			
Robert Pratt	DAI	30 )	\$ 43,522	PIO/T
Mary White	DAI	30 )		PIO/T
Dr. Soebekti		30	\$ 6,000	PIL
Dr. Udai Pareek		30	\$ 6,000	PIO/T
Dr. Soekarjono		30 )	\$ 10,000	PIL
Mr. Prijono Ashari		20 )		PIL
Mr. Meliala		20 )		PIL
2. Mission/Office Professional Staff Person-Days (estimate) <u>10</u>			3. Borrower/Grantee Professional Staff Person-Days (estimate) <u>70</u>	

# A.I.D. EVALUATION SUMMARY PART II

## J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided) Address the following items:

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned .

Mission or Office: O/PH, USAID Indonesia Date this summary prepared: November 9, 1987

Title and Date of Full Evaluation Report: Evaluation of the Comprehensive Health Improvement Program—Province Specific, by Robert Pratt, dr. R. Soebekti, Prijono Ashari, A.M. Meliala, Udai Pareek, dr. Soekardjono and Mary White.

### Purpose of Activity Evaluated

This project was developed to accelerate and intensify the upgrading of the health sector service delivery systems of three provinces (DI Aceh, Nusa Tenggara Timur, and West Sumatra) to enable them to increase the pace of health status improvement of their populations. Manpower development and field trials of province-specific health interventions are the focus of this project, which was begun in 1981.

### Purpose of Evaluation and Methodology Used

This evaluation was to assess performance, strengths and weaknesses of the current CHIPPS project in each of the three provinces and recommend changes that would enhance the achievement of its objectives during the remaining two years of the project. The specific objectives were to: examine the extent to which the four-step process of problem identification, planning, implementation, and monitoring and evaluation was followed for selected activities; evaluate the relationship between CHIPPS activities in each province to national programs and priorities; assess the degree to which the CHIPPS four-step process has been institutionalized in each province; examine the lessons the CHIPPS experience has provided to the issue of decentralization; and develop a set of recommendations for the remaining period of CHIPPS.

After the evaluation team met with Ministry of Health (MOH) and USAID officials, it developed a questionnaire which was used during interviews with provincial staff concerning specific CHIPPS activities. Over a sixteen-day period, team members visited the three provinces and discussed 26 project activities with approximately 80 persons as a means of assessing the progress attained. In addition, the team assessed written reports and held discussions with long-term consultants in West Sumatra and Aceh. In Jakarta, the team met with several key personnel at the central government level.

### Findings and Conclusions

Problem-Solving Process. Provincial health staff capabilities in problem identification and epidemiological methods have been strengthened concurrently, but some staff still require training in epidemiological techniques in problem analysis; the problem identification process is being institutionalized in each province by providing epidemiological/data management training to district and health center staff; however, a workable and sustainable vital registration system has yet to be developed in any province. CHIPPS planners have included appropriate interested persons in the planning process, thereby obtaining their inputs and participation in implementation; CHIPPS planners have generally made good use of outside expertise; however, planning has often been limited to a series of discrete events rather than developing strategies for

achieving objectives; and planning has usually not included planning for monitoring and evaluation. In general, planning was weaker when problem identification was weak; and planning for CHIPPS activities has become more substantive and demanding than for routine national programs. Similarly, successful implementation seems to have been determined by the quality of problem identification and planning that preceded it. The monitoring and evaluation of CHIPPS activities has been weak - especially for training activities; two reasons for this are that a heavy burden of routine reporting to the central government prevents provinces from introducing new reports for monitoring purposes, and cost effectiveness analyses of activities have not been incorporated in the design and evaluation process.

Decentralization. Long- and short-term consultants have facilitated the decentralization process in Aceh and West Sumatra by providing technical and motivational support to local officers, and central units have strengthened the process by providing technical support to peripheral units. However, long-range changes in decentralization will require greater financial flexibility.

Relationship to National Programs and Priorities. Most of the activities reviewed were very supportive of national program objectives, e.g., child survival, integrated service posts, immunization and nutrition; epidemiological surveys have provided valuable information for health planners; and CHIPPS' focus on integrated service posts has stimulated cooperation and some integration among provincial health office units, strengthening their development. However, some national programs received little or no attention from CHIPPS, e.g., diarrheal disease control, environmental sanitation and maternal health.

Program Management. Each province has made appropriate structural/organizational arrangements for managing CHIPPS, and the provincial project directors have played major supportive roles in initiating and administering project activities. Their involvement in CHIPPS has strengthened the influence of their KanWil (provincial MOH office) planning units generally. Long-term consultants in Aceh and West Sumatra have had a major influence on the priorities and character of CHIPPS. A great deal of "technology" was transferred and confidence was gained; an important task now is to assist in consolidating the gains made to date. The availability of extra-budgetary, discretionary CHIPPS funds has enabled CHIPPS provinces to demonstrate that they can perform decentralized health services delivery problem identification, planning and implementation. Regular budget constraints do not permit them to do that. National goals and targets cannot be attained and sustained without greater local discretionary authority over budgets and access to local resources. MOH officials at the national level are familiar with the CHIPPS objectives and concept, but not with its performance with respect to their own programs.

Impact on the Community. CHIPPS has generated valuable lessons on community participation in health services delivery, including its limitations (e.g., village health volunteers' ability to perform technical functions). However, mobilizing effective participation required major investments in training, supervision and follow-up.

Linkages with Other Health Programs and Sectors. Those persons responsible for CHIPPS activities sought and obtained essential inputs from appropriate programs and sectors when necessary. They were notably successful in obtaining active political/motivational support from local government authorities.

Cost Effectiveness. Because cost effectiveness/efficiency analysis has been neglected in CHIPPS implementation, project personnel cannot demonstrate to provincial and central-level planners that resources are being used more efficiently than before CHIPPS began. This is unfortunate in view of the very high priority now placed on that subject.

Dissemination of Results. Very little information about the process, results and problems of CHIPPS activities has been disseminated outside of each province. Consequently, its experiences are not being used by planners of similar or related programs.

Institutionalization. Problem identification, community involvement and planning capabilities are spreading throughout the provinces, but monitoring and evaluation and data analyses need continued attention. The prospects for institutionalization are greatly enhanced when activities gain access to local financial resources and are low cost.

Implications. For Repelita V (1989-94), CHIPPS provinces are making important progress to prepare themselves for decentralization by strengthening their human resource, technological, information and organizational capabilities through CHIPPS. They are also improving their effectiveness by targeting interventions more precisely and improving the efficiency of drug management. CHIPPS support has helped these provinces to strengthen their abilities to make progress toward national child survival and quality of life goals. For 1989 to 1993, CHIPPS is generating substantial information about health services delivery issues which can guide USAID program planning. CHIPPS has also demonstrated that provincial health departments can respond well to opportunities to enhance their performance. CHIPPS provinces will require continued opportunities to apply their new skills to consolidate the gains made.

#### Recommendations

The Problem-Solving Process. (1) Non-disease specific problem identification must be strengthened by broadening the epidemiological approach; provincial officers should make more use of anthropological approaches; (2) the Kanwil/Dinas (provincial health service implementation office) should use a system of expert peer review panels to critique technically complex activity proposals; (3) each province should continue to strengthen the problem identification and epidemiological skills of health officers; (4) and a special workshop on recording and reporting births and deaths should be held. (5) CHIPPS should provide training to provincial staff in strategic planning practices. (6) For monitoring and evaluation, MOH and each Kanwil/Dinas should reduce the routine reporting burden it imposes on all levels of the health system (especially the health centers) and encourage provinces to develop reporting mechanisms to monitor innovative activities. (7) Cost-effectiveness analyses should be conducted as described in the CHIPPS Project Paper.

Decentralization. (1) To support decentralization, MOH units at the national level must concentrate on providing policy and technical guidance to the provinces; (2) CHIPPS should be used to strengthen planning and managerial skills in the three provinces; (3) greater effort must be made to involve district and sub-district personnel in organizing and planning CHIPPS activities; (4) and provincial and district officials must mobilize local financial resources to support decentralized health services.

Relationship to National Programs and Priorities. MOH departments at the central level should review what CHIPPS provinces are doing with respect to national programs and provide feedback and support as appropriate; since the province initiatives have strengthened the performance of national programs, MOH should explicitly encourage provinces to take more initiative; and because program innovations might modify implementation approaches for national programs, MOH should be prepared to accept such digressions as long as results are obtained. MOH should judge provinces on outputs, not inputs.

Program Management. MOH and CHIPPS provinces should analyze the provinces' experience to derive useful general lessons for managing decentralized health services delivery. USAID and the MOH should consider providing TA to project directors to strengthen their planning and management capabilities. Long-term consultants (LTCs) should continue to assist the provinces until CHIPPS ends, but focus increasingly on deepening and extending provincial health system skills to assure that the gains made will be sustained. NTT should carefully consider whether to seek an LTC to assist with that objective. MOH, USAID and Bappenas (the National Planning Board) should analyze the relative impacts of CHIPPS grant funds and regular DIP on decentralization in each province and then recommend concrete changes to the DIP/DUP process to support decentralization. MOH should form an informal CHIPPS advisory group of senior members from each unit concerned with CHIPPS activities to exchange information with the MOH project officer. The GOI/MOH project officer at the central level should assume more technical responsibility.

Impact on the Community. CHIPPS and the MOH should continue efforts to strengthen the working relationships between health services delivery programs and community organizations and to strengthen the capabilities of the latter. Despite this recommendation, USAID and MOH should carefully consider the problem of sustaining support for community-based organizations after AID CHIPPS funding ends.

Linkages with Other Health Programs and Sectors. Kanwil/Dinas should strengthen their relationships with regional planning boards in order to obtain provincial budgets for health services.

Cost Effectiveness. Each province should pursue cost-effectiveness/efficiency analyses as part of CHIPPS activities described in the Project Paper. CHIPPS managers should consult with MOH and Bappenas to determine the most important kinds of analyses. The final CHIPPS evaluation should look closely at this subject.

Dissemination of Results. Methods should be developed to share CHIPPS experiences and lessons learned with appropriate persons and organizations.

Institutionalization. CHIPPS should strengthen skills required to institutionalize its approach; it should focus on identifying low-cost activities for which institutionalization prospects will be highest and seek local resources for recurrent costs. Technology transfer should continue to be stressed, especially at the district and sub-district levels. The use of the Indonesian consultants should be stressed. ✓

Implications. Health sector planning for Repelita V should take into account what the CHIPPS provinces have done as a guide to what can be accomplished nation-wide. For 1989-93, USAID should maximize the benefits of the CHIPPS experience by drawing lessons from it for future programs and by continuing project support in the three provinces as long as possible, but at decreasing input levels. LTCs should not be continued beyond 1989.

K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)

Evaluation of the Comprehensive Health Improvement Program-Province Specific, by Robert Pratt, dr. R. Soebekti, Prijono Ashari, A.M. Meliala, Udai Pareek, dr. Soekardjono and Mary White, October 1987.

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

Feedback from GOI counterparts at the central and provincial levels indicates that the evaluation process was regarded as a useful and positive exercise, and the results were well received.

ATTACHMENTS

MISSION COMMENTS ON FULL REPORT

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EVALUATION  
OF THE  
COMPREHENSIVE HEALTH IMPROVEMENT PROGRAM-  
PROVINCE SPECIFIC

Prepared for :  
the Provincial Health Offices in  
D.I. Aceh, Sumatera Barat and  
Nusa Tenggara Timur;  
the Ministry of Health,  
Government of Indonesia;

and

the Office of Population and Health,  
U.S. Agency for International Development

Evaluation Team :

- |                |  |
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| Co-Team Leader | - Robert Pratt, MBA, Consultant (DAI)  |
| Co-Team Leader | - dr. R. Soebekti, MPH, Consultant (USAID)   |
| Member         | - Prijono Ashari, SE, Directorate General of<br>Community Health (MOH)   |
| Member         | - A.M. Meliala, SKM, DSP, Directorate General<br>of Communicable Disease Control and<br>Environmental Health (MOH) |
| Member         | - Udai Pareek, PhD, Consultant (USAID)   |
| Member         | - dr. Soekardjono, MPH, Planning Bureau (MOH)  |
| Member         | - Mary White, MPH, ScD, Consultant (DAI)   |

October 1987

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ACKNOWLEDGMENT

The evaluation team wishes to express its appreciation to the many persons in Aceh, NTT, Sumatera Barat, and Jakarta, who contributed their time and assistance so generously for this evaluation.

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EXECUTIVE SUMMARY

A seven-person team evaluated the CHIPPS project during September 2 to October 9, 1987. The \$11.0 million, eight year project (1981-1989) is to help three outer island provinces develop epidemiologically-based problem solving capabilities to address their respective health services needs. It provides technical and financial assistance for manpower development and intervention field trials. The project is seen now as part of the government's current policy to decentralize responsibility for management of health programs to the provinces.

The evaluation was to examine the extent to which the project's four-step problem solving process was being used, and to assess progress made regarding decentralization, contributions to national programs and priorities, program management, sustainability, institutionalization and several other issues. The team visited the three provinces and discussed 26 project activities with approximately 80 persons as a means for assessing progress attained with respect to the subjects mentioned above. Brief reports were written about the process followed in developing and implementing each activity. Based on its findings, the team drew a number of conclusions and made recommendations pertaining to each subject. It found that substantial progress has been made on all fronts, but that the gains made are still fragile. Greatest attention must now be placed on 1) consolidating the gains in terms of extending them more widely throughout each province and providing more opportunities for staff at all levels to apply their newly acquired skills, and 2) finding ways to sustain the new practices financially and institutionally. The team urged the government to make some facilitating system changes quickly to maximize technical and financial support for the provinces and to encourage provincial initiatives. The project activities are strongly oriented toward child survival, the highest MOH priority and the provinces have had some encouraging success at mobilizing local resources to finance health services delivery.

The conclusions and recommendations are summarized in the Summary of Conclusions and Recommendations.

Recommendation for the GOI and USAID

- Consider the many specific recommendation
- Make appropriate "system" changes quickly, especially financial/accounting.
- Encourage province initiative by measuring performance by outputs, not inputs.
- Provide technical and financial support to the provinces.
- Strengthen the managerial capabilities of provincial health staffs, to enhance their performance and the institutionalization of the four-step process.
- Introduce cost-effectiveness analyses for CHIPPS-sponsored activities.

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SUMMARY OF CONCLUSIONS & RECOMMENDATIONS

1. GENERAL

Conclusions:

- Problem Solving Process - Progress has been made but more attention must be paid to problem identification for non-disease-specific problems, problem analysis, planning and monitoring and evaluation.
- Decentralization - Some excellent progress has been made but the kabupatens are often not sufficiently involved. National financial management practices must be changed to accommodate decentralization.
- Relationship to National Programs and Priorities. CHIPPS has supported and strengthened them in each province.
- Impact on Communities - CHIPPS has had some strong impact on health and worked closely with community groups.
- Institutionalization - The pace of institutionalization has been greatest with respect to manpower skills, followed by generation of local financial resources. Least progress has been made with "system" changes.
- Pelita V - CHIPPS provinces have been preparing for Pelita V (1989-1994 national development plan) for the past six years.
- Despite progress made, the gains are still fragile.

2. THE PROBLEM - SOLVING PROCESS

a. Problem Identification

Conclusions:

- Province health staff capabilities in problem identification and epidemiological methods have been strengthened concurrently.
- The problem identification process is being institutionalized within each province by providing epidemiological/data management training to kabupaten and health center staff.
- Although problem identification capabilities are improving, some province staff require training in epidemiological techniques in problem analysis.
- A workable and sustainable vital registration system has yet to be developed in any province.

Recommendations:

- Problem identification for non-disease specific problems must be strengthened by broadening the epidemiological approach.
- Province officers should make more use of anthropological approaches for problem identification.
- KanWil/Dinas in each province should use a system of expert "peer review" panels to critique technically complex activity proposals, utilizing competent persons from the government, universities and private sector as appropriate.
- Each province should continue to strengthen the problem identification and epidemiological skills of health officers throughout the provinces to enable them to analyze problems and not just describe them, as they are doing now.

- A special workshop on recording and reporting births and deaths should be held, so that each province has the benefit of learning from each other's experiences.

b. Planning

Conclusions:

- Planners for CHIPPS activities have included appropriate interested persons in the planning process, thereby obtaining their inputs and participation in implementation.
- CHIPPS planners have generally made good use of outside expertise, such as FETP, FKM, NAMRU, YIS, DepKes.
- Planning has often been limited to planning a series of discrete events rather than developing strategies for achieving objectives.
- Planning has usually not included planning for monitoring and evaluation.
- Planning was weaker when problem identification was weak.
- Planning for CHIPPS activities has been more substantive and demanding than for routine national programs.

Recommendations:

- CHIPPS should provide training to province staff in strategic planning practices.

c. Implementation

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Conclusions:

- Successful implementation seems to have been determined by the quality of problem identification and planning that preceded it.

Recommendation: None

d. Monitoring and Evaluation

Conclusions:

- Monitoring and evaluation of CHIPPS activities has been weak. Especially for training activities, effectiveness cannot be assessed.
- A heavy burden of routine reporting for Pusat prevents provinces from introducing new reports for monitoring purposes.
- Analyses of cost-effectiveness of activities have not been incorporated in the design and evaluation processes.

Recommendations:

- USAID, DepKes and each KanWil/Dinas should arrange to strengthen the monitoring and evaluation components of all activities.
- DepKes should reduce the routine reporting burden it imposes on all levels of the health system (especially the health centers) and encourage provinces to develop reporting mechanisms to monitor performance of innovative activities.
- Cost effectiveness (efficiency) analyses should be done as described in the CHIPPS Project Paper.

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### 3. THE DECENTRALIZATION PROCESS

#### Conclusions:

- The LTCs and STCs facilitated the decentralization process in Aceh and SumBar by providing technical and motivational support to the local officers.
- Central units have strengthened the decentralization process by providing technical support to peripheral units.
- Decentralization requires financial flexibility.
- SPK and COME field training are important for decentralization.

#### Recommendations:

- DepKes units must concentrate on providing policy and technical guidance to the provinces to support decentralization.
- CHIPPS should be used during the next two years to strengthen planning and managerial skills in the three provinces to support decentralization, including SPK and COME.
- Greater effort must be taken to involve kabupaten and kecamatan-level persons and organization in planning CHIPPS activities.
- Province and kabupaten-level officials must mobilize local financial resources to support decentralized health services.

#### 4. RELATIONSHIP TO NATIONAL PROGRAMS & PRIORITIES

##### Conclusions:

- Most of the CHIPPS reviewed activities by the evaluation team were very supportive of national program objectives, e.g. child survival, PosYandu, immunization and nutrition.
- Epidemiologic surveys have provided valuable information for provincial and national -level health planners.
- Some national programs received little or no attention from CHIPPS, e.g. diarrheal disease control, environmental sanitation, and maternal health.
- CHIPPS activities have not conflicted with national health policies, programs and goals. Quite the opposite, they enhanced the performance of many national programs in each province of some programs nation-wide.
- Focus on PosYandu has stimulated cooperation and some integration among units within province health offices, (e.g., KanWil/Dinas).

##### Recommendations:

- DepKes departments should take a careful look at what the CHIPPS provinces are doing with respect to their national programs, and provide feedback and support as appropriate.
- Since the province initiatives have strengthened performance of national programs, DepKes should explicitly encourage provinces to take more initiative.

