

UNCLASSIFIED

MOZAMBIQUE

PILOT CHILD SURVIVAL

656-0207

Project Paper

United States Agency for International Development  
Mission to Mozambique

June 30, 1989

UNCLASSIFIED

AGENCY FOR INTERNATIONAL DEVELOPMENT  
**PROJECT DATA SHEET**

1. TRANSACTION CODE  A = Add  C = Change  D = Delete  
 Amendment Number \_\_\_\_\_ DOCUMENT CODE 3

2. COUNTRY/ENTITY MOZAMBIQUE

3. PROJECT NUMBER 656-0207

4. BUREAU/OFFICE Africa

5. PROJECT TITLE (maximum 40 characters) Pilot Child Survival

6. PROJECT ASSISTANCE COMPLETION DATE (PACD) MM DD YY 1 2 3 1 9 1

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4)  
 A. Initial FY 89 B. Quarter 3 C. Final FY 90

8. COSTS (\$000 OR EQUIVALENT \$1 = 720 MT)

| A. FUNDING SOURCE      | FIRST FY 89 |            |              | LIFE OF PROJECT |            |              |
|------------------------|-------------|------------|--------------|-----------------|------------|--------------|
|                        | B. FX       | C. L/C     | D. Total     | E. FX           | F. L/C     | G. Total     |
| AID Appropriated Total | 400         |            | 400          | 800             |            | 800          |
| (Grant)                | ( 400 )     | ( )        | ( 400 )      | ( 800 )         | ( )        | ( 800 )      |
| (Loan)                 | ( )         | ( )        | ( )          | ( )             | ( )        | ( )          |
| Other U.S.             |             |            |              |                 |            |              |
| 1.                     |             |            |              |                 |            |              |
| 2.                     |             |            |              |                 |            |              |
| Host Country           |             | 148        | 148          |                 | 295        | 295          |
| Other Donor(s)         | 564         |            | 564          | 1,128           |            | 1,128        |
| <b>TOTALS</b>          | <b>964</b>  | <b>148</b> | <b>1,112</b> | <b>1,928</b>    | <b>295</b> | <b>2,223</b> |

9. SCHEDULE OF AID FUNDING (\$000)

| A. APPROPRIATION PURPOSE | B. PRIMARY CODE | C. PRIMARY TECH. CODE |         | D. OBLIGATIONS TO DATE |         | E. AMOUNT APPROVED THIS ACTION |         | F. LIFE OF PROJECT |         |
|--------------------------|-----------------|-----------------------|---------|------------------------|---------|--------------------------------|---------|--------------------|---------|
|                          |                 | 1. Grant              | 2. Loan | 1. Grant               | 2. Loan | 1. Grant                       | 2. Loan | 1. Grant           | 2. Loan |
| (1) DFA                  | 580             | 53C                   |         |                        |         | 800                            |         | 800                |         |
| (2)                      |                 |                       |         |                        |         |                                |         |                    |         |
| (3)                      |                 |                       |         |                        |         |                                |         |                    |         |
| (4)                      |                 |                       |         |                        |         |                                |         |                    |         |
| <b>TOTALS</b>            |                 |                       |         |                        |         | <b>800</b>                     |         | <b>800</b>         |         |

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

| A. Code   | GSPV | DEL | NUTR |
|-----------|------|-----|------|
| B. Amount | 800  | 100 | 100  |

13. PROJECT PURPOSE (maximum 480 characters)

To develop and test, under insurgency conditions, replicable and cost-effective measures to reduce infant and child morbidity and mortality.

14. SCHEDULED EVALUATIONS

Interim MM YY 0 3 90 Final MM YY 0 4 9 1

15. SOURCE/ORIGIN OF GOODS AND SERVICES  
 000  941  Local  Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)

17. APPROVED BY  
 Signature: Julius P. Schlotthauer  
 Title: Mission Director  
 Date Signed: MM DD YY 0 6 3 0 8 9

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION  
 MM DD YY 0 8 0 7 8 9

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Date: June 30, 1989

ACTION MEMORANDUM FOR THE MISSION DIRECTOR

THRU: David Mutchler, Deputy Director *DM*  
FROM: James H. Purcell, Program Officer *JHP*  
SUBJECT: Approval of Pilot Child Survival Project

ACTION: Your approval is requested for a grant of Eight Hundred Thousand United States Dollars (\$800,000) from the Development Fund for Africa (DFA) appropriation to the People's Republic of Mozambique for the Pilot Child Survival project (656-0207). It is planned that the \$800,000 will be obligated in two increments over the two year life of project.

DISCUSSION: The Pilot Child Survival project seeks to obtain information on the workings of primary health care in Zambezia province, in central Mozambique. Field information and analysis will result in recommendations for improving the health care delivery and supervision system, particularly for mothers and children in rural areas where health facilities are limited and needs are magnified by disruptive economic and social conditions.

The two-year project has been designed to enable A.I.D. and the Mozambique Ministry of Health to determine a strategy and specific interventions for strengthening primary health care in rural areas. The project will fieldtest modifications to the health information system to improve the evaluation of service delivery.

The project will be implemented through the field level coordination of a European non-governmental organization, Medecins Sans Frontieres (MSF), under a Cooperative Agreement in the amount of \$235,000. MSF has considerable experience in Mozambique, at both ministerial and field levels, in helping the Ministry of Health meet critical primary health care needs, particularly those of mothers and children. A long term epidemiologist, to be arranged through a \$330,000 buy-in to an existing AID/W cooperative agreement with The Johns Hopkins University, will work in Zambezia to establish the baseline survey, contribute to the project work plan, and effect improvements in the health information system. Additional operations research assistance into aspects of child survival will be made available to the project through a series of short-term consultancies from Johns Hopkins. The project will also provide commodities and a contract project manager within the A.I.D. Mission.

AID/W approved the PID for the Pilot Child Survival project on March 14, 1989 and provided guidance for the project design in 89 State 109048 (attached as Annex 13 to the Project Paper). Based on the ECPR guidance, the following revisions have been made in the project design, and are reflected in this Project Paper.

The Executive Summary (pp 1-8) presents in detail the Mission's rationale for initiating a rural health delivery project rather than an emergency or urban based project. It also explains the design options considered (pp. 4-6), the potential to reduce health delivery costs or to reach more at-risk children (p. 27, Annex 3), the basis for concluding that the pilot project is replicable, and the security risk to project participants (p. 8, Annex 6). Other donor activities are examined in detail (pp. 5-7, pp. 22-23, Annex 12). Justification for the selection of MSF and the use of a cooperative agreement is addressed (p. 32) and implementation roles and responsibilities are explained (pp. 28-30). Project objectives (p. 19 and LOGFRAME) more clearly show the project's focus on institution building and improved service delivery. The following special considerations are relevant to your review and approval of this memorandum:

Twenty-five Percent Host Country Contribution: A host country contribution of 25 percent of total project costs is required, pursuant to FAA Section 110. The required host country contribution is \$267,000, or Mt 192 million (at \$1 = Mt 720). Accordingly, written assurances have been received (Annex 14) from the GPRM Ministry of Health, that timely local currency contributions in the requisite amounts will be made to the Provincial Health Division of Zambezia during the life of the project in support of government operations which will directly second the activities covered by this project. Our agreement with the Ministry of Finance to use A.I.D. generated counterpart funds for the Ministry of Health's operating budget will help the MOH to assure that operating funds are made available to Zambezia province.

Comprehensive Anti-Apartheid Act of 1986: No A.I.D.-financed goods or services will be procured from South African parastatals.

Justification to Congress: The U.S. Congress was duly notified of A.I.D.'s intent to obligate funds for the Pilot Child Survival project. Formal Notification was sent to the Congress on December 1, 1988. The CN period expired on December 21, 1988. An obligation may now be incurred according to Section 634A of the FAA and A.I.D. guidelines.

Delegation of Authority 551/REDSO Concurrence: At present, USAID/Mozambique is classified as a Class B mission. According to DOA 551, Project Paper approval by the Director,

USAID/Mozambique, must receive the concurrence of the Director, REDSO/ESA. That concurrence has been received (Nairobi 19400 dated June 29, 1989).

Initial Environmental Examination: The IEE was prepared for and attached to the project PID at the time of its submission. It had received the clearance of the RLA/Mbabane (2-10-89) and has since received the concurrence and approval of the Africa Bureau Environmental Officer, AFR/TR/ANR (See 89 State 109048). The project meets the criteria for a categorical exclusion.

Procurement Under DFA: Since this project is DFA-funded, Code 935 is the authorized procurement code. Therefore, no waivers will be required. However, as required by DOA 551, Section 5F, and the DFA Procurement Policy Recommendations and Africa Bureau Instructions dated April 4, 1988 (88 State 105351), the following procurement limitations apply to the project.

With respect to pharmaceuticals, all AID-financed pharmaceuticals will have their source and origin in the United States, except as A.I.D. may otherwise agree in writing, and otherwise be procured in compliance with HB 1B, 4C3. With respect to air transportation and travel, all such travel and transportation financed by AID to and from the United States will be limited to U.S. flag carriers, subject to documented exceptions, which will be made sparingly. With respect to ocean shipping, the Cargo Preference Act rules apply and the procurement plan indicates how the Cargo Preference Act rules shall be met. With respect to motor vehicles, as indicated in the procurement plan, U.S. manufactured vehicles cannot meet the needs of the project, because of required specifications and spare parts and maintenance capabilities within Mozambique. Therefore, non-U.S. vehicles from Code 935 countries will be procured. Finally, the procurement plan calls for U.S. procurement of goods and services to the maximum practicable extent.

Registration and Non-Competitive Selection of Medecins Sans Frontieres: The Project Paper calls for selection of Medecins Sans Frontieres (MSF), a private voluntary organization based in France, as the eventual recipient of a project-funded cooperative agreement in order to permit MSF to act as the field coordinator and principal project implementation agent. MSF is being registered with AID, and the Cooperative Agreement will only be signed after such registration. As provided in HB 13, 2B2e, the requirement for competition is considered to be met when cooperative agreements are based on prescribed eligibility requirements and on selection procedures for Mission-funded cooperative agreements to registered PVOs for field programs. Consequently, no waiver of competition is required.

Condition Precedent to Initial Disbursement: The Project Agreement shall contain, in substance, the following condition precedent to initial disbursement: Prior to the first disbursement, the Recipient will, except as the parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a statement of the name and position of those persons in the Government of the People's Republic of Mozambique who are authorized to sign project documents and communications, together with a specimen signature of each such person specified in such statement.

Covenants: The Project Agreement shall contain, in substance, the following special covenants:

(1) The Recipient, including the Ministry of Health, will collaborate with the Provincial Health Office in Zambezia, and with project implementation agents (the field coordination unit and U.S.-based consultants), to prepare and furnish to A.I.D. within ninety (90) days after the date of the Project Agreement, and update at least annually, a detailed time-phased implementation work plan for the Project, including clearly delineated roles and responsibilities for all project personnel.

(2) The Recipient will use its best efforts to continue to furnish, and to facilitate the efforts of other entities, including DPCCN, to store, transport and distribute, food commodities in sufficient quantity and combination to the target population in Zambezia province.

AUTHORITY: Under DOA 551, as revised, you, as Director of a Schedule B post, have the authority to authorize new projects up to \$20 million with a life of project not in excess of ten years, with the concurrence of the appropriate REDSO Director. Under DOA 551 you also have the authority to receive and determine the adequacy of assurances with respect to host country contributions as required by Section 110 of the FAA, negotiate and sign grant agreements with foreign governments, and implement such grant agreements, with the concurrence of the appropriate REDSO Director.

RECOMMENDATION: It is recommended that you authorize the Pilot Child Survival project (656-0207), and approve the Project Paper by signing the attached Project Authorization and PP Project Data Sheet.

ATTACHMENTS:

1. Project Authorization
2. Project Paper and Project Data Sheet, with Annexes
3. Grant Agreement

PROJECT AUTHORIZATION

Cooperating Country: Mozambique  
Project Title: Pilot Child Survival  
Project Number: 656-0207

1. Pursuant to the Foreign Assistance Act of 1961, as amended, the Foreign Operations, Export Financing, and Related Programs Appropriations Act, 1989, Africa Bureau Delegation of Authority (DOA) 551, as amended, and the authority delegated under 89 State 109048, I hereby authorize the Pilot Child Survival project for the People's Republic of Mozambique (Recipient), involving planned obligations of not to exceed Eight Hundred Thousand United States Dollars (\$800,000) in grant funds from the Development Fund for Africa (DFA), over a two year period from the date of authorization, subject to the availability of funds in accordance with the A.I.D. OYB/allotment process, to help in financing foreign exchange and local currency costs for the project. Except as A.I.D. may otherwise agree in writing, the planned life of the project is two years from the date of initial obligation.

2. The project seeks to obtain information on the workings of the primary health care system in Zambezia province, with the prospect of improving the practice and supervision of child survival interventions in remote rural settings with limited resources. A better understanding of the rural health sector could lead A.I.D. to support long term implementation of a program that would include multiple approaches to dealing with a range of child survival issues within the current disruptive context of the Mozambican countryside.

3. The Project Agreement, which may be negotiated and executed by the officers to whom such authority is delegated in accordance with A.I.D. regulations and Delegations of Authority, shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

a. Source and Origin of Commodities, Nationality of Services

The source and origin of commodities and nationality of services financed under the project shall be in accordance with Africa Bureau DOA 551, Section 5F. Accordingly, commodities other than pharmaceuticals financed by A.I.D. under the project shall have their source and origin in Mozambique, the United States or

any other country included in A.I.D. Geographic Code 935, except as A.I.D. may otherwise agree in writing. Pharmaceuticals financed by A.I.D. under the project shall have their source and origin in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have Mozambique, the United States or any other country included in A.I.D. Geographic Code 935 as their place of nationality, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on a flag vessel of the United States.

b. Condition Precedent to Initial Disbursement

The Project Agreement shall contain, in substance, the following condition precedent to initial disbursement: Prior to the first disbursement, the Recipient will, except as the parties may otherwise agree in writing, furnish to A.I.D., in form and substance satisfactory to A.I.D., a statement of the name and position of those persons in the Government of the People's Republic of Mozambique who are authorized to sign project documents and communications, together with a specimen signature of each such person specified in such statement.

c. Covenants

The Project Agreement shall contain, in substance, the following special covenants:

(1) The recipient, including the Ministry of Health, will collaborate with the Provincial Health Division in Zambezia, and with project implementation agents (the field coordination unit and U.S.-based consultants), to prepare and furnish to A.I.D. within ninety (90) days after the date of the Project Agreement, and updated at least annually, a detailed time-phased implementation work plan for the project, including clearly delineated roles and responsibilities for all project personnel.

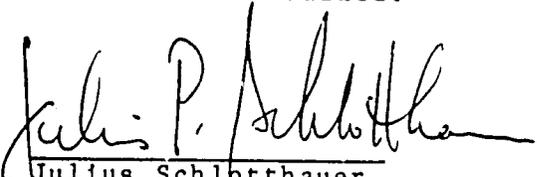
(2) The recipient will use its best efforts to continue to furnish, and to facilitate the efforts of other entities, including DPCCN, to store, transport and distribute, food commodities in sufficient quantity and combination to the target population in Zambezia province.

d. Waiver

The requirement for competition in the award of grants or cooperative agreements is hereby waived, and an exception to competition is authorized for services to be rendered by the non-governmental organization, Medecins Sans Frontieres, in the total amount of \$235,000.

e. Registration of NGO Medecines Sans Frontieres

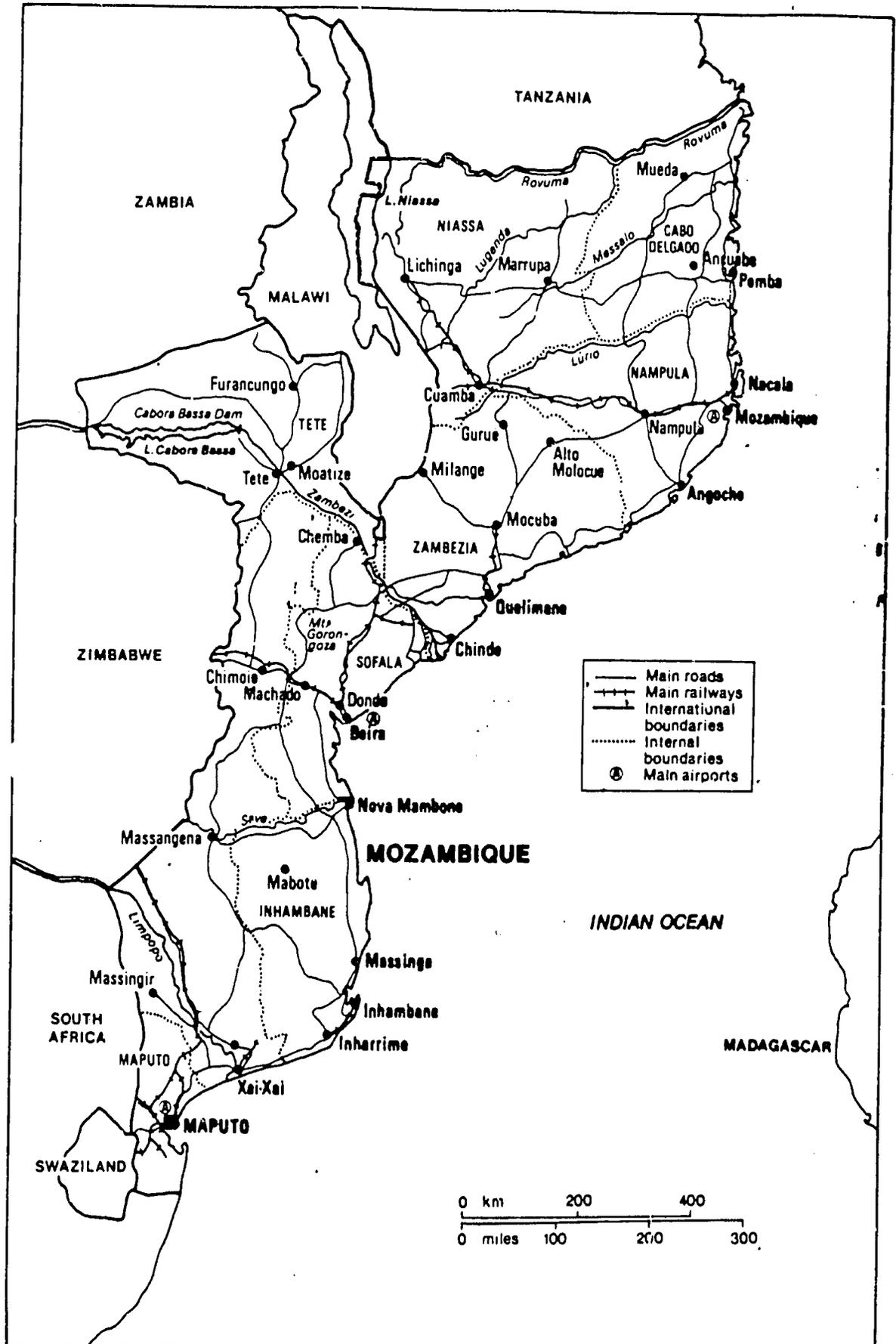
The Project Paper calls for selection of Medecines Sans Frontieres (MSF), a non-governmental organization based in France, as the eventual recipient of a project-funded cooperative agreement in order to permit MSF to act as the field coordinator and principal project implementation agent. MSF qualifies as a private non-governmental organization, fulfilling the essential characteristics contained in HB 3 (Annex 1 to Appendix 4C, Paragraph III through subparagraph E). MSF has submitted to A.I.D. Washington the required documentation to be registered with A.I.D as a private voluntary organization eligible to receive A.I.D. funds. The cooperative agreement with MSF will not be signed until the registration has been obtained.

  
Julius Schlotthauer  
Director  
USAID/Mozambique  
6-30-89  
Date

Clearances: Tim C. Riedler, RIA TR  
PRM, James H. Purcell JHP  
D.Dir., David Mutchler DM  
Reg. Cont., J. Gonson JG

DRAFT: T.RIEDLER:DLC:05/25/89:AUTHORIZ/MOZ

# Mozambique



## LIST OF ACRONYMS

|        |  |
|--------|--|
| AID/W  | - Agency for International Development/Washington                    |
| BCG    | - Tuberculosis vaccination   |
| CDD    | - Control of Diarrheal Diseases                                      |
| DPCCN  | - Department for the Prevention and Combatting of Natural Disasters  |
| DTP-P  | - Diphtheria, Tetanus, Pertussis and Polio Vaccinations              |
| ELAT   | - Strategy for the Struggle Against Tuberculosis                     |
| EMOFAR | - Parastatal ORS Factory   |
| EPI    | - Expanded Program on Immunization                                   |
| FP     | - Family Planning  |
| GPRM   | - Government of the People's Republic of Mozambique                  |
| HIS    | - Health Information System  |
| IBRD   | - International Bank for Reconstruction and Development (World Bank) |
| INPF   | - National Physical Planning Institute                               |
| KAP    | - Knowledge, Attitudes, and Practices                                |
| LOP    | - Life-of-Project  |
| Mt     | - Metical (Mozambican Currency) - plural Metacais                    |
| MCH    | - Maternal and Child Health  |
| MOH    | - Ministry of Health   |
| MSF    | - Medecins Sans Frontieres (France)                                  |
| NGO    | - Non Governmental Organization                                      |
| OJM    | - Mozambican Youth Organization                                      |
| OMM    | - Mozambican Women's Organization                                    |
| ORS    | - Oral Rehydration Salts   |
| ORT    | - Oral Rehydration Terapy  |
| OTM    | - Mozambican Worker's Organization                                   |
| PHC    | - Primary Health Care  |
| PVO    | - Private Voluntary Organization                                     |
| SCF    | - Save the Children Fund, (U.K.)                                     |
| SSS    | - Salt-Sugar Solution  |
| TBAs   | - Traditional Birth Attendants                                       |
| TBC    | - Tuberculosis Control Program                                       |
| UNDP   | - United Nations Development Program                                 |
| UNHCR  | - United Nations High Commission for Refugees                        |
| UNICEF | - United Nations Children's Fund                                     |
| WHO    | - World Health Organization  |
| WVRD   | - World Vision Relief and Development                                |

# I. PROJECT RATIONALE AND DESCRIPTION

## A. BACKGROUND AND RATIONALE

### 1. Executive Summary

This project is a response to an initial request by the Mozambique Ministry of Health in 1988 to support a blindness control program in Zambezia province. In its proposal, the Ministry identified vitamin A deficiency (measured as night blindness) and eye infections as two of the major factors contributing to widespread blindness in Zambezia. The World Bank's 1989 food security paper on Mozambique reports for Zambezia province a 14.8% growth faltering rate among children above 5 years of age and acute malnutrition (low weight for height) among 9% of the children of Mocuba district under 5 years. The seriousness of the broader child health situation, both throughout the country and specifically in Zambezia province, led USAID Mozambique to conceive this pilot project to do operations research on a wider range of interventions for enhancing child survival.

Although vitamin A supplementation remains within the project, the ministry's request for additional, more curative, ophthalmological activities are not included. Instead, the Pilot Child Survival project aims to determine appropriate strategies for strengthening primary health care (PHC) interventions for child survival in the war-torn areas of rural Zambezia province within the environment of a hit-and-run insurgency. If and when a more peaceful rural environment is restored, it will be these interventions which will continue to be required over the long term to undo the tremendous damage currently incurred by the present population.

At the heart of this pilot project is the testing of increased medical supervision of health services by doubling the number of flight hours available to Medecins Sans Frontieres (MSF), the French non-governmental organization, to reach towns isolated by the insurgency and adding to the MSF tasks a significant involvement in preventive health care. We will utilize operations research to compare the effect and affordability by the MOH of this approach with those approaches being tried in other districts of Zambezia. The project will concentrate on providing four key child survival interventions:

- Oral Rehydration
- Immunization
- Growth Monitoring
- Vitamin A Supplementation

Studies will focus on ways to strengthen the sustainability of these critical services in a context of extreme deprivation, food deficits and armed banditry.

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The study area (four district centers of Zambezia province) is unfortunately now typical of rural Mozambique - destabilized by continuing internal strife, flooded by refugees (deslocados) who suffer alongside longer term residents - themselves also affected (afetados) by the destruction of their fields and homes as well as by grossly inadequate food, clothing and medical supplies.

Distribution of Afetados and Deslocados  
(By Province)

| <u>Province</u> | <u>Population*</u> | <u>No. Deslocados</u> | <u>No. Afetados</u> | <u>Percentage</u> |
|-----------------|--------------------|-----------------------|---------------------|-------------------|
| Maputo          | 1,850,000          | 173,300               | 224,900             | 21.5              |
| Gaza            | 1,200,000          | 38,500                | 657,800             | 58.0              |
| Inhambane       | 1,310,000          | 187,900               | 425,000             | 46.8              |
| Sofala          | 1,242,000          | 125,000               | 195,000             | 25.8              |
| Manica          | 764,000            | 93,100                | 147,500             | 31.5              |
| Tete            | 1,010,000          | 97,000                | 125,000             | 22.0              |
| Zambezia        | 3,078,000          | 538,900               | 364,900             | 29.4              |
| Nampula         | 2,943,000          | 200,500               | 535,900             | 25.0              |
| Niassa          | 635,000            | 199,300               | 119,300             | 50.2              |
| C. Delgado      | 1,134,000          | 36,400                | 79,400              | 10.2              |
| <b>Total</b>    | <b>15,166,000</b>  | <b>1,689,900</b>      | <b>2,874,700</b>    | <b>30.1</b>       |

\* Notional figures derived from the 1980 census figures, estimated as of mid-1989. Included are an estimated one million Mozambicans who have taken refuge in neighboring countries.

As in most of rural Mozambique, continuing civil strife severely restricts the area safe for human habitation and for normal agricultural production. More than a third of the population in the country is dependent upon emergency food supplies - which in rural situations must be transported by air or by armed convoy. The government's human and financial resources are insufficient to cope with increasing levels of infant and child mortality which are already among the highest in the world.

The Mission must assume the current situation of rural privation will continue for some time, even if peace is achieved in the near future. To help alleviate the acute suffering of over five million people, the government must find cost-effective ways to expand the coverage of emergency food and medical supplies, as well as preventive child survival programs.

The overwhelming majority of Mozambique's population (and certainly its poorest members) live in rural areas, under conditions similar to those of Zambezia province. Although

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the costs of providing rural health care may be higher than in urban areas (particularly since urban clientele can help defray the cost of service delivery), the disastrous state of health conditions throughout rural Mozambique makes it imperative to focus efforts there.

A major task of this pilot project is to help develop the analytical basis for an expanded program of U.S. assistance within the next two years. Given the security situation, we assume that, for the foreseeable future, most service delivery points will be located within or very close to district capitals. The operations research conducted in this pilot effort must:

- a) Be sound not only in design but in execution and analysis, taking into account the unique difficulties of rural Mozambique.
- b) Coordinate closely with ongoing MOH health service delivery and data collection funded and assisted by NGO's and other donors.
- c) Enlist the full participation of the Ministry of Health in collaborative design, execution and analysis, in order to increase the probability the government will use the end results to make and sustain necessary changes within its health program.

In ensuring this, the pilot project cannot rely solely on short term TDY assistance because MOH and the international NGO skills in operations research and epidemiology are limited. The nature of the operations research effort requires increasing, in depth, familiarity with the conditions of rural Zambezia, Portuguese language skills, and continuity of supervision over the collection and analysis of data. Data should be analyzed in the field to ensure quick feedback and maximum participation by the Ministry of Health.

This argues for the long term placement (approximately 12 months) of a trained expatriate epidemiologist physician based in the secure provincial capital of Quelimane. This person will have the time to establish the necessary working relationships with provincial ministry officials, Mozambican health workers, Medecins Sans Frontieres volunteers and the other NGO's (Save the Children, ICRC, World Vision, Progetto Sviluppo) engaged in health programs. (S)he will also become intimately familiar with the realities of day to day health service delivery in the four district centers which form the study area and will be in a position to train and supervise Mozambican health staff in conducting research and evaluations and rapidly translating study findings into recommendations for health program improvement.

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2. Fundamental Options for Project Focus

A. The Geographic Options

- 1) Urban (Maputo, Beira)
- 2) Peri-urban (Maputo and Beira Green Zones)
- 3) Provincial Capitals (10)
- 4) District Centers (option selected: 4 of 115)
- 5) Rural Areas Outside of District Centers

B. The Institutional Options

- 1) Ministry of Health Administration
- 2) MOH Urban Hospitals
- 3) MOH Rural Clinics and Health Posts (option selected to test in Zambezia)
- 4) NGO Facilities
- 5) Private Sector Pharmacies
- 6) Traditional Healers

C. The Sectoral Options

- 1) Emergency Services
- 2) Curative
- 3) Preventive (option selected)
  - a) Nutrition
  - b) Child Survival (option selected)
  - c) Basic Sanitation
  - d) Water Supply
  - e) Malaria Control
  - f) Tuberculosis
  - g) AIDS Prevention
  - h) Family Planning

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The geographic option the Mission has selected targets four district centers and their immediate environs. Rural areas outside of district centers are too insecure for regular project operations. Provincial capitals are already relatively well served by MOH facilities and private pharmacies (See IBRD Staff Appraisal Report, Mozambique Health and Nutrition Project, February 1, 1989). Maputo and Beira constitute the only truly urban areas in Mozambique. They receive the best health care services in the country, experience a far lower level of suffering and play host to far fewer numbers of deslocados and afetados than do the district centers. Moreover, the World Bank Health and Nutrition project (\$51 million) focuses a substantial portion of its resources on Maputo City, as well as upon Maputo province and the capital cities of the provinces of Nampula, Tete, Manica and Sofala.

The institutional option focuses on operations research to evaluate current procedures and to test modifications of program carried out at the district hospital and district health post level by Ministry of Health staff, assisted by volunteer doctors, nurses and nutritionists of Medecins Sans Frontieres. National level Ministry of Health administration in Maputo City and five provinces will receive substantial support from the World Bank Health and Nutrition Project. A.I.D. is already supporting emergency programs of several PVOs, including World Vision and Save The Children (U.S.), and initiating a major prosthesis program, as well as the UNICEF vital medicines program. Support for private sector pharmacies would not appreciably affect rural child mortality levels, given the current security situation. Little is known about the activity or effectiveness of traditional healers, most of whom operate in remote rural areas.

On a sectoral basis, the project will focus on child survival strategies, since the infant and child mortality rate in rural Mozambique is, according to UNICEF (1989), the third highest in the world after Afghanistan and Mali. Child malnutrition is rampant in Zambezia and coverage of the Ministry's Expanded Program of Immunization (EPI) and its Control of Diarrheal Diseases (CDD) services is limited. A.I.D. and other donor support for emergency food programs attempts to address this most important determinant of maternal and child health. Although the government already has immunization campaigns and CDD programs underway with other donor support, further strengthening of service delivery is required to more effectively expand the coverage of preventive health care (PHC) services to children under 5 years of age.

Mozambique's requirements for basic sanitation and potable water supply far outstrip any assistance which we and other

donors might offer. A comprehensive nationwide program will have to wait for the return of peace and security to the countryside.

Malaria control would be an obvious priority in times of peace. The UN is considering support for a national malaria assessment, although for the foreseeable future, a spraying and prophylactic program will have to center on Maputo and Beira.

The government is addressing AIDS with U.S and other donor assistance through a public information campaign, with blood screening now available in Maputo from samples taken in provincial capitals.

Family planning is currently offered to post partum women. A more extensive and intensive rural family planning program may become possible during the next few years, once the health service delivery system is strengthened sufficiently to handle emergency and preventive health problems. War-related injuries and malnutrition currently overwhelm available hospital and clinic operations. The Mission is currently designing a \$2.5 million prosthesis program to improve surgical procedures and production and fitting of artificial limbs for the growing number of children and adults who require them.

### 3. Other Donors

The largest infusion of donor assistance for health will result from the proposed \$51 million World Bank and other-donor-funded Mozambique Health and Nutrition Project. The World Bank strategy is to:

Facilitate development of improved health policies in cost-recovery, manpower development and facility management;

Strengthen the Ministry of Health through reorganization of the central ministry, development of improved financial management information systems and increasing central capacity to manage and supervise investment programs;

Improve food security policies and information;

Support the health facilities reconstruction program;

Improve hospital management;

Strengthen health facility maintenance at the provincial and central levels through technical assistance and the provision of initial stocks of basic materials;

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Improve pharmaceutical supplies through construction/renovation of drug storage facilities, strengthening inventory control, etc.

Improve health manpower training;

Increase the efficiency of the urban food distribution system;

The project will also work closely with bilateral donors and NGO's such as World Vision, CARE, ICRC, UNICEF, Save The Children working in Zambezia province.

The service delivery component of the pilot project will be implemented with the direct assistance of Medecins Sans Frontieres, which has operated in the four pilot districts for several years, employing expatriate volunteer doctors, nurses and nutritionists. The Johns Hopkins University will provide the services of a full time expatriate epidemiologist to design, monitor and analyse the operations research effort, and to translate study findings into policy recommendations.

The focus of this pilot project is consistent with that of the A.I.D. Africa Bureau Child Survival Strategy, with respect to emphasis on the 'core activities' of oral rehydration therapy (ORT) and immunization as well as the importance it places on practical grass roots training of management, program planning and service delivery personnel.

The Ambassador has reviewed and concurs in the placement of a full time expatriate epidemiologist in Quelimane, capital of Zambezia province.

As a result of the increased technical assistance, life of project cost has been raised to a new total of \$800,000. This is reflected in the Mission's FY 1991 Annual Budget Submission.

In formulating this project, the Mission deliberated at great length the merits of conducting a project of this nature in Zambezia province. Substantial donor support in health and population is already being provided to national level program managers and to hospital based programs in selected urban areas (Annex 12). Many international NGOs are also assisting at the village or district level in strengthening the provision of health care services. However, at the district level of Zambezia province, where substantial emergency food and health assistance has been provided, where improvements in national PHC programs have not effectively "trickled down" to produce more efficient district PHC services, where an international NGO is currently operating (but not specifically in PHC), and where 750,000 people reside in the proposed pilot areas (of which 25% are afetados or deslocados), potential exists for significantly enhancing child health while effectively complementing national and donor efforts. A

different project aimed at either urban health care service delivery or rural emergency health support would essentially duplicate the present efforts of other donors and not effectively address the widespread preventable child health problems at the rural district level.

Security concerns were also considered for project staff (see Annex 6). Although attacks have occurred throughout the province, two of the proposed project sites are reasonably secure district capitals (Gurue and Mocuba) and no overnight stays are planned in the two remaining district capitals of Alto Molocue and Ile. Medecines Sans Frontieres-France constantly monitors the security situation and communicates changes immediately by radio. Through regular contacts with provincial and district authorities, missionaries, other NGOs, and private individuals, MSF is able to assess when it is safe to enter one of the districts. Overnight stays by project staff will only occur in Quelimane or Mocuba. USAID believes that through prudent preventive measures and by avoiding unnecessary risks, project personnel will be able to implement the project safely. The Ambassador has concurred in this judgment.

#### 4. Background

At independence in 1975, the level of human resource development within Mozambique, as indicated by life expectancy at birth and the literacy rate, was extremely low even when compared to the predominantly low standards of sub-Saharan Africa. More than 70 percent of the population lived out of the reach of any form of modern health care. The post-independence government gave high priority to development of basic social services, including investment in an extensive primary health care (PHC) network, development of the educational system, and implementation of special activities designed to maintain food consumption and nutritional status at acceptable levels. Partially due to these measures, improvements were recorded in the health, nutritional and educational status of Mozambicans, particularly in the 5-7 years immediately following independence.

In recent years, however, the health care system has been hard hit by the combined effects of a widespread and destructive insurgency and economic restructuring. In rural areas particularly, the vicious insurgency has led to severe disruption of existing social services and agricultural production, thereby reversing the gains of previous years. The systematic destruction and looting of rural health facilities, combined with massive dislocations of the rural population, has all but destroyed the rural public health delivery system. This has been further aggravated by the drain on an already inadequate GPRM budget for counter-insurgency costs. The government is financially unable to put the system back together again. While many NGOs

have specific rural health projects in operation, none of these, nor all of them taken together, can fully compensate for the recent damage done.

Total demand for food and social services has also increased, due largely to rapid population growth. Available estimates indicate that the Mozambique population doubled in size from 6 to 12 million between 1950 and 1980, and is now estimated to be nearly 15 million. The absolute numbers are not as troubling as the annual rate of growth, now reported at about 3 percent (World Bank, 1988), sufficient to double the population in 23 years. Such a growth rate has serious implications for the future health and nutritional status of Mozambicans, many of whom are already suffering from hunger and disease.

Over the coming decade, Mozambique's population faces serious and widespread health and nutrition problems. Food security is likely to remain precarious due to a capricious climate, gaps and disruption in infrastructure, institutional weaknesses, and continued insurgency. Substantial food aid will be necessary in the foreseeable future despite anticipated improvements in domestic food production. When peace comes, the reconstruction and rehabilitation of primary health care services will demand considerable time and attention. In the short run, and as a preliminary step, there is the need to improve the efficiency, quality and management of the present health care system so that PHC can be a viable component of the system.

The Ministry of Health has identified a need for both short and long term strategies. This two-phased approach is a response to problems posed by Mozambique's peculiar conditions of prolonged instability, and the severely reduced availability of money for the sector. The short term health objectives of the GPRM are:

1. to put back into operation as many currently damaged units as possible;
2. to rehabilitate hospitals;
3. to acquire essential medicines and organize their distribution;
4. to continue to accord priority, whenever possible, to rural areas and to areas most affected by emergencies;
5. to maximize efficiency of all facilities, coordinate and mobilize resources at the national and international levels in order to increase the government's capacity to achieve these objectives;
6. to maintain priority for training, especially in-service and formal pre-service training; and
7. to take care of children in difficult circumstances.

Both the overall policy framework and the specific planning objectives outlined above are evidence of Mozambique's strong commitment to the improvement of maternal and child health. The high level of commitment has been repeatedly demonstrated in programs which increase and enhance coverage in both urban and rural situations. However, despite correctly oriented policies and an exemplary start in the late 1970's, coverage remains inadequate. Moreover, health service delivery has declined severely in rural areas as a result of the destructive insurgency and sharply reduced budgets.

##### 5. Health Problems in Mozambique and Zambezia Province

Mozambique has one of the highest infant mortality rates in the world estimated at 170 per thousand live births and the rate of under five mortality is estimated to be over 300 per thousand live births (UNICEF, 1989). As in most African countries, the most common causes of child death are diseases which can be easily prevented and treated, such as measles, malaria, and diarrhea. MOH statistics distinguish between populations that live in the relative normalcy of an urban environment with access to some social services and those that have recently emerged from or who continue to live in areas affected by armed insurgency. For example, in Zambezia and Tete provinces, where family life has been severely disrupted, the incidence of mortality and morbidity among mothers and children is much higher than normal, and indeed these rates are likely to be among the highest in the world.

In these disruptive times, the GPRM and the donor community distinguish between those displaced from their home district by war and/or drought (deslocados), and those remaining in place but having suffered direct, significant damage from the same two causes (afetados). The four districts within Zambezia where the pilot project will be implemented are Alto Molocue, Ile, Gurue, and Mocuba. Total recorded population of these four districts is 750,000, 25% of whom are deslocados (83,500) and afetados (125,750).

Severe malnutrition is rampant in war affected areas where more than 13% of children under five have been found to be extremely wasted and/or stunted. In conjunction with systemic protein-calorie malnutrition, vitamin deficiencies (beri-beri, pellagra, scurvy, and most recently xerophthalmia) have been measured among severely affected populations. In Zambezia province, vitamin A deficiency was found in alarming levels in 1987/88. Among 3790 deslocado children under 12 years of age surveyed in Zambezia, nearly 8 percent exhibited night blindness - eight times the World Health Organization standard indicating a significant vitamin A deficiency problem (MOH, 1988). Studies in Indonesia and Bangladesh have linked vitamin A deficiency with increasing risk of diarrhea and respiratory infection. In Zambezia, these health problems are widespread among children although accurate prevalence and incidence data are unavailable.



