



For a better tomorrow for all
Japan International Cooperation Agency

**EX-POST EVALUATION STUDY
ON
PROJECT FOR IMPROVEMENT OF
DISTRICT HEALTH SERVICES IN
SOUTH SULAWESI**



FINAL REPORT



PT. INDOKOEI INTERNATIONAL
Engineering and Management Consultant

MARCH 2005

INO
JR
04-05

Executive Summary

I. Outline of the Project	
Country: Indonesia	Project title: Project for Improvement of District Health Services in South Sulawesi
Issue/Sector: Health Services	Cooperation scheme: Project-type Technical Cooperation
Division in charge:	Total cost: 256,395 thousand Yen
Period of Cooperation	R/D: Apr.1, 1997 – Mar.31, 2002
	Partner Country's Implementing Organization: Ministry of Health
	Supporting Organization in Japan:
Related Cooperation	
<p>1. Background of the Project</p> <p>The health status in the Indonesia was improving but infant mortality rate and maternal mortality are lower than those of other ASEAN countries. In Indonesia, there were big differences among provinces and between urban and suburban areas on health indicators. The Government of Indonesia proposed the project to assist the human resource development in the island of Sulawesi where the health situation was worse than that others areas.</p> <p>The project would intend to strengthen district services through the three sub-project as follows; (i) Human resources development to reduce preventable death, (ii) Introducing problem-oriented action research (PROAR) in the three pilot areas, and (iii) Strengthening the district laboratory system through introducing quality assurance in the three pilot areas.</p>	
<p>2. Project Overview</p> <p>Project for Improvement of District Health Services in South Sulawesi consist of Human Resource Development (District Health Manager and Mother Child Health), Problem Oriented Action Research (PROAR) and Laboratory Quality Assurance.</p> <p>(1) Overall Goal</p> <p style="padding-left: 40px;">To contribute to reduction of deaths through strengthening of district health services in South Sulawesi Province</p> <p>(2) Project Purpose</p> <p>To strengthen district health services through the three sub-projects as follow,</p> <ol style="list-style-type: none"> a) Human resources development to reduce preventable deaths, b) Introducing problem-oriented action research (PROAR) in the three pilot areas (Pilot Project), c) Strengthening the district laboratory system through introducing quality assurance in the three pilot areas (Pilot Project). 	

(3) Outputs**a) Human Resource Development**

- Heads of district health officials develop their capabilities to manage district health service
- Officials of provincial health service (offices), and district hospitals develop their capabilities to train district health personnel
- Doctors, nurses, midwives and village midwives develop their knowledge and technical skill to practice essential medical care for reducing preventable deaths.
- Staff of health centers develops their capabilities to improve daily services by introducing the quality assurance method.
- Staff of provincial health laboratories develops their capabilities to train district laboratory technicians.
- Training methods and modules for improvement of district health services are strengthened

b) Problem-oriented action research (PROAR)

Heads and staff of district health offices in the pilot areas develop their capabilities to manage and supervise problem-oriented action research for reducing preventable deaths (problem-identification, planning, implementation, monitoring and evaluation).

c) Strengthening district laboratory system

The Laboratory Quality Assurance system is introduced in the pilot areas.

(4) InputsJapanese side:

Long-term Expert	<u>11</u>	Equipment (approx)	<u>168,968</u> thousand Yen
Short-term Expert	<u>29</u>	Local cost (approx)	<u>87,427</u> thousand Yen
Trainees received	<u>14</u>	Others	Yen

Indonesia side:

Counterpart	<u>27</u>	Equipment	___
Land and Facilities			
Local Cost			
Others	Local currency		<u>Rp 1,159,160</u> thousand Rupiah

II. Evaluation Team

Members of Evaluation Team	Tugiyo, SKM., MSi.	
Period of Evaluation	Day/Month/Year~Day/Month/Year 14 March 2005 - 31 March 2005	Type of Evaluation: Ex-post Evaluation

III. Result of Evaluation**1. Summary of Evaluation Result****(1) Impact**

The project decreased Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) and improve health management in the districts health service. It improved the human resources capabilities in provincial/district health services, central laboratories, PUSKESMAS staffs, doctors, nurses, and midwives. The overall goal of the project to contribute to in reduction of deaths through strengthening of district health services in South Sulawesi Province has been highly achieved.

The other positive impacts of the project is establishment of network cooperation among the provincial/district health services, Hasanudin University, Faculty of Public Health and other universities in Java.

(2) Sustainability

Even the executive training stopped since the completion of the project, the Health Policy & Administration Postgraduate Program and Hospital Administration Postgraduate Program, Hasanuddin University continue by self-financial funding from the government. The students not only come from Sulawesi but also from Maluku and Kalimantan.

The training of PROAR, MCH and Postgraduate Program, and laboratory activities are financed by the central government through APBN and province government through APBD. The institutions, which organize the trainings, are District Health Officials, Central Laboratory, Faculty of Public Health Hasanuddin University, and Siti Fatima Hospital Makassar.

The equipments provided by the project in Central Laboratory are operated and maintenance well.

From the fact mentioned above, it can be concluded that the project is highly sustainable.

2. Factors that have promoted project in the aspect of:

(1) Impact

The commitment of the dean, all lecturers of Postgraduate Program University of Hasanuddin and cooperation with the universities in Java are very high. Central laboratory is an excellent and reputable laboratory, having capable human resources and complete equipments and recommended as reference laboratory in East Indonesia.

In some PUSKESMAS, the programs and activities are controlled, monitored and evaluated based on standard quality indicators. In addition, midwives and village midwives should have APN Certificate to open the midwives practice, for controlling the quality of midwives.

All the mentioned factors have promoted the project impact.

(2) Sustainability

The alumni of Health Policy & Administration and Hospital Administration Postgraduate Program Hasanuddin University promote the programs in where the alunmi works. Central Laboratory is in an accreditation process that will improve the quality and strengthen the human resources of the central laboratory.

The financial subsidy from Central Government supports the sustainable of PROAR training, MCH and Postgraduate Program, and laboratory activities. Government regulations with regard to the decentralization system are appropriate and support the districts to develop PROAR. The province government supports the districts to develop the model of PROAR.

The acceptance of APN as a curriculum at Academy of Midwives and Faculty of Medicine become also the factor that has promoted the sustainability of the project, beside the factors mentioned above.

3. Factors that have inhibited project in the aspect of:

(1) Impact

The project impact has inhibited by the cost of executive training and postgraduate program that is considerable high. Some hospitals laboratory have no complete equipments and instruments, less PROAR supervision to PUSKESMAS, and less APN supervision after the trainee back to his/her workplace by the Province/Districts health official become also the factors that have inhibited the project impact.

(2) Sustainability

Less budget for financing the activities of province / district health services become the factor that inhibited the project sustainability. Other factors are capabilities of lecturers, skill of Health Policy and Administration staffs and laboratory technicians that need to be improved for supporting the sustainability of the project.

4. Conclusion

The purpose of the Project for Improvement of District Health Services in South Sulawesi has been achieved and contributed in reduction of deaths through strengthening of district health services in South Sulawesi Province. The impact of the project is spreading in the districts of the province in high sustainability; even there are some factors that inhibit the project impact and sustainability.

5. Recommendation

To enhance further impact of the project, the following recommendations are suggested to the Provincial and District Health Services in South Sulawesi:

- (1) To promote PROAR training in districts, strategic training of trainers is required in districts that were not attended the PROAR training previously. Supervision and monitoring of PROAR trainer alumni at their workplace is necessary to evaluate the implementation and dissemination of training result.
- (2) To improve the human resource development, the provincial and districts health offices are suggested to sustain executive training and post graduate program of mid-level district health manager in cooperation with the Faculty of Public Health, Hasanudin University.
- (3) The provincial and districts health offices are suggested to sustain APN training of doctors, nurses, midwives and villages midwives for developing their knowledge and technical skill in practical essential medical care for reducing preventable deaths.
- (4) To conduct workshop or seminars about bottom-up policy for planning of PUSKESMAS program and supervise, monitor and evaluate the PUSKESMAS for future improvement.

6. Lessons Learned

For more effective and efficient of the similar project in the future, such as “Improvement of Health Service in Sulawesi”, improvement of lecturers’ capability and skill of Health Policy & Administration is important. Government supports in view of policy, regulation and financial are essential.

7. Follow-up Situation

The provincial health services continues to disseminate the project impact by conducting training of PROAR, APN, Laboratory Quality Assurance for doctors, nurses, midwives and village midwives, head of PUSKESMAS and the staff and laboratory technicians in district level. A system for monitoring the implementation of training result at their institutions will be set-up.

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SERVICES
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FINAL REPORT

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CHAPTER I

INTRODUCTION

1.1 General

The Government of the Republic of Indonesia with the assistance of the Government of Japan has implemented the Improvement of District Health Services Project in South Sulawesi Province. The cooperation between both governments as technical assistance that implemented by Japan International Cooperation Agency and Ministry of Health in Central Government and Local Government in Project site.

The project was started in April, 1997 and completed in March, 2002. With about five month left to the termination of cooperation period, Japan International Cooperation Agency and Ministry of Health had conducted terminal evaluation of the project at the end of 2001 with recommendation: the established training, MCH Survey, and QA system will be maintained and improved by the province and district. ; Commitment and political support is indispensable for district health improvement. It is hoped that necessary advocacy for funding to the policy makers at various level be made by concerned people.

As a whole, the implementation of District Health Services Project in South Sulawesi Province project was almost 5 years before taken over the operation and maintenance by local government.

In order to improve self-reviewing process and accountability to general public, therefore the ex-post evaluation study has been conducted for the District Health Services Project in South Sulawesi Province that has passed more than three years after the end of cooperation period.

1.2 Purpose of the Study

The main purposes of the ex-post evaluation study are as follows:

- To assess the current situation of past project mainly from the impact and sustainability point of views; and
- To draw lesson-learned and recommendation.

The evaluation is expected to verify the important issues relating to the impact of the project and sustainability of the project.