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- Because province innovations might modify implementation approaches for national programs, DepKes should be prepared to accept such digressions as long as results are obtained. DepKes should judge provinces on "outputs" performance and not on "inputs".

## 5. PROGRAM MANAGEMENT

### Conclusions:

#### a. Province Structure

- Each province has made appropriate structural/organizational arrangements for managing CHIPPS (NTT - Pokja/Satgas, Aceh-Coordinator, SumBar-Unit heads)

#### b. Province PimPro

- Province PimPro's have played major supportive roles initiating and administering project activities. Their involvement in CHIPPS has strengthened the influence of their KanWil planning units generally.

#### c. Long-term consultants

- The LTCs to KanWil/Dinas in Aceh and SumBar made major contributions to CHIPPS performance and had major influence on its character and priorities in each province. A great deal of "technology" was transferred and confidence gained.
- The role of LTC is difficult. The institutions must be prepared to use their skills. The LTCs must be sensitive to the needs of their counterparts, and yet not hesitate to take initiatives.
- An important task of the current LTCs in those provinces is now to assist with consolidating gains made to date.

d. Budget and Financial Constraints

- The availability of extra-budgetary, discretionary CHIPPS funds has enabled the three provinces to demonstrate that they can perform decentralized health services delivery problem identification, planning and implementation. Regular budget constraints have not permitted them to do that.
- Major local discretionary authority over budgets and access to local resources are pre-requisites for real decentralized health services delivery. National goals and targets cannot be attained and sustained without both.

e. Pusat Structure

- DepKes officials are familiar with the CHIPPS objectives and concept but not with its performance with respect to their own programs.

f. Pusat Structure

- The CHIPPS PimPro has played an important role.

Recommendations:

a. Province Structure

- DepKes, with the three provinces should analyze the experiences of the three arrangements to derive lessons which may be useful generally to management of decentralized health services delivery.

b. Province PimPro's

- USAID and DepKes should consider providing technical assistance to the PimPro to strengthen their planning and management capabilities.

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c. Long-term consultants

- The LTCs should continue to assist the provinces until CHIPPS terminates, but focus increasingly on deepening and extending skills throughout the province health system to assure that gains made will be sustained. NTT should consider carefully whether to seek a LTC (US or Indonesian) to assist with that objective.

d. Budget and Financial Constraints

- DepKes, USAID and BAPPENAS should conduct a careful analysis of the relative impacts which CHIPPS grant funds and regular DIP have made on decentralization in each province and then recommend concrete changes to the DUP/DIP process to support decentralization.

e. Pusat Structure

- The team recommends that DepKes form a CHIPPS advisory group (informal) composed of senior members of each unit concerned with CHIPPS activities to exchange information with the DepKes PimPro.

f. Pusat PimPro.

- The PimPro should assume more technical responsibility.

6. CHIPPS IMPACT ON THE COMMUNITY

Conclusions:

- CHIPPS has generated valuable "lessons learned" about community participation in health services delivery, including its limitations (e.g. ability of kaders to perform technical function).
- Mobilization of effective community participation required a major investment in training, supervision and follow-up.

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Recommendations:

- CHIPPS and DepKes should continue efforts to strengthen the working relationships between health services delivery program and community organizations and strengthened the capabilities of the latter.
- Despite the above recommendation, DepKes and USAID should consider carefully the problem of sustaining support for community-based organization after AID CHIPPS funding terminates.

7. LINKAGES WITH OTHER HEALTH PROGRAM & SECTORS

Conclusions:

- Persons responsible for CHIPPS activities sought and obtained essential inputs from appropriate program and sectors when necessary. They were notably successful in obtaining active political/motivational support from local government authorities (Bupati's and Camat's).

Recommendations:

- KanWil/Dinas should strengthen relationships with BAPPEDA'S in order to obtain APBD budget for health services.

8. COST EFFECTIVENESS

Conclusions:

- Cost effectiveness/efficiency analysis has been neglected in CHIPPS implementation. Consequently, CHIPPS implementors cannot demonstrate to provincial and central-level planners that they are using resources more efficiently than before CHIPPS began. This is unfortunate in view of the very high priority now placed on that subject.

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Recommendations:

- Each province should pursue cost-effectiveness/efficiency analyses as part of CHIPPS activities as described in the Project Paper. CHIPPS managers should consult with DepKes and BAPPENAS to determine what kind of analyses would be most important.
- The final CHIPPS evaluation should look closely at this subject.

9. DISSEMINATION OF RESULTS

Conclusions:

- Very little information about the process, results and problems of CHIPPS activities has been disseminated outside of each province. Consequently, its experiences are not being used by planners of similar or related programs.

Recommendations:

- Methods should be developed to share CHIPPS experiences and lessons with appropriate persons and organizations.

10. INSTITUTIONALIZATION

Conclusions:

- Capabilities in some areas (problem identification, community involvement, planning) are spreading throughout the provinces and thus becoming institutionalized. Other skills, such as monitoring and evaluation and data analyses, need continued attention.
- Low-cost activities will have a better chance of being institutionalized than high-cost activities. Institutionalization prospects are greatly enhanced when activities gain access to local financial resources.

Recommendations:

- CHIPPS should strengthen skills required to institutionalize the "CHIPPS approach".
- CHIPPS should focus on identifying low-cost activities for which institutionalization prospects will be highest and seek local resources for their recurrent costs.
- Technology transfer should continue to be stressed, especially to kabupaten and kecamatan levels. Use of Indonesian consultants could be increased.

11. IMPLICATIONS FOR PELITA V

Conclusions:

- Decentralization of government health services to the province. The three CHIPPS provinces are making important progress to prepare themselves for that responsibility by strengthening their human resource, technological, information and organizational capabilities through CHIPPS.
- Efficient use of national resources. The CHIPPS provinces are making progress toward this goal through application of the "four-step problem solving process". They are improving effectiveness by targeting interventions more precisely. In information, drug management improvements will yield major gains in efficiency.
- Child survival and quality of life. The CHIPPS support has helped the three provinces strengthen their capabilities to make substantial progress toward these goals during Pelita V.

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Recommendations:

- Health sector planning for Pelita V should take into account what the three CHIPPS provinces have done as a guide to what can be accomplished nation-wide during Pelita V.

12. IMPLICATIONS FOR USAID - 1989 TO 1993

Conclusions:

- CHIPPS is generating substantial information about health services delivery issues in which can guide USAID health sector program planning.
- CHIPPS has demonstrated that province health departments can respond well to opportunities to enhance their performance.
- The CHIPPS provinces will require continued opportunities to apply their new skills to consolidate the gains made.

Recommendations:

- USAID should maximize the benefits of the CHIPPS experience by 1) drawing lessons from it for future programs, and 2) continuing the project support in the three provinces as long as possible, but at decreasing input levels. LTCs should not be continued beyond 1989.

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GLOSSARY

ACR	Activity Completion Report
APBD I	Provincial Budget
APBD II	Kabupaten Budget
APBN	National Budget
ARI	Acute Respiratory Infection
BAPPEDA	Regional Planning Board
BAPPENAS	National Planning Board
Bidan	Midwife
BINKESMAS	Community Health Services
BKKBN	Family Planning Coordination Board for Private Voluntary
BMC	Supplementary Food
Bupati	Head of Kabupaten
Camat	Head of Kecamatan
CDC	Communicable Disease Control
CHIPPS	Comprehensive Health Improvement Program-Province Specific
CHS	Consortium for Health Sciences
COME	Community Oriented Medical Education
DepKes	Department of Health
Desa	Village
D.I. Aceh	Daerah Istimewa Aceh
Dinas Kesehatan	Office of Provincial Health Service Implementation
DoKabu	Head of Kabupaten Government Health Service
Dukun Bayi	Traditional Birth Attendant
DUP/DIP	Budget and Programming System (Requested/Approved)
EPI	Expanded Program on Immunization
FETP	Field Epidemiology Training Program
FKM	Faculty of Public Health, University of Indonesia
Gizi	Nutrition
GOI	Government of Indonesia

HIS	Health Information System
HTRD	Health Training Research and Development Project
IDRC	International Development Research Center
IFY	Indonesian Fiscal Year
IHS	Integrated Health Services
IMR	Infant Mortality Rate
INPRES	"Presidential" Funds (sent directly to local implementation unit)
Kabupaten	Regency (Sub-Provincial Administrative Unit)
Kader	Village Level Volunteer
KanWil Kesehatan	Office of Provincial Representatives of Ministry of Health
Kecamatan	Sub-Regency Administrative Unit
Kepala	Head (abbr. Ka)
Kotamadya	Municipalities
LitBangKes	National Institute Health Research and Development
LTC	Long-Term consultant
MCH	Mother-Child Health
MOE	Ministry of Education
MOF	Ministry of Finance
MOH	Ministry of Health
NAMRU	US Naval Medical Research Unit
NGO	Non-Government Organization
NTT	Nusa Tenggara Timur
O/PH	Office of Population and Health (USAID)
ORS	Oral Rehydration Solution
PIL	Project Implementation Letter
PimPro	Project Director
PIU	Project Implementation Unit
PKK	Pendidikan Kesejahteraan Keluarga (Family Welfare Movement through Village Women)
PLKB	Family Planning Extension Worker
POKJA	Working Group
POLI	Potential for Organizational Learning Index

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POM	Food and Drug Control Office
PosYandu	Integrated Services Post
P2M	Communicable Disease Control
P3M	Centers for Communicable Disease Control
Pusat	Central Government Level
PusDikLat	Center for In-service Training
PusDikNaKes	Center for Preservice Education
PusKesMas	Community Health Center
PVO	Private Voluntary Organization
Repelita	Five Year Plan
RaKerKesDa	Provincial Health Conference
RaKerKesNas	National Health Conference
SID	Village Information System
SIK	Health Information System
SPK	Sekolah Perawat Kesehatan (Nursing School)
STC	Short Term Consultant
SumBar	Sumatera Barat
TB	Tuberculosis
TBA	Traditional Birth Attendant
TOTCA	Training of Trainers cum Change-Agents
TT	Tetanus Toxoid
UNDP	United Nations Development Program
UNICEF	United Nations Children Fund
UPGK	Family Nutrition Improvement Program
USAID/I	United States Agency of International Development/Indonesia
WHO	World Health Organization
YanKesMas	Department of Community Health Service
YIS	Yayasan Indonesia Sejahtera (Foundation for Indonesian Welfare)

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## I. INTRODUCTION

### A. Project Background

The best way to convey accurately the rationale for CHIPPS is to refer to the description included in the Project Paper. It is, therefore, quoted below.

"The health status of much of the rural population of Indonesia is considerably below the standards desired by the Government. Strong efforts have been made by the Department of Health to improve the situation through expansion of preventive and curative health services. Those measures, combined with overall economic and social development, will make an impact over time. However, the Government wants to accelerate the pace of health improvement having set ambitious goals for itself by the year 2000.

"Because the country is so large and so dispersed it is very difficult for central agencies in Jakarta to work intensively with each Province or to give special attention to a few. Responsibility for sector program execution is therefore delegated to the provinces to do the best they can with the resources received from Jakarta and those they can obtain locally. Given their limited manpower and financial resources, most provinces, have been severely handicapped in dealing effectively with their priority health sector problems.

"This Project was developed to accelerate and intensify the upgrading of the health sector services delivery systems of three provinces to enable them to increase the pace of health status improvement of their populations. Through a problem solving approach that will increase the capability of provincial health officials to improve the targeting, operation and evaluation of specific health/nutrition activities, it will be seen whether demonstrable change can be achieved by focusing on several key constraints and priority health problems such as maternal and child health and nutrition.

"The Project will address essentially two major constraints confronting these three provinces : a) inadequate quantity of paramedical personnel serving in the rural health centers and interfacing with the communities (especially the primary health nurse) and b) poor quality of services delivered due to inadequate budgets, training, information, planning, implementation and motivation. Although there are considerable geographic, economic and ethnic differences between the three provinces, differences in their health problems are a matter of degree rather than of kind. Therefore, even though the Project content for each Province is Province-Specific, having been developed through intensive discussion and analysis in each Province, the components are very similar in each." (CHIPPS Project Paper, September 1981).

USAID worked closely with MOH officials in Jakarta and in the three provinces selected by the GOI to participate (DI Aceh, Nusa Tenggara Timur and West Sumatera) to develop concrete proposals for project support. AID agreed to provide a \$9.0 million loan to finance technical and operational support focused on manpower development and field trials of province-specific health interventions (health systems development). The former has concentrated on nurses, rural sanitarians, laboratory technicians, village health volunteers, medical students (community medicine), health center doctors and staff and provincial and kabupaten health officials.

The health system development component concentrated on the identification and solution of priority health problems affecting the province by applying a four-step problem solving approach including problem identification, planning, implementation and monitoring and evaluation. The "CHIPPS approach" was based heavily on epidemiological methods.

The project was authorized by AID in September 1981. Following a slow start, \$3 million was converted from loan to grant, providing greater flexibility and speed to disbursements and use of funds because grant funds were outside the GOI budget. In 1985 AID extended the project two years to September 1989 and added \$2.0 million of grant funds.

Each province was to have a long term consultant (LTC). Their recruitment and posting was delayed and they were not in place until August 1983 (Aceh), February 1984 (NTT) and August 1984 (West Sumatera). The Aceh LTC remained until September 1987 and is being replaced by another. The first NTT LTC departed in January 1986 and his replacement served from May 1986 until July 1987. In West Sumatera the first LTC departed December 1986 and his successor will remain for at least another year. Although some activities began before they arrived, initial implementation was delayed because of their late arrivals, especially system development activities.

Two previous evaluations, called "Process Reviews", were conducted of CHIPPS in May 1984 and June 1985. The first review found that CHIPPS implementation was well underway in Aceh, but just beginning in the other two provinces. The team identified the following problems:

- 1). difficulty of reorienting officials to the CHIPPS approach;
- 2). implementation units at province and central levels were not functioning;
- 3). insufficient attention to process factors;
- 4) lack of process indicators to measure performance;
- 5) unclear proposal and reporting procedures; and
- 6) rigid planning process.

They made a set of recommendations to deal with the problems identified.

The second review found that virtually all of the activities agreed to by the GOI and AID in 1981 had been or were being carried out. It focused on how well the problem solving approach was understood, practiced and being institutionalized. The team made a number of

recommendations to address problems identified, including the following :

- 1). appoint a facilitator in MOH to focus on institutionalization and process issues;
- 2) publicize CHIPPS results;
- 3) emphasize institutionalization of the CHIPPS approach;
- 4) include kabupatens in planning and coordinate among activity managers;
- 5) appoint Indonesian LTCs in each province to work on task analysis training;
- 6) conduct studies on economic implications of CHIPPS;
- 7) evaluate nurse training activities and problems of posting graduates.

## B. Objectives, Methodology, and Evaluation Team

### 1. Objectives of the Evaluation

The primary purpose of this evaluation was to assess performance, strengths and weaknesses of in the current CHIPPS project in each of the three provinces, and recommend changes which would enhance achievement of its objectives during the remaining two years.

The specific objectives of the evaluation were as follows:

1. To examine the extent to which the four step process of problem identification, planning, implementation, and monitoring and evaluation was followed for selected activities in each province, and to identify areas for further improvement or change.
2. To evaluate the relationship between CHIPPS activities in each province to national programs and priorities, and the extent to which CHIPPS has contributed or detracted from those national programs.
3. To assess the degree to which the CHIPPS four-step process and approach has been institutionalized in each province, by evaluating the prospects for sustainability and replicability of selected activities in each province, after CHIPPS.
4. To examine the lessons that the CHIPPS experience has provided to the issue of decentralization.
5. To develop a set of recommendations for the remaining period of CHIPPS, focusing on areas that need strengthening or suggestions for change.

### 2. Methodology:

#### a. Preparation:

During the orientation of the evaluation team members to the objectives of this evaluation, a meeting was held on September 7 at the Ministry of Health (MOH), chaired by Dr. Soeyono Yahya, Director General of BinKesMas. This meeting was particularly valuable in clarifying what the MOH hoped to learn from the evaluation. Subsequently, meetings were held with officials from the Office of Population and Health and the Program Office at USAID, as well as with the USAID Mission Director, to discuss the aims of the evaluation.

The evaluation team considered the comments and suggestions offered by both the MOH and USAID carefully as it developed a specific plan for information gathering. A type of "questionnaire" was created to assure that the necessary information would be obtained, specifically with regard to the questions that had been posed to the team (Appendix 1). The questionnaire was used by team members during interviews with provincial staff concerning specific CHIPPS activities.

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Prior to the team's own preparatory work, USAID had provided a list of suggested activities for review in each province. Due to the limited time that could be spent in each province, it was necessary to focus attention on just a selection of activities. The activities suggested by USAID were those which had received significant project support. The team added additional activities to this recommended list. Most of the additions represented the team's desire to examine some activities across all three provinces. Examples include drug management and birth and death recording and reporting. On arrival at each province, additions or deletions were made from the planned list in response to comments received from the provincial health personnel. The activities which were reviewed in each province are listed in Table 1.

b. Provincial Visits

The dates spent in each of the three provinces were as follows : NTT, September 11 to 16; DI Aceh, September 17 to 22; and Sumatera Barat, September 23 to 26. (The team's visit to Sumatera Barat was unfortunately reduced by one day due to the cancellation of a scheduled flight).

In each province, the team made a courtesy call to the head of KanWil/Dinas. This was followed by a presentation by the local PimPro of the CHIPPS activities, and a discussion of the team's schedule and choice of activities for review.

To conduct interviews with provincial staff, the team broke into groups of two or three persons. The persons interviewed in each province are listed in Appendix 2. Interviews usually lasted three to four hours, and followed the format developed in the "questionnaire". Very often, provincial staff had prepared reports or other materials for the teams review. The interviews were particularly useful in going beyond the question of what was done, to questions of how, why, and by whom. Afterward, written summaries were prepared by team members for each activity. These summaries were given to USAID and the Ministry of Health.

The purpose of the interviews was not to critically evaluate the merits or achievements of each activity, but rather to use these activities as examples of how the CHIPPS four step process was being practiced, and to learn as much as possible about the broader issues of decentralization, sustainability, institutionalization, and so forth. The team is aware of the limited nature of its fact-finding efforts and that, as a result, some of the accomplishments or problems associated with specific activities may have been overlooked.

In addition to these activity-specific interviews, discussions also were held with the long-term consultants in Sumatera Barat and Aceh, and with the governor and the head of PKK in NTT.

Discussions also were held in each province with key managerial personnel, on more general issues of program management and plans for the next two years. Finally, a brief presentation was made to the

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KanWil/Dinas staff of the team's preliminary findings, with an opportunity for reaction and feedback, before leaving each province.

c. Interviews in Jakarta

After returning from the field, the evaluation team met with several key personnel at the pusat level. These meetings were intended to obtain their opinions and reactions on what the three provinces were doing under CHIPPS. These persons were: dr. S. Gunawan, MOH/CDC, regarding immunization activities; dr. Sonya Purnomo, MOH, regarding community participation and PosYandu; Sdr. Soetikno, PusDikNaKes, regarding SPK training; Sdr. Ignatius Tarwotjo, MOH/Directorate of Nutrition, regarding nutrition programs; Dr. Soekirman, BAPPENAS, regarding Pelita V and financial arrangements to support decentralization; and Dr. Selamat Soesilo and Matilda Johann, MOH/Directorate of Drug Control, regarding drug management.

