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**ASSESSING THE ORS MARKET  
AND  
PROGRAM PLANNING FOR THE  
CONTROL OF DIARRHEAL DISEASES  
MADAGASCAR**

**A Report Prepared by PRITECH Consultant:  
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**During The Period:  
DECEMBER 7-18, 1992**

**TECHNOLOGIES FOR PRIMARY HEALTH CARE (PRITECH) PROJECT**

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## ABBREVIATIONS

AID	Agency for International Development
APPROPOP	Appui au Programme de Population, USAID Project
CDD	Control of Diarrheal Disease Program
CS	Child Survival
DTU	Diarrhea Training Unit
GOM	Government of Madagascar
IEC	Information, Education and Communication
MCH	Maternal and Child Health
MOH	Ministry of Health
MSH	Management Sciences for Health
NCDDP	National Control of Diarrheal Disease Program
ODIVA	Local ORS Brand Name
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PRITECH	Technologies for Primary Health Care Project
SSS	Sugar Salt Solution
TOT	Training of Trainers
UNICEF	United Nations Children's Fund
WFP	World Food Program
WHO	World Health Organization

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## EXECUTIVE SUMMARY

The PRITECH Social Marketing Specialist, Mr. Camille Saade and PRITECH Kenya's Country Representative, Ms. Karen Blyth visited Madagascar from December 7-18th, 1992 to begin planning for PRITECH activities previously designed by the National Control of Diarrheal Disease Program (NCDDP), Ministry of Health and PRITECH consultants (Prins/Heise) in April, 1992 in collaboration with USAID Antananarivo. PRITECH and USAID Antananarivo have negotiated a delivery order for support to the NCDDP which includes extensive PRITECH technical assistance.

The purpose of the visit by Blyth was to discuss with USAID and the MOH the content and timing of outlined PRITECH activities, begin administrative, financial and logistical arrangements for future PRITECH/MOH activities, and discuss the possibility of Karen Blyth becoming the PRITECH Country Representative for Madagascar from April-August, 1993.

Mr. Saade, who directs PRITECH's commercial sector activities, provided technical assistance to the national CDD program in the area of ORS social marketing. Mr. Saade analyzed the ORS market in Madagascar, reviewed the production and distribution issues, and developed different ORS supply, distribution and promotion options. He presented the advantages and disadvantages of each option to the Director of Preventive Medicine, to allow the MOH to make long-term decisions.

The team jointly met with the MOH, USAID, UNICEF, WHO representatives and private sector contacts including distributors, private pharmaceutical organizations and pharmacies. Ms. Blyth visited health facilities, ORT Corners and Diarrheal Training Units, and discussed PRITECH's programming and training plans with MOH officials and facility staff. Mr. Saade visited pharmaceutical producers and distributors in both governmental and commercial sectors.

Together the PRITECH team finalized plans for 1993 PRITECH-sponsored training activities in collaboration with the Director of Maternal and Child Health and the NCDDP Manager, Dr. Hanta Raveloson and Dr. John Claude Razafimanjato, her Deputy and PRITECH counterpart. Dates and plans were set for March 7-13, 1993 for the Diarrhea Training Unit Workshop and for March 22-27, 1993 for the IEC/CDD Strategy Workshop. These dates have subsequently changed, with the IEC training scheduled for March 8 - 12, and the DTU training from April 19 -30. Immediately following the IEC Strategy workshop, an ORS promotional strategy and selected promotional materials will be developed during working meetings with ODIVA and promotion partners. Most promotional materials will be developed and pre-tested by June/July 1993.

The national CDD coordinator and Blyth spent three days on important logistical, administrative and banking procedures to help establish a PRITECH/Madagascar office in 1993. Due to the thorough budget and overall program planning completed by the MOH and USAID/Madagascar, the PRITECH team was able to quickly delve into administrative issues. Revision to the PRITECH Work Plan will be incorporated and the budget adjusted accordingly to better reflect what can be accomplished in an eight month period. Steps were made to establish a bank account, look into buying a four wheel drive vehicle and office equipment, and make hotel reservations for upcoming NCDDP Training Programs (DTU,IEC), after a quick assessment of suitable hotels offering affordable prices and conducive environments for training programs.

## I. INTRODUCTION

PRITECH's overall program in Madagascar was developed by the Ministry of Health in collaboration with PRITECH consultants, Ms. Agma Prins and Mr. Ken Heise in April, 1992. Earlier PRITECH visits were made by Ms. Agma Prins in 1990 and 1991. The purpose of the PRITECH Program is to strengthen national efforts to reduce diarrhea-related morbidity and mortality among children under five in harmony with ongoing efforts supported by the UNICEF and WHO.

A PRITECH team consisting of Ms. Karen Blyth (future PRITECH representative in Madagascar) and Mr. Camille Saade (PRITECH social marketing specialist) visited Madagascar from December 7-18th, 1992 to begin planning for 1993 PRITECH activities.

## II. PURPOSE AND SCOPE OF WORK

The purpose of the PRITECH visit was to plan for future PRITECH activities and to analyze the ORS marketing situation in Madagascar. The two consultants had different objectives:

Consultant: Camille Saade

1. To provide technical assistance to the national CDD program in the area of ORS marketing.
2. To assess the ORS market in Madagascar and review the production and distribution channels.
3. Develop and present options on supply, accessibility, and marketing of ORS to the Director of Preventive Medicine.

Consultant: Karen Blyth

1. To discuss with USAID and the MOH the content and timing of 1993 PRITECH programming and training activities.
2. To begin administrative, financial and logistical arrangements for future activities, and discuss the possibility of Karen Blyth becoming the Country Representative for PRITECH Madagascar from April-August, 1993.
3. Prepare and present a draft report for review by USAID and the MOH.

### III. ORS MARKET ASSESSMENT

The purpose of the first visit was to analyze the market and provide a clear picture of the players, the opportunities and the constraints facing production and promotion of ORS in Madagascar. The primary issues in Madagascar are 1) whether to continue local production of ORS by ODIVA and 2) how to increase the availability of and access to ORS in the public and private sectors.

#### A. Market Analysis for Pharmaceuticals

##### 1. Pharmaceutical Producers:

Of the pharmaceutical producers in Madagascar, there are two private manufacturers (RATHERA and FARMAD), one parastatal manufacturer, (OFABA, reporting to the Ministry of Industry), and ODIVA, a separate production unit for ORS which is located within the Central Pharmacy (parastatal distribution organization for the public health system). At this time, only ODIVA produces ORS.

##### \* RATHERA

RATHERA is a small pharmaceutical company that manufactures under license some Pierre Fabre products. They also manufacture their own products, mostly bronchodilators, analgesics, and tonics in syrup form. Their future plan includes a production line for capsules and tablets. They have no plans for the manufacturing of a powder form and therefore they are not in their current state candidates for ORS production. The pharmacist in charge of RATHERA is also the president of the Pharmacists Association of Madagascar.

##### \* FARMAD

FARMAD is a medium-sized pharmaceutical company which formerly manufactured for Rhône-Poulenc but is now manufacturing only for Roussel, in addition to its own products. They have a wide production line ranging from I.V. solutions to tablets, capsules, syrups and ointments. They plan to add a sacheting machine to their line in the near future. Five years ago, they produced an adaptation of an ORS powder called Tsyranok, for diarrhea. However, no license was granted by the Ministry of Health and FARMAD had to withdraw the product. FARMAD primarily supplies the private sector, but also responds to MOH tenders. According to their sales, they estimate that the private sector market is between 60-90 billion FMG, while the public sector would be 30-45 billion FMG. However, in unit terms, the public sector volume would be 2 or 3 times larger.