1.3 Scope of the Study

In order to achieve the objective mentioned above, the study shall cover the following items:

- a) Collect and review document relating to the project;
- b) Identification of major questions and key informants for the study;

- c) Collection background data needed for evaluation analysis;
- d) Field observation of project site by means of discussions, interviews with key informant and field investigation;
- e) Analysis of collected data, including result of interviews; and
- f) Formulate lesson learned and recommendation to improve future JICA projects and at the same time to increase accountability to the stakeholders and general public.

1.4 The Study Team and Study Period

The ex-post evaluation study has been implemented for five past technical cooperation projects where the position of all project at the stage of more than three years after the end of cooperation period. The projects are as follows:

Table 1.1 List of JICA Project

Name of JICA Project	Period	Project Site
Dairy Technology Improvement Project	1998-2002	Bandung
The Agricultural Statistics Technology Improvement & Training Project	1994-2001	Jakarta
Irrigation Engineering Service Center Project	1994-1999	Bekasi
Integrated Agricultural and Rural Development Project in Southeast Sulawesi Province	1991-1996 2000-2001	Kendari
Project for Improvement of District Services in South Sulawesi	1997-2002	South Sulawesi Province

For undertaking evaluation of the projects as listed above, the Study Team was composed six experts, covering Team Leader, expert in charge of Dairy, Agricultural Economic, Irrigation, Rural Development, and Public Health. The Study Team Member is listed in Table 1.2.

The Study period will be three weeks from 2nd week of March until the end of March 2005. The schedule of the Study is as follows:

- 1st week : Preliminary meeting and preparation of Study
- 2nd week : Field visits, observation and interviews
- 3rd week : Analysis and drafting of report, submission of draft final report

Table 1.2 Lists of Study Team Members

Name	Position	Project
Hadiono S	Team Leader	Integrated Agricultural and Rural Development Project
Soedjasmiran Prodjodihardjo	Dairy Specialist	Dairy Technology Improvement Project
Soedjatmiko	Agriculture Economist	The Agricultural Statistics Technology Improvement and Training Project
Besar Hatmaya	Irrigation Engineering Specialist	Irrigation Engineering Service Center Project
Arief Effendi	Rural Development Specialist	Integrated Agricultural and Rural Development Project
Tugiyo	Public Health Specialist	Project for Improvement of District Services in South Sulawesi

The implementation schedule is shown in Figure 1.1.

Figure 1.1 Implementation Schedule

No.	Work Items	March 2005			April 2005	
		(2)	(3)	(4)	(1)	(2)
I. Stage I Preliminary Meeting & Preparation Works						
1	Preliminary Meeting	■				
2	Preparation of Evaluation Method	■				
3	Identification of Major Questionnaires & Key Informants	■				
4	Collecting of Project Documents	■				
II. Observation and Interviews						
1	Discussion with Agencies concerned		■			
2	Interview Survey		■			
3	Extraction of the Result		■			
III. Drafting Evaluation Result						
1	Findings Analysis			■		
2	Impact & Sustainability Analysis			■		
3	Evaluation Format			■		
4	Draft Final Report			■		
IV. Final Report						
1	Submission of Summary Format				■	
2	Submission of Draft Final Report, Comment				■	
3	Submission of Final Report					■

1.5 Structure of Final Report

The structure of Final Report is arranged into chapters as follows:

Executive Summary

This Executive Summary presents the report in brief, summarizing the result of evaluation for impact and sustainability, factors that promoted and inhibited the project, conclusion, recommendation, lessons learned and follow-up situation.

Chapter 1 Introduction

This Chapter presents general description of the project, propose of the study, scope of the study, the study team and study period.

Chapter 2 Project Information

This Chapter presents the project information in general, purpose and scope of the project, achievement of project input and project organization.

Chapter 3 Approach and Methodology

This Chapter presents approach of the study and methodology.

Chapter 4 Result of Evaluation and Findings

This Chapter presents present status of project, impact, sustainability, factors affecting the impact and factors affecting the sustainability.

Chapter 5 Lessons Learned from the Past

Chapter 6 Overall Conclusions

Chapter 7 Recommendations

CHAPTER II

PROJECT INFORMATION

2.1 General

The health status in the Indonesia was improving but infant mortality rate and maternal mortality are lower than those of other ASEAN countries. In Indonesia, there were big differences among provinces and between urban and suburban areas on health indicators. The Government of Indonesia proposed the project to assist the human resource development in the island of Sulawesi where the health situation was worse than that others areas.

The project would intend to strengthen district services through the three sub-project as follows; 1) Human resources development to reduce preventable death, 2) Introducing problem-oriented action research (PROAR) in the three pilot areas, 3) Strengthening the district laboratory system through introducing quality assurance in the three pilot areas.

2.2 Purpose and Scope of the Project

(1) Overall Goal

The overall goal of the project is to contribute to reduction of deaths through strengthening of district health services in South Sulawesi Province

(2) Project Purpose

The purpose of the project is to strengthen district health services through the three sub-projects as follow:

- Human resources development to reduce preventable deaths;
- Introducing problem-oriented action research (PROAR) in the three pilot areas (Pilot Project);
- Strengthening the district laboratory system through introducing quality assurance in the three pilot areas (Pilot Project).

(3) Scope of the Project

1) Human Resource Development

- a) Heads of District Health Officials develop their capabilities to manage district health service with he support of staff at University of Hasanuddin, Faculty of Public Health;
- b) Officials of Provincial Health Service (offices), and district hospitals develop their capabilities to train district health personnel;

- c) Doctors, nurses, midwives and villages midwives develop their knowledge and technical skill to practice essential medical care for reducing preventable deaths;
- d) Staff of health centers develops their capabilities to improve daily service by introducing the quality assurance method;
- e) Staff of provincial health laboratories develop their capabilities to train district technicians; and
- f) Training methods & modules for improvement of district health service are strengthened.

2) Problem-Oriented Action Research

Heads & staff of district health services & staff officers develop their capabilities to manage & supervise problem-oriented action research for reducing preventable deaths (problem-identification, planning, implementation, monitoring and evaluation)

3) Strengthening District Laboratory System

The Laboratory Quality Assurance system is introduced in the pilot areas.

(4) Activities of the Project

1) Human Resource Development

- Setting up curriculum committees
- Training for heads of district health officials
- Trainers training for staff of district health offices and services
- Trainers training for staff of district hospitals
- Training for staff of district hospitals and health centers
- Training for village midwives
- Base-line survey
- Training of quality assurance
- Introducing quality assurance
- Trainers training for provincial laboratory technicians
- Monitoring and evaluation activity for every training course
- Modification of training modules

2) Introducing PROAR in the Pilot Project

- Base-line survey
- Training of facilitators for verbal autopsy and PCM (Project Cycle Management)
- Establishment of medical audit conference to identity problem
- PCM workshop for planning problem-oriented action research
- Implementing the small scale pilot project
- Monitoring & evaluation of the small scale pilot project

- 3) Strengthening District Laboratory Research
 - Base-line survey
 - Training of quality assurance for laboratory technicians both in district hospital & health centers

2.3 Achievement of Project Inputs

(1) Japanese Side

a) Dispatch of Experts

The Japanese side has dispatched 11 long-term and 29 short-term experts in total up to the Project evaluation

b) Training of Counterparts in Japan

The Japanese side has accepted 14 Indonesian counterparts on Clinical Laboratory diagnosis, District Health Management and so on.

c) Allocation of Expenses on Activities

Total 87,427 thousand yen will be allocated until the end of the project

d) Provision of Equipment

Total 168,968 thousand yen was allocated for the provision of equipment until the evaluation.

(2) Indonesian Side

a) Counterparts Personnel

Total 27 persons have been assigned to the project during cooperation period

b) Budget

The amount of 1,159,160 thousand Rp. has been expensed by the evaluation

c) Building and Facilities

The project has been utilizing the building and facilities of District Health Services for its activities.

2.4 Project Organization

There are three type of Joint Coordinating Committee established for implementing the Project according to function of public health service from the central district level as follows : Central Joint Coordinating Committee (CJCC), Provincial Joint Coordinating Committee (PJCC), and District Joint Coordinating Committee (DJCC). The Indonesian side will support the Joint Coordinating Committee's activities (See Figure 2.1).

(1) Central Joint Coordinating Committee (CJCC)

1) Term of Reference

The CJCC held twice a year and whenever necessity arises:

- To discuss the annual work plan of the Project in line with the tentative implementation
- To review the overall progress of the Project and achievements of the above-mentioned annual work plan.
- To review and exchange views on major issues arising from or in connection with the Project.