Other eye infections, such as trachoma, are common public health problems which contribute to blindness in Zambezia. In their 1988 study, the ministry found trachoma in more than 30% of the children surveyed - a problem which can be easily prevented through more sanitary child care practices and treated with basic drugs. Total blindness in Mozambican children due to vitamin A deficiency or trachoma or other causes will further exacerbate the already reduced economic and productive potential of their respective communities. Blindness limits the opportunities of those children and their families to contribute to and benefit from improvements in the economy and social services. Following the onset of blindness, child health improvements are also more difficult to achieve because of increased risk of accidents, accidental death, etc. In fact, blind people do not long survive in a rural situation of want, privation, and poor medical care.

#### 6. Relation of Project to A.I.D. Strategy

The Pilot Child Survival project is consistent with A.I.D.'s overall child survival policy objectives which emphasize public health interventions that most effectively avert child deaths and illness. The A.I.D. Health Assistance Policy Paper (1982) and Health Sector Strategy (1984) specifically state that within A.I.D. supported health programs, child survival has priority and major emphasis is to be given to ORT and EPI as the "twin engines" of child survival. Furthermore, A.I.D. aims to institutionalize more universal coverage of PHC services to effect mortality reductions in children under five years of age and disease and disability reductions in women, children, and other members of the work force. PHC offers the most cost effective approach to health care in the short run given the resource limitations of most developing countries. A.I.D.'s Africa Bureau Child Survival Action Plan (1987) places additional emphasis on the training of management, program planning, and service delivery personnel at several hierarchical levels to meet the identified needs and conditions of African countries. Use of PVOs is also encouraged in A.I.D. sponsored health projects in Africa.

In strict conformity with these agency policies, the project focuses on strengthening the delivery of selected PHC services, improved supervision and management support with assistance from an international PVO. In Zambezia, these interventions are basic to improving both child survival and the delivery of health services more broadly.

The Mission's overall strategy has been, and is, to assist Mozambique address its critical food deficit, to promote the private sector, and to provide the necessary means to accelerate and sustain increased productivity (FY 1989 ABS). Since 1976, A.I.D. has supplied very large amounts of food to

Mozambique to combat chronic food shortages created by insurgency and drought. The U.S. food program in Mozambique currently accounts for about 30 percent of the total amount required to make up the annual food deficit. The evident deterioration of child nutritional status, particularly in Zambezia province, the apparently related cases of blindness, and the resultant increased incidence of morbidity and mortality among the affected population all reflect the fact that even with heroic efforts to deliver donated food to the needy, the size of the task and the logistical constraints caused by the insurgency are such that food shortages will recur and non-food measures must also be taken to assure child survival. While direct food assistance is not a feature of this pilot project, it is reasonably assumed that food will continue to be provided to the extent feasible to communities within the Zambezia province target area, with the logistical assistance of DPCCN and World Vision Relief and Development Organization (see Annex 7). In addition, improved growth monitoring data provided through the project will assist the GPRM in Zambezia in their current efforts to better target food deliveries in the province based on nutritional need.

## B. PROJECT DESCRIPTION

The two year pilot project is designed to enable A.I.D. and the Ministry of Health to test ways to strengthen primary health care for child survival in war-torn rural areas of Zambezia province. The project will seek to utilize the existing MOH health care system to effect improvements in service delivery for enhanced child survival. The project will also attempt to estimate the cost-effectiveness of the measures on the health status of the population, although exact measures of health are difficult with a highly mobile population.

Implementation will be through the Ministry of Health with assistance from Medecins Sans Frontieres - France, an NGO currently based in Zambezia province providing emergency health assistance to the MOH, and the Johns Hopkins University which will provide operations research assistance. Other PVOs/NGOs based in the province will collaborate with project activities.

### 1. Goal and Purpose

The goal of the project is to improve child health and survival in Mozambique. The purpose of the project is to develop and test, under insurgency conditions, replicable and cost-effective measures to reduce infant and child morbidity and mortality.

## 2. Project Components

The project consists of an initial examination of the health delivery system in four districts of Zambezia followed by measures to effectively improve diarrhea management, growth monitoring and supplementary feeding, intensive immunization delivery, and vitamin A supplementation therapy. These specific interventions were selected because of their highly positive impact on child survival and because the ministry's delivery of these services requires strengthening to realize greater child survival. Annex 1 describes in detail the MOH national PHC programs and the specific services provided in the Zambezia province target areas. Beneficiaries include normal residents (including afetados) as well as those fleeing the insurgency. The project emphasizes appropriate interventions for high risk mothers and children.

(a) Initial Baseline Assessment: So as to be able to evaluate the performance of the project's efforts, carefully focused baseline data will be compiled within the first 90 days of project implementation covering the Mocuba, Ile, Alto Molocue and Gurue districts in Zambezia province. This will be done by the Johns Hopkins University in conjunction with Medecins Sans Frontieres - France, the MOH, and other relevant parties.

The baseline will consist of both qualitative and quantitative indicators of service delivery. Community level health status data (e.g. morbidity and mortality statistics) are difficult to obtain for project monitoring purposes because of the tremendous mobility or instability, because of the insurgency, of the target population. Thus, program level data which describe the efficiencies of the ministry's current system and identify areas for testing possible improvements (see section (b) following) will be the primary focus of the baseline assessment. Where feasible, data on health status and health behavior among mothers and children in the target area will be collected; however, consideration will be given to the utility of this data in view of the difficulties in following future trends among a mobile population and in view of the project's overall emphasis on service delivery.

(b) Operations Research: The project intends to field test the effectiveness and the efficiency of several basic health interventions. Among those child survival related interventions for which service delivery is considered "priority" by the MOH, this pilot project has identified four specific interventions for particular attention. These are described below.

Two of the four pilot areas have operating hospitals where preventive services are delivered separately from curative care. The project will emphasize the integration of the following four interventions into all health care activities to minimize the "missed opportunities" for preventive child care. Furthermore, the expanded use of MSF's flying doctor program, to be funded by the project, will provide comparative data shedding light on cost effectiveness for PHC management and supervision. Johns Hopkins will assist in designing specific operations research activities for each of these four interventions based on the results of the baseline survey.

i) Diarrhea Management:

Appropriate diarrhea control in Mozambique is not as effective as it could be (Cutts et al., 1988). This study shows that ORS is being delivered in the majority of cases, but mothers are not adequately counseled on accurate use and the effects of ORT. Cutts recommended that health workers be better supervised and trained to instruct mothers on preparation and use of ORT. A homemade porridge and water solution may be more effective than SSS in Mozambique, both because it is starch based, and because sugar and salt are not available in the majority of rural homes.

The Government of Mozambique has undertaken steps to strengthen the health education component of ORT through in-service and pre-service training, supervision, and materials production (see Annex 1). The ministry, with ongoing assistance from MSF and Johns Hopkins University, will develop approaches to continue strengthening supervision and on-the-job training of health staff. The specific supervision and training activities will stress counseling to mothers on preparation and use of ORT.

ii) Growth Monitoring:

Severe malnutrition is rampant in the Zambezia districts. More than 13 percent of children under five whose growth has been monitored have been found to be extremely wasted or stunted. In conjunction with systemic protein-calorie malnutrition, vitamin deficiencies (beri-beri, pellagra, scurvy and most recently xerophthalmia) have also been measured among populations in the target area (see Annex 1).

The project, through Johns Hopkins University and MSF, will assist the MOH in Zambezia in its efforts to improve the nutrition surveillance system being established in the province and in conducting special nutrition surveys. With improved nutritional data, the project will provide the MOH in Zambezia with greater ability to influence decisions regarding food aid deliveries to areas of need. As appropriate, OMM community workers will be involved in community-based nutrition education.

iii) Immunizations:

For all vaccines, Zambezia province coverage is reported lower than the Mozambican average. Coverage of EPI activities in Zambezia (all districts) for the 0-11 month age group in 1988 was:

|                        |     |
|------------------------|-----|
| - Third dose DPT-Polio | 18% |
| - Measles              | 31% |
| - BCG                  | 34% |

Distribution of vaccines to the districts is irregular, due to transportation, communication and management constraints. Fuel and electricity shortages are common and contribute to frequent cold chain breakdowns. By experimenting with solar powered refrigerators in selected sites throughout the country, the ministry hopes to remove these major obstacle to effective operation of the cold chain. A.I.D. will support participation in this program as part of a strategy to integrate immunizations within the regular health structure. The project funds the installation of such equipment at four sites within the project area. The project will also provide for training in maintenance and repair at an ongoing MOH organized course. The Johns Hopkins University and MSF will assist in collecting data to measure the effectiveness of the solar powered refrigerators in minimizing cold-chain breakdowns.

The project will also facilitate improved supervision of EPI services within the pilot areas to effect a reduction in "missed opportunities" for immunizations. Supervisory visits will be increased through support for increased air transport to the pilot areas by the MSF flying doctor program.

iv) Vitamin A Deficiency:

The MOH in Zambezia is interested in obtaining a better understanding of the magnitude of vitamin A deficiency in the province. Preliminary data indicate that vitamin A deficiency and associated night blindness is a significant health problem. Operations research activities, with assistance from the Johns Hopkins University and MSF, will identify and test service delivery issues - e.g. the feasibility of providing vitamin A supplements to children with malnutrition, measles, or diarrhea, considering the difficulties in patient follow-up and tracking in an extremely mobile population.

Vitamin A supplementation is a critical component of the project. Based on the prevalence of night blindness in the province, and the successful experience in Indonesia and Bangladesh in reducing child mortality and morbidity through vitamin A interventions, such supplementation among deslocados and afetados should effect an overall improvement in child health. The MOH has developed protocols for vitamin A supplementation, and these will be introduced and tested in the pilot areas. Even though dietary measures to counter nutritional deficiencies is preferred to supplementation approaches, vitamin A supplementation is appropriate within the current health, agro-economic, and insurgency context of Zambezia. During year 2 of the project, promotion of vitamin A vegetable gardening will be introduced in the pilot areas through the World Vision Relief and Development Organization vegetable pack program which has been initiated in Zambezia province. Because WVRO is already operating in the province, project funds for promoting this activity will not be required (See Annex 7).

Funding for seminars and workshops in vitamin A and child survival will provide the Ministry of Health with up-to-date information on vitamin A technology in child survival.

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Each of the areas of intervention identified above will be the object of specific research activities directed at services provided to children and mothers. Their number and complexity will be limited to facilitate the

process of testing and to permit a simple, direct and comprehensible system of health information against which sustainability of the interventions can be weighed.

(c) Improved Health Information System (HIS): The HIS will be the project tool for tracking the performance of the interventions sketched above against the expanded baseline data which will be prepared at the project's outset. The current system could make more and better use of existing data in health planning, program evaluation, management, and supervision. It ought to be possible, in most cases, to use the HIS as a monitor of service delivery of specific interventions. Obviously, monitoring specific individuals will be difficult, especially tracking displaced persons who are still on the move. However, within the target group, evaluation will focus on the delivery of the four prescribed interventions to certain individuals and groups. Given the existing HIS and the use of project funded computers and based on the experience of those who have been working in Zambezia, this task seems feasible, even at district health centers.

The Johns Hopkins University will assist in developing the necessary mechanisms to track the performance of the four interventions described above. In addition, managerial or technical approaches to improve the Zambezia HIS will be developed to facilitate better use of data for PHC program management.

(d) Logistic Support and Limited Commodities: Improved basic management and logistics will assist the Ministry of Health in providing efficient approaches to overcome the transportation and communication obstacles caused by the insurgency in the project area.

In addition to technical assistance to define better approaches to management and supervision, the pilot project will examine a variety of logistical resources. MSF has used light aircraft with effectiveness in the past to greatly facilitate the role of supervision of many remotely situated district health centers and provide linkages with and supplies from the provincial level. MSF also has an effective system of radio communication to supplement site visits and to provide security and scheduling information. Security concerns require the use of aircraft in many instances. To provide more time for PHC supervision and on-the-job training, the project will fund the incremental costs of doubling the number of MSF flights to the pilot project areas. In at least one district within the pilot project area, a four-wheel drive vehicle will assure logistics in

supervision and supplies. In more rural areas, bicycles (manufactured in Mozambique) can provide the means to support data collection and supervision. The use of various modes of transport and communication will also be tested as part of information gathering about the efficiency and effectiveness of rural health systems in Mozambique.

Regular MOH supplies of medicines and supplies, most provided by donors, should be sufficient to carry out the program of operations research. However, contingency funds within the project may be used to provide essential drugs and supplies (such as ORS and vitamin A capsules), if otherwise not available, so as not to jeopardize the opportunities for information gathering in specific areas of health intervention.

### 3. Project Outputs

- Increased knowledge and understanding of factors contributing to cost-effective mother and child health care systems in Mozambique.
- Identification of institutional and technical approaches central to cost-effective child survival programs in war impacted rural areas of Mozambique.
- A draft model of a functioning primary health care system with limited resources in conditions of insurgency, which includes:
  - \* adequate and timely data collection, reporting and analysis;
  - \* adequate supervision of maternal and child health activities;
  - \* movement towards integration of MCH services with curative services; and
  - \* timely provision of vaccines, medicines and supplies.

### 4. Project Inputs

The project will support field coordination, operations research assistance, short term training (both U.S. and Mozambique), commodities, evaluation, and monitoring.

(a) Field Coordination: A project field coordinator will be stationed in Zambezia province to play the central role in implementing the work plan and to monitor agreed upon levels of participation of other parties

involved in important project functions; this includes technical assistance, training, logistics and regular reporting. The project field coordinator will be recruited by Medicines Sans Frontieres - France which has health sector field experience in the project zone.

MSF, a French NGO, specializes in health crisis situations of short or long duration which are generally located in areas of great need, either due to remoteness or inadequacy of facilities. MSF has substantial experience in rehabilitating health facilities and curative services in the four project areas in collaboration with the MOH. Recently, MSF has begun broadening its activities more to the preventive type of services.

The MSF project coordinator will be responsible to the MOH in Zambezia for the daily implementation of the project and will report to the Medical Director, MOH, in Zambezia. On project related administrative activities, MSF will report to the USAID Mozambique project manager, also funded through this project and based in the Maputo USAID office. This USAID project manager will oversee the utilization of project resources and monitor overall project progress under the direction of the USAID Mission management.

(b) Operations Research Assistance: A long term epidemiologist, to be arranged through an existing AID Washington cooperative agreement with the Johns Hopkins University, will be recruited for a twelve month period. This person will be responsible for working with MSF and MOH in Zambezia in establishing the baseline survey, developing the project work plan, including all operations research efforts, and effecting improvements in the MOH Zambezia HIS system. In addition, a series of short term operations research consultancies from both the Johns Hopkins University and the MSF/Paris EpiCentre will supplement the efforts of the long term epidemiologist and the MSF project coordinator.

Staff from the Johns Hopkins University's Institute for International Programs (JHU/IIP) have visited Mozambique in recent months, and have spent time in Zambezia province. JHU/IIP's current cooperative agreement with A.I.D.'s S&T/Health Division, contains a facility for mission buy-ins to provide related services.

JHU/IIP has expressed interest in cooperating with this project by providing operations research assistance to identify means to assess the effectiveness of child survival interventions. Qualified, experienced short term specialists will provide guidance in ways to frame

and answer questions noted in the course of project implementation.

(c) Training, Workshops and Seminars: Approximately fifty clinic and hospital staff from Mocuba and surrounding areas in Zambezia, as well as MSF staff, will be trained at the Health Workers' Training Center in Quelimane. The project will fund the costs of travel, instruction, and accommodation for participants.

Workshops and seminars in vitamin A technology and other relevant areas will be conducted with assistance from the Johns Hopkins University or other locally based organizations such as Save the Children Fund (U.K.), where appropriate.

In addition, short term training opportunities in the U.S. in child survival or funding for travel to child survival conferences will be provided to select provincial and national officials, and MSF staff, where appropriate.

(d) Commodities and Logistical Support: The project will fund the purchase of four solar powered refrigerators for the cold chain in four health facilities. Funding is also provided for a 4 x 4 vehicle and two computers for use by the MOH in Zambezia and the project coordinator and the JHU long term epidemiologist.

The project includes \$125,000. for MSF for additional transportation to permit twice monthly flights to the four outlying health facilities in the target area. This doubling of the number of times per month that MSF visits these sites will allow time to add the preventive health care services of the project to the curative care assistance presently provided.

(e) Research, Evaluation and Monitoring: The project is a series of evaluations. One of the first actions will be the establishment of a common research plan incorporated into the project work plan. This will be a collaborative effort of the MOH (national and provincial levels), the project field coordination personnel, the Johns Hopkins University, and A.I.D. The plan will be prepared within the first 90 days after signature of the project agreement. The work plan, and specifically the research plan component, is effectively an initial evaluation in that it will take the present health and security situation into account in setting up a calendar of project activities. The work plan will also list the content and periodicity of reporting on specific,

quantifiable benchmarks which will be followed throughout the project, and will set the framework for the two formal evaluations, mid-term and final.

The operations research activities in the work plan, in general, will not require additional funds other than the cost of the Johns Hopkins University assistance. However, supplementary funding is provided for special surveys to determine the nature and extent of specific clinical and managerial problems in the target areas. These surveys will include gathering financial information to test the cost-effectiveness or affordability by the MOH of alternative program approaches.

For A.I.D. to assess progress toward achieving project objectives, and ultimately in fulfilling the project purpose, two comprehensive project evaluations will be organized over the course of project implementation. The initial evaluation should take place after month nine, but not later than the end of the first year. This will permit mid course corrections or reinforcements in overall strategy and field level implementation.

The final evaluation should occur after month 18 and, besides assessing actual project performance, will serve as a major program exercise in assessing lessons learned during the project, with a view towards incorporating that information into the design of a larger child survival/health sector intervention by A.I.D. in Mozambique, should such be determined to be feasible.

## C. COLLABORATION AND COORDINATION WITH OTHER DONORS

### 1. Other Donor Involvement in the Health Sector

Donor input in the health and population sectors in Mozambique is substantial (Annex 12). In 1987, more than \$24 million of non-capital and \$28 million of capital support was provided for health and population activities by external donors. Non-capital support consists mainly of technical assistance, training, and local operational support. Capital investments has been mainly in the rehabilitation of health units or the provision of supplies and equipment. Total donor support to the health and population sectors in 1987 accounted for nearly 15% of all external funding provided to Mozambique in all sectors (UNDP, 1987).

The most prominent supporters of health and population programs in Mozambique are U.N. agencies other than UNDP, bilateral donors, and international NGOs. As noted in Annex 12, most funding has been directed to primary health care, water and sanitation, program mangement, and medical supplies,

equipment, and drugs. Family planning and population receives little direct donor support.

Many donors are working with national level health program managers or, in the case of NGOs, at the community level. Assistance is being provided to health activities in urban centers or to more accessible and safe rural areas. The Pilot Child Survival project does not duplicate the activities of other donors in Zambezia province or nationally, but instead builds on the experience of MSF in the pilot areas. Although the project could provide assistance in more safe urban centers, other donor support in these areas, combined with shallow MOH staffing throughout the country, could result in duplication of efforts, less than optimal involvement of MOH staff, and less effective impact. By concentrating in the pilot rural areas, where few other donors are working, collaboration with national efforts is maximized (e.g. implementation of new PHC protocols), coordination between the MOH and existing donors in the province is enhanced, and a very real need for improving health services for rural people will be met.

## 2. Project Coordination with Participating Agencies

Special care will be given to the coordination of the inputs of each of the participants to project management. Coordination and collaboration between all parties will be facilitated by the formation of a project task force. This group will be comprised of:

- Ministry of Health representatives in Zambezia province (Medical Director, Statistician/Epidemiologist, MCH Director, and Health Educator),
- MSF Project Coordinator,
- Johns Hopkins University Epidemiologist
- USAID Project Manager (Maputo-based),
- a representative from the Health Workers' Training Center in Quelimane, Zambezia (possibly Save the Children/UK),
- a representative of World Vision.

The purpose of this group will be to coordinate and collaborate in the implementation of project activities. The project task force will meet on a quarterly basis at a minimum or as otherwise determined by the members of the task force. Furthermore, a memorandum of understanding (MOU) will be prepared for signature by the MOH, MSF, World Vision, Save the Children (U.K.) and USAID. This MOU will clarify the roles,

responsibilities, and commitments of each agency in implementation of project activities.

The USAID Mission will have a USDH Health/Nutrition/Population officer on its staff in early 1990. USAID Swaziland has a regional HPN staff whose duties include providing service to USAID Mozambique. USAID will also contract for a project manager to assist in handling arrangements for limited commodity procurement, preparation of terms of reference for short term operations research assistance, preparation of disbursement vouchers, centralization of all project related reporting requirements, and backstopping the project evaluation efforts. This person ideally will have Portuguese language ability to deal with representatives of the Ministry of Health. It would be advantageous, but not essential, for this person to have previous experience in public health. Of greater importance may well be management capabilities in dealing with a variety of players moving quickly across the stage, and whose interaction will be essential to the success of the project. Travel to Zambezia will be required at least once per quarter.

## II. COST ESTIMATES AND FINANCIAL PLAN

### A. Project Budget

The total cost of the Pilot Child Survival project over a two year period is \$800,000. A.I.D. funds will be obligated in bilateral grant agreements with the Ministry of Health during FY 1989 and FY 1990.

A portion of these funds will be provided to Medecins Sans Frontieres (MSF) through a sub-obligating cooperative agreement between USAID Mozambique and MSF. USAID Mozambique will also provide funds to the Johns Hopkins University for the operations research part of the project through a sub-obligating Mission buy-in to the centrally-funded CSAP-Support: Cooperative Agreement for Child Survival Project (936-5951.01). USAID Mozambique will procure directly all project commodities. Table 1 presents a summary project budget. The assumptions used in preparing the budget are described below. A more detailed breakdown of the budget and budget assumptions are contained in the Financial Analysis (Annex 5).

Table 1  
Pilot Child Survival Project  
Summary Budget by Organization  
(in U.S. dollars)

|                                | AID<br>----- | Estimated<br>Cooperating<br>Agencies'<br>Contributions<br>----- |
|--------------------------------|--------------|---|
| MEDECINS SANS FRONTIERES       | 235,000      | 1,127,600   |
| Long Term Staff                | 72,400       | 538,000   |
| Short Term Assistance          | 45,000       | ---   |
| Commodities                    | ---          | 70,000  |
| Air Transportation             | 117,600      | 240,000   |
| Home Office Support            | ---          | 279,600   |
| JOHNS HOPKINS UNIVERSITY       | 330,000      | ---   |
| Ops. Research Assistance       | 330,000      | ---   |
| USAID                          | 235,000      | ---   |
| Commodities                    | 83,600       | ---   |
| Evaluation                     | 30,000       | ---   |
| Project Manager                | 35,000       | ---   |
| Training                       | 50,000       | ---   |
| Contingency                    | 36,400       | ---   |
| MINISTRY OF HEALTH             | ---          | 295,200   |
| Personnel                      | ---          | 23,200  |
| Supplies, Equipment, Transport | ---          | 122,000   |
| Facilities                     | ---          | 150,000   |
| TOTAL                          | 800,000      | 1,422,800   |

Direct assistance to Medecins Sans Frontieres is provided for a long term project coordinator to be based in Quelimane, the incremental costs of doubling air transportation to the districts (above what is already being funded by MSF), and periodic visits by the MSF/Paris EpiCentre technical staff for baseline and evaluation activities.

Funding for the Johns Hopkins University includes the cost of a 12 month long term advisor in epidemiology and nine consultancies in operations research and evaluation (est. 27 person weeks). Sufficient funds will be made available for data gathering and analysis required to test the cost-effectiveness or affordability by the Ministry of Health of alternative approaches.

Funds to be expended directly by USAID include those for all commodity procurement, including a vehicle, the additional costs of the final evaluation, a USAID project manager, in-country training and two short term courses in the U.S. or a third country for Ministry of Health officials.

The A.I.D. funds managed by USAID Mozambique will also be obligated with the Ministry of Health in the project grant agreements. Earmarks and commitments, including those for MSF and Johns Hopkins, will be made by USAID with the concurrence of the MOH.

#### B. Local Contribution to the Project

Because the project is to take place within the Ministry of Health's structure and, indeed, is intended to strengthen Mozambique's primary health care system, the ministry's normal recurring operating costs form the major part of the local contribution to the project. Furthermore, MSF's normal recurring costs for personnel and air travel which are provided outside this project also constitute a non-A.I.D. contribution to the project. The MOH's operating costs for the relevant facilities and personnel, and MSF funds, are included in Table 1 as part of the Estimated Cooperating Agencies' Contributions.

The ministry currently has 267 health staff in the four districts and 8 staff at the MOH headquarters in Zambezia who will be highly involved in project implementation. Their salaries and fringe benefits are estimated at Mt 8.4 million or \$11,600 million per year (at M720 = \$1). An estimated Mt 44 million (or \$61,000) is included as a local contribution for medical supplies, transportation, and equipment. Facilities in the four project districts are valued at Mt. 54,000 (\$75,000) annually.

MSF has 12 staff based in the four project areas at an estimated annual cost of \$430,000 and a three person staff in Maputo whose annual salaries total \$108,000. For the purposes of this project, half the annual recurrent cost of these

personnel is calculated as an MSF contribution to the project (\$269,000). Paris support staff regularly visit Maputo, and their cost (estimated at \$23,300 per 3 week trip) for 6 trips per year is allocated as an MSF contribution (\$279,600 over the LOP). Monthly MSF air transportation to the districts costs an average of \$240,000 per annum, all of which is allocated as a local contribution. Finally, \$70,000 for vehicles in Zambezia is allocated as an MSF contribution.

Details of the local contributions from the Ministry of Health and MSF are provided in the Financial Analysis (Annex 5).

### C. Recurrent Costs

Given the current unfavorable economic situation, the resultant low government revenues, and limited budget resources available to the MOH, Mozambique is dependent upon donor support for virtually every development activity. Continuation of donor support across all aspects of the economy is therefore essential. Beyond this underlying dependence upon donors, prospects for achieving the outputs planned for this project will not depend on the Ministry of Health employing additional health personnel nor assuming substantial additional recurrent costs. The project seeks to improve existing MOH child survival interventions of the present health care system and without relying on a significant expansion of services requiring additional personnel.

Air transportation, however, is a major input which cannot be sustained by the Ministry of Health following project completion. The annual cost of the MSF air transportation for supervisory visits and the delivery of medical supplies, currently \$240,000 annually plus an additional \$52,800 to be provided under the project, is a cost which is not sustainable without donor assistance. Indeed, all air transport in Zambezia is currently donor funded. This is an interim measure, however, and once peace is restored, costly air transport would be replaced by more affordable ground transportation. But in view of the continuing insurgency, and concomitant risks associated with ground transport, costly air travel is now the only means to supervise and supply district health facilities.

### III. IMPLEMENTATION RESPONSIBILITIES AND PLAN

The implementation responsibilities of each agency involved in the project are described below. The coordinated relationship between the various parties will be further outlined in the memorandum of understanding to be prepared for signature by USAID, MOH, MSF, World Vision, Save the Children (U.K.), and DPCCN.

#### A. Implementation Responsibilities

##### 1. Ministry of Health/Zambezia

- In conjunction with MSF, prepare a detailed project work plan, complete with research plan, to be approved by USAID, for implementing all project activities;
- Implement activities developed during the project in MOH health facilities in four districts of Zambezia;
- Accompany MSF staff in supervisory visits to Mocuba and outlying health facilities;
- Work closely with all consultants to develop new systems for integrating child survival interventions into existing operations; and
- As required, work with Save the Children Fund (U.K.) to design and implement training activities and coordinate training follow-up and supervision.

##### 2. Medecins Sans Frontieres

- Responsible for the day-to-day implementation of project activities;
- In conjunction with MOH, prepare a project work plan, to be approved by USAID, for implementing project activities;
- Recruit, train, provide and support a project coordinator for the duration of the project;
- Involve Ministry of Health supervisory staff in supervisory visits to Mocuba and outlying health facilities;
- Work closely with all consultants to develop new systems for integrating child survival interventions into existing operations; provide transportation to Mocuba and outreach sites from Quelimane for all consultants as required;

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- Provide accommodation for all project consultants in Mocuba and other outreach sites;
- As required, work with Save the Children Fund (U.K.) to design and implement training activities and coordinate training follow-up and supervision; and
- Provide USAID and the MOH in Zambezia with regular reports on project related activities.

3. The Johns Hopkins University

- Recruit, train, provide and support one long term Portuguese-speaking epidemiologist physician to live in Quelimane and visit the four project districts;
- Provide timely short term operations research assistance to the MOH in Zambezia, MSF, and other relevant parties in specified areas;
- Provide USAID, the MOH in Zambezia, and MSF with reports of all short term technical assistance and evaluation activities; and
- Provide for long term epidemiologist's participation in final evaluation.

4. Save the Children Fund (U.K.)

- As required, and in conjunction with the Ministry of Health, assist in designing and implementing training activities for project related components.

5. World Vision Relief and Development Organization

- Coordinate with MSF, MOH/Zambezia, and DPCCN to ascertain food needs and adequate food supplies in project areas;
- Work closely with MSF, DPCCN, and the MOH in Zambezia to determine appropriate gardening activities to combat food and vitamin A deficiencies; and
- Provide regular reports to USAID, MSF, DPCCN, and the MOH in Zambezia on all project related activities.

6. USAID

- Arrange short term operations research assistance, and facilitate travel and in-country logistical arrangements (as far as Quelimane or other major city served by the national airline);

- Arrange U.S. and third country training; and
- Procure all commodities.

#### B. Implementation Schedule

- |             |  |
|-------------|--|
| Month 1     | <ul style="list-style-type: none"> <li>- Project grant agreement signed between USAID and MOH.</li> <li>- Pursuant to PIO/T, cooperative agreement between USAID and MSF signed.</li> <li>- MSF contracts with Project Coordinator.</li> <li>- Commodity orders placed.</li> <li>- Buy-in for JHU operations research assistance completed.</li> </ul>   |
| Month 3     | <ul style="list-style-type: none"> <li>- Baseline survey completed and submitted to relevant parties.</li> <li>- Project work plan, including research plan and budget prepared. USAID approval given.</li> <li>- MSF Project Coordinator in the field.</li> <li>- JHU epidemiologist in the field.</li> <li>- Additional MSF flying doctor visits to districts begin.</li> <li>- Operations research assistance in diarrhea management and vitamin A technology provided.</li> <li>- Operations research assistance in designing special surveys provided.</li> </ul> |
| Month 5     | <ul style="list-style-type: none"> <li>- Operations research assistance in EPI and growth monitoring provided.</li> </ul>  |
| Month 7-9   | <ul style="list-style-type: none"> <li>- Special surveys implemented.</li> <li>- Mid-project evaluation completed.</li> </ul>  |
| Month 10-12 | <ul style="list-style-type: none"> <li>- Follow on operations research assistance in intervention areas provided.</li> </ul>   |
| Month 13-16 | <ul style="list-style-type: none"> <li>- Evaluation recommendations implemented.</li> </ul>  |

- Follow on operations research assistance in intervention areas provided.
- Month 17-24
- Follow-on operations research assistance in intervention areas provided.
  - Final project evaluation completed.

### C. Procurement Plans and Responsibilities

The project description specifies the participation of four most important units in the implementation of activities over the two year life of project: the GPRM Ministry of Health, Medecins Sans Frontieres, the Johns Hopkins University (Institute of International Programs), and A.I.D. These units have several players, each of whom is responsible for performance within its own unit. The project task force will help to oversee project implementation by meeting regularly in Quelimane (or, exceptionally, in Maputo). Regular on-site monitoring of project implementation is an integral part of achieving project objectives.

#### 1. Operations Research Assistance

Immediately following the signing of the project agreement between representatives of A.I.D. and the Government of the People's Republic of Mozambique, project implementation orders for operations research assistance will be signed with the Ministry of Health. These PIO/Ts provide for project financed assistance outside of Mozambique for implementation of project activities.

| <u>Agent</u>             | <u>Responsibilities</u>                     | <u>Mode of Implementation</u>                         |
|--------------------------|---|---|
| Medecins Sans Frontieres | Field Coordination<br>EpiCentre Tech. Asst. | Sub-Grant (Cooperative Agreement)                     |
| Johns Hopkins University | Consultancies in<br>Operations Research     | Buy-in to AID/W<br>Child Survival Project             |
| Project Manager          | Mission Project<br>Management               | Personal Services<br>Contract (until USDH<br>arrives) |

Payment arrangements for these assistance activities are elaborated in Annex 8, "Payment Process".

## 2. Selection of Medecines Sans Frontieres

The decision to implement a major component of this pilot project with MSF is in large measure a happy coincidence of circumstances. Almost by chance, the Mission, in exploring initially what might be done over the long term to address the plight of Mozambique's children and to provide a learning ground, happened upon the MSF program in Zambezia. Working with and learning from the MSF staff, notably Drs. Philippe Rastano and Angela Gago, the Mission and MSF collaborated on a project design which grafts on to the established MSF curative emergency program a preventive health program for children that is consistent with and supportive of MSF program activities and objectives. The project is thus responsive to the priorities of both the MOH and A.I.D. as well as those of MSF.

MSF staff, dedicated and effective under the most trying circumstances, work in danger zones where few other organizations have dared to tread. No other PVO has an established program in Zambezia province suitable for implementing the preventive health component of this pilot project. The well organized and effective support provided by the Paris headquarters has ensured that no gap occurs when personnel depart. Invariably, MSF staff speak Portuguese and quickly establish effective working relationships with their Mozambican counterparts. MSF has established a well-tuned supply, logistics, and communications systems. Most importantly, MSF has significant experience in delivering health care in Zambezia province and has acquired a well-deserved reputation for getting the job done. In addition to the synergism we have created in joining forces with MSF, it would be costly, expensive and time consuming to solicit proposals from other non-governmental organizations to implement the project design.

A cooperative agreement was selected as the appropriate implementation instrument because A.I.D. is not procuring goods or services from MSF, but rather is transferring funds to MSF to support its health activities in Zambezia province, and substantial involvement of A.I.D. in the project activities is anticipated. For example, given the pilot nature of this project, which will serve as a learning ground for developing and testing alternative approaches to health care delivery for possible follow on activities, the Mission will be collaborating closely with MSF and reviewing developments and directions under the project on an ongoing basis.

## 3. Project Implementation

Each of the parties to the project work plan will carry out their respective part of the project specified in the plan. The members of the operations research assistance teams (MSF and JHU) will have one or more assigned counterparts (often for

different functions), and will be jointly responsible to the designated technical coordinator within the Ministry of Health. Members of the project task force are jointly responsible for overseeing the implementation of the work plan. Regular meetings, generally organized in Quelimane, under the joint leadership of the MOH's technical coordinator and the MSF's project coordinator, will review progress towards project objectives.

The USAID project manager, will provide backstopping, as required, for the efforts of the project implementation agents (MSF and JHU), to help in day-to-day administrative and procurement issues which do not require the consultation of the task force.

#### 4. Project Covenants

Within ninety (90) days of the signature of the project agreement, representatives of the MOH, with representatives of the implementing agents, MSF and JHU, and with the A.I.D. representative will prepare a detailed project plan of work which specifies the the project's research and implementation activities over the two year period.

The work plan will cover all A.I.D. financed and related MOH sponsored activities scheduled over the 24 months. The work plan will be time-phased and clearly delineate roles and responsibilities for all project personnel. The MOH must formally present the plan to USAID for prompt review and written approval by means of a project implementation letter. Upon issuance of this approval, field implementation of project activities can begin.

The project agreement covenant also commits the GPRM to ensuring that the work plan is updated from one year to the next. By a process of consultations, as in the drafting of the original plan of work, the MOH (both ministerial and provincial levels), in collaboration with MSF, JHU (and A.I.D., as required), will present the updated work plan before the end of month 12 to USAID for review and approval by project implementation letter.

Given the extraordinary importance of adequate food to project beneficiaries, a covenant in the grant agreement will require the GPRM to use its best efforts to continue to furnish, and to facilitate the efforts of other entities, including DPCCN, to store, transport and distribute, food in sufficient quantities and combination to the dislocado and afetado populations of the four project districts.

## 5. Project Monitoring

One of the major project activities involves regular supervision of an improved health information system, including the efficient delivery of child survival interventions. However, at another level, all project activities are the object of continuous monitoring by USAID and the MOH.

Monitoring will generally include meetings with the MSF project coordinator and the MOH staff in Quelimane. Site visits will be made to coincide with the regularly scheduled meetings of the project task force. The monitoring process will focus on identified and agreed upon benchmarks which indicate progress made towards the achievement of project objectives, and take note of issues which may impede that progress. The process will give rise to a report drafted by USAID for distribution to MOH/Maputo, MOH/Zambezia, MSF and JHU. Information from this report should feed directly into the preparation of the Mission's semi-annual Project Implementation Report (PIR) for AID/W. The report will include specific recommendations for actions to improve the progress of project implementation, and can serve as a check list for addressing outstanding issues.

## 6. Project Monitoring Benchmarks

The following benchmarks are listed as tentative indicators of progress marked towards the successful implementation of project actions, and the attainment of project objectives. Benchmarks are way stations en route to End-of-Project status.

- Work plan developed and approved - - - October 1, 1989
- Long term JHU epidemiologist arrives - - - October 1, 1989
- All commodities arrive - - - October 1, 1989
- Procedures for maintaining vaccine cold chain adopted -  
January 1, 1990
- Procedures for teaching ORT and monitoring utilization  
adopted - - - January 1, 1990
- Techniques for delivering vitamin A therapy and  
monitoring effectiveness adopted - - - January 1, 1990.
- Procedures for growth monitoring and nutrition  
information dissemination adopted - - - January 1, 1990
- First special survey results released - - March 1, 1990
- Second special survey results released - September 1, 1990
- Annual Zambezia epidemiology report reflects data  
compiled during project - - - December 1, 1990

## 7. Commodity Procurement Procedures

The Commodity Management Office of USAID Mozambique will assist MSF in finalizing specifications and will itself procure project commodities, based on the issuance of PIO/Cs. The procurement plan calls for U.S. procurement of goods and services to the maximum practicable extent.

Since this project is DFA-funded, Code 935 is the authorized procurement code. Therefore, no waivers will be required. However, as required by DOA 551, Section 5F, and the DFA Procurement Policy Recommendations and Africa Bureau Instructions dated April 4, 1988 (88 State 105351), the following procurement limitations apply to the project.

- a. Vehicle: Service for U.S. manufactured vehicles is not available in Mozambique. Consequently, U.S. manufactured vehicles cannot meet the needs of the project because of required specifications (particularly right hand drive) as well as spare parts and maintenance capability within Mozambique. Therefore, a non-U.S. vehicle, one 4 X 4. double cabin, diesel-powered pick up, from a Code 935. country will be procured. Requests for quotations will be issued to authorized dealers in the project area who are capable of providing after sales service. A spare parts package covering two years of maintenance will be included.
- b. Solar Powered Refrigerators: Specifications will be finalized, based on what is currently being tested in the field by other donors. The requirement will be advertised in a "Procurement Information Bulletin," published by A.I.D.'s Office of Small and Disadvantaged Business in Washington. A spare parts package will be included.
- c. Computers, Uninterruptible Power Supply and Supplies: A request for quotation will be prepared and distributed to the computer dealers in Maputo who provide after sales service. Two "Personal Computers" will be required, with software packages for word processing in the Portuguese language, and for data base and spreadsheet capability.
- d. Vitamin A: All A.I.D.-financed pharmaceuticals will have their source and origin in the United States, except as A.I.D. may otherwise agree in writing, and otherwise be procured in compliance with HB 1B, 4C3. If Vitamain A is procured from UNICEF/UNIPAC, such procurement will be in accordance with guidance contained in 86 State 105127, as issued by M/SER/OP.

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e. Cargo Preference: U.S. flag vessels will be used to the maximum extent possible for shipment of commodities under the project. However, as provided in the blanket transportation source waiver for Mozambique approved on January 26, 1989, no U.S. flag service is available from non-U.S. ports to ports in Mozambique. Consequently, transportation sources of non-U.S., Code 935 vessels may be used for cargoes originating at ports outside the U.S.

f. Air Transportation and Travel: All such travel and transportation provided by A.I.D. under the project to and from the United States will be limited to U.S. flag carriers, subject to documented exceptions, which will be made sparingly. No U.S. flag carriers fly into Mozambique, so U.S. flag carriers will not be used for the flights directly into or out of Mozambique.