3. Composition of the Evaluation Team:

The evaluation team was led by Robert Pratt, MBA., a development management specialist and USAID consultant (Development Alternatives, Inc.), and dr. Soebekti, MPH, USAID consultant facilitator for CHIPPS. Other members of the team were: Udai Pareek, Ph.D, a USAID consultant for organizational development; Mary White, Sc.D, an epidemiologist and USAID consultant (Development Alternatives, Inc.), dr. Soekardjono, MPH, the CHIPPS project manager (PimPro) at the Planning Bureau of the Ministry of Health, Jakarta; Drs. A.M. Meliala, from the Directorate of Communicable Disease Control, Ministry of Health; and Prijono Ashari, SE, from the Directorate of Community Health Services, Ministry of Health. In Sumatera Barat, the team was joined by Azis La Sida, the former CHIPPS PimPro in Jakarta, (currently on long-term training in Manila), and Djohari from the Directorate of Communicable Disease Control, Ministry of Health.

4. Organization of the Report

The main body of the report focuses on the team's assessment of the progress to date. The team decided not to prepare a separate chapter for each province. Instead, attention was focused on the broader issues which spanned all three provinces. These issues are the problem solving process, decentralization, relationship to national programs and priorities, program management, other issues, and the institutionalization process.

Whenever possible, positive and negative examples were taken from each province. The intention of the team was not to compare the three provinces in any respect. To do so would be inappropriate, given the unique characteristics of each.

At the end of each section, conclusions and recommendations for further attention are provided.

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The assessment of current progress is followed by a prospective examination of CHIPPS for each province. Finally, the implications of the team's findings for the future are discussed, both for USAID's country development strategy and for the Ministry of Health's plans for Pelita V.

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TABLE 1

ACTIVITIES SELECTED FOR REVIEW IN EACH PROVINCE

N.T.T.

1. Nutrition/UPGK
2. Nutrition/PKK
3. Epidemiology Training
4. Drug Management
5. PosYandu
6. Malaria Control/Robek
7. Malaria Control/Nangapanda
8. Crash Immunization Program/Manggarai
9. Health Information System (SIK)
10. Nurse Training/SPK

D.I. ACEH

1. Vitamin A & Immunization/Meulaboh
2. PosYandu (Survey)
3. Drug Management
4. Traditional Birth Attendants (Survey)
5. Tetanus Survey and Crash Campaign
6. Village Information System (SID)
7. Tetanus Surveys and Crash Campaigns

SUMATERA BARAT

1. Data Management Training
2. Tetanus Survey and Immunization Campaign
3. Drug Management
4. Community Oriented Medical Education
5. Nurse Training/SPK
6. PosYandu Acceleration
7. T.B. Survey and Control Program
8. Breastfeeding Promotion
9. Recording and Reporting of Vital Statistics

## II. ASSESSMENT OF PROGRESS

### A. The Problem Solving Process

#### 1. Project Objective

The core of the CHIPPS approach is the four-step process of problem identification, planning, implementation, and monitoring and evaluation. This four-step process is certainly not unique to CHIPPS; it merely reflects the principle steps involved in sound planning and management of intervention activities.

Emphasis on four separate steps reflected the underlying objective of CHIPPS, which was to strengthen the capabilities of provincial staff to identify and solve their own health problems. To accomplish this task, and to do it well, provincial staff needed to expand their skills and experiences beyond the mere conduct of activities.

In particular, provincial staff needed to be able to characterize the local health problems and establish priorities for intervention. Planning efforts would make use of the information obtained during the problem identification process. Because planning also would be accomplished at the provincial level, greater opportunities would be available for developing or testing different approaches to deal with local problems. Responsibility for the implementation of programs, designed to solve specific problems, would require careful supervision and monitoring of activities. Evaluation would assist the provincial staff in assessing the success of specific interventions in achieving their objectives, and would provide valuable feedback for replanning efforts. Thus, adherence to the four-step process would help assure that province-specific programs responded to local needs in an efficient and effective manner.

#### 2. Problem Identification

The process of problem identification is the step at which the community health or health service problem is measured, either qualitatively or quantitatively, and its characteristics or determinants described.

To be able to adequately identify health problems at the provincial level and below, both the skills of health personnel to collect and analyze data, as well as the quality of available data, needed to be increased. Toward this end, all three provinces have undertaken measures to train personnel in epidemiology and to develop systems for collecting statistics on births and deaths.

#### a. Vital Statistic Activities

One of the targets of Pelita IV was a reduction in the infant mortality rate, to 70 deaths per 1000 live births by 1989. This target stimulated interest in obtaining accurate IMR statistics at the local level.

The project paper for CHIPPS (September 1981) envisioned that "simple but reasonably accurate vital statistics" systems would be initiated in all three provinces. Although activities have been conducted in all three provinces toward the development of such a system, a workable model has yet to be developed in any province.

In NTT, efforts to develop a system for registering health events began in 1984. Implementation of a trial system was to begin in September 1987. The lengthy process of problem identification and planning revealed the complexity of the existing (and non-functioning) vital registration system, as well as some of the difficulties to be encountered in developing a new system. The planned system is intended to eventually replace the existing system from the Ministry of Interior, and would rely heavily on kaders or other volunteers at the village level. Information to be recorded includes all births, deaths (for all ages), and symptoms/signs of cause of death. No financial incentives for reporting would be used.

In Aceh, a trial village information system was initiated in 1984, but the implementation of the system has suffered from a variety of problems. The trial system was to operate independently of the vital registration system of the Ministry of Interior. Although recommendations have been developed for improvements, the future of this system is still in question. One important problem has involved financial incentives, which were paid to village-level persons to report events to the Puskesmas, and to Puskesmas staff to visit households for additional information. The financial arrangements for this system created "misunderstandings" at the provincial level, and threatened the sustainability of the system after CHIPPS.

In Meulaboh, West Aceh, a different vital registration system was begun as part of a double intervention program for Vitamin A and immunizations. This system was more successful, largely due to the considerable input of outside consultants, who could closely monitor its operation, and a system of financial payments. This arrangement was never designed to be maintained after the completion of the intervention program. Although the DoKabu would like the system to be continued, it seems unlikely that it could be, after financial and consultant support is withdrawn.

In West Sumatera, a trial system was initiated which would supplement, but not replace, the existing vital registration system. Under-reporting was a major problem, and after one year, the system had ceased to operate in all but a few villages. Plans are being developed for a revised system to be tried in a separate area, but the future of this activity is also somewhat uncertain.

Other efforts have also been made to measure birth and death rates in West Sumatera. One kabupaten (Pesisir Selatan) conducted a population census to obtain its own estimates of infant mortality. This activity was funded entirely by the kabupaten. As part of PosYandu

activities, the PKK is developing a recording and reporting system for births and deaths. To date, the potential for this system to provide useful information for the health centers has yet to be realized. Both of these efforts highlight the perceived importance of information on births and deaths to health personnel at the sub-provincial level.

b. Epidemiology Training

Another aspect of strengthening the capability of persons within each province to identify problems is training in the technical and analytical skills necessary to make optimal use of routine data. Such training has been developed and implemented in each province, but in slightly different ways. Currently, all provinces are emphasizing the training of PusKesMas-level staff. Training includes the concept of local area monitoring.

Training of PusKesMas-level staff focuses on the analysis and use of data which is routinely collected at that level. We did not critically evaluate the content of the training curriculum being used in each province, and none of the provinces has conducted formal evaluations of its training program. On the basis of informal observations, provincial level staff often remarked that the PusKesMas-level staff are making use of these new skills.

It may be too early to assess the impact of this training in each province. One potential problem may be the high turn-over of PusKesMas doctors. To address this problem, efforts in NTT have recently focused on the training of nursing staff in epidemiologic skills.

c. Epidemiological Surveys

For several projects, epidemiologic methods have been used to quantify the magnitude of a particular problem in the province. The epidemiologic methods employed have been primarily descriptive, with major emphasis on measuring health outcomes, such as mortality rates. Only the most basic analytical methods have been utilized, looking at differences in mortality rates between different areas, for example. Even relatively straightforward efforts to obtain simple measurements involve subtleties that may be overlooked by those planning the survey or using its results.

In Aceh, a province-wide neonatal tetanus survey in 1984 found an infant mortality rate of 110/1000 per year and a tetanus neonatal mortality rate of 20.9/1000 per year. In other words, neonatal tetanus accounted for almost 20% of all infant deaths. Prior to the survey, most doctors in Aceh were skeptical about the importance of neonatal tetanus, because few cases were seen in the health centers or hospitals. The survey alerted health planners to the magnitude and relative importance of neonatal tetanus in Aceh.

The survey also attempted to examine other factors that could be related to neonatal tetanus mortality. For instance, neonatal tetanus mortality rates were similar for babies delivered by trained and untrained traditional birth attendants.

The survey also examined the proportion of women receiving pre-natal care, umbilical cord treatment, and other factors. These analyses were simple but informative. As a result of this survey, a TT crash campaign for women of reproductive age was launched in two kabupatens with high neonatal tetanus mortality rates.

In Sumatera Barat, a province-wide survey was conducted on the prevalence of pulmonary tuberculosis in 1984/85. Before this survey, no data was available on the prevalence of TB in this province. Among persons aged 15 years and older, the prevalence of tuberculous (positive sputum smears) was measured as 5.3/1000. The prevalence was slightly higher for males than for female, and highest for those aged 45-65. Because this survey was province-wide, prevalence figures could be calculated for different regions. The highest prevalence (18.0/1000) was in kabupaten Pesisir Selatan. This kabupaten later was targeted for a special TB control program.

In reviewing several of the epidemiologic surveys that had been conducted, the team found several instances of inappropriate use of sampling methods to calculate rates for sub-samples, incorrect calculations of confidence intervals, and other technical problems. Although these concerns were not found to be important for these activities reviewed, the potential was identified for serious misinterpretations of data, should these same problems occur in different settings. Of particular concern was the possibility that sampling bias or statistical imprecision could create spurious differences in rates, which then would be used to target activities to the wrong groups. Quite obviously, the value of epidemiologic information to lead to more efficient utilization of scarce resources is lost if the data or their interpretation is incorrect.

On some occasions, special surveys were conducted, but planning for the activity began before the survey results were available. In NTT, this occurred with regard to both the nutrition and crash tetanus toxoid programs. In both instances, the people involved in planning the intervention were different from those conducting the survey. This lack of coordination of efforts made the survey findings irrelevant to the intervention activities.

d. Other Methods for Problem Identification

In many instances, smaller efforts or less sophisticated problem identification techniques may be sufficient. For example, in NTT, the Family Welfare Movement (PKK) wanted to learn about the reasons for participation, or non participation, by village volunteers and mothers,

in existing village-level nutritional activities. To do this, interviews were conducted with village volunteers, mothers of young children, PKK persons at the village level, village officials, and Puskesmas staff. The information obtained was qualitative in nature and indicated several factors which were probably responsible for low participation, such as low income, low awareness about the importance of nutrition, lack of education, and so forth. Much of this information was used to develop training materials which reflected the conditions within the villages. Outside consultants provided assistance in this effort. Greater input would have been necessary for a more rigorous study, but the contribution of such results to the planning of training efforts might not have been substantially better.

The usefulness of going through the problem identification step is not always recognized, especially if the problem in question is not a particular disease. For instance, in Aceh, interest existed in establishing a system for collecting information about births and deaths at the village level. It was widely recognized that the current vital registration system did not provide useful information on birth and death rates. From this point of departure, plans were developed for a different reporting system.

Problem identification should be more than a personal recognition that a problem exists; it should involve some characterization of the problem and its potential determinants. In this case, the planning for this activity might have benefited from a better understanding of the existing vital registration system and the reasons for its failure. Some of the recommendations being made now, after the trial system has stalled, might have been included in the initial plans, if the problem identification step had not been skipped. In particular, intersectoral involvement with BKKBN, the Ministry of the Interior, the Bureau of Statistics and others might have been initiated much earlier.

In Sumatera Barat, the problem with drug management seemed obvious enough; the province had received complaints about inadequate supplies, expired drugs, delivery of the wrong drugs, etc. As a result of their experience, KanWil POM concluded that the problem was supply management, and proceeded to design workshops for physicians and pharmacists at the province, kabupaten and Puskesmas level.

Another approach would have been to investigate the reasons for the apparent problems in drug supply, in a more systematic way. The current assumption seems to be that supply management is more important than prescribing practices, so that some health personnel who distribute drugs (nurses and paramedics) are not included in the training. Without better information, there is a risk that the training will not address the most important aspects of the problem. Moreover, progress in drug management will be difficult to assess, because no baseline measures exist.

Conclusions:

1. The value of good information on birth and death rates, and in particular, infant mortality rates, is well recognized. The experiences of NTT, Aceh, and West Sumatera to develop new or improved vital registration systems have revealed the tremendous complexity of this issue and the various obstacles to the implementation of a workable and sustainable system.
2. The close relationship between problem identification and epidemiological methods has strengthened provincial staff capabilities in both areas.
3. Current efforts at providing epidemiology training to persons at the kabupaten and Puskesmas levels, in all three provinces, should further institutionalize the problem identification process.
4. The assistance of outside experts in the development and design of certain problem identification efforts is likely to be a continuing need. Progress has already been made in identifying persons within Indonesia who can meet this need.

Recommendations:

1. A need exists to broaden problem identification skills to address problems which are not disease-specific. The "epidemiologic" approach to problem identification should be generalized and applied to other problems, such as health systems management.
2. In addition, the process of problem identification should be expanded to encourage the use of other methodologies and approaches, such as anthropology and sociology, as appropriate.
3. Expert review panels might be established within each province, utilizing the talents of persons from the government, universities, or other sectors. The assistance provided by these experts should be guidance and consultation only, while the major responsibility for conducting these activities needs to lie with the local staff.
4. The people who have been involved in vital statistics activities in each province might benefit from learning about the experiences and lessons gained from the other provinces perhaps through a CHIPPS-sponsored workshop.
5. Finally, efforts should be made to further consolidate and strengthen the development of problem identification skills at all levels. Continuing educational opportunities for those who have received some training should be provided. In addition, epidemiologic techniques for analyzing a problem, not just describing it, need to be promoted in such education efforts.

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### 3. Planning

Planning is the process by which methods to address specific problems are developed, and available resources identified. If health programs are to be effective, the planning should be aimed at achieving specific objectives, not just at conducting certain activities. Because these objectives should be tied to specific health problems, the planning process is strengthened by good problem identification. In addition, methods for monitoring and evaluation, as well as for implementation, should be included in the planning process.

#### Findings:

We found that planning was generally satisfactory for carrying out the specific CHIPPS activities on an annual basis. Often the planning process was enhanced by the contributions of persons or organizations outside of the government health system.

For example, in NTT, the Robek Malaria activity was well planned. Planning was done at the kabupaten with input from NAMRU, whose previous work had led to this activity, and the kabupaten PKK. Planning took place over one year. It appears that all key factors were well planned--supplies, manpower, training, supervision, funds and community participation (except that the control comparison did not work out) because implementation proceeded smoothly. However, the kabupaten was assisted greatly from close NAMRU involvement.

In Sumatera Barat, the COME activity was very well planned. The objective was to provide realistic community-based field training for medical students as preparation for effective performance as Puskesmas doctors. The activity assisted with curriculum adjustments, COME teaching module, faculty training and field training of students.

Following problem-identification the medical school staff took several preparatory fact-finding steps which facilitated subsequent planning. These included consultation with other medical schools which had already undertaken COME activities and with YIS to determine location of activities. They then reached agreement with KanWil/Dinas Kesehatan and PemDa (local government) regarding respective responsibilities for each party, in return for benefits which each group foresaw from the activity. The medical school also sought and received technical inputs from the following groups: IDRC, YIS, other medical schools, CHS and FKMM. Specific planning activities included: 1) establishment of liaison between the medical school and KanWil/Dinas Kesehatan; 2) establishment of an executive unit for field training; 3) formulation of curriculum; 4) development of community oriented teaching module; 5) selection of field practice areas; and 6) preparation of annual plans for field activities.

The activity was planned very thoroughly with special attention paid to obtaining inputs from prior experiences of others and to coordination with the two key groups concerned--KanWil/Dinas and PemDa. CHIPPS PimPro also played an active role. Implementation experience has

revealed, however, that several factors were not attended to in the initial planning: 1) integration of all relevant medical school departments in the activity; 2) development of a methodology to evaluate students' abilities following training; and 3) how to finance the program after CHIPPS.

Planning for the Tetanus Toxoid and Measles Crash Program in kabupaten Manggarai, NTT, was also well done. It was a pilot project in two kecamatans to determine the effect of strong community participation on immunization coverage rates. Immunization was done in two cycles and was targeted on women of reproductive age (TT), primary school students (TT) and children under age five (measles).

The activity was done at the initiative of the Province level PKK, following consultation with the kabupaten officials. The kabupaten government planned the program jointly with the PKK. The KanWil/Dinas Health staff only provided technical guidance and the PimPro was not involved in the planning. All inputs were anticipated and provided for including the immunization materials (from DIP) and vaccinators as well as for the community mobilization and all logistical and training requirements. The latter consisted of organizing a kabupaten-level team (Tim Sukses Kabupaten) headed by the Bupati, with four vice-chairs, two secretaries, DoKabu, head of PKK and 15 members of various departments of the kabupaten government. Each kecamatan formed a similar team (Tim Sukses Kecamatan) responsible for actually conducting the program. These teams were headed by the Camat, with three vice-chairs (military, police and PKK). The head of PusKesMas was secretary. Members included persons from the religious community and information office.

The planning was very thorough, as reflected by the results - (96% to 100% coverage), and the experience demonstrated that a crash program, with careful planning, substantial resources and heavy involvement of local government authorities, can achieve extremely high immunization coverage.

The planning process should also consider over all health objectives. For the Manggarai crash immunization program, the initiative and planning was essentially external to the provincial-level KanWil/Dinas immunization program (EPI), and no provision was made to replicate the effort as such, or in modified form. The crash program itself was very well planned to accomplish its own specific targets, but planning did not look beyond that crash program toward achieving similar results on a broader scale. The costs, in terms of funds, time and energy were very high and cannot be met routinely.

The potential effectiveness of particular activities is diminished when planners do not set performance targets nor develop longer-term plans for reaching them. In Sumatera Barat, Planning for the Drug Management activity provided all of the required inputs for a series of workshops but did not go beyond that minimum requirement. The objective was to improve drug management, i.e., reduce the imbalance

between supply and demand. The activity has consisted of two stages to date: 1) two-week workshop of 40 province and kabupaten-level participants (July 1986) and 2) two series of 5 two-day workshops of 50 PusKesMas staff (doctor and one staff) from all PusKesMas. A third stage workshop will be held February 1988.

The planning process followed was appropriate for designing a series of workshops to increase awareness of the problems that had been identified. The previous Aceh workshop experience was used, all concerned groups in SumBar were consulted, and outside expert consultants provided their assistance. However, the planning did not go beyond that - a series of workshops. In large part because the problems have not been thoroughly examined and defined, the planning has also not been sharply focused. In fact, the workshop training appears to be focused more on the symptom of a problem, drug shortfalls and excesses, than on the causes, e.g., health professionals' lack of understanding of basic pharmacology and appropriate drug therapy.