2) Composition

The composition of CJCC as follow:

- a) Chairperson: Indonesian Representative of the Project
- b) Indonesian Side:
 - Executive Director of the Project
 - Project coordinating at the central office
 - Directors of related Units, Ministry of Health
 - Project coordinator at the provincial office
- c) Japanese Side :
 - Chief Advisor
 - Coordinator
 - Japanese Experts
 - Resident representative of JICA Indonesia Office
- e) Observer: Officials of the Embassy of Japan in the Republic of Indonesia

(2) Provincial Joint Coordinating Committee (PJCC)

1) Term of Reference

The PJCC held whenever necessity arises. The function of the PJCC as follows:

- To discuss detailed work plans and major issues of the Project
- To monitor and evaluate the Project with CJCC and DJCC
- To coordinate between the central level and district level

2) Compositions

The composition of PJCC as follow:

- a) Chairpersons : Head of KANWIL South Sulawesi (KAKANWIL)
- b) Deputy Chairpersons:
 - Japanese chief advisor
 - Head of District Health Services
- c) Secretary: Administrative coordinator of KANWIL South Sulawesi
- d) Indonesian Side:
 - Head of KANWIL South Sulawesi (KAKANWIL)
 - Head of Provincial Health Services
 - Dean of Faculty of Public Health, University of Hasanuddin
 - Administrative coordinator Kanwil Kesehatan South Sulawesi
 - All heads divisions in Kanwil
 - All heads of divisions in District Health Services
 - Head of provincial health laboratory
 - Head of provincial training center
- e) Japanese Side:
 - Chief Advisor
 - Coordinator
 - Japanese Experts

(3) District Joint Coordinating Committee (DJCC)

1) Term of Reference

The DJCC held whenever necessity arises. The function of the DJCC is as follows:

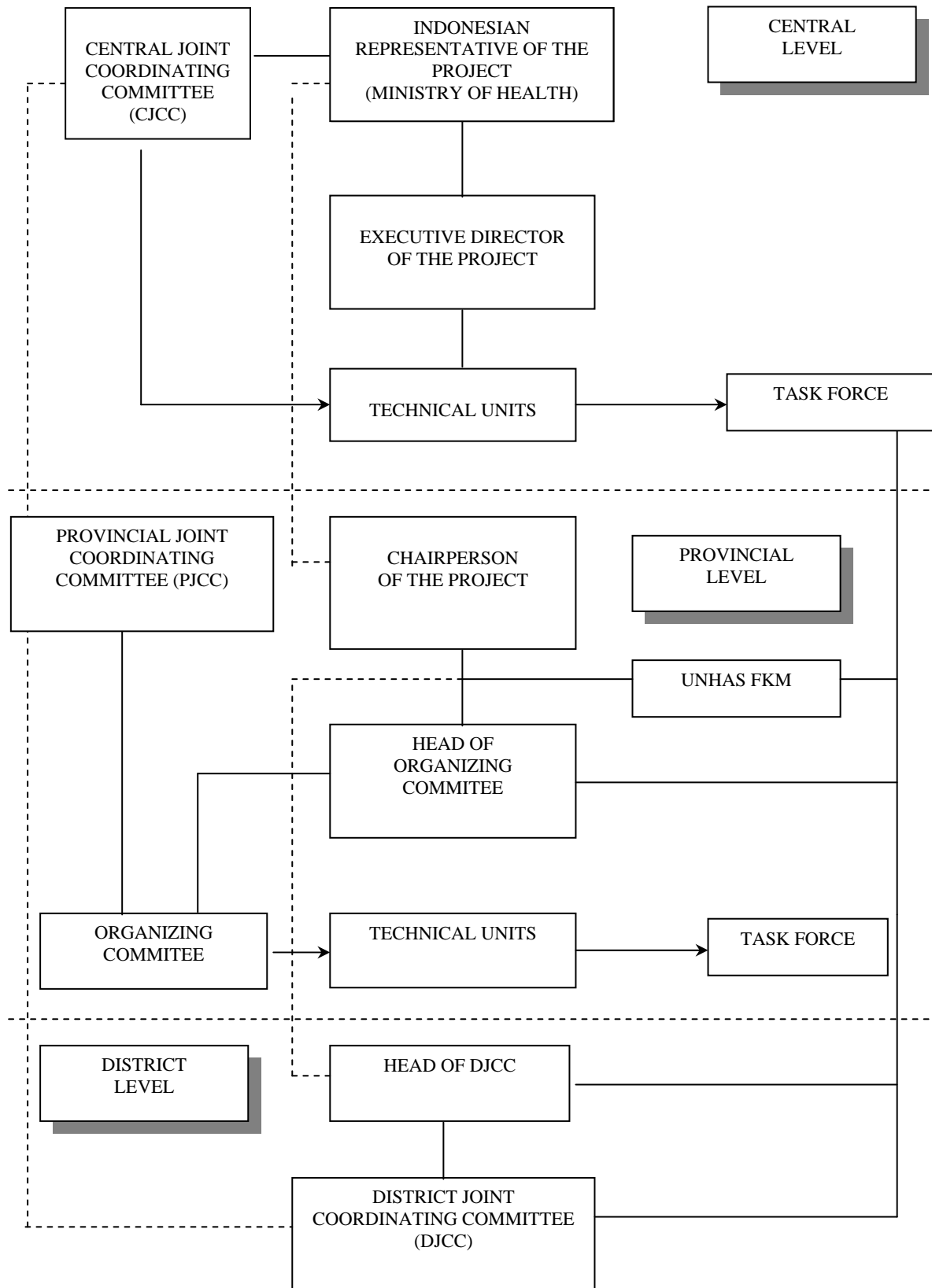
- To implement the work plan
- To monitor and evaluate with PJCC
- To discuss major issues of the Project

2) Composition

The composition of PJCC as follow:

- a) Chairpersons : Head of KANWIL South Sulawesi (KAKANWIL)
- b) Deputy Chairpersons: Japanese chief advisor
- c) Indonesian Side:
 - Head of the district health office
 - Head of the district health service
 - Director of District hospital
 - Officials of the district health office
 - Officials of the district health service
 - Staff of district hospital
 - Representative of health centers
 - Representative of village midwives
 - Representative of doctors association
 - Representative of midwife association
 - Officials of related agencies on the District Level
- d) Japanese Side:
 - Chief Advisor
 - Coordinator
 - Japanese experts

Figure 2.1 Project Management Structure



CHAPTER III APPROACH AND METHODOLOGY

3.1 Approach of the Study

Project Cycle Management (PCM) method is used for ex-post evaluation study for Improvement of District Health Services Project in Southeast Sulawesi. The ex-post evaluation study is mainly expected to verify the impact and sustainability of project at the stage of more than three years after the end of cooperation period. From the element of project i.e., input, output, project purpose and overall goal, ex-post evaluation more focused on project purpose and overall goal. The evaluation seeks answers to the following main questions of impact and sustainability.

(a) Impact of the Project

- To what extend has the project's "overall goal" been achieved since the time of terminal evaluation?
- What "positive" and also "negative" impacts are observed as a result of the project?
- How the project contributed the improved institutional capacity of the implementing institution?
- Are there any external factor that have contributed to (or impeded) the achievement of "overall goal" of the project"?

(b) Sustainability of the Project

- To what extend have the benefits of the project continued (maintained) since the end of the cooperation period?
- To what extent is the outcome of the project expected to maintain?
- What are the major factors that have enhanced (or impeded) sustainability of the project?

The evaluation framework of impact and sustainability of project is shown in Figure 3.1.

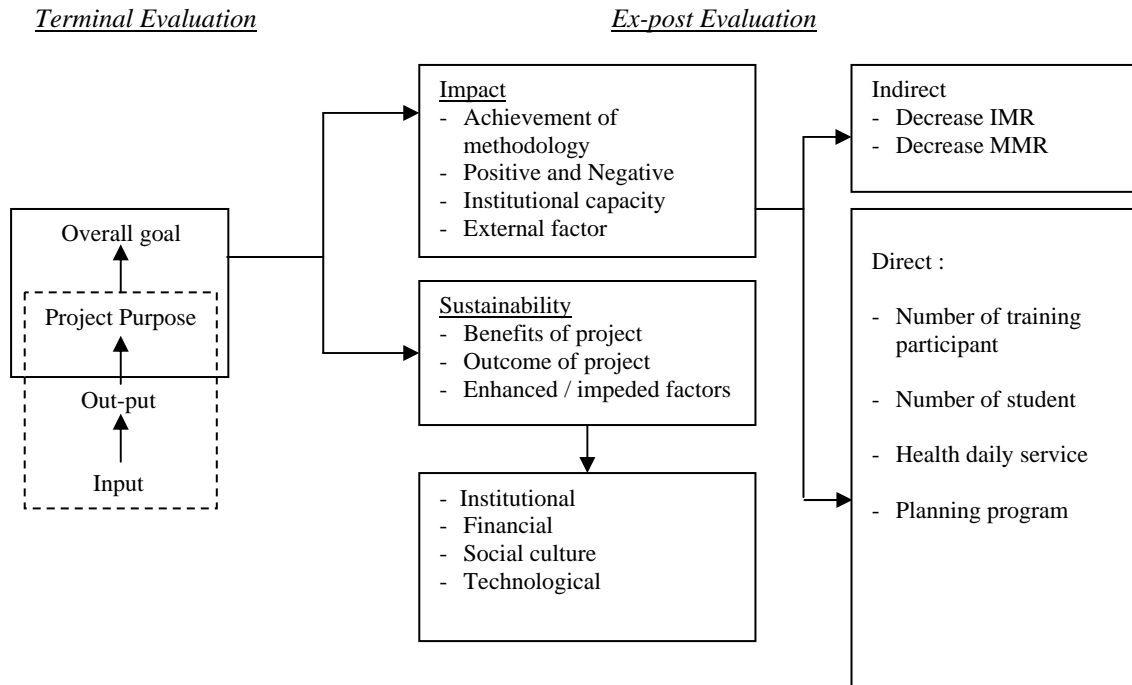
3.2 Methodology

(1) Project Design Matrix

Ex-post evaluation is carried out by preparing Project Design Matrix (PDM) and narrative summary, mainly for project purpose and overall goal. The objective verifiable indicators are verified objectively based on achievement of project purpose and overall goal. Both qualitative and quantitative data and information are proportionally assessed. The means of verification is developed to verify indicators, by preparing questionnaire for interviewing key beneficiaries and officials involved in the project and data collection,

documentations and reports related to the project implementation. The project design matrix is attached in Annex 1.

Figure 3.1 Evaluation Framework of Impact and Sustainability of Project



(2) Data Collection

Data collection was conducted during implementation of study covering documents, and report for reviewing the elements of project as well as achievement of project target. Based on *Final Evaluation Study Report of Improvement of District Health Services in South Sulawesi (2001)*, there are 25 (twenty five) location that has been received one or more project with equipment indication in Table 3.1.

