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The International Science and Technology Institute, Inc.

**IMPLEMENTATION PLAN FOR
THE FOCUSED ASSESSMENT OF THE
PHARMACEUTICAL SECTOR AND
ASSESSMENT FOR OVERALL PLANNING PROCESS**

#14

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ACKNOWLEDGEMENTS

The Government of Indonesia's decision to strengthen the institutional policy basis required to ensure that the financial support needed to maintain child survival programs will be sustained represents a substantial step towards setting the foundation for achieving the goal of reduced infant and child mortality.

The proposed reforms in the ordering, management, distribution and correct prescription and use of drugs, with increased efficiency in the use of essential drugs for priority child health problems, will undoubtedly have an impact on child survival.

Support for this consultation was provided by ISTI through the GOI/USAID HSFP No. (497-0394).

The author would like to express his thanks to all the people who gave of their time and knowledge to make this report possible. Special thanks are due to Dr. Thomas D'Agnes, Mr. Azis La Sida, Drs. M. Sihombing and the PIO/P staff for their assistance and cooperation. Sincere thanks are expressed to the USAID mission, particularly to Dr. E. Voulgaropoulos and Mrs. J. Riggs Perla. Special acknowledgement is extended to Mr. James Bates, who as a co-consultant gave so freely of his experience and knowledge.

Finally, the Drug Management and Manpower Study Implementation Plan, which was produced as a result of this consultation was developed by the staff of the Project Implementation Office for Pharmaceuticals.

EXECUTIVE SUMMARY

The Pharmaceutical Component of the Health Sector Financing Project is planning to conduct five focussed assessment studies to address the areas of: drug use; drug management; manpower resources and requirements; behaviors and attitudes towards the use of drugs; and a review of secondary data, literature and training materials.

Based on an assessment of current study plans and pre-study preparation requirements, the following four pre-study activities were identified: recruitment of additional consultants; development of an implementation management plan; development of a study site preparation plan; and development of an evaluation plan. It was agreed that the studies would not proceed until all of these conditions were met.

It is very important that the abovementioned plan for evaluation be developed prior to the start of any major studies. This plan should take into consideration the objectives and targets of the PIO/P. Based upon these areas, key evaluation quantitative indicators should be identified. Baseline data requirements should also be determined and a plan for collection, analysis and monitoring changes in this data over the implementation period. It is also important that a plan for study site preparation which includes involvement of key decision makers and managers at each level of the system be developed and implemented prior to conducting the studies.

The Project Implementation Office for Pharmaceuticals developed an Implementation Plan for the Drug Management and Manpower Studies which includes the logistics and coordination of study activities, management roles, quality control measures and job descriptions for consultants. The Drug Use Study and Behavior and Attitudes Study were put on hold until issues relating to the study design were re-assessed.

The policy formulation process, organizational structure, planning functions and planning/implementation cycle of the GOI have clearly been taken into account in the development of the HSFP. The administrative structure and funding mechanism for the HSFP represent a new method for implementation of GOI/MOH and USAID bilateral agreements. The establishment and functions of the Project Management Unit and Project Implementation Offices are new concepts and activities within the MOH.

The overall conceptual model and strategy for the planning, implementation and evaluation of activities for the Pharmaceutical Component of the HSFP have not been fully developed. Within this context, the Project Implementation Office for Pharmaceuticals is in the process of developing its first annual implementation plan. The primary inputs for this plan are all from the national level. It is important that the key decision makers and the national level. It is important that the key decision makers and managers with responsibilities for policy formulation, planning, implementation and evaluation of pharmaceutical sector activities at every level of the system be involved in the PIO/P planning process. MOH pharmaceutical committees and working teams should be established at each level of the system in study sites and pilot areas. They should be briefed on HSFP activities and involved in the planning process.