Good planning will maximize the potential contribution of available resources. The Tetanus Crash Program in Aceh provides a good example of sound planning. Following a province-wide survey, crash programs were planned for Pidie Kabupaten (1985) and Aceh Utara (1986) to provide tetanus toxoid (TT1 and 2) for women aged 10-45 in Pidie and Aceh Utara, plus measles for children under age five in Aceh Utara. The crash program approach was chosen because coverage by routine immunization was considered inadequate and prospects for significant expansion too slow.

The initiative for the program came from the province KanWil/Dinas staff with support from consultants and Pusat experts who had assisted with the survey. Planning was done by a KanWil/Dinas committee. Preparation included sending two persons to NTB to learn how a similar program was conducted there. The team enlisted participation of the kabupaten religious leaders (ulama) and PKK to motivate the community, and schools to educate children about immunization. Vaccinators were recruited from among recent, but still unemployed, SPK nursing graduates. Vaccines were provided by DepKes.

The planning anticipated all requirements for the two crash programs. It was done by the Provincial health system with active participation of kabupaten and kecamatan health, local government and community groups. In large part because the crash programs were initiated and planned entirely by the provincial KanWil/Dinas, with outside assistance, they feel the programs are a part of their own overall immunization program. As such, they arranged to analyze their cost effectiveness and plan to continue to use the approach in the future.

In contrast, poor planning can be very costly, both in terms of time and limited resources. The Dukun Bayi (TBA) survey in Aceh did not yield usable findings, due in part, at least, to inadequate planning. A survey of knowledge and practices of TBA's was conducted in nine

Kecamatan in March, 1987 followed by a workshop in September, 1987 to discuss the findings. The objective was to determine if differences of TBA knowledge and practices were correlated with different tetanus prevalence rates. A survey based on a questionnaire was conducted to determine TBA knowledge, and observations of TBAs at work were conducted to assess their practices.

The survey was carefully designed, selecting sites in high, medium and low prevalence areas, pretesting and revising the questionnaire and involving persons from province, kabupaten and kecamatan. However, the results showed no knowledge difference between trained and untrained TBAs, nor between TBAs of high, medium and low prevalence kabupatens. Those findings revealed that training and supervision had been ineffective but did not reveal what the TBAs actually did, or did not do, that contributed to high or low tetanus mortality.

Analysis of the TBA observations conducted as part of the activity was not completed in time for the workshop, so those findings of TBA practices could not be taken into account in planning next steps. Although that problem was identified during the implementation phase, it reveals poor planning in that additional time was not provided for that more complex analysis, and the workshop was not postponed until the analysis was completed.

In NTT, planning for a Birth and Death Registration System trial in NTT encountered serious problems. The objective was to develop and test a system for obtaining reliable information on births, deaths and cause of death. Planning took place during two workshops which followed a problem identification survey in 1984 of 24 villages. A system which emerged from that planning process is to be initiated September 1987.

The first workshop (February 1986) of 18 participants from 12 kabupaten and seven participants from province-level attempted to design a completely new HIS (Health Information System) to remedy the weaknesses of the current system, which is imposed by Pusat. But the draft of the new system was abandoned because it was too complex, and therefore infeasible.

The second workshop (January 1987) was to have evaluated the draft system developed by Workshop I. But since that draft was already abandoned, the 32 Workshop II participants from all province government levels, including two village heads, concentrated on ways to strengthen the existing system. They recommended initiation of a new vital registration system (births, deaths and symptoms of cause of death) which will supplement the regular HIS. The KanWil accepted the recommendation and funds are included in this year's DIP.

The planning process has taken a long time and was not done smoothly. The evaluation team attributes some of the problem, at least, to the limited experience of the province staff with the subject. And

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yet the planners did not seek inputs from outside experts, which CHIPPS could have provided. The planning is following a trial and error approach which is time-consuming, at best. If lessons are learned at each step and used to develop eventually a sound system, then the end result will be worthwhile. But the time and effort lost are not cost-free given the severity of the province's problems and the fact that an opportunity to maximize CHIPPS assistance for further development of the system will be lost.

#### Planning Conclusions

1. CHIPPS activity planners have done a good job of including appropriate interested parties in the planning process, thereby obtaining their inputs and their participation as needed in subsequent implementation.
2. CHIPPS planners have generally made good use of outside expertise to plan activities, such as NAMRU, YIS, FETP, consultants, FKM, etc.
3. Planning for CHIPPS activities has too often been limited to planning a series of discrete events, e.g. survey, workshop, crash program, etc. rather than developing strategies for achieving defined substantive objectives for which the events are inputs in the process. The team recognizes that such short-term planning is caused in part by the uncertainties of short-term funding cycles and the "innovative trials" nature of much of CHIPPS activity.
4. Planning has usually not included planning for monitoring and evaluation. This is largely a result of #3 above.
5. Planning was weaker when problem identification was weak.

#### 4. Implementation

The process of implementation is the execution of planned activities and the supervision of these activities. Implementation is strengthened by thorough planning and concurrent monitoring of activities.

#### Findings

The success of the implementation process is strongly influenced by the quality of the preceding problem identification and planning steps.

In NTT, the problems in drug management were identified as the prescribing practices of PusKesMas heads and supply management. Plans for designing training to address these problems followed. The training consisted of a training course for province and kabupaten level staff (total 30), preparation of an NTT-specific "blue book" of recommended drug therapy for 21 priority diseases for use at PusKesMas;

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training course for 30 PusKesMas heads on therapies, management and recording and reporting. The province currently preparing a "blue book" for hospital use.

Training was quite thorough because both courses were for two weeks. The "blue book" manual, developed following the first course and without CHIPPS funds, was used as a training device at the second course and also sent to each PusKesMas for immediate use. Improvements have already been observed, informally, in terms of drug supplies lasting longer, and a narrower range of drugs being ordered.

The Birth and Death Registration activity in Aceh encountered many problems during implementation. Some of these problems may have been due to weak problem identification and planning. The objective was to provide local information on birth and death rates for children under age five. It was a pilot project in 106 villages consisting of a census done by village heads, death reporting by village heads, verbal autopsies by PusKesMas doctors, birth reporting by Dukun bayi, and follow-up by PusKesMas bidan.

Each participant in the system (village head, doctor, Dukun bayi and bidan) received a payment of between Rp.500.- and Rp.4,000.- for each incident reported. After one year of satisfactory implementation a "misunderstanding" occurred between the province CHIPPS PimPro and Activity Coordinator about payments to the participating PusKesMas doctors. As a result, payment stopped, reporting stopped and the Coordinator withdrew in January 1986. An evaluation in March 1986 identified the following problems: administration of the incentive payments, inadequate supervision of cause-of-death reporting, no use of data by PusKesMas or feedback to PusKesMas, and under-reporting of births and deaths. Since then, payment arrangements were corrected, birth reporting was discontinued, the new PimPro has invited the previous Coordinator to rejoin the Activity, and a seminar was held to discuss plans for a new approach, but no concrete steps have been taken yet. At this point the KanWil/Dinas staff disagree as to whether the reporting system is still operating.

Since this activity was initiated as a pilot project, the team may have been encouraged to take a trial and error approach. The financial incentives provided were not sufficient to effect good performance, and the impact of payment interruption certainly demonstrated a lack of commitment to the activity by the local participants. The KanWil/Dinas staff currently are attempting to modify the design and continue the effort.

Substantial implementation accomplishments can result from a clear perception of what must be done, strong commitment to the intervention by a core group of individuals, and excellent cooperation between those persons acting in private capacities and the official health sector.

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One example is the Breastfeeding promotion activity in Sumatera Barat. Its objective was to increase the practice of breastfeeding to reduce diarrhea prevalence among infants and thereby reduce IMR. The activity consists of introducing "rooming-in" in province hospitals and promoting breastfeeding in the community through Puskesmas staff.

A small core group of breastfeeding advocates (one pediatrician and two nurses, subsequently expanded to eight nurses) initiated "rooming-in" at SumBar's largest hospital, caused the formation of a SumBar chapter of the Indonesia breastfeeding association (BKPP ASI), introduced "rooming-in" in all other province government-run hospitals; trained 80 para-medics and some doctors from the hospitals, some Puskesmas, SPK medical school and nutrition academy teachers and KanWil/Dinas staff. This has all been done between January 1985 and September 1987, with CHIPPS financial support for training and a small amount of short-term consultants, and extensive backing from the KaKanWil, hospital administrators and the Governor's wife. It suggests that similar gains might be made in other fields through similar private-government cooperation.

Implementation also benefits from periodic feedback and replanning. The objective of the Epidemiology Training activity in Aceh was to enable Puskesmas staff to analyze data concerning health problems of their communities and prepare solutions. The activity consists of a series of four annual training courses on epidemiology and management for province, kabupaten and Puskesmas level staff.

The curriculum has been steadily adapted to the needs and capabilities of the participants based on feedback from each preceding course. And province staff have steadily taken on more responsibility for teaching the courses, so that the last course (August 1987) was conducted solely by an Aceh team. Besides province and kabupaten staff, a doctor and nurse from each of 70 Puskesmas have been trained, out a total 134 Puskesmas. Although no formal evaluation of post-training impact has been done, province staff have observed Puskesmas staff application of the training. Another indicator of its perceived value is that the Bupati's and Camat's support the training.

#### Conclusion:

Successful implementation seems to have been determined by the quality of planning that went into each activity and clarity of objectives as understood by the responsible parties. Lack of inputs, such as funds, did not arise as an implementation impediment in our discussions.

## 5. Monitoring and Evaluation

The problem-solving cycle remains incomplete without proper monitoring and evaluation. Monitoring is continuous assessment of the progress of an activity, the problems being faced during the implementation, and alternative actions to ensure that the progress of the activity is smooth. Monitoring is a mechanism of getting continuous feedback for immediate action to achieve the objectives. Evaluation is the periodical (usually at the end) assessment of the results. While monitoring is continuous and focuses on the process of an activity, evaluation is periodical and is preliminarily concerned with the results, including the impact of the activity.

Evaluation needs to be concerned with results in action or impact in the field. For example, evaluation of a training program should be concerned with performance of its participants in their jobs after training (impact) rather than their perception of its usefulness (reaction).

### Findings:

There are some good examples of monitoring and evaluation of CHIPPS activities. In the NTT SPK activity, located in four places, monitoring was done by SPK staff at the Kabupaten level. The experiences and progress were first discussed by the groups concerned, then KanWil staff visited the locations to review progress. Finally, replanning workshops of the staff of the four centers were held for 12 days involving PusDikLat staff from Jakarta.

In the NTT Malaria Control Trial (Robek), impact indicators were used for evaluation (parasite rates among persons attending Puskesmas). Preliminary results showed a drop of parasite rates in the treatment area from 34.8% to 5.1% during a period of 9 months. Several indicators were used for malaria control (smears for malaria parasites, nutritional status of children under age 10, hematocrit analysis, various entomologic data, the number of community members attending meetings, and the number of visits to the health post for medication). Another feature of this evaluation was the planned use of a control or non-treatment village for comparison. Detailed analysis and interpretation of the data were done.

Similarly, in the Aceh Tetanus Crash Campaign, two indicators were used for evaluation: percent of targets that received immunization, and tetanus mortality rates among the infants. These are two good examples of 2-stage impact, impact on the behavior of the population (meetings or immunization), and the impact of that behavior on the desired result (reduction in mortality). For two kabupatens the coverage rates were: TT1 (96% for Pidie and 92.9% for Aceh Utara), TT2 (80% for Pidie and 83.5% for Aceh Utara), and measles (77.2% for Aceh Utara). In this activity evaluation was quite thorough. Using similar methodology a second survey was conducted in Pidie only. Local staff (60 nurses and midwives) were used as interviewers, supervised by FETP students. The data analysis showed a decline in the neonatal mortality due to tetanus from 32.1/1000 (1984) to 4.9/1000 (1987).

In some activities monitoring and evaluation were not properly done. Training activities often omitted this step. For example, in epidemiology training in Aceh, although end-course evaluation was done, and the curriculum was even modified, no systematic monitoring and evaluation of the post-training performance of the course participants was done. There was informal feedback by KanWil/Dinas staff based on their visits. Even if a system of systematic observation of the participants' performance by the Dinas/KanWil staff during their routine visits had been devised and used, it would have served a useful purpose.

Similarly, in SumBar no monitoring and evaluation was done for data management training. Pre- and post-training tests were used, showing improved knowledge and some skill. However, it is not known if these were used in the job, although some informal information indicated that the former participants used their skills. It must be stressed that evaluation of training in terms of participants' reactions to training or their improvement of knowledge has a limited purpose; training also needs to be evaluated in terms of its impact on performance of the participants in the field.

The team was told in Aceh that KanWil/Dinas could not introduce any new reporting systems to monitor Puskesmas and kabupaten trainees' subsequent application of their new skills. They explained that the burden of preparing routine reports required by DepKes was already too great. This could represent a major constraint to developing monitoring and evaluation systems for all CHIPPS activities or for any province-specific initiative.

In SumBar the team was told that the KanWil/Dinas staff could not monitor performance of drug management trainees because of inadequate budget for supervisory field trips. They felt that reports alone would not suffice because the Puskesmas and kabupaten-level staff do not now submit their required routine reports, so they certainly would not submit additional ones. In fact, the drug management training in SumBar includes reporting and recording practices, so the training itself should result in improved monitoring, if KanWil/Dinas staff analyze the reports received.

#### Conclusions:

1. Monitoring and evaluation generally has been weak in most of the CHIPPS activities, particularly in training.
2. Heavy routine pusat reporting requirements will make introduction of new ones for monitoring and evaluation difficult.

#### Recommendations:

1. We recommend short action-oriented workshops in monitoring and evaluation for all three provinces.

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2. All training activities should have enough pre-training work, including monitoring and evaluation design (and information about performance indicators), and post-training monitoring and evaluation. Training activities must budget for these, in the absence of which training may not be effective.

3. The team recommends that the epidemiologic skills that have been developed for problem identification also be applied to the evaluation of activities. This application of epidemiologic methods would provide an opportunity for trained personnel to practice and further develop their skills in epidemiology. In addition, experience in the analytical techniques that are required for evaluation could strengthen the process of problem analysis in the future.

## B. Decentralization Process

### Project Objectives

One major objective of CHIPPS is to acceleration the process of decentralization in health planning and implementation. This is reflected in the very name of the Project, emphasizing its province-specific nature. This objective is shared by the GOI as reflected in a new decree recently issued by the President. We have examined in some details to what extent this objective is being achieved through CHIPPS.

Decentralization has been interpreted in various ways. It essentially is the process of giving, creating, and enabling more autonomy to be exercised by the operating levels in an organization; and in the same measure, of changing control by the central authority from prescription on the one hand to coordination and support on the other. Decentralization is a continuum from complete control to complete autonomy.

Autonomy is primarily in two areas, task and finance. In a decentralized arrangement the central authority lays down the broad policy, leaving to the operating units the work of spelling out the policy into strategy, planning and implementing a program. On the financial side, in a decentralized program, resources are allocated to the operating units, after negotiating their needs and availability of resources, leaving to them the work of preparing the detailed utilization plans.

Decentralization, being a continuum, evolves in stages or phases. The main factor determining the appropriate phase of decentralization is the level of competency of the operating unit(s). Three areas of competency can vary on a continuum, from very low to very high: technical competency (to do the main task), planning competency (preparation of a plan, implementation, and follow-up and evaluation), and human process competency (interest of people, tendency to take responsibility and effective team work). The higher these competencies (or in other words, higher the decentralization capability) of the operating units, the higher should be the stage of decentralization.

Decentralization also increases the responsibility of the central authority, but at a higher level; coordination, networking, resource generation, providing support of skills, etc. The role of the central authority undergoes a change, from regulatory role to coordinating and consulting role.

### Findings:

We found evidence to suggest that the process of decentralization has been progressing in CHIPPS. Several degrees of decentralization were observed during our visits to the three provinces, and are discussed below in terms of specific CHIPPS activities in the three provinces.

The common form of decentralization has been a more active role of the province in health programs. Although several activities were initiated by the Pusat, these were taken over by the province to work out the details for implementation. The goals are given by the Pusat, but the provinces work out their own strategies and approaches. For example, the goal of a specific number of PosYandu to be set up in SumBar was determined by the Pusat, but the way this would be done, and how PosYandu would be made effective were worked out at the provincial and Kabupaten level. The operational plan of acceleration of PosYandu was worked out by a team through inter-sectoral meetings. The team worked out solutions for lack of resources (both human and financial). Use of relawans (nursing graduates awaiting placement) and pooling budget for regular activities in the different sections in KanWil and Dinas were used to overcome the problems. The units involved were motivated to work as a team, and each team contributed funds for the integrated approach.

This step in decentralization, the province taking the responsibility of preparing the strategy and detailed plan for implementation is the first step to meet the CHIPPS objectives. However, determining targets by the center, without consulting the provinces, defeats the purpose of decentralization.

Decentralization is also reflected in the adaptation done by the provinces in some activities designed at the pusat level. For example, NTT adapted the central book of guidance ("red book") called "blue book" by the province, to suit the needs of NTT. In our interviews at the Pusat level, we were told that Pusat would have no objection to the blue book, in fact POM encourages such initiative, which demonstrates successful decentralization.

Epidemiology training in NTT is another example of continuous adaptation of the training at several stages in the light of experience gained. COME in SumBar also modified several aspects, including, for example, task analysis of the supervisory role of the medical faculty.

Such active adaptations of programs taken from outside certainly are in conformity with the CHIPPS objectives.

Some activities have been initiated by the provinces themselves. Drug management in Aceh and breastfeeding promotion in SumBar are examples. These activities were initiated by the provinces, with no Pusat involvement. A survey conducted in Aceh showed lack of drug management, and so this was taken up in a systematic way. A survey was followed by province-wide workshops, then mini workshops in each Kabupaten, resulting in preparation of a form given to Puskesmas for recording drug use. Breastfeeding promotion was initiated by one pediatrician in a hospital in Padang because she found that only 24% of mothers continued breastfeeding their infants for one year. The activity was in due course introduced in all the provincial hospitals.

Several activities, initiated by the Province, but planned and executed at the Kabupaten and Kecamatan levels demonstrate a higher level of decentralization. Malaria control in NTT and Tetanus survey in SumBar are examples. Malaria control in Robek was carried out by 18 kaders and sprayers and numerous community participants. In SumBar, after a visit to Aceh to see how the survey was conducted there, a team of 15 KanWil officials prepared a plan in consultation with a CDC consultant for tetanus survey, and presented it in a meeting of DoKabu's. After DoKabu's approval a detailed plan of implementation was prepared by 3 persons. More than 100 persons were selected and trained to conduct the survey.

This is a higher level of initiative at the lower operational levels in a province, and meets the objectives of CHIPPS.

A still higher form of decentralization is demonstrated when everything is done by people in a province at all levels. In NTT PosYandu was running for two years, and the province found out the weakness in monitoring and in establishing PosYandu as a community responsibility, coordinated by LKMD. The policy was laid down by the governor. Meetings were held at the province level, attended by people from related sectors and programs, as well as at the kecamatan level (chaired by the Camat). This shows initiative and planning at all levels. In NTT a tetanus immunization campaign was conceived, initiated, planned, and implemented at the province and other levels in the province, involving PKK.