Based on this review, the key question and key informant have been identified and followed by preparing questionnaire for beneficiaries such as Head of Provincial Health Office (Dinas Kesehatan Propinsi), Head of Health Office (Dinas Kesehatan Kabupaten), Head of Central Laboratory, Head of District Hospital Laboratory, Head of Community Health Center (Puskesmas), Dean of Faculty of Public Health, Hasannudin University, and the alumni of the training participant. To implement data collection activity for both primary data and secondary data, field observation has been conducted to project sites by deciding sample of 4 (four) location as follow:

Table 3.1 Location that Has Been Received Equipment of Project

No.	Location	Sub-Project			
		PROAR	HRD	MCH	LAB.
1	Makassar	KANWIL Sul-Sel DKK Sul-Sel	Faculty of Public Health, Hasanudin University	DKK Ujunpandang DKK Sul-Sel RS Siti Fatima	Central Lab Envt. Lab. SM Analisis RSU Haji RS Wahidin RSU Siti Fatimah RSU Pertiwi PSKM Amcci Saw PSKM Tamamaun RS Labuang PSKM Layang PSKM Daya
2	Bulukumba	PSKM Tanete PSKM Ponre DKK Bulukumba		RSU Bulukumba DKK Bulukumba	RSU Bulukumba
3	Pinrang	DKK Pinrang		RSU Pinrang DKK Pinrang	RSU Pinrang
4	Pare-pare	DKK Parepare		RSU Parepare DKK Parepare	RSU Parepare
5	Bone			DKK Bone RSU Bone	RSU Bone
6	Soppeng			DKK Soppeng	RSU Soppeng RSU Ajapangk
7	Palopo			RSU Palopo	RSU Palopo RSU Sawerigadi
8	Majene			DKK Majene	RSU Majene
9	Bantaeng			DKK Bantaeng	RSU Bantaeng
10	Toraja			DKK Tator RSU Tator	RSU Lakipadad
11	Luwu Utara			DKK Luwu	RSU Andijemma
12	Barru			DKK Barru	RSU Barru
13	Enrekang			DKK Enrekang	RSU Enrekang
14	Mamuju			DKK Mamuju	RSU Mamuju
15	Sidrap			DKK Sidrap RSU Sidrap	RSU Nenemalomo
16	Wajo			DKK Wajo	RSU Lamadukel
17	Jeneponto			Jeneponto	RSU Lanto DGP
18	Takalar			DKK Takalar	RSU Pattalas
19	Selayar			DKK Selayar	RSU Selayar
20	Maros			DKK Maros	RSU Maros
21	Pangkep			DKK Pangkep	RSU Pangkep
22	Gowa			DKK Gowa	RSU Sungguminas
23	Senkang				RSU Senkang RSU Ramaduke
24	Sinjai			DKK Sinjai	RSU Sinjai
25	Polmas			DKK Polmas	

Table 3.2 Location & Institution of Project Study

Locations	Institutions	Sample
Makassar	Provincial Health Office (Dinas Kesehatan Propinsi)	<ul style="list-style-type: none"> • Head of Office Administration • Chief of Effort Health Promotion of Puskesmas Section
	Central Laboratory	<ul style="list-style-type: none"> • Head of Central Laboratory • Staff of Central Laboratory
	Faculty of Public Health, Hasanudin University	Deputy of Postgraduate Program Management
	Siti Fatimah Hospital	<ul style="list-style-type: none"> • Head of Hospital • Staff of APN Training Center
Pinrang	Health Office	<ul style="list-style-type: none"> • Head of Health Office • Mother & Child Health Section
	Lasinrang District Hospital	<ul style="list-style-type: none"> • Head of Hospital Laboratory • Obstetrics and gynecology doctors • Mother & Child Health Section
Parepare	Andi Makassar District Hospital	<ul style="list-style-type: none"> • Head of Hospital Laboratory • Mother & Child Health Section
Gowa	Health Office	<ul style="list-style-type: none"> • Head of Health Office
	Community Health Center (Puskesmas)	<ul style="list-style-type: none"> • Head of Community Health Center • Staff of Community Health Center

The selection of institutions sample is based on institutions that organized the training project, pilot projects developed by project, and the alumni of training project.

(3) Data Analysis

Approach of data analysis covers descriptive analysis, evaluative analysis and intersection analysis of indicators of overall goal and project purpose. The quantitative data and qualitative data are presented in tables and figures.

CHAPTER IV

RESULT EVALUATION AND FINDING

4.1 Present Status of Project

(1) Problem Oriented Action Research (PROAR)

In the beginning, the implementation of the Project was organized by Regional Health Office (Kantor Wilayah Kesehatan Sulawesi Selatan) and Provincial Health Office (Dinas Kesehatan Sulawesi Selatan). PROAR trainings have been organized at Makassar, Bulukumba, Pinrang, and Pare-Pare as shown in Table 4.1. In line with the new government system (regional autonomy), both institutions are merged to be Provincial Health Office (Dinas Kesehatan Propinsi).

Table 4.1 Institution that Organized and as a Pilot Project of PROAR

No.	Location	Institution	Status
1	Makassar	KANWIL Sul-Sel DKK Sul-Sel	Organizer
2	Bulukumba	PSKM Tanete PSKM Ponre DKK Bulukumba	Pilot Project
3	Pinrang	DKK Pinrang	Pilot Project
4	Pare-pare	DKK Parepare	Pilot Project

Source: Final Report Document (2001)

At present, the activities of PROAR training are organized by Provincial Health Office, especially by the Effort Health Promotion of Puskesmas Section. PROAR training has been organized 12 times, attended by 295 participants after the project completion by self funding of Provincial Health Office. The number of PROAR Training Participants is shown in Table 4.2.

Table 4.2 Number of PROAR Training Participants

No.	Year	Time of Training	Number of Participant
1	2003	1	22
2	2002	2	50
3	2001	4	96
4	2000	5	172
	Total	12	295

Source: Provincial Health Office, South Sulawesi, 2004

Beside Provincial Health Office, three Health District Offices in Barru, Luwu, and Gowa also organized PROAR Training. The participants of the PROAR Training are provincial and district facilitator, head and staff of Puskesmas. An interview was conducted to Bajeng Puskesmas staffs that attended the PROAR Training and implemented PROAR to understand their opinion on the PROAR Training and the result of implementation. The module that used in this PROAR training is shown in the photographs attached in Annex 3.

(2) Laboratory Quality Assurance

Most of district hospitals in South Sulawesi and Central Laboratory Makassar have received laboratory equipments, IQC (Internal Quality Control) & EQA (External Quality Assurance) training and seminar, as one of the project purposes is to improve IQC and EQA services. The locations and institutions that have received the laboratory equipments are as follow:

Table 4.3 Location & Institution that Received Laboratory Equipment

No	Location	Institution
1	Makassar	Central Laboratory Envt. Laboratory. SM Analis RSU Haji RS Wahidin RSU Siti Fatimah RSU Pertiwi PSKM Amcci Saw PSKM Tamamaun RS Labuang PSKM Layang PSKM Daya
2	Bulukumba	RSU Bulukumba
3	Pinrang	RSU Pinrang
4	Pare-pare	RSU Parepare
5	Bone	RSU Bone
6	Soppeng	RSU Soppeng RSU Ajapangk
7	Palopo	RSU Palopo RSU Sawerigadi
8	Majene	RSU Majene
9	Bantaeng	RSU Bantaeng
10	Toraja	RSU Lakiப்பட
11	Luwu Utara	RSU Andijemma
12	Barru	RSU Barru
13	Enrekang	RSU Enrekang
14	Mamuju	RSU Mamuju
15	Sidrap	RSU Nenemalomo
16	Wajo	RSU Lamadukel
17	Jeneponto	RSU Lanto DGP
18	Takalar	RSU Pattalas
19	Selayar	RSU Selayar
20	Maros	RSU Maros
21	Pangkep	RSU Pangkep
22	Gowa	RSU Sungguminas
23	Senkang	RSU Senkang RSU Ramaduke
24	Sinjai	RSU Sinjai

Source: Final Report Document (2001)

All of hospital in Makassar City has executed IQC with the limited diagnosis parameter, and about half of district hospital in South Sulawesi and West Sulawesi has also executed the same thing. Unfortunately, most of Community Health Center (Puskesmas) has not executed the IQC. There is no IQC and EQA training executed after the project completion due to budget constraint.

(3) Human Resources Development (District Health Manager)

Human resources development project for District Health Manager has been organized by Faculty of Public Health, Hasanudin University. There are two training activities that are Executive Training and Postgraduate Program of Administrative and Health Policy for District Health Manager. Executive training program is finished in line with the project completion in 2001, but the Postgraduate program is now still going on.

Number of Executive training program until 2001/2002 is 146 participants and number of Postgraduate program students until 2004/2005 is 344 persons. Total participants of executive training program and postgraduate program based on financial aid by group / year is shown in Table 4.4 and Table 4.5.

Table 4.4 Number of Participants of Executive Training Program Based on Financial Aid

No.	Group/Year	Financial Aid	
		JICA	Self Funding
1	I / 1997-1998	23	0
2	II / 1998-1999	23	1
3	III / 1999-2000	23	8
4	IV / 2000-2001	24	11
5	V / 2001-2002	24	9
	TOTAL	117	29

Source: Faculty of Public Health, Hasanudin University

Table 4.5 Number of Enrolled Students of Post Graduate Program Based on Financial Aid

No.	Group/Year	Financial Aid	
		JICA	Self Funding
1	I/1997-1998	14	8
2	II/1998-1999	14	9
3	III/1999-2000	14	18
4	IV/200-2001	12	36
5	V/2001-2002	0	48
6	VI/2002-2003	0	61
7	VII/2003-2004	0	38
8	VIII/2004-2005	0	72
	TOTAL	54	290

Source: Faculty of Public Health, Hasanudin University

(4) Human Resources Development (Mother Child Health)

Human resources development project for Mother Child Health (MCH) has been organized by RS Siti Fatimah Makassar, as a Provincial APN (Asuhan Persalinan Normal) Training Center (Pusat Pelatihan Klinik Sekunder = P2KS), and District Health Office as Primary Clinic Training Center (P2KP). The location and institution that has received MCH equipments are as follow:

Table 4.6 Location and Institution that Has Received MCH Equipment

No.	Location	Institution
1	Makassar	DKK Ujunpandang DKK Sul-Sel RS Siti Fatima
2	Bulukumba	RSU Bulukumba DKK Bulukumba
3	Pinrang	RSU Pinrang DKK Pinrang
4	Pare-pare	RSU Parepare DKK Parepare
5	Bone	DKK Bone RSU Bone
6	Soppeng	DKK Soppeng
7	Palopo	RSU Palopo
8	Majene	DKK Majene
9	Bantaeng	DKK Bantaeng
10	Toraja	DKK Tator RSU Tator
11	Luwu Utara	DKK Luwu
12	Barru	DKK Barru
13	Enrekang	DKK Enrekang
14	Mamuju	DKK Mamuju
15	Sidrap	DKK Sidrap RSU Sidrap
16	Wajo	DKK Wajo
17	Jeneponto	Jeneponto
18	Takalar	DKK Takalar
19	Selayar	DKK Selayar
20	Maros	DKK Maros
21	Pangkep	DKK Pangkep
22	Gowa	DKK Gowa
24	Sinjai	DKK Sinjai
25	Polmas	DKK Polmas

Source: Final Report Document (2001)

The APN training was attended by doctors, nurses, midwives and village's midwives to develop their knowledge, technical skill and practice essential medical care for reducing preventable deaths.