ABBREVIATIONS

APBD I/II	Provincial/District Routine and Development Budget
ASKES	Civil Servant Health Insurance Program
CDD	Control of Diarrheal Disease
EPI	Expanded Program of Immunization
Gizi	Nutrition Program
GOI	Government of Indonesia
HSFP	Health Sector Financing Project
ISTI	International Science and Technology Institute
MOH	Ministry of Health
PC	Pharmaceutical Component
PIO/P	Project Implementation Office for Pharmaceuticals
PMU	Project Management Unit
USAID	United States Agency for International Development

INTRODUCTION AND BACKGROUND

The Pharmaceutical Component (PC) of the Health Sector Financing Project (HSFP) is in the process of developing a final plan for management of five focussed assessment studies. These studies will address the areas of: drug use; drug management; manpower resources and requirements; behaviors and attitudes towards the use of drugs; and a review of secondary data, literature and training materials.

Results from these studies will not only serve as a base for the initiation of pharmaceutical assessment activities but possibly as the basis for the design of interventions which will be implemented as pilots.

Study protocols have been developed and implementors (Contractors) selected. Major meetings were held between the MOH, implementors, and five consultants to review the design of the focussed assessment study during the period 30 January - 17 February 1989.

Due to the complexity of the field studies, number of survey sites, span of topics covered and number of implementors involved concern was expressed about the management of the implementation of such a large effort.

Four areas of particular concern were noted: coordination of the studies; specialized technical assistance for qualitative and quantitative aspects of the studies; effort and time required to further develop, test, revise and implement studies; and quality control for studies.

Based on these concerns the following scope of work was developed for this consultancy:

1. Design a manpower plan for oversight and management of the focussed assessment of pharmaceutical sector. This plan should include a scope of work and time allocation for the following personnel:
 - a. Field Coordinator
 - b. Logistics Manager
 - c. Data Management Specialist
2. Advise the project on logistics arrangements for the studies.

OBSERVATIONS AND FINDINGS

During the consultancy a meeting was held on 2 February 1989 at the Project Management Unit (PMU) between ISTI staff and consultants. It was decided that the focussed assessment studies would not be conducted until the following pre-study activities were completed:

1. Recruitment of the field coordinator and data management specialist.
2. Development of the implementation management plan for the Drug Management Study and Manpower Study.
3. Identification of key decision makers and information requirements at the national, provincial, regency and district levels. Development of planning functions at all levels and study site preparation plan.
4. Development of an evaluation plan which includes the identification of key quantitative indicators, baseline data requirements and data which will be collected in these areas from the studies.

It was further stated that it was previously agreed that the Manpower and Management Drug Studies would proceed after the above conditions were met. These studies will provide additional data on: manpower performance, constraints, requirements, and recommendations for improving performance; and the performance of the current drug system, availability of drugs, constraints and recommendations for improving the system and availability of drugs. The Drug Use Study and Behavior and Attitudes Study were put on hold until issues in reference to the design of the studies could be re-assessed. It was anticipated that these studies would be delayed for 1-2 months. The Drug Use Study will provide information on the prescribing patterns, resultant problems and recommendations for possible interventions. The Behavior and Attitudes Study (Social Marketing Study) will provide information on the knowledge, attitudes and behavior of patients and community in reference to the use of drugs.

During the consultancy the Project Implementation Office for Pharmaceuticals (PIO/P) developed an "Implementation Plan for the Drug Management and Manpower Studies" (see Appendix 1). The plan includes: logistics; management roles; quality control measures; and job descriptions for the field coordinator, study facilitator and data management specialists.

The PIO/P was also in the process of developing its annual implementation plan for 1989/1990 to 1990/1991. The development of this plan represents substantial progress towards formulation of a basis for additional steps in the planning process.

At this stage the annual implementation plan is being developed with inputs primarily from the national level (mainly from the PIO/P) in a top-down mode. Apparently, the key decision makers from the related MOH departments at the national, provincial and district levels have had little involvement in the planning process.