This form of decentralization comes closest to the objectives of CHIPPS. However, if the activities are planned and implemented by a province, without any outside help, there may be some wastage of time and energy, when such help could properly guide and assist in the successful planning and implementation. For example, work on a birth and death reporting system was attempted in NTT without any outside help, and through trial and error they struggled with this activity. External help could have saved time lost in these attempts. Decentralization also puts the responsibility of identifying areas and sources of help, and seeking such help when needed, on those at the province or below.

Some activities show lack of decentralization. For example, Vitamin A/Immunization activity in Aceh, although well planned and executed with the participation of the DoKabu and Bupati, lacks elements of decentralization. The activity was conceived by outside agencies, and the provincial staff was not actively involved in its development.

#### Conclusions:

Several conditions facilitate decentralization. Such conditions may be created by the Pusat as well as by the operating units (e.g. provinces). The main two considerations underlying these factors, briefly discussed below, are raising the level of capability to decentralize (on behalf of the Pusat), and capability to use decentralization (on behalf of the operating units).

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1. If greater demands are put on the provinces by the center to do most of their planning and implementation, the provinces are likely to respond. On the other hand, if the provinces are expected only to conform, they will not take initiative. This has been borne out by the experience in the three provinces. Demands for local planning did get response from these provinces.
2. Mere expectations and demands may not result in decentralization. Broad guidance, some technical support, and specific help in areas in which the provinces may be weak are necessary for the success of decentralization. Progress in decentralization, at least in Aceh and SumBar, has been facilitated by the guidance and support provided by competent LTCs and STCs. The Pusat agencies need to increasingly take this role.
3. Decentralization will require mutuality between Pusat and provinces, and mutuality can increase if Pusat gives as much information and feedback to the provinces as it demands from them. Within a province this has been demonstrated. For example, in SumBar the Kabupaten level planning and implementation has been greatly facilitated by continuous dialogue with the provincial sections and persons.
4. One instrument which can promote decentralization fast is financial flexibility. The three provinces experienced that grant money facilitated local initiative in experimenting. In the three provinces we were told that this one factor is extremely critical for the success of decentralization.
5. At the provincial and lower levels the capability for decentralized planning and action requires higher levels of technical, planning, and managerial (human process) competencies. Such competencies need to be developed through training-and-action in the various fields. All three competencies need to be developed in an integrated way. The second CHIPPS Process Review found that organizational development in SumBar had facilitated CHIPPS progress in that province. We found that technical competencies have been fairly well developed; planning competencies are in the process of development. Managerial competencies are the least developed, and will need attention in the next two years.

In summary, we found a fairly high level of "decentralization capability" and performance in all the three provinces, an acceptable level of competency and a willingness and ability to take responsibility. We also found increasing decentralization tendency on the part of Pusat. However, of the two, the latter is weaker. There is still a tendency to "determine" most things at the pusat level.

Recommendations:

1. More flexible budget should be provided in general, and to the three provinces in the next two years in particular. To start with, for each major field of health, block grants could be given to the provinces, leaving to them the details about how they would like to utilize the grants. At the end of two years (when CHIPPS comes to a close), the experience could be reviewed, and regular budgetary system then could be developed.
2. The role of pusat agencies should change from regulatory to supervisory and facilitative functions. This would mean higher level of technical and managerial competence in such agencies to be able to provide feedback and guidance, and to do more networking of inter-provincial resources.
3. In the next two years much more emphasis should be given on developing planning and managerial competencies in the three provinces. CHIPPS LTCs in these provinces need to focus on consolidation of the programs, and on achieving managerial efficiency. FETP and HTRD graduates are good resources, and these should be utilized more. Already the three provinces are using them.
4. The Pusat CHIPPS PimPro, provincial PimPro's and the LTCs should pay more attention to involving people from kabupatens and kecamatans in the relevant activities. Wider mobilization of personnel at all levels needs to be promoted.
5. Special attention and support may be given to community groups (PKK, Kader, Ulama, etc) to participate in CHIPPS activities.
6. Special encouragement may be given to the various level personnel in the provinces to raise financial resources from the community, local government and industry or organizations, and other external agencies. This possibility has already been demonstrated in NTT, Aceh and Sumatera Barat.

### C. Relationship to National Programs

#### Project Objectives:

The Project Paper stated this objective as follows : ". . . a central objective of the Project is to . . . introduce analytical techniques (and institutionalize them) so that existing health programs can be better targeted to serve people in greatest need of specific health services. The focusing of existing programs on a more limited number of objectives is one way to improve effectiveness . . ." (p.31).

This objective was repeated in the Amplified Project Description of the amended Loan Agreement as follows : "The project is considered as part of the National Health Development in the three . . . provinces".

Of concern to the national health program has been the interpretation of the Phrase "province-specific", in the name CHIPPS. Before leaving to visit the three provinces, the team was asked by Dr. Soeyono Yahya, Director of BINKESMAS, to examine this question. Specially, he was interested in knowing whether the activities supported by CHIPPS contributed to, or conflicted with, national programs and policies.

The original intention of CHIPPS was to provide health officials in the three provinces with additional resources, so that they would be better able to respond to their unique manpower and health services delivery needs. This was to occur within the broad, policy guidelines established at the national level. CHIPPS would contribute to the effectiveness and impact of the existing health programs, in each province, by providing the opportunity to tailor these programs to local needs. But, is this what actually occurred ? When examining the activities within each province, the evaluation team attempted to compare each with the corresponding national program. The team paid particular attention to ways in which activities may differ from national programs and whether any true innovations were being introduced or tested. After returning to Jakarta, interviews with certain MOH officials helped to clarify these issues further.

#### Findings

##### 1. Manpower Development

Project outputs were planned with the close collaboration of the Ministry PusDiNaKes officials to assure that they would in fact support directly national program goals. The activities chosen were all aimed at increasing the number and/or capabilities of professional and para professional health officers who would provide or manage health services delivery at the Kecamatan and community levels. These were a) primary health nurses (PK) and teachers, b) rural sanitarians, c) laboratory technicians and teachers, d) community volunteers e) medical students and teachers, f) health center doctors and staff, and g) province and kabupaten health officials. In practice, all of these groups have received training as anticipated.

## 2. System Development

The subjects to be addressed by CHIPPS, as reflected in the Project Paper and Loan Agreement, were developed in close consultation with the Ministry and provinces. They were the best estimates at that time of the provincial and national priorities. Subjects included nutrition, diarrheal diseases, TB, tetanus, health information system, role of women, role of PKK in health delivery, community medicine and primary health care. With the resources and skills provided by CHIPPS, persons within each province would be better able to address their local health needs, by developing intervention strategies which were appropriate for their local culture, geography, resources and demographics. These activities were intended to supplement and support, but not replace, the national programs.

### a. Epidemiologic surveys and other Data Collection Activities

Many activities under CHIPPS have attempted to better characterize the distribution and magnitude of special health problems. Since data on the incidence and prevalence of specific diseases were often of questionable quality or non-existent from national sources, many of the epidemiologic activities conducted in the provinces were relevant and of potential interest to the national health programs.

For instance, all three provinces conducted province wide surveys of neonatal tetanus mortality. These surveys provided measures of neonatal and infant mortality rates, as well as neonatal mortality rates due to tetanus. Together, these province-specific measures indicated the relative importance of neonatal tetanus to total infant mortality. Moreover, these measures provided valuable indicators by which progress toward attainment of the national goal of an infant mortality rate of 70/1000 by 1989 could be assessed.

In Sumatera Barat, a province-wide survey of pulmonary TB was completed, following the recommendation of the national TB control program that each province conduct such a survey. This survey was perhaps the first of its kind to be conducted in Indonesia, and provided prevalence measures which were of very high quality.

At the Puskesmas level, special training activities in epidemiology and data management have supported the nationally-launched program of local area monitoring. With these skills, Puskesmas staff may be better able to conduct surveillance activities and to respond quickly to local disease outbreaks. This training is being conducted in all three CHIPPS provinces.

In addition, efforts have been attempted at improving the collection of birth and death statistics in all three provinces. The availability of this information at the village level would eliminate the need for most special surveys. To date, progress toward the

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establishment of successful systems to collect this information has been slow, due in part to the existence of a non-working vital registration system from the Ministry of the Interior, and the competing needs of Puskesmas staff to prepare various reports for the national programs. Efforts in all three provinces have paid special attention at recording deaths and cause of death for children under age 5, reflecting the national emphasis on child survival and the goal of reducing the infant and childhood mortality rates.

b. Immunization

Immunization activities are closely related to the national goal of improving child survival. In all three provinces, crash immunization campaigns have been undertaken. These crash campaigns were intended to support the routine immunization programs by quickly increasing coverage for selected and hard to reach populations.

According to Dr. S. Gunawan, Director of Epidemiology and Immunization at the MOH, crash campaigns for immunizations can be justified if they support the following three objectives: immediate impact on coverage, improvement of community awareness of the importance of immunization, and strengthening of the existing infrastructure for routine immunization activities.

In Aceh, crash campaigns for tetanus were conducted in two kabupatens. (Tetanus toxoid is usually given twice to pregnant women, and these immunizations are highly effective in preventing tetanus in newborn infants. Tetanus often occurs after birth, due to unhygienic treatment of the umbilical cord, and it is 90% fatal). The previous province-wide neonatal tetanus survey had identified certain areas where the neonatal tetanus rates were particularly high, and the crash campaigns were conducted in two of the four kabupatens with the highest rates.

As a result of these two campaigns, approximately 200,000 women of reproductive age received both injections of tetanus toxoid vaccine (representing a coverage figure of approximately 80%). In addition, children under age three received measles vaccinations in one kabupaten. A follow-up survey in one kabupaten reported a dramatic decline in the neonatal tetanus mortality rate, from 32.1/1000 to 4.9/1000.

The primary indicators for the success of the campaign were the percent coverage of the target population and a measure of neonatal mortality rate, one year after the crash campaign in one kabupaten. No effort was made to examine different kinds of indicators directly, such as community awareness or infrastructure strengthening. However, it would be inaccurate to conclude that these factors were totally overlooked during the planning and implementation of the campaigns. For instance, the religious community (Ulama) and the PKK played important roles in educating the community about the need for immunization. The high coverage figures suggest that these community education efforts were

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effective. The endorsement of the campaign by religious leaders was particularly important in clarifying misconceptions that the vaccine was "Christian water" or a form of birth control. From this campaign came the recommendation that two immunizations for tetanus be required for all Moslem women before marriage. The adoption of this recommendation has the potential to significantly increase routine tetanus toxoid immunization coverage.

Figures in Jakarta for immunization coverage in Aceh for 1986/1987, for tetanus and other target diseases, continue to be among the lowest in Indonesia. It is not clear to the evaluation team why the figures for tetanus toxoid reportedly have not improved, given the fact that 200,000 additional women, aged 15 to 45, received tetanus toxoid in Aceh between September 1985 and January 1987. It is possible that the existing recording and reporting system failed to reflect the fact that pregnant women who previously participated in the crash program did not need to receive the tetanus immunizations through the regular program.

Another concern expressed by Dr Gunawan has been that the crash programs diverted attention and resources away from the routine immunization program. Given that the supervisors for the campaigns were health center doctors, it seems likely that the routine program would have received less attention during the crash campaigns. In fact, Dr Solter in Aceh has stated that immunization coverage for the first DPT and third polio vaccines dropped in these areas during the campaign periods. In response to these concerns about the routine immunization program, an "accelerated immunization program" recently has been introduced in Aceh. As of September 1987, the program had begun in three kabupatens, with the objectives of increased coverage for all vaccines and increased community awareness and participation.

The crash campaign in one Kabupaten in Aceh was the subject of a cost-effectiveness analysis by Peter Berman and John Quinley of Johns Hopkins University. They estimated that the cost per immunized woman (for tetanus toxoid) was roughly comparable between the crash and routine campaigns. The crash campaign was considered slightly less efficient than the routine program in terms of neonatal deaths prevented, since the crash campaign included all women of reproductive age. Not all these women will become pregnant, whereas the routine program focuses on pregnant women. The total costs of the crash program in one kabupaten was Rp.120,000,000.- an amount equivalent to 70% of the immunization budget for the whole province in 1985/86. Subsequent budgets for 1986/87 and 1987/88 have been reduced substantially. Continuation of crash campaigns in other areas will be dependent on the identification of additional revenues, perhaps through a local industry-supported Community Development Fund.

A crash tetanus toxoid and measles campaign also was conducted in NTT. This campaign was unique in that one of its principle objectives was to examine the effect of community participation on immunization coverage, and it was not prompted by the neonatal tetanus survey in the province. High coverage of the target population was achieved (ranging

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from 96% to 100%), but the target populations were relatively small (9800 women, 2800 children under age five). The planning and implementation of this activity incorporated an exceptional degree of community and local government involvement with the health system. The chair of PKK for NTT feels that this activity was ground-breaking in that it established mutual cooperation and trust among these separate groups, which later was extended to other health activities. In addition to contributing to the development of community participation in health activities, this program also provided many lessons for the participating persons from the provincial CDC division in the technical implementation of crash programs. Subsequently, a doctor in a health center on the Island of Sawu was able to achieve high immunization coverage for several vaccines, at only one-fourth the cost of the previous crash program. This success has been attributed, in part, to the knowledge and experience that CDC advisors had obtained from the previous crash program.

#### FETP

Participants of the Field Epidemiology Training Program (FETP) in Jakarta have made substantial contributions to many CHIPPS-supported activities. Frequently, these trainees have served as field supervisors for data collection or as instructors in epidemiology training programs, in all three provinces. Through their participation in CHIPPS-supported activities, these emerging epidemiologists have gained valuable field experience. They also have had the opportunity to work with other epidemiologists on specific projects. Thus, CHIPPS has contributed to the development of experienced field epidemiologists in Indonesia.

#### d. Malaria

In NTT, two separate trial projects have attempted to measure the effectiveness of control strategies which differed in some way from the national program. In Robek, innovations to the control program included DDT spraying by trained persons from the community, community health education, active case finding and treatment by kaders, and environmental source reduction by unpaid community residents. In a comparison village, malaria control activities corresponded to the national Malaria Control Program (regular spraying with DDT and passive case detection only). Analyses could only assess the effectiveness of the new treatment, without comparison to the national control program, due to other unanticipated differences between the two villages. This trial project suggested some different strategies which could be used to strengthen the existing malaria control program in NTT.

In another area of NTT, Nangapanda, a different type of control strategy currently is being evaluated. Again, a treatment area will be compared with an area where the malaria control program corresponds to the national program. Major differences in the new treatment are once-a-year spraying, and radical treatment for malaria cases. In this trial, community participation is not being utilized.

e. Tuberculosis

In Sumatera Barat, a major effort is currently underway to reduce TB prevalence in one kabupaten. This activity was prompted by a province-wide prevalence survey completed in 1985. One major difference in this activity from the national program is its active case detection and holding, which relies heavily on community volunteers and extra staff at the health centers. In addition, treatment for confirmed cases is to follow the short-course (six month) regimen of drugs.

This TB control activity could not be supported by the national program, largely because of the cost involved for medications. For this one kabupaten in Sumatera Barat, the costs are approximately US\$ 270,000 per year. To conduct similar activities nation-wide would be prohibitively expensive, and it would be difficult for the national government to allocate this amount to only one province. To date, the sources of support for this activity in Sumatera Barat have come from CHIPPS, the Dutch government (through an International TB association) and the kabupaten government. Continuing financial support for this activity, which is planned to continue until year 2000, has yet to be secured, but outside donors are being sought.

f. PosYandu

PosYandu is a national program currently operating in all provinces, with an emphasis on acceleration in eleven, including NTT, Aceh, and Sumatera Barat. CHIPPS has been used to support this national program, either through the conduct of studies or through the introduction of innovative approaches to the implementation of PosYandu activities.

In Aceh a special survey was conducted to identify reasons why the community was not participating in PosYandu activities. The survey involved structured interviews with kaders and community residents. This survey was followed by a workshop to discuss the survey results, and later by a request to six kabupatens to submit proposals for improving PosYandu and kader performance.

In Sumatera Barat, a study was conducted on the effectiveness of kaders, another study on the costs of PosYandu is being conducted, and studies on the effects of PosYandu on health seeking behavior and on the effectiveness of SPK nursing volunteers are planned. One of the innovations introduced in this province is the utilization of recent, but unplaced, SPK nursing graduates in PosYandu activities. In addition, the heads of kabupaten health offices have been involved in the planning of PosYandu, and the Governor has instructed local government officials to support PosYandu activities, as a result of CHIPPS-supported provincial efforts on this topic.

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In NTT, major efforts have focused on the development of training programs for PosYandu kaders. This direction of activity was established as a result of meetings between staff from the province and health centers.

g. Nutrition

In NTT, the PKK has been active in developing new training activities for village kaders in the field of nutrition, and then monitoring the activities of the kaders in the villages. One innovation introduced by PKK has been a different system for selecting kaders (to be done by mothers and not by village heads). In addition, training for PKK trainers at both the kecamatan and kabupaten levels was introduced. This separate training reflects the different nature of the responsibilities of PKK at different levels. These activities initially were conducted in one kabupaten, but plans are to extend them to the remaining eleven kabupatens, using funds from CHIPPS, APBN and the New Zealand government.

The Director of Nutrition in DepKes expressed satisfaction with local efforts to adapt the UPGK national program to local needs as was done in NTT because its effectiveness will be enhanced.

In West Aceh, research activities are being conducted to examine the impact of Vitamin A on childhood mortality (as well as other issues). These activities are being supported by CHIPPS and Helen Keller International. The evaluation team felt that these activities might contribute more to the national program than to CHIPPS objectives in the province. Several aspects of the Vitamin A project were designed to achieve the objectives of its research component, rather than to strengthen local health services delivery or local manpower development.

In Sumatera Barat, a program to promote breast-feeding was begun in 1985. This program focuses on the training of midwives and nurses from government health facilities, the establishment of rooming-in policies in government hospitals, the teaching of breast feeding practices in antenatal clinics, and the involvement of PusKesMas in promoting breast feeding in pre-natal clinics and in teaching local kader and traditional birth attendants.

h. Drug Management

According to POM Director of Drug Control, work done through CHIPPS on drug management in each province represents the first provincial initiative to strengthen drug management and rational prescribing practices, in support of the high priority assigned to that national health sector problem. He feels lessons learned there can guide further POM efforts during Pelita V to improve the cost effectiveness of the use of drugs.

### 3. Setting Province-Specific Priorities

The manner in which activities were selected for CHIPPS support appears to have depended on several factors operating simultaneously. At times, these factors have included the interests of the LTC, the skills of the provincial staff, the desires of the governor or the head of the provincial health office, and so forth. The results of special epidemiologic surveys often served as the impetus for follow-on activities. In addition, it appears that most sections or subsections of KanWil/Dinas were encouraged to develop or participate in CHIPPS activities. But strategic, unified, long-range planning for health programs has yet to occur at the provincial level.

#### Conclusions

1. Many of the activities reviewed by the evaluation team were very supportive of national program objectives. These include manpower development through COME and SPK, strengthening of PosYandu, greater involvement of the community in some activities, reduction in neonatal tetanus mortality through immunization, and others. Through many of these activities, the capabilities of PusKesMas staff also have been enhanced.
2. Efforts at obtaining province specific measures of different health indicators have involved special epidemiologic surveys and attempts at recording births, deaths, and cause of deaths. The epidemiologic surveys have yielded valuable information for both provincial and national health planners. However, the data currently available is not yet sufficient to enable provincial health planners to establish priorities among the various health problems. The absence of reliable data on disease incidence, prevalence, and mortality rates is a major limitation to the establishment of local priorities.
3. Some routine national health programs received little or no attention under CHIPPS. Notable examples of such health programs include diarrheal disease control, environmental sanitation, and maternal health. Family planning was intentionally omitted from the scope of CHIPPS when the project began.