Table 4.7 Number of APN Training Participants based on Financial Aid at Siti Fatimah Hospital, Makassar

No.	Year	Financial Aid	
		JICA	Others
1	1999	20	-
2	2000	80	90
3	2001	40	18
4	2002	0	90
5	2003	0	118
6	2004	0	11
Total		140	327

Source: P2KS (Siti Fatimah Hospital) South Sulawesi

4.2 Impact

Various activities have been carried out by the project such as Problem Oriented Action Research (PROAR), Laboratory Quality Assurance, Human resources Development (District Health Manager) and Human Resources Development (Mother Child Health).

Even the PROAR pilot projects was conducted in several city and Districts, but the selection of the pilot project location was spreading in all area of South Sulawesi and representing south, middle and north area of the Province. On the other hand, most of RSU in all Districts in South Sulawesi received laboratory and MCH equipments and attending the human resources development training program. It can be said that the project is covered all South Sulawesi area.

The overall goal of the project activities is reduction of deaths through strengthening of district health services in South Sulawesi Province. Therefore, the indicators of the project impact are the number of Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR). The IMR & MMR data from Provincial Health Department, South Sulawesi can be seen in Table 4.8.

Table 4.8 IMR and MMR in South Sulawesi

No.	Year	IMR (Baby)	MMR (Mother)
1	2001	898	166
2	2002	707	184
3	2003	625	176
4	2004	590	87

Source: Provincial Health Office, South Sulawesi, 2004

Based on Table 4.8, the IMR & MMR have been decreased from 2001 to 2004. Even the IMR and MMR are indirect impact of the project and many factors affected to the IMR and MMR, but the activities of the project are much concerned and directed to reach the overall goal of the project as mentioned above. The Table 4.8 indicates that the project goal has been reached and continues after the completion of the project.

The process of the above impact indicators for each sub-project is described as follow:

(1) Problem Oriented Action Research (PROAR)

The overall goal of the PROAR activities is to strengthen problem solving capability of districts and Puskesmas leads for the improvement of district health services and reduction of preventable deaths, while the activities purpose is to make the regional and Puskesmas staffs are able to solve health problems using PROAR. Considering this, the verifiable indicators are health indicators in the targeted districts and number of trained personnel.

The Study Team observed and realized that the capabilities of Puskesmas staffs on planning the program with PROAR were improved. It means that the PROAR help Puskesmas staff to arrange the planning program covering of description and determination of indicators of basic component, before and after condition expectation, implementation program, monitoring and evaluating program. Problems solving will be completely done. So, the success of Puskesmas programs can be easily measured.

Change of training participants' attitude directed to the proper Puskesmas management resulting in appropriate planning program. PROAR has been accepted as a Puskesmas management tool. It can be said that the PROAR activities has highly impacts to the Puskesmas management in planning the programs.

(2) Laboratory Quality Assurance (LQA)

The overall goal of LQA is to improve the reliability of clinical laboratory diagnosis. This will contribute to the improvement of district health services. In overall, the verifiable indicator is improvement of health status in the targeted districts in the province.

Specifically, the project purpose is to establish appropriate quality assurance system and practice on regular basis at the Central laboratories, districts hospital laboratories and Puskesmas laboratories. In this case, the verifiable indicators are IQC and EQA are practiced on regular basis and the number of diagnosis parameter increases and the number of diagnosis errors decreases.

The Study Team observed and realized that LQA project activities in central laboratory have been functioning as the referral laboratory not only in South Sulawesi but also in East Indonesia. It improves the capabilities of central laboratory, human resource and services from 70% to 80% IQC for diagnosis parameter, and 90% for equipments. The number of customer services has also increased. All of hospitals in Makassar City and a half of hospitals (50%) at district in South Sulawesi have implemented IQC with limited parameter diagnosis.

It can be said that purpose of the LQA activities has been achieved and accordingly the overall goal of LQA will be followed.

(3) Human Resources Development (District Health Manager)

The overall goal of the Human Resources Development for District Health Manager is to strengthen the district health services and decrease preventable deaths. The provincial health can be taken as the verifiable indicator.

It is expected that district health managers are able to solve local problems. Verifiable indicators are career promotion of the alumni and their placement, improved knowledge and skills, and integrated program planning.

The curriculum for the training and post graduate programs was set-up based on the need and requirement district health management. Study Team observed that the impacts of HRD-DHM project activities are improvement of health management in the districts health service. Training conducted was not only for the Head of District Health Services but also for the staffs. The network among heads of district health office and chiefs of hospitals and other alumni has been established and developed after they had attended the same courses. It has important role during the change of paradigm, sector reform and attitude change to make theoretical and practical advises for decision makers. University of Hasanuddin, Faculty of Public Health established cooperation networks with University of Indonesia, Jakarta, University of Gajah Mada, Yogyakarta, and University of Airlangga, Surabaya. It also increased the number of students of Health Policy & Administration and Hospital Administration Postgraduate Program Hasanuddin University.

Considering the mentioned fact, it can be said that the HRD-DHM activities has reached expectation result and accordingly, the goal will be fulfilled gradually.

(4) Human Resources Development (Mother Child Health)

The overall goal of the HRD-MCH is to decrease morbidity and mortality of mother and child, sp that the verifiable indicator is incidence case of maternal and infant deaths in the targeted region. The project purpose is to improve the service quality of midwives/nurses in the districts. The verifiable indicators are improved knowledge and skills of the trained staff and established and sustainable training program.

The Study Team realized that the project activities increased capabilities of doctors, nurses, midwives & village midwives on APN-MCH. Service reliability of hospitals, health centers and midwives has been improved, and more people can have access to better health services. Midwives from other provinces/districts indicated the desire to have training to improve their skills and knowledge with high enthusiasm.

The above fact shows that the HRD-MCH activity has reached the goal and purpose.

4.3 Sustainability

(1) Problem Oriented Action Research (PROAR)

After completion of the project, the PROAR trainings have been continued up to now by

financing from the government through APBN and APBD (Rp. 46 million/training). About 295 persons alumni of PROAR trainings were resulted from 12 time trainings on year 2000 to year 2003 that organized by Provincial Health Department. Some of the district health managers in the districts in the province received PROAR trainings, and pre-placement training for physicians and districts midwives started as well. The institutions that organized the PROAR trainings are Province Health Office and District Health Offices (Barru, Luwu, Gowa). PROAR has been systematically introduced in the training for health personnel. PROAR is expected to be used even after the PROAR project has been completed.

From the fact, it can be said that the PROAR training is highly sustainable.

(2) Laboratory Quality Assurance (LQA)

Beside provision of equipments to the central laboratory, hospital laboratories and selected Puskesmas, the activities of LQA were training to introduce IQC and EQA, including monitoring and evaluation.

After completion of the project, the number of sample and parameter that diagnosed by Central laboratory was increased. The central laboratory will continue to implement the EQA and IQC using its own budget. It intends to work towards better laboratory quality. The Central Laboratory in Makassar continues to organize the EQA and IQC training.

The equipments received by Central laboratory and Hospital laboratory were operated and maintained well. Twenty (20) persons alumni of Hematology and Reproduction Training were result from 2 time training on 2003 to 2004 that organized by Central Laboratory. The budget for the training (Rp. 65 million/training) is arranged from the APBN.

From the fact, it can be said that the LQA activity is highly sustainable.

(3) Human Resources Development (District Health Manager)

After project completion, the Faculty of Public Health, Hasanudin University continuously implements the Post Graduate Program. Due to good performance and high reputation of the alumni, the number of self-financing trainees and students has been increasing as can be seen in Table 4.9.

Table 4.9 Number of Alumni of Training and Post Graduate Program

No.	Year	Alumni of	
		Training (person)	Post Graduate (person)
1	1998	1	8
2	1999	8	9
3	2000	11	18
4	2001	9	36

The financial training executive, Health Policy & Administration Postgraduate Program and Hospital Administration Postgraduate Program Hasanuddin University are from Ministry of Health, DHS-Ausaid, District Government, and self-funding. Budget of training executive is Rp 4.000.000/trainee and Postgraduate program (S2) is Rp 24.000.000 (4 semesters)/student. The students not only come from Sulawesi but also from Maluku and Kalimantan. The commitment of University of Indonesia - Jakarta, University of Gajah Mada - Yogyakarta, and University of Airlangga - Surabaya to support the training executive and postgraduate program are still highly given. The commitment of the dean, lecturer and Postgraduate Program of Hasanuddin University are still in high spirit.

The fact shows that the Human Resources Development for District Health Manager is highly sustainable.