MSF will be responsible to A.I.D. during the course of the project implementation for providing insurance, fuel and lubricants, assuring maintenance of all procured commodities, and for keeping a record of the same. All commodities will be titled to MSF, except for drugs, medical supplies, and the solar powered refrigerators which will be titled to the MOH. The eventual disposition of goods procured under this project will be spelled out in the Standard Provisions annex to the cooperative agreement signed between USAID and MSF.

#### 8. Disbursement Procedures

Annex 8 details the payment process for all project activities. USAID administrative approval of vouchers will be provided by the designated project officer within USAID Mozambique.

#### IV. MONITORING AND EVALUATION

##### A. USAID Monitoring Responsibilities

The project will fund a USAID project manager to oversee the implementation of project activities and monitor overall project performance. The project manager will report to mission management on all project matters. The MOH will prepare a project work plan for USAID approval which will serve as the basis for project monitoring and evaluation. The MOH will provide USAID with quarterly technical reports as well as a completion report within 90 days of the expiration of the project grant agreement.

The Johns Hopkins University and MSF will prepare for USAID and the MOH quarterly progress reports and quarterly financial reports which will be used to monitor implementation of the work plan. The project manager will also undertake regular site visits to Zambezia for monitoring project activities.

##### B. Evaluation Plan

USAID will arrange for two evaluations during the first and second years of project implementation. The evaluations will review the success of project activities with a view toward identifying/designing follow on activities for A.I.D., other donor and GPRM funding. These evaluations will also focus on the performance of the MOH in terms of coordinating project inputs (operations research assistance, training, commodities) with project activities to produce real outputs.

The first evaluation will assess the initial implementation of project activities and suggest necessary mid-course corrections. The final evaluation will document the impact of project activities on the achievement of goals and purpose, and will provide recommendations for activities to be incorporated into the proposed follow-on project. The Johns Hopkins University epidemiologist will be brought back to Mozambique to participate in this final evaluation.

## V. SUMMARY OF ANALYSES

### A. Technical Analysis

The Mozambique Ministry of Health currently contains the basic infrastructure for delivering preventive and curative services. In recent years, national child survival programs (EPI, CDD, nutrition, maternal health, family planning, etc.) have been established and gradual improvements in their delivery are being implemented. Coverage rates are not high, but generally increasing. The ministry is committed to expanding the overall child health program to include more focused interventions aimed at reducing mortality of high-risk groups. Unfortunately, as described in the previous discussion, implementation has not been as successful as planned due primarily to insufficient supervision and management, and the insurgency.

In Zambezia, all the national health programs are being implemented to some degree, including EPI, CDD, nutrition, maternal care and family planning, malaria control, tuberculosis control, rural water and sanitation, and health worker training. Effective expansion and implementation of health care cannot be attained in the absence of adequate MOH technical and managerial skills to assess needs, establish priorities, secure external support, and initiate and supervise the actual delivery of the service program. While the provincial directorate and district health facilities are short of staff, the present personnel need to upgrade their skills in service delivery, management, and supervision. Assistance provided through this project will help to overcome these constraints by focusing on skills development for improved health services delivery.

Transportation and insecurity are major constraints to effective service delivery. Transportation for supervision and replenishment of supplies is difficult due to the violence and the high cost of air travel to remote districts. Medecins Sans Frontieres - France is already operating in seven districts in Zambezia and can provide, through its existing flying doctors' program, assistance to the Ministry of Health/Zambezia in transportation, drug supply, on-the-job training, management, and supervision.

### B. Security Analysis

Many of Mozambique's rural areas are now in a condition of virtual anarchy as armed insurgency or banditry affects all of the country's 10 provinces. Violence has displaced some two million people out of a population of 15 million and is the main cause of hunger which affects five million. Large parts of the country are accessible only by air because the highways

and rail lines have been destroyed or are often attacked. Outside the main towns, most country areas are prey to attacks. Several aircraft used to haul relief supplies have been hit by ground fire, but without serious results. The Department of State maintains a travel advisory for Mozambique, warning American travelers to use extreme caution when traveling by land. The conflict continues at as high a level as it ever has in all ten provinces.

Zambezia is under intense pressure. Road access to areas outside of the provincial capital of Quelimane can only be accomplished under armed escort. For all intent and purposes, the district capitals of Mocuba, Ile, Gurue and Alto Molocue are accessible only by air. While Quelimane itself has not been attacked, attacks on roads around Quelimane are common.

With the enemy capable of striking at will, emergency relief and development aid workers in Zambezia take special precautions to assure security. Donor organizations such as Medecins Sans Frontieres monitor the security situation constantly and communicate charges immediately by radio. Through regular contacts with provincial and district authorities, missionaries, other non-governmental organizations and private individuals, MSF assesses when it is safe to enter one of the districts.

In accordance with established policy of the U.S. Embassy in Maputo, all personnel from The Johns Hopkins University as well as direct hire and contract AID employees will obtain Embassy approval before traveling to and within Zambezia province. It is not envisioned that the Johns Hopkins or MSF project personnel would stay overnight, except in Quelimane, Gurue and Mocuba, reasonably secure towns. The resident epidemiologist in Quelimane will keep in touch with the USAID Mission regarding travel plans, but will have autonomy with respect to travel decisions based on superior local knowledge.

There is good reason to believe that by continuing to take prudent preventive measures and avoiding unnecessary risks, project personnel will be able to implement the project safely.

### C. Economic Analysis

Despite the admirable efforts being made towards economic rehabilitation, Mozambique still faces severe economic and financial constraints. The country's economic problem is, therefore, that of securing sufficient donor resources and allocating them to many different uses, in such a way that the net benefit to society is as large as possible. Since imports are required for virtually every development activity, donor support across all aspects of the economy is essential.

Due to the prevailing violence and the uncertainty of food supplies, non-economic factors, such as considerations for

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safety, survival, and avoidance of conflict, dominate resource allocation and pricing decisions which under ordinary circumstances would adhere more closely to strict economic motivations and rationales.

Research on the return to investment on people has shown that the labor product created by health care and savings in health expenditures in the future as a consequences of reduction in disease can be substantial. This project also has significant indirect financial benefits, particularly in reducing government expenditures through a more efficient health information system leading to better inventory control and reduced waste. The project's emphasis on introducing efficiency and cost containment measures would assist the government in making better use of scarce domestic and foreign resources.

Benefit-cost analysis for this type of project is impractical due to the difficulties and high costs of generating the necessary data base. Cost data will be collected during project implementation in an effort to try to determine whether the approach being taken in this pilot project represents a cost-effective approach to child health improvement. Improvements in the delivery of basic child survival services based on this type of analysis can then be evaluated for inclusion in a possible follow on project during FY 1991. Given the proposed level of expenditure, this approach is preferable to engaging in a health sector analysis that would involve project delay.

Obviously, given the overall economic situation of the country, sustainability of any - indeed all - activities in Mozambique is dependent on continued high level donor support of the entire GPRM Economic Rehabilitation Program. The activities planned in this pilot project are consistent with the IBRD-IMF endorsed strategy of Mozambique to give priority attention to operation, maintenance and rehabilitation as opposed to new capital investment. No attempt has been made to determine the maximum amount the beneficiaries can spend on health care given the insurgency, widespread dislocation of the population and the decline in consumer purchasing power since the Economic Rehabilitation Program began in 1987.

#### D. Social Analysis

Massive internal displacements have occurred as a result of drought, famine and insurgency. The government estimates the internal displaced population at around 1.7 million and another nearly 1 million Mozambicans have sought refuge in neighboring countries. The constant movement of large numbers of people contributes to an extremely unstable social structure in the four Zambezia project areas and makes the delivery of public services to rural communities costly and difficult. Moreover, the resulting limited sense of community and the fragility of

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social structures in the project areas present serious obstacles to achieving the required beneficiary involvement.

The direct beneficiaries of this pilot project will be the mothers and children of the districts of Mocuba, Alto Molocue, Ile and Gurue in Zambezia province. Most of the population of these districts are Lomwe, either of the Nyanja or Manganja ethnic group. No cultural resistance to modern curative and preventive health care has been observed in the project area in recent years.

With domestic food production in crisis, family stocks of food are negligible in the pilot areas and food aid distribution is difficult and uncertain due to the insurgency. Therefore, success in assuring adequate and timely food supplies will have a major influence on the impact of this pilot project.

While the project is expected to serve as a basis for subsequent province wide or national health sector elaboration of a long term child survival intervention, data that are both reliable and valid are hard to collect and project impact may be elusive.

#### E. Administrative Analysis

The non-governmental organizations involved in project implementation, Medecins Sans Frontieres - France (MSF), Save the Children (U.K.) and World Vision Relief and Development, have earned impressive reputations for their abilities to function well in remote settings with basic logistics. In Zambezia they have been effective in working with each other and with the provincial and district personnel of the Ministry of Health.

Since 1986 when it began operations in Zambezia province, MSF has been assisting the Ministry of Health in the rehabilitation of the rural hospitals in Mocuba and Gurue, and providing largely curative care and supervision of health posts through its flying doctors' program. MSF trains health staff, provides supervision for clinical activities, and provides logistical support to the government in distributing medical supplies, food, and medical evacuations to the hospitals of Mocuba and Quelimane.

MSF staff, dedicated and effective under the most trying circumstances, work in danger zones where few other organizations have dared to tread. The well organized and effective assistance provided by the Paris headquarters supports well-tuned supply, logistics, and communications systems which would be exceedingly expensive and time consuming to replicate.

Save the Children (U.K.) has been active in Mozambique for nearly five years, largely in projects in health, social welfare, relief activities, reconstruction, rehabilitation and development. Since 1986, it has provided full time epidemiological assistance to the Zambezia provincial health office in surveillance, planning, teaching, and assessment of the province's health information system. They have also organized and constructed a Health Workers' Retraining Centre in Quelimane, which offers a full range of seminars for health care providers. More recently, in response to the emergency SCF has provided 33 trucks, maintenance support for them, and agricultural equipment.

SCF has established a track record of committed, long range, and effective assistance in Zambezia. Its personnel are well qualified professionals committed to improved health care delivery.

World Vision since 1984 has provided agricultural production packages (AGPAKs) containing tools and supplies in Tete and Manica provinces. In addition, in cooperation with DPCCN and the Mozambican Red Cross it has provided food for more than 300,000 people, clothing, and blankets. In 1987, World Vision initiated a primary health care program, focused on women and children in two districts of Tete province.

#### F. Financial Analysis

While the Ministry of Health is responsible for project implementation, it will receive assistance from a non-governmental organization (Medicins Sans Frontieres - France) and a respected and renowned U.S. public health educational institution (The Johns Hopkins University) in implementing various aspects of the project.

A cooperative agreement with MSF for \$235,000 will finance a full-time project coordinator for two years (\$72,400), the services of an MSF/Paris Epicentre consultant (\$45,000), and air transportation (\$117,600) for one extra flight per month to each of the four districts.

Through a buy-in (\$330,000) to an existing A.I.D. cooperative agreement with The John Hopkins University, a long term (12-month) epidemiologist will be stationed in Quelimane (\$145,000) and nine consultancies in operations research will be funded.

USAID Mozambique will expend \$151,400 for commodities (\$83,600), a Mission project manager (\$35,000), training (\$50,000), two evaluations (\$30,000) and contingency (\$36,400). While these funds will be obligated under the project agreement with the Government of Mozambique, the funds will be managed by USAID.

SC(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable to: (A) FAA funds generally; (B)(1) Development Assistance funds only; or (B)(2) the Economic Support Fund only.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

1. FY 1989 Appropriations Act Sec. 578(b).  
Has the President certified to the Congress that the government of the recipient country is failing to take adequate measures to prevent narcotic drugs or other controlled substances which are cultivated, produced or processed illicitly, in whole or in part, in such country or transported through such country, from being sold illegally within the jurisdiction of such country to United States Government personnel or their dependents or from entering the United States unlawfully?
2. FAA Sec. 481(h); FY 1989 Appropriations Act Sec. 578; 1988 Drug Act Secs. 4405-07. (These provisions apply to assistance of any kind provided by grant, sale, loan, lease, credit, guaranty, or insurance, except assistance from the Child Survival Fund or relating to international narcotics control, disaster and refugee relief, narcotics education and awareness, or the provision of food or medicine.) If the recipient is a "major illicit drug producing country" (defined as a country producing during a fiscal year at least five metric tons of opium or 500 metric tons of coca or marijuana) or a "major drug-transit country" (defined as a country that is a significant direct source of illicit drugs significantly affecting the United States, through which such drugs are transported, or through which significant sums of drug-related profits are

NO

N/A

laundered with the knowledge or complicity of the government): (a) Does the country have in place a bilateral narcotics agreement with the United States, or a multilateral narcotics agreement? and (b) Has the President in the March 1 International Narcotics Control Strategy Report (INSCR) determined and certified to the Congress (without Congressional enactment, within 45 days of continuous session, of a resolution disapproving such a certification), or has the President determined and certified to the Congress on any other date (with enactment by Congress of a resolution approving such certification), that (1) during the previous year the country has cooperated fully with the United States or taken adequate steps on its own to satisfy the goals agreed to in a bilateral narcotics agreement with the United States or in a multilateral agreement, to prevent illicit drugs produced or processed in or transported through such country from being transported into the United States, to prevent and punish drug profit laundering in the country, and to prevent and punish bribery and other forms of public corruption which facilitate production or shipment of illicit drugs or discourage prosecution of such acts, or that (2) the vital national interests of the United States require the provision of such assistance?

N/A

3. 1986 Drug Act Sec. 2013; 1988 Drug Act Sec. 4404. (This section applies to the same categories of assistance subject to the restrictions in FAA Sec. 481(h), above.) If recipient country is a "major illicit drug producing country" or "major drug-transit country" (as defined for the purpose of FAA Sec 481(h)), has the President submitted a report to Congress listing such country as one (a) which, as a matter of government policy, encourages or facilitates the production or distribution of illicit drugs; (b) in which any senior official of the

N/A

government engages in, encourages, or facilitates the production or distribution of illegal drugs; (c) in which any member of a U.S. Government agency has suffered or been threatened with violence inflicted by or with the complicity of any government officer; or (d) which fails to provide reasonable cooperation to lawful activities of U.S. drug enforcement agents, unless the President has provided the required certification to Congress pertaining to U.S. national interests and the drug control and criminal prosecution efforts of that country?

4. FAA Sec. 620(c). If assistance is to a government, is the government indebted to any U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies, (b) the debt is not denied or contested by such government, or (c) the indebtedness arises under an unconditional guaranty of payment given by such government or controlled entity?

NO

5. FAA Sec. 620(e)(1). If assistance is to a government, has it (including any government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

NO

6. FAA Secs. 620(a), 620(f), 620D; FY 1989 Appropriations Act Secs. 512, 550, 592. Is recipient country a Communist country? If so, ~~has~~ the President determined that assistance to the country is vital to the security of the United States, that the recipient country is not controlled by the international Communist conspiracy, and that such assistance will further promote the independence of the recipient country from international communism? Will assistance be provided

NO

- either directly or indirectly to Angola, Cambodia, Cuba, Iraq, Libya, Vietnam, South Yemen, Iran or Syria? Will assistance be provided to Afghanistan without a certification, or will assistance be provided inside Afghanistan through the Soviet-controlled government of Afghanistan? NO
7. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, damage or destruction by mob action of U.S. property? NO
8. FAA Sec. 620(l). Has the country failed to enter into an investment guaranty agreement with OPIC? No. An OPIC agreement was signed on July 28, 1984.
9. FAA Sec. 620(o); Fishermen's Protective Act of 1967 (as amended) Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel because of fishing activities in international waters? NO  
(b) If so, has any deduction required by the Fishermen's Protective Act been made?
10. FAA Sec. 620(q); FY 1989 Appropriations Act Sec. 518. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any loan to the country under the FAA? (a) NO  
(b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the FY 1989 Appropriations Act appropriates funds? (b) NO
11. FAA Sec. 620(s). If contemplated assistance is development loan or to come from Economic Support Fund, has the Administrator taken into account the percentage of the country's budget and amount of the country's foreign exchange or other resources spent on military equipment? (Reference may be made to the annual "Taking Into Consideration" memo: "Yes, taken into account by the Administrator at time of approval of N/A because contemplated assistance is not a development loan or from ESF.

Agency OYB." This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

12. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have relations been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption? NO
  
13. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget? (Reference may be made to the "Taking into Consideration" memo.) Any arrearages have been taken into account by the Administrator at the time of approval of the Agency FY 1989 OYB. See FY 1989 "Taking into Consideration" memo.
  
14. FAA Sec. 620A. Has the President determined that the recipient country grants sanctuary from prosecution to any individual or group which has committed an act of international terrorism or otherwise supports international terrorism? NO
  
15. FY 1989 Appropriations Act Sec. 568. Has the country been placed on the list provided for in Section 6(j) of the Export Administration Act of 1979 (currently Libya, Iran, South Yemen, Syria, Cuba, or North Korea)? NO
  
16. ISDCA of 1985 Sec. 552(b). Has the Secretary of State determined that the country is a high terrorist threat country after the Secretary of Transportation has determined, pursuant to section 1115(e)(2) of the Federal Aviation Act of 1958, that an airport in the country does not maintain and administer effective security measures? NO

17. FAA Sec. 666(b). Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? NO
18. FAA Secs. 669, 670. Has the country, after August 3, 1977, delivered to any other country or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards, and without special certification by the President? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) NO
19. FAA Sec. 670. If the country is a non-nuclear weapon state, has it, on or after August 8, 1985, exported (or attempted to export) illegally from the United States any material, equipment, or technology which would contribute significantly to the ability of a country to manufacture a nuclear explosive device? NO
20. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Assembly of the U.N. on Sept. 25 and 28, 1981, and did it fail to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the "Taking into Consideration" memo.) Yes. This factor has been taken into consideration by the Administrator in approving the FY 1989 OYB for Mozambique. See also page 6 of the GC "Taking into Consideration" Memo dated November 9, 1984.
21. FY 1989 Appropriations Act Sec. 527. Has the recipient country been determined by the President to have engaged in a consistent pattern of opposition to the foreign policy of the United States? NO

22. FY 1989 Appropriations Act Sec. 513. Has the duly elected Head of Government of the country been deposed by military coup or decree? If assistance has been terminated, has the President notified Congress that a democratically elected government has taken office prior to the resumption of assistance?

NO

23. FY 1989 Appropriations Act Sec. 540. Does the recipient country fully cooperate with the international refugee assistance organizations, the United States, and other governments in facilitating lasting solutions to refugee situations, including resettlement without respect to race, sex, religion, or national origin?

YES

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria

FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

NO

FY 1989 Appropriations Act Sec. 536. Has the President certified that use of DA funds by this country would violate any of the prohibitions against use of funds to pay for the performance of abortions as a method of family planning, to motivate or coerce any person to practice abortions, to pay for the performance of involuntary sterilization as a method of family planning, to coerce or provide any financial incentive to any person to undergo sterilizations, to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning?

NO

2. Economic Support Fund Country Criteria

FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the President found that the country made such significant improvement in its human rights record that furnishing such assistance is in the U.S. national interest?

N/A

FY 1989 Appropriations Act Sec. 578(d). Has this country met its drug eradication targets or otherwise taken significant steps to halt illicit drug production or trafficking?

N/A

5C(2) - PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A includes criteria applicable to all projects. Part B applies to projects funded from specific sources only: B(1) applies to all projects funded with Development Assistance; B(2) applies to projects funded with Development Assistance loans; and B(3) applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 1989 Appropriations Act Sec. 523; FAA Sec. 634A. If money is sought to obligated for an activity not previously justified to Congress, or for an amount in excess of amount previously justified to Congress, has Congress been properly notified?
2. FAA Sec. 611(a)(1). Prior to an obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance, and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?
3. FAA Sec. 611(a)(2). If legislative action is required within recipient country, what is the basis for a reasonable expectation that such action will be completed in time to permit orderly accomplishment of the purpose of the assistance?

Congress will be appropriately notified of planned obligation of an amount in excess of amount previously justified to Congress.

Yes

N/A

4. FAA Sec. 611(b); FY 1989 Appropriations Act Sec. 501. If project is for water or water-related land resource construction, have benefits and costs been computed to the extent practicable in accordance with the principles, standards, and procedures established pursuant to the Water Resources Planning Act (42 U.S.C. 1962, et seq.)? (See A.I.D. Handbook 3 for guidelines.) N/A
  
5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and total U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability to maintain and utilize the project effectively? N/A
  
6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. As pilot project to be implemented in sharply focused geographic area in one province, project not susceptible to regional or multilateral project execution. Will not encourage regional development.
  
7. FAA Sec. 601(a). Information and conclusions on whether projects will encourage efforts of the country to:  
(a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations;  
(d) discourage monopolistic practices;  
(e) improve technical efficiency of industry, agriculture and commerce; and  
(f) strengthen free labor unions. Health services project not related to private business, trade or production.
  
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise). Health services project not related to private business, trade or production.

9. FAA Secs. 612(b), 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars. Mission has agreed with Ministry of Finance to use U.S. generated local currencies to fund Ministry of Health's operating budget.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release? N/A
11. FY 1989 Appropriations Act Sec. 521. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? N/A
12. FY 1989 Appropriations Act Sec. 549. Will the assistance (except for programs in Caribbean Basin Initiative countries under U.S. Tariff Schedule "Section 807," which allows reduced tariffs on articles assembled abroad from U.S.-made components) be used directly to procure feasibility studies, prefeasibility studies, or project profiles of potential investment in, or to assist the establishment of facilities specifically designed for, the manufacture for export to the United States or to third country markets in direct competition with U.S. exports, of textiles, apparel, footwear, handbags, flat goods (such as wallets or coin purses worn on the person), work gloves or leather wearing apparel? No
13. FAA Sec. 119(q)(4)-(6) & (10). Will the assistance (a) support training and education efforts which improve the capacity of recipient countries to prevent loss of biological diversity; (a) No  
(b) be provided under a long-term agreement in which the recipient country agrees to protect ecosystems or other (b) No

- wildlife habitats; (c) support efforts to identify and survey ecosystems in recipient countries worthy of protection; or (d) by any direct or indirect means significantly degrade national parks or similar protected areas or introduce exotic plants or animals into such areas? (c) No  
(d) No
14. FAA Sec. 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (either dollars or local currency generated therefrom)? N/A
15. FY 1989 Appropriations Act. If assistance is to be made to a United States PVO (other than a cooperative development organization), does it obtain at least 20 percent of its total annual funding for international activities from sources other than the United States Government? N/A
16. FY 1989 Appropriations Act Sec. 538. If assistance is being made available to a PVO, has that organization provided upon timely request any document, file, or record necessary to the auditing requirements of A.I.D., and is the PVO registered with A.I.D.? Yes, subject PVO is presently in process of being registered with A.I.D.
17. FY 1989 Appropriations Act Sec. 514. If funds are being obligated under an appropriation account to which they were not appropriated, has prior approval of the Appropriations Committees of Congress been obtained? N/A
18. State Authorization Sec. 139 (as interpreted by conference report). Has confirmation of the date of signing of the project agreement, including the amount involved, been cabled to State L/T and A.I.D. LEG within 60 days of the agreement's entry into force with respect to the United States, and has the full text of the agreement been pouched to those same offices? (See Handbook 3, Appendix 6G for agreements covered by this provision). This requirement will be met.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FY 1989 Appropriations Act Sec. 548  
(as interpreted by conference report for original enactment). If assistance is for agricultural development activities (specifically, any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference, or training), are such activities (a) specifically and principally designed to increase agricultural exports by the host country to a country other than the United States, where the export would lead to direct competition in that third country with exports of a similar commodity grown or produced in the United States, and can the activities reasonably be expected to cause substantial injury to U.S. exporters of a similar agricultural commodity; or (b) in support of research that is intended primarily to benefit U.S. producers?

N/A

b. FAA Secs. 102(b), 111, 113, 281(a). Describe extent to which activity will (a) effectively involve the poor in development by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, dispersing investment from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward a better life, and otherwise encourage democratic private and local governmental

(a) An improved health delivery system will help ensure that mothers and children will receive better attention over a wide range of basic health care concerns. A healthier population will be able to participate more fully in the local economy. A U.S. public health applied research institution will assist in identifying and testing an appropriate mix of interventions which can be sustained by local Ministry of Health personnel.

(b) Some health extension work will be carried out with collaboration Mozambique's women's organization.

- institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries.
- c. FAA Secs. 103, 103A, 104, 105, 106, 120-21; FY 1989 Appropriations Act (Development Fund for Africa). Does the project fit the criteria for the source of funds (functional account) being used?
- d. FAA Sec. 107. Is emphasis placed on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?
- e. FAA Secs. 110, 124(d). Will the recipient country provide at least 25 percent of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?
- f. FAA Sec. 128(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?
- (c) The project emphasizes health interventions which can be carried out by local personnel.
- (d) Women's concerns, specifically their own nutrition and that of their children, are emphasized.
- (c) N/A
- Yes, the project advances the DFA objective of improving the delivery of social services.
- The recommended public health interventions are specifically designed for areas and climates with limited physical/monetary resources.
- Yes, Section II (Cost Estimate and Financial Plan) addresses this issue.
- Both the institution-building component and the operational research project components are designed to address the basic health care of poor rural people..

- g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government. The project will engage government health personnel at both the ministerial and provincial levels, in a collaborative process of ascertaining rural area needs, and then organizing an effective, responsive program which can be supervised, evaluated and subsequently improved, as required.
- h. FY 1989 Appropriations Act Sec. 536. Are any of the funds to be used for the performance of abortions as a method of family planning or to motivate or coerce any person to practice abortions? No
- Are any of the funds to be used to pay for the performance of involuntary sterilization as a method of family planning or to coerce or provide any financial incentive to any person to undergo sterilizations? No
- Are any of the funds to be used to pay for any biomedical research which relates, in whole or in part, to methods of, or the performance of, abortions or involuntary sterilization as a means of family planning? No
- i. FY 1989 Appropriations Act. Is the assistance being made available to any organization or program which has been determined to support or participate in the management of a program of coercive abortion or involuntary sterilization? No
- If assistance is from the population functional account, are any of the funds to be made available to voluntary family planning projects which do not offer, either directly or through referral to or information about access to, a broad range of family planning methods and services? N/A

- j. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes
- k. FY 1989 Appropriations Act. What portion of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, colleges and universities having a student body in which more than 40 percent of the students are Hispanic Americans, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)? No portion of project funds have been set aside specifically either to meet HBCU or Grey Amendment concerns. However, eligible institutions covered by these categories have been encouraged to apply to fill certain roles in technical assistance.
- l. FAA Sec. 118(c). Does the assistance comply with the environmental procedures set forth in A.I.D. Regulation 16? Does the assistance place a high priority on conservation and sustainable management of tropical forests? Specifically, does the assistance, to the fullest extent feasible: (a) stress the importance of conserving and sustainably managing forest resources; (b) support activities which offer employment and income alternatives to those who otherwise would cause destruction and loss of forests, and help countries identify and implement alternatives to colonizing forested areas; (c) support training programs, educational efforts, and the establishment or strengthening of institutions to improve forest management; (d) help end destructive slash-and-burn agriculture by supporting stable and productive farming practices; (e) help conserve forests which have not yet been degraded by helping to increase Yes. Qualifies for a Categorical Exclusion.  
No  
(a) No  
(b) No  
(c) No  
(d) No  
(e) No

- production on lands already cleared or degraded; (f) conserve forested watersheds and rehabilitate those which have been deforested; (g) support training, research, and other actions which lead to sustainable and more environmentally sound practices for timber harvesting, removal, and processing; (h) support research to expand knowledge of tropical forests and identify alternatives which will prevent forest destruction, loss, or degradation; (i) conserve biological diversity in forest areas by supporting efforts to identify, establish, and maintain a representative network of protected tropical forest ecosystems on a worldwide basis, by making the establishment of protected areas a condition of support for activities involving forest clearance or degradation, and by helping to identify tropical forest ecosystems and species in need of protection and establish and maintain appropriate protected areas; (j) seek to increase the awareness of U.S. government agencies and other donors of the immediate and long-term value of tropical forests; and (k)/utilize the resources and abilities of all relevant U.S. government agencies?
- (f) No
- (g) No
- (h) No
- (i) No
- (j) No
- (k) No
- m. FAA Sec. 118(c)(13). If the assistance will support a program or project significantly affecting tropical forests (including projects involving the planting of exotic plant species), will the program or project (a) be based upon careful analysis of the alternatives available to achieve the best sustainable use of the land, and (b)/take full account of the environmental impacts of the proposed activities on biological diversity?
- N/A

- n. FAA Sec. 118(c)(14). Will assistance be used for (a) the procurement or use of logging equipment, unless an environmental assessment indicates that all timber harvesting operations involved will be conducted in an environmentally sound manner and that the proposed activity will produce positive economic benefits and sustainable forest management systems; or (b) actions which will significantly degrade national parks or similar protected areas which contain tropical forests, or introduce exotic plants or animals into such areas? No
- o. FAA Sec. 118(c)(15). Will assistance be used for (a) activities which would result in the conversion of forest lands to the rearing of livestock; (b) the construction, upgrading, or maintenance of roads (including temporary haul roads for logging or other extractive industries) which pass through relatively undegraded forest lands; (c) the colonization of forest lands; or (d) the construction of dams or other water control structures which flood relatively undegraded forest lands, unless with respect to each such activity an environmental assessment indicates that the activity will contribute significantly and directly to improving the livelihood of the rural poor and will be conducted in an environmentally sound manner which supports sustainable development? (a) No  
(b) No  
(c) No  
(d) No
- p. FY 1989 Appropriations Act. If assistance will come from the Sub-Saharan Africa DA account, is it (a) to be used to help the poor majority in Sub-Saharan Africa through a process of long-term development and economic growth that is equitable, participatory, environmentally sustainable, and self-reliant; (b) being provided in accordance with the policies contained in section 102 of the FAA; (a) Strengthening primary health care delivery systems in rural areas involves a long-term process of institution building which, to be successful, has to be equitable participatory, sustainable and self-reliant. This project begins that process.  
(b) Yes.

(c) being provided, when consistent with the objectives of such assistance, through African, United States and other PVOs that have demonstrated effectiveness in the promotion of local grassroots activities on behalf of long-term development in Sub-Saharan Africa; (d) being used to help overcome shorter-term constraints to long-term development, to promote reform of sectoral economic policies, to support the critical sector priorities of agricultural production and natural resources, health, voluntary family planning services, education, and income generating opportunities, to bring about appropriate sectoral restructuring of the Sub-Saharan African economies, to support reform in public administration and finances and to establish a favorable environment for individual enterprise and self-sustaining development, and to take into account, in assisted policy reforms, the need to protect vulnerable groups; (e) being used to increase agricultural production in ways that protect and restore the natural resource base, especially food production, to maintain and improve basic transportation and communication networks, to maintain and restore the renewable natural resource base in ways that increase agricultural production, to improve health conditions with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care, to provide increased access to voluntary family planning services, to improve basic literacy and mathematics especially to those outside the formal educational system and to improve primary education, and to develop income-generating opportunities for the unemployed and underemployed in urban and rural areas?

(c) The project anticipates engaging the technical and logistical services of an experienced, expert PVO as the field coordinator of the project workplan.

(b) The project addresses critical health sector priorities which have been identified by the government, A.I.D., and other donor organizations.

(e) Project addressed the need to improve health conditions, with special emphasis on meeting the health needs of mothers and children, including the establishment of self-sustaining primary health care systems that give priority to preventive care.

- q. FY 1989 Appropriations Act Sec. 515.  
If deob/reob authority is sought to be exercised in the provision of DA assistance, are the funds being obligated for the same general purpose, and for countries within the same general region as originally obligated, and have the Appropriations Committees of both Houses of Congress been properly notified?

N/A

2. Development Assistance Project Criteria (Loans Only)

N/A

- a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan at a reasonable rate of interest.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20 percent of the enterprise's annual production during the life of the loan, or has the requirement to enter into such an agreement been waived by the President because of a national security interest?
- c. FAA Sec. 122(b). Does the activity give reasonable promise of assisting long-range plans and programs designed to develop economic resources and increase productive capacities?

3. Economic Support Fund Project Criteria

N/A

- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of Part I of the FAA?
- b. FAA Sec. 531(e). Will this assistance be used for military or paramilitary purposes?
- c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

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| NARRATIVE SUMMARY   | OBJECTIVELY VERIFIABLE INDICATORS   | MEANS OF VERIFICATION   | IMPORTANT ASSUMPTIONS   |
|---|---|---|---|
| <p><u>Program/Sector Goal:</u></p> <p>To improve child health and survival in Mozambique.</p>   | <p><u>Measures of Goal Achievement:</u></p> <ul style="list-style-type: none"> <li>- Mortality and morbidity statistics for children.</li> <li>- Statistics on malaria, diarrhea, measles, and malnutrition among children.</li> </ul>  | <ul style="list-style-type: none"> <li>- MOH health statistics records</li> <li>- Special surveys</li> </ul>  | <p><u>Assumptions for Achieving Goal:</u></p> <ul style="list-style-type: none"> <li>- In spite armed insurgency and economic crisis, effective improvements in Mozambique child survival are possible.</li> <li>- Donor assistance continues at least at current level</li> </ul>  |
| <p><u>Project Purpose:</u></p> <p>To develop and test, under insurgency conditions, replicable and cost-effective measures to reduce infant and child morbidity and mortality.</p>  | <p><u>Conditions Indicating Achievement:</u></p> <ul style="list-style-type: none"> <li>- Increased understanding of factors contributing to mother/child mortality and morbidity in Zambezia.</li> <li>- A draft model of a functioning primary health care system with limited resources in condition of insurgency.</li> </ul>   | <ul style="list-style-type: none"> <li>- Expert observations and evaluations.</li> <li>- Anecdotal reports</li> <li>- MOH work plans, service statistics and supervisory records in Zambezia.</li> <li>- Mid-term and final evaluations.</li> </ul>   | <p><u>Assumptions for Achieving Purpose:</u></p> <ul style="list-style-type: none"> <li>- Given insurgency, adequate field testing and supervision can be conducted.</li> <li>- Lessons can be replicable elsewhere with adjustments.</li> <li>- MOH limited resources and capacities can sustain follow-on child survival project</li> <li>- Adequate and timely donations of food are provided</li> </ul> |
| <p><u>Outputs:</u></p> <ul style="list-style-type: none"> <li>- Complete, accurate, relevant and timely data collection, reporting &amp; analysis</li> <li>- Regular and adequate supervision of MCH activities</li> <li>- Integration of MCH services into curative services</li> <li>- Timely provision of vaccines medicines and supplies</li> </ul> | <p><u>Magnitude of Outputs:</u></p> <ul style="list-style-type: none"> <li>- Proven procedures of maintaining vaccine cold chain</li> <li>- Proven techniques teaching ORT and monitoring utilization</li> <li>- Proven techniques delivering vitamin A therapy and monitoring effectiveness</li> <li>- Proven procedures for growth monitoring and nutrition information dissemination to mothers of small children</li> </ul> | <ul style="list-style-type: none"> <li>- Supervisors' reports.</li> <li>- Health information system records and reports.</li> <li>- Operations research reports from spot surveys and observation.</li> <li>- Work plans and records of MCH services in MOH Zambezia health centers.</li> </ul> | <p><u>Assumptions for Achieving Outputs:</u></p> <ul style="list-style-type: none"> <li>- MOH, NGOs, and consultants coordinate in implementing improved PHC services</li> <li>- U.S. consultants effectively impart new ideas.</li> </ul>  |
| <p><u>Inputs:</u></p> <ul style="list-style-type: none"> <li>- U.S. operations research epidemiologist (long term)</li> <li>- U.S. operations research consultants (short term)</li> <li>- MSF project coordinator</li> <li>- Commodities</li> <li>- USA ID project manager</li> </ul>  | <p><u>Implementation Targets:</u></p> <ul style="list-style-type: none"> <li>- Twelve p/m long term assistance</li> <li>- Twenty-seven p/wks. short term assistance</li> <li>- 300 hours flying time for logistics support</li> <li>- 24 person months on-site coordination</li> <li>- Two computers and software</li> <li>- Four solar-powered refrigerators</li> </ul>  | <ul style="list-style-type: none"> <li>- Work order records within AID/Washington</li> <li>- Flight logs</li> <li>- Site checks in district health centers</li> <li>- Trip reports</li> <li>- Commodity receiving reports</li> </ul>  | <p><u>Assumptions for Providing Inputs:</u></p> <ul style="list-style-type: none"> <li>- Centrally funded project buy-in possible</li> <li>- Satisfactory working relationships established between AID, MOH, and NGOs.</li> <li>- Commodities arrive in timely fashion.</li> <li>- USA ID provides adequate backstop support.</li> </ul>   |

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ANNEX 1

TECHNICAL AND INSTITUTIONAL ANALYSIS

DESCRIPTION OF HEALTH AND NUTRITION SERVICES

MINISTRY OF HEALTH AND ZAMBEZIA PROVINCE

- I. STRUCTURE OF THE MINISTRY OF HEALTH
- II. MOH NATIONAL HEALTH DIRECTORATE - DESCRIPTION OF SELECTED PROGRAMS
  - A. EPI
  - B. Nutrition
  - C. MCH/FP
  - D. Diarrheal Disease Control
  - E. Health Education
  - F. Tuberculosis Control
  - G. Malaria Control
- III. MOH PLANNING AND STATISTICS DEPARTMENT
- IV. MOH DIRECTORATE OF HUMAN RESOURCES
- V. PHARMACEUTICAL SUPPORT
- VI. RURAL WATER AND SANITATION
- VII. MOZAMBICAN WOMEN'S ORGANIZATION (OMM)
- VIII. DESCRIPTION OF HEALTH FACILITIES IN PILOT DISTRICTS OF ZAMBEZIA PROVINCE
  - A. Alto Molocue
  - B. Ile
  - C. Gurue
  - D. Mocuba
- IX. SUMMARY

Bibliography  
Persons Contacted  
Abbreviations

MOZAMBIQUE  
STATISTICAL DATA

|  | <u>NATIONAL</u> | <u>ZAMBEZIA</u> |
|--|-----------------|-----------------|
| Total Population (1988) <u>a</u> . (in millions) | 14.93           | --              |
| Population Growth Rate (1986) <u>a</u> . (%)     | 3.0             | --              |
| Fertility Rate (1987) (in '000)                  | 6.42            | 8.20            |
| Urban  | 5.72            | --              |
| Rural  | 6.93            | --              |
| Crude Birth Rate (1987) (in '000)                | 47.1            | 54.6            |
| Life Expectancy (1987) (in years)                | 43.6            | 34.4            |
| Male   | 42.1            | 33.1            |
| Female   | 45.0            | 35.6            |
| Rural  | 39.1            | --              |
| Urban  | 48.7            | --              |
| Crude Mortality Rate (1987) (in '000)            | 20.6            | 22.9            |
| Male   | 22.1            | 23.8            |
| Female   | 19.2            | 22.1            |
| Infant Mortality (1987) (in '000)                | 159.0           | 226.0           |
| Male   | 172.0           | 243.0           |
| Female   | 146.0           | 209.0           |
| Rural  | 183.0           | --              |
| Urban  | 130.0           | --              |
| Under Five Mortality (1987) <u>b</u> (in '000)   | 325 -375        | --              |
| Adult Literacy Rate (1985) <u>b</u> (%)          | 38              | --              |

Source: All data from Ministry of Health except (a) World Bank, 1988; and (b) UNICEF Annual Report, 1988.

## DESCRIPTION OF HEALTH AND NUTRITION SERVICES

### MINISTRY OF HEALTH AND ZAMBEZIA PROVINCE

The following describes the structure and nature of MOH child-survival related programs at the national level, Zambezia Province level, and the four districts where the pilot project intends to focus. The discussion is limited to those specific child survival and preventive health programs which the Project will be addressing. Non-PHC health programs such as mental health, leprosy, occupational health, and laboratory support are not explored in this document. Most of the following information is drawn primarily from World Bank and UNICEF documents (1988), as well as from interviews with MOH and donor staff working in specific primary health care programs.