FARMAD has its own sales force which consists of 12 medical representatives spread all over the country. Only three of them are based in Antananarivo. Through the sales force, FARMAD covers

doctors, pharmacies and depots across the country. The same family owning FARMAD also owns DROGEMAD, one of the four major distributors (see below).

\* OFAFA

OFAFA, a parastatal manufacturer, reports to the Ministry of Industry. It is owned 50% by the state and 50% by banks and insurance companies. It produces mostly tablets, pills and liquids (such as syrups). Its turnover last year was around 3 billion FMG, with one-quarter of its sales through the Central Pharmacy and the rest to the private sector. Most of the sales to the private sector are made through the wholesalers, and their own network, SIMED (Société d'Information Médicale), located in each of the five provinces. Each SIMED has a pharmacist in charge, plus administrative and warehouse personnel and a full-time medical representative in charge of marketing and sales in the province.

OFAFA is a sales driven organization. Each medical representative sets his sales objectives with the manager, and is rewarded for his sales on a monthly basis. The five medical representatives in Antananarivo cover the same geographical area, but have different product lines.

\* ODIVA

ODIVA/ORS PRODUCTION UNIT

(see earlier PRITECH reports: Prins/Heise, April 1992; Prins, 1991)

The ODIVA ORS Production Unit started operating in June, 1988 with subsidies from UNICEF. Since that time, UNICEF has supplied raw materials for the production of 2,000,000 packets. According to the original agreement between UNICEF and the Government of Madagascar, UNICEF was to supply raw material for the production of one million sachets during the first year, and enough for 500,000 sachets per year during the two subsequent years. The Ministry of Health was to supply raw materials for the production of 500,000 sachets during years two and three. The unit was to then become self sufficient. However, to date, the government contribution has been very limited due to budgetary constraints.

ODIVA sachets are produced on a semi-automatic Rovema filling machine, with a capacity of approximately one million sachets a year. So far, the average annual production is between 400,000 and 500,000 a year, with a peak of 600,000 sachets in 1992. The average weekly production is between 1-3 batches of 4,000 sachets each. Production can eventually be increased to reach 1 million sachets a year based upon 5 batches weekly. Labor consists of 15 workers: the manager of the unit, 2 laboratory technicians, 2 administrative personnel, and 10 production unit personnel. The ten production personnel are divided as follows: 4 for mixing/weighing, 4 for filling and packaging, and 2 for cutting and sealing of the

polyethylene bags.

ODIVA is packed in sachets for one liter preparations of solution. It has the standard WHO citrate formula. The ORS powder is filled in an inner polyethylene bag and sealed. It is then wrapped with the ODIVA leaflet and repacked in an outer polyethylene bag. Packing of ODIVA sachets is done in boxes of 50's. They are then re-packed into shipping cartons of 10 boxes equal to 500 sachets. Most of the production is sold to the Central Pharmacy, the parastatal distribution organization that supplies the Ministry of Health.

Approximately 100,000 sachets were sold in 1992 in the private market through two wholesalers (SOMAFAR and COFARMA). Actual inventory of ready-made sachets is approximately 150,000 sachets, while the inventory of raw material is sufficient for 700,000 sachets.

The ODIVA sachet is sold at 140 FMG to wholesalers, private pharmacies and to the central pharmacy. The price to the public in pharmacies is between 240-300 FMG in Antananarivo. It was reportedly sold at a higher price in the provinces.

It should be noted that the sales to the MOH are only on paper. However, the proceeds of the sales to the private wholesalers and pharmacies are kept in an account under the joint responsibility of the head of ODIVA production unit (Mme Léa), and the Chef de Service SMI (Dr. Hanta). The amount to date was reportedly between 30 and 40 million FMG.

The head of the ODIVA production unit developed a cost analysis for an ORS sachet, based on production of one million sachets a year. According to her detailed calculations, the cost of a sachet without any subsidies would be 292 FMG.

Raw Materials	135 FMG
Packaging Materials	72 FMG
Depreciation of Equipment	30 FMG
Labor	30 FMG
Laboratory Testing Agents	7 FMG
Other Administrative Costs	18 FMG
<b>TOTAL COSTS per SACHET</b>	<b>292 FMG</b>

No significant promotion for ODIVA has been carried out. Sales in the private sector have benefitted indirectly from the spill-over effect of the IEC campaigns and the health workers' training run by the MOH.

## 2. Pharmaceutical Distributors

\* COPHARMA

COPHARMA is one of the major pharmaceutical distributors in Madagascar. Though they service the pharmacies, they specifically focus on the small drugstores (depots) in the provinces. In 1992, they sold approximately 50,000 ORS sachets. They have a computer system which allows immediate access to sales and inventory levels of all the products they distribute. COPHARMA offered to communicate messages about ODIVA/ORS and distribute materials during the visits of their commercial agents to the provinces, or when the pharmacists and drugstore owners come to the office to place orders.

\* DROGEMAD

DROGEMAD is another major distributor, although they do not yet carry ODIVA. The main reason is the insistence on cash payments by the Central Pharmacy. DROGEMAD would prefer to "buy" a new product initially on a consignment basis, then if it takes off commercially, it would purchase it on a cash basis. DROGEMAD has a fleet of vehicles that distributes drugs in the metropolitan area of Antananarivo, but for the provinces they dispatch orders through rural transport systems. The general manager suggested a few promotional ideas for ODIVA, such as extensive use of radio, and displaying of signs on the rural transportation vehicles (taxi-brousse).

\* SOMAPHAR/Rhône-Poulenc-Rorer

SOMAPHAR is another of the four major distributors and is wholly owned by Rhône-Poulenc-Rorer (RPR). SOMAPHAR also distributes for other companies. Besides pharmacies and drugstores, their sales go to big accounts such as SOLIMA (petrol), JIRAMA (power), insurance companies and banks. They have a sales force of 6 medical representatives, exclusively promoting RPR products. They are based in Antananarivo and spend, in theory, one week every month in the provinces. Their promotional cycle covers three months in which they have to see 600 doctors. They make extensive use of direct mailing to support the sales force. SOMAPHAR offered to include an ODIVA brochure in one of its routine mailings. SOMAPHAR is the second largest distributor carrying ODIVA.

\* OPHAM

OPHAM is one of the four major distributors of pharmaceuticals but they do not yet carry ODIVA. The general manager was not available during this PRITECH visit.

\* Central Pharmacy (Pharmacie Centrale)

The Central Pharmacy is the parastatal distribution organization that supplies the public health system. It reports to the Director of Pharmacy and Laboratories at the MOH. The Central Pharmacy distributes drugs through their two trucks to the provincial

capitals only. Further distribution is the responsibility of the provincial authorities. Their 1992 budget was 4.5 billion FMG, supplemented by 9 billion FMG from the Cooperation Suisse. They estimate their real financial need to be around 24 billion FMG to satisfy the minimum needs of the public health system. According to the Director of the Central Pharmacy, the pharmaceutical market in Madagascar is split, 40% public and 60% private sector. They plan to computerize their inventory system as of February, 1993. Besides ODIVA, which is produced in their building, they also plan to produce I.V. solutions shortly (fully funded by Cooperation Suisse).

### 3. Distribution Outlets

#### \* Pharmacies

There are only between 160-180 pharmacies in the country, half of them in Antananarivo. Pharmacies are staffed by a registered pharmacist, who is assisted by a number of counter clerks (vendeurs). Pharmacists belong to one of the three professional pharmacists' associations (Ordre des Pharmaciens, Syndicat des Pharmaciens, and Association des Pharmaciens).

#### \* Depots (Small Drugstores)

Depots are intended to fill the country-wide shortage in pharmacies. Owners of these small drugstores are required to have a license from the Pharmacy and Laboratory Division in the MOH. There are between 1,500-2,000 depots throughout the country, most often close to a health center. Depots can sell a limited amount of drugs. However, most of the depots, if large enough, can have the same inventory as a pharmacy. In theory, the depots receive their supplies from the pharmacies at a 10% mark-up.