(4) Human Resources Development (Mother Child Health)

The governor and the heads of provincial and district health department are aware of the importance of activity, and are ready to provide budget. The institutions that organize of training are Siti Fatimah Hospital, Makassar as a training center (P2KS=Pusat Pelatihan Klinik Sekunder/Training Center of Secondary Clinic) in South Sulawesi, and some of District Health Office in South Sulawesi as Tana Toraja District, Palopo, Pinrang, Gowa, Sidrap, Oangkep, and Parepare. Midwives and village midwives should have APN (Asuhan Persalinan Normal/Normal Birth Guidance) Certificate if she wants to open the midwives practice. There are 3.500.000 midwives and village midwives in South Sulawesi, and so far only 20% of them have APN Certificate. APN is accepted as a curriculum at Academy of Midwives and Faculty of Medicine. Almost all midwives and health personnel in South Sulawesi and other provinces are enthusiastic about the training.

This fact shows the high sustainability of the Human Resources Development for Mother Child Health.

4.4 Factors Affecting the Impact

4.4.1. Promoting Factors

(1) Problem Oriented Action Research (PROAR)

The PROAR activity has high impact and contributed in reaching the goal of the project. The main promoting factors that affecting the impact is the high commitment of the health staffs from Province Health Office, District health offices and Puskesmas who assigned to attend the training of PROAR.

The development of PROAR training module through baseline survey, trial, monitoring and evaluation make the training module appropriate to the requirement of the health staffs.

More over, the support from the province government, as well as districts government for

socialization and dissemination of the result of PROAR training also promote the impact of the activity.

(2) Laboratory Quality Assurance

The purpose of the LQA activities has been achieved and it is expected that the overall goal of LQA will be followed. The main factor promoting the impact is that the central laboratory and district hospitals laboratories have potential and capable human resources. Provision of the equipments and training IQC and EQA, which formulated through baseline survey to meet the real requirement, makes the central and district hospital laboratories highly improve their services.

(3) Human resources Development (District Health Manager)

The most important factor in reaching the expectation result of HRD-DHM is high commitment of the dean, all lecturers of Postgraduate Program of University of Hasanudin and strong cooperation with the universities in Java. The program highly improves the capability of the District Health Managers, which disseminated the knowledge gained from the program to other staff in their institutions.

(4) Human Resources Development (Mother Child Health)

The goal and purpose of the HRD-MCH has been achieved. The main factor in achieving the goal and purpose of the HRD-MCH is that all health staffs (doctors, nurses, midwives & village midwives) involved in this activity have high enthusiasm in improving their capability. Controlling, monitoring and evaluation of the program based on the standard quality indicators make the program runs as expected. In addition, the policy which insist the midwives and village midwives to have APN certificate for controlling the quality of midwives also push the impact in high level.

4.4.2. Preventing Factors

(1) Problem Oriented Action Research (PROAR)

Even the PROAR activities has socialized and organized in district hospitals and Puskesmas, there is no supervision of the PROAR activities in Puskesmas level as the smallest unit of health center. More over, the mutation of the health staff in Puskesmas, especially doctor as the head of Puskesmas that often happened become the preventing factors of the impact.

(2) Laboratory Quality Assurance

Even the purpose of the LQA activities has been achieved in general, some of the hospitals laboratory did not have complete equipments since the provision of equipments and training of IQC and EQA are only to central laboratory and selected district hospital laboratory and selected Puskesmas laboratory. These become the preventing factor of the LQA activities.

(3) Human resources Development (District Health Manager)

The cost of executive training and postgraduate program is considerable high. The health managers who want to participate the training and program has limited budget. These become the preventing factor of the HRD-DHM activities.

(4) Human Resources Development (Mother Child Health)

No supervision of APN application/implementation after the trainee (doctors, nurses, midwives & village midwives) back to his/her workplace by the Province / Districts health official become the preventing factors of HRD-MCH. The budget of APN-MCH training also becomes the constraint of the activity.

4.5 Factors Affecting the Sustainability

4.5.1. Promoting Factors

(1) Problem Oriented Action Research (PROAR)

In line with the regional autonomy, both regional governments in province and districts have more attention to the improvement of health services. Both governments allocate some budget or financial subsidy to support the continuity of PROAR activities. These become the main promoting factors for sustainability of the PROAR activities.

(2) Laboratory Quality Assurance

As the same manner in above, the province and districts governments support the sustainability of LQA activities by allocation of financial subsidy for operation and maintenance of the central laboratory, hospital laboratories and Puskesmas laboratories. In addition, the central laboratory is in an accreditation process that will improve the quality and strengthen the human resources of the laboratory.

(3) Human resources Development (District Health Manager)

The main factor affecting the sustainability of HRD-DHM is that the alumni of the postgraduate program promote the program in where the alumni work. In addition, the governments support the activities by allocating budget for subsidy.

(4) Human Resources Development (Mother Child Health)

The midwives and village midwives should have APN certificate is the main factor for HRD-MCH sustainability. The acceptance of APN as a curriculum at Academy of Midwives and Faculty of Medicine also become the factor that has promoted the sustainability of the project.

4.5.2. Preventing Factors

(1) Problem Oriented Action Research (PROAR)

The budget allocated by the government for is too small and can not cover all requirements of the PROAR activities. In addition, the human resources is still need to be improve for more better result.

(2) Laboratory Quality Assurance

Subsidize of financing from the Central Government can not cover all requirements of the operation and maintenance of all laboratories in districts hospitals and Puskesmas.

(3) Human Resources Development (District Health Manager)

As the same manner for the impact, less budget from the governments become the inhibited factor of the sustainability.

(4) Human Resources Development (Mother Child Health)

The same problem of financing is also suffering to this HRD-MCH activity. For exam, Fatima Hospital as a Training Center of APN (MCH) can only received 12 participants each training session. The budget of APN-MCH training is very limited.

CHAPTER V

LESSONS LEARNED

Appropriate with the decentralization system, district health office can develop PROAR to be implemented in its working area, especially for community health center (Puskesmas) in coordination with Provincial Health Office (Dinas Kesehatan Propinsi).

High commitment of the dean and all lecturers of the postgraduate program of Hasannudin University and cooperation with Indonesia University - Jakarta; Gajah Mada University - Yogyakarta, and Airlangga University - Surabaya make the executive training and post graduated program run successfully.

To decrease the Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR), the APN (Asuhan Persalinan Normal / Normal Give Birth Education) training is needed by doctors, nurses, midwives and village midwives.

Central laboratory has capable human resources and complete laboratory equipments and become the referral laboratory in East Indonesia. With the limited financing from APBN budget, central laboratory is still operated.

Financing at district and or provincial health office is not optimal yet to carry out the PROAR program, APN training and monitoring and IQC & EQA training laboratory. This condition impedes the impact and sustainability of the project.

Improvement capability of lecturer, trainer, facilitators, laboratory equipment, MCH equipment, and book library collection is needed to support the activities to continue the project.

CHAPTER VI

OVERALL CONCLUSIONS

Although the Project for Improvement of District Health Services in South Sulawesi has been terminated, similar activities still continue. It indicates that South Sulawesi Province is aware to decrease deaths through strengthening of district health services.

The impact of the project is indicated by decreasing of Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR).

The indicator of the project sustainability is all of the sub projects (Problem Oriented Action Research (PROAR), Laboratory Quality Assurance, Human Resources Development (District Health Manager and Mother Child Health)) still run.

The budget of activities was supported by APBN Central Government, APBD Province & District, and also self-funding by participants/students.

As the final result, the objective of the project has been successfully achieved. The project highly contributed to the preventable deaths reduction through strengthening district health services in South Sulawesi Province.

CHAPTER VII

RECOMMENDATIONS

Based on the result of this Evaluation Study, the Study Team concluded some recommendation that should be taken by provincial and district health office to expand the impact and sustain the project, as follows:

1) **PROAR**

The PROAR should be promoted in other districts that have not yet participated in previous PROAR trainings. Strategic training of trainers is urgently required for dissemination of further PROAR trainings. Budgetary allocation should be made at district level for this purpose. In addition, supervision of PROAR alumni at the workplace is necessary to monitor the implementation of its training in the planning program. It is recommended to implement the PROAR in the development of district health planning.

2) **Human Resources Development (Health District Manager)**

The provincial and district health office are suggested to sustain the executive training and post graduate program for mid-level district health manager in cooperation with the Faculty of Public Health, Hasanudin University.

3) **Human Resources Development (Mother Child Health)**

The provincial and district health office are suggested to sustain APN training of doctors, nurses, midwives and villages midwives develop their knowledge and technical skill to practice essential medical care for reducing preventable deaths. A periodic follow up monitoring of trained midwives and health personnel by provincial health Office or P2KS should be considered.

4) **Laboratory Quality Assurance**

The laboratory equipments should be operated by capable laboratory technician in Central laboratory, district hospitals laboratory and Puskesmas laboratories. To improve technician's skill, it is necessary to sustain the IQC and EQA training.

ANNEX 1

Project Design Matrix for Ex-Post Evaluation:

Annex 1.1 : PDM_E – Problem Oriented Action Research (PROAR)

Annex 1.2 : PDM_E – Laboratory Quality Assurance

Annex 1.3 : PDM_E – Human Resource Development (District Health Managers)

Annex 1.4 : PDM_E – Human Resources Development (MCH)

Annex 1.5 : Overall Project design Matrix (PDM)

Annex 1.1. PDME - Problem Oriented Action Research (PROAR)

Cooperation Period : April 1997-March 2002 Target Area : Three Pilot Area Target Group : Regional and Puskesmas Staff.