The overall conceptual model and strategy for the planning, implementation and evaluation of activities for the Pharmaceutical Component of the HSFP have not been fully developed. Numerous discussions have taken place in reference to the organizational structure of the Pharmaceutical Component but no clear decisions have been reached. To a certain extent, this will be clarified by additional data from the focussed assessment studies. The administrative structure and mechanism for this project are completely new for bilateral agreements between the GOI and USAID. The establishment of a Project Management Unit (PMU) and PIO/P are new concepts and activities within the MOH.

The above statements should all be viewed in reference to the fact that the PIO/P is at a critical point of development. It is preparing its first annual implementation plan and planning to implement its first major activities in the form of focussed assessments which may be used to design interventions which will be implemented in pilot (study) areas and if successful on a national scale.

Therefore, it is very important that the fundamental strategy and plan are solid because they will serve as the foundation for the majority of PIO/P activities.

It is just as important that the key decision makers and managers from every level of the system be involved in the process from the beginning so that they can participate and develop a sense of ownership for the activities for which they are administratively responsible. If they are involved in the planning process, particularly in the assessment of problems and development of interventions, they will assume more responsibility for the implementation of the interventions.

As previously stated, it is also essential that the assessment and intervention phases take place within the MOH system and include key decision makers and managers. It is also important that these activities are part of or are consistent with the health planning/implementation cycle of the GOI and includes all key decision makers at all levels of the system with responsibilities in reference to pharmaceuticals. This is of particular importance because of the use of outside (non-MOH) contractors as implementors of the studies and new method of administration via a PMU and PIO/P.

Focussed assessment study teams have been formulated at the national level which include representatives from the PIO/P, MOH departments, study contractors and consultants. A national level Steering Committee has been established which has fourteen members from departments in the MOH and task force teams have also been set up.

MOH pharmaceutical committees and working teams should be established at each level of the system. These committees and teams should be formed with members in respect to the organizational interrelationships at each administrative level with responsibilities for collaboratively developing pharmaceutical sector policies and strategies, planning activities and services, implementation and monitoring their impact.

For example, the pharmaceutical committees could be formed with decision makers at the national, provincial and regency levels who are responsible for determining annual drug orders. The main purpose of the committee would be the coordination and collaboration in the selection of drugs for the annual order to strengthen, maximize and rationalize the effective use of drug budgets e.g., INPRES, ASKES, Local Purchase (APBD I/II provincial and kabupaten level operating budgets), and Special Programs (CDD, EPI, and Gizi) for ordering pharmaceuticals based on need (morbidity patterns) especially in relation to major childhood health problems.

The pharmaceutical teams could be composed of members with management responsibilities, such as, procurement, storage and distribution, and effective use. These teams could assist in conducting the focussed assessments, design and implementation of interventions.

The policy formulation process, organizational structure, planning functions and planning/implementation cycle of the GOI have clearly been taken into account in the development of the HSFP. All aspects of the Pharmaceutical Component should now be reassessed in relationship to the above areas. All plans should then be reviewed to clearly reflect the relationship between HSFP objectives and the involvement of the above areas.

Another critical area which requires further development is an overall plan for evaluation of the Pharmaceutical Component. It is very important that the plan for evaluation be developed prior to the

start of any major studies. This plan should take into consideration the objectives and targets of the PIO/P. Based on these areas, key evaluation quantitative indicators should be identified. Baseline data requirements should also be identified and a plan for collection, analysis and monitoring changes in this data over the implementation period.

The current focussed assessment studies should be assessed to insure that they will gather baseline data on the key evaluation quantitative indicators. These studies should also be assessed to determine if they have a valid sampling frame; study sites are representative of major regions; and if they should be designed so that they can be carried out on a longitudinal basis with matched control areas.

A plan for study site preparation which includes involvement of key decision makers and managers at each level of the system should be developed and implemented prior to conducting the studies.