#### Other Distribution Channels (ie: the chloroquine circuit)

The MOH chloroquine distribution network which began in February, 1992, is a de-centralized system with funding from the World Bank (\$600,000). Chloroquine is distributed by the district health center to local community leaders that have been trained in basic knowledge about malaria prevention and treatment. The box of 1,000 tablets is sold at 5,000 FMG to the identified community leaders (grocery owner, school teacher, etc.) who sell tablets at 15 FMG each (making a profit of 10,000 FMG on each box). The distribution program is viewed as an experiment of sorts, and should be monitored by the CDD Program as an option for ORS distribution.

## **B. KEY ISSUES**

### **1. Continuous supply of ORS.**

The potential ORS needs to treat infantile diarrhea in Madagascar are estimated as follows:

Three million children below five years of age times four episodes of diarrhea annually equals twelve million episodes. If only 20% are treated with two 1-liter sachets, the potential need for ORS would equal 4.8 million sachets.

Currently, the ODIVA annual production averages approximately 500,000 sachets, far below the estimated need. In 1993, ODIVA's production capacity could reach 1 million sachets, enough to cover the projected growth in sales. ODIVA sales are projected to increase to 1.5 million sachets in 1994, 2 million in 1995, and 2.6 million in 1996, at which point the sales should be equally split between the private market and the public sector (see Figure 1). To address the current shortfall, three options are offered:

a. Increasing the production capacity of ODIVA, either through a second shift, or through a higher capacity automatic filling machine. However, a higher capacity machine would require a capital investment of approximately \$100,000. In either case, the issue of sustainable operations will have to be addressed.

b. Increase local production, either by complementing or substituting for ODIVA's production through one of the two potential local producers, OFAFA or FARMAD. Each offers the added advantage of providing medical representatives for the promotion of the product.

c. Importation of ORS sachets for the public health sector by donors, for the private sector through one of the wholesalers, and for the NGO community through their own organizations.

### **2. Availability and Accessibility of ORS**

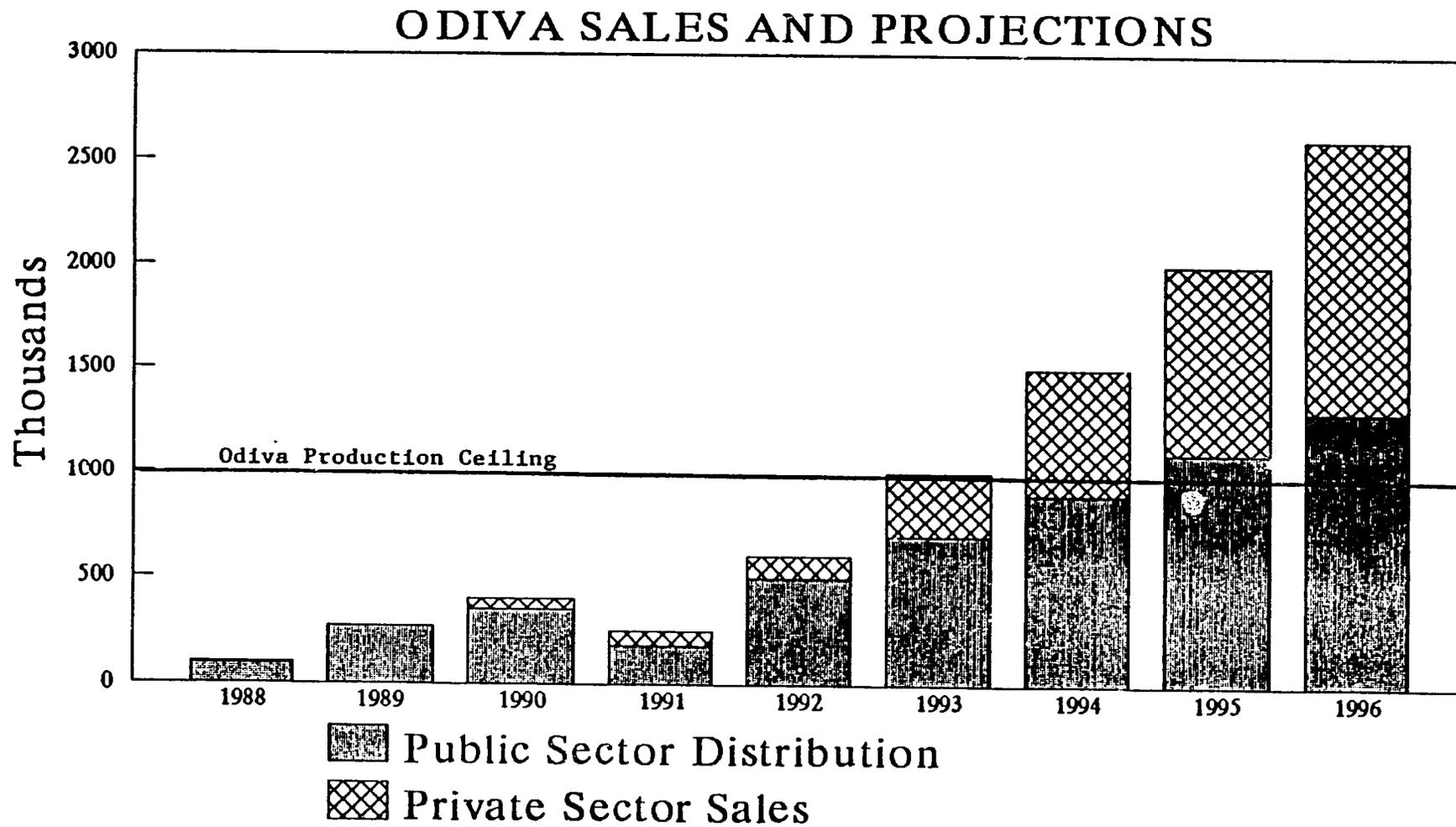
#### **a. Public Sector:**

In the public sector, the main factors influencing availability and accessibility of ORS are the distribution system and the price of the product. The limited budget of the health centers does not allow them to purchase sufficient ORS to satisfy their patients' needs, especially when the product is distributed for free.

#### **Options:**

1. If the MOH policy is to continue the free distribution of

Figure 1



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essential products, including ORS, the price of ORS could be artificially lowered to accommodate the very limited budget of the health centers. Essentially, the subsidy burden would fall on the MOH and ODIVA.

2. If the MOH adopts a nation-wide cost-recovery scheme, then the price of ORS should be adjusted to allow a small profit margin to the health centers while still being affordable to the patients.

b. Private Sector:

The main factors influencing availability of ORS in the private sector are demand and distribution.

Options: Consumer demand for ORS is expected to be generated through the proposed promotional activities outlined in the next section. ORS distribution can be enhanced by supplying all existing private distribution channels through incentive programs, in order to create inventory pressure at all levels (wholesalers, pharmacies and drugstores). In other words, create the PUSH.