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Strengthen problem solving capability of districts and Puskesmas leads to the improvement of district health services and reduction of preventable deaths.	Health indicator in the targeted districts.	Annual report of Dinas.	District health and clinical management is stabilized.
Project Purpose Regional and Puskesmas Staff are able to solve health problems using PROAR.	Numbers of trained personnel and small scale projects implemented. Results of the projects.	Training reports and small scale projects reports.	Condition of health service will not be worse than the present.
Outputs 1. PROAR is developed and established 2. PROAR teams are established 3. PROAR modules are completed 4. Puskesmas, districts and Province Staff are trained on PROAR	1.1 Number of training and seminar, and related participants. 1.2 Attitude change of the above participants. 1.3 Acceptance of PROAR as PSKM management tool. 1.4 Continued use of PROAR. 2.1 Letter of assignment, Order to establish a PROAR team, and its agenda are issued at provincial and district level. 2.2 Number of Puskesmas with PROAR team. 3.1 The modules are completed, well tested, and available. 4.1 Capability to organize training. 4.2 Capability to prepare a proposal implement and report the result of the small scale project.	Training report Training (Survey) report Small project reports Dinas letter Dinas letter Survey result The modules Training results Small project reports	Trained personnel continue working
Activities 1.1 Socialization & advocacy of PCM concept thru meetings and pilot activities in Blkb & Pinrang. 1.2 Baseline survey in 2 Puskesmas in BLKB. 1.3 Workshop to develop PROAR using the survey results.	Inputs/JICA Long-term experts 54 mm Short-term experts 3.3 mm Equipment (¥1.000 yen) ¥ 15.889		

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
<p>1.4 Trial of the prototype in 2 PSKM in BLKB.</p> <p>1.5 Revising the prototype.</p> <p>1.6 Adapting the modules to PSKM management.</p> <p>1.7 Acceptance survey of the modules.</p> <p>1.8 Monitoring and evaluation of the small scale projects in 3 pilot sites.</p> <p>1.9 Socialization & advocacy of PROAR.</p> <p>2.1 Organizing PROAR teams in Province District and Puskesmas.</p> <p>3.1 Development of PROAR modules prototype.</p> <p>3.2 Revising and finalizing the modules.</p> <p>4.1 Training of trainers.</p> <p>4.2 Training of District and Puskesmas Staff.</p> <p>4.3 Pilot miniscale project in 29 PSKM in 2 districts.</p> <p>4.4 Training in province for heads of PKMS, PDGI by FKM/UNHAS through HP-V & National budget.</p> <p>4.5 Re-training of trainers, District Health Office heads, and Parepare Staff.</p> <p>4.6 Pilot miniscale project in Parepare.</p>	<p>Inputs/Dinas</p>		<p>Pre-condition</p> <p>Local Government</p> <p>Support the Project</p>

Annex 1.2. PDME - Laboratory Quality Assurance

Cooperation Period : April 1997 - March 2002 Target Area : South Sulawesi Province Target Group : Physicians, Medical Technologists.

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal Reliability of clinical laboratory diagnosis is improved and this contributes to the improvement of district health services.</p>	<p>Improvement health status of the targeted districts in the province.</p>	<p>The Provincial Health Department's annual report.</p>	<p>District health and clinical management is stabilized.</p>
<p>Project Purpose 1. Appropriate Quality Assurance System is established and practiced on regular basis at the Central lab, districts hospital laboratories & Puskesmas labs.</p>	<p>1.1 IQC & EQA are practiced on regular basis 1.2 The number of diagnosis parameter increases and the number of diagnosis errors decreases.</p>	<p>Monthly District Hospital Lab. Reports. QA manual.</p>	<p>Condition of health service will not be worse than the present.</p>
<p>Outputs 1. Equipment is provided to the selected Puskesmas, district hospital labs and the Central lab. 2. Personnel for IQA & EQA are trained. 3. IQC & EQA are introduced to the Central lab and selected district hospital labs. 4. Knowledge, awareness and attitude of doctors, medical tech., hospital chefs & regional health office heads regarding Quality Assurance improve. 5 Training materials for Quality Assurance are developed.</p>	<p>1.1 Provided lab. Equipment and diagnosis parameters 2.1 Areas if training and number of the trainees. 3.1 Number of the labs practicing IQA & EQA and their total. 4.1 Number of diagnosis, number of diagnoses request from doctors; topics discusses in the seminars and workshop; Dept of Health lab. diagnosis regulations. 5.1 Availability of appropriate training materials.</p>	<p>1.1 List of the provided and diagnosis parameters & ocular inspection. 2.1 Seminar, workshop and training reports. 3.1 EQA evaluation report, IQA self assessment report, & Central Lab. annual report. 4.1 District hospital lab monthly reports, seminar workshop reports, hospital regulation, & result of the questionnaires. 5.1 Developed training materials.</p>	<p>Trained personnel continue working.</p>
<p>Activities 1.1 Baseline survey of the district hospital labs & Puskesmas labs. In the pilot sites and making the strengthening plan. 1.2 Equipment provision to the central lab. & hospital labs. in the pilot sites. 1.3 Equipment provision to selected Puskesmas.</p>	<p>Inputs/JICA Long-term experts 39 mm Short-term 20 mm Equipment (*1.000 yen) ¥ 80.474 c/p training 188 mdays</p>		

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
2.1 Training to introduce IQA & EQA. 2.2 Lab. diagnosis technical training for Puskesmas. 2.3 Training in Japan for Lab. Management & QA. 3.1 IQA & EQA monitoring and evaluation 3.2 Survey for the expansion of IQA & EQA. 3.3 Additional training & Equipment provision to expand the system to other sites. 4.1 Seminar & workshop for specific topics. 5.1 Development of training materials.	Inputs/Dinas c/p 5		Pre-conditions Local government supports the project

Annex 1.3. PDME - Human Resource Development (District Health Managers)

Cooperation Period : April 1997-March 2002 Target Area : South Sulawesi Province Target Group : District Health Managers.

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal District health service are strengthen and preventable deaths decreases.	Provincial health indicators.	Annual Provincial Health Report.	District health and clinical management is stabilized.
Project Objective District health managers are able to solve local problems.	1.1 Career promotion of the alumni and their placement. 1.2 Improved knowledge and skills. 1.3 Integrated program planning.	1.1 Data from Dinas Kesehatan. 1.2 Student assessment reports	Condition health services will not be worse than the present
Outputs 1. Standardized & quality training program is develop 2 The program is formally accredited. 3. Improved capability of the trainees. 4 Sustainable and marketable training program.	1.1 Specific curriculum for each student batch. 1.2 Assessment of lecturers capability. 1.3 Strengthen facilities in terms of equipment, building and library. 1.4 Standard Program procedures. 2.1 Level of credibility. 3.1 Acquired knowledge and skills 4.1 Number of self-financing students. 4.2 Program diversification.	1.1 Curriculum 1.2 Lecturer assessment reports 1.3 Ocular inspection and equipment list 1.4 University report procedures 2.1 Credibility rating 3.1 Students performance evaluation 3.2 Student GPA 4.1 Admission records 5.1 Course general information.	
Activities 1.1 Curriculum development 1.2 Student selection and admission 1.3 Training facility strengthening 1.4 Selection of lecturers 1.5 Lecturers capacity building 1.6 Visiting lecturers program 1.7 Course monitoring 1.8 Quality control 1.9 Need assessment of students	Inputs/JICA Long-term experts Short-term expert 2.4 mm Equipment (*1.000yen) ¥ 8.463 Inputs/UNHAS c/p 4 Budget for training (1.000 Rp) 1.159.160		

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
1.10 Attendance control 1.11 Evaluation and reporting 2.1 Training course accreditation 3.1 Comparative study 3.2 Seminar of specific subjects 3.3 Seminar on case study 3.4 computer training 3.5 Developing an annual health plan 3.6 Student assignments (PPK & Thesis) 4.1 Program promotion, marketing 4.2 Networking with other institutions			Pre-condition Local government support the project

Annex 1.4. PDME - Human Resource Development (MCH)

Cooperation Period : April 1997-March 2002 Target Area : Parepare, Pinrang Target Group : Midwives and Health Personnel

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal Morbidity and mortality of mother and child decrease.	Incidence case of maternal and infant deaths in the targeted regional.	Report of district office (LB3)	District Health and clinical management is stabilized
Project Purpose Improve the service quality of midwives/nurses in the districts	Improved knowledge and skills of the trained staff. Established & sustainable training program.	Training reports	Condition of health service will not be worse than the present
Outputs 1. Modified verbal autopsy from, maternal death case conference, and survey of high risk pregnancies in Pinrang 2. Trained trainers & staff for use of the National Social Safety Network scheme. 3.1 Availability of APD trainers and training centers 3.2 Trained rural midwives on APDD 4 MCH training in Parepare us strengthened	1 Continued use of the developed form and procedures 2. Number of the trained staff 3 Number of the raining centers and trainees 4 Established MCH health training program in Parepare	Development forms, procedures and Reports from districts Training report Training reports. Reports from Dinas Training reports Developed educational materials Training reports	
Activities 1.1 Baseline survey in Pinrang 1.2 Introduction of Action Research in Pinrang Maternal death survey Verbal autopsy and conference Survey on High Risk pregnancies Training on Mother-child Cohort book 2.1 Training on the National Social Safety Network 3.1 Establishment of District Midwife Training Center 3.2 Providing equipment to the above 3.3 Training of trainers for APD 3.4 Training of district midwives on APD	Inputs/JICA Long-term experts 24 mm Short-term experts 4.2 mm Equipment (*1.000yen) ¥ 38.194 c/p Training 50 mday Inputs/Dinas c/p 7		

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
3.5 Refresher training for the APD trainers 4.1 Baseline survey in Parepare 4.2 MCH training (including Magne) in Parepare 4.3 Equipment provision to Parepare Puskesmas 4.4 Introducing statistical data for management of pregnant mothers			Pre-condition Local government supports the project

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
2-1 Heads and staff of district health services and offices develop their capabilities to manage and supervise problem-oriented action research			
3) Strengthening district laboratory system 3-1 Laboratory Quality Assurance system is introduced	3-2 Number of trained technicians for quality assurance	Annual project report	Trained personnel continue working
<p>Activities:</p> <p>1-1-1 Setting up curriculum committees</p> <p>1-1-2 Training for leads of district health officials</p> <p>1-2-1 Trainers training for district health staff</p> <p>1-2-2 Trainers training for staff of district hospital</p> <p>1-3-1 Training for staff of district hospital and health centers</p> <p>1-3-2 Training for village midwives</p> <p>1-4-1 Baseline survey</p> <p>1-4-2 Training of quality assurance</p> <p>1-4-3 Introducing quality assurance</p> <p>1-5-1 Trainers training for provincial laboratory technicians</p> <p>1-6-1 Monitoring and evaluation for training courses</p> <p>1-6-2 Modification of training modules</p> <p>2-1-1 Baseline survey</p> <p>2-1-2 Training of verbal autopsy and PCM</p> <p>2-1-3 Establishment of medical audit conference</p> <p>2-1-4 PCM workshop</p> <p>2-1-5 Implementing the mini-project</p> <p>2-1-6 Monitoring and evaluation</p> <p>3-1-2 Training of quality assurance for laboratory technicians both in district hospital and health centers</p>	<p>Inputs from Japan (JICA)</p> <p>1 Dispatch of Japanese Expert</p> <p>2 Training of Indonesian counterparts in Japan</p> <p>3 Provision of Equipment</p> <p>4 Middle level training</p> <p>Inputs from Indonesia</p> <p>1 Counterparts and administrative personnel</p> <p>2 Provision of building and facilities</p> <p>3 Counter budget for the implementation</p>		<p>Trained trainers continue working</p> <p>Pre-condition Local government supports project</p>

ANNEX 2
List of Persons Interviewed

Annex 2**LIST OF PERSONS INTERVIEWED**

No.	Name	Position
1	Dr. Muh Anwar, MKes.	Head of Office Administration, Provincial Health Office (DINAS KESEHATAN) of South Sulawesi
2	Hj. Marwiah	Head of Effort Health Promotion of Puskesmas Section, Provincial Health Office (DINAS KESEHATAN) of South Sulawesi
3	Dr. H. Moch. Arief Setyabudi, MKes	Head of Central Laboratory, Makassar, South Sulawesi
4	Drs. Muh Nahir Bandtu	<ul style="list-style-type: none">• Staff off, Central Laboratory, Makassar, South Sulawesi.• Ex-counterpart that trained of Clinical Lab. Diagnosis in Japan
5	Drs.Syahrir Pasinringi, MSi	<ul style="list-style-type: none">• Deputy of Postgraduate Program, Faculty of Public Health, Hasanudin University, Makassar• Ex-counterpart of District Health Manager Training project.
6	Hanna Anwar	Staff of APN Training Center, Siti Fatimah Hospital, Makassar
7	Hj. Norma	<ul style="list-style-type: none">• Trainer APN Training Center, Siti Fatimah Hospital, Makassar.• Chief of Midwife Association of South Sulawesi.
8	Dr. Sunduseng	<ul style="list-style-type: none">• Head of Pinrang Health Office (DINAS KESEHATAN).• Ex- counterparts PROAR project
9	Hj. Rendeng	<ul style="list-style-type: none">• Head of Mother & Child Health Section• Alumni of APN Training
10	Sabarariah	<ul style="list-style-type: none">• Head of Hospital Laboratory Lasinrang District Hospital, Pinrang• Alumni of Laboratory Training
11	dr. Anas Budi	<ul style="list-style-type: none">• Obstetrics and gynecology doctors, Lasinrang District Hospital, Pinrang• Alumni of APN Training
12	Tuti Herawaty	Staff of Mother & Child Health Section, Lasinrang District Hospital, Pinrang
13	Hj. Murusamawati	<ul style="list-style-type: none">• Head of Hospital Laboratory, Andimakkasau District Hospital, Pare-pare• Alumni of Laboratory Training
14	Dr. Max Boy	Head of Health Office (DINAS KESEHATAN) of Gowa
15	Nursyamsi, SKM.	<ul style="list-style-type: none">• Staff of Community Health Center (Puskesmas) Bajeng, Gowa• Alumni of PROAR Training

ANNEX 3
List of Photograph



Community Health Center (Puskesmas), Bajeng, Gowa
has been implemented PROAR



Module of PROAR Training



Library of Faculty of Public Health, Hasanudin University



Computer Laboratory, Faculty of Public Health, Hasanudin University



Postgraduate Student (S2) Faculty of Public Health, Hasanudin University



Classroom for Executive Training and Postgraduated Student,
Faculty of Public Health, Hasanudin University



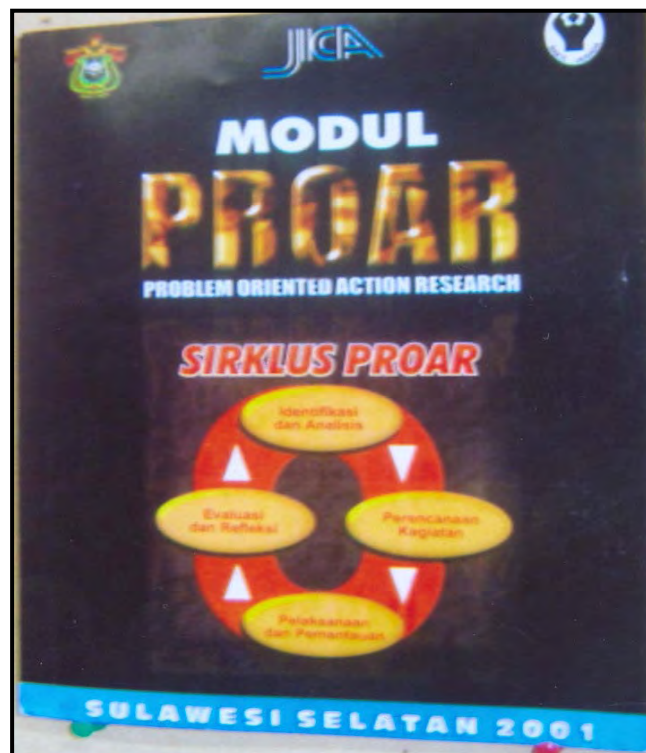
Central Laboratory, Makassar



Medicine Student has been practiced at Central Laboratory, Makassar

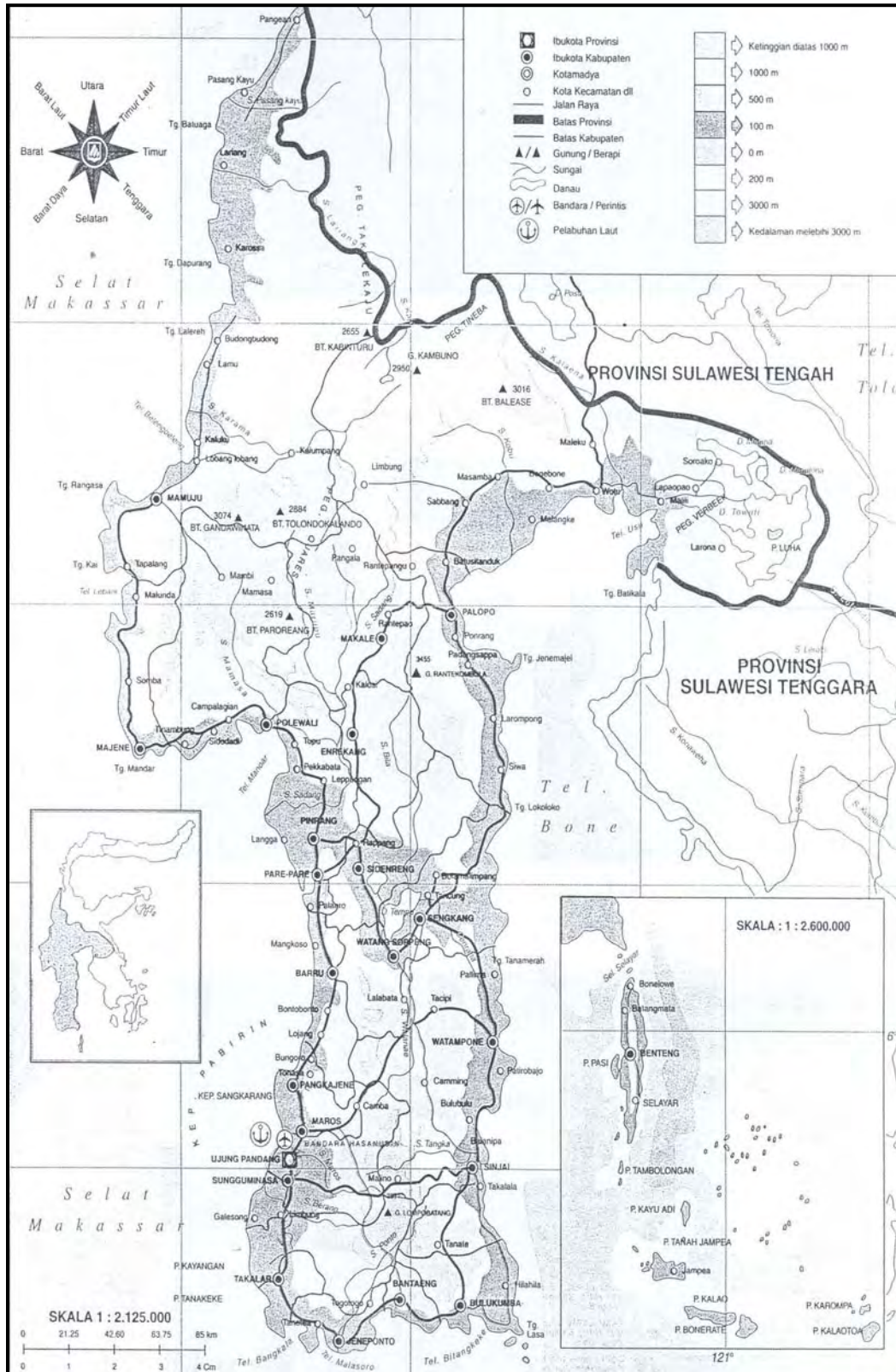


Siti Fatimah Hospital Makassar, as APN Training Center



Module of PROAR Training

South of Sulawesi Map



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