RECOMMENDATIONS

Based on the findings and observations, the following recommendations can be offered:

1. The field coordinator and data management specialist should work with the PIO/P and study facilitator to complete all of the pre-study activities.
2. The 1989/90 to 1990/91 annual PIO/P implementation plan should be reviewed in reference to the relationship between the HSFP and the GOI's policy formulation process, planning/implementation cycle and functions at all levels of the system and organizational structure.
3. An evaluation plan which includes key quantitative indicators and baseline data requirements should be developed for the Pharmaceutical Component of the HSFP.
4. The current focussed assessment studies should be assessed to determine: what baseline data will be provided and areas in which baseline data will not be collected; validity of sample frame; collection of data required for the identification of problems and design of interventions; criteria for the selection of study sites and intervention sites; representativeness of sites selected; if study design and methodology is valid for use as a longitudinal study with matched control areas.
5. Based on the analysis of the results from recommendation 4, the following should be determined:
 - a. Which studies can be used to collect data:
 - On baseline evaluation quantitative indicators (on which indicators),
 - On problem identification and analysis,
 - For the design of interventions.
 - b. Which studies can serve as longitudinal studies for monitoring HSFP progress.
 - c. Which study sites are representative of regions and can be used as intervention pilot areas.
 - d. What additional studies are required.
 - e. Overall Pharmaceutical Component plan for major studies. It should include studies identified in the evaluation plan, all other major studies and technical assistance requirements.
6. A study site preparation plan should be developed and implemented which includes strategy for briefing and involving key decision makers and managers at each level of the system prior to conducting the studies.

Appendix 1

DRAFT

**IMPLEMENTATION PLAN FOR THE DRUG
MANAGEMENT AND MANPOWER STUDIES**

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BACKGROUND

The Health Sector Financing Project's Drug Component is coordinating the implementation of four studies. Each study focuses on a set of problems in Drug Management. The topics to be covered by each study are summarized below.

<u>Title</u>	<u>Topics Covered</u>
Drug Management Study	Management of planning, procurement and distribution
Drug Manpower Study	Problems related to work performance for personnel involved in Drug Management
Drug Use Study	Drug prescribing patterns
Social Marketing Study	Behavior and perceptions of prescribers, dispensers, patients and communities concerning drug use

For purposes of implementation, the four studies are regarded as two sets which will be administered in successive stages. The Drug Management and Drug Manpower studies make up the first set and are scheduled to be launched with a pilot test to be carried out during the second two weeks of April. The Drug Use and Social Marketing Studies will be launched in tandem at a later date which is not yet fixed. When the results of all four studies become available, they will form the information base required for designing and testing interventions to rationalize planning, procurement, distribution and use of drugs in Indonesia's public sector health care system.

MANAGEMENT PLAN

DEPKES and the Health Sector Finance Project's Management Unit have brought together a number of actors for the purposes of designing and implementing the Drug Management and Manpower Studies. The roles of these actors are summarized below.

<u>Actors</u>	<u>Roles</u>
Study Implementation Teams from Mangala Jiwa Mukti (Management) and Price Waterhouse (Manpower)	Contractors engaged for the purpose of designing and implementing the studies
Consultants	Local and international experts in relevant technical areas to advise on design and implementation issues

<u>Actor</u>	<u>Role</u>
Activity Coordinators	DEPKES staff members responsible for monitoring the progress of study implementation

Field Director

A consultant engaged for the purpose of coordinating the work of all other parties and assuring that implementation progresses according to schedule and with an acceptable level of quality

Summary Job Descriptions for the consultants and field director are attached.

QUALITY CONTROL PLAN

Quality control of work performed at each step of the implementation process is of highest concern to both DEPKES and Health Sector Finance Project Management. Care has been taken to include quality control measures throughout the overall Implementation Plan. Among these measures are the following:

- * Two data management consultants have been engaged for the purposes of standardizing data collection instruments, coding procedures, data input procedures and data presentation formats. The data management consultants will also observe the pilot test and recommend measures for correcting deficiencies.
- * At both the pilot test and regular data collection stages of study implementation, there will be careful training of enumerators.
- * The data management consultants will monitor the data collection effort and assure that enumerators are performing as intended and that data collection instruments are being used correctly.
- * At the data input and cleaning stages of study implementation, the data management consultants will monitor the performance of the study implementation teams and assure this work is being performed correctly.
- * At both the pilot test and regular data collection stages, consensus groups will be used to review results and provide informed guidance on how to proceed with analysis.