A summary of the Ministry's capacity to undertake this pilot child survival project, based on the following description of its organization and services, is provided in the summary (section IX).

#### I. STRUCTURE OF THE MOH

The Ministry of Health contains five central directorates and two central departments, each of which contain several divisions, sections, nuclei, or centers. In addition, each province has a provincial health directorate. Figures 1-3 present the organizational structure of the national MOH, the provincial MOH Directorates, and District MOH Directorates. The functions of the MOH directorates and central departments are as follows:

1. National Directorate of Health: Oversees all curative and preventive service delivery including tuberculosis, leprosy, MCH, family planning, diarrheal diseases, EPI; environmental and occupational health; pharmacy; and epidemiology and statistics.
2. National Directorate of Social Action: Oversees social services and welfare for children, the aged, the physically and mentally handicapped, and the indigent; and limited daycare services for working mothers.
3. Directorate of Human Resources: In charge of manpower planning and management; supervision of all health training institutes (with exception of medical student education which falls under the Ministry of Education); and directives for MOH personnel salary levels.
4. Directorate for Administration and Finance: In charge of internal administration of personnel matters and physical plant; administration of the Ministry's budget, accounting, and expenditure monitoring.

REPÚBLICA POPULAR DE MOÇAMBIQUE  
ORGANIGRAMA DO MINISTÉRIO DA SAÚDE

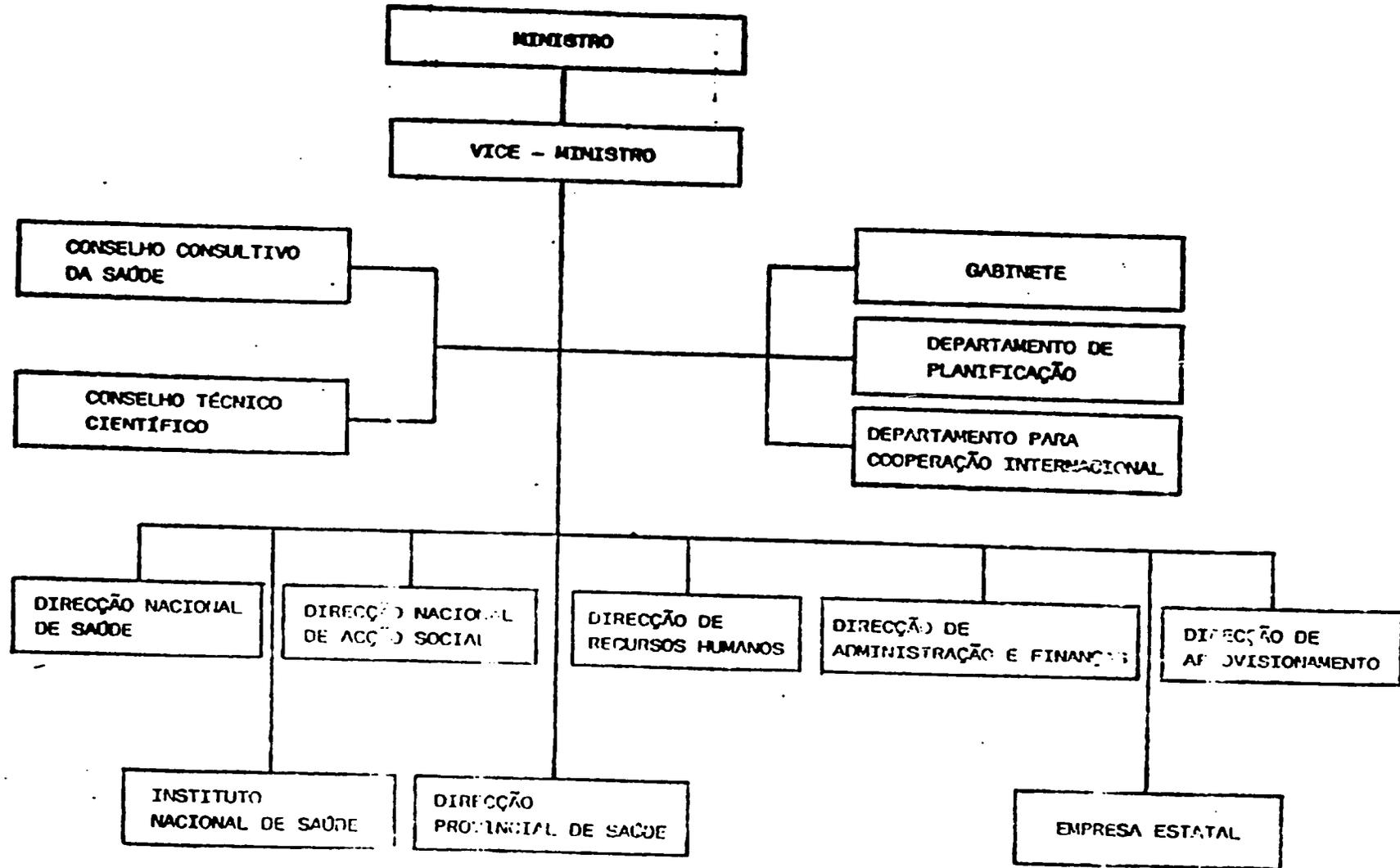


Figure 1

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ORGANIGRAMA tipo de  
DIRECCÃO PROVINCIAL DE SAU

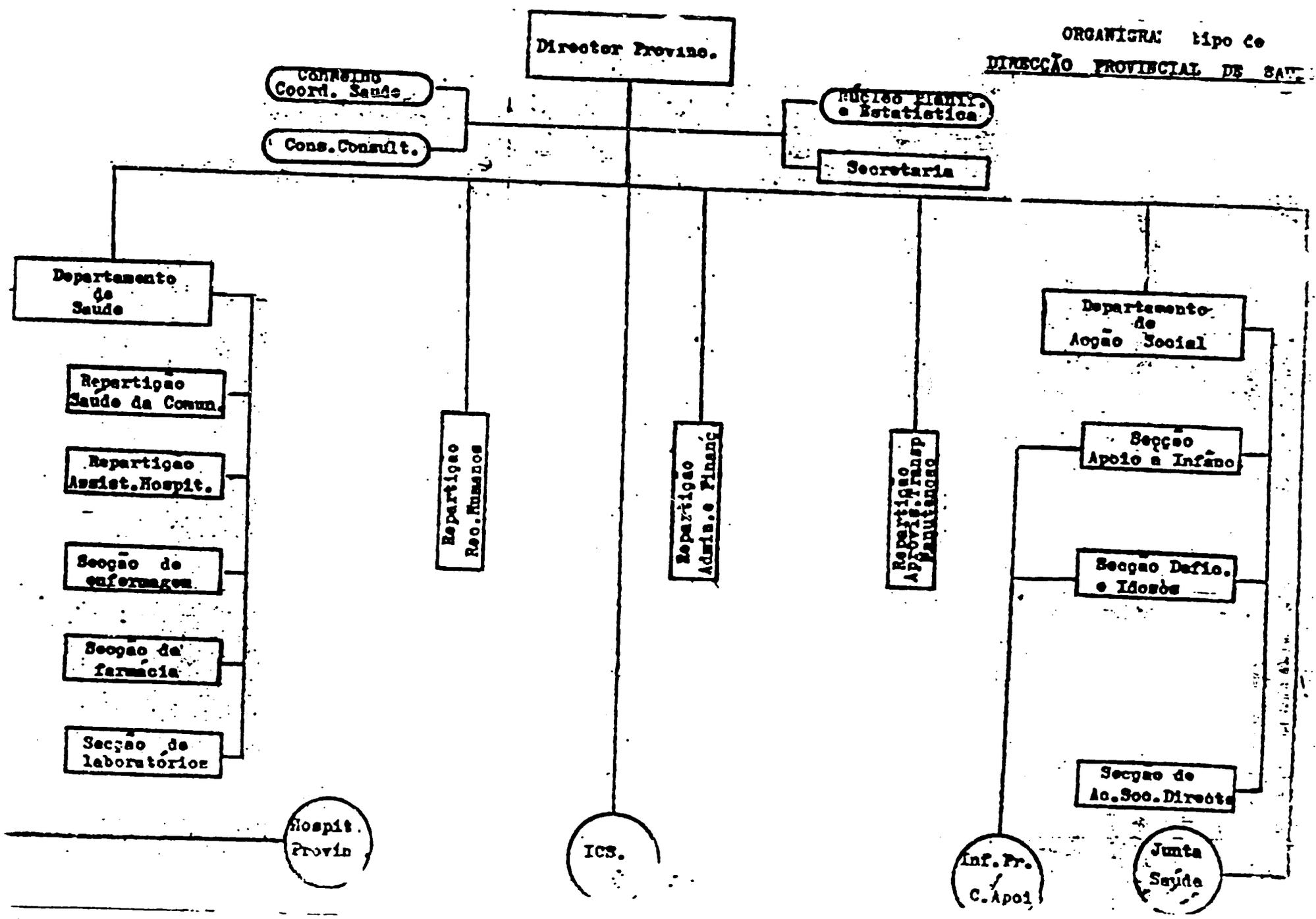


Figure 2

88

ORGANIGRAMA-tipo de DIRECCÃO DISTRICTAL DE SAÚDE

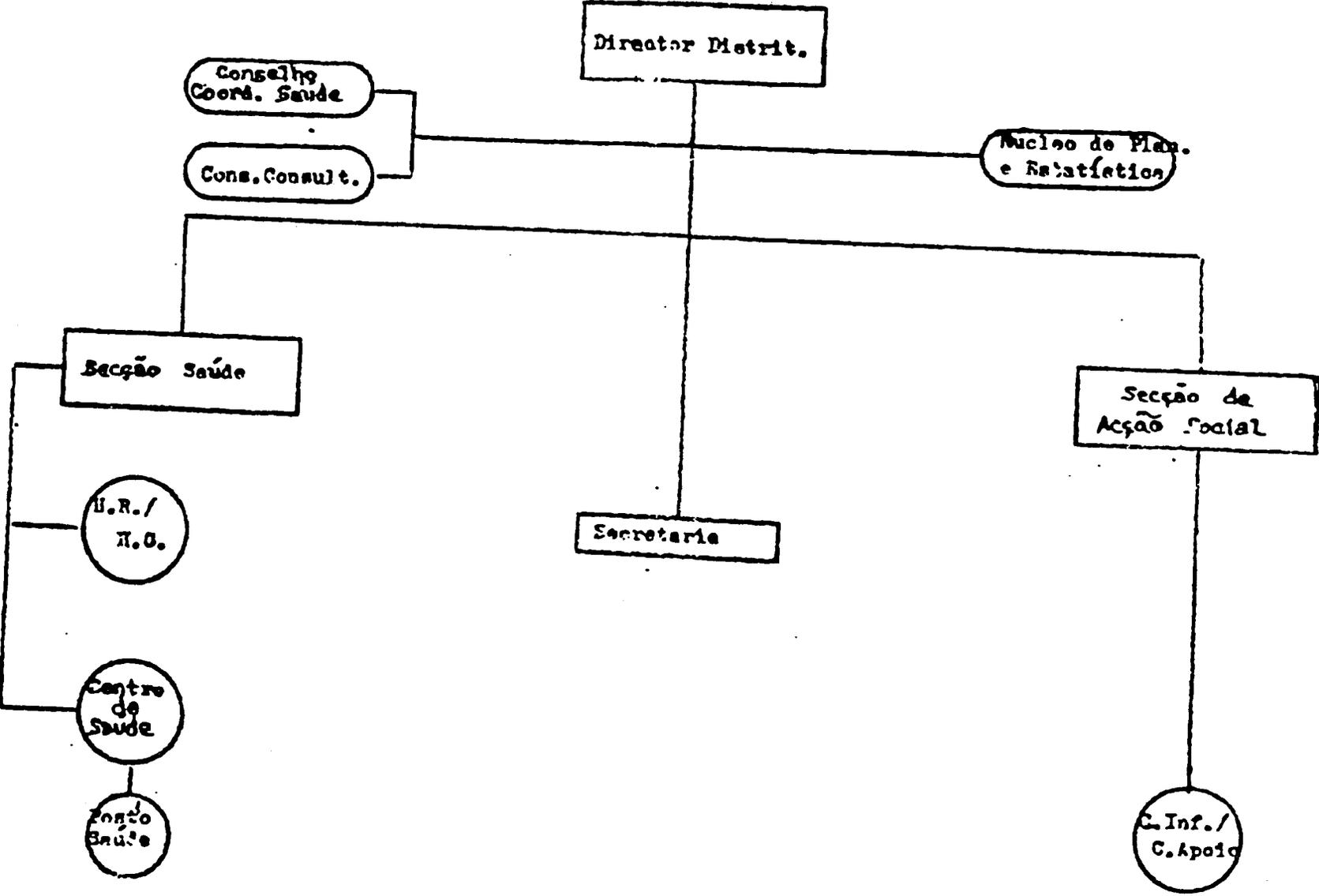


Figure 3

5. Directorate of Supplies: In charge of procurement and distribution of consumable supplies and equipment.
6. Planning Department: In charge of the entire planning process including defining long-term needs with respect to health coverage, human resources, and finances; organizing the health information system; managing its own epidemiological section and division of statistics and demography.
7. Department of International Cooperation: coordinates the activities of bilateral, international, and NGO donors in the health sector.

In each province, MOH services and administrative support are under the direction of the Provincial Health Director. The Provincial Directorates are responsible for all curative and preventive activities, supervise all staff, and plan their own expenditures within the guidelines and global budgets provided by the central level.

In addition to the central and provincial organizations, the MOH has several adjunct units:

1. National Health Institute: Founded in 1980, it is primarily concerned with epidemiological, laboratory, and public health research.
2. Regional Center for Health Development: Serves as a regional resource in management and public health training for Portuguese speaking countries.
3. Water and Food Safety Laboratory: responsible for laboratory analysis for public health.
4. Health Sciences Institute: oversees five personnel training centers for health sciences.
5. Maintenance Center: oversees maintenance and repair of all Ministry equipment and vehicles. Regional maintenance staff are now established in all nine provinces.
6. Printing Center: handles MOH needs for production of training and informational materials.
7. Centro de Abastecimentos: handles all medical and non-medical supplies and their distribution.
8. Drugs and Medical Equipment Centers (MEDIMOC, FAERMAC, and EMOFAR).

The World Bank reports that a recent restructuring of the MOH has begun to simplify and clarify functions and procedures. Further reorganization will be implemented under the World Bank's Health/Nutrition Project (1989-1995).

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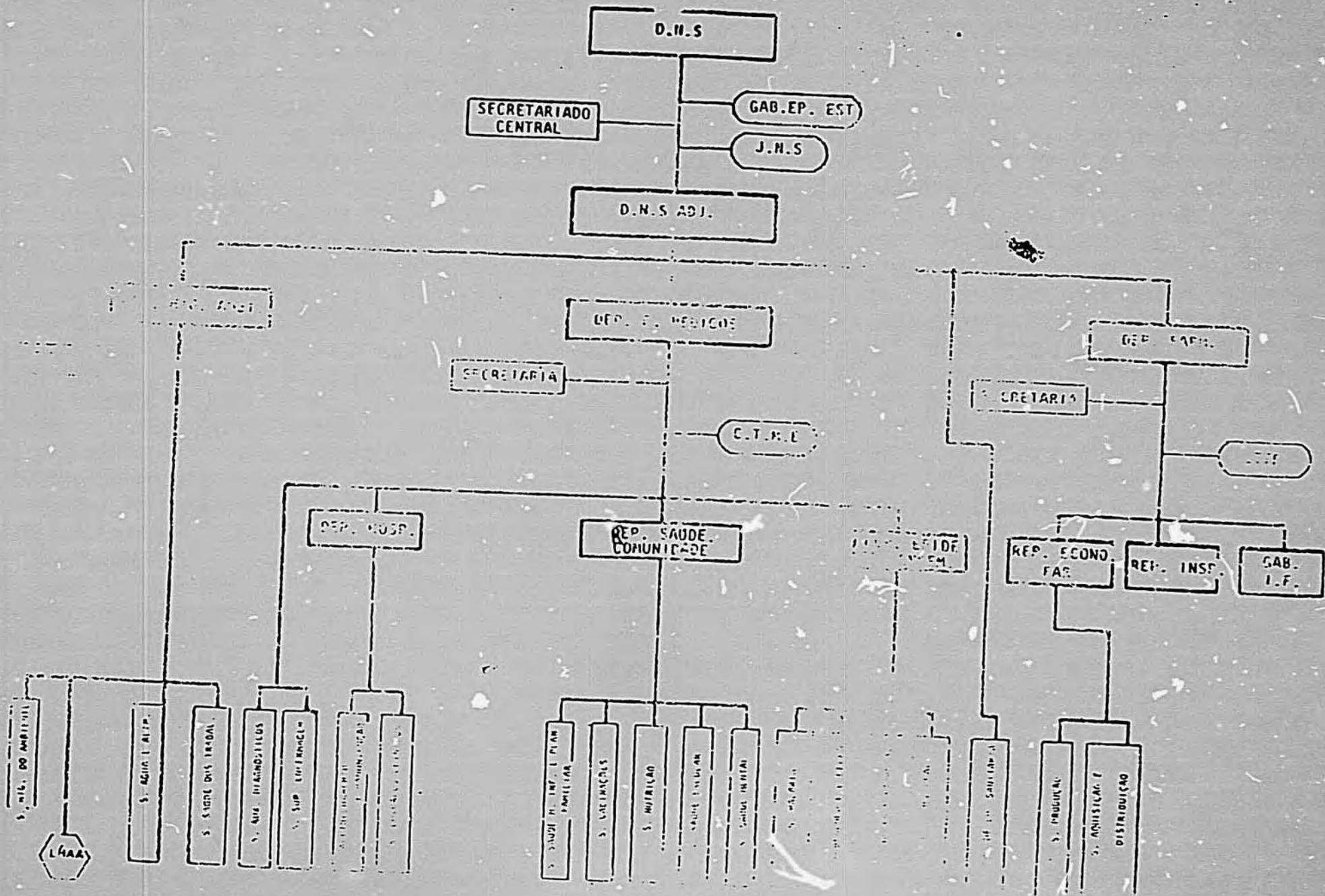


Figure 4

## II. NATIONAL DIRECTORATE FOR HEALTH: DESCRIPTION OF SELECTED PROGRAMS

The Directorate for Health contains six Departments responsible for a variety of discrete programs (see Figure 4):

- Community Health: MCH/FP, EPI, Nutrition, School Health, and Mental Health;
- Epidemiology of Endemic Diseases: Malaria, Tuberculosis and Leprosy, Cholera and Diarrhea, and Oral Health;
- Health Education;
- Environmental Hygiene: Environmental Health, Food and Water, Occupational Health;
- Secretariat: Public relations, Directorate archives, and Directorate Supplies;
- Pharmacy: Drug Purchasing, Production, and Distribution.

The following discussion provides information on selected MOH programs related to the Project's efforts in Zambezia Province. Both national and provincial program information is presented where available.

### A. EXPANDED IMMUNIZATION PROGRAM (E.P.I)

The Ministry of Health has been implementing the activities of the Expanded Immunization Program through its EPI section since 1976. Besides insuring the supply of vaccines, transportation, refrigeration, including materials inherent for vaccinations, this program is responsible for the establishing technical norms, programing, supervision, and evaluation of immunization activities at the national level.

In 1987, a new strategy of Accelerated Vaccination was initiated: vaccinations are given at fixed posts with an interval of one month between each dose. Mobile teams visit rural areas once each month during the three months of June, July and August. Door-to-door mobilization is carried out. A "welcome" card, given to all displaced persons upon arrival at an accommodation center, is used to motivate displaced persons to the nearest Health Center for EPI and other health services.

Figure 5 shows the National Agenda for the immunization of children (target group 0-23 months). At the refugee centers priority is given to protection of children against measles. In this way all children from the age of 9 months to 4 years without a vaccination card should be immunized against measles, independent of the fact of having had measles before. Figure 6 shows the vaccination agenda for women (anti-tetanus), with 2 strategies at the fixed post level and displaced persons centers. Besides this, the Ministry also immunizes grade one students and workers against tetanus.

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VACCINATION AGENDA : CHILDREN

| VACCINATION             | AGE   | DOSAGE   | VIA                       |
|-------------------------|---|--|---------------------------|
| BCG                     | At birth or as soon as possible thereafter  | 0,1 ml (Japanese)                                      | Intradermic               |
| POLIO First Application | At birth or as soon as possible thereafter (together with BCG)  | 2 or 3 drops depending on the manufacturers directions | Orally                    |
| DPT<br>3 doses          | 1st dose: As of 6 weeks of age<br>Minimum interval between doses: 4 weeks<br>Maximum interval between doses: does not exist | 0,5 ml   | Intramuscular<br>on thigh |
| POLIO<br>3 doses        | 1st dose: As of 6 weeks of age<br>Minimum interval between doses: 4 weeks<br>Maximum interval between doses: does not exist | 2 or 3 drops   | Orally                    |
| ANTI-MEASLES            | At 9 months or as soon as possible thereafter<br>Displaced children are vaccinated upto 4 years of age                      | 0,5 ml   | On the arm                |

8

VACCINATION AGENDA: WOMEN: ANTI-TETANUS VACCINATION

DOSAGE: 0,5 ml

INTRAMUSCULAR, ON LEFT ARM

ALWAYS USE VACCINATION CARD

|          | FIXED POSTS: PREGNANT WOMEN   | DISPLACED PERSONS CAMPS/MOBILE GROUPS: WOMEN FROM THE AGE OF 15 TO 44 YEARS |
|----------|---|---|
| 1st dose | First contact at pre-natal consultation   | 1st contact with women at productive age                                    |
| 2nd dose | 4 weeks or more after 1st dose  | 4 weeks or more after 1st dose  |
| 3rd dose | After delivery (at post-natal consultation or at the time of vaccinating the child against DPT and Polio) | 6 months or more after the 2nd dose   |
| 4th dose | 3 years or more after the 3rd dose  | 3 years or more after the 3rd dose  |
| 5th dose | 5 years or more after the 4th dose  | 5 years or more after the 4th dose  |

AFTER 5 DOSES THE WOMEN IS PROTECTED DURING HER REPRODUCTIVE LIFE.

MINIMUM INTERVAL BETWEEN THE DOSES: 4 WEEKS

MAXIMUM INTERVAL: DOES NOT EXIST

The EPI information system is based on simple reporting sheets which are submitted weekly to provincial and national levels (see Figures 7 and 8) for aggregation and analysis.

Table 1 provides the latest coverage data for the years 1984-88. Changes in coverage between years may be due to different population estimates used as the denominator. Although the number of fully vaccinated children (0-11 months) is not available, MOH officials believe that nationally 35-40% of all children are fully immunized and urban coverage is likely twice this rate.

-----  
 TABLE 1  
 Mozambique EPI Coverage Rates (0-11 months in Percent)

|                   | <u>1984</u> | <u>1985</u> | <u>1986</u> | <u>1987</u> | <u>1988</u> |
|-------------------|-------------|-------------|-------------|-------------|-------------|
| BCG               | 49          | 47          | 46          | 52          | 49          |
| Measles           | 50          | 39          | 39          | 37          | 44          |
| DPT (3)/Polio (3) | 32          | 29          | 32          | 22          | 38          |

Source: Planning Dept., Ministry of Health  
 -----

Mozambique's national requirement for vaccines (an estimated 8.5 million doses/year) is fully funded by UNICEF. Continued funding for future requirements appears to be committed.

The national cold chain has four levels: A central vaccine store in Maputo (equipped with walk-in cold rooms donated by UNDP); provincial vaccine depots (recently equipped with chest freezers or refrigerators funded by WHO/UNICEF); district depots or stores situated at district health centers (equipped with single refrigerators in variable condition); and health posts (equipped with vaccine carriers). Storage capacity at the central vaccine store is presently adequate, but in anticipation of expanded EPI activities in the future, plans are now being made to enlarge the store.

Although the cold chain is well established, numerous problems continue to plague the system. Shortages of fuel for the lowest levels consistently contribute to cold chain breakdowns. To address this, the Ministry is testing the suitability of solar-powered refrigeration in 31 sites throughout the country. Additional problems relate to communication and transportation breakdowns for the delivery of vaccines, and general management weaknesses at all levels. The Ministry has no shortage of cold chain equipment, although trained personnel is a continuing problem for all Ministerial activities for all programs.



| VACINA                                      | CRIANÇAS       |       |                |             |           |            |
|---|----------------|-------|----------------|-------------|-----------|------------|
|   | 0-11 meses     |       |                | 12-23 meses |           | + 24 meses |
| BCG   | 0000 0000 0000 | Total | 0000 0000 0000 | Total       | 0000 0000 | Total      |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| Polio<br>Aplicação<br>Primária<br>(com BCG) | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| DTP 1                                       | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| POLIO 1                                     | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| DTP 2                                       | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| POLIO 2                                     | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| DTP 3                                       | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| POLIO 3                                     | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
| SARAMPO                                     | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |
|   | 0000 0000 0000 |       | 0000 0000 0000 |             | 0000 0000 |            |

FIGURE 7

| VACINAS            | MULHERES GRAVIDAS  | TOTAL | MULHERES EM IDADE FÉRTIL<br>(15-44 a)  | TOTAL |
|--------------------|--|-------|--|-------|
| VAT 1              | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |
| VAT 2              | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |
| VAT 3              | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |
| VAT 4<br>(Reforço) | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |
| VAT 5<br>(Reforço) | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |

|       | CRIANÇAS 1ª CLASSE   | TOTAL | TRABALHADORES  | TOTAL |
|-------|--|-------|--|-------|
| VAT 1 | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |
| VAT 2 | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       | 0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000<br>0000 0000 0000 0000 0000 |       |

P E S U M O

| VACINA | No. de Doses nos<br>Fracos Abertos | No. de Doses<br>Aplicadas | No. de Doses<br>Desperdiçadas |
|--------|------------------------------------|---------------------------|-------------------------------|
| BCG    |                                    |                           |                               |
| DTP    |                                    |                           |                               |
| A.P.   |                                    |                           |                               |
| A.S.   |                                    |                           |                               |
| VAT    |                                    |                           |                               |

FIGURE 8

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The National EPI Program has developed the following objectives for 1989:

- Fulfill the National Agenda for Immunizations.
- Attain 80% coverage of all vaccines in the urban areas (cities and districts).
- Strengthen the active integration of EPI/MCH activities at all levels in order to avoid missed opportunities.

EPI Activities in Zambezia Province:

Coverage of EPI activities in Zambezia (1988) for the 0-11 month age group are:

- Third dose DPT-Polio: 18%
- Measles: 31%
- BCG: 34%

For all vaccines, Zambezia Province coverage is reported lower than national figures, although underreporting is widespread. The Provincial Health Directorate has one staff person responsible for all EPI activities (including cold chain) in the Province. This person is also responsible for other community health programs. Vaccine distribution to the districts is irregular due to transportation, communication, and management constraints. Fuel and electricity shortages are common and contribute to widespread cold chain breakdowns.

B. NUTRITION

The Nutrition Section of the Ministry of Health launched in 1982, a country-wide nutritional monitoring program (vigilancia nutricional) with data from anthropometric surveys, growth monitoring activities, and information obtained concerning the food stock in the community. In addition, in 1987, the Ministry developed an early warning famine system based on growth faltering statistics from the growth monitoring data.

As a result of this initiative, the Nutrition Section has published since 1987 a quarterly report on nutritional status in the country. Recent analysis confirm that the cumulative effects of war and social destabilization, drought, deterioration of the health system, economic decline, and food supply shortfalls, malnutrition has increased among young children. UNICEF states that up to 57% of children under five may now suffer from some form of malnutrition compared with a similar estimate of only 17% in 1983. Incidence of low-birth weight, an indicator of maternal malnutrition, is estimated at 16%.

Food security in Mozambique is precarious. FAO estimates that agricultural production is down from 1986, and food aid requirements are increasing annually. The Nutrition Section recently reported that family food stocks are generally low,

and in Beira, for example, 60% of families had no food stocks and only 23% had enough food to last until the next harvest. Food donations are distributed through the Ministry of Commerce and International Cooperation either for sale through a ration system in Maputo or for free distribution in emergency relief programs.

To encourage food sufficiency at the household level, the Nutrition Department has involved the Mozambican Women's Organization (O.M.M.) training them to educate communities in the use and cultivation of nutritious foods. The MOH also published in March 1988, a nutritional guide for all health field workers to promote better nutrition monitoring and public education.

The National Health Directorate has recently initiated a vitamin A deficiency prevention and treatment program which is headed through the health center's MCH leader. Requirements for Vitamin A are funded through UNICEF. The Ministry's protocol for Vitamin A supplementation (see Figure 9) recommends distribution to the following target groups: children 0 - 5 years of age, children with symptoms of serious malnutrition, measles and post-measles, low respiratory or gastrointestinal infections, children with xerophthalmia, and children displaced and/or affected by the war and drought.

#### Nutrition in Zambezia Province:

The Provincial Health Directorate of Zambezia has a Nutrition Nucleus with one nutrition agent trained at the only nutrition course conducted in Mozambique for nutrition agents during 1979.

Nutrition surveys are carried out in the region by non-governmental Organizations in collaboration with the local MOH authorities. Following are some of the results of surveys carried out in refugee centers in 1988:

|                                   |         |
|-----------------------------------|---------|
| NAMANJAVIRA (MOCUBA): W/H < 80% : | 16.75 % |
| NAMAGOA (LUGELA): W/H < 80% :     | 11.0 %  |
| IMPACA (PEBANE): W/H < 80% :      | 48.3 %  |

The World Bank also reports that 20-25% of children arriving in resettlement camps in Zambezia are severely malnourished compared to national levels of 5-7%.

Serious malnutrition in the Provincial Hospital of Quelimane was the cause of 23.5% of the 183 deaths which occurred in the first semester of 1988. In June 1988, in the rural Hospital of Mocuba, 96% of the children admitted to the pediatric ward suffered from serious malnutrition. In the Mocuba maternity, the incidence of low birth weight was 28.5% during April 1988.

For 1989, the Zambezia Nutrition agent has prepared a Provincial Nutrition Program consisting of (a) Growth

MINISTERIO DA SAUDE  
DIRECCAO NACIONAL DE SAUDE

PROGRAMA DE SUPLEMENTACAO DE VITAMINA A

PREVENCAO E TRATAMENTO ATRAVES DA ADMINISTRACAO DE VITAMINA A

Este programa devera ser dirigido pelo responsavel do SMI das provincias.

Os trabalhadores dos Servicos de Saude irao usar as seguintes estrategias para a implementacao do Programa de Suplementacao com Vitamina A nos grupos de risco:

I- A DISTRIBUICAO aos grupos de risco sera feita em consultas externas e nos Hospitais:

1. Considera-se grupos de risco:
  - a) todas as criancas de 0 a 5 anos de idade, deslocadas e afectadas pela guerra e seca.
  - b) criancas de 0 a 5 anos de idade atendidas nos Servicos de Saude que apresentem sinais de malnutricao grave, sarampo, post-sarampo com complicacoes, infeccoes respiratorias baixas, infeccoes intestinais (diarreia).
2. Seguir todas as instrucoes abaixo enumeradas para determinar a dose a ser dada para cada crianca.
3. Anotar no cartao da crianca a data em que a crianca recebeu a dose.
4. Repetir a dose depois de 6 meses.
5. Integrar com o deslocamento da equipa de vaccinacao para administrar a Vitamina A junto com a vaccinacao de Sarampo (prioritariamente nos Centros de Deslocados).

II- O TRATAMENTO das criancas com Xeroftalmia sera feito em consultas externas e, os casos graves serao acompanhados no Hospital.

Serao utilizados os seguintes preparados de Vitamina A:

- a) Capsulas de Vitamina A em solucao oleosa de 200.000 UI.
- b) Capsulas de Vitamina A em solucao oleosa de 100.000 UI.

III- ESQUEMA DE PREVENCAO (profilaxia) com Vitamina A:

| IDADE             | DOSE       | PERIODICIDADE   |
|-------------------|------------|-----------------|
| Menor de 12 meses | 100.000 UI | de 6 em 6 meses |
| De 1 a 5 anos     | 200.000 UI | de 6 em 6 meses |

**ATENCAO:** Quando nao houver disponibilidade das formas terapeuticas acima indicadas, podem ser utilizadas as capsulas de 200.000 UI de Vitamina A oleosa para o fornecimento da dose as criancas menores de 12 meses de idade, da seguinte maneira:

1. Cortar o bico da capsula com o uso de agulha ou tesoura desinfectada e contar o numero de gotas do conteudo.
2. Abrir as proximas capsulas de forma identica a efectuada para contagem.
3. Dar a metade da dose na boca de uma crianca e dar o restante da capsula a outra crianca.

monitoring in all the districts (weight/age), choosing some health centers as pilot centers for surveillance of growth monitoring data each month; (b) Nutritional surveys (weight/height), in (Milange, Chinde, Luabo, Gile, Pebane, Namarroi and Maganja da Costa towns); and (c) Family food stock surveys in Alto Molocue, Mocuba, Gurue and Quelimane cities.

In addition, others activities planned for 1989 include:

- Introducing nutrition into the in-service training for MCH and Preventive agents;
- Studying prevalence of vitamin deficiencies in a pilot area (Inhasunge), as well as conducting a KAP on ORS treatment;
- Nutrition education of all health personnel and communities, through OMM, OJM (youth groups), etc;
- Nutritional supervision of district health staff (depending of transport facilities).

With the data obtained from the above activities, the nutrition nuclei will inform the emergency commission about the food and nutrition situation in the districts and their more urgent needs.

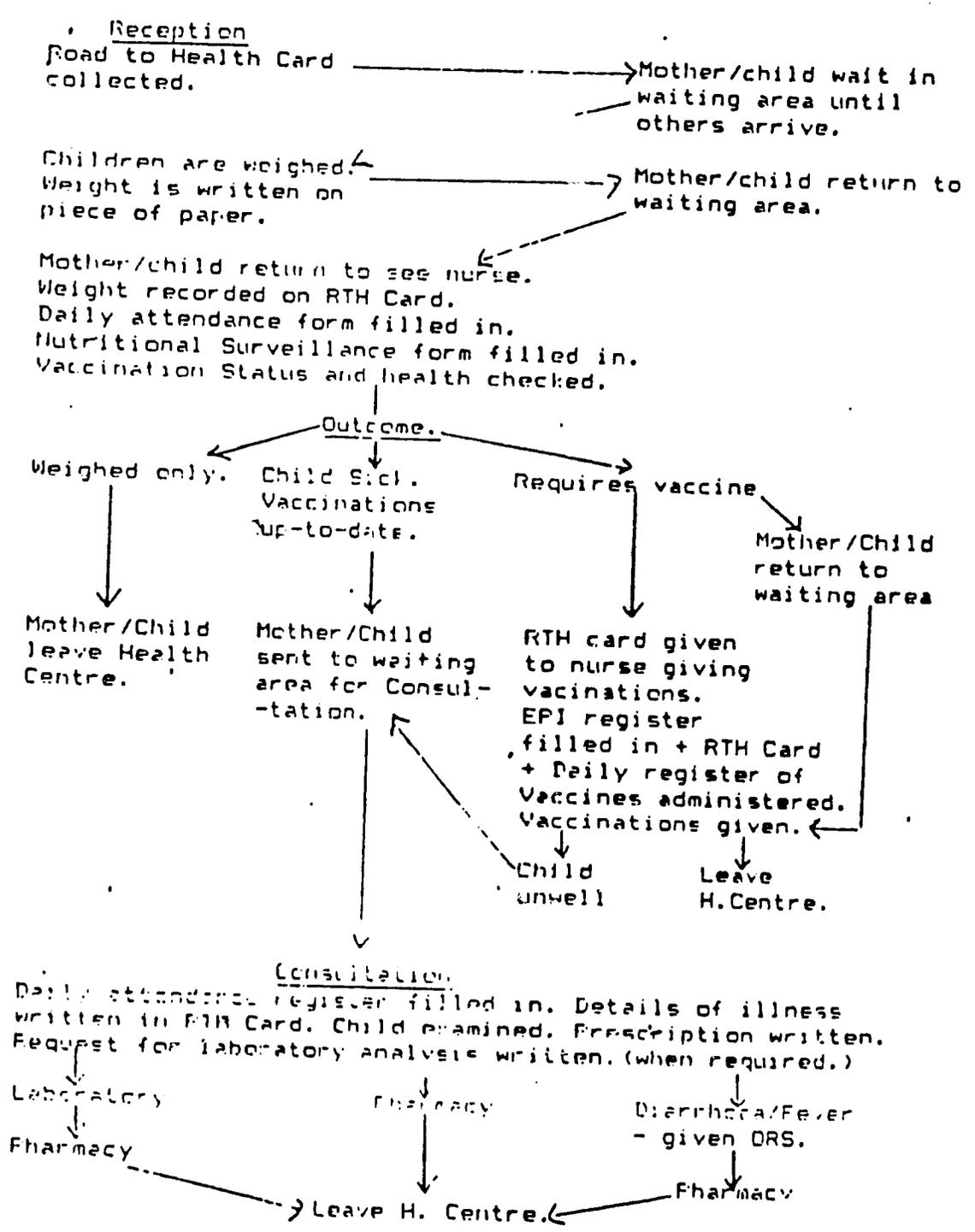
#### C. MATERNAL AND CHILD HEALTH - FAMILY PLANNING (MCH/FP)

The Maternal and Child Health program and the Family Planning program began in 1977 as major priorities of the Frelimo Party to promote basic health for the population. Family planning was implemented as a vertical program until 1980 when integrated MCH/FP programs were designed. Initial implementation of the integrated program was carried out between 1981 and 1983 following the development of norms and protocols and family planning training for all clinical staff.

The MCH/FP Section of the Ministry of Health oversees various programs at the national level with the general objectives of reducing maternal-child mortality and morbidity. The Ministry's MCH programs are carried out in five areas, all of which have established norms and protocols:

- Pre-Natal consultation program;
- Institutional Delivery program;
- Gynecological Programs: Combatting sexually transmitted diseases, prevention of AIDS, and Combatting Gynecological and Breast Carcinoma (this is a new program beginning in 1988);
- Family Planning programs;
- Children's program from 0-4 years: "Special Attention" to children at risk, Selection of Healthy Children (Triage), Vaccinations for target group 0-23 months, Control of Diarrheal Diseases, Control of Acute Respiratory Infections.

Figure 10 shows the flow of children through a typical health center. Growth monitoring, EPI, and consultations for illness are all integrated into MCH services.



Progress of Mother/Child through Health Centre.

FIGURE 10

The maternal health components of MCH/FP are based on a high risk approach for pregnancy, deliveries, and family planning. Coverage of MCH/FP activities is listed in Table 2.

-----  
**TABLE 2**  
Mozambique MCH/FP Coverage Rates (Percent)

|   | <u>1984</u> | <u>1985</u> | <u>1986</u> | <u>1987</u> |
|---|-------------|-------------|-------------|-------------|
| 0-4 Year Consultations<br>(first visits)  | 18          | 18          | 20          | 22          |
| Pre-Natal Consultations<br>(first visits) | 53          | 47          | 45          | 44          |
| Deliveries in Hospitals                   | 30          | 29          | 27          | 27          |
| Family Planning                           | 1           | 1           | 2           | 4           |

-----

The Ministry has implemented a pilot program for Traditional Birth Attendants (TBAs) in Inhambane Province. Preliminary data show that the 34 trained TBAs assisted in 2,200 deliveries, and survival of infants born by TBAs was very high and mother/infant death rates were low. The TBAs were also trained in family planning, although the impact of the training on contraceptive prevalence rates is unknown at this time. The Ministry hopes to expand this program to other provinces.

The Ministry has also conducted a survey of reproductive and sexual behavior in Mozambique, although results are not available at this time.