3. **Correct Use of ORS**

Before ORS can be effectively promoted, a National Policy must be promulgated. IEC and ORS promotional activities would then be designed to achieve the ends of the National Policy. A comprehensive ORS promotion strategy should address the relevant population segments. An outline of possible promotional activities aimed at selected targets could be as follows:

a. Consumers (Mothers)

An IEC campaign needs to be developed to generate consumer demand for ORS. Point of sales materials will be developed for pharmacies and drugstores to promote the purchase of ORS in the store. Educational materials will be distributed in health facilities as well as in pharmacies and private clinics. Activities including school children could also be considered.

b. Private Physicians

The most efficient way to influence the behavior of prescribing physicians is through the frequent visits of medical representatives. We will try to enlist the sales force support of OFAFA or FARMAD. Promotional materials such as brochures and prescription pads will be developed to support the detailing efforts by the medical representatives. It is essential that we gain the support of opinion leaders in the medical community. A specific approach will be designed for the Physicians' Associations.

c. Public Health Medical Personnel

Continued case management training will be led by the National CDD Program to improve good case management practices by public health personnel. Educational materials will be developed and above all the training curricula will be updated.

d. Distributors/Retailers

An incentive program will be developed for wholesalers, pharmacies and drugstores to encourage ORS stocking and sales. Point of sale materials will be developed for pharmacies and drugstores.

The topic of diarrhea will be the primary subject at the next annual meeting of the Pharmacists' Association. The Pharmacists' Association plans to have an Open Door event (Journées Portes Ouvertes) on February 18 and 19, 1993 to promote pharmacists' interaction with the public. The national CDD coordinator will present updated information on diarrhea management, using this opportunity to upgrade knowledge and practices of the pharmacists. PRITECH has sent materials to support this effort.

e. NGO Community

A strategy will be developed to coordinate ORS promotion and supply with the major NGO Health Care Providers, estimated to cover 10 - 12% of health care services in the country.

The above outline is aimed at generating demand (ie: creating the PULL).

**C. PRELIMINARY MARKETING RECOMMENDATIONS FOR ORS**

Until further exploration of the options suggested above is carried out, PRITECH's preliminary position is to satisfy the unmet need for ORS by maximizing the utilization of the available resources, and by phasing in the additional resources necessary to achieve the long-term goal of sustainability.

In view of this, PRITECH recommends (for the short term) maintaining the ODIVA production unit as long as it can satisfy the level of ORS demand. However, to maintain ODIVA's operation, it will be necessary to renegotiate the agreement with UNICEF or other donors to supply part of the needed raw materials. As the demand for ORS is expected to increase over the one million sachet production capacity of ODIVA, probably in 1994, it will be necessary to find a suitable and sustainable source of supply. PRITECH recommends starting now the approach of enlisting the resources of a private manufacturer.

One suggested scenario is that the selected manufacturer would initially supply the private market needs in ORS, while ODIVA will continue to supply the public sector. Once private sales reach a sustainable level, there would be an option to source the public health system from either the private manufacturer or from ODIVA, based on cost-effectiveness and other sustainability criteria.

#### **IV. MOH/CDD ACTIVITIES, ISSUES, AND DISCUSSION**

##### **A. NATIONAL CDD PROGRAM**

The PRITECH visit in December, 1992 had two primary objectives as stated earlier. This section will address issues pertaining to the development of a revised 1993 Work Plan as well as administrative arrangements for PRITECH activities. Throughout the two week visit, PRITECH worked closely with Dr. Hanta Raveloson, Head of MCH Services and NCDDP Manager, and Dr. John Razafimanjato, the recently appointed MCH/Deputy and PRITECH's direct MOH counterpart.

There are currently four members of the National CDD Program. In addition to Dr. Raveloson and Dr. Razafimanjato, there are two paramedical staff, Ms. Monique Wailhen (midwife) and Ms. Lala Raharinivo, (nurse) who have requested to be trained in diarrhea management. Their roles are primarily administrative, coordinating program activities. It is recommended that their roles and allocation of responsibilities be better defined within the NCDDP, and their CDD knowledge/skills updated, so that they can become active team members of the National CDD Program.

In addition to daily meetings with the national CDD program staff, PRITECH held meetings with division managers (Nutrition, ARI, Health Education, Family Planning) within MCH Services. MOH policy in MCH Services is to encourage integration among the different divisions. There are plans to develop an integrated approach in MCH Services for health information systems, training, and overall program implementation and supervision.

As the major objective of this visit was to lay the groundwork for upcoming PRITECH activities, the PRITECH/MOH Work Plan was revised to respond better to the MOH/CDD 1993 Action Plan. Activities and timeframes submitted in the PRITECH Proposal developed in April, 1992 were adjusted accordingly with the NCDDP Coordinator. PRITECH interventions were reviewed and prioritized. These are discussed in Section VII below. Of utmost priority is the need for the Ministry of Health and the NCDDP to jointly finalize the National CDD Policy, as this policy will provide the underpinning for all other activities.

##### **B. DISCUSSION WITH MOH OFFICIALS (NATIONAL HEADQUARTERS)**

It was extremely important to discuss with and develop consensus among national MOH officials, in order to move forward on planned 1993 PRITECH program activities.

1. Director of Preventive Medicine, MOH, Dr. R. Ranjalahy

Dr. Ranjalahy remains extremely supportive of planned 1993 PRITECH activities. He is aware of the need to finalize the National CDD Policy as a first-step to program implementation. He is particularly interested in PRITECH's assessment of the ORS market and will study the various options presented to him by Camille Saade, and determine the best path to follow. PRITECH had the good fortune of being visited by Dr. Ranjalahy in Arlington, Va. in November, 1992, while he was in the United States.

2. Director of Pharmacy and Laboratories, MOH, Dr. Jean Remi Randriamanjaka

In addition to the overview of the pharmaceutical sector discussed earlier in this report, Dr. Randriamanjaka discussed the public sector pharmaceutical approach in Madagascar, specifically the following community-based pharmacy initiatives:

1. Cooperation Suisse: Community Pharmacies/Fianarantsoa
2. Initiative de Bamako (UNICEF) Preliminary Study
3. GTZ/ Majunga Province

3. Director of National Training Unit, MOH, Professor Razafindrakoto

The Ministry of Health feels that health personnel are too often away from their posts being trained, without producing tangible results. The MOH is also concerned about inadequate supervision and follow-up provided for these health workers. The National Training Unit, which reports directly to the Secretary General, was recently formed by the MOH, to coordinate all health training activities, to ensure quality training and follow-up, and to avoid duplication among the increasing number of donors.

The National Training Unit will develop and oversee central, provincial, district and health center level training teams who will coordinate all training programs within the Ministry of Health. The Director of the National Training Unit explained that health workers need to be competent in all technical areas. He expressed the need to develop supervisory and monitoring systems to help health workers implement learned skills.

PRITECH and the NCDDP met with the Director and Deputy of the National Training Unit to seek their support and direct involvement of 1993 planned training activities.

### **C. VISITS TO MOH HEALTH FACILITIES**

PRITECH visited several health facilities to develop an understanding of the constraints and opportunities that exist in

health facility case management practices. Of greatest concern were the minuscule public health sector budgets, limiting the purchase of ODIVA (ORS) needed to operationalize ORT Corners in public health facilities. The lack of accessibility, affordability and distribution of ORS in the public health sector remains a major constraint.

1. DTU, Hôpital Befelatanana, Professor Roland Rakotoarimanana

The DTU has not been operational for over a year due to political unrest. Medical students in Madagascar study CDD in their 4th year of training. In the past, the Hospital DTU would train 30 medical students every 6 weeks on diarrhea management. A major constraint has been the lack of DTU training materials, although they did have the current 1991 WHO Assessment Chart. The DTU at Befelatanana Hospital will be one of the sites for the PRITECH-supported CDD Documentation Center(s).

2. Demonstration Zone of Itaosy, Antananarivo Metropolitan (falls under MCH Services) Dr. Liliane Rajaonah

The Demonstration Zone of Itaosy is a pilot MOH health center that covers a population of 68,000 people. The ORT Corner was established in 1990 and is operational with equipment (table, plastic cups, 1 liter pitcher, hotplate) donated by UNICEF and ORS/ODIVA available through the MOH. The health center did not have the UNICEF CDD posters on display in the ORT Corner, nor a WHO assessment chart. According to Dr. Rajaonah, the mothers only stayed 1-2 hours in the ORT Corner, as they needed to return to work and/or care for children. They are however given 2-3 one liter sachets and are requested to return to the health center the following day for a follow-up visit. November to March is the peak diarrhea season when their cases rise dramatically.

