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PRITECH II ASSESSMENT
CAMEROON NATIONAL CONTROL OF
DIARRHEAL DISEASES PROGRAM

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1. INTRODUCTION

1.1 Background

From March 1 through 14 a FRITECH assessment team worked with the Technical Director and Manager of the Cameroon National Diarrheal Disease Control Program to :

- * review progress of the program toward the establishment of an integrated national program for the control of diarrheal diseases,
- * review the role of FRITECH in assisting this effort, and
- * formulate proposals for the future development of the program and FRITECH's role within it.

The major findings and recommendations of the Team in each of the major components of the CDD program are presented in the main body of the report. More detailed information is provided in the annexes.

In order to collect information for this assessment, FRITECH and CDD staff visited health services and hospitals in eight of the ten provinces of Cameroon and conducted interviews with representatives of a wide variety of participating government services and donor agencies. The findings and recommendations presented in this document represent the consensus views of all the team members based on their various observations.

The future role of FRITECH within the CDD program will be jointly determined by FRITECH, WHO and USAID staff based on the results of this assessment and the anticipated planning activity to occur directly after the completion of this document.

1.2 SUMMARY OF RESULTS

The overall observation of the assessment team is that the Cameroon CDD program has made remarkable progress in a relatively limited time period using very limited human, material and financial resources. Resource limitations have slowed progress, but have also moved program managers to develop a wide base of support and assistance from numerous Ministry of Health services, from other ministries, from other health projects, from FVOs and from donors. CDD in Cameroon is a collaborative program.

CDD in Cameroon has also striven from its inception to become an integrated component of primary health care. Despite the need for special attention and effort—sometimes interpreted as verticality—in the launching of an effort to change long-established and firmly entrenched practices and attitudes, every possible opportunity has been sought to cooperate, collaborate and meld with other FHC activities. It is significant that the Technical Director of the CDD program is also the Assistant Director of Preventive Medicine and responsible for FHC. Recent collaboration with the Nutrition and Health Education Services is another symptom of this commitment to FHC and integration.

Finally, the national CDD team has striven to develop a broad-based, multi-dimensional program: activities have been initiated in almost every component of CDD: case management, CRS logistics, health education/communications, research, information systems, evaluation, and so on. This is important, as the key to success of any CDD program is the growth of a partnership between parents