The relative amount of attention paid to various programs varied among the provinces, and also somewhat from the relative priorities of the national government. Many activities have supported child survival, such as nutrition, immunization and PosYandu activities. Others, such as tuberculous control in Sumatera Barat and malaria control in NTT, corresponded to lower national priorities.

4. The team concludes that CHIPPS activities have certainly not conflicted with national health policies, programs and goals. To the contrary, we found strong evidence that CHIPPS activities supported and indeed enhanced effectiveness of many national programs in the provinces and also contributed knowledge useful to DepKes about implementation of some programs nationwide.



Recommendations:

1. DepKes departments should take a careful look at what the three CHIPPS provinces are doing with respect to their national programs, and provide support and feedback where appropriate.
2. Since province initiatives to modify or enhance standard national program approaches appear to have resulted in more effective performance, DepKes should explicitly encourage provinces to make more such efforts, and then follow-up to derive lessons which might be applied more widely.
3. As province-level health data and health planning capabilities increase, the KanWil/Dinas may prepare province-specific health improvement strategies whose priorities and approaches might differ from some of the routine national programs, which taken together do not now represent a coherent strategy for each province. In that event, DepKes officials should be prepared to accept those differences as long as the programs are effective and the provinces are making acceptable progress toward reaching the priority national targets. In short, DepKes should judge provinces on performance or "outputs" and not on "inputs".

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D. Program Management

Project Objectives

The major management objective was to encourage and facilitate decentralized planning, program administration, and technical innovation in the three provinces, while maintaining DepKes overall policy, coordinative and supervisory roles, and enabling USAID to perform its project management responsibilities. This meant establishing appropriate mechanisms in each province for providing administrative, technical and financial inputs to the project.

The Project Paper anticipated establishment of a project implementation unit (PIU) in each province, headed by the KaKanWil. Instead, each province appointed its chief planning officer to be project manager (PimPro), with the concurrence of DepKes, which had done the same in Jakarta. The PimPro, in consultation with the KaKanWil and KanWil/Dinas staff, prepared activity proposals for CHIPPS support, and administered project inputs.

Technical guidance was to be provided by one long-term consultant in each province, supplemented by short-term foreign and Indonesian consultants, and technical specialists from DepKes Pusat.

Financial inputs were initially to be provided entirely from AID loan funds, through the regular government budget process (DUP/DIP), and GOI counterpart budget, also from the DIP. Subsequently, most AID funds were converted to grant because the regular DUP/DIP process did not provide enough flexibility to meet requirements for speed and flexibility of CHIPPS innovative activities.

Reporting of progress and problems was also required and made a part of the project management arrangements.

Findings

a. Province Structures

Each province has made different administrative arrangements for managing CHIPPS. NTT has used a system of task forces (Pokja) and work groups (Satgas) to manage and coordinate the CHIPPS activities. At the present time each activity is managed by one Satgas and a group of Satgas report to one of three Pokja, which in turn, report to the CHIPPS PimPro. Each Satgas contains several persons from one or more KanWil/Dinas units concerned with the particular activity. The PimPro feels that this arrangement assures adequate involvement and coordination of relevant KanWil/Dinas staff in each activity.

Aceh currently assigns a KanWil/Dinas staff member to be "coordinator" for each CHIPPS activity. That person is responsible for enlisting the participation of others as an informal team, as

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appropriate. They adopted the coordinator system recently, following several years of relying on the chiefs of the respective KanWil/Dinas units to be responsible for each activity. That proved to be unsatisfactory.

SumBar uses neither Pokja/Satgas nor coordinators but relies on each KanWil/Dinas unit to manage activities proposed by them, and therefore assigned to them. The PimPro expects the unit officers to coordinate with each other, as appropriate. A formal coordination mechanism has been initiated for the PosYandu activity, because it involves five interventions and requires collaboration of several units.

Advantages and disadvantages of making special arrangements (Pokjas, Satgas, Coordinators) for planning and managing CHIPPS activities were identified during the team's interviews. Such special arrangements are helpful to assign responsibility and to focus staff energy on the activities and to facilitate cooperation and coordination between units. But as long as they are external to the regular KanWil/Dinas management system, the activities managed by them may also remain outside of the regular KanWil/Dinas program. And a basic principal of CHIPPS is to strengthen the regular province system and not to create special programs and structures. The team could not determine if one system has resulted in better CHIPPS performance than another. Each province has had its share of favorable and unfavorable results, none of which can be attributed to the management structure per se.

The NTT staff are aware of the longer-run necessity of turning over responsibility for those CHIPPS activities which will continue after CHIPPS, to the regular units. And some has been done already. But the acting KaKanWil proposes to continue using the Pokja arrangement for the entire KanWil/Dinas program because he feels it strengthens coordination and communication within the organization.

b. Role of PimPro's

The PimPro's have all been the chiefs of the KanWil planning offices, which is logical. They have influenced the CHIPPS performance in several ways, and CHIPPS, in turn, has had an impact on their roles as KanWil planning officers.

They have inevitably taken more interest in some activities than in others, thereby causing some to flourish more than others. For example, one of the NTT PimPro's took a personal interest in drug management and a great deal was accomplished. But he is said to have prepared proposals for CHIPPS activities unilaterally, so that coordination was not advanced. By contrast, other PimPro's have not taken a strong hand in preparing or screening proposals, merely passing on proposals from the technical units to DepKes and USAID for approval.

Once activities were begun, the PimPro's appear to have been generally supportive, but not directly involved in the actual planning

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and implementation stages of most activities. The drug management case in NTT is one notable exception, and the PimPro's intervention in the Aceh (Village Information System) SID activity resulted in a one-year stoppage of implementation, perhaps for good reason.

There is some evidence that, by serving as CHIPPS PimPro, the planning units' role have been enhanced. In SumBar the PimPro feels that his unit (PPE) now exercises more influence in planning the total KanWil program, as a result of its role in planning and managing CHIPPS. Whereas the technical units could previously deal directly with Jakarta on budget, with CHIPPS, PPE controls the planning/budget process. Its positive contributions in that process have caused the technical units to seek its assistance with their regular programs as well.

### c. Role of Consultants

We discuss the role which the long-term consultants have played in CHIPPS in this management section because, although they made many technical contributions, they also had considerable influence on the nature of the program in each province, the pace of implementation, and on the learning and decision-making process in each province. The consultant role is a difficult one and these consultants have been praised and damned. Their performance also has an impact on sustainability and institutionalization of skills, practices and interventions, subjects which are discussed more thoroughly in section II.F.

The two LTCs to the KanWil/Dinas in NTT made little impact for a variety of reasons, which appear to have been unique to that situation and those individuals, and therefore do not contribute importantly to the team's efforts to draw generalizable conclusions and recommendations. The last LTC in NTT developed particularly unfortunate relationships with his counterparts, which severely limited his effectiveness. On the other hand the LTC in Aceh (1984-1987) and the two LTCs in SumBar (1984-1986 and 1986-present) have made substantial impact on those programs.

The first LTCs in Aceh and SumBar seem to have exercised great influence on the selection of activities in the early stage. This appears to have been based on a combination of sense of priority and personal interest and background. In Aceh, the LTC adopted a strategy to concentrate his energy at first on a few activities, in order to get some underway quickly and to demonstrate what could be done. The KanWil/Dinas officials had not yet determined a firm course of action for CHIPPS and were, therefore, ready to accept suggestions from the LTC. His priorities were epidemiology training, neonatal tetanus, birth and death reporting and kader training. He found considerable interest in the first two and little interest in the last two. He supported others' interest in additional activities and helped them develop proposals, but did not seek actively to generate additional activities himself. One of his most critical contributions to CHIPPS was in motivating and encouraging the health staff, thus promoting their confidence and enthusiasm. Subjects which he did not propose received relatively less

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attention than others. That was a practical, and logical strategy to follow, but program planners must realize the great influence which the LTC wields through his choices, sound or not.

The first SumBar consultant's impact was similar, but even more pronounced. Before determining a firm course of action he reviewed progress to date and considered alternative priorities. He then concentrated on developing data collection systems, epidemiological surveys and training and through an aggressive approach, appears to have generated a high level of activity quickly. Questions have been raised about the sustainability of those activities. The present LTC has adopted a very different strategy. He is concentrating on a consolidation of gains made and broad-based institutionalization of planning and management skills at all levels. Their strategies are different, as are their specialties and personalities, but they probably both brought what was needed for the program at their respective times.

The Aceh and SumBar LTCs maintained direct contact with USAID and DepKes managers and frequently negotiated substantive agreements with them on behalf of their respective provinces, outside of the regular DepKes-Province channels. This accelerated implementation but also created a sense of artificiality about the CHIPPS program. Those special arrangements cannot be continued in the absence of consultants.

Several observers questioned whether the LTCs needed to have been physicians, which they all were and are, or whether they could have been management specialists instead. The team recognizes the major contribution which most of the consultants have made, and also can conjecture how a "manager" might have performed. The three provinces probably would have made more broad-based process-type gains (planning systems, training, etc.) but potentially fewer visible high-impact, health interventions. Which approach would lead to more sustained, decentralized health improvement is anyone's guess.

In NTT, a different type of LTC has been supported by CHIPPS (half-time) to work directly with the PKK. The evaluation team did not focus on her role or contributions. However, the chair of the PKK in NTT feels that she has made substantial and valuable contributions to the PKK.

#### d. Budget & Financial Constraints

CHIPPS was intended to have an impact in several ways on the budgetary and financial constraints to improved health services delivery in the three provinces. First, additional resources were provided for manpower development for nurses, sanitarians and lab technicians. Second, small amounts of extra-budgetary funds were to be used to enable province health staffs (province, kabupaten, kecamatan and village) to gain experience in problem identification, planning, implementation, monitoring and evaluation of interventions, to address priority health problems of their regions. Funds are not usually available in the health development budget for that purpose. Third, it was hoped that

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demonstrations that the province health staffs were capable of using discretionary funds effectively to produce concrete results would cause Jakarta budget/financial accounting authorities to a) allocate larger amounts for primary health services delivery and b) provide the funds to the provinces in a much more flexible manner, i.e., lump sum.

The team feels that the first two objectives have been met but that no progress has been made on the third. The responsibility for not accomplishing this rests first with the CHIPPS project managers themselves. Practically no effort has been made to measure the effectiveness of apparently successful interventions in comparison with their costs, i.e., cost effectiveness analyses. (This issue is discussed at more length in section II.E.3.). Clear evidence of increasing cost effectiveness over time should convince finance and budget authorities that larger allocations for health will yield a good return on investment of scarce national resources. Health professionals must provide evidence that economists will appreciate.

Health services delivery will become more efficient and effective when the province, kabupaten and Puskesmas staff obtain the same discretionary authority over the use of regular DIP funds as they have had over the use of the CHIPPS grant funds. The team heard numerous complaints about the rigidity of DIP budgets and inability to modify line items, even though they recognized little would be gained by spending the funds for the prescribed purpose. The waste of scarce funds caused by this must be enormous. But, the system is so firmly established that no one we interviewed thought that it could be changed. Another limiting aspect of the DIP process is the long time lag between the time a project is planned and the time the funds can be spent.

Based on our discussions in three provinces, the team feels that real decentralization of health services delivery planning and implementation will be required to provide effective services and to reach the national health targets, and that major local discretionary authority over budgets is a pre-requisite for that.

#### e. Pusat Structure

The linkage between the provinces and the pusat seems to be primarily through Pusat PimPro of CHIPPS. There has been no system of involvement of the various offices of MOH in CHIPPS policies, except occasional visits by such officials to the provinces, or casual contacts by CHIPPS LTCs with some officials when the former visit Jakarta. For institutionalization of CHIPPS, there seems to be a greater need for participation of Pusat officials in CHIPPS process.

The CHIPPS PimPro at the pusat level has played an important role. However, his primary role has been that of an administrator, receiving financial requests from the provinces, coordinating with USAID, preparing and approving DIPs and PILs, receiving progress reports, arranging for consulting, financial, and material resources. Now that most of the administrative arrangements have been worked out, the role of the Pusat PimPro should come more professional.

## Conclusions and Recommendations

### 1. Province Structure:

The team concludes that each province has made reasonable structural/organizational arrangements for managing CHIPPS to suit their respective needs. NTT and Aceh have modified their arrangements over time, reflecting that the lessons learned were applied.

We recommend that the three provinces and DepKes analyze the advantages and disadvantages of the three arrangements used to derive lessons which may be useful generally to province-level health services management.

### 2. Role of Province PimPro:

We conclude that the PimPro arrangement has been productive in that they have played a major supportive role in initiating and administering project activities. They do not appear to have directed or controlled the course of CHIPPS development in their provinces, but rather facilitated its progress. The planning division's influence in at least one province, and perhaps all three, has been enhanced as a result of its role in CHIPPS.

The team recommends that the PimPro role in CHIPPS be continued for the remainder of the Project and that DepKes/USAID consider providing technical assistance to the PimPro's to strengthen their planning and management capabilities.

### 3. Role of Consultants:

The LTCs in two provinces made major contributions to CHIPPS performance and even determined its character there. The start-up tasks of the first LTCs were accomplished and the challenge for the present consultants is to integrate the gains made into the provinces' systems. Based on the experiences of all three provinces, we conclude that the role of LTC is a difficult one. The institutions must be ready to use their skills, the consultants must be sensitive to the needs of their counterparts and yet not hesitate to impart their knowledge and experience to them. The first Aceh and SumBar consultants made good use of their relatively short tenures. A great deal of "technology" was transferred and local confidence gained. The task of each province, assisted by their current consultants, is to sustain the gains made while still expanding their capabilities in additional areas.

We recommend that LTCs continue to assist the provinces during the next two years, but focus increasingly on deepening and extending skills throughout the province health system to assure that the gains made are sustained. NTT should consider carefully whether to seek a LTC for the remainder of CHIPPS to assist with that objective.

#### 4. Budget and Financial Constraints

The team concludes that provision of extra-budgetary discretionary funds from CHIPPS has enabled the three provinces to demonstrate that they can perform truly decentralized planning and implementation of effectively health services delivery. Unfortunately, CHIPPS has not yet generated concrete evidence, in terms of impacts and cost-effectiveness, which would demonstrate clearly the benefits derived from careful use of discretionary, "flexible" funds.

We also conclude that major local discretionary authority over budgets is a pre-requisite for real decentralized planning and implementation of effective health services, and that national targets cannot be achieved and sustained without both.

The team recommends that DepKes, USAID and BAPPENAS conduct a careful study with each province of the specific uses made of the CHIPPS grant funds to determine if, and if so, how, its flexibility and discretionary nature contributed to achieving CHIPPS objectives in each province. They should try to determine specific constraints and limitations which the current DUP/DIP process imposes on decentralized problem identification, planning, implementation and evaluation and compare that with evidence of facilitating factors resulting from availability of more flexible grant funds. The findings should be used to define and recommend concrete changes in the DUP/DIP process which will support decentralization, such as including health services delivery funds in "provincial package" transfers from Pusat to the provincial government for administration.

We also recommend that USAID and DepKes consider taking similar steps with allocation of AID grant funds to the three provinces right away in order to gain experience in preparation for managing government budget funds in the same manner.

#### 5. Pusat Structure

From our interviews with Pusat officials we feel that there is lack of involvement in and appreciation of CHIPPS work at the pusat level. CHIPPS is an integrated program, and requires support from all sections of MOH. In order to increase both involvement in and understanding of CHIPPS we recommend that an advisory group be formed, consisting of senior officials of the units directly concerned with CHIPPS (BinKesMas, community health, CDC, POM, Gizi). This group should meet about once a month to discuss priorities of CHIPPS activities, progress of activities in the light of CHIPPS objectives, ideas to accelerate CHIPPS process, and feedback to be communicated to the provinces. The group may also review the emerging priorities in MOH and how these could be used in planning of CHIPPS work. One important function of the group should be to review what lessons from CHIPPS experiences have been adapted in the routine MOH programs, and what else can be incorporated with needed modification. In other words, while the

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task of selecting and implementing specific activities should be a province responsibility, the role of the advisory group should be to critically review the progress, give feedback to the provinces, and help institutionalize CHIPPS gains.

The CHIPPS PimPro at the pusat level should assume more professional responsibility : critically reviewing provincial reports, giving feedback to the provincial PimPro's, periodically reviewing CHIPPS structure in the provinces from the points of view of decentralization and institutionalization, planning and reviewing the progress of new PILs on policy and technical help, securing short term consulting resources for the provinces, and involving pusat officials, both from Bureau of Planning and other units, in competency building programs.

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## E. Other Issues

### 1. Impact of CHIPPS on the Community

#### Project Objectives:

In the original project paper, linkages with community organizations and volunteers were viewed as critical to the effective performance of the government health program, particularly Puskesmas. Working together, the community and the health centers were to complement each other's efforts. The community would assist the health center to expand its health and nutrition activities to the villages. In return, the health centers would provide the necessary resources and technical guidance.

Under CHIPPS, provinces were to evaluate trial interventions which included inputs from community organizations. The PKK, or family welfare movement, was considered as a potentially valuable mechanism for involving the community in health activities.

#### Findings:

Different definitions of the community have been used in various CHIPPS supported activities, and the community has been utilized in different ways.

For example, in the tetanus crash campaigns in Aceh, Moslem leaders played an important role in promoting the need for immunizations within the community. Their participation was critical to assuring residents that the immunizations were not contrary to the teachings of their faith.

In the malaria control trial in Robek, NTT, paid kaders and sprayers were residents of the community. In addition, unpaid men and women within the community were involved in efforts to reduce mosquito breeding areas.

In Sumatera Barat, the mass immunization campaign provided PKK and village leaders, at the kecamatan level, with special training on the promotion of community participation in immunization activities. As a result of the experiences of this program, it was determined that training needed to be provided at the village level for it to be effective.

In NTT, the PKK has received CHIPPS support, both financial and technical (through short-term consultants and one LTC), to develop and strengthen its organization. This support has enhanced the PKK's capability to contribute to health activities in NTT. In addition, CHIPPS has created a spread effect within the PKK, with the result that the lessons learned are being applied to PKK activities in areas other than health.

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In one PKK activity in NTT, CHIPPS supported a trial which was primarily intended to examine the impact of community participation, via PKK, on immunization coverage for tetanus toxoid and measles. This trial demonstrated that given exceptional involvement and cooperation with different branches of the local government, high coverage could be achieved. However, it is difficult to determine what, if any, aspects of this activity could be replicated, if special resources to support this involvement are not available.

More recently, community volunteers have been proposed as major implementors in at least two activities. In NTT, the proposed health information system would rely on village volunteers to complete reporting forms for births and deaths. These volunteers would be supervised by the PKK, not by the Puskesmas. In Sumatera Barat, the recently initiated TB control program depends on village volunteers to conduct case finding, holding, and treatment. Both of these activities are intended to last several years or indefinitely.