3. Circonscription Médicale, Merina East, Dr. Josiane Andrianarsoa, Chef de Service

Severe budget constraints inhibit Dr. Josiane Andrianarsoa and her staff from conducting good case management practices. The Circonscription Médicale (CM) for Merina East serves over 1 million people, which includes the Antananarivo metropolitan area. The CM of Merina East covers 4 districts with a 1993 operational budget of 30 Million FMG, or \$160,000 to cover all expenses (including staff salaries) for 426 Sanitary Centers, 11 Dispensaries, and 1 Medical Center. The requested CDD budget alone totaled 48 million FMG, of which 35 million was to purchase 204,000 ODIVA sachets from the Central Pharmacy at 175 FMG per sachet. In 1993 Dr. Andrianarsoa will not be able to order her estimated ORS supply due to budgetary constraints.

#### 4. Urban Dispensary, Merina East (CM), Dr. Ingy Sylene

The urban dispensary lacked the space to have a functioning ORT Center. Due to budgetary constraints, they had a limited supply of ODIVA/ORS and had to ration treatment according to need. They are allotted 200 sachets/per month (4 boxes of 50 sachets), and these are quickly depleted. Clinic staff instruct the mothers on the use of SSS and home case management. They refer severely dehydrated cases to referral hospitals in Antananarivo for treatment.

#### **D. UNICEF**

UNICEF has been an extremely active partner in the control of diarrheal diseases under the leadership of Dr. Monique Traore. The NCDDP has benefitted from the collaboration between Dr. Traore and Dr. Hanta, the national CDD coordinator. Dr. Traore will be departing Madagascar in early 1993. Her replacement has not yet been determined. PRITECH will work closely with UNICEF in 1993.

As discussed earlier in this report, UNICEF supports the ODIVA Production Unit by providing imported raw materials for the production of ORS. UNICEF has also assisted the program in IEC (production of print materials), training, establishment of ORT corners and CDD surveys as noted below.

#### UNICEF/NCDDP Activities and Accomplishments:

1. Accessibility of ORS (ODIVA)
2. Establishment of ORT Centers (200)
3. Establishment of DTUs - Medical Schools/Provinces (9)
4. Diarrhea Management Training (all levels)
5. IEC: Development, production and distribution of posters.
6. Health Information Systems/Epidemiology
7. Operational Research

#### 1993 UNICEF/CDD Activities:

1. Training of Sanitary Agents (400), February, 1993
2. Supervision/Evaluation, 1993
3. ODIVA/ORS Support
4. Re-printing and Distribution of 3 posters:  
1. Treatment 2. Nutrition 3. Prevention.
5. Finalize 1991 Rapid Assessment Focus Group Results, Dr. Gladys Martin, UNICEF/Nairobi.
6. ORT Corner Support

#### **V. CDD PROGRAM PLANS**

##### **A. General Recommendations**

The PRITECH team supports recommendations and discussion points raised in the April, 1992 PRITECH Trip Report. Although the NCDDP has made significant gains with limited resources, in 1993 efforts in collaboration with PRITECH should focus on the development of

the National CDD Policy (currently being re-written by Dr. Hanta Raveloson), plans and strategies (Training, IEC, Supervision) and on ORS distribution and promotion strategy. PRITECH will assist the NCDDP in the development of these important policies, plans and strategies in 1993 to strengthen the foundation of the program.

Priority should also be given by the National Coordinator to build a central team with the four staff members, upgrading both their clinical and program management skills. Roles and responsibilities of each CDD team member should be clearly defined. PRITECH can assist with team-building and program planning through its ongoing provision of technical assistance.

#### **B. Achievements to Date**

Dr. Hanta Raveloson continues to work on the National CDD Policy which is being revised to incorporate national policies on both ORS and home case management. Dr. Raveloson attended a WHO/PRITECH sponsored planning meeting in Niger, November, 1992, where she also finalized the 1992 NCDDP Action Plan. Dr. John Razafimanjato was appointed as the PRITECH counterpart and the Deputy for the NCDDP. WHO training materials for 1993 program activities were ordered by Dr. Raveloson with Dr. Lejnev, CDD/Geneva Training Officer at the CDD Planning Workshop in Niamey, Niger.

#### **C. Documentation Centers**

The Ministry of Health decided that two CDD Documentation Centers (PRITECH-supported) would be established in 1993 at the following locations: DTU, Befelatanana Hospital, Antananarivo, and the MCH/MOH Library at the Institute of Hygiene. PRITECH visited both locations. Very few CDD resource materials exist in Madagascar. PRITECH/Washington should send all pertinent CDD materials c/o Dr. Hanta Raveloson to establish the two separate documentation centers. Specific training materials will be shared with the newly established National Training Unit at MOH headquarters.

#### **VI. REVISIONS TO SCOPE OF WORK:**

The Scope of Work (SOW) for PRITECH activities in Madagascar has gone through several revisions since it was first developed during the PRITECH team visit in April 1992. The PRITECH response to the SOW for the Delivery Order was developed in October, 1992, and submitted to AID/W contracts. It maintained the objectives and principal activities of the April draft, but reduced some of the outputs and deliverables in line with the shorter time period available for project implementation. The budget submitted by PRITECH reflected those changes. These changes were agreed to by USAID.

During the visit by Blyth in December, 1992, the SOW was again reviewed and some further changes were felt necessary. The initial

four objectives will continue to guide PRITECH interventions in Madagascar:

1. Increase the number of public and private sector health care providers practicing good case management for diarrhea including consistent prescription of Oral Rehydration Salts (ORS) in sufficient quantities, limited and appropriate use of drugs and procedures, integration of nutritional counseling, and good communication with mothers with respect to home management.
2. Develop an IEC strategy and materials and develop capacity in the area of IEC in order to improve health care workers' and mothers knowledge and practice of good home management.
3. Increase ORS demand, production, and availability.
4. Increase the effectiveness and efficiency of CDD Program implementation with an emphasis on improved program planning and monitoring and on operations research and evaluation.

Additional adjustments need to be made to some specific elements of the SOW to reflect what can be accomplished by PRITECH and the MOH in the eight months remaining in the Delivery Order. The revisions discussed below were jointly determined by Dr. Hanta and Ms. Blyth.

The revisions below make reference to the Scope of Work in the Delivery Order, attached as Annex VI.

**A. In conjunction with Objective 1:**

(Task III.A.3c. of Annex VI): Strengthen the Diarrhea Training Units (DTU) and Oral Rehydration Therapy (ORT) corners--includes numerous elements, one of which calls for training of up to 150 provincial trainers in pedagogical skills and in practical case management in the DTUs. This task will be undertaken but with reduced numbers targeted (20 trainers), as is outlined in the PRITECH budget. If possible, per MOH request, 10 trainers per 6 provinces will be trained.

(Task III.A.4a., 4b of Annex VI): Improve the rational use of drugs in the national program. Analyze current practices, attitudes and costs. Develop and implement a CDD action plan.

In order to accomplish this task, PRITECH had proposed two consultant visits by a rational drug use expert. Due to the reduced timeframe and the already heavy consultant load, the PRITECH team recommends eliminating this task. Technical assistance in rational drug use could be obtained outside the PRITECH project, i.e. through the AID/W Office of Health pharmaceutical management project (recently awarded to Management Sciences for Health).

**B. All tasks in Objectives 2 and 3 will be met. (Priority Objectives)**

**C. In conjunction with Objective 4:**

(Task III.D3 of Annex VI): Develop a simple Management Information System for CDD and train the staff in computer skills needed to manage the system.