In 1988, the Ministry established the following objectives for MCH:

- Tracking Institutional deliveries and Pre-natal consultations.
- Increasing coverage of Family Planning and Child Care (0-4 years) components.
- Upgrading the skills of technical personnel attached to MCH/FP, especially regarding attention to children 0-4 years and Family Planning.
- Disseminating information on the Mother-child Health Care and Family Planning programs, emphasizing Family Planning to special groups of the community.
- Improving and standardizing the register for consultations.
- Giving priority to Pre-natal care for Institutional deliveries and high risk pregnancies.
- Consolidating and strengthening the capacity of the MCH/FP Nucleus at central MOH.

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- At the Provincial level, goals for 1988 were also established:
- Organizing provincial seminars for MCH/FP to study the goals and norms of implementation.
  - Integrating an OMM Representative in provincial Nuclei.
  - Establishing district nucleus' of MCH/FP where they do not exist.
  - Implementing attention norms for Child Care, Special Attention to selection of children at district level.
  - Integrating consultations in all Health Units where MCH/FP services are available daily.
  - Making supervisory visits to districts to evaluate the achievement of goals and attention norms.
  - Carrying out educational and information tasks on MCH/FP in all external consultations, Maternities, and in the community in general.
  - Implementing training courses in MCH/FP for traditional midwives in provinces where not done before and where feasible.
  - Training community leaders to collaborate in promoting MCH/FP actions.
  - Establishing an implementation strategy for the new gynecological program.

#### MCH/FP in Zambezia Province:

Zambezia Health Directorate has one physician and one nurse responsible for provincial MCH/FP programs. In-service training sessions for those responsible for MCH/FP at the district level were conducted in the last two years. Supervision of MCH/FP activities at the district level needs improvement to achieve the provincial program goals.

Coverage statistics for MCH/FP in Zambezia Province during 1987 are lower than the national coverage rates depicted in Table 2, although underreporting is widespread:

- First Pre-natal consultation: 15.6%
- First dose of anti-tetanus vaccine for pregnant women: 8.4%
- Second Tetanus dose for pregnant women: 4.5%
- Hospital Deliveries: 10.0%
- First Family Planning Consultation: 1.6%
- First preventive consultation for children from 0-4 years: 6.5%

#### D. DIARRHEAL DISEASE CONTROL (CDD) PROGRAM:

The CDD Program is being managed at the central level by one person on a part-time basis. Two surveys conducted in 1987 indicate that children in Beira have 6.4 episodes of diarrhea per year and children in Quelimane have 2.5 episodes/year. All provinces have been asked to submit data on diarrheal cases and deaths during 1985-88 to further strengthen the CDD data base.

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Presently, WHO/UNICEF provides all the national requirements of ORS, although local production has just begun through EMOFAR, a parastatal pharmaceutical organization. UNICEF also funds all materials, cups, etc., required for health center and community-level ORT demonstrations.

A pilot CDD-School Health Project has successfully involved teachers and students as community mobilizers and health educators for diarrheal disease control. Communities have been educated on mixing SSS, use of SSS/ORS and home fluids to prevent dehydration, water and environmental health. The Ministry plans to expand this community-based effort in all provinces.

The national CDD Program is also establishing linkages with Agua Rural to promote water supplies for health and sanitation (see section V. below).

#### CDD In Zambezia:

In August 88, a national training seminar on Acute Respiratory Infections and Diarrheal diseases was conducted in Maputo with the objective to continue with the seminar at provincial and district level. Unfortunately, this seminar has not been held in Zambezia.

The responsibility for monitoring CDD activities in the Province lies with the physician and nurse responsible for provincial MCH programs. Little information is available, but upgraded CDD services have just been initiated in 1988 in three districts - Nicoadala, Morrumbala and Quelimane.

In these districts, children with diarrhea receive ORS to take home and instruction on its use. When the children have diarrhea with moderate malnutrition, they receive ORS in the health center, (where they remain approximately 6 hours), after which in the "triage" consultation they receive ORS to take home. All ORS packets are provided free of charge.

In June 89, the CDD program will be taught in the in-service seminar for district MCH staff in Quelimane.

#### E. HEALTH EDUCATION:

The Education Center for Public Health, a section within the National Directorate for Health, is in charge of producing and coordinating health information and education for MOH programs (e.g. environmental hygiene, EPI, malaria, etc.). Because the Center has no budget of its own, it is funded from those MOH programs which have budgets for education activities.

The Center produces radio programs and a variety of printed materials on specific health problems. Because a national

health KAP survey has not been conducted, information on public knowledge and practices is obtained from health care workers and from health center service statistics.

The Center has produced a number of posters and booklets on family planning, EPI, AIDS, water and sanitation, diarrhea, and tuberculosis. Radio programs are developed by each provincial health directorate for broadcast to the provincial population. The Center has also produced health, water, and sanitation materials for school textbooks up to grade 5.

Training activities in health education are implemented through seminars and courses for health personnel. OMM and district health directors (the highest political authority in a district) have also been educated on the major health problems facing the country and mobilized to spread health information to the general public.

#### Health Education in Zambezia

Three nuclei inside the Provincial Health Directorate of Zambezia are responsible for the Community Health Education:

- a) Community Health: with one staff member who has other duties, such as the EPI program, Leprosy, etc.;
- b) Health Education: with one staff member; and
- c) School Workers Health: with one staff member.

This two latter nuclei, under the supervision of the Community Health nucleus, have monthly programs in schools and factories, and lessons about community health within the Medicine Preventive Agents seminars in the training center of Quelimane.

In 1988, radio programs were broadcast once a month on EPI (6 months) and Tuberculosis (4 months), prepared by the EPI and ELAT Zambezia programs.

The School-Workers Health Section carries out, once a month, speeches in the factories on Tuberculosis, AIDS, STDs, and Communicable Diseases. In schools, weekly speeches on water and sanitation, hygiene, and EPI are given for students and teachers. They also provide tetanus vaccinations once a month for students and workers.

In 1989, the School-Workers Health Section aims to retrain first aid staff ("socorristas") within the factories in health education. This will be done in conjunctions with the OTM (Mozambican Labor Organization).

## F. TUBERCULOSIS PROGRAM (ELAT)

The Tuberculosis control program began in 1978 concentrating its efforts in Maputo and Beira. Funding for the program was extremely limited until 1984 when the Norwegian government provided the MOH with funds to initiate a more comprehensive program entitled ELAT (Estrategia de Luta Anti-Tuberculosa). The program was managed by one Mozambican physician and one expatriate. Currently, the program is managed by a medical technician while the physician is in training. In each province where ELAT is implemented, one MOH staff person is charged with managing the provincial activities, including collecting and forwarding all statistics to the central level.

In 1985, ELAT introduced norms, registration and information procedures for all TB patients. Registered TB patients have steadily increased since 1985, but these figures only represent 70% of the country where ELAT is being implemented, and even these statistics are believed to be underreported:

|      |                         |
|------|-------------------------|
| 1985 | 2,000 registered cases  |
| 1986 | 8,000 registered cases  |
| 1987 | 11,000 registered cases |
| 1988 | 15,000 registered cases |

The prevalence of Tuberculosis is unknown, but the MOH believes that it is widespread. No national prevalence survey has been conducted, but a 1987 study of pulmonary tuberculosis (confirmed by sputum positive) in the Central Hospital of Maputo found a prevalence of 138 cases per 150,000 population.

Three lines of treatment, provided free of charge, have been developed: (1) standard - twelve months of treatment; (2) short - eight months of treatment; and (3) relapse - eight months of treatment. Until recently, Ministry policy indicated that the standard line of treatment could be delivered by any health staff member, but the short line of treatment was to be delivered only by physicians in central and provincial hospitals. Now, based on the results of the Maputo Hospital study which found that the "short" line of treatment was 30% more effective than the "standard" line, short lines of treatment are delivered in all rural, provincial, and central hospitals where a physician is based.

### Tuberculosis Control in Zambezia:

One medical technician is responsible for implementing ELAT in Zambezia Province, but because she is also responsible for assisting the pediatric physician at Quelimane Hospital, supervision of district level activities is limited. One expatriate is assisting in TB control in Quelimane City only.

In April 1988, 248 cases were in treatment in Quelimane City alone, nearly 60% in the 20-45 year age group, and 3.4% in the 0-4 year age group. These figures probably do not represent the widespread TB found in the younger age groups. In Mocuba, Gurue, Ile, and Alto Molocue, 520 TB patients were registered in late 1988.

In Quelimane, only 429 persons were detected in a 15-month period (1987-1988). The MOH states that this may represent less than 10% of the expected number of new cases (4,221) based on a risk calculation by WHO (1961) of 3.4/1,000 population. Even this risk figure is believed to be low considering the increasing malnutrition, insurgency, and dislocation of rural populations over the last 10 years.

#### G. MALARIA CONTROL PROGRAM:

Malaria control is divided into a vector control program and a malaria control program. Presently, three persons manage the national malaria program within the National Directorate for Health: one physician, one biochemist and one laboratory technician.

In 1962, WHO started a vector control program for the eradication of the Paludism vector (the Anopheles mosquito). This program ended in 1974, when it proved that it was impossible to totally eradicate the mosquito.

In 1985, a new vector control program was started (financed by the Ministry of Health), only in the cities of Maputo, Namputa and Beira with DDT spraying which proved effective in reducing the mosquito population. A four-person team for vector control (an epidemiologist, entomologist, parasitologist, and a bio-statistician), are now examining the feasibility of expanding DDT spraying and vector control in Quelimane. This program consists of spraying the outskirts of the cities once a year, spraying some blocks of residential areas close to water, and leaving others unsprayed to measure the efficiency of insecticides.

Studies are now being carried out on the clinical effectiveness of spraying and the possibility of resistance of the Anopheles to DDT. Other studies (financed by the Danish Government until WHO funding is obtained) are being conducted in Maputo for the control of vectors: research on the bacillus sphaericus, which destroys the mosquito larvae; and the effectiveness of spraying the mosquito nets with a new insecticide (Peretroid).

In 1984, a strategy for malaria control was created in response to increasing numbers of Plasmodium Falciparum cases resistant to chloroquine. In 1988, the MOH estimated that between 60% - 90% of all malaria cases were chloroquine resistant.

A two-year project (1989-90) entitled "Malaria Control through Primary Health Care" has been recently initiated, financed by USA for Africa. The project's objectives are two-fold: (1) reduce morbidity and mortality rates due to malaria; and (2) reduce the speed with which Plasmodium Falciparum resistance spreads. The project aims to achieve these objectives through the following:

- Distribution of anti-malarials to all health units capable of diagnosing malaria;
- Training updates in malaria for health personnel;
- Improving the quality of malaria diagnosis;
- Expanding the laboratory network throughout the country;
- Increase the general public's knowledge of the signs of malaria and treatment procedures.

During the next two years, malaria refresher courses will be given to curative medical personnel and laboratory personnel in each province (6 provinces in 1989 and the remainder in 1990). These courses will be held for a duration of 14 days and 20 people from each province will participate: 10 heads of laboratories and 10 heads of health clinics. The course objectives include:

- Treatment of malaria cases; malaria resistance and complicated malaria.
- Correct methods for malaria microscopy
- Train personnel, especially those handling malaria cases and sanitary education.
- Implement the national norms for diagnosis, treatment and handling of patients with malaria as well as vigilance and information systems at the district and provincial levels.

In addition to this PHC-oriented project, the malaria program is involved in vector control; epidemiological, entomological, and parasitological studies on malaria; and traditional treatment of malaria. All of these activities, however, are being implemented only in Maputo.

#### Malaria in Zambezia:

No one person is responsible for the Malaria program in Zambezia Province. The principal activities carried out for Malaria Control consist of diagnosis and treatment of malaria cases in the health centers and posts.

The "Malaria Control through Primary Health Care Program" has not yet been implemented in Zambezia. Malaria refresher courses in Quelimane will take place in June 89. Discussions about the program and vector control will begin soon.

### III. PLANNING AND STATISTICS DEPARTMENT

The Ministry's Planning and Statistics Department is divided into the two sections of Planning and Statistics/Demography (see Figure 11). The Planning Section is sub-divided into four offices staffed by a total of four persons:

|                         |                  |
|-------------------------|------------------|
| Medical & Social Care:  | - 1 technician;  |
| Economic and Financial: | - 2 technicians; |
| Human Resources:        | - 1 technician;  |
| Epidemiology:           | - no staff;      |

and the Statistics/Demography section is sub-divided into two offices with two staff total:

|                         |                  |
|-------------------------|------------------|
| Statistics & Demography | - 2 technicians; |
| Operations:             | - no staff.      |

The Medical and Social Care Office plans for the 38 hospitals, 908 health posts, and 210 health centers nationwide. The Human Resources Office is in charge of planning the needs for health staff; the Economic and Financial Office plan and manage the Ministry's budget; and the Statistics and Demography Office manage the Health Information System. Currently, the Department's Epidemiology and Operations Offices are not operative due to lack of staff.

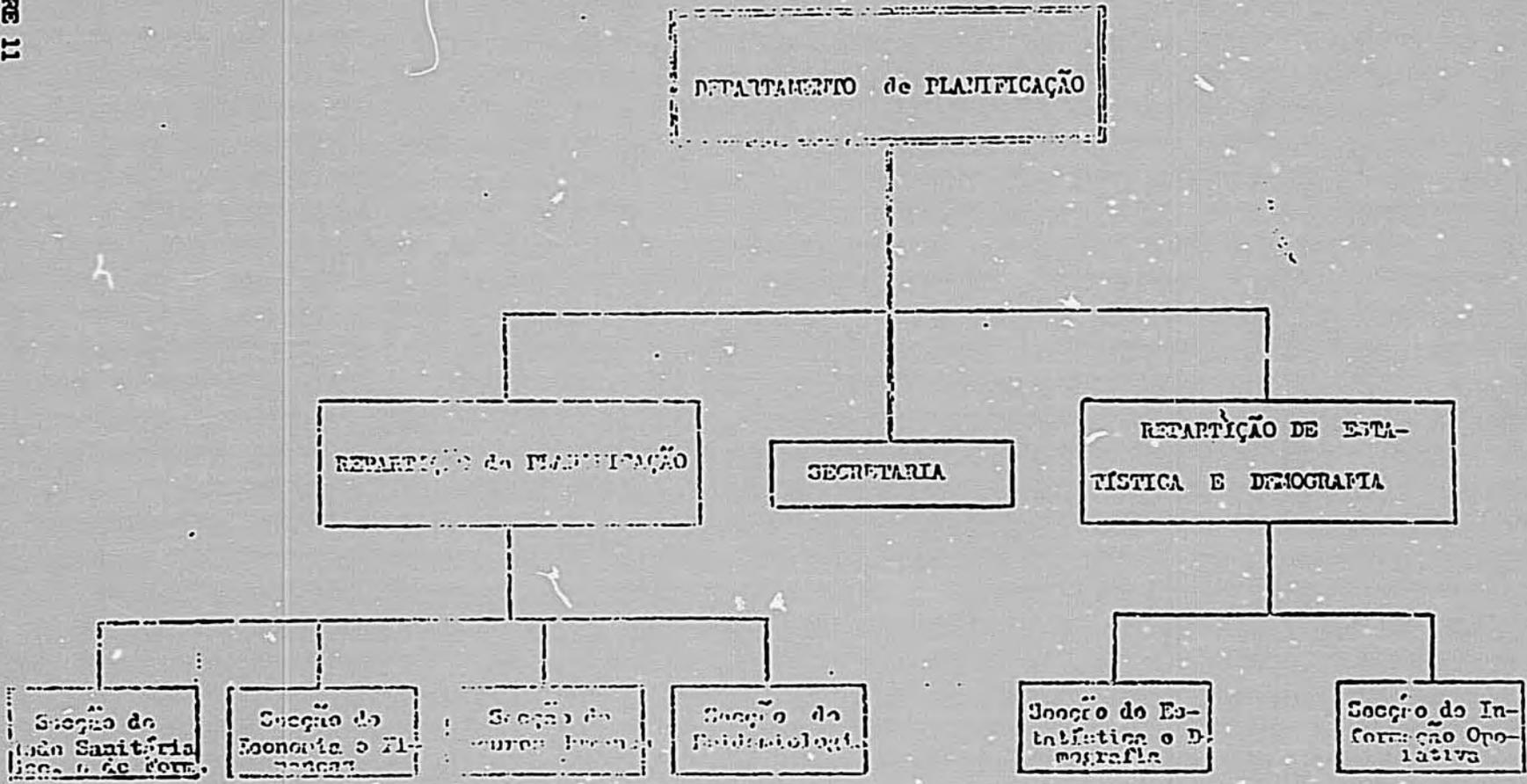
The Planning Department prepares annual Programs of Action for short-term guidance within the Ministry. Semi-annual planning meetings are held to formulate and refine sector strategies, objectives, and budget projections based on district and provincial data.

The Ministry's Health Information System (HIS), instituted in 1980, collects information for use by the Planning Department and other MOH units. The principal types of information collected yearly from health facilities are data on resources, service activities, finances, economics, epidemiology and surveillance data, and demography. Complementary data collection systems deal with the activities of specific programs, most notably EPI, MCH, Occupational Health, Hygiene, Water, Environmental Health, and Infectious Disease Programs (i.e. malaria, tuberculosis, leprosy). Presently, the major notifiable diseases are: measles, tetanus, diphtheria, pertussis, trypanosomiasis, rabies, cholera, plague, poliomyelitis, hepatitis, meningitis, tuberculosis, leprosy, typhoid fever, trachoma and diarrhea.

Besides the Planning Department, MOH epidemiological information is also collected by the National Directorate of Health and the National Health Institute, although a possible unification of all epidemiological activities under the Planning Department will be explored in 1989. Only two trained Mozambican epidemiologists are employed in the country: one is assigned to the Provincial Directorate of Zambezia, the second to the Medical University. Three Mozambican MOH employees have public health degrees (including courses in epidemiology) and

FIGURE 11

ORGANIGRAMA DO DEPARTAMENTO DE PLANEJAMENTO



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are based at MOH central level. In addition, nine expatriates trained in epidemiology are based at MOH central level, and one expatriate epidemiologist based at the MOH/Zambezia. In the near future, a team of twelve Cuban epidemiologists will arrive to assist each Provincial Health Directorate in epidemiological activities.

Central Planning and Statistics receives district and provincial data on health activities (see Figure 12), compiles this data in the Statistical Information Bulletin, and distributes it to provincial and district headquarters five times each year. Figure 13 shows the type of data which ideally is obtained from each MOH level. Due to the lack of personnel and computer equipment, all data is analyzed manually, resulting in frequent inaccuracies. Although the Planning and Statistics Department want data reported back to each district headquarters, the provincial directorates generally do not report district data back to each district health office.

The World Bank reports that there is room for significant improvement in the HIS. Diagnostic categories are very general, rendering interpretation difficult. The information collected is sometimes not useful or redundant. Morbidity and mortality information received at the central level is frequently incomplete or duplicative. The system requires streamlining and greater quality control at the district and provincial levels, including feedback to the producers of the data at the district and clinic levels.

In 1982 the Planning Department published a Organization and Appraisal Guide for planning of all health activities and health centers, including estimates of community catchment, drug management, personnel management, etc. The Ministry plans to revise this guide in early 1989.

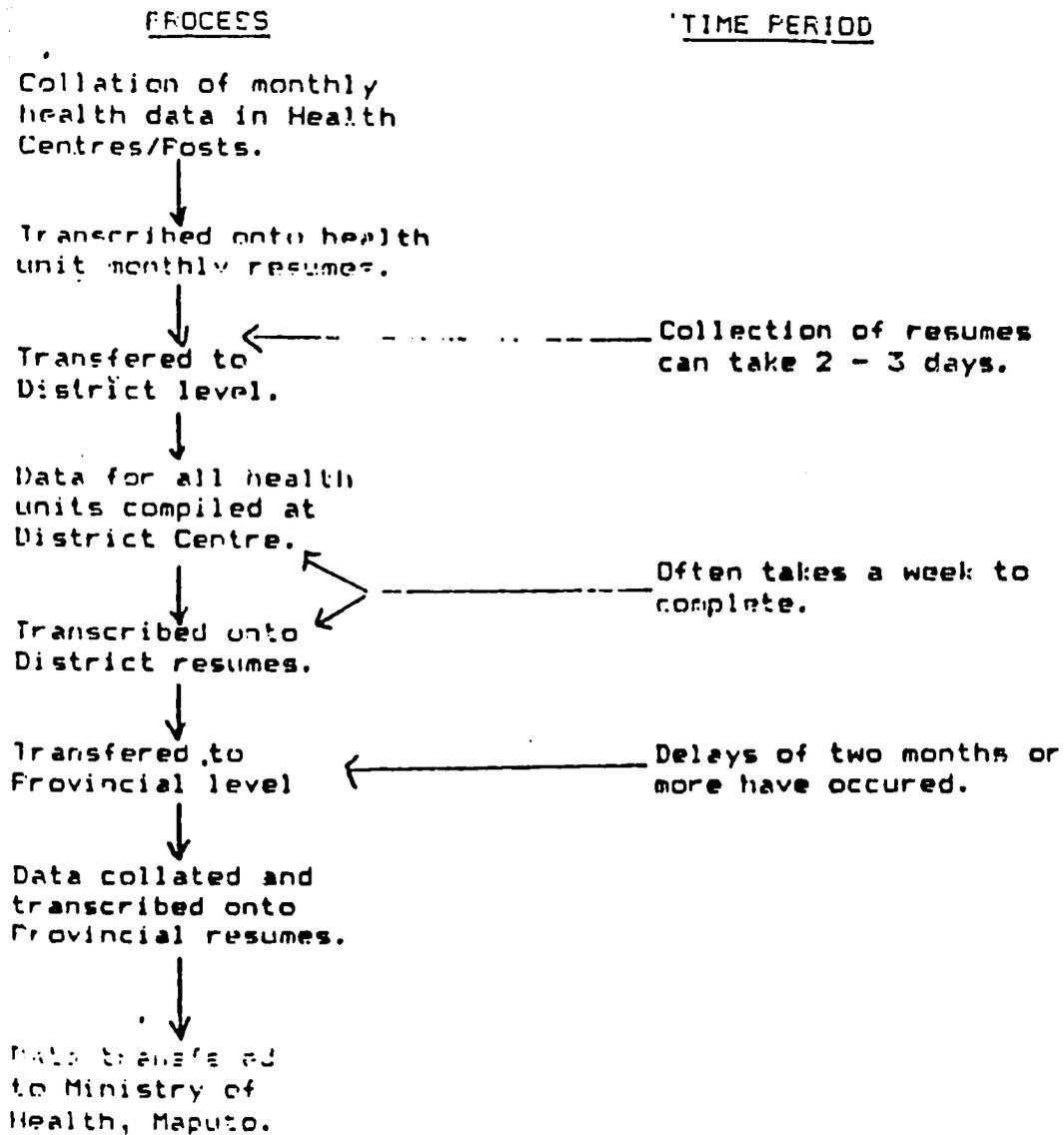
#### Planning and Statistics in Zambezia

The Planning and Statistics Nucleus of the Provincial Directorate for Health in Zambezia has a staff of four persons (one epidemiologist, two statistics nurses, and one administrative assistant) who are presently assisted by a long-term consultant from Save the Children Fund (U.K.). This office produced the country's first PROVINCIAL EPIDEMIOLOGY BULLETIN in 1988 for Zambezia health activities in 1987. Training in statistics, conducted in 1988 for district directors, preventive health care workers, and MCH nurses, is aimed at further improvement of data collection and reporting.

#### IV. MOH DIRECTORATE OF HUMAN RESOURCES

Health manpower training is coordinated by the Directorate of Human Resources and is considered a high priority by the MOH.

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Stages involved in the collation and transfer of data from health units to National level.

FIGURE 12

271001 Sistema de Informação de Saúde: Informação Estrutural (SIS) 11.

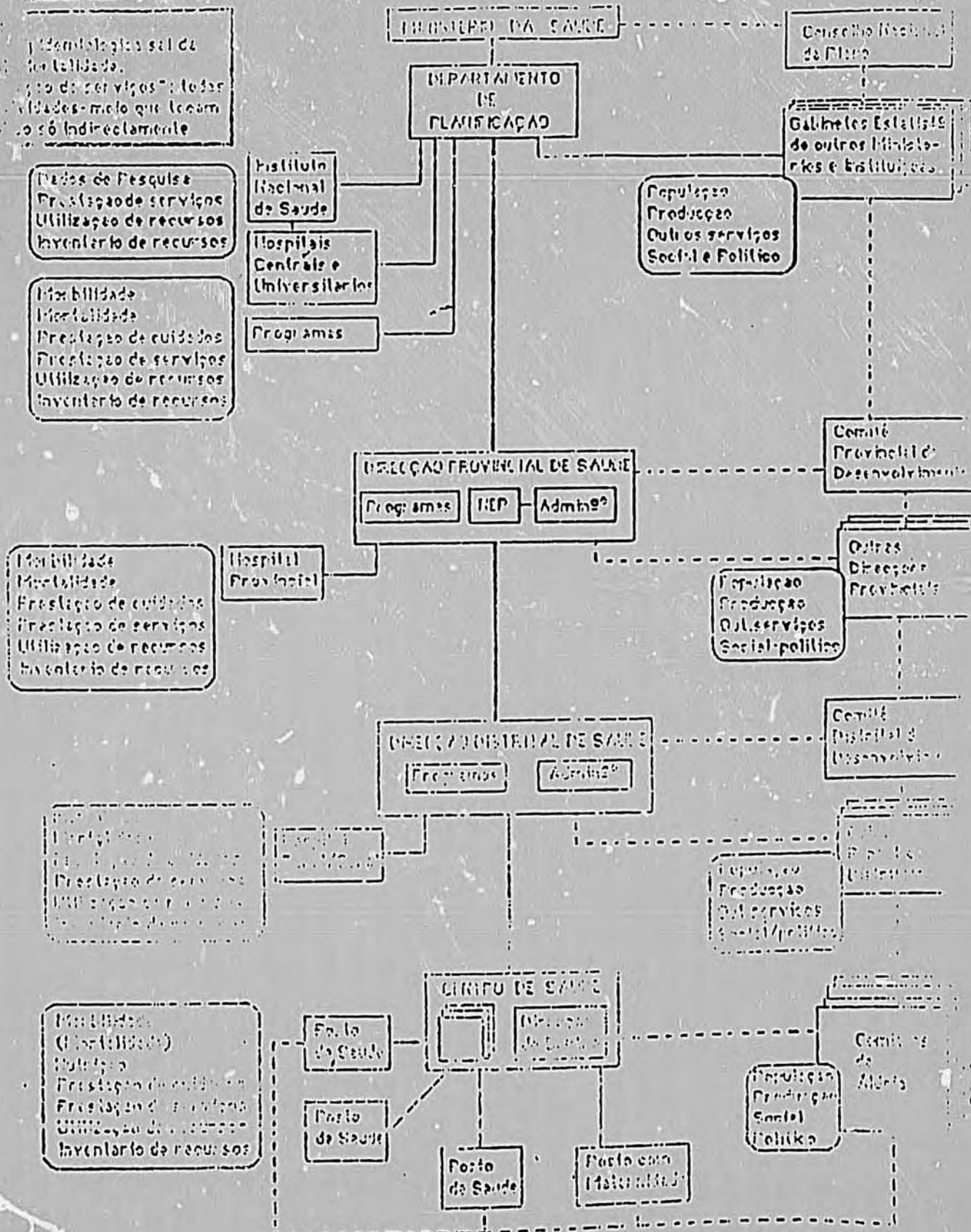


FIGURE 13

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However, the current economic crisis has forced a scaling back of the health labor force which is being implemented through lowering enrollments of medical and health worker training institutes. Moreover, a shortage of qualified teachers and widespread security problems have further constrained health manpower training. Figure 14 shows the number of health teachers for all health training nationwide.

In 1989, pre-service health training will be conducted in the following centers: (i) the Faculty of Medicine in Maputo (under the direction of the Ministry of Education); (ii) three Health Sciences Institutes situated in Maputo, Beira, and Nampula; (iii) a midwifery/nursing training center in Marracuene; and (iv) the Provincial Centers of Cabo Delgado, Gaza, and Zambezia. Figure 15 summarizes the pre-service training conducted during 1988. In 1989, the Ministry plans to eliminate elementary training for nurses (except in Niassa Province) and focus only on basic (including basic MCH nursing programs) and intermediate-level training.

The Faculty of Medicine currently graduates an estimated 20 physicians per year. The Health Sciences Institutes train three levels of health professionals:

- "elementary level" nurses, midwives, laboratory workers, and other health sciences who receive one year of training (minimum four years of schooling prior to enrollment). Elementary level training is being discontinued in 1989 (except in Niassa Province);
- "basic-level" nurses or health agents who receive two years of technical training (minimum six years of schooling required prior to enrollment); and
- "intermediate level" specialized nurses, technicians, or administrators who receive two-three years of training (minimum nine years of schooling prior to enrollment).

The health center at Marracuene is devoted to teaching specialized MCH nurse/midwives, with family planning an important part of the curriculum. The first class graduated in 1984 with approximately 20 students graduating each year. Due to bandit activity, the school has been temporarily relocated to Maputo.

Intermediate-level courses are held at the Health Science Institute in Maputo. Intermediate-level training produces the following cadres:

- Medical and Surgery Technicians - trained to substitute physicians and surgeons where they do not exist;
- Nurses specialized in instrumentation, anesthesiology, etc.; (The Ministry is exploring the possibility of expanding intermediate training for nurses in two new areas - general nursing and nurse-midwives);
- Preventive Medical Technicians - responsible for preventive activities of the E.P.I. and environmental programs amongst other activities;
- Technicians in social care, pharmacy, laboratory, radiology, dental health, rehabilitation, child welfare, and the administration of certain medical care units.

FORMAÇÃO DE FORMADORES (MONITORES)

| RAMO                    | ANOS | 77-79     | 80-82     | 83-85     | 77-85     |            |
|-------------------------|------|-----------|-----------|-----------|-----------|------------|
|                         |      |           |           |           | nº        | %          |
| ENFERMAGEM              |      | 21        | 11        | 25        | 57        | 59         |
| PARTIPIRAS              |      | 1         | 3         | 10        | 14        | 15         |
| MEDICINA PREVENTIVA     |      | -         | 1         | 7         | 8         | 9          |
| LABORATÓRIO             |      | 3         | -         | -         | 3         | 3          |
| FARMÁCIA                |      | 2         | -         | 1         | 3         | 3          |
| ADMINISTRAÇÃO           |      | 1         | -         | -         | 1         | 1          |
| PUERICULTURA            |      | 1         | -         | -         | 1         | 1          |
| REABILITAÇÃO            |      | 2         | -         | -         | 2         | 2          |
| ODONTOESTOMATOLOGIA     |      | -         | -         | 1         | 1         | 1          |
| FORMAÇÃO POLÍTICA       |      | -         | -         | 1         | 1         | 1          |
| NUTRIÇÃO                |      | -         | -         | 4         | 4         | 4          |
| OPTALMOLOGIA (ENFERMG.) |      | 1         | -         | -         | 1         | 1          |
| <b>T O T A L -</b>      |      | <b>32</b> | <b>15</b> | <b>49</b> | <b>96</b> | <b>100</b> |

Fonte: DMH-DF

FIGURE 14

CENTROS DE FORMAÇÃO DE PROFISSIONAIS DE SAÚDE EM 1988

| CENTROS                                       | CURSOS   |
|---|--|
| I.C.S. DO MAPUTO<br>ANEXO DE MARRACUENE       | DE NÍVEL MÉDIO: Especializações, e Técnicos nas várias carreiras.<br>Enfermagem de S.M.I.      |
| I.C.S. DA BEIRA                               | DE NÍVEL BÁSICO: Enfermagem, Enf. S.M.I.<br>DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc. |
| I.C.S. DE QUELIMANE                           | DE NÍVEL BÁSICO: Enfermagem, Enf. S.M.I.   |
| I.C.S. DE NAMPUA                              | DE NÍVEL BÁSICO: Enfermagem, Enf. S.M.I.<br>DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc. |
| CENTRO PROVINCIAL DE GAZA<br>(CHICUMDANE)     | DE NÍVEL BÁSICO: Enfermagem<br>DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.              |
| CENTRO PROVINCIAL DE INHAMITANE<br>(CHICUQUE) | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.   |
| CENTRO PROVINCIAL DE MANICA<br>(CHIMUÍO)      | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.   |
| CENTRO PROVINCIAL DE TETE                     | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.<br>DE NÍVEL BÁSICO: Enfermagem              |
| CENTRO PROVINCIAL DA ZAMBEZIA<br>(MOCUBA)     | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.   |
| CENTRO PROVINCIAL DE CABO-DELGADO<br>(PEMBA)  | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.<br>DE NÍVEL BÁSICO: Enfermagem              |
| CENTRO PROVINCIAL DE NIASSA<br>(LICHINGA)     | DE NÍVEL ELEMENTAR: Enf, Part, Aux. Farm, Microsc.   |

FIGURE 15

Figure 16 lists the numbers of health professionals trained in the country's health centers between 1976 and 1987. Changes in the schemes of service have been frequent, particularly in the nursing area where Nursing "A" and "B" were replaced by Nursing (NC or new curriculum) and elementary nurses. Now, in 1989, only basic nursing (enfermagem NC), MCH nursing (enfermagem de SMI), and intermediate nursing (enfermagem geral) will be trained.

#### Training in Zambezia Province:

The Provincial Health Directorate has a Training nucleus staffed by two persons to manage pre-service and in-service training activities in the province. Besides the Health Sciences Institute in Quelimane where basic nurse training (NC) is conducted, there is also an in-service Health Workers Training Center, created in 1987 by the Provincial MOH with assistance from Save the Children Fund (U.K.). In-service refresher courses are conducted given for health personnel (social workers, district directors, basic nurses, etc.) working in the districts.

In-service courses conducted during 1988, mostly two weeks in duration, included: Maternal and Child Health, Epidemiology and Statistics, Diagnosis and Treatment, Elementary Midwife Training, Social Work, AIDS, Health Management, and Drugs and Diagnosis. The courses are facilitated by SCF staff together with the Training Nucleus staff.

### V. PHARMACEUTICAL SUPPORT

Drugs are distributed to the clinics and hospitals through the essential drug program or MEDIMOC (the state enterprise responsible for the import/export and distribution of medical supplies).

#### A. Essential Drugs Program (EDP)

EDP began in 1986 in the southern provinces in Mozambique, expanded in 1987 to Zambezia and the central provinces, and in 1989 will begin in Nampula and northern provinces. The EDP consists of three kinds of prepacked kits:

- kit A : for 1000 consultations with 41 medicines;
- kit B : for 500 consultations with 22 medicines; and
- kit C : for 250 consultations with 14 medicines.

The kits contain drugs and supplies for the most common health problems in Mozambique (i.e. anti-malarials, antibiotics, analgesics, bandages, ORS, anti-parasitics, iron for anemia, etc.). Each year, Maputo, Gaza and Inhambane Provinces have received the following EDP kits: 2318 A Kits, 1797 B Kits, and 652 C Kits.

PROFISSIONAIS DE SAÚDE FORMADOS NOS CENTROS DE FORMAÇÃO DE SAÚDE DE 1976 A 1987

| CARRERAS                   | CATEGORIAS              | 76   | 77  | 78   | 79  | 80  | 81   | 82  | 83   | 84  | 85   | 86   | 87  | TOTAL |     |
|----------------------------|-------------------------|------|-----|------|-----|-----|------|-----|------|-----|------|------|-----|-------|-----|
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Enfermagem                 | TÉCNICOS                | -    | 17  | 65   | -   | -   | 34   | -   | -    | -   | 29a) | 21   | -   | 166   |     |
|                            | AGENTES                 | -    | 21  | -    | 62  | 20  | 33   | 20  | 103  | 105 | 66   | -    | -   | 430   |     |
|                            | ENFERMAGEM (NC)         | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | 71   | 164 | 235   |     |
|                            | ENFERMAGEM "A"          | 54   | 37  | 49   | -   | 83  | 59   | 99  | 97   | 212 | 177  | 239  | -   | 1106  |     |
|                            | ENFERMAGEM "B"          | 13   | 212 | 143  | 128 | 73  | 22   | 29  | 54   | -   | -    | -    | -   | 604   |     |
|                            | ENFERMAGEM ELEMENTAR    | -    | -   | -    | -   | -   | -    | -   | -    | 177 | 42   | 223  | 162 | 13    | 617 |
|                            | ENFERMAGEM GERAL        | -    | 23  | 45   | -   | -   | -    | -   | -    | -   | -    | -    | -   | -     | 68  |
|                            | INSTRUMENTAÇÃO b)       | -    | 21  | 5    | 19  | 14  | -    | -   | -    | -   | 17   | -    | -   | -     | 76  |
|                            | ENF. REANIMAÇÃO b)      | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | 13   | -   | -     | 13  |
|                            | ANESTESIOLOGIA b)       | -    | 9   | -    | 13  | -   | 26   | -   | -    | -   | -    | -    | -   | -     | 61  |
|                            | ADMSTR. ENFERMAGEM b)   | -    | 10  | -    | 26  | 22  | -    | -   | -    | -   | 35   | -    | -   | -     | 93  |
|                            | ENF. PEDIÁTRICA b)      | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | 16   | -   | -     | 16  |
|                            | PSIQUIATRIA b)          | -    | -   | 23   | -   | -   | -    | -   | -    | -   | -    | -    | -   | -     | 23  |
| OPTALMOLOGIA b)            | -                       | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | 8    | -   | 8     |     |
| Med. Preventiva e San. J.º | TÉCNICOS                | -    | -   | -    | -   | 31  | -    | -   | -    | -   | -    | -    | -   | 31    |     |
|                            | AGENTES                 | -    | -   | 26   | 111 | 25  | 26   | -   | -    | -   | 19   | 30   | -   | 257   |     |
| Odontologia                | AGENTES NUTRIÇÃO        | -    | -   | -    | 22  | -   | -    | -   | -    | -   | -    | -    | 20  | 22    |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Enfermagem de S.M.I.       | ENFERMAGEM DE S.M.I.    | -    | -   | -    | -   | -   | -    | -   | -    | 60  | 107  | 152  | 56  | 401   |     |
|                            | PARTEIRAS "A"           | -    | -   | 9    | -   | 12  | -    | -   | 25   | -   | -    | -    | -   | 46    |     |
|                            | PARTEIRAS "B"           | 13   | 25  | 28   | 44  | 13  | 43   | -   | -    | -   | -    | -    | -   | 206   |     |
|                            | PARTEIRAS ELEMENTARES   | -    | -   | -    | -   | -   | -    | -   | -    | 113 | 41   | 93   | 73  | 333   |     |
| Enfermagem Social          | TÉCNICOS                | -    | -   | -    | 22  | -   | 8    | -   | -    | 8a) | 10a) | -    | -   | 40    |     |
|                            | AGENTES                 | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | -    | -   | -     |     |
| Fisioterapia               | TÉCNICOS                | -    | -   | -    | -   | -   | 7 b) | -   | -    | -   | -    | 28   | -   | 33    |     |
|                            | AJ. T.º. FARM. 1º       | -    | -   | 16a) | -   | -   | -    | -   | -    | -   | -    | -    | -   | 16    |     |
|                            | AGENTES                 | -    | 22  | 34   | -   | -   | -    | 54  | -    | -   | -    | -    | 18  | 128   |     |
| Laboratório                | AUXILIARES              | -    | 19  | 71   | 50  | 17  | -    | -   | 62   | 78  | 30   | 48   | 23  | 398   |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Laboratório                | TÉCNICOS                | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | 14a) | -   | 14    |     |
|                            | PREP. DE LAB. 1º        | 10a) | -   | 10a) | -   | -   | -    | -   | -    | -   | -    | -    | -   | 20    |     |
|                            | AGENTES                 | -    | 27  | 30   | -   | -   | -    | -   | 45   | -   | -    | -    | -   | 102   |     |
| Medicina Molecular         | MICROSCOPISTAS          | 10   | 60  | 61   | 56  | 26  | -    | 40  | -    | -   | 31   | 66   | 9   | 359   |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Med. Nuclear               | TÉCNICOS                | 6    | -   | 9a)  | -   | -   | -    | -   | 16a) | -   | -    | -    | -   | 22    |     |
|                            | AJ. T.º. RAD. DE 1º     | -    | -   | -    | 4   | 31  | -    | -   | 15a) | -   | -    | -    | -   | 9     |     |
|                            | AGENTES                 | -    | -   | 37   | 10  | 13  | -    | -   | -    | -   | -    | -    | -   | 50    |     |
| Odontologia                | AUX. CAN. ESCURA        | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | -    | -   | 60    |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Odontologia                | TÉCNICOS                | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | -    | -   | -     |     |
|                            | AGENTES                 | -    | -   | -    | 18  | -   | -    | 6   | -    | 41  | -    | -    | 24  | 86    |     |
|                            | AUXILIARES              | -    | -   | -    | 20  | 18  | -    | -   | -    | -   | -    | -    | -   | 38    |     |
| Med. de Reabilitação       | AGENTES                 | -    | -   | -    | 17  | -   | 22   | -   | 8a)  | -   | -    | -    | 22  | 69    |     |
|                            | PROTÉSICOS/ORTÉSICOS A  | -    | -   | -    | -   | -   | -    | -   | -    | 6   | -    | -    | -   | 6     |     |
|                            | AUXILIARES              | -    | -   | -    | -   | -   | -    | -   | -    | -   | 6    | -    | -   | 6     |     |
| Fisioterapia e San. J.º    | PROTÉSICOS/ORTÉSICOS B  | -    | -   | -    | -   | -   | -    | -   | -    | 6   | -    | -    | -   | 6     |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Fisioterapia e San. J.º    | TÉCNICOS                | -    | -   | 26   | -   | -   | -    | -   | 19   | 62  | -    | 38   | 21  | 169   |     |
|                            | AGENTES                 | -    | 35  | -    | 31  | 21  | -    | -   | -    | -   | -    | -    | -   | 87    |     |
| Fisioterapia e San. J.º    | AUXILIARES              | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | -    | -   | -     |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Fisioterapia e San. J.º    | TÉCNICOS                | -    | -   | -    | -   | -   | 19   | 19  | -    | -   | -    | -    | -   | 38    |     |
|                            | AGENTES                 | -    | -   | -    | -   | 24  | -    | -   | -    | 20  | -    | 20   | -   | 64    |     |
| Fisioterapia e San. J.º    | TÉCNICO DE CIRURGIA B   | -    | -   | -    | -   | -   | -    | -   | -    | -   | -    | -    | 11  | 11    |     |
|                            | ENSINO b)               | -    | 13  | -    | 19  | -   | -    | 18  | 19   | -   | 30   | -    | 11  | 107   |     |
| Fisioterapia e San. J.º    | TÉC. ELECTROCARDIOGRAF. | -    | -   | 6    | -   | -   | -    | -   | -    | -   | -    | -    | -   | 6     |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| Fisioterapia e San. J.º    | A.P.E.B. *              | -    | -   | 274  | 215 | 303 | 219  | 218 | 87   | 85  | 33   | 19   | 22  | 1475  |     |
|                            |                         |      |     |      |     |     |      |     |      |     |      |      |     |       |     |
| TOTAL                      |                         | 276  | 502 | 962  | 918 | 776 | 618  | 538 | 928  | 888 | 1001 | 623  | 553 | 8488  |     |

FIGURE 16

D.S.S.F. →

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The Program, in addition to drugs, supplies a pick-up in each province (sometimes a truck), fuel, spare parts and air travel for drugs transportation to remote districts. Training on the most common diseases is done for health personnel using the kits at provincial and district level, and a guideline for EDP supervision has been established, but this is in need of further strengthening.