Another source of "volunteer" manpower, unplaced SPK nursing graduates, has been utilized in Sumatera Barat for PosYandu activities. Aceh also has developed plans for using these nurses in PosYandu, following a somewhat modified model. The availability of this resource obviously was not anticipated in the original project paper, as it was expected that these graduates would be placed in health centers. The uncertainty over their eventual placement is of great concern. Making use of these nurses for PosYandu benefits PosYandu in the short-term and provides additional field experience for these nurses, but it also establishes a model which relies on manpower with greater technical skills than other volunteers, and these nurses are unlikely to be available in the long term.

#### Conclusions:

1. The nature of CHIPPS supported activities often encouraged provincial-level health personnel to consider ways in which community members or organizations could be included in health activities. Several different methods of making use of these resources have been tried, and valuable lessons have been learned from these experiences.

2. The contribution that can be made by community participants was greater when efforts were made to strengthen their knowledge and skills. Thus, the community can be a valuable resource, but its participation is associated with additional costs.

3. The limits of community participation also are being assessed, both directly through selected surveys and indirectly through field activities. To date, the ability of village volunteers to carry-out more technical responsibilities, over a sustained period, has yet to be demonstrated.

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Recommendations:

1. Efforts should be continued to consolidate and strengthen the existing relationship between the government health programs and community organizations.
2. Greater attention should be paid to strengthening the organizational capabilities and skills of selected community organizations, to increase their potential contributions.
3. The additional resources needed to sustain and support a higher level of community participation need to be considered, in terms of the continued sustainability of this contribution over time.

2. Linkages with Other Health Programs & Sectors

Project Objectives

CHIPPS was intended to strengthen three provinces' capabilities to deliver effective health and nutrition services to their populations, a broad mandate. It must therefore have the same relationships with the health sector, and other sectors, institutions and programs, as do the province health systems. In a very real sense, CHIPPS was not intended to be another "program" but rather a resource to be used by the existing health program of each province. Therefore, an analysis of CHIPPS linkages with other programs and sectors is really an analysis of linkages maintained by each KanWil/Dinas in carrying out activities supported by CHIPPS.

The Project Paper anticipated that close ties would be established by the KanWil/Dinas with their respective Bappeda, to plan and coordinate inter-sectoral inputs required for CHIPPS-supported activities, and that similar linkages would be established with other groups which could facilitate attainment of program objectives.

Findings

Activities which required extensive community participation such as nutrition, immunization, and PosYandu have established working arrangements with appropriate organizations. These include PKK, ulama, and BangDes (local government officials). Some activities have received technical inputs from other programs or organizations malaria in NTT - NAMRU and WHO; drugs management in Aceh - Faculty of Medicine; breastfeeding in SumBar - University of Diponegoro; COME in SumBar - FKM, IDRC (Canada); and TB in SumBar - WHO, CDC Atlanta, and Indonesian TB Association. In addition, P2M units in the provinces maintained close ties with P3M in DepKes, receiving considerable support for immunization and epidemiology training activities. Other units, including nutrition and POM, did not maintain such linkages with their DepKes counterparts. In the planning and implementation of related CHIPPS activities.

We saw no evidence of formal relationships with Bappedas, but we did encounter a number of cases where some CHIPPS - related work was financed by APBD-I or II funds (province or kabupaten budgets), especially in NTT. The "blue book" of recommended drug therapy is an example. On the other hand, planning of the actual CHIPPS activities was limited, for the most part, to the health staffs.

There seems to have been little necessity to establish linkages with other donor agency programs in the provinces such as UNICEF, World Bank, UNDP, etc.

### Conclusions

We conclude that where linkages were required to obtain essential inputs for activities (technical, political, financial or organizational) the responsible person sought and obtained it. In fact they seem to have been very successful in obtaining active political/motivational support from local government authorities (Bupatis and Camats).

### 3. Cost Effectiveness

#### Project Objective

A major objective of CHIPPS, as stated in the AID Project Paper upon which the Project is based, is to "increase the capability of the Provincial Health Services to deliver effective services at reasonable costs . . ." (p.49). In the six years since CHIPPS began, the Ministry of Health has become even more concerned with achieving quantifiable impacts on health problems, e.g., reducing IMR. A major concern of both the Ministry and BAPPENAS (the consumer and provider of budget resources), then and now, is how to demonstrate that scarce national resources are used effectively for promotive, preventive and curative public health services, in order to justify future and larger allocations. The first task is to raise the effectiveness of services provided through improved targeting, skills and community participation. Then effectiveness achieved must be measured, along with the unit costs.

According to the Project Paper, CHIPPS was to "place considerable emphasis on conducting cost effectiveness analysis as part of [an ongoing] evaluation program". The following text from the Project Paper describes what was intended.

"Prior to undertaking a particular pilot intervention, survey study or training activity, the "effectiveness" of the activity will be established by defining a desired outcome or acceptable measure of success. The projected cost of the activity will also be calculated. Following completion of the activity, the outcome will be analyzed and qualified and actual costs calculated to determine its cost-effectiveness. Although at the outset there will be few standards against which to judge whether a certain cost-effectiveness result is acceptable, over time, as experience is accumulated, comparisons leading

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to more objectivity can be made. In this way, we hope to provide a means of judging the return on investment of health sector budgets. By demonstrating such returns and making improvements in cost-effectiveness, over time, it is expected that the provinces and DepKes will be in a better position to argue effectively for larger allocations at national, provincial and kabupaten levels.

### Findings

The evaluation team found no case where that process had been followed. In fact, we encountered few activities for which measures of effectiveness were established at the outset in terms of desired outcomes. Furthermore, although CHIPPS budget costs were known for each activity, and other financial support was known for some, we encountered no cases for which total costs, including non-financial inputs, were calculated. It was as late as 1987, in fact, that any effort to perform cost-effectiveness studies was begun. The first was a comparative study of the Aceh tetanus crash program and the province routine program.

We also found that the Ministry's need for cost-effectiveness information has not diminished since 1981. On 7 September, 1987, the Director General of Community Health (BinKesMas) addressed financial factors of CHIPPS and expressed a need for cost-effectiveness evidence to justify allocation of greater resources to primary health care services, at the expense of other health services, e.g., hospitals. Unfortunately CHIPPS has not provided him with that evidence.

### Conclusions

Cost-effectiveness analysis has been neglected in CHIPPS implementation. The omission was begun at the very beginning of the project because the evaluation plan described in the Project Paper, in which the cost-effectiveness analyses were described, was not included in the Amplified Project Description of the Loan Agreement. Since the Loan Agreement, and not the Project Paper, appears to have been used to guide project planning and implementation, cost effectiveness analysis did not receive the attention it deserved. We do not know why that happened but we surmise that the project implementors, consultants and monitors (USAID and GOI) were not personally familiar with the concept and its importance; they were fully occupied with other project concerns and no one from the Ministry or USAID followed-up. We feel that a great opportunity has been lost, since by now a substantial body of cost-effectiveness evidence from a large number of actual interventions could have been made available for use in program and budget planning at the national and provincial levels.

### Recommendations:

1. Each province should pursue cost-effectiveness analyses as part of new or ongoing CHIPPS activities in the way described above, taken from p.49 of the Project Paper. Indonesian or foreign consultants should assist with this effort because the province staffs appear to be unfamiliar with the process.

2. The final CHIPPS evaluation should look closely at this subject.

3. CHIPPS managers should consult with DepKes and BAPPENAS planning officers to determine what sort of cost-effectiveness evidence would be most important to obtain.

4. Communication and Dissemination

Information about CHIPPS processes of planning, rationale of selection of activities, progress of activities, results, problems, and analysis of experiences for decentralization and institutionalization, etc., is sent from the provinces to the center in the form of quarterly and activity reports. These are not disseminated to the concerned people in other related MOH units. Communication of some highlights of the provincial experiences may be useful. Instead of sending the copies of the provincial reports, the CHIPPS PimPro at Pusat may prepare executive summaries and implications for action, and raise issues for attention of the concerned pusat units. The reports to be disseminated to the various units should be processed with specially prepared summaries to stimulate attention and action.

The Pusat PimPro may also consider starting a CHIPPS Newsletter, facilitating communication and dissemination amongst the three CHIPPS provinces, and even to other provinces. The newsletter may give some routine information of interest to the provinces, and mainly highlight the processes of some CHIPPS activities, what interesting innovations are being made, and the processes which help them to succeed, or the problems encountered. The newsletter may help to disseminate experiences which strengthen the processes of decentralization and institutionalization. Each issue of the new letter may also contain details of one innovative activity from a province. The newsletter may be issued quarterly.

## F. Institutionalization Process

### The Project Objective

Any new program, especially one involving a new approach and philosophy, can be launched through some special effort. After it achieves its objectives, it should become a part of the regular work. This is institutionalization. Unless a program becomes institutionalized, it cannot be said to have fully succeeded, because its achievements may end after the special efforts are withdrawn. This is the concern in USAID and the MOH regarding institutionalization of CHIPPS.

Institutionalization is a complex process. It involves several aspects. These are reflected in questions of replicability, sustainability, diffusion (spread to other areas), and organizational learning (learning from and building on experiences). We shall take each of these processes and assess the degree of institutionalization of CHIPPS.

#### 1. Replicability

As a part of institutionalization the question of replicability is often raised, i.e. can it be multiplied ?

For CHIPPS, replicability means replicability of processes (e.g. 4-step problem solving process), approaches (e.g. epidemiological approach of data-based action), and values (e.g. decentralized decision making and implementation, community involvement and mobilization).

### Findings

We found some evidence of replicability of several activities, both within a province and in other provinces. Epidemiology training is a good example. The training was originally started in Aceh. Then it was taken up in SumBar, after some persons from there visited and saw its relevance to their needs. Then NTT followed. Epidemiology training demonstrated further replicability within the province (Aceh) where four training programs were held, attended by kabupaten staff and Puskesmas doctors. The last two courses were conducted by people within the province. These courses were done out of DIP funds, which shows institutionalization of the activity. Similarly, in SumBar a modified program of epidemiology-cum-data management has been conducted in several stages, and has been taken up in all kabupatens, involving all Puskesmas; trainers are from the province.

Replicability is high if an activity is simple enough to be adopted elsewhere. Drug management is one example. This is being done in all three provinces, and has high potential for replicability. It can be taken up by any province because of its relative simplicity, low cost, resultant savings, and increased efficiency.

Low cost activities are likely to have higher replicability. Drug management, as stated above, is one example. The nutrition activity in NTT is another example. BMC, a low-cost mixed food product used to improve nutrition is likely to be replicated within the province, and has high potential for adoption in other provinces, if maintenance and repairs can be handled satisfactorily at the local level.

Replicability is also related to perceived need. If an activity responds to highly felt need of a population, it is likely to be replicated. Field training of nursery students, involving a community-oriented epidemiological approach, now being done in all three provinces, is an example. During our discussions in the PusDiNaKes, we found great interest in this activity for the national nurse training program, and depending on budgeting exercises, the new approach is likely to be adopted in some form in the nursing curriculum.

Replicability as process replicability may mean development of realistic programs, based on learning from some activity. The tetanus immunization crash program in SumBar, for example, led to the development of four alternative approaches to immunization. The proposals have already been prepared and submitted. So an activity may succeed in helping in the development of strategies.

Some activities obviously have low replicability, like the Vitamin A project in Aceh (done by outsiders as a special project), the tetanus immunization crash program in NTT, for which an extraordinary effort was made to mobilize resources, and the TB survey and control program in SumBar (done by local specialists at very high cost).

## 2. Sustainability

Another aspect of institutionalization is sustainability of a new approach. Sustainability is concerned with continued use of a new practice. Three main questions can be raised in relation to sustainability:

- (a) Is there enough motivation and interest in the province, so that they will continue to use it in their regular work? Is this interest widespread, at all levels in the provincial health system, and in all concerned sections, like the community volunteers, etc.?
- (b) Are human resources, both in terms of competence and quantity, available to continue the new activity? Can such resources be supplemented, from the community?
- (c) Can the activity be continued with the available financial resources? This also relates to the cost-effectiveness of an activity. How much probability exists of supplementing financial resources, from the community, industries, local government etc.? We would like to assess sustainability from these angles.

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## Findings

Replicability and sustainability are closely related. Some activities were conducted as an initial attempt to push a program. For example, crash programs for tetanus immunization in all three provinces were successful in achieving their goals, but were not meant to be sustained. However, they created a mobilized community effort. The vitamin A activity in Aceh, and several surveys (TBA, PosYandu etc) are not meant to be continued. However, the surveillance skills developed are sustainable.

Activities requiring simple techniques and skills are likely to be sustained, for example, data management training and BMC nutrition activity.

Another issue related to sustainability is transfer of technology, in terms of transferring skills from outside technical consultants to their provincial counterparts. In Aceh, two large-scale surveys have been conducted to examine infant mortality, and specifically, neonatal mortality. Of particular interest to the evaluation team was the question of whether such a survey could be repeated again in Aceh without outside assistance. The opinion of several provincial health personnel was that outside assistance still would be needed, not only in terms of extra manpower, but also in terms of technical guidance. The LTC felt that the provincial staff had the necessary skills, but simply lacked confidence in their abilities. He thought that, in retrospect, it might have been a mistake to bring in so many people from outside to work on the second survey. In his opinion, the presence of these outsiders reinforced the impression that the province needed this input, which may not have been the case.

Commitment, as demonstrated by adoption of the activity in the regular DIP, and its wider use, demonstrates sustainability. The UP GK nutrition program in NTT has potential sustainability from this angle. Other factors which may contribute to sustainability are inter-program and inter-sectoral linkages. The breastfeeding promotion activity in SumBar is an example. Interlinkages among hospital, PKK, SPK, KanWil, and community leaders have increased sustainability prospects of this activity.

Sustainability depends very much on availability of resources, certainly trained personnel, but much more on financial resources. And financial resources may depend on demonstration of cost effectiveness. This issue deserves a separate comment, and has been included in III.C.

The impact of the large cuts in the national health budgets of the last two years has been cushioned somewhat by the availability of CHIPPS resources, which now comprise a much larger percentage of the health budget in all three provinces. In several instances, programs are being planned or implemented which, even under more prosperous times, would be difficult to sustain financially after CHIPPS. The most extreme

example of this may be the current TB control program in Sumatera Barat. Efforts have been successful in obtaining funds outside of CHIPPS, but CHIPPS still contributes a very large share of the total costs.

### 3. Diffusion

Institutionalization also involves spread of the new approach or program to other areas. When an area or a province has adopted a program, tested its utility, and finally accepted it, there is a natural eagerness that the benefits of the change also be shared by other areas or provinces. Diffusion makes start-up of a similar activity in a new region less expensive than the initial model. The replicators have the advantage of learning from the experiences of the innovators, and do not have to spend the same amount of resources to develop the basic design. Diffusion can be within a province or across the provinces.

#### Findings

There is evidence of diffusion within CHIPPS provinces. For example, while in SumBar and NTT CHIPPS was started in some selected Kabupatens, in a couple of years the entire provinces were seen as the "field" of CHIPPS work. A similar development happened in the field training of nursing students in all the three provinces.

In the beginning, CHIPPS supported training of additional nurses, but the benefits received by them were soon shared with other students. In SumBar, community-oriented field training, mainly in the CHIPPS-supported government SPK, was introduced in the Army SPK, and two other private SPKs.

An interesting example of diffusion across the provinces is from South Sumatra, where the previous KaKanWil of Aceh was appointed last year as KaKanWil in this province. He has been requesting support for a similar approach in South Sumatra. MOH and USAID are responding to the request, not by "duplicating" CHIPPS, but by supporting the effort of using the CHIPPS approach.

We came across one example of cross-sectoral diffusion. In NTT, the advantage of flexible budgets for effectiveness of PKK activities in tetanus and nutrition led to the discussion of flexibility in Pusat, and the Ministry of Home Affairs seems to have been convinced to work towards the concept of block grants.

Another form of diffusion is in the various parts of MOH at the pusat level. During our interactions with several Pusat officials in Jakarta, we were dismayed with the fact that with some exceptions there is very little knowledge and understanding of what is being attempted by CHIPPS. We strongly feel that low diffusion of CHIPPS approach at MOH level may delay its institutionalization, even though the highest level people may be supportive.

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#### 4. Organizational Learning

Organizational learning is the process of making use of and building on cumulative experiences. As the individual learns (or does not learn), similarly organizations learn (or do not learn). Institutionalization includes the process of organizational learning.

Organizational learning has three phases : innovation, implementation, and stabilization; and four mechanisms used by a system (like a province): mechanisms for flexibility, for mutuality, for contingency planning, for competency building (like training).

In order to assess potential for organizational learning, an Organizational Learning Diagnostics (OLD) instrument was completed by 5 key persons in each province, including the CHIPPS PimPro (Appendix 3). The results of these measures indicated that among the mechanisms of organizational learning, contingency planning and use of temporary systems (task groups, etc.) have been less developed and used. Considerable attention has been paid to training activities, but in some key areas skills and competencies are still lacking. Capacity building of the province will require sustained attention.

The old instrument was used for impact evaluation of USAID/Indonesia's Health Training Research and Development Project (HTRD); at the 2nd Advanced Program for Management Trainees (APMT) in 1985, the same number of respondents (not the same persons) had completed the instrument. NTT was not included in that evaluation. 1985 POLI figures, compared with the present (1987) show improvement in all the phases and mechanisms in organizational learning in both the provinces in two years (Appendix 3).

#### Conclusions:

1. Staff capability. Although capabilities in some areas (problem identification, community involvement, planning etc), have developed to a great extent, competencies in some other areas are less well developed (monitoring and evaluation, surveillance, management and use of data, transfer of learning to other activities etc). In the absence of strengthened competencies, institutionalization may suffer.
2. Financial constraints. Activities requiring lower costs are likely to be institutionalized; if high recurring costs are involved, the likelihood of institutionalization is low. For example, activities involving payment of financial incentives (used in the collection of birth and death information in Aceh) are not only unsustainable, but may backlash when such incentives are no longer offered. There may also be negative spill over to other activities being routinely done, where such incentives are not given. We feel strongly that where supplementary resources are to be provided these should be in the form of facilities and not financial incentives which do not fit with the prevailing practices in the provinces. Financial incentives may produce quick dramatic results, but are likely to lower chances of institutionalization.

3. Supplementary resources. If the community, local government, NGOs, local industry, etc. are motivated to provide some resources (persons and materials) and take over some responsibility, the institutionalization process is strengthened. This process has begun in all three provinces.
4. Community mobilization. Since health improvement concerns the community, the activities in which the community is involved and is enthused about are likely to be institutionalized more. Promotion of breastfeeding in SumBar, and immunization in NTT are examples.
5. Interlinkages among the KanWil-Dinas sections (e.g. in PosYandu acceleration activity in SumBar, epidemiology training in NTT), among the various health system levels in a province (e.g. data management activity in SumBar), with other sectors (e.g. promotion breastfeeding in SumBar), between health system and the community (e.g. tetanus immunization in NTT), and between the provinces and the pusat are likely to promote and accelerate institutionalization.

#### Recommendations

Many activities initiated under CHIPPS have high potential for institutionalization, which has progressed over the years. Some activities were not meant to be sustained in the same form, but have helped in starting off some processes. The effort for solving problems through a process of problem identification/planning intervention/ implementing/evaluation is likely to be institutionalized, depending on further sustained effort. We are, therefore, making some recommendations in this regard for attention of the Pusat, CHIPPS program, and others concerned with this effort.