Of priority to the MCH/NCDDP is for core staff to receive computer training. Dr. Hanta Raveloson has already received three bids from different local companies and selected the core staff. Dr. Raveloson would like to integrate all MCH programs into one MIS system. The PRITECH team recommends that we maintain this task but schedule only one (rather than two) MIS consultant trip in July-August, 1993. The consultant will develop a MIS framework for the NCDDP.

(Task III.D4.a. of Annex VI): Implement operations research and evaluation activities.

This task could also be maintained if it is understood that only small-scale studies (on locally available foods/fluids as recommended) could be accomplished in this limited timeframe.

(Task III.D4.b. of Annex VI): A WHO Focused Program Review would be of great assistance to the NCDDP. The PRITECH team recommends that the WHO Focused Program Review for Madagascar be scheduled after PRITECH's August, 1993 departure, as it is a time-consuming activity. The PRITECH team recommends that WHO schedule a WHO Focused Program Review beginning in September-November, 1993.

## **VII. UPCOMING PRITECH-supported MOH Training Activities:**

The first quarter of 1993 will be extremely busy as PRITECH and the MOH begin their collaboration. The major events scheduled during this time are briefly summarized below, while a more comprehensive listing of actions and activities is presented in section IX. below. For each activity involving external consultants and/or travel, PRITECH will prepare detailed Task Assignments for approval by the PRITECH Project Manager in Washington, and seek approval for scopes of work and travel via cable from USAID/Antananarivo.

### **A. IEC Strategy /ORS Promotion Plan Workshop:**

#### **Goals/Objectives:**

1. Develop an IEC strategy to support the National Policy.
2. Develop preliminary IEC/promotional ideas and materials.
3. Incorporate messages on ODIVA/ORS.

**Location:** Antananarivo

**Date:** March 8-18, 1993

**Trainers/Facilitators:** Camille Saade, Jacqueline Bouwmans

**Participants:** 10-15

NCDDP Central Staff, MCH/IEC staff, National MOH IEC/Training Representatives, Provincial Representatives, ODIVA Unit Production Coordinator.

### **B. DTU Workshop:**

#### **Goals/Objectives**

1. Develop a national CDD training strategy.
2. Discuss problems facing DTUs, problem solving.
3. Develop training modules for DTU's.
4. Develop DTU 1993 Action Plans.

**Location:** Solimotel, Antananarivo

**Date:** April 19-30, 1993

**Trainers/Facilitators:** Agma Prins, Dr. Tetanye (proposed)

**Participants:** 20-25 Total

9 UFD, IRA/CDD Coordinators, Dr. Hanta, IEC, Dr. Ranjahlay, Professor Nol, Dr. Rigobert, National team (5).

### **C. Third country training for NCDDP staff**

1. NCDDP Coordinator: Supervision, Program Management (WHO): PRITECH is in contact with the National CDD Program in Cameroon and has requested that space be reserved in their March training for Dr. John Razafimanjato. PRITECH proposes that he attend back to back courses on Supervision and Program Management. These courses will be offered with WHO assistance.

2. DTU Coordinators: Supervision or Program Management (WHO): PRITECH has requested that space be reserved for three or four DTU Coordinators to attend a WHO-sponsored course in Cameroon.
3. Third country for Dr. Hanta (WHO/Geneva): PRITECH is asking WHO Geneva for a list of course dates for the briefing on CDD which is typically offered several times per year. The one week course would allow Dr. Hanta to make important contacts at WHO while providing her with up to date information and materials on a wide variety of CDD issues.

#### VIII. ADMINISTRATIVE ISSUES FOR PRITECH START-UP

##### A. Project Vehicle:

PRITECH will follow-up discussions with Chris Lyons, REDSO/ESA, (in charge of commodities for APPROPOP) regarding the purchase of a Jeep Cherokee. USAID suggested that PRITECH purchase from the distributor who is awarded the contract for APPROPOP procurement of Jeep Cherokee vehicles.

##### B. Project Bank Account: (BMOI)

USAID has written a letter to BMOI requesting that they assist the PRITECH Project to establish a FMG Convertible Account, would allow immediate transactions with the PRITECH Bank of Boston Dollar Account. The account will be opened as soon as possible, with PRITECH/MSH employee, Karen Blyth, as the signatory of the account.

##### C. Equipment:

PRITECH should revise the Madagascar buy-in to incorporate equipment for MCH/NCDDP as requested earlier by the MOH and USAID Madagascar. Although these equipment items will only be minimally used by PRITECH, they will begin to equip NCDDP/MCH Services for future USAID Child Survival Activities.

The following equipment is considered necessary:

1. Photocopier Machine: Estimated Cost: \$7,500

Note: MCH Services has only one small (barely functioning) photocopier machine given to them by UNICEF second-hand. Major documents need to be photocopied outside of MCH Services.

2. Slide Projector/Overhead: Estimated Cost: \$1,000

A slide projector and overhead projector are important training items which the NCDDP/MCH Services should have available for case management and IEC training activities. They are currently not available in MCH Services.

3. Desktop Computer/Laser Printer: \$5,000

There is only one non-functioning desktop computer/printer in the Director of MCH Services' office. Dr. Raveloson is very interested in developing computer skills for the NCDDP staff, including two secretaries. PRITECH will support local computer training as discussed earlier in this report. A second computer system is needed to make the NCDDP fully functional.

D. Follow-up Training Plans:

1. IEC Workshop: March 8-18, 1992

Only two provincial participants will be participating in the IEC Workshop. Their airfare will be pre-paid by PRITECH, probably through PRITECH/Kenya. PRITECH will also need to make an advance payment to the hotel selected for the IEC training.

2. DTU Workshop: April 19-30, 1993

PRITECH Kenya can initiate an advance payment in January, 1993 to Air Madagascar for airfares for provincial DTU participants' travel. Consultant Agma Prins will need to make payment for all remaining workshop costs upon her arrival in Madagascar. No advance payment is required by the government training institute, Maharbakaok. A letter is, however, required from the MOH confirming the dates.

USAID Per Diem Rates:

USAID did not have written per diem guidelines for contractors, but they did offer important guidelines. USAID will approve paying only university professors an honorarium of 60,000 FMG per day. For training workshops USAID suggested reasonable hotels and provided guidelines for local transportation and meals. PRITECH will continue to consult closely with the Mission on all per diem related matters.

## **IX. REVISED PRITECH CALENDAR OF ACTIVITIES**

The following schedule of events is recommended to be incorporated into the current PRITECH calendar of activities.

January, 1993	Finalize NCDDP Policy Order of Vehicle Revision of SOW
February, 1993	Preparation for March workshops
March, 1993	IEC Strategy Workshop (3/8-3/19) Development of IEC Strategy and ORS Promotion Plan (3/15-3/18)
April, 1993	DTU Workshop (April 19-30) Development of Training Strategy Arrival of Representative Setting-up of Office Purchasing of Equipment NCDDP Planning/Strategies
May, 1993	WHO/Geneva Training, Dr. Hanta Develop/pre-test IEC Materials Finalize DTU training materials DTU Training/Case Management
June, 1993	TOT/Pedagogy Training Skills Local Experts Evaluate Training in Provinces (2 weeks)
July, 1993	Follow-up on ODIVA marketing plan and revision of promotional materials (early July) Local Computer Training (3 weeks) MIS Consultant (late July, 93)
August, 1993	Project Evaluation/Planning Shut-down (August 15, 1993)

**ANNEX I.****SCHEDULE OF VISITS****Sunday, December 6**

9:30 Arrival of PRITECH consultants

**Monday, December 7th**

7:30 Meeting with Susan Wright, APPROPOP Coordinator, USAID

8:00 Meeting with Dr. Ranjalahy, Director of Preventive Medicine and Susan Wright, USAID.