4. CALENDAR OF EVENTS

ACTIVITY/STEP	RESPONSIBLE	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
10. FINALIZE DATA COLLECTION INSTRUMENTS FOR THE PILOT TEST.									
11. PREPARE MATRIX OF DATA TO BE COLLECTED BY SOURCE BY ALL STUDIES.	DIRECTOR	////							
12. RESOLVE POINTS OF OVERLAP THROUGH ASSIGNMENT TO SPECIFIC STUDIES.	DIRECTOR	////							
13. STANDARDIZE FORMATS FOR DATA COLLECTION INSTRUMENTS, CODING PROCEDURES, COMPUTER DATA FILE STRUCTURES AND FORMATS FOR PRESENTING ANALYZED DATA.	DATA MGT ADV IMPLEMENTORS		//////						
14. REVISE INSTRUMENTS IN ACCORDANCE WITH POINTS 1-3, ABOVE.									
18. CARRY OUT PILOT TEST.									
11.A. SCHEDULE ENUMERATOR VISITS TO PILOT SITE.	DIRECTOR		////						
11.B. TRAIN ENUMERATORS FOR PILOT TEST.	IMPLEMENTORS			////					
12.A. DATA COLLECTION FOR PILOT TEST.	IMPLEMENTORS			////					
12.B. INDEPENDENT OBSERVATION OF PILOT TEST.	DATA MGT ADV			////					
13.A. ANALYSIS OF PILOT DATA USING CONSENSUS GROUPS.	IMPLEMENTORS & COM GROUPS				////				
13.B. EVALUATION OF PILOT BASED ON OBSERVERS FINDINGS.	DATA MGT ADV				////				
14. FINAL REVISION AND APPROVAL OF DATA COLLECTION INSTRUMENTS.	IMPLEMENTORS				////				

ACTIVITY/STEP	RESPONSIBLE	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
10. FINAL PREPARATION FOR DATA COLLECTION.									
11. TRAINING OF ENUMERATORS.	IMPLEMENTORS				////				
12. SCHEDULING OF SITE VISITS.	DIRECTOR	////							
13. SPECIFICATION OF SUPERVISION PLAN.	DIRECTOR	////							
14. NOTIFICATION TO FIELD SITES.	DIRECTOR		////////		////////				
10. DATA COLLECTION.	IMPLEMENTORS					//////////			
15. DATA INPUT AND CLEANING.									
11. INPUT AND CLEANING.	IMPLEMENTORS					//////////			
12. VALIDATION OF CORRECT DATA INPUTTING.	DATA MGT ADV					//////////			
16. DATA ANALYSIS									
11. PRESENTATION OF PRELIMINARY FINDINGS.	IMPLEMENTORS							////	
12. CONSENSUS GROUP FEEDBACK.	CON GROUPS							///	
13. PREPARATION OF FINAL REPORT.	IMPLEMENTORS								//////
16. INTERVENTION PLANNING									
11. DEVELOP PLANNING METHODOLOGY									
12. SELECT PLANNING GROUPS.									
13. SPECIFY PRIORITIES.									
14. PLAN PRIORITY INTERVENTIONS									
15. DEVELOP INTERVENTION TESTING PLAN									