1. In order to strengthen interlinkages among the Pusat-level health offices concerned with CHIPPS, we recommend formation of a Pusat advisory group for CHIPPS.
2. We recommend more visits by some key Pusat persons to the three CHIPPS provinces for specific purposes, where they could both see the activities and provide pusat point of view and guidance.
3. We also recommend inter-province visits in the three CHIPPS provinces, and visits by key officials from some other provinces who are interested in learning from CHIPPS experiences (e.g. the World Bank supported provinces). These should be planned by the Pusat CHIPPS PimPro.
4. It is time that accumulated experiences in the three provinces were both disseminated and critically examined. We recommend national level seminars on nursing training, community-oriented medical education, birth and death reporting and recording, epidemiology training and use of local data, acceleration of immunization (including crash programs). Next year, seminars on PosYandu effectiveness and drug management should be organized, when enough

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experience in these two areas will have been generated in the three provinces. The seminars may be coordinated by the concerned MOH unit, and must be based on papers prepared by the three CHIPPS provinces and other provinces with varied experiences, and must result in a report incorporating the learnings for possible adoption in the next Pelita. Similar seminars on community mobilization for health, low cost health programs, and supplemental financial resources for health could be considered.

5. We recommend greater emphasis on transfer of technology in the three provinces in the next two years. Gaps in the existing competencies should be located, and appropriate steps should be taken to provide those competencies.
6. Institutionalization requires team work, between KanWil and Dinas and province and Kabupaten levels, and within KanWil and Dinas among bidangs and sections. Regarding KanWil and Dinas, the current practice of the flow of financial and other resources from the pusat to the provinces contributes to the imbalance between the two. Generation of more financial resources at the provincial and Kabupaten level is likely to redress the imbalance to a great extent. However, the perceptions of each others' competence, importance, and central role in Provincial health systems also cause difficulties in collaborative work. We recommend that efforts to recognize and deal with such issues be encouraged and organization development work be done more extensively, through the HTRD intern program graduates, in all the three provinces.
7. To be able to successfully secure supplementary resources (personnel and financial), provincial and kabupaten health officials need to be able to "sell" the merits of their programs to other groups, such as the local government, NGOs, local businesses, etc. Since this is an unfamiliar area for most health personnel, management training under CHIPPS might include the development of skills in obtaining supplementary resources.

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### III. NEXT STEPS

#### A. Province Plans for Next Two Years

The next two years are crucial for CHIPPS, in terms of sustainability and institutionalization of gains made to date. Although each province KanWil/Dinas was aware of this, we did not find that any had begun to plan seriously for the "post-CHIPPS era".

#### N.T.T.

NTT has a new head of KanWil/Dinas who is very interested in CHIPPS. He assessed the current status of CHIPPS in the province as being like a car that just had been started. Now, the need is to consolidate what had already begun and put the car in gear.

Management improvement is to be a major emphasis in CHIPPS-NTT over the next two years. One aspect of management improvement would be an increase in the capabilities of DoKabu's to use epidemiology.

Until now, most activities have been targeted directly to the PusKesMas, with little or no involvement of the DoKabu. Much of the difference in progress among the Kabupatens was attributed to human factors, such as the personal characteristics of the PusKesMas doctor. In the future, the province hopes to involve the people at the Kabupaten level more directly in the planning and implementation of activities.

This province has been without a long-term consultant at KanWil/Dinas since June 1987. Provincial health personnel do not want another foreign LTC. Their preference would be to make greater use of Indonesian short-term consultants. We, however, see the need for some kind of LTC to help guide the enthusiasm we witnessed of the province in sustained and systematic work.

#### ACEH

The provincial staff is currently discussing plans for the next two years. No overall plans exist, yet. However, in the future, higher priority will be given to activities which can be finished in the next two years and to projects which can be institutionalized. The governor has instructed that attention be given to the village information system (for vital statistics). New activities are to be assigned a lower priority.

Greater attention is to be placed on program management. Plans are underway for training programs in both management skills and organizational behavior. This training is to be given first to section chiefs at the provincial level, but later will be extended to persons from the kabupatens.

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At the time of our visit to the province, the LTC was preparing to leave, after four years in Aceh. A new LTC had been identified, and she is already familiar with the province and the CHIPPS program there. It was expected that she would formally assume her position in a few weeks. Although the former LTC was highly valued for his contributions to Aceh, high hopes were expressed for the potential contributions of the new LTC. Many provincial staff felt that they were ready for a change in emphasis. They would like the new LTC to assist them with the management of projects, especially with regard to monitoring and evaluation.

#### SUMATERA BARAT

A transition process had already begun at the end of 1986, with the change in LTC. The new LTC has attempted to focus on the managerial aspects of all projects, to complement the strong technical skills contributed by the first LTC.

The PosYandu activities provided an opportunity for provincial staff from different divisions to work together. This integration of efforts is hoped to be extended further in the future. In particular, more integration teams are planned which would combine provincial and kabupaten staff.

In the past, most of the planning activities were conducted by KanWil staff, and Dinas participated in project implementation. Ways are being explored to integrate Dinas into the planning process.

#### B. Implications for MOH - Pelita V

The team found that the three provinces are making progress, with CHIPPS support, in several areas which are expected to be national priorities during the next five year development plan period.

We will review some of those briefly here:

1. Decentralization of some government functions to the provinces. Health services delivery should be the responsibility of province governments and the three CHIPPS provinces are making important progress to prepare themselves to handle that responsibility.
2. Efficient use of national resources. Until now health services delivery has been poorly targeted and its effectiveness could not be measured. The three CHIPPS provinces are making progress through application of the "four step problem solving process" to target interventions more precisely and are attempting to measure the effectiveness of some. Much more must be done, especially with cost-effectiveness, but performance should be improved further by 1989.
3. Child survival and quality of life. Current GOI and USAID priorities are placed on child survival and reducing IMR to 70/1000 by 1989 and 45/1000 by 2000. Aceh, NTT and SumBar are certainly participating in that effort, with strong support from CHIPPS. But

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Pelita V will apparently look beyond survival to quality of life for greater numbers of survivors. The CHIPPS project originally anticipated supporting analysis and trials for a number of interventions intended to enhance the quality of life, as well as increase the survival rate, which have not received much support from CHIPPS. Those included several nutritional problems (goiter and cretinism, blindness due to vitamin A deficiency), diarrheal diseases, environmental sanitation and maternal and child health. To prepare human resource planning and implementation capabilities to handle those interventions effectively during 1989-1994, it may be useful to provide CHIPPS support for them now.

### C. Implications for USAID

Assuming USAID will share many of the Pelita V health sector goals, CHIPPS may be seen as contributing significantly to future USAID health sector objectives. Because health problems will remain severe in rural areas where access to effective health services is most difficult, USAID should continue to give priority to those areas - where EPI, Timor malaria, HTRD, CHIPPS and Family Planning projects have focused.

DepKes is making some major policy and operational changes with respect to decentralization, per the GOI regulation no. 7 of 1987, and it will be a high priority in Pelita V. CHIPPS has helped to prepare the groundwork in three provinces for decentralization and perhaps encouraged DepKes to move in that direction. As pointed out earlier, the team feels that major budgetary policies and practices vis a vis the provinces must be changed as a corollary to health services delivery decentralization. Authority to make budget decisions and access to local sources of funds must accompany transfer of responsibility for planning and managing health services to the provinces and below.

In light of these major policy changes, USAID should continue to help strengthen the capacity of provinces to handle the added responsibility of decentralization efficiently and effectively. Many issues deserve attention including, 1) expanding use of local financial and human resources for service delivery (e.g. Puskesmas self financing), 2) continued strengthening of nurse capabilities since they are the real Puskesmas program managers, 3) use of cost-effectiveness analyses to guide program planning and priority setting, ensure that scarce resources are used efficiently, and support requests for more resources for preventive health services, 4) making the provinces fully capable of planning, managing and evaluating effective programs.

Attainment of the last three objectives will only be realized through repeated practice. Opportunities to apply newly acquired skills requires field projects and funds. Given the scarcity of health services funds from the GOI and local sources, AID can make a major contribution, by continuing to provide modest funding through CHIPPS to support local studies, trials and interventions for as long as possible.

The three provinces have made substantial progress since 1981, but the gains are still fragile. They should soon be able to demonstrate impact from the human resource investments made and, as they do so, more local resources should be forthcoming to sustain and expand effective performance.

CHIPPS is a valuable asset for USAID. It has made a significant impact in three provinces, two of which, at least, are of some special political importance - NTT and DI Aceh. It has made an impact in DepKes where it is regarded as the pilot for decentralization. It is producing some interesting small-scale operation research on subjects which are central to child survival strategies, such as TBA practices, use of health centers, etc. The team feels that USAID should make maximum use of the CHIPPS asset, using it for as long as possible to feed into further child survival initiatives.

APPENDIX 1

FACT-FINDING INSTRUMENT USED

I. Findings

1. Why start activity?
2. Four Step Process :

a. Problem Identification

How was it done?

Survey  
Meetings  
Existing data  
Pusat  
Other

Who did identification work?

KanWil staff  
Pusat  
Consultants  
Others

Costs:

APBN  
APBD  
CHIPPS  
Community  
Private

b. Planning

How was it done?

Who did the planning?

KanWil staff  
Pusat

Consultants

NGO  
DoKabu  
Other

Costs :

Various

DUP/DIP approval process

Problems - if any

Time devoted to planning

Began-  
Finished-

c. Implementation

How?

Special campaign or routine program?

Who implemented activity?

Costs

Various sources

Supervision  
Who did supervision?  
Problems?  
Time  
Began  
Finished  
Planned VS actual  
Obstacles/problems

- d. Monitoring & Evaluation  
How :  
Indicators used  
Methodology used  
System used  
Who did it?  
Costs  
Results  
Problems  
Replanning/Feedback?
3. Follow-up Plans/Next Steps  
Sustainability  
Repicability  
Institutionalization
4. Have results been communicated?  
To whom  
How?
5. Total Costs  
Sources  
Amount
6. How managed by Province?
7. Staff capability:  
Skills  
Time
8. Role of PimPro
9. Role of LTC
10. Special training used for activity
11. Logistics factors e.g. distance to activity site.
12. Linkages with other programs or sectors.
13. "What have you learned from doing this Activity? What difference has it made?".

II. Teams's Assessment of Activity

1. Role of PusKesMas.
2. Process followed - Did they follow CHIPPS four step process?.
3. Effectiveness/Impact of Activity.
4. Sustainability/replicability/institutionalization.
5. Relevance (relationship) to national programs/targets.
6. Does Activity represent "decentralization"?
7. Implications for Pelita V?
8. Implications for AID programs?
9. Candidate for case study?

APPENDIX 2

PERSONS INTERVIEWED AT PUSAT AND PROVINCE

<u>NO.</u>	<u>N A M E</u>	<u>TOPICS DISCUSSED</u>
<u>PUSAT</u>		
1.	Dr. S. Gunawan	- Immunization, Tetanus crash programs.
2.	Dr. Sonya Purnomo	- PosYandu
3.	Mr. Soetikno	- Nurse Training (SPK)
4.	Ign. Tarwotjo, M Sc	- Nutrition
5.	Soekirman, PhD	- Financial Procedures
6.	Dr. Selamat Soesilo	- Drugs Management
7.	Matilda Johann	- Drugs Management
<u>N.T.T.</u>		
1.	Dr. Lada (KaKanWil)	- General Management Issues
2.	Dr. Servas M. Pareira (PimPro)	- Birth & Death Registration and OD Management Training
3.	Ny. E.N. Mitak	- Nurse training (SPK)
4.	Ny. S. Sembiring	- Nurse training (SPK)
5.	Ny. E. Indiarti	- Nurse training (SPK)
6.	Ny. Mia Kuhurima	- Nurse training (SPK)
7.	Dr. Selamat Soesilo	- Drugs Management
8.	Matilda Johann	- Drugs Management
9.	Ny. Ermaya Riwurohi	- Nutrition, UPGK
10.	Eko Suprijadi	- Nutrition, UPGK
11.	Ny. Djukatana	- Nutrition & P2GK, PKK
12.	Ny. Makambombu	- Nutrition & P2GK, PKK
13.	Ny. M.E. Husein	- Nutrition & P2GK, PKK
14.	Frans Pello, SKM	- Epidemiology Training
15.	G.A. Samana	- Epidemiology Training
16.	Willy Tokan	- Epidemiology Training
17.	Soleman Lepat	- Epidemiology Training
18.	Marthen Biro	- Epidemiology Training
19.	Dr. Gatot Suroso	- Drug Management
20.	Dr. Lapoe Moekoe	- PosYandu
21.	Karel Surat	- PosYandu
22.	Wanti Morghen	- PosYandu
23.	Threes Pora	- PosYandu

- 24. Dr. Titus Nenobais MPH - Malaria - Robek & Nangapanda, and Tetanus Toxoid & Measles Immunization Crash Program
- 25. Dr. H.C. Theodorus - " -
- 26. M. Biro - " -
- 27. Frans Pello SKM - " -
- 28. Ny. M. Ratoe Oedjoe - P2GK, PKK
- 29. Ny. N. Nasri Abdullah - P2GK, PKK
- 30. Ny. L. Tagadoko Taolin - P2GK, PKK
- 31. Ny. Dortje Lay - P2GK, PKK
- 32. Ny. Agnestia Turuk - P2GK, PKK
- 33. Drg. Herman Suwono - Birth & Death Registration
- 34. Dr. Fen Olof Manik - Birth & Death Registration
- 35. Drs. Freddy Rangga - OD Management Training
- 36. Dr. Nafsiah Mboi - PKK (General)
- 37. Ms. Karen Smith - PKK (General)
- 38. Governor Mboi - NTT (General)

D.I. ACEH

- 1. Dr. Udin M. Muslaini (KaKanWil) - General Management Issues
- 2. Dr. Syarifuddin (PimPro) - General Management Issues
- 3. Dr. John Quinley - Vit A/Immunization
- 4. Dr. Iskandar, SKM - PosYandu
- 5. Dr. Cut Idawani - PosYandu & Epidemiology training
- 6. Drg. Fauziah - PosYandu & Epidemiology training
- 7. Dra. Armiati - Drugs Management
- 8. Drs.A. Farhan Hamid - Drugs Management
- 9. Drs. Marzuki Mizan - Drugs Management
- 10. Dra. Farida - Drugs Management
- 11. Dr. Saleh Suratno - Survey of TBA
- 12. Nurjani - Survey of TBA
- 13. Cut Usdawati - Survey of TBA
- 14. Yulidar - Survey of TBA
- 15. Dr. Burhanuddin Yusuf - Epidemiology Training & Tetanus Crash Program
- 16. Mr. Marzuki - " -
- 17. Dr. Rustam Roni - " -
- 18. Dr. Anwar Djafar - " -
- 19. Dr. Chaeruddin Meuraxa - " -

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|-------------------------------------|--|
| 20. Sulaiman Sarong                 | - Tetanus Crash Program                    |
| 21. Dr. Anjar Asmara                | - Tetanus Crash Program & SID              |
| 22. Dr. Molek Sjafri                | - Village information system (SID)         |
| 23. Dr. Syahminan Arongan           | - Village information system (SID)         |
| 24. Dr. Ormaya                      | - Village information system (SID)         |
| 25. Dr. Steve Solter                | - Role of LTC, CHIPPS in Aceh<br>(General) |
| 26. Dr. Margaret Wilusz-<br>Poresky | - Future role of LTC                       |

SUMBAR

- |                                  |   |
|----------------------------------|---|
| 1. Dr. Rafki Ismail (KaKanWil    | - General Management Issues   |
| 2. Dr. Bachtiar Karatu (PimPro)  | - General Management Issues   |
| 3. Dr. Saif Abdullah SKM         | - Epid Training & PosYandu  |
| 4. Dr. Henry Gunawan             | - Epid Training & PosYandu  |
| 5. Dr. Arus Yakub MSc            | - Tetanus Survey & Campaign   |
| 6. Dr. Rinal Fendi               | - Tetanus Survey & Campaign   |
| 7. Drs. Nadir Chan               | - Drugs Management  |
| 8. Drs. Hawry Ahmad              | - Drugs Management  |
| 9. Dr. Kamardi Thalut            | - COME  |
| 10. Dr. Syafril Syahbuddin       | - COME  |
| 11. Dr. Hafid Ardi               | - COME  |
| 12. Dr. Bastian Manalu           | - COME  |
| 13. Syahril SKM                  | - Nurse Training (SPK)  |
| 14. Rustam Effendi SH            | - Nurse Training (SPK)  |
| 15. Drs. A. Muas                 | - Nurse Training (SPK)  |
| 16. H. Daltias Churchill         | - Nurse Training (SPK)  |
| 17. Muslim SKM                   | - Nurse Training (SPK)  |
| 18. Dr. Rasyidah Rasyid MPH      | - Acceleration of PosYandu  |
| 19. Drs. Syaukani Isa            | - Acceleration of PosYandu  |
| 20. Chaidir BA                   | - Acceleration of PosYandu  |
| 21. Dr. Wihardi Trimam           | - Acceleration of PosYandu  |
| 22. Renfil SKM                   | - Acceleration of PosYandu  |
| 23. Peter Fajans MD, MPH         | - Acceleration of PosYandu<br>- Role of LTC<br>- CHIPPS in SumBar (General) |
| 24. Dr. Zainal Rasyidin          | - TB, Survey and Control  |
| 25. Dr. Parma Oemi Aznil         | - Breast feeding  |
| 26. Dr. Linda Taufik             | - Birth, Death and Cause of death<br>registration system.                   |
| 27. Dr. Syahril Sani<br>(DoKabu) | - CHIPPS activities in<br>Kabupaten Pesisir Selatan                         |
| 28. Dr. Zulanwar                 | - " -   |
| 29. Dr. Asman                    | - " -   |

APPENDIX 3

INSTRUMENT FOR ORGANIZATIONAL LEARNING

The attached instrument was adapted and translated in Bahasa Indonesia instrument was adapted for assessing the perception of five key persons in each province about the extent of use some practices (mechanisms). The responses show the level of their learning potential, and which dimensions are strong and weak. The responses to 23 items can be scored to show the attention given to organizational learning mechanisms at the stages of innovation, implementation, and stabilization. These are also scored to show how much use has been made of OL practices contributing to flexibility, team work, contingency planning, use of temporary systems (task forces, work groups etc), and competency building (mainly training).

In addition, the eight members of the Evaluation Team rated each province on a 5 - point scale on each the eight dimensions, based on their impressions. Potential for organizational learning index (POLI), ranging from 0 to 100, was calculated from the five responses from each province. The ratings of members of the evaluation team were averaged, and were converted in a scale ranging from 0 to 100, to match with POLI. The results are show below.

<u>Organizational Learning Dimensions</u>	<u>NTT</u>		<u>ACEH</u>			<u>SUMBAR</u>		
	<u>POLI Ratings</u>		<u>POLI Ratings</u>		<u>POLI</u>		<u>Ratings</u>	
			1985	1987	1985	1987		
Innovation	43	60	37	62	78	56	62	82
Implementation	48	50	40	57	64	43	61	70
Stabilization	42	50	23	54	56	43	59	60
Experimentation and flexibility	43	50	37	56	65	61	63	74
Mutuality	45	50	35	57	60	48	66	70
Contingency planning	42	48	30	56	62	40	58	66
Temporary systems	42	58	35	50	56	35	54	66
Competency Bldg	55	68	39	68	70	54	76	78

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