10:00 Meeting with Dr. Hanta Raveloson, Director of Maternal and Child Health, National CDD Coordinator.

11:00 Meeting with Ms. Lea Ratsimbazafy Head, Tour of ORS Production Unit Head, National Pharmacy.

12:30 Meeting with Carina Stover, HPN Officer, USAID.

14:00 Visit to Pharmacies in Antananarivo

**Tuesday, December 8th**

9:00 Meeting with Dr. Jean Remi Randriamanjaka, Director of Pharmacy and Laboratory, Ministry of Health.

11:00 Meeting with President Ordre des Pharmaciens (Saade)

11:00 Visit to MOH Public Health Demonstration Zone, Itaosy Health Center (Blyth).

15:00 Visit to DTU at Befelatanana Hospital, Antananarivo (Blyth)

15:00 Meeting with Guy Second, Director DROGEMAD, (Saade)

16:00 Meeting with WHO Representative, Dr. Kassatsky

**Wednesday, December 9th**

9:00 Meeting with Dr. Andrianirian Raveloson, Malaria Medical Officer.

11:00 Meeting with Dr. Monique Traore, UNICEF Representative

14:30 Meeting with Dr. Josiane Andrianarsoa, Circonscription Medicale of Imerina Est. Visit to urban dispensary/ORT corner, Dr. Ingy Sylene. (Blyth)

14:30 Meeting with Mr. Ginot Andriamparany, Commercial Director, Rhone Poulenc/SOMAPHAR (Saade)

**Thursday, December 10th**

8:00 Mr. Ramiaramañana Andrianandrasana, President, Pharmacists Association of Madagascar and RATHERA Pharmacist in charge. (Saade)

8:30 PRITECH 1993 planning meeting with the National CDD Program Team led by Dr. Hanta Raveloson, MCH Director.

14:00 PRITECH/NCDDP 1993 Planning Meeting continued. Meeting with Mr. Michel Ramanantsoa, General Manager, FARMAD. (Saade)

**Friday, December 11th**

- 8:30 Meeting with COFARMA: Mr. Eric Ramamonjinandrianina, Mr. Laurent Rajaonarivlo, Commercial Representatives (Saade)
- 10:00 Preliminary DHS presentation of findings at USAID.
- 11:30 Meeting with Gerard Rakotondrainibe, Susan Wright, USAID.
- 14:30 Preliminary review of findings.

**Monday, December 14th**

- 8:30 Planning Meeting with Dr. Hanta Raveloson
- 9:00 Discussion with National CDD Team
- 10:00 IEC Team/MOH
- 12:00 Discussion with Dr. Hanta Raveloson (cont.)
- 14:30 Discussion with Dr. Hanta Raveloson (cont.)
- 16:00 Mr. Ramiaramanana Andrianandrasana, President, Pharmacists Association of Madagascar

**Tuesday, December 15th**

- 8:00 Administrative & Banking Issues (Blyth)
- 10:30 Central Pharmacy, Director (Saade)
- 14:00 OFAFA, Director (Saade)
- 14:30 Meeting with National Training Unit, Director, MOH
- 16:00 ODIVA Production Unit (Saade)

**Wednesday, December 16th**

- 8:00 Director of Preventive Medicine (De-Briefing)
- 10:00 De-briefing with USAID/Madagascar
- 13:00 Lunch with National CDD Program Coordinator
- 14:30 Administrative Issues (Blyth)

**Thursday, December 17th**

- Departure of Consultant, Camille Saade
- 8:00 Report-writing (Blyth)
- 15:00 Meeting with National CDD Manager (Blyth)  
(National Policy/Work Plan)

**Friday, December 18th**

- 8:30 Finalize PRITECH Draft Report
- 14:30 Report submission to USAID Madagascar  
Meeting with Susan Wright, USAID

**ANNEX II.**

**LIST OF PERSONS CONTACTED**

**USAID**

Ms. Carina Stover, HPN Officer, USAID  
Mr. Gerard Rakotondrainibe, Assistant HPN Officer  
Ms. Susan Wright, APPROPOP Coordinator

**MINISTRY OF HEALTH**

Dr. Rasolofomanana Ranjalahy, Director of Preventive Medicine  
Prof. Roland Denis Rakotoarimanana, Medical Director, Befelatanana Hospital  
Professor Andriamanalina Nirina Razafindrakoto, Director, National Training Unit  
Dr. Rafiringason Rigobert Arsene, Deputy Director, National Training Unit  
Dr. Andrianirina Raveloson, National Malaria Medical Officer  
Ms. Lea Ratsimbazafy, ORS Production Unit Head, National Pharmacy  
Dr. Jean Remi Randriamanjaka, Director of Pharmacies and Laboratories.  
Dr. Damoela Randriantsimaniry, Director. Communicable Diseases

**MATERNAL AND CHILD HEALTH/MOH**

Dr. Hanta Raveloson, Maternal and Child Health Director  
Dr. Randriamanalina Bakolalao, Nutrition Division (MCH)  
Dr. Albert Raanamahery, School Health Division (MCH)  
Dr. Jeannette Rabeharisoa, Family Planning Division (MCH)  
Ms. Jeanine Rakoto Andriamihaja, IEC Specialist (MCH)  
Dr. Claire Razanadraibe, Health Education Division (MCH)

**National CDD Program Staff: MCH/MOH**

Dr. John Claude Razafimanjato, National CDD Coordinator (MCH)  
Ms. Monique Ho Wailhen, National CDD Program, Midwife, (MCH)  
Ms. Lala Raharinivo, Nurse, (MCH)

**MINISTRY OF HEALTH PROVINCIAL FACILITY STAFF**

Dr. Liliane Rajaonah, Public Health Demonstration one of Itaosy  
Dr. Josiane Andrianarisoa, Director, Circonscription Medicale of Merina East

**PRIVATE SECTOR**

Mr. Desire Ratsimbazafy, Marketing Director, OFAFA.  
Mr. Guy Second, General Manager, DROGEMAD.  
Mr. Ginot Andriamparany, Commercial Director, RHONE-POULENC-RORER.  
Mr. Michel Ramanantsoa, General Manager, FARMAD.  
Mr. Eric Ramamonjinandrianina, Commercial Representative, COFARMA.  
Mr. Laurent Rajaonarivelo, Commercial Representative, COFARMA.  
Mr. Andrianandrasana Ramiaramanana, Pharmacist-in-charge, RATHERA.  
Mr. Razafinimanana Jean Damien, chef de service, PHARMACIE CENTRALE.  
Mr. Raiaona Emmanuel Benjamin, gestionnaire, PHARMACIE CENTRALE.