5. DESCRIPTION OF ACTIVITIES AND STEPS

ACTIVITY/STEP	RESPONSIBLE	DISCUSSION
<p>1A. FINALIZE DATA COLLECTION INSTRUMENTS FOR PILOT THE TEST.</p> <p>1. PREPARE MATRIX OF DATA TO BE COLLECTED BY SOURCE FOR BOTH STUDIES.</p>	DIRECTOR	<p>THE MOST SYSTEMATIC APPROACH FOR IDENTIFYING POINTS OF OVERLAP BETWEEN THE TWO STUDIES WILL BE TO PREPARE A MATRIX COMPARING THE TYPES OF INFORMATION TO BE GATHERED BY EACH STUDY. THE MATRIX SHOULD SHOW WHAT DATA WILL BE COLLECTED, THE SOURCE AND THE METHOD TO BE USED. THIS SHOULD BE DONE FOR EACH LEVEL OF THE DEPKES SYSTEM.</p>
<p>2. RESOLVE POINTS OF OVERLAP THROUGH ASSIGNMENT TO SPECIFIC STUDIES.</p>	DIRECTOR	<p>BASED ON THE RESULTS OF THE MATRIX PREPARATION EXERCISE, WHEN POINTS OF OVERLAP ARE IDENTIFIED, THE DATA COLLECTION FOR THESE POINTS MAY BE ASSIGNED TO ONE STUDY OR THE OTHER. FOR PURPOSES OF ANALYSIS, THESE DATA MAY BE SHARED BY BOTH STUDIES.</p>
<p>3. STANDARDIZE FORMATS FOR DATA COLLECTION INSTRUMENTS, CODING PROCEDURES, COMPUTER DATA FILE STRUCTURES AND FORMATS FOR PRESENTING ANALYZED DATA.</p>	DATA MGT ADV	<p>AFTER POINTS OF OVERLAP HAVE BEEN RESOLVED, AND CONTENT OF DATA COLLECTION INSTRUMENTS FOR BOTH STUDIES HAVE BEEN FIXED, IT WILL BE NECESSARY TO INSURE THAT THEY ARE COMPATIBLE FOR PURPOSES OF CODING, DATA INPUT, DATA ANALYSIS AND DATA PRESENTATION.</p>
<p>4. REVISE INSTRUMENTS IN ACCORDANCE WITH STEPS 1-3, ABOVE.</p>	IMPLEMENTORS	<p>BASED ON THE OUTCOMES OF THE 3 STEPS ABOVE, THE IMPLEMENTORS WILL MAKE SPECIFIC CHANGES IN THE INSTRUMENTS. THESE WILL BE THE FINAL REVISIONS BEFORE THE PILOT TEST.</p>

ACTIVITY/STEP	RESPONSIBLE	DISCUSSION
10. CARRY OUT PILOT TEST.	DIRECTOR	THIS SCHEDULE WILL BE PROPOSED BASED ON ASSUMPTIONS ABOUT THE MOST APPROPRIATE PHASING FOR ENUMERATORS FROM THE TWO STUDY TEAMS AND THE ESTIMATED AMOUNTS OF TIME REQUIRED FOR THE VARIOUS DATA COLLECTION TASKS.
11.A. SCHEDULE ENUMERATOR VISITS TO PILOT SITE.	IMPLEMENTORS	EACH STUDY TEAM WILL BE ASKED TO PRESENT PLANS FOR TRAINING THEIR ENUMERATORS. WHEN THE STUDY DIRECTOR IS SATISFIED THAT THE PLANS ARE ADEQUATE, THE TEAMS WILL BE ASKED TO CARRY OUT THIS TRAINING.
12.A. COLLECT DATA FOR PILOT TEST.	IMPLEMENTORS	AFTER TRAINING EACH STUDY TEAM WILL COLLECT DATA AT THE PILOT SITE IN ACCORDANCE WITH THE SCHEDULE FIXED BY THE DIRECTOR.
12.B. INDEPENDENT OBSERVATION OF THE PILOT TEST.	DATA MGT ADV(S)	THE DATA MANAGEMENT ADVISOR WILL OBSERVE THE PILOT DATA COLLECTION EFFORT AND REPORT ON ANY PROBLEMS IDENTIFIED WITH RESPECT TO SCHEDULING, PERFORMANCE OF ENUMERATORS, VIABILITY OF INSTRUMENTS AND ETC.