The EDP is financed by the Italian Government through UNICEF and supplies health centers and posts and community villages. UNICEF has advised the MOH to include Vitamin A in the kits, but the MOH refused because they expect external procurements of Vitamin A from other sources.

#### B. MEDIMOC

MEDIMOC is a state enterprise which is the sole importer/exporter and distributor of medical supplies. The organization is managed by a General Director and consists of three sections: (a) Internal Trade Dept.; (b) External Trade Dept.; and (c) Administration Dept..

The External Trade Dept.. purchases the medicines or receives the donations (such as the EDP kits). The Internal Trade Dept.. distributes the medicines and supplies to both the National Health Service (hospitals, clinics, etc), following the instructions of the MOH Pharmaceutical Dept., and to the pharmacies network, both private and state pharmacies.

USAID has financed a Vital Drug Program to supply hospitals, through MEDIMOC, with the most important drugs supplies. For the other drug requirements, the Provincial Directorate of Health makes directly requisitions to MEDIMOC each 3 months.

For the drugs distribution, MEDIMOC has two offices: one in Maputo which supplies Gaza, Inhambane and Cabo Delgado Provinces, and the other in Beira for the central and northern provinces.

Vitamin A is not included in the Essential Drug Program kits, although the provincial directorates of health can request it directly to MEDIMOC. In 1988, the following quantities of vitamin A were distributed to the country:

|                                       |                        |
|---------------------------------------|------------------------|
| Tete: 34 packs of 100 capsules        | Zambezia: 80 packs     |
| Cabo Delgado: 31 packs                | Xai-Xai: 40 packs      |
| Inhambane: 40 packs                   | Sofala: 60 packs       |
| Manica: 20 packs                      | Maputo City: 20 packs. |
| Hospital Central de Maputo: 600 packs |                        |

On 31 December 1988, 67,600 capsules of Vitamin A were available in MEDIMOC Maputo. An additional 200,000 capsules of Vitamin A were expected to arrive to MEDIMOC (UNICEF donations), for distribution to the provinces.

## VI. RURAL WATER AND SANITATION

Water and sanitation programs are implemented through three ministries - the Ministry of Health (for public education), Ministry of Construction and Water (for construction of water supplies), and the National Commission of Planning through the Institute of Physical Planning (I.N.P.F.) (for latrine construction). The Rural Water National Program Department (PRONAR), also known as Agua Rural, contains provincial delegations consisting of two sections:

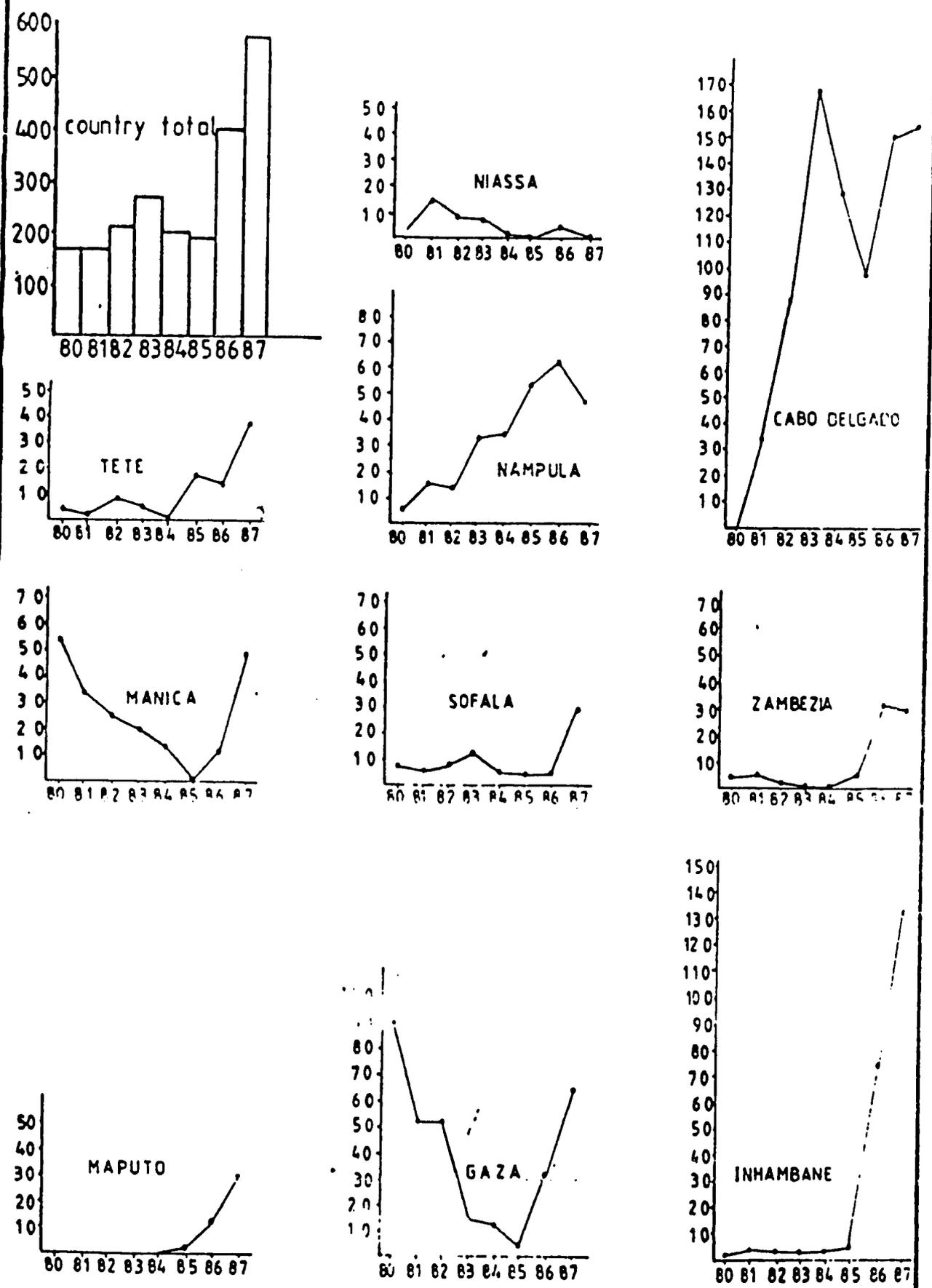
- Rural Water Provincial Directorate; responsible for the planning, finance and administration; and
- Rural Water Provincial Shipyard; in charge of the execution of works.

The latrine program, implemented through INPF, oversees distribution of donated cement and other materials for construction of slabs by private cooperatives or government workshops in the major cities of the country. Initiated in 1979 in Maputo with revised technology for latrine construction, the program has expanded to other provinces, utilizing the experience gained from Maputo City. Financing for materials of the latrine program comes mainly from the United Nations Development Programme (UNDP) and other Non-Governmental Organizations. Latrine slabs are sold to families for approximately M3,200. If the pit requires reinforcement, the price increases to M17,500.

Finally, health education on water and sanitation is conducted through the Ministry of Health. Although in the 1970's the Ministry of Health organized a group of agents to give instruction in hygiene and environment sanitation at the community level, this training is no longer being conducted.

The World Bank reports that only 10-13% of the rural population has access to protected water, and the current pace of digging wells and boreholes is too slow to reach the target of 25,000 water supplies by the year 1990 (to reach 75% of the rural population). At current rates of construction, IBRD estimates that it would take more than 35 years to reach that target, ignoring any population increase. Furthermore, Mozambique's national goal of 1 well per 500 people is low when compared to international standards promoted by UNICEF and UNHCR (1 well per each 200 people). Figures 17 and 18 show well construction activities per province between 1980-87, and the provincial 1990 goals for water supply construction.

Hand pumps are now manufactured in Maputo and motorized pumps are provided by international donations. Generally, the water of the wells is neither analyzed nor chlorinated. Once a well is constructed, the water is pumped out and the well re-filled with clean water. How well the clean water is utilized is generally unknown, but GPRM officials state that more education on keeping the water clean between water points and the point of consumption will be needed to realize the potential health benefits.

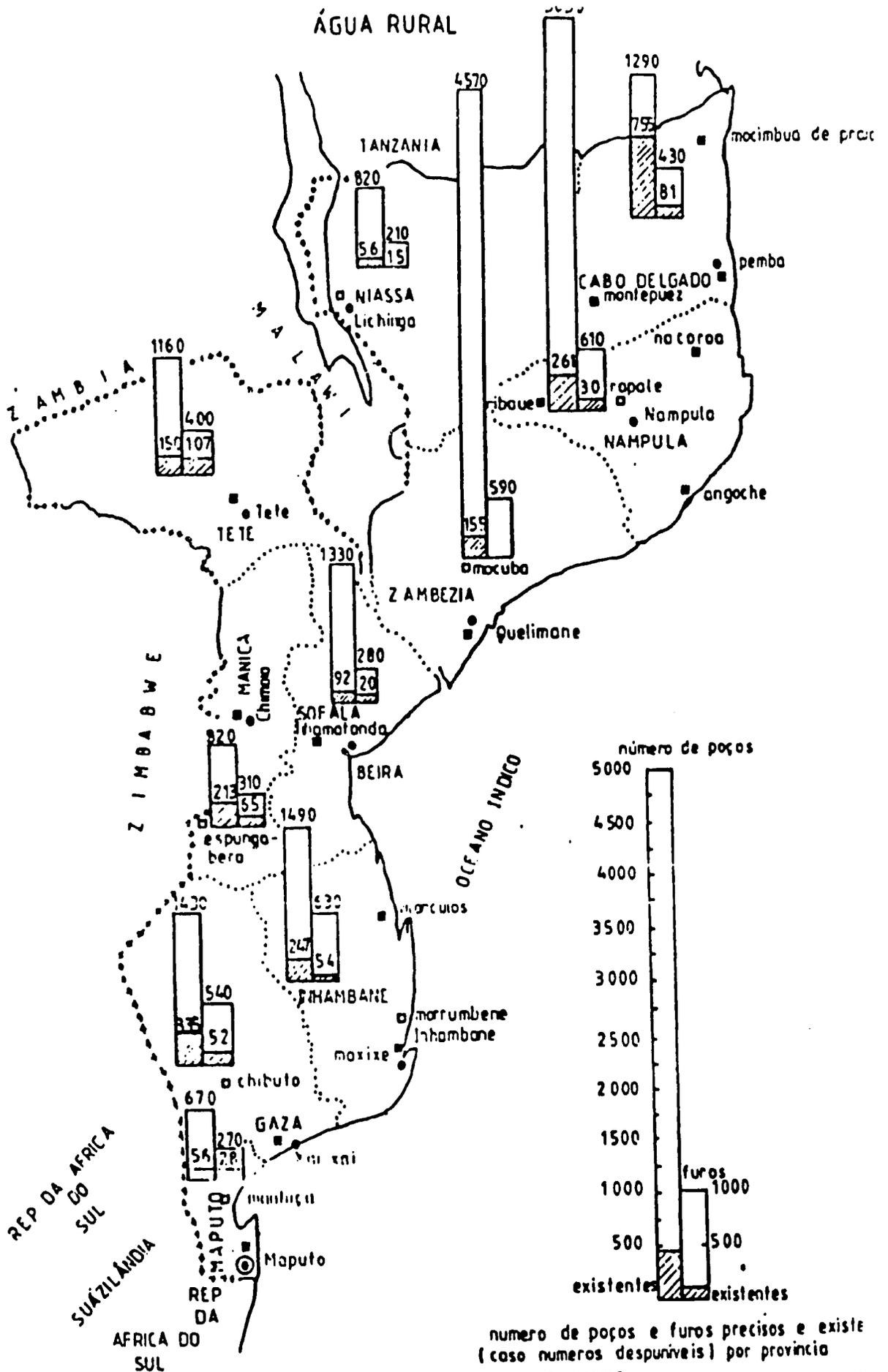


annual well construction per province, period 1980-1987

FIGURE 17

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# ÁGUA RURAL



numero de poços e furos precisos e existe (caso numeros despuníveis) por provincia situação V/1/88 escala 1:8000 C.

FIGURE 18

Since 1984, PRONAR, in conjunction with the Ministry of Health, has implemented a successful pilot project in Cabo Delgado Province, entitled "Community Participation and Education". This project trained community representatives with four years of schooling in water supply construction, health, and public education methods to stimulate community participation in construction, maintenance, and repair of water supplies. Once a community is sensitized to the water problems and needs in their area, Agua Rural provides technical assistance in construction. Latrine construction is now being integrated into the project in Cabo Delgado through promoting construction with local materials. The GPRM plans to expand the Community Participation and Education Project to other Provinces in 1989, although the latrine component will not be fully integrated in other Provincial project activities.

PRONAR trains 20 rural water technicians per year to head the district and provincial level water teams who are generally staffed by local villagers where construction occurs.

In addition to constructing community wells, Agua Rural also constructs private wells, which are privately financed. One 6 meter well costs about M 500,000 (\$800), manual pump included.

#### Water and Sanitation in Zambezia

In the Zambezia province, the Provincial Rural Water Directorate is composed of 2 sections:

- District level: emphasizing the installation of motor water pumps;
- Rural level: emphasizing the construction of wells and protected holes, where at least one manual water pump is installed.

The Provincial Directorate decides how and where the works are to be carried out, accounting for security and logistic conditions in the area.

To achieve the national goal of providing potable water to 75% of the rural population, a total of 4570 wells are required in the Zambezia province; unfortunately, only 155 wells were constructed before 1988. At present, just 3% of the Zambezia population has access to potable water, the lowest coverage in Mozambique. Due to logistical, security and financial problems, as well as lack of basic materials, it is impossible to construct new wells in each district. Consequently, emphasis is now on the rehabilitation of old wells, motor water pumps and damaged sewer systems. The Rural Water Program in Zambezia is principally financed by the Mozambique and Dutch Governments, but problems have been arising, due to lack of local funds with the subsequent delay and completion of the works.

In Zambezia (and Nampula), the water table is reported to be high and most of the population could be supported to dig their

own wells. Zambezia Province has five rural water teams (four in Quelimane and one in Mocuba) each composed of 1 technician and 3 well diggers. The 1988 Provincial plan states an objective of constructing 40 wells, and in 1989 constructing 60 hand-dug wells and 15 machine-drilled boreholes. However, privately financed wells which provide additional funds to the program often take priority over community efforts; for example, in Mocuba 9 community and 12 privately financed wells were dug in 1988.

In Zambezia, the Improved Latrines project is only executed in the provincial capital Quelimane. Four teams, with a total of 18 people, construct two latrine slabs per day at a price of M12,075 (\$20). By comparison, the official minimum salary in Mozambique is 12,000 Meticals.

Two extension workers in Quelimane and Mocuba have been designated to implement the "Community Participation and Education Project" due to begin in 1989.

#### VII. MOZAMBICAN WOMEN'S ORGANIZATION: OMM (ORGANIZACAO DAS MULHERES MOZAMBICANAS)

OMM was created in 1976 for the promotion of Mozambican women. OMM is organized into four levels:

- CENTRAL LEVEL: (a) National Co-ordinating Council which consists of 44 members representing 11 provinces; and (b) National Secretariat which consists of 6 offices for Organization, Training and Information, Social work, Administration and Finance, Mobilization, and Foreign Affairs;
- PROVINCIAL LEVEL: A Provincial Co-ordinating Council and a Provincial Secretariat;
- DISTRICT LEVEL: District Co-ordinating Council and a District Secretariat
- LOCAL LEVEL: Base Secretariat and Area Organizations, Factories, etc.

In Maputo, the organization's secretariat is in charge of planning activities, together with the Frelimo Party and the Government. The Secretariat for Training and Information gives courses at its Training Center to managerial staff and other activists of the OMM for the dissemination of Family Planning, Mother-Child Health Care, Social work, etc. OMM involved the Nutrition section of the Ministry of Health together with the Agrarian section of the Ministry of Agriculture to conduct courses on dissemination of horticultural information.

The Mobilization Secretariat skillfully published a quarterly information magazine although financial constraints prohibit further publication. OMM also produces an information program on Radio Mozambique.

OMM is financed by the Frelimo Party, through membership fees, and donations from International Organizations.

Although the OMM activists at the local level have always been volunteers, the new orientation is that they should be motivated through small contributions such as food, soap, clothes, etc. provided from the communities.

Since 1982, a Cooperation Agreement between OMM and the Ministry of Health was established to promote health and nutrition through OMM representatives throughout the country. This will soon be revised due to social changes in Mozambique and the situation of displaced people.

#### OMM in Zambezia

In Zambezia Province, OMM together with the Provincial Directorate for Health carries out information programs on Family Planning and MCH: The Ministry trained 43 OMM activists in 1987 and 26 activists in 1988. In August 1988, several OMM activists were also trained as trainers for the Province with the aim that they would conduct their own training courses at the community level. Alto Molocue, Mocuba and Gurue have two OMM trainers each to train other OMM activists to motivate communities to seek health care at health facilities.

VIII. DESCRIPTION OF HEALTH FACILITIES IN PILOT DISTRICTS OF ZAMBEZIA PROVINCE

The Project focuses on four districts in Zambezia Province: Alto Molocue, Gurue, Ile, and Mocuba. Each district contains a rural hospital with in-patient facilities, MCH/FP services (including all child survival services provided nationwide), and support for surrounding health posts and deslocado camps. The Table 3 summary of the four district health facilities and their activities is further elaborated in sections A - D below.

TABLE 3  
SUMMARY OF HEALTH CENTERS IN PILOT AREAS

|                                 | <u>Alto<br/>Molocue</u> | <u>Ile</u> | <u>Gurue</u> | <u>Mocuba</u> |
|---------------------------------|-------------------------|------------|--------------|---------------|
| District Population ('000s)     | 174                     | 308        | 201          | 177           |
| Affected/Deslocated ('000s)     | 29                      | 86         | 35           | 58            |
| No. District Deslocado Centers  | 9                       | 7          | 7            | 13            |
| No. Beds in District Health Ctr | 19                      | 45         | 32           | 155           |
| Maternity Beds                  | 19                      | 12         | 17           | 26            |
| No. health staff                | 52                      | 27         | 48           | 140           |
| Outpatient Visits/day           | 95                      | 103        | 115          | 168           |
| Deliveries/mo                   | 126                     | 87         | 180          | 209           |
| Family Planning Visits/mo       | 25                      | 26         | 75           | 70            |
| Potable Water Supply            | no                      | no         | yes          | yes           |
| Electricity                     | yes                     | no         | yes          | yes           |
| Health Transportation           | yes                     | no         | yes          | yes           |

A. ALTO - MOLOCUE

Alto - Molocue is situated 356 Km north of Quelimane. The city's population is 62,250 and the district population is 174,154. The displaced population is 18,515. The affected population is 11,000.

Health Center Staff - 52 persons total:

- 1 Health District Director
- 1 Medicine Agent
- 5 Basic Nurses
- 7 Primary Nurses
- 2 MCH Nurses
- 4 Primary Midwives
- 1 Microscopist
- 1 Pharmacy Assistant
- 2 Preventive Medicine Agents
- 1 Laboratory Agent
- 1 Child Care Agent
- 1 Administrator Assistant
- 26 "Servents" (support staff who assist in health activities)

Hospital Activities

|                                  |                        |
|----------------------------------|------------------------|
| - External Consultations:        | 95/day                 |
| - Hospitalized patients:         | 50/month               |
| - Maternity:                     | 126 deliveries/month   |
| - Pre-Natal Consultations:       | 930/month              |
| - Family Planning Consultations: | 25/month               |
| - Post-Natal Consultations:      | 12/month               |
| - Tuberculosis:                  | 60 registered patients |
| - Leprosy:                       | 0                      |
| - E.P.I.:                        |                        |
| BCG:                             | 479/month              |
| Measles:                         | 446/month              |
| DPT1 + Polio:                    | 343/month              |
| DPT2 + Polio:                    | 277/month              |
| DPT3 + Polio:                    | 288/month              |
| Pregnant Women: Tetanus 1:       | 257/month              |
| Tetanus 2:                       | 293/month              |

Main Building: The main building is composed of a pharmacy, a laboratory, a emergency unit (2 beds), an external consultation office, a room for small surgery (not used due to lack of material and qualified personnel), and a district administrative office.

Second Building: Contains 19 beds, and is used to hospitalize patients.

Third Building: Maternity ward with 13 beds also used for pre-natal consultations.

Apart from these buildings there are 7 huts, 3 of which are used to accommodate TBC patients during the first phase of treatment, the fourth to treat TBC out-patients, the fifth and sixth huts for activities of E.P.I. and M.C.H. care, and the seventh hut used for dental care, respectively.

Cold Chain: The Alto-Molocue Health Center has one petrol and one electric refrigerator to serve it. Frequent breakdowns in electricity and fuel supplies occur.

Water Supply: The Health Center does not possess its own supply of water and to satisfy their needs, a non-protected communal well, located approximately 1 km away, is used, as well as the nearby river situated about 3 kms from the Center. The Health Center staff therefore fetches the water in buckets, pans, etc. in order to satisfy the daily needs of the Center.

Electricity Supply: A hydroelectric dam exists near the Alto-Molocue town, which in general supplies energy 24 hours/day. However, during the dry season, the dam does not produce enough electricity for a full day's requirements.

Sanitation: There is no pit latrine and the existing toilets inside the hospital are not fed with running water.

Transportation: The Health Center has only 1 motorcycle to cover its transport requirements. To make vaccinations in the health post the staff must walk the 10 or 19 km distance.

Communication: By radio. There are 2 radios (1 from the electricity company (CETA) and another one from the local Police).

Health Units Served by the Health Center: There are just two health posts accessible, one in Marua and another one in Granja which are respectively 10 km and 19 km. away from the main health center.

B. ILE

Ile is situated approximately 45 minutes flight from Quelimane. The city population is 32,542 and the district population is 308,127. The displaced population is 28,164. The affected population is 58,000.

Health Center Staff: 27 persons total

- 1 Health District Director
- 1 Medicine Agent
- 4 Basic Nurses
- 1 MCH Nurse
- 1 Primary Midwives
- 1 Microscopist
- 1 Pharmacy Assistant
- 1 Medical Preventive Agent
- 1 Administrator Assistant
- 1 Driver
- 13 "Servents"
- 1 Dental Assistant

Hospital Activities

|                                  |                        |
|----------------------------------|------------------------|
| - External Consultations:        | 103/day                |
| - Hospitalized patients:         | 52/month               |
| - Maternity:                     | 87 deliveries/month    |
| - Pre-Natal Consultations:       | 328/month              |
| - Family Planning Consultations: | 26/month               |
| - Post-Natal Consultations:      | 0                      |
| - Tuberculosis:                  | 41 registered patients |
| - Leprosy:                       | 0                      |
| - E.P.I.:                        |                        |
| BCG:                             | 348/month              |
| Measles:                         | 123/month              |
| DPT1 + Polio:                    | 203/month              |
| DPT2 + Polio:                    | 213/month              |
| DPT3 + Polio:                    | 185/month              |
| Pregnant Women:                  |                        |
| Tetanus 1:                       | 249/month              |
| Tetanus 2:                       | 79/month               |
| Students:                        |                        |
| Tetanus 1:                       | 600/month              |
| Tetanus 2:                       | 128/month              |

Main Building: The main building is composed of a pharmacy, a laboratory, (not used due to lack of materials), a emergency unit (1 bed), an external consultation office, a room for small surgery (not used due to lack of materials and qualified personnel), a hospitalization unit with 45 beds, and a district administrative office.

Second Building: A maternity ward with 12 beds and also used for pre-natal consultations.

Third Building: Used for the M.C.H. and E.P.I. activities.

Cold Chain: The Ile Health Center has only one petrol refrigerator which is not consistently supplied with fuel.

Water Supply: The Health Center does not possess its own supply of water and therefore the nearby river situated about 4 Kms from the Center, is the only water resource. The Health Center staff fetch the water in buckets, pans, etc. in order to satisfy the daily needs of the Center.

Electricity Supply: There is no town electricity supply because the town generator is out of order.

Sanitation: There is no pit latrine or any other kind of sanitation.

Means of Transport: The village of Ile was attacked in 1988 and in February 1989. The health center's medical equipment was robbed and destroyed and the motor vehicle used by the center was also damaged. The only means of transport available at the moment is one tractor which serves both Namarroi and Ile.

Communication: There is one military radio in Ile.

Health Posts Served by the Health Center: There are 12 health posts in the district of which only 4 are presently accessible:

|           |       |
|-----------|-------|
| Muliquela | 12 km |
| Socone    | 40 km |
| Napera    | 45 Km |
| Valasse   | 60 Km |

### C. GURUE

Gurue is situated about 1 hour flight north of Quelimane. The city's population is 39,550 and the district population is 201,950. The displaced population is 3,880. The affected population is 31,768. An M.S.F. team has been at Gurue since August 1988 on a permanent basis.

HEALTH CENTER STAFF: 48 persons total

- 1 Health District Director
- 1 Medical Technician
- 1 Medicine Agent
- 4 Basic Nurses
- 4 Primary Nurses
- 3 MCH Nurse
- 3 Primary Midwives
- 1 Laboratory Agent
- 1 Physiotherapist
- 1 Social welfare Agent
- 2 Microscopist
- 1 Pharmacy Assistant
- 1 Dental Assistant
- 2 Preventive Medicine Agent
- 22 "Servents"

The M.S.F. team at Gurue is composed of 1 physician and 1 logistician.

Hospital Activities

|                                  |                         |
|----------------------------------|-------------------------|
| - External Consultations:        | 115/day                 |
| - Hospitalized patients:         | 170/month               |
| - Maternity:                     | 180 deliveries/month    |
| - Pre-Natal Consultations:       | 650/month               |
| - Family Planning Consultations: | 75/month                |
| - Post-Natal Consultations:      | 8/month                 |
| - Tuberculosis:                  | 39 follow-up patients   |
| - Leprosy:                       | 65 registered           |
| - E.P.I.:                        | BCG: 462/month          |
|                                  | Measles: 322/month      |
|                                  | DPT1 + Polio: 570/month |
|                                  | DPT2 + Polio: 467/month |
|                                  | DPT3 + Polio: 348/month |
| Pregnant Women:                  | Tetanus 1: 128/month    |
|                                  | Tetanus 2: 108/month    |

Main Building: The main building is composed of a hospital unit with 32 beds, a surgery block (presently undergoing repairs), an emergency unit (2 beds), and a district administrative office.

Second Building: Consists of a pharmacy and a laboratory, and is also used for external consultations and E.P.I. and M.C.H. activities.

Third Building: A maternity ward with 17 beds also used for pre-natal consultations.

Fourth Building: Presently being used to accommodate the health center's medical personnel.

An annex building is being used as kitchen and store room.

Cold Chain: Gurue Health Center has two refrigerators - one petrol refrigerator and one electrical. Generally, electricity supplies are adequate, although breakdowns occur. Fuel is difficult to obtain.

Water Supply: A water supply system is presently being installed to serve all the city. In addition, the hospital has 3 rainwater tanks which provides minimum water supplies for the hospital.

Electricity Supply: A hydroelectric dam exists near the Gurue town, which in general supplies energy 24 hours/day. However, during the dry season, electricity cannot be generated for the full day. Apart from this, the hospital has a petrol generator, but fuel is difficult to obtain.

Sanitation: The Health Centre has 2 toilets.

Means of Transport: The Health Center has 1 motorcycle being used by the Center's Director and 1 ambulance in very poor condition.

Communication: The Health Center has access to one radio transmitter belonging to EMOCHA (tea company) and the M.S.F. team also has their own radio.

Health Units Served by the Health Center: There are 13 health posts dependent on the Gurue Health Center of which 12 are fully accessible (less than 30 Km. away).

#### D. MOCUBA

Mocuba is situated 160 km north of Quelimane. The city's population is 51,936, and the district population is 177,930. The displaced population is 33,410 and the affected population is 25,000, although the numbers are increasing monthly. An M.S.F. team has been at Mocuba since early 1986 on a permanent basis.

Rural Hospital Staff: 140 persons total

- 1 Health District Director
- 2 Medical Technicians (1 the District Director, the other the hospital Director)
- 1 Surgery Technician
- 25 Basic Nurses
- 9 Primary Nurses
- 3 MCH Nurses
- 3 Primary Midwives
- 1 Microscopist
- 3 Laboratory Agents
- 3 Surgical Assistants
- 1 Anesthetist
- 1 Nurse Supervisor
- 1 Pharmacy Assistants
- 2 Radiologist Assistants
- 1 Physiotherapy Assistant
- 2 Dental Assistant
- 43 "Servents"
- 10 others workers

Out-Patient Center Staff

- 1 Nurse District Supervisor
- 1 Administrative Assistant
- 1 Statistics Nurse
- 5 Basic Nurses
- 3 Primary nurse
- 3 MCH nurses
- 3 Preventive Medical Agents
- 1 Medical Agent
- 1 Child Care Agent
- 1 Pharmacy assistant
- 8 Servants
- 1 Driver

The M.S.F. team at Mocuba is composed of 2 physicians, 1 mid-wife, 3 nurses, 1 laboratory technician, and 1 logistician.

Hospital Activities

|                                  |                         |
|----------------------------------|-------------------------|
| - External Consultations:        | 168/day                 |
| - Hospitalized patients:         | 557/month               |
| - Maternity:                     | 209 deliveries/month    |
| - Pre-Natal Consultations:       | 730/month               |
| - Family Planning Consultations: | 70/month                |
| - Post-Natal Consultations:      | 30/month                |
| - Tuberculosis:                  | 380 follow-up patients  |
| - Leprosy:                       | 55 follow-up patients   |
| - E.P.I.:                        | BCG: 521/month          |
|                                  | Measles: 414/month      |
|                                  | DPT1 + Polio: 273/month |
|                                  | DPT2 + Polio: 616/month |
|                                  | DPT3 + Polio: 316/month |
| Pregnant Women:                  | Tetanus 1: 327/month    |
|                                  | Tetanus 2: 234/month    |
| Students:                        | Tetanus 1: 901/month    |
|                                  | Tetanus 2: 118/month    |

Rural Hospital of Mocuba: The rural hospital of Mocuba consists of a complex of 11 buildings distributed as follows:

|              |   |
|--------------|---|
| 1st Building | An emergency unit with 9 beds   |
| 2nd "        | A surgery block, the intensive care unit and a room for the hospitalization of surgery patients |
| 3rd "        | Hospitalization for adults  |
| 4rd "        | Pediatric hospitalization   |
| 5th "        | Maternity   |
| 6th "        | First phase TBC in-patients   |
| 7th "        | Pharmacy  |
| 8th "        | Dental Unit   |
| 9th "        | Laboratory  |
| 10th "       | Kitchen and stores room   |
| 11th "       | Laundry   |

The total number of beds is 181.

There is another complex 5 minutes from the hospital, where all the MCH/FP activities and the children's "triagem" are performed, as well as referred consultations (to a physician) for out-patient care. There is also a district administration office and an annex where the TBC out-patients follow-up is done. About 15 minutes from the hospital and near the local market, one can find the old railway line, and this is where the adults' "triagem" is conducted, including basic treatment services. This site lacks all conditions required for an activity of this character (e.g. adequate furnishings, screens, sheltered waiting areas, etc).

Cold Chain: For the cold chain of Mocuba Rural Hospital there are 2 petrol refrigerators and 1 electrical and breakdowns are very frequent.

Water Supply: A water supply system is presently being installed to serve the Mocuba city population. In addition, the hospital has 1 well which cannot be used due to the absence of a water pump (although the well is dry outside of the rainy season). The hospital also has a cistern to collect rainwater from the rain and one 1 water tank within the hospital (although this cannot be used because of the absence of a motor pump to fill the tank).

Electricity Supply: Mocuba town has a generator which supplies energy from 6 to 11pm and depending on the availability of diesel, this generator can also operate from 8 to 12am. Occasionally, electricity is available during other times of the day. The surgery block has one small emergency generator (fuel) and fuel supplies are generally adequate to run the generator when needed.

Sanitation: The Hospital has 2 pit-latrines and 2 showers. Each of the three in-patient wards have toilets. (MSF hopes to begin a sanitation program to build pit-latrines and water supplies in the dislocados camps and at the health posts.)

Means of Transport: The hospital has 2 cars and 2 unavailable motorcycles.

Communication: The M.S.F. team has one radio transmitter, and there are 12 other radios in the town used by both government and private industries.

Health Units Served by the Health Center: The health Center serves 3 health posts which are accessible (Mocuba Cisal, Munhiba, and Posto Agricola), one health post which is in a neighboring district (Lugela), and one health post not accessible (Mugeba) to the health staff, although much of the population is served by the health center.

## IX. SUMMARY

As evidenced by the above description of both the national and the Zambezia provincial health programs/organization, the Mozambique Ministry of Health currently contains the basic infrastructure for delivering preventive and curative services. In recent years, child survival services (EPI, CDD, nutrition, maternal health, family planning, etc.) have been established and gradual improvements in their delivery are being implemented. The Ministry is committed to expanding the overall child health program to include more focused interventions aimed at reducing mortality of high-risk groups. Unfortunately, as described in the previous discussion, implementation has not been as successful as planned due primarily to insufficient supervision and management.

Operational constraints related to insurgency, economic decline, and natural calamities have also adversely affected the Government's ability to expand and upgrade health service delivery. To its credit, Mozambique has consistently allocated resources to health in line with the GPRM's policy emphasizing PHC and preventive activities. The Government's commitment to rebuilding/restoring its health network is reflected in the allocation of some of its own meager resources to the effort.

Effective expansion and implementation of health care cannot be attained in the absence of adequate MOH technical and managerial skills to assess needs, establish priorities, secure external support, and initiate and supervise the actual delivery of the service program. External assistance is absolutely critical to improve program supervision and management, particularly in the provinces and districts.

This pilot Child Survival Project will work within the Ministry's system to effect managerial, supervisory, and technical improvements in the child survival services established in Zambezia Province.

## BIBLIOGRAPHY

### I. MOTHER CHILD HEALTH

- Ministry of Health, Normas de atencao (Consulta de Crianças Saldas 0-4 anos).  
....Normas de atencao especial (Crianças 0-4 anos).  
....Manual de obstetricia practica, 1988.  
....Como devemos comer.  
....Normas sobre cuidados com o recém nascido, 1987.  
....Normas de tratamento da diarreia infantil, 1988.  
....Normas pediatricas, 1988.  
....Programa e plano de accao em MCH/FP, 1988.

### II. PRIMARY HEALTH CARE - GENERAL

- Ministry of Health, Les Soins de Sante Primaire au Mozambique, 1985,  
....Malaria Guideline, 1988.  
Save the Children Fund (U.K.), Annual reports, 1987-88.  
Medecins Sans Frontieres (France), Monthly flying doctor reports, Trimester reports (Mocuba and Gurue) 198-1988.  
World Bank, Population, Health, and Nutrition Sector Report, November 1988.  
UNICEF, Annual Report Mozambique, 1988.

### III. EXPANDED PROGRAM IMMUNIZATION

- Ministry of Health, Com vacinacao completa, crianças saudaveis, 1988.  
....EPI, proposta de programa de accao para 1989.

### IV. NUTRITION

- Ministry of Health, Boletim Trimestral de informacao da situacao alimentar e nutricional. No. 1-6, 1987-88.  
....Guiao de nutricao para trabalho no campo, 1988.  
....Normas para suplementacao em vitamin A, 1988.  
UNICEF, Assignment Children: Vitamin A deficiency and Xerophthalmia, 1987.

### V. HEALTH WORKER TRAINING

- Ministry of Health, Folhas de informacao e estatisticas das actividades de formacao em Mozambique, 1987.

VI. PLANNING AND STATISTICS

Ministry of Health, Guia de planificacao, organizacao e avaliacao para centros de saude, 1984.

....Boletim de informacao estatistica, 1987-88.

....Boletim epidemiologico provincial (Zambezia), 1988.

....Regolamento Organico do Ministerio de Saude.

....Plano e programa Provincial para 1989, (Zambezia).

VII. WATER - SANITATION

Agua Rural, Manuais de informacao e divulgacao dos Programas de Agua Rural e latrinas melhoradas, 1987-88.

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ADMINISTRATIVE ANALYSIS

A detailed description of the Ministry of Health was presented in Annex 1. The following describes Private Voluntary Organizations (PVOs) who have been working in Zambezia Province, establishing their capability to function well in remote settings with basic logistics, and earning reputations for effectiveness by working with each other and with the provincial and district personnel of the Ministry of Health under the supervision of the Ministry of Cooperation's Emergency and Refugee Operations Coordinator.

While covering a variety of public health concerns, PVOs have directed their attention particularly towards the health and well being of mothers and children.

A. MEDECINS SANS FRONTIERES - FRANCE (MSF)

MSF has been operating in Mozambique since 1984, in collaboration with the Ministry of Health and the DPCCN (Departamento de Prevencao e Combate das Calamidades Naturais), in the following fields:

- Technical and logistical assistance
- Drugs supply
- Supervision of curative and preventive MOH activities
- Health staff training
- Nutritional support
- Physical rehabilitation of clinics and hospitals
- Air and land transport support

Since 1986, MSF has been assisting the Ministry of Health in Zambezia province in the rehabilitation of the rural hospital of Mocuba and in the supervision of the health posts accessible in the surrounding area.