**UNICEF/WHO**

Dr. Monique Traore, UNICEF Representative  
Dr. Kassatsky, WHO Representative

**COOPERATING AGENCIES**

Dr. Juan Schoemaker, Demographic Health Services, MACRO  
International  
Mr. Ray Martin, World Bank  
Ms. Henrietta Search, Marie Stopes Consultancy, London, England  
Ms. Lucile Rafalimanana, Marie Stopes International Madagascar

**ANNEX III.**

**PARTICIPANT LIST  
IEC WORKSHOP, March 8-19. 1993  
Antananarivo**

**UNICEF**

Dr. Monique Traore, Health/Nutrition Officer

**Ministry of Health:**

Dr. Ranjalahy, Director Preventive Medicine, MOH  
Dr. Rakotobe Rabehevitra, MOH/IEC Headquarters  
Professor Razafindrakoto, Director, National Training Unit

**MCH/MOH Services:**

Dr. Hanta Raveloson, MCH Services Director  
Dr. John Razafimanjato, Deputy, MCH Services  
Dr. Jeanine Andriamihaja, IEC Specialist  
Dr. Claire Razanadraibe, IEC Chief  
Dr. Liliane Rajaonah, Demonstration one of Itaosy  
Ms. Monique Ho Wailhen, NCCDP, Midwife  
Ms. Lala Raharinivo, NCCDP, Nurse  
Ms. Lea Ratsimbazafy, ORS Production Unit Head  
Mr. Justin

**Provinces:**

Dr. Noro, Majajanga  
Dr. Rabarijaona Noro, Tamatave

**ANNEX IV.**

**PARTICIPANT LIST  
DTU WORKSHOP, April 19-30, 1993  
Antananarivo**

**PROVINCES:**

Dr. Rakondrajaona N., Antsirabe  
Dr. Rakotomanga Jean, Tulear  
Dr. Rakoto Bruno, Tamatave  
Dr. Randrianarimanana Dieudonne, Fianarantsoa  
Dr. Ramarason Benoit, Mahajanga

**MINISTRY OF HEALTH:**

Dr. Raveloson Hanta, Chef de Service MCH Services  
Dr. Ranjalahy, Director, Preventive Medicine, MOH  
Dr. John Razafimanjato, Deputy, MCH Services  
Dr. Claude Ravelajaona, Antananarivo

**DTU Directors:**

Dr. Rakotoson, Antsirabe  
Dr. Daniel Andrianaivo, Tulear  
Dr. Soavelo Pascal, Tamatave  
Sister Barbot, Fianarantsoa  
Dr. Rafaralalao Lucienne, Mahajanga  
Dr. Rakotoarimanana Roland, Antananarivo

**ANNEX V.**

**CONTACT LIST  
PRITECH MADAGASCAR**

**USAID MADAGASCAR:**

Ms. Carina Stover, HPN Officer  
Mr. Gerard Rakotondrainibe, Project Assistant  
Ms. Susan Wright, APPROPOP Coordinator  
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**MINISTRY OF HEALTH:**

Dr. Hantaniaina Raveloson, Chef de Service  
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BP 866  
Service de la Sante, Maternelle Infantile  
Antananarivo 101

Dr. Ranjalahy, Director of Preventive Medicine  
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Dr. Jean Remi Randriamanjaka, Director of Pharmacy  
and Laboratory, MOH  
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**PRIVATE SECTOR:**

Mr. Desire Ratsimbazafy, Marketing Director, OFAFA  
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Antananarivo 101

Mr. Ginot Andriamparany, Commercial Director, RHONE-POULENC-RORER  
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Antananarivo

Mr. Michel Ramanantsoa, General Manager, FARMAD  
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Antananarivo 101

Mr. Eric Ramamonjinandrianina, Commercial Representative, COFARMA  
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Mr. Andrianandrasana Ramiaramanana, RATHERA, Pharmacist-in-charge  
Tele: 40333, 40334  
B.P. 4189

BMOI: Banque Malgache de l'Océan Indien  
Mr. Fety Rasolofoarisandy, Head Office  
Tele: 346.09  
B.P. 25  
Telex: 223.81

## **Annex VI. Delivery Order Scope of Work, PRITECH Madagascar**

### **I. BACKGROUND**

The Management Sciences for Health/PRITECH Project financed under the APPROPOP project PIO/T will provide technical assistance and some operational funding to assist the National Program for the Control of Diarrheal Diseases (CDD) to consolidate past gains and to strengthen the program's base for further expansion over the next seven years. This input will complement other donor support, including that provided by Unicef and the World Health Organization (WHO). Other operational expenses may be covered under the Services Delivery Support Activities component of the APPROPOP Project providing the proposed activities conform to established criteria for selection.

### **II. OBJECTIVES**

1. Increase the number of public and private sector health care providers practicing good case management for diarrhea including consistent prescription of Oral Rehydration Salts (ORS) in sufficient quantities, limited and appropriate use of drugs and procedures, integration of nutritional counseling, and good communication with mothers with respect to home management and prescription.
2. Develop an IEC strategy and materials and develop local capacity in the area of IEC in order to improve health care workers' and mothers' knowledge and practice of good home management of diarrhea.
3. Increase ORS demand, production, and availability.
4. Increase the effectiveness and efficiency of CDD program implementation with an emphasis on improved program planning and monitoring and on operations research and evaluation.

### **III. SCOPE OF WORK**

The contractor will assist the Ministry of Health/CDD National Program to undertake the following activities according to the calendar of activities in Annex I.

#### **A) In conjunction with Objective No. 1:**

1. Publish and distribute an official national policy on diarrhea case management.
2. Develop an overall, long-term training strategy and plan.

3. Strengthen the Diarrhea Training Units (DTU) and Oral Rehydration Therapy (ORT) Corners.
  - a) Develop a plan to revitalize the DTUs (discussion of problems, reach agreement on the content and process of training, training plan and logistics) through a one week workshop for the DTU Directors and other key collaborators (15-20 people maximum).
  - b) Develop standard training materials in modular form to use during practical training in the DTUs and ORT Corners.
  - c) Train up to 150 provincial trainers in pedagogical skills and in practical case management in the DTUs.
  - d) Analyze and improve case management practices in the DTUs, to be carried out by a two-person expert team.
  - e) Train lower level health workers with APPROPOP funding in theoretical and practical skills.
  - f) Review and strengthen the curriculum used in nursing and medical schools pertaining to the diagnosis and treatment of diarrheal disease.
  - g) Establish a Documentation Center on diarrheal disease at the national level.
4. Improve the rational use of drugs in the national CDD Program.
  - a) Analyze current practices, attitudes, and costs.
  - b) Develop and implement a CDD action plan with respect to the rational use of drugs.
- B) In conjunction with Objective No. 2:
  1. Develop a global IEC strategy for the CDD Program (objectives, strategies, target populations, messages, materials, distribution, etc.) during a 3 day workshop with appropriate MOH and CDD Program staff, 15-20 people maximum.
  2. Develop materials (design, test, finalize, print) aimed at health workers, mothers, and other groups. This might include posters, brochures, aide-memoires, radio spots, etc.

3. Strengthen local institutional capacity in IEC development through practical training during the development of the IEC strategy, during materials development and, if possible, through a special short course.
- C) In conjunction with Objective No. 3:
1. Increase the availability of ORS.
    - a) Study the problems and constraints and develop a plan for increasing the efficiency and rate of ORS production at the ODIVA parastatal Production Unit (using existing raw materials and without major new investments).
    - b) Provide supplemental management and technical training of Production Unit Staff, if necessary.
    - c) Implement Action Plan.
    - d) Evaluate the feasibility of continued local production of ORS (ODIVA) at the parastatal unit, after one year.
    - e) Study alternatives to continued local production (importation or production by a private pharmaceutical company). This study will be carried out concurrently with ongoing plans to increase production.
  2. Develop the production and marketing of ODIVA brand ORS.
    - a) Develop a marketing plan, including costing and pricing.
    - b) Develop and print promotional materials.
    - c) Train ORS "promoters".
    - d) Implement promotion of marketing plan.
    - e) Implement awareness raising activities among pharmacists and other sellers of ORS.
- D) In conjunction with Objective No. 4:
1. Train the National Coordinator in CDD program management.

2. Prepare a seven year Implementation Plan for the CDD program, including long-term training, IEC, supervision of the CDD program at all levels, MIS development and other relevant strategies.
3. Develop a simple Management Information System for CDD and train the staff in computer skills needed to manage this system.
4. Implement operations research and evaluation activities.
  - a) Implement small-scale studies on locally available foods and fluid for home treatment of diarrhea.
  - b) Collaborate with WHO to carry out the CDD mid-term program evaluation (mid-1993).