ACTIVITY/STEP	RESPONSIBLE	DISCUSSION
CARRY OUT PILOT TEST, CONT'D		
3.A. ANALYSIS OF PILOT DATA USING CONSENSUS GROUPS.	IMPLEMENTORS & CONSENSUS GROUPS	THE ANALYZED PILOT DATA WILL BE PRESENTED TO A CONSENSUS GROUP COMPOSED OF DEPKE'S STAFF AND PROJECT CONSULTANTS. THE GROUP WILL PROVIDE GUIDANCE ON THE UTILITY OF THE PILOT DATA AND RECOMMENDATIONS FOR ANY CHANGES TO BE MADE IN PRESENTATION FORMAT OR CONTENT OF DATA PRIOR TO CARRYING OUT THE REGULAR DATA COLLECTION EXERCISE.
3.B. EVALUATION OF THE PILOT DATA COLLECTION PROCESS BASED ON OBSERVERS' FINDINGS.	DATA MGT ADV(S)	THIS STEP FOCUSES ON THE DATA COLLECTION PROCESS. THE OBSERVERS WILL PREPARE A WRITTEN NOTIFICATION OF PROBLEMS AND CONSTRAINTS OBSERVED AND RECOMMENDATIONS FOR OVERCOMING THEM.
4. FINAL REVISION AND APPROVAL OF DATA COLLECTION INSTRUMENTS.	IMPLEMENTORS & DIRECTOR	BASED ON THE OUTCOMES OF THE PRECEDING TWO STEPS, THE DIRECTOR AND DATA MANAGEMENT ADVISOR(S) WILL SPECIFY FINAL REVISIONS TO BE MADE IN THE DATA COLLECTION INSTRUMENTS. ONCE THE REVISIONS HAVE BEEN MADE, THE DIRECTOR WILL APPROVE THE INSTRUMENTS FOR USE IN THE REGULAR DATA COLLECTION EXERCISE.

ACTIVITY/STEP	RESPONSIBLE	DISCUSSION
10. FINAL PREPARATION FOR DATA COLLECTION.		
11. TRAINING OF ENUMERATORS.	IMPLEMENTORS	ALL OF THE STEPS IN THIS ACTIVITY ARE BASED ON LESSONS LEARNED IN THE PILOT TEST. BASED ON THE OBSERVERS REPORT OF THE PILOT TEST AND THE FINAL VERSIONS OF THE DATA COLLECTION INSTRUMENTS, THE IMPLEMENTORS WILL PREPARE PLANS FOR FINAL TRAINING OF SURVEY ENUMERATORS. FOLLOWING APPROVALS FROM THE DIRECTOR, THE TRAINING WILL TAKE PLACE.
12. SCHEDULING OF SITE VISITS.	DIRECTOR	IN CONSULTATION WITH THE IMPLEMENTORS, THE DIRECTOR WILL PREPARE A DETAILED SCHEDULE FOR DATA COLLECTION AT ALL LEVELS OF THE SYSTEM AND ALL SITES TO BE VISITED.
13. SPECIFICATION OF SUPERVISION PLAN.	DIRECTOR	THE DIRECTOR WILL DEVELOP A SUPERVISION PLAN TO VALIDATE THAT DATA ARE BEING COLLECTED IN A SATISFACTORY MANNER THROUGHOUT THE DATA COLLECTION PERIOD.
14. NOTIFICATION OF FIELD SITES.	DIRECTOR	ALTHOUGH THE FIELD SITES HAVE ALREADY BEEN APPRISED THAT THESE STUDIES WILL BE CARRIED OUT, THERE WILL BE A FINAL NOTIFICATION TO EACH SITE JUST PRIOR TO THE SCHEDULED VISITS.
10. DATA COLLECTION	IMPLEMENTORS	DATA COLLECTION WILL TAKE PLACE IN ACCORDANCE WITH THE STEPS CARRIED OUT FOR THE FINAL PREPARATION.