Beginning in 1987, MSF has been providing a supplementary feeding program for severely malnourished children in the Mocuba area and opened an intensive feeding center in Mocuba hospital. The MSF team is composed of 2 physicians, a mid-wife, 3 nurses, a laboratory technician and a logistician.

Monthly trips via air since June 1987 have permitted MSF to visit the remote health centers of Ile, Alto Molocue, Gurue and more recently Chinde, Namarroi and Gile. MSF trains health staff, provides supervision for clinical activities, and provides logistical support to the government in distributing

medical supplies, food, and medical evacuations to the hospitals of Mocuba and Quelimane.

In August 1988, an MSF team was placed in Gurue composed of a physician and a logistician. The health center is being rehabilitated and public health activities are under MSF supervision.

MSF has acquired significant experience in delivering health care in Zambezia province and has demonstrated its ability to get the job done, as evidenced by the effective rehabilitation of the regional hospital in Mocuba. However, MSF clearly has a curative and, appropriately, emergency orientation which reflects the immediate problems facing Mozambique over the last few years. The preventive activities planned under this project will round out and complement the strong curative emphasis of the organization.

Critics have questioned the extent to which MSF's assistance has created a parallel system vs. stronger integration with the MOH. This is largely a misconception. There is little doubt that at the district level MSF is working hand-in-glove with MOH personnel within the MOH facilities. MSF has been less successful involving provincial level health staff in what they are doing at the district level. For example, MSF's requests for MOH officials to accompany them on flying doctor visits have been frequently rebuffed. This unresponsiveness is of obvious concern and will be addressed during this pilot project.

MSF staff, dedicated and effective under the most trying circumstances, work in danger zones where few other organizations have dared to tread. Although most staff are assigned for a six month period, many extend beyond their initial commitment. The well organized and effective support provided by the Paris headquarters has ensured that no gap occurs when people leave. Furthermore, the staff are well qualified for their assignments and no early termination has occurred in four years. Finally, MSF has established a well-tuned supply, logistics, and communications systems which would be exceedingly expensive and time consuming to replicate.

#### B. SAVE THE CHILDREN FUND (U.K.) IN MOZAMBIQUE

SCF/UK has been active in Mozambique for four years in projects in health and social welfare and, more recently in response to the emergency situation, in relief activities, reconstruction, rehabilitation and development work as well.

Health and Social Welfare: In December 1984, SCF/UK began epidemiological support to the MOH with an emphasis on EPI to achieve better vaccination coverage in rural Mozambique. Since early 1987, SCF has extended its involvement to the national vaccine cold chain and logistics systems. SCF/U.K. involvement

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in the national nutrition program began in 1988 with a nutritionist working in the MOH nutrition section in Maputo. Other SCF programs include logistical support in distribution of all MOH supplies, a project aimed at "Support of Children in Difficult Circumstances", and community-based rehabilitation (described in emergency relief below). The latter two projects are focused in Maputo, but will expand to the provincial level, probably in Zambezia.

Two SCF health workers arrived in 1986 to start inservice training courses for health staff. A Health Workers' Retraining Centre in Quelimane (Zambezia) was constructed for this purpose. The seminars emphasize group work, active participation, and follow up in the district workplaces. Since 1986, an epidemiologist has provided technical assistance to the provincial health authority in surveillance, planning, teaching, and assessment of the province's Health Information System.

Responses to the Emergency: Since February 1987, SCF, apart from the supply of essential commodities, has made a major contribution to DPCCN's logistical capacity by the purchase of 33 trucks and the setting up of a workshop for their maintenance and training mechanics.

To encourage food production by family sector farmers, SCF has provided 22 tractors, accessories and irrigation pumps with the aim of cultivating 3300 hectares by 1990.

In Zambezia, SCF is helping to rehabilitate some of the basic health infrastructure in Morrumbala damaged by war insurgency. The Community Based Rehabilitation Program supports small industries including the purchase of carpenters' tools, fishing nets, and sewing machines to give displaced people an opportunity to establish their own economic livelihood in their new areas of habitation.

SCF has obviously established a track record of committed, long-range, effective assistance in Zambezia. The establishment of modest but affordable GPRM Health Workers' Training Center, which has been fully utilized, is now serving as a model for other similar training centers in the country. The epidemiology support to Zambezia Province has been particularly effective in conducting surveys, producing reports, and producing the nations first provincial epidemiological annual report. Furthermore, the epidemiology advisor, under adverse circumstances, has facilitated nutrition status surveys in each district of Zambezia, although of uneven quality due to transportation and communication difficulties beyond the control of SCF. SCF staff are well qualified and committed to improved health in Zambezia.

C. WORLD VISION IN MOZAMBIQUE

The primary objective of the WV Mozambique program is to assist Mozambicans with emergency relief and provide opportunity for long-term development. This is being achieved through health care, educational opportunities and agricultural assistance.

World Vision has been providing food and medical aid to the people of Mozambique since 1986. In 1984, World Vision established emergency relief programs for Tete and Manica Provinces by providing AGPAK's containing tools and supplies. World Vision is working in cooperation with the Mozambican Government Relief Agency (DPCCN) and the Mozambican Red Cross to provide food for more than 300,000 people, clothing, blankets and AGPAK's. Child health projects emphasize health facility rehabilitation. Other projects include needs assessment programs for agriculture, water, irrigation, health and nutrition. Needs defined by the communities themselves, such as agricultural assistance, fisheries, and educational opportunities, complete the development portion of World Vision's Mozambique program.

In 1987, World Vision initiated a primary health care program, with particular focus on women and children in two districts of Tete Province.

World Vision had difficulties with leadership prior to 1988, but since then a new director has provided effective management of the organization. While initially WV's role in food aid was limited to importing food, the organization is actively taking on greater responsibilities for distribution and end use at the district level. The Maputo office is expanding and plans to become more involved in development efforts to complement their emergency support, especially in linking nutritional needs with food and primary health care support.

ECONOMIC ANALYSIS

Introduction: After a period of modest economic growth (2% a year) from 1977 to 1981, the Mozambican economy went into a period of abrupt decline during which GNP fell by an average of 8% per year from 1981 to 1986. The government's response to the deteriorating economic situation was the formulation of the Economic Recovery Program (ERP), which has received widespread international donor support. The ERP went into effect in 1987 and has succeeded in restoring a modest (4%) upward trend in GDP.

Under the ERP, the Government of Mozambique will continue fiscal stabilization efforts during and beyond 1989. This is particularly important in a nation where the public sector is clearly very large; the central government accounts for around 50% of GDP. One factor which contributed to such a large share has been government's major expenditures on health and education to address pressing social needs following independence. GDP growth is expected to continue at around 4% per year, assuming that the security situation remains basically unchanged. During 1989, very ambitious efforts will be undertaken to further increase tax revenues from around 20% of the GDP in 1988 to about 22% in 1989. Expenditures will be contained through various measures, with the objective of reducing the overall deficit from about 14% of the GDP to about 10% in 1989.

Despite the efforts being made towards economic rehabilitation, the country still faces severe economic and financial constraints. The external accounts are particularly out of balance. On the current account, Mozambique will earn about \$200 million from its exports (principally prawns and cashews) plus workers' remittances and other invisibles this year. It needs, however, to import some \$950 million in current goods and services, plus meet after-Paris Club debt service of about \$150 million in 1989 alone. Even though exports are projected to grow faster than imports in the coming years as economic rehabilitation proceeds, the current account deficit continues to grow in dollar terms because of the vast difference in the 1988 base of exports (\$98.3 million) and imports (\$763.6 million).

Mozambique's economic problem is, therefore, that of securing sufficient donor resources and allocating them to many different uses, in such a way that the net benefit to society is as large as possible. Since imports are required for virtually every development activity, donor support across all aspects of the economy is essential.

Investments in health in Mozambique present some rather special problems due to the prevailing violence and the uncertainty of food supplies. There is a possibility of higher levels of conflict, and a resulting large number of human casualties. Under such circumstances, economic patterns and processes are more greatly distorted than is the usual case of a developing country. In view of this, non-economic factors, such as considerations for safety, survival, and avoidance of conflict, dominate resource allocation and pricing decisions which under ordinary circumstances would adhere more closely to strict economic motivations and rationales.

Economic Benefits: Research on the return to investment on people has shown that health care interventions are not only humanitarian but also make major contributions to economic growth. That is, health outlays improve the labor product and continue to yield a return over a period of years. The labor product created by this care and savings in health expenditures in the future as a consequence of reduction in disease can be substantial.

An objective of the MOH approach to primary health care is the integration of maternal and child health interventions within all clinic and hospital operations, not as a separate, parallel system. There are obvious economies within such a plan of integration, especially with the current unfavorable economic situation, the resultant low government revenues, and limited budget resources available to the MOH. With the prospect of substantial foreign assistance continuing, it is reasonable to anticipate that a wide range of health services can be made available to the population on a national scale through the facilities and staff of the MOH. For the near and medium term, proceeds from the sale of U.S. food aid, and other counterpart contributions, will be available to support basic MOH operations.

Quite apart from the value of increased survival or improved health status, it is obvious that in a country as poor as Mozambique, such improvements, if they are to have a significant impact on the health of large numbers of Mozambicans, must be as cost-effective as possible. It is common in health projects to ignore cost-benefit issues and concentrate on cost-effectiveness questions, which are certainly more tractable. Clearly cost-benefit concerns pertain in that beneficial impacts should have a higher value than the cost of producing them. However, given the complexity and subjective moral nature of estimating the value of a life saved, which is the basic unit of benefit in this project, attention has been focused on finding the least cost way to achieve this objective.

This project has significant indirect financial benefits, particularly in reducing government expenditures through a more efficient health information system leading to better

inventory control and reduced waste. The bulk of project benefits will be received by the population in the four target districts through more and better health services leading to reduced morbidity and mortality. The project focus, however, is to facilitate immediate improvement of the MOH capacity to deliver health services to its clientele. Ultimately, these health benefits will be realized in the form of increased physical and mental productivity on the part of nearly all of the population in the four districts of Zambezia.

In addition to these direct benefits, the project's emphasis on introducing efficiency and cost containment measures would assist the government in making better use of scarce domestic and foreign resources, thereby improving both the quality and the sustainability of service delivery within the tight resource constraints facing Mozambique.

Cost-Effectiveness: Project designers have been faced with the challenge of addressing the dire need for health interventions in a country where health indicators have historically been below world standards and of ensuring that scarce resources are allocated efficiently. To that effect, the project contemplates field testing health interventions that should lead to the selection of cost-effective solutions to Mozambique's health problems.

Benefit-cost analysis for this type of project is impractical due to the difficulties and high costs of generating the necessary data base. Whether the approach being taken in this pilot project represents a cost-effective approach to child health improvement will be examined during project implementation, especially during the two planned formal evaluations. For this purpose, cost data will be collected during the course of the project in addition to data on the project's health impacts. Ultimately, support for this type of pilot project in rural areas enduring vicious insurgency rests on humanitarian considerations and the desire to meet the minimal needs for good health among the rural poor.

The project is designed to generate supporting data on project operations on a systematic basis which will provide the MOH and A.I.D. with a basis for judging the cost-effectiveness of the project approach and approaches being implemented in other areas. Improvements in the delivery of basic child survival services based on this type of analysis can then be evaluated for inclusion in a possible follow on project during FY 1991. Given the proposed level of expenditure, this approach is preferable to engaging in a health sector analysis that would involve project delay.

Health Care Expenditure Affordability: No attempt has been made to determine the maximum amount the beneficiaries can spend on health care given the insurgency, widespread dislocation of the population and the decline in consumer

purchasing power since the Economic Rehabilitation Program began in 1987. Neither current farm level income data for the four pilot areas nor wholesale agricultural prices are available to determine farm earnings.

Sustainability: Obviously, given the overall economic situation of the country, sustainability of any - indeed all - activities in Mozambique is dependant on continued high level donor support of the entire GPRM Economic Rehabilitation Program. The activities planned in this pilot project are consistent with the IBRD-IMF endorsed strategy of Mozambique to give priority attention to operation, maintenance and rehabilitation as opposed to new capital investment. According to the most recent IBRD Public Expenditure Review for Mozambique, "Achievement of government savings should remain a long term target which should not be pursued through the postponement of vital operations, maintenance and rehabilitation expenditures."

In recent years, Mozambique's budget allocations for recurrent costs in the health sector have declined considerably due to military needs and economic difficulties. Currently, recurrent cost funding by the government and foreign donors are inadequate to maintain a reasonable level of service in the sector, particularly outside Maputo. Ongoing and planned rehabilitation efforts will require additional incremental local recurrent costs and further strain the MOH's already insufficient funds for material and supplies. In the short term, the IBRD urges that "more donor funding for recurrent expenditures, even at the expense of reduced rehabilitation, should be considered." In this regard, MSF is contributing substantial resources toward rehabilitating health services and in providing volunteer doctors and nurses to supplement MOH staffing requirements in district health facilities. USAID has agreed with the Ministry of Finance to use a substantial portion of PL 480 local currency generations to support the current account budget of the Ministry of Health.

The government has taken the initiative to mobilize more resources for the health sector by appealing to external donors, promoting greater community responsibility for health and through the introduction of a comprehensive cost recovery program. The latter is being pursued more cautiously "given the need to protect access to health services for the poorest segments of the population and those hardest hit by the transitional costs of ERP measures." While provisions have been made to protect the interests of these vulnerable groups, there are indications that utilization rates at health facilities are beginning to decline.

SOCIAL ANALYSIS

Social-Cultural Context: Demographic data for Mozambique (1980 census) report that Mozambique's population doubled in size from six to twelve million between 1950 and 1980. The current population growth rate is reportedly close to 3 percent, which, assuming growth rates continue at current levels, would increase Mozambique's population by more than 50 percent to over 23 million during the remainder of this century. The population density in 1980 was 15 inhabitants per square kilometer (lower than African standards), but population density in Zambezia province was reported to be 29 inhabitants per square kilometer. According to the 1980 census, only 13 percent of the country's population was urban in 1980, however, urban growth since then has been rapid due to drought and security problems.

The age pyramid in 1980 was 17.8 percent under 5 years of age, 46.5 percent under 15 years, 50.2 between 15-64 years, and 3.3 percent 65 years and older. The impact of this age distribution will be particularly pronounced on demand for education and health services. In the health sector, growth in maternal and child health clients is expected to be rapid in the near future.

Massive internal displacements have occurred as a result of drought, famine and insurgency. The government estimates the internal displaced population at around 1.7 million. At present, international refugee population is estimated at nearly 1 million persons, mainly in Malawi, Zimbabwe and Zambia. Most observers believe that both internal and international displacements are likely to reverse whenever normal conditions return. The constant movement of large numbers of people contributes to an extremely unstable social structure in the four Zambezia project areas. William Finnegan, writing in the May 22, 1989 issue of The New Yorker magazine, observed that

"For refugees, and especially for peasants driven off their land, .... the world is decidedly not on its axis. Their homes and all that accompanies that fundamental notion - kin, society, sustenance, identity itself - have been torn from them by terrifying forces."

Reportedly less than one tenth of the land suitable for agriculture is presently under cultivation. Isolated homesteads predominate among the rural population, which under even normal conditions make the provision of infrastructure and the delivery of public services to rural communities costly and difficult.

Mothers in rural areas work the fields, care for the family, (which usually includes many children), spend considerable time walking to fetch water for family use, and when possible, work outside the home to increase family income. Most mothers in the pilot areas are illiterate, do not speak Portuguese and don't understand the benefits of immunization and other child health interventions. Often Mozambican women are the head of the family (husbands are absent or dead, and many women are single parents).

Preventive health care services are currently used more by the more well off and literate persons living near health facilities. Few children and mothers currently living in deslocado camps, who are more at risk, have access to the benefit of growth monitoring, immunization, diarrhea treatment and other child survival preventive interventions.

Beneficiaries: Beneficiary participation is a key element to the success of all projects. Active target group involvement is even more critical in this pilot project, as it is required for the dissemination of improved preventive health services to potential clients in inaccessible areas. However, the limited sense of community and the fragility of social structures in the project areas present serious obstacles to achieving the required involvement.

The design strategy that will deal with this potential constraint will be the use of community workers of the Organization of Mozambican Women (OMM) as a vehicle for encouraging beneficiary participation. In each of the four districts of the project, the OMM has established some organizational structure and achieved a degree of acceptance by local people. Taking advantage of this presence, the project will support OMM community workers in disseminating information on nutrition, horticulture, ORT, EPI and Vitamin A deficiency. While a main thrust of the OMM involvement will be to encourage participation in the health program, it will be made clear that: (1) OMM membership is not a prerequisite for access to child survival health care services, and (2) participation in the health program will not require involvement in any other OMM activities.

The direct beneficiaries of this pilot project will be the mothers and children of the four districts of Zambezia province (Mocuba, Alto Molocue, Ile and Gurue), where family life has been severely disrupted by the combined effects of famine, drought and insurgency. Total recorded population of these four districts is 750,000; those dislocated number 83,500, and individuals at risk total approximately 125,750. Project beneficiaries will include normal residents of those districts as well as deslocados fleeing the insurgency. The project emphasizes interventions for high-risk mothers and children.

The secondary beneficiaries of the project will be the health staff in the four pilot areas who will receive in-service

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training and acquire new skills during specialized seminars. Viewed from the perspective of these service providers, this pilot project will also serve to raise the morale of these professionals, by reducing frustration for having to turn clients away due to lack of medicines and supplies or inability to treat or prevent some illness or condition.

The project also has a strong research component focused on vitamin A deficiency, diarrhea management, immunization and growth monitoring. By assisting the MOH in conducting small studies of different aspects of child survival approaches and public health interventions, this research will give the MOH better knowledge of the health problems in rural Zambezia and an improved capacity to plan and implement strategies for strengthening primary health care for child survival in war ravaged rural areas.

Additional beneficiaries of the project will be the staffs of the private voluntary organizations and the provincial DPCCN who will acquire better information on population, nutrition needs and primary health care problems, and in conjunction with the MOH, share this information to improve decision making and planning. Relationships between all the cooperating parties will also be strengthened.

Participation: The design team for the pilot project included the National Director of Health as well as the Chief Medical Officer and the MCH/FP director of Zambezia province. Meetings with MOH national and provincial officials and MOH program managers provided essential information for planning project activities and determining the feasibility of various approaches to project implementation. Extensive meetings with health staff in the four pilot areas yielded relevant information about the health activities and needs perceived by the population. Interviews conducted with Mozambican mothers regarding their health care needs and expectations enabled the design team to confirm most of the views expressed by the health care staffs in the project areas.

The design team met with various departments within four ministries of the Government of Mozambique at the national and provincial levels which offered important insights into Mozambique society and institutions. As an outgrowth of these discussions, the project includes a component for assembling and sustaining an inter-agency committee to monitor the achievement of project objectives and improvements in child survival in the project areas.

The team also consulted U.N. agencies, six private voluntary organizations working in Zambezia province and representatives of the Organization of Mozambican Women (OMM) at the national and provincial levels, who are familiar with rural Mozambique society. These consultations enabled the design team to gain insight into different perceptions of traditional family, community and social values, beliefs and customs.

The full participation of the Ministry of Health at the national and provincial levels will assure in the execution and implementation of project activities, including the development of new systems to integrate child survival interventions, research into existing operations and the strengthening of service delivery, supervision, management and evaluation capacity. This includes training of health staff in the pilot areas and technical assistance to MOH officials.

Social Appropriateness: The decision of a potential client to seek and use health services from the MOH is conditioned by a number of factors, including:

1. perceived need to cure or prevent some illness or condition;
2. the services offered are perceived to be culturally and technically appropriate to solve the problem at hand;
3. the services are reasonably accessible in time and distance; and
4. there is a reasonable likelihood that the service provider has the right supplies, information and equipment to solve the problem.

This pilot project primarily addresses the last two factors mentioned above, and assumes the others to be equal in importance in the decision making process of the potential client. Factor number four could be restated that the facility and service provider is a credible and dependable source of health services. The concepts of credibility and dependability are intimately linked in the minds of potential clients of the system, especially in traditional, rural elements of the Mozambican population.

This pilot project, therefore, seeks to strengthen management systems to assure dependable arrival of medicines and supplies and to keep the equipment in operating order. The test of social appropriateness of this project will therefore be a gradual increase in service delivery at the lower end of the health system.

Social-Cultural Feasibility: Mozambique's population - an estimated 15.2 million in 1989 - is divided into more than a dozen distinct ethnic groups. Although they have some common cultural and historical experiences, each has its own language, material conditions, identity and heritage. Most of the population in Ile, Mocuba, Alto Molocue and Gurue are Lomwe, either of the Nyanja or Manganja ethnic group. According to MSF, no cultural resistance to modern curative and preventive health care has been observed in the project area in recent years. Nonetheless, socio-cultural receptivity

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to the child survival interventions planned for this pilot project will be monitored regularly during implementation.

Although project participants (mothers and children) and health care workers come from separate segments of society, this social distance is not expected to be a potential constraint. Experience in the four pilot districts of Zambezia indicates that the differences in social class and orientation that exist do not contribute to mutual ignorance, distrust and difficulty in establishing constructive interpersonal relationships. An important project design element is health care staff orientation and training. In cases where the professional staff does not have the requisite technical skills, technical training or refresher training continuing education will be provided, including cultural sensitivity issues relative to dealing with deslocado and afetado patients.

Support to OMM community workers is an important method of providing health information and promoting child survival interventions among communities (especially mothers). The project will work with the OMM to expand health education. Training seminars for OMM personnel will be conducted if appropriate. In essence, the OMM community workers will be culture brokers serving as a conduit of information from the target groups to the delivery system and the converse. As these community workers will have first-hand knowledge of beneficiary beliefs and attitudes concerning disease, curing and modern medical practitioners, these insights will be shared with the district health care staffs and help formulate strategies to deal with patients in a culturally sensitive manner.

#### Issues:

(1) Malnutrition - Important factors in the design and implementation of this pilot project are the severity and prevalence of malnutrition, the massive dislocation of the population, and the impoverished and illiterate target group. In Zambezia malnutrition is severe among the highest at risk groups (infants, young children and pregnant and lactating women). Among the most affected communities are those which experience massive population displacements as victims of the insurgency search for more secure, protected zones. These people arrive at resettlement camps severely malnourished and food is frequently not available as needed.

Clearly, one of the most cost-effective health interventions available, along with EPI and ORT, is to improve nutrition through growth monitoring and well-targeted food distribution and nutrition education programs. The project will assist the MOH in Zambezia to improve the nutrition surveillance system and to conduct special nutrition surveys in the pilot districts and also in utilizing growth monitoring statistics in decisions regarding food aid deliveries to areas of need.

OMM community workers will be involved in community-based nutrition education.

With domestic food production presently in crisis, family stocks of food are negligible in the pilot areas. The distribution of food aid is difficult and uncertain due to the insurgency. Thus, the success of World Vision (see Annex 7) in assuring adequate and timely food supplies will have a major impact on the success of the child survival interventions planned in this project.

(2) Impact: - The pilot project will be implemented in four districts in central Zambezia which have health problems exacerbated by deslocados from adjacent districts who have taken refuge among area residents. Given the similarities of health care problems throughout Zambezia and indeed in each of Mozambique's ten provinces, improved effectiveness of child survival activities in the project area could serve as a basis for subsequent province wide or national health sector elaboration of a long term child survival intervention.

But realistically, one must recognize that as in most health programs, it will be difficult to measure impact of this pilot project, especially given the brief two year implementation period contemplated. As the 1987 A.I.D. evaluation discussion paper No. 23 "Development Assistance and Health Programs: Issues of Sustainability" concluded (p. 4):

"Despite serious efforts to monitor the effect of different interventions on health, few programs have succeeded in doing so. Data that are both reliable and valid are hard to collect and the impact of preventive efforts are elusive."

With the expected difficulty measuring direct and indirect impact of this project, it may be difficult to quantify cost-effectiveness.

FINANCIAL ANALYSISI. BUDGET ASSUMPTIONS

While the Ministry of Health is responsible for project implementation, it will receive assistance from a non-governmental organization (Medecins Sans Frontieres-France) and a respected and renowned U.S. public health educational institution (The Johns Hopkins University) in implementing various aspects of the project. The project budget (see Table A) illustrates total USAID funding of \$800,000 for the activities which will be carried out by the three primary implementing institutions.

A. Medecins Sans Frontieres-France

A cooperative agreement with MSF will include \$235,000 for personnel and transportation. This is in addition to the current support being provided to Mozambique by MSF, as indicated in the Estimated Cooperating Agencies' Contributions.

1. Long-Term Staff: A full-time project coordinator for two years is budgeted at \$36,200 per year to cover the costs of salary (\$25,200 per year), international travel (\$2,200/year Paris-Maputo return), local travel (\$3,000/year Maputo-Zambezia return), lodging (\$4,800/year), and contingency (\$1,000 per year). The coordinator will be recruited by MSF either in Paris or locally.
2. Short Term Technical Assistance: The services of an MSF/Paris EpiCentre consultant (with epidemiological skills) is budgeted over the two year period at \$45,000. Two visits during year one and one visit during year 2 for baseline and evaluation activities are estimated to cost \$15,000 per visit for each three week consultation.
3. Air Travel in Zambezia: A total of \$117,600 is budgeted for one extra flight per month to each of the four districts. The round trip flying time to each of the four districts totals 11 hours (three hours each round trip to Alto Molocue, Ile, and Gurue, and two hours round trip to Mocuba). MSF is currently making one trip per month to each of these sites. Additional trips to each district, at an estimated \$400/hour flight time for 11 additional hours each month, will cost \$4,400 per month or \$105,600 over the two year period. In addition, a contingency of 30 extra hours of flight time (\$12,000) is provided for transport of technical assistance, operations research assistance and evaluation teams during the two year project.

B. Johns Hopkins University: A long term (12-month) epidemiologist to be stationed in Quelimane will be recruited by JHU during the project. Nine consultancies, each three weeks in duration over the life of project, will also be provided. The total cost of \$330,000 for JHU assistance is based on the following estimates:

Salaries: The epidemiologist's salary is budgeted at \$72,000/year for a one year period. Nine consultancies are budgeted for 18 work days over a three week period at a maximum salary of \$270/day (\$43,740). Finally, a JHU project coordinator is budgeted at \$10,000 per year over the two year project (\$20,000). Per diem for nine consultants (\$22,500) is budgeted for 25 days per consultancy (3 weeks in Mozambique and 4 days travel) at \$100 per day. International travel (\$60,000) is calculated at \$5,000 per consultant trip and \$15,000 for the long term epidemiologist and family members (assumes 2 dependents). Local travel from Maputo to Quelimane and return is budgeted at \$100/trip for nine consultants and six trips for the long term epidemiologist. The JHU budget also contains funds for communications, telephone, postage (\$10,500) and allowances, storage, etc. for the long term advisor (\$20,000). Finally, overhead/fee estimated at 30% of the above costs (\$75,072) and contingency (\$4,688) are included in the budget calculations.

C. USAID Activities: A total of \$151,400 for a project manager, training, and evaluation are to be earmarked and committed directly by USAID Mozambique. While the funds will be obligated under the project agreement with the Government of Mozambique, the funds will be managed by USAID.

USAID will procure project commodities costing \$83,600: One 4x4 vehicle (\$25,000) and funds for maintaining the vehicle (\$9,600 over two years); two computers, printers, and UPS (\$14,000); four solar powered refrigerators (\$20,000); and vitamin A, antibiotics, or other project related medical supplies as required (\$15,000).

The project manager will be recruited locally at an estimated cost of \$35,000 over the life of project to cover the costs of salary, local travel to Quelimane, and related costs. Two short training courses in the U.S. for GPRM officials are budgeted at \$30,000 (\$15,000 each) to cover the costs of travel, per diem, and tuition. If required, short term training in Mozambique for fifty health workers at the Quelimane Health Workers' Training Center will be funded at \$20,000. Finally, \$30,000 is budgeted for the final evaluation to cover the costs of USAID or other individuals' participation and \$36,400 is set aside for contingency to cover unforeseen costs or the costs of designing the follow on health project. Because the mid-term evaluation will be conducted with JHU, MSF, MOH, and USAID Mozambique staff, no additional funds are budgeted.

## II. LOCAL CONTRIBUTION BY COOPERATING AGENCIES:

The Ministry of Health and MSF will be contributing established resources to the project as summarized in Table B.

Of the 1,600 employees (including both permanent and casual workers) in the Ministry of Health in Zambezia, an estimated 275 are employed in the four target areas and the MOH/Zambezia program offices which will be involved in project implementation. Approximately Mt 48 million is spent annually on salary and fringe benefits province-wide, of which an estimated Mt 8.4 million is paid to health care workers in the target areas. At a Mt 720=\$1.00 exchange rate, this amounts to an annual salary contribution of \$ 11,600 or \$ 23,200 over the life of project. An estimated Mt 189 million is spent in the province for drugs, equipment, materials, transport, offices and health facilities, and training. A proportionate amount of these recurrent costs has been allocated as an MOH contribution (Mt 44 million or \$ 61,000 per year).

MSF has twelve staff based in the project areas and three MSF/Maputo staff who will support this project. Based on an annual cost of \$36,000 per year per individual (for salary, fringe benefits, transport, and accommodation), and assuming that each of these fifteen staff will be allocating 50% of their time to project related activities, MSF will contribute \$538,000 during the project for personnel. MSF/Paris staff also visit Mozambique on a regular basis to oversee all MSF activities. Each year, a visit is made by a computer specialist, a sanitarian, an administrative officer, and a personnel officer. In addition, semi-annual trips are made by the MSF/Paris nutritionist and program officer. These six visits each year average 2-3 weeks in duration. Assuming \$23,300 per visit for costs of per diem (\$100/day), travel (\$4,000 per trip) and salary (\$3,000/month or \$750/week), a total of \$139,800 per year or \$279,600 is estimated as the home office support contribution.

MSF has a contract with a private Zimbabwean airline to fly 50 hours per month to their project sites. The current cost of air travel is \$400/hour or \$240,000 per year. Half this amount is allocated as an MSF contribution during the project (\$120,000 per year or \$240,000 total).

Five vehicles are based in Zambezia province in the project areas: two Landrovers, two double cabin pick-ups, and one single cabin pick-up. Based on an estimated value of \$20,000 each for the Landrovers and \$10,000 each for the other vehicles, a total \$70,000 is estimated as a one time contribution to the project.

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**Table A**  
**Budget by Year of Expenditure**

|                                 | <u>Year 1</u>    | <u>Year 2</u>    | <u>TOTAL</u>     |
|---------------------------------|------------------|------------------|------------------|
| <b>MEDECINS SANS FRONTIERES</b> |                  |                  |                  |
| Long term Staff                 | 36,200           | 36,200           | 72,400           |
| Short Term Technical Assistance | 30,000           | 15,000           | 45,000           |
| Air Travel to Districts         | 52,800           | 52,800           | 105,600          |
| Contingency Air Travel          | 6,000            | 6,000            | 12,000           |
| Sub-total                       | \$125,000        | \$110,000        | \$235,000        |
| <b>JOHNS HOPKINS UNIVERSITY</b> |                  |                  |                  |
| Long Term Epidemiologist        | 120,000          | 25,000           | 145,000          |
| Nine Consultancies'             | 103,000          | 82,000           | 185,000          |
| Sub-total                       | \$223,000        | \$107,000        | \$330,000        |
| <b>USAID ACTIVITIES</b>         |                  |                  |                  |
| Commodities                     |                  |                  |                  |
| - vehicle                       | 25,000           | 0                | 25,000           |
| - vehicle maintenance           | 4,800            | 4,800            | 9,600            |
| - solar powered refrigerators   | 20,000           | 0                | 20,000           |
| - computers, UPS, printers      | 14,000           | 0                | 14,000           |
| - drugs, vitamin A, antibiotics | 15,000           | 0                | 15,000           |
| Project Manager                 | 17,500           | 17,500           | 35,000           |
| International Training          | 15,000           | 15,000           | 30,000           |
| Mozambique Training             | 12,000           | 8,000            | 20,000           |
| Evaluation                      | 0                | 30,000           | 30,000           |
| Contingency                     | 18,200           | 18,200           | 36,400           |
| Sub-total                       | \$144,500        | \$ 93,500        | \$235,000        |
| <b>TOTAL</b>                    | <b>\$471,300</b> | <b>\$292,300</b> | <b>\$800,000</b> |

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Table B  
Estimated Local Contribution by  
Cooperating Agency

|                                | <u>Year 1</u>  | <u>Year 2</u>  | <u>Total</u>     |
|--------------------------------|----------------|----------------|------------------|
| Ministry of Health/Zambezia    |                |                |                  |
| Personnel                      | 11,600         | 11,600         | 23,200           |
| Supplies, Equipment, Transport | 61,000         | 61,000         | 122,000          |
| Facilities                     | 75,000         | 75,000         | 150,000          |
| MSF/France                     |                |                |                  |
| Field Staff                    | 269,000        | 269,000        | 538,000          |
| Home Office Support            | 139,800        | 139,800        | 279,600          |
| Air Travel                     | 120,000        | 120,000        | 240,000          |
| Vehicles                       | 70,000         | ---            | 70,000           |
| <b>TOTAL</b>                   | <u>746,400</u> | <u>676,400</u> | <u>1,422,800</u> |

SECURITY ANALYSIS

Nature and Source of Insecurity: Security in Mozambique, the major problem facing the Government of Mozambique (GPRM), remains serious, with no indications of improvement. Many of Mozambique's rural areas are now in a condition of virtual anarchy as armed insurgency or banditry affects all of the country's 10 provinces. The insurgent group has armed camps throughout the country, and although it periodically occupies district capitals or large towns, it has little support among the local population.

Violence has displaced some two million people out of a population of 15 million and is the main cause of hunger which affects five million. It has caused at least one hundred thousand deaths directly. Transportation corridors are major targets of enemy actions with only the Beira corridor functioning without major interruptions despite frequent enemy attempts to sabotage the line. Large parts of the country are accessible only by air because the highways and rail lines have been destroyed or are often attacked. Destruction and looting between 1980 and 1989 have rendered inoperative 1,976 primary schools, 793 health units, over 900 shops, and 1,337 trucks, buses and tractors. The GPRM estimates its cost at over \$6 billion between 1975 and December 1988.

Outside the main towns, most country areas are prey to attacks. There are frequent ambushes on the same stretches of road, sometimes within the space of a few days. In the face of this, the government armed forces are largely impotent. As William Finnegan reported in the May 22, 1989 issue of The New Yorker magazine, "Although people are dying in all of Mozambique's ten provinces, there is no front, and few pitched battles."

Mozambique receives substantial military assistance from neighboring countries. Zimbabwe and Malawi have thousands of troops stationed in Mozambique. While government forces periodically conduct operations in various parts of the country, there are no indications that they bring any significant military results. While the presence of Zimbabwean troops has been a deterrent to insurgent attacks, the conflict continues at as high a level as it ever has in all ten provinces.

The Department of State maintains a travel advisory for Mozambique, warning American travelers that the insurgent guerrilla war against the Mozambique government continues. The advisory states:

"Due to activities of RENAMO forces, road and rail travel outside provincial capitals can be very hazardous. RENAMO has publicly stated that it will not hold itself responsible for the safety of anyone traveling in the country, and there have been numerous attacks against civilian and economic targets. Travelers are obliged to use extreme caution when traveling by land especially on the national highways."

A troubling new dimension of the conflict is the increasing threat to aircraft. Several aircraft used to haul relief supplies have been hit by ground fire, but without serious results.

Situation in Zambezia Province: Zambezia has been an ideal location to initiate military insurgency attacks. Despite gains from the military offensive launched in Zambezia by the Government in June, 1988, the province is under intense pressure. The railway from Quelimane to Mocuba has been attacked several times and road travel to and from any district capital remains perilous. Road access to areas outside of the provincial capital of Quelimane can only be accomplished under armed escort. Military-escorted convoys move occasionally between Quelimane and Mocuba to deliver food.

For all intent and purposes, the district capitals of Mocuba, Ile, Gurue and Alto Molocue are accessible only by air. While the Government reportedly continues to occupy all the district capitals, small-scale and large unit enemy activities continue around Mocuba, Gurue, Ile and Alto Molocue. In late November 1988, Gurue was overrun by a large and well-organized force. There were major actions near Alto-Molocue in early 1989 and Ile was occupied for several days in February 1989. While Quelimane itself has not been attacked, attacks on roads around Quelimane are common.

Coping With Insecurity in Zambezia: With the enemy capable of striking at will, emergency relief and development aid workers in Zambezia take special precautions to assure security. Except for those towns where security is reasonably assured (presently Gurue and Mocuba), expatriate development workers do not stay overnight outside Quelimane. When the security situation deteriorates, personnel are pulled back to safe areas. It is not envisioned that Johns Hopkins or MSF project personnel would stay overnight except in Quelimane, Gurue and Mocuba.

Donor organizations such as Medecins Sans Frontieres, Save the Children (U.K.) and the International Committee for the Red Cross (I.C.R.C) monitor the security situation constantly and communicate changes immediately by radio. MSF has its own well established HF radio network linking Maputo-Quelimane-Mocuba-Gurue. Thrice daily radio contacts enable MSF to report changes in the security situation. Through regular contacts with provincial and district authorities, missionaries, other non-governmental organizations and private individuals, MSF assesses when it is safe to enter one of the districts.

The established policy of the U.S. Embassy in Maputo requires all official and direct contract employees of the United States to obtain written approval of the Ambassador for travel outside Maputo. The Embassy is able to consult Mozambican security authorities and other informed sources in appraising the risk of travel to insecure areas. In accordance with this policy, all personnel from Johns Hopkins University as well as direct hire and contract AID employees will obtain Embassy approval before traveling to and within Zambezia province. The resident epidemiologist in Quelimane will keep in touch with the USAID Mission regarding travel plans, but will have autonomy with respect to travel decisions based on superior local knowledge.

Before flying its aircraft to Zambezia project sites, the MSF pilot and chief of party consult Mozambican security officials in Quelimane and file a standard flight plan. If MSF or Mozambican officials determine that travel would be unsafe, the flight is canceled. On occasion permission has been denied for security reasons. Should such a situation occur during project implementation, travel would not be undertaken. In addition, before landing at any of the districts in Zambezia, the MSF plane circles the town several times for a final check of the security situation. If the district staff which usually meets the MSF aircraft is not present or other suspicious activity is evident, the plane does not land.

Despite its ineffectiveness in dealing with the violence, the Government of Mozambique is not in danger of military defeat. President Chissano is continuing to press ahead with his domestic and foreign policy initiatives aimed at bringing peace. In the meantime the prospects are for a high level of conflict. We conclude that by continuing to take prudent preventive measures and avoiding unnecessary risks, project personnel will be able to implement the project safely.

WORLD VISION FOOD DISTRIBUTION PROGRAM

A. OBJECTIVE

The main objective of the World Vision program in the districts of Ile, Alto Molocue, Gurue and Mocuba in Mozambique's Zambezia province is to assure the delivery of the appropriate combination and quantity of food commodities to targetted deslocados. This will enhance and maintain the nutritional status of the designated beneficiaries and is the most effective means of combating malnutrition and related health problems. The four districts are Mocuba, Alto Molocue, Ile, and Gurue.

Other NGOs will also be heavily involved in the project. Medecins Sans Frontieres (MSF) is providing and will continue to provide medical services. CARE and the DPCCN are responsible for the storage, transport and actual distribution of the food. Save The Children (U.K.) has donated and is maintaining the majority of the trucks which will transport most of the food to be provided in the project.

B. EXISTING CONSTRAINTS

1. Security

All of the target districts are subject to insurgent attacks from time to time. Travel to the districts is restricted to air or travel under military convoy, and convoys are only organized when the military agree to schedule them. The military are frequently short of fuel and spare parts to make such convoys on a regular basis.

2. Insufficient Trained DPCCN Staff in Quelimane

The DPCCN in Quelimane, as in most other provinces, suffers from a shortage of trained personnel. In the case of Zambezia province, the problem becomes most evident in planning, logistics and transport. This is shown most dramatically by their inability to organize regular shipments of food to the affected districts, even when the provincial warehouses in Quelimane are full. Neither has the DPCCN staff been able to supply all three commodities (corn, beans, oil) simultaneously to provide the maximum nutritional benefits.

C. PROCUREMENT

World Vision will procure sufficient quantities of corn, beans and oil through the PL-480 (Food For Peace) Program of the United States Government to supply an adequate ration to the targeted populations. The rations recommended are 12 kgs.

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of corn, 2 kgs. of beans, and 1 kg. of oil per person per month. When it can be satisfactorily demonstrated that certain of these populations have access to quantities of food from local production, the rations may be reduced accordingly. The estimated population and the quantities would therefore be as follows:

| <u>DISTRICTS</u> | <u>POPULATION<br/>DESLOCADOS</u> | <u>MONTHLY FOOD REQS. (MT)</u> |              |            |
|------------------|----------------------------------|--------------------------------|--------------|------------|
|                  |                                  | <u>CORN</u>                    | <u>BEANS</u> | <u>OIL</u> |
| Mocuba           | 33,410                           | 401                            | 66           | 33         |
| Ile              | 28,164                           | 338                            | 56           | 28         |
| Alto Molocue     | 17,469                           | 210                            | 34           | 17         |
| Gurue            | <u>3,061</u>                     | <u>37</u>                      | <u>6</u>     | <u>3</u>   |
| Totals           | 82,104                           | 986                            | 162          | 81         |

Total monthly requirement: 1,229 MT  
 Total annual requirement: 14,748 MT

#### D. COMMODITY MANAGEMENT, DISTRIBUTION AND ACCOUNTING

##### 1. Receipt and Storage

World Vision will actively work with DPCCN in monitoring the off-loading of vessels, the transport to the provincial warehouses, see to the proper stacking of the commodities and assure that proper tallies are taken at the several stages of the operation. World Vision will also assist DPCCN in seeing that the products are handled on a FIFO (first in-first out) basis. Care will also be taken to see that the warehouses are maintained in a clean and orderly manner.

##### 2. Distribution Planning

World Vision will actively participate in the preparation of the plans of distribution of the commodities. This will be done in full consultation with MSF who will determine the nutritional status of the populations involved and in consideration of the other foods available to them.

##### 3. Commodity Accounting

World Vision will assist the DPCCN in seeing that proper and adequate methods are used in accounting for the commodities. This will enable World Vision to account properly to the donor for receipts, distributions, losses, claims, etc.

#### 4. Transportation of Commodities

World Vision does not now intend to import and operate transport vehicles. It prefers to utilize the present fleet of DPCCN trucks as well as the new trucks arriving in the province, a gift of Save The Children (U.K.). World Vision will also explore ways to utilize the private sector truck fleet where possible, and will look for ways to assist the private sector to get more vehicles back into service. However, should the need be adequately demonstrated, World Vision is prepared to actively seek more vehicles of the type required (e.g. 4X4, 4X6, tractors and trailers, etc.). These would be operated by World Vision, or placed in the hands of the private sector. They will not be added to the existing DPCCN fleet. Any such initiative will be taken only after due consultation with the various parties involved.

#### 5. District Warehousing

World Vision will also assist in training those responsible for managing the district warehouses so that they meet the criteria mentioned in D.1 above. Presently the district warehouse situation is as follows:

| <u>DISTRICT</u> | <u>CAPACITY (MT)</u> |
|-----------------|----------------------|
| Mocuba          | 650                  |
| Ile             | 450                  |
| Alto Molocue    | 120                  |
| Gurue           | 300                  |

#### 6. Monitoring

World Vision will train and place a sufficient number of end-use monitors to verify that the program is operating as outlined and agreed to in the plan submitted. Any deviations will be documented and called to the attention of the officials responsible. Follow-up calls will be made to ascertain that corrective actions have been taken.

### E. RELATED ACTIVITIES

#### 1. Vegetable Gardens

Vegetable seeds are of great concern to the GPRM Ministry of Agriculture. The provincial Department of Agriculture is most willing to provide logistic and legal support for seed importation. World Vision's agronomist is becoming acquainted with the target districts and has already recommended a "technico agricola" who, under his direction, will handle all vegetable gardens. He will be assisted by a number of already trained rural extension personnel who are working in projects in other districts.

Training local leaders from each district in vegetable production would be an integral feature of the World Vision project. It would include bringing people from their districts to Quelimane to be trained by World Vision's agricultural teams. In the process they would gain practical experience by working on some of the ongoing agricultural projects. This transfer of knowledge and techniques will benefit the targeted districts, not only in the promotion of vegetable gardens, but also in the development of local leadership.

One of World Vision's ongoing and already self-sufficient projects is a nursery to cultivate grafted and natural fruit trees. The product of this nursery is partly sold to support the rural extension agents who care for the seedlings and part is freely distributed to the deslocados. Replication of this project could be planned for the pilot child survival areas with care given to include the types of fruits (notably vitamin A rich) that will be most supportive of the health care services being provided.

## 2. Water Projects

A major component of any health project is the availability of clean, pure water. A survey will be conducted as to the water availability, and where clean water is lacking, World Vision will explore the best means for its production; e.g. hand-dug wells, bore holes or spring capping.

Annex 8

AID Payment Process

Methods of Implementation and Financing

The following table exhibits the payment processes which will be followed under this project. In no instance do they depart from the Agency's policies. The Mission will be entering into a Project Grant Agreement with the Ministry of Health and two subobligating agreements: a Cooperative Agreement with a foreign non-governmental organization, Medecins Sans Frontieres (France), and a buy-in to an existing Cooperative Agreement with Johns Hopkins University (JHU). The foreign NGO is an Agency approved organization and has had a financial management review where their procedures were found to be satisfactory and eligible to receive U.S. funds.

| <u>Type of Assistance</u>                           | <u>Method of Implementation</u>    | <u>Method of Payment</u> | <u>Pre-Payment Review</u> | <u>Post-Payment Review</u> | <u>Audit</u> | <u>AID Internal Control</u> | <u>Comment</u> |
|---|------------------------------------|--------------------------|---------------------------|----------------------------|--------------|-----------------------------|----------------|
| TECHNICAL AND RESEARCH ASSISTANCE:                  |                                    |                          |                           |                            |              |                             |                |
| (Cooperative Agreement, MSF)                        | Contractor (PVO-Foreign)           | Direct Reimbursement     | PM-ACO                    | N/A                        | IG           | Good                        | 1              |
| Direct Contract (Cooperative Agreement Buy-in, JHU) | Non-Profit Contractor (University) | FLC                      | PM-ACO                    | N/A                        | IG           | Poor-Good                   | 2              |
| Direct Contract                                     | PSC                                | Direct Reimbursement     | PM-ACO                    | PM(Nominal)                | IG           | Excellent                   | 3              |
| COMMODITIES:  |                                    |                          |                           |                            |              |                             |                |
| AID Procurement                                     | Purchase Order                     | Direct Reimbursement     | PM-ACO                    | N/A                        | IG           | Good to Excellent           | 4              |

1. For services performed in the field, Project Manager (PM) should have a good basis for voucher approval, whereas home office services will be more difficult to monitor.
2. Project Manager will have a good basis for reviewing work performed in the field; however, correlating payment to Contractor with work performed will be difficult under the Federal Letter of Credit buy-in arrangement. Contractor will be required to submit financial reports directly to Project Manager, on at least a quarterly basis, to enable Project Manager to monitor progress and approve vouchers for payment. However, even with these additional reporting requirements, tracking project disbursements to project activities will be very difficult and the results imprecise unless the project manager frequently reconciles financial and implementation information from all sources.
3. Services will be performed in the field, so Project Manager (PM) will have a good basis for voucher approval.
4. USAID will be fully involved in procurement and payment. Problems of compliance with procurement regulations, e.g. limit of shelf items, vehicle procurement, waivers, and price may arise.

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INITIAL ENVIRONMENTAL EXAMINATION  
OR  
CATEGORICAL EXCLUSION

ANNEX 9

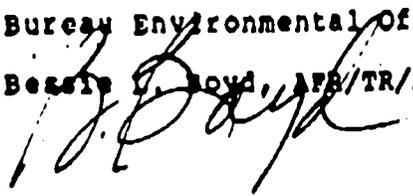
COUNTRY: Mozambique  
PROJECT TITLE: Pilot Child Survival  
PROJECT NUMBER: 656-0207  
FUNDING: FY 1989 \$600,000  
LOP \$600,000  
CATEGORICAL EXCLUSION PREPARED BY: Sidney Bliss, Project  
Development Officer,  
AFR/PD/SA

ENVIRONMENTAL ACTION RECOMMENDED: POSITIVE DETERMINATION \_\_\_\_\_  
NEGATIVE DETERMINATION \_\_\_\_\_  
CATEGORICAL EXCLUSION X

Discussion: This activity meets the criteria for a Categorical Exclusion in accordance with 22 CFR Section 216.2(c) and is excluded from further review because under Section 216.2(c)(2) (viii) programs involving nutrition, health care or population and family planning services except to the extent such programs include activities directly affecting the environment (such as construction of facilities, water supply systems, waste water treatment, etc.) are not subject to the provisions of Section 216.3. Since this project only provides basic technical assistance and training, with a small component for commodities, USAID/Mozambique has determined that the proposed project meets the criteria as specified in Section 216.2(c)(2) (viii) for a categorical exclusion and has received the concurrence of the Africa Bureau Environmental Officer for this determination.

Bureau Environmental Officer's Decision:

Bessie L. Boyd, AFR/TR/ANR



APPROVED: X

DISAPPROVED: \_\_\_\_\_

DATE: March 27, 1989

clearance: Donald Keene, RLADK date: 10/2/89

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TERMS OF REFERENCE FOR PROJECT COORDINATOR

The Medecins Sans Frontieres (MSF) project coordinator will be responsible for overseeing the daily implementation of all project activities in the four areas. The project coordinator will report to the MOH and USAID on all technical activities and to USAID for all financial issues. Specifically, the project coordinator will:

- Prepare, in conjunction with MOH/Zambezia, annual project work plans to be submitted to USAID for approval. The work plans will contain all activities, including operations research activities, short term operations research visits, flights for monitoring and supervision, special surveys (as required), training activities (as required), and budgets.
- As indicated in the approved work plan, assist the MOH in implementing improvements to the health information system (HIS), including more accurate, complete, and timely reports from district levels. Assist MOH in analysis at the provincial and district levels as required.
- As indicated in the approved work plan, organize implementation of specified project activities (e.g. child survival interventions, surveys, service delivery, etc.) through existing MOH staff at the provincial and district levels, through consultants, and through MSF staff.
- As indicated in the approved work plan, institute regular supervision and monitoring visits with MOH supervisors to district health centers in the pilot areas to strengthen service delivery of MCH programs.
- Arrange all logistical support for consultants (including lodging, transportation from Quelimane, and secretarial/communications support).
- In conjunction with assigned MOH staff, work with all consultants to develop and implement strategies for strengthened child survival and MCH programs at the district and provincial level.
- Organize special surveys as detailed in the approved work plan.
- Organize monthly project meetings (at provincial level) with MOH/Zambezia staff and other agencies as appropriate.

- Organize semi-annual project meetings (at national level) with MOH headquarters and other agencies as appropriate.
- Submit monthly progress reports to MOH/Zambezia and USAID.
- Ensure submission of quarterly financial reports to USAID.
- Ensure proper record of all procurement, operations, and maintenance of project-funded equipment and commodities.
- Liaise with MOH/Zambezia, DPCCN/Zambezia, World Vision/Zambezia, and other agencies as appropriate to identify needs in project areas for food deliveries and horticultural interventions.

Qualifications: A Master's degree in public health, medical degree, or equivalent is required. Knowledge of epidemiological principles and health information systems is required. Good management and organizational skills is desirable. Portuguese language proficiency and a minimum of two years of international experience are required. Africa is experience preferable.

MEMBERS OF THE PROJECT DESIGN TEAM

Ministry of Health: Dr. Jorge Cabral, National Director  
of Health

Dr. Humberto Cossa, Chief Medical  
Officer, Zambezia province

Dr. Carol Marshall, Director MCH/FP,  
Zambezia province

USAID Mozambique: James H. Purcell, Program Officer

USAID Swaziland: Mary Pat Selvaggio, Deputy Regional  
Health, Population and Nutrition  
Officer

Donald Keene, Regional Legal Advisor

Timothy Riedler, Regional Legal Advisor

Michael Kenyon, Regional Contracts  
Officer

Jana Gonson, Regional Budget and  
Accounting Officer

AID Washington: Sydney Bliss, Project Development  
Officer

Others: Dr. Angela Gago, Medecins Sans  
Frontieres (France)

Dr. Chris Kjolhede, Johns Hopkins  
University School of Public Health

Dr. Philippe Rastano, Medecins Sans  
Frontieres (France)

HEALTH SECTOR DONORS

Donor input in the health and population sectors in Mozambique is substantial. In 1987, more than \$24 million of non-capital and \$28 million of capital support was provided for health and population activities by external donors. Non-capital support consists mainly of technical assistance, training, and local operational support. Capital investments have been mainly in the rehabilitation of health units or the provision of supplies and equipment. Total donor support to the health and population sectors in 1987 accounted for nearly 15% of all external funding provided to Mozambique in all sectors (UNDP, 1987).

The most prominent supporters of health and population programs in Mozambique are U.N. agencies other than UNDP, bilateral donors, and international NGOs. As noted in the following description, most funding has been directed to primary health care, water and sanitation, program management, and medical supplies, equipment, and drugs. Family planning and population receives little direct donor support.

UNICEF is the major donor in the health sector. During the five years 1985-90, UNICEF provided technical assistance, equipment, supplies, and transportation support for the national MOH primary health care network, the EPI program, training of basic health personnel, young child development, and rural water supply. Through European Economic Community funding, UNICEF also provides medical assistance to returning refugees, drugs, and health center rehabilitation activities. A.I.D. has funded \$ 3.4 million for vital medicines distributed by UNICEF in this period.

The World Health Organization has supported health worker training, technical assistance for national health development, and research on tropical diseases. WHO also provides equipment and vehicles for health posts and health centers, and is furnishing equipment and materials for the sanitation HIS, and the vaccination and diarrheal disease control programs.

In population, UNFPA funded a variety of activities during 1986-88 in demography and population planning, training, and IEC for MCH/FP, women's groups, and schools.

UNDRO provides funds for hospital rehabilitation in Sofala province.

The World Bank is providing a loan, with parallel financing from WFP, UNICEF, NORAD and the Swiss, for strengthening policy formulation and management, improving health efficiency, improving service quality, and helping to mitigate some of the social costs of economic adjustment. The focus of the project is longer term institutional development at the national and provincial levels.

Australia provides one volunteer in the health sector and funds the rehabilitation of the Inhambane health center. France funds training for MOH health staff, the rehabilitation of the Umbeluzi water treatment plant, and one volunteer to work within the health sector. Italy is a major bilateral donor in the health sector, providing substantial technical assistance and medical supplies for the central hospital of Maputo and the provincial hospital in Zambezia; medicines for the basic health program; support for the MOH health equipment maintenance center; vehicles for health activities in Maputo City; funds for water supply to Pemba and basic supplies for families receiving orphaned children in Sofala, Tete, and Niassa provinces. Italy also funds Italian NGOs assisting in rural health, and water and food supply.

The Netherlands, focused primarily on water and sanitation, is providing technical assistance to the sanitary workshop in Zambezia (latrine construction), the Water and Health Office in Maputo, the Maputo Sewage project, a Maputo Community water project, and a health program in Niassa. The Netherlands also provides capital support (materials and commodities) for sanitation activities in Beira; for primary health care; chemicals for drinking water; shallow well construction; drainage for Maputo; rehabilitation of health centers in Tete and several smaller environmental projects.

Switzerland funds equipment, training, and technical assistance for pharmaceutical management; rural water supply; general health sector training; printing machines and materials for the MOH printing press; and laboratory materials for food and drinking water quality testing in Maputo, Pemba, and Cabo Delgado. The Swiss also channel funds to UNICEF for water supplies and to the Red Cross for blood transfusion services.

NORAD provides funds for the national TB program, and transportation support for the distribution of medicines. The UK/ODA funds support activities at Maputo Hospital. The U.S. has funded vital medicines and surgical materials for afetados and deslocados as well as technical assistance and condoms for the national AIDS program.

A variety of NGOs work in health in Mozambique. Canadian CUSO provides support for dental health training. MSF/France provides funding for rehabilitation of health

centers in Zambezia and Manica provinces. Save the Children Fund (U.K.) provides support for the MOH EPI program and epidemiology units, and for health worker in-service training in Zambezia province. Missionary Aviation Fellowship (MAF) has provided vehicles and an ambulance for health posts in Beira, Boane, and vehicles for dental outreach services. Lutheran World Federation provides laboratory equipment for Maputo Hospital, and United Support of Artists for Africa provides funds for a primary health care project in Xai-Xai. World Vision Relief and Development Organization is providing primary health care support to dislocados in conjunction with logistical food aid support.

RF

ACTION: AID-3

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TO RUEETC/AMEMBASSY MAPUTO IMMEDIATE 9957

INFO RUEHME/AMEMBASSY MBABANE IMMEDIATE 0397

RUEENR/AMEMBASSY NAIROBI IMMEDIATE 3912

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 CN: 09872  
 CHRG: AID  
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10 APR 1989

AIDAC MBABANE FOR SELVAGGIO AND KEENE, NAIROBI FOR REDSO/ES

E.O. 12356: N/A

TAGS:

SUBJECT: MOZAMBIQUE PILOT CHILD SURVIVAL PROJECT  
 (656-0227): PID GUIDANCE CABLE

1. THE ECPR FOR THE SUBJECT PID TOOK PLACE ON MARCH 14, 1989. THE ECPR WAS CHAIRED BY AFR/PD DIRECTOR TIMOTHY J. BORK WITH REPRESENTATIVES FROM AFR/PD/SA, AFR/SA, AFR/TR/HPN, AFR/DP/FAB, AND GC/AFR. USAID/MOZAMBIQUE DIRECTOR JULIUS SCHLOTTHAUER REPRESENTED THE MISSION. THE BUREAU APPROVED THE PID AND AUTHORIZED THE MISSION TO PROCEED TO DEVELOP AND APPROVE THE PROJECT PAPER AND TO AUTHORIZE THE PROJECT IN ACCORDANCE WITH STANDING DELEGATIONS OF AUTHORITY AND WITH THE GUIDANCE PROVIDED HEREIN.

2. PROJECT RATIONALE. THE ECPR QUESTIONED THE MISSION'S RATIONALE FOR INITIATING A RURAL HEALTH DELIVERY PROGRAM AT THIS TIME IN MOZAMBIQUE. THIS STEMMED FROM A CONCERN THAT THE PID HAD NOT PREPARED THE ANALYTICAL BASIS FOR THE PROPOSED INTERVENTION. IN THE ABSENCE OF SUCH A DISCUSSION, IT WAS DIFFICULT TO SEE HOW THE INCREASED COSTS AND RISKS ASSOCIATED WITH DOING BUSINESS IN A RURAL SETTING THROUGH A GPRM ORGANIZATION

COULD BE JUSTIFIED. FOR EXAMPLE, IF THE ULTIMATE OBJECTIVES OF THE PROJECT ARE ALONG THE LINES OF INSTITUTIONALIZING CHILD SURVIVAL INTERVENTIONS, WOULDN'T IT MAKE MORE SENSE TO BEGIN THAT PROCESS IN A NON-STRIP AREA, I.E., AN URBAN AREA?

ALTERNATIVELY, IF THE SECRETER-RUN OBJECTIVE IS TO DECREASE THE RATES OF CHILD MORBIDITY AND MORTALITY IN THOSE AREAS WHERE THESE RATES ARE NEGATIVELY AFFECTED BY THE PRESENCE OF WAR-LIKE CONDITIONS, WOULDN'T ANOTHER STRATEGY MORE DIRECTLY ACHIEVE THE OBJECTIVE; F.G., PROVIDE EMERGENCY ASSISTANCE TO A ZAMBEZIA-BASED CLINIC? UNDER THIS SCENARIO, DEVELOPING MOE SUPERVISION SYSTEMS, FOR EXAMPLE, SEEMS A CIRCUITOUS ROUTE TO ACHIEVING THE OBJECTIVE.

THE MISSION DIRECTOR PRESENTED TO THE BOPE A STRONG CASE FOR PROCEEDING WITH A RURAL-BASED CHILD SURVIVAL PILOT EFFORT IN MOZAMBIQUE AT THIS TIME. ON THIS BASIS, THE ECPR AGREED TO GIVE THE GO-AHEAD FOR PROJECT PAPER DEVELOPMENT. NEVERTHELESS, THE ECPR CONCLUDED THAT THERE IS A NEED TO EXAMINE OPTIONS IN ADDITION TO THE APPROACH OUTLINED IN THE PID (PARTICULARLY THE OPTION OF WORKING IN URBAN, RATHER THAN RURAL, AREAS) SO THAT, BY THE END OF THE PILOT, A.I.D. WILL HAVE A CLEAR RATIONALE AND STRATEGY FOR A LONGER-TERM EFFORT. VARIOUS CRITERIA FOR COMPARING OPTIONS WERE DISCUSSED AT THE ECPR. PERHAPS MOST IMPORTANT IS THE ESTIMATED COST-EFFECTIVENESS OF A.I.D. INTERVENTIONS IN TERMS OF IMPACT ON HEALTH STATUS. MISSION SHOULD CLEARLY SEEK TO IMPLEMENT A STRATEGY WHICH WILL REACH THE GREATEST NUMBERS OF AT RISK MOZAMBIKAN CHILDREN AT THE LOWEST MARGINAL COST. WE KNOW THAT THE COSTS OF DOING BUSINESS IN RURAL MOZAMBIQUE ARE SIGNIFICANTLY HIGHER THAN IN URBAN AREAS. DURING THE PILOT, MISSION SHOULD LOOK AT WAYS TO REDUCE THESE COSTS OR, ALTERNATIVELY REACH MORE AT-RISK CHILDREN FOR ESSENTIALLY THE SAME INVESTMENT. A SECOND CRITERION IS REPLICABILITY OF THE PILOT EFFORT ON A BROAD SCALE IN MOZAMBIQUE. HOW SIMILAR IS THE SELECTED PILOT AREA (OR AREAS) TO OTHER PARTS OF THE COUNTRY IN TERMS OF THE NATURE OF HEALTH PROBLEMS CURRENT HEALTH CARE DELIVERY SYSTEMS AND THE EFFECTS OF CIVIL STRIFE? WHAT IS THE MISSION'S EXPECTATION REGARDING THE CONTINUATION OF THE INSURGENCY AND, HENCE, THE REPLICABILITY OF LESSONS THAT MIGHT BE LEARNED FROM PILOT CHILD SURVIVAL ACTIVITIES THAT TAKE PLACE IN A STRIFE-TORN AREA? THIRD, OPTIONS SHOULD BE ANALYZED IN THE LIGHT OF THE SECURITY RISK TO PROJECT PARTICIPANTS. THESE INCLUDE A.I.D. PERSONNEL, THE STAFF OF

.I.D.-FUNDED CONTRACTORS OR NGO'S, AND MOH STAFF, AS WELL AS THE BENEFICIARY GROUP. THIS IS OBVIOUSLY A QUESTION THAT MUST BE CAREFULLY ADDRESSED UP-FRONT IN THE PROJECT PAPER, AS WELL AS MONITORED DURING IMPLEMENTATION. IN JUSTIFYING A GIVEN APPROACH, REFERENCE SHOULD ALSO BE MADE TO OTHER DONOR ACTIVITIES. IN PARTICULAR, THE MISSION SHOULD SHOW HOW THE PROPOSED A.I.D. PROJECT IS CONSISTENT WITH THE OVERALL HEALTH SECTOR POLICY THRUST OF THE IERD AND COMPLEMENTS THE SPECIFIC ACTIVITIES PLANNED BY THE BANK.

THE ECPR AGREED THAT THE ANALYSIS OF OPTIONS COULD BE SET OUT IN THE PROJECT PAPER IF THE MISSION HAS ACCESS TO SUFFICIENT INFORMATION. IF THE INFORMATION BASE IS WEAK, THE PILOT PROJECT ITSELF SHOULD BE DESIGNED TO TEST OPTIONS AND THEREBY DEVELOP THE KNOWLEDGE AND EXPERIENCE NEEDED TO ELABORATE A LONGER TERM STRATEGY AND PROJECT ACTIVITIES IN THE HEALTH SECTOR.

3. IMPLEMENTATION STRATEGY. THE PROPOSED PROJECT WOULD SEEK TO IMPROVE PRIMARY HEALTH CARE DELIVERY BY STRENGTHENING THE MINISTRY OF HEALTH, WITH SUPPORT FROM A NONGOVERNMENTAL ORGANIZATION WHICH HAS PRESENCE AND EXPERIENCE IN THE PROJECT AREA. THE ECPR DISCUSSED THREE ISSUES RELATED TO THIS IMPLEMENTATION STRATEGY.

(A) AGAIN, THE EXISTENCE OF THE ARMED INSURGENCY LED THE ECPR TO QUESTION THE APPROPRIATENESS OF WORKING WITH A GPRM MINISTRY IN ZAMBEZIA AND W Q MDQPYV EFFECTIVELY PURSUED IN A NON-STRIKE AREA. THE ECPR RECOMMENDED THAT, IF THE ASSESSMENT OF OPTIONS AFFIRMS THE PLAN TO IMPLEMENT THE PILOT PROJECT IN AN INSURGENCY ZONE WHERE MOH AND OTHER GOVERNMENT FACILITIES ARE THE TARGET OF REBEL ATTACKS, A.I.D. SHOULD SEEK TO LIMIT ITS ACTIVITIES TO THOSE ABSOLUTELY NECESSARY FOR TESTING THE FEASIBILITY OF WORKING WITH THE MOH. THE ECPR INSTRUCTED THE MISSION TO EXAMINE FURTHER THE RESPECTIVE ROLES AND RELATIONSHIP OF THE MOH AND THE PARTICIPATING NGO IN LIGHT OF THESE CONCERNS. IT WAS THE SENSE OF THE ECPR THAT, EVEN THOUGH THE PROJECT MAY BE IMPLEMENTED THROUGH A GOVERNMENT-TO-GOVERNMENT AGREEMENT, ON-THE-GROUND LEADERSHIP FOR IMPLEMENTATION SHOULD BE VESTED IN THE NGO AND THAT THE APPROACH TO ASSISTING THE MOH SHOULD BE GRADUAL, FOCUSING INITIALLY PERHAPS ON INFORMATION SHARING AND SUPERVISORY TYPES OF ACTIVITIES.

(B) THE PID PROPOSES THAT FUNDING FOR THE NGO BE PROVIDED THROUGH AN A.I.D. COOPERATIVE AGREEMENT. THE

ECPR QUESTIONED WHETHER A COOPERATIVE AGREEMENT WAS THE APPROPRIATE MECHANISM FOR PROVIDING THE DESIRED TYPE OF ASSISTANCE, AND ALSO WHETHER A DIRECT RELATIONSHIP BETWEEN THE MOH AND NGO WOULD BE MORE IN KEEPING WITH THE INSTITUTIONAL STRENGTHENING OBJECTIVES OF THE PROJECT. THE MISSION SHOULD ASSESS THE VARIOUS OPTIONS FOR FUNDING THE NGO, INCLUDING THE PROVISION OF A.I.D. FINANCING FOR A HOST COUNTRY CONTRACT BETWEEN THE MOH AND NGO. A CLEARER DEFINITION OF THE ROLES AND RELATIONSHIP OF THE MOH AND NGO, PER PARA 3(A), ABOVE, SHOULD ASSIST IN CHOOSING AMONG OPTIONS. THE FINAL DECISION SHOULD BE JUSTIFIED IN THE PROJECT PAPER.

FURTHERMORE, IF THE CONTRACT MECHANISM IS FOUND TO BE APPROPRIATE AND IF THE MISSION WISHES TO OBTAIN THE NGO'S SERVICES ON A NONCOMPETITIVE BASIS, THE PROJECT PAPER SHOULD INCLUDE THE NECESSARY WAIVER. IF THE COOPERATIVE AGREEMENT ROUTE IS JUSTIFIED AND RPT AND IF THE NGO FITS THE DEFINITION OF A PVO (HANDBOOK 3, APPENDIX 4C), THEN THE NGO MUST BE REGISTERED WITH A.I.D. AS A PVO IN ORDER TO RECEIVE ASSISTANCE FROM A.I.D. COMPETITION IS DEEMED TO HAVE BEEN MET IF A GRANT OR COOPERATIVE AGREEMENT IS AWARDED TO A REGISTERED PVO EVEN IF CONSIDERATION HAS NOT BEEN GIVEN TO OTHER ENTITIES (HANDBOOK 13, CHAPTER 2).

(C) IT WAS NOTED AT THE ECPR THAT, ALTHOUGH HEALTH-RELATED NGO'S IN MOZAMBIQUE HAVE RECENTLY BEGUN

TO FOCUS ON PREVENTIVE, PRIMARY HEALTH CARE NEEDS, THEIR ACTIVITIES HAVE BEEN MAINLY ON THE EMERGENCY AND CURATIVE SIDE. THE MISSION SHOULD ENSURE THAT THE NGO SELECTED TO IMPLEMENT THE PROJECT HAS THE CAPACITY AND PROPER ORIENTATION TO SUPPORT THE KINDS OF PREVENTATIVE CHILD SURVIVAL INTERVENTIONS TARGETED BY THE PROJECT.

4. PROJECT PAPER ANALYSES. GIVEN THE PILOT NATURE OF THIS PROJECT, THE DCPR RECOGNIZED THAT FULL PROJECT ANALYSES ARE NOT APPROPRIATE. THE ANALYSES SHOULD FOCUS ON (A) ISSUES ARISING FROM THE INSURGENCY AND THE QUESTION OF OPTIONS TO IMPLEMENTING THE PROJECT IN ZAMBESIA AS DISCUSSED IN PARAS 2 AND 3, AND (B) THE BASIC REQUIREMENTS FOR IMPLEMENTING THE PROJECT. FOR EXAMPLE, THE ECONOMIC ANALYSIS SHOULD ADDRESS THE QUESTION OF COST-EFFECTIVENESS. THE SOCIAL AND INSTITUTIONAL ANALYSES SHOULD EXAMINE THE SECURITY IMPLICATIONS OF DIFFERENT OPTIONS AND THE APPROPRIATE APPROACH TO WORKING WITH THE MOH. THE TECHNICAL ANALYSIS SHOULD COMBINE THE FINDINGS OF THE ECONOMIC, SOCIAL AND INSTITUTIONAL ANALYSES WITH A DISCUSSION OF

REPLICABILITY, OTHER DONOR ACTIVITIES, AND OTHER ISSUES AND THUS ESTABLISH THE RATIONALE FOR THE OPTION TO BE IMPLEMENTED UNDER THE PILOT PROJECT. (IF INSUFFICIENT INFORMATION IS AVAILABLE AT THE PROJECT PAPER STAGE TO FINALIZE THE ANALYSES, THEY SHOULD IDENTIFY THE GAPS AND DELINEATE A STRATEGY FOR COLLECTING THE NEEDED INFORMATION DURING IMPLEMENTATION OF THE PILOT PROJECT.) IN TERMS OF BASIC REQUIREMENTS FOR IMPLEMENTATION, THE INSTITUTIONAL ANALYSIS SHOULD EXAMINE THE CAPACITIES OF THE MOH AND THE NGO. THE TECHNICAL ANALYSIS SHOULD DISCUSS THE APPROPRIATENESS OF THE SELECTED CHILD SURVIVAL INTERVENTIONS. THE

FINANCIAL ANALYSIS SHOULD DEMONSTRATE THE ADEQUACY OF THE FINANCIAL PLAN FOR ACHIEVING PLANNED PROJECT OUTPUTS.

THE PROJECT PAPER SHOULD ALSO IDENTIFY IN EACH ANALYTICAL AREA THE MORE SPECIFIC OPERATIONAL KINDS OF ISSUES THAT ARE RELEVANT TO THE FEASIBILITY AND DESIGN OF A LONGER-TERM EFFORT AND THAT WILL BE EXPLORED DURING PROJECT IMPLEMENTATION. EXAMPLES OF THESE ISSUES INCLUDE THE FOLLOWING: TO WHAT EXTENT CAN SERVICE DELIVERY BE EFFECTIVELY MOVED FROM FIXED FACILITIES TO THE COMMUNITY? WHAT LEVEL OF SERVICES AND COVERAGE CAN THE MOH PROVIDE WITHIN ACTUAL AND PROJECTED RESOURCE LEVELS? IF THE PROJECT IS IMPLEMENTED IN AN INSURGENCY ZONE WHAT IS THE MOST EFFECTIVE WAY TO DEAL WITH DISPLACED PERSONS? ARE CLIENTS WILLING TO SEEK SERVICES AT MOH FACILITIES WHICH MAY BE TARGETS FOR ATTACKS BY REBELS?

5. PROJECT OBJECTIVES. THE STATED OBJECTIVES OF THE PROJECT SHOULD BE IN KEEPING WITH ITS PILOT NATURE AND LIMITED SCOPE. THE ROPS APPEAR TO BE REASONABLE. HOWEVER, SOME OF THE OUTPUTS LISTED IN THE LOGFRAME RELATE TO IMPACTS ON HEALTH STATUS, A GOAL-LEVEL OBJECTIVE. IT IS QUESTIONABLE TO WHAT EXTENT HEALTH IMPACT, AS OPPOSED TO INSTITUTIONAL AND SERVICE DELIVER OBJECTIVES, CAN BE ACHIEVED AND MEASURED IN A TWO-YEAR PILOT PROJECT. THE PROJECT PAPER DESIGN TEAM SHOULD CAREFULLY STRUCTURE THE OBJECTIVES TO REFLECT WHAT CAN REALISTICALLY BE ACHIEVED GIVEN THE PROJECT'S PILOT NATURE AND INPUT LEVELS. THE MISSION SHOULD FULLY UNDERSTAND THAT THE ECPR APPROVED THCS EFFORT ONLY AS A PILOT ACTIVITY NECESSARY TO TEST CERTAIN IMPLEMENTATION MODALITIES AND TO OBTAIN INFORMATION NECESSARY TO ESTABLISH ANALYTICAL BASES FOR A LARGER PROJECT EFFORT TO BE SEPARATELY DESIGNED, JUSTIFIED, AND FINANCED. THE MISSION SHOULD NOT SEEK TO EXPAND THIS PILOT PROJECT INTO A FULL SCALE CHILD SURVIVAL PROGRAM WITHOUT FIRST

UNDERTAKING A FULL ANALYTICAL EFFORT.

6. TECHNICAL ASSISTANCE SERVICES. THE PID REFERS TO ACCESSING SHORT-TERM U.S. TECHNICAL ASSISTANCE SERVICES THROUGH A CENTRALLY FUNDED COOPERATIVE AGREEMENT. IN GENERAL, A CONTRACT RATHER THAN A COOPERATIVE AGREEMENT IS THE APPROPRIATE VEHICLE FOR OBTAINING TECHNICAL ASSISTANCE. COOPERATIVE AGREEMENTS SHOULD BE USED TO SUPPORT ONGOING ACTIVITIES OF THE RECIPIENT THAT SUPPORT A.I.D. /90(/--58:-). THE BUDGET INCLUDES A SMALL LINE ITEM FOR PHARMACEUTICALS IN THE EVENT THAT THEY ARE NOT AVAILABLE FROM OTHER SOURCES FOR A SPECIFIC PROJECT INTERVENTION. THE MISSION DIRECTOR CONFIRMED THAT UNICEF IS THE MAIN SUPPLIER OF THE REQUIRED KINDS OF PHARMACEUTICALS IN MOZAMBIQUE AND THAT IT IS THE MISSION'S INTENTION NOT TO FINANCE THEM IF IT CAN BE AT ALL AVOIDED. UNDER THESE CIRCUMSTANCES THE MISSION MAY WISH TO TREAT THIS AS A CONTINGENCY ITEM IN THE BUDGET RATHER THAN AS A SEPARATE LINE ITEM. IF THE MISSION DOES OPT TO FINANCE PHARMACEUTICALS AND INCLUDES A

SEPARATE LINE ITEM IN THE BUDGET, THE PROCUREMENT PLAN IN THE PROJECT PAPER SHOULD DESCRIBE HOW THE MISSION INTENDS TO PROCURE THE PHARMACEUTICALS TAKING INTO CONSIDERATION A.I.D.'S SPECIAL PROCUREMENT REGULATIONS FOR PHARMACEUTICALS (HANDBOOK 1B, SECTION 403).

8. MONITORING AND EVALUATION. THE PID PROPOSES THAT THE PROJECT EVALUATIONS BE CARRIED OUT BY A.I.D. DIRECT HIRL STAFF IN COLLABORATION WITH THE MOH AND OTHER PROJECT PARTICIPANTS. GIVEN THE PERENNIAL SCARCITY OF CI FUNDS AND THE POSSIBLE NEED FOR OUTSIDE EVALUATORS WITH SPECIALIZED TECHNICAL EXPERTISE THE MISSION SHOULD CONSIDER ADDING A SEPARATE BUDGET LINE ITEM FOR EVALUATION, MONITORING, AND AUDIT SERVICES. IN ADDITION, THE PROJECT PAPER SHOULD CONTAIN A MONITORING AND EVALUATION PLAN WHICH SETS OUT A METHODOLOGY FOR ANSWERING THE KINDS OF FEASIBILITY QUESTIONS TO BE TESTED BY THE PILOT PROJECT.

9. IEE. THE BUREAU ENVIRONMENTAL OFFICER APPROVED THE RECOMMENDATION FOR A CATEGORICAL EXCLUSION CONTAINED IN THE PID. A COPY OF THE APPROVED IEE HAS BEEN POUCHED TO THE MISSION.

10. IN CONCLUSION, THE ECPR APPROVED THE PID AND AUTHORIZED THE MISSION TO PROCEED WITH PROJECT PAPER

DEVELOPMENT. HOWEVER, TO PROCEED WITHOUT EXPLICIT CONSIDERATION AND ANALYSIS OF ALTERNATIVES TO THE SINGLE APPROACH DESCRIBED IN THE PID IS NOT ACCEPTABLE. THROUGH THE PROCESS OF FURTHER DESIGN WORK AND THE EXPERIENCE GAINED DURING IMPLEMENTATION OF THE PILOT EFFORT, THE MISSION SHOULD ASSESS OPTIONS AND DEVELOP A CLEAR STRATEGY AND DEFENSIBLE RATIONALE FOR ADDRESSING THE SERIOUS HEALTH AND CHILD SURVIVAL PROBLEMS IN MOZAMBIQUE OVER THE LONGER TERM. BAKER

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06/29/89

REPÚBLICA POPULAR DE MOÇAMBIQUE  
MINISTÉRIO DA SAÚDE

Nº.

Maputo, 29./06/1989

Sr. Julius Schlotthauer  
Director  
USAID Mission  
Maputo

1300/CIS-SPNS/89

Exmº. Sr. Schlottheuer,

Tenho a honra de escrever-lhe sobre a colaboração no ano transacto entre o Ministério de Saúde e a Missão USAID no desenvolvimento do Projecto de Sobrevivência da Criança na Província da Zambézia. Estamos deveras satisfeitos com o projecto por se estar a desenvolver e gostaríamos oficialmente de solicitar assistência dos Estados Unidos.

Estamos satisfeitos pelo facto de a Johns Hopkins University e a Medicins Sans Frontieres prestarem assistência na implementação do projecto. Podemos agora também confirmar o nosso compromisso de executar o projecto como acordado, contribuindo deste modo com pessoal, serviços e medicamentos equivalentes a \$300,000 como nossa contribuição ao projecto.

Estamos ansiosos por esta nova iniciativa de Moçambique e Estados Unidos.

Atenciosamente,

O DIR. DA Direcção Nacional de Saúde,

Dr. António Jorge Rodrigues Cabral



C.C.: DNS/SMI  
DCI/RCB  
GABT. SE. MIN. COOP.

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