ACTIVITY/STEP	RESPONSIBLE	DISCUSSION
E. DATA INPUT AND CLEANING		
1. INPUT AND CLEANING.	IMPLEMENTORS	THE INDIVIDUAL STUDY TEAMS WILL BEGIN INPUTTING AND CLEANING DATA AS IT COMES IN FROM THE FIELD.
2. VALIDATION OF CORRECT INPUTTING OF DATA.	DATA MGT ADV(S)	THE DATA MANAGEMENT ADVISORS WILL MONITOR THE INPUT AND CLEANING OF DATA TO ASSURE THAT THIS IS BEING DONE CORRECTLY.
F. DATA ANALYSIS.		
1. PRESENTATION OF PRELIMINARY FINDINGS.	IMPLEMENTORS	THE STUDY TEAMS WILL MAKE PRELIMINARY PRESENTATIONS OF ANALYZED DATA BASED ON FORMATS DEVELOPED IN STEP A.3., ABOVE.
2. CONSENSUS GROUP FEED BACK.	CONSENSUS GROUP	THE CONSENSUS GROUP WILL REVIEW THE PRELIMINARY PRESENTATION AND PROVIDE FEEDBACK FOR PREPARATION OF FINAL REPORTS.
3. PREPARATION OF FINAL REPORT.	IMPLEMENTORS	BASED ON FEED BACK FROM THE CONSENSUS GROUPS, THE STUDY TEAMS WILL PREPARE THEIR FINAL REPORTS.
G. INTERVENTION PLANNING	PIO	DETAILS FOR THE STEPS IN THIS ACTIVITY WILL BE PROVIDED AT A LATER DATE.

Attachment 1

JOB DESCRIPTIONS

FIELD DIRECTOR

Local consultant to be recruited.

The Field Director will be responsible for coordinating the work of the implementation teams and consultants to assure that the various activities and steps in the overall study process are carried out properly and according to schedule. It is understood that many of the tasks currently assigned to the Field Director in the Implementation Plan will be delegated to other consultants.

STUDY FACILITATOR

J.A. Bates MS

Mr. Bates has recent practical experience coordinating four major studies in Drug Management in Indonesia. His first assignment is to assist with development of the overall Implementation Plan for the two studies. After the Field Director is recruited, he will assist the incumbent by monitoring the progress of implementation and advising on problems and solutions. In addition to assisting with implementation issues, Mr. Bates will function as technical advisor for the Drug Management Study. It is assumed that the Study Facilitator will be most active in the early stages of the implementation process and that over the course of time the need for his services will diminish.

DATA MANAGEMENT ADVISORS

Mary White PhD

Local Consultant to be recruited.

The two Data Management Advisors are expected to have substantial experience in carrying out large scale surveys and especially in computer assisted data processing. Ability to work efficiently with Lotus, dBase and SPSS is considered an essential requirement. The work of the Data Management Advisors centers on quality control. Specific tasks to be carried out include:

- * Review all extant documentation and standardize formats for data collection instruments, coding procedures, computer data file structures and formats for presenting analyzed data.
- * Observe pilot test, evaluate the process of data collection, make recommendations for overcoming any deficiencies observed and assist with final revisions of instruments.
- * Observe enumerator training and confirm that enumerators are prepared to collect data correctly. This task is to be carried out at both the pilot test and regular data collection stages.
- * Observe data input and cleaning operations and assure that this work is being performed correctly.

MANPOWER DEVELOPMENT CONSULTANT

Ben Silalahi PhD

Dr. Silalahi will advise on design and implementation of the Manpower Study. Because of his extensive practical experience in operations research in Indonesia's public sector, he is also requested to assist the Field Director by accepting assignments to resolve problems related to overall coordination of the two studies and quality control of data management.

Appendix 2

LIST OF KEY CONTACTS

Ministry of Health

Dr. Kumara Rai

Ms. Andayaningsih

Dr. Vincent Gan

Dr. Batunathal Gultom

ISTI

Dr. Thomas D'Agnes

Mr. Azis La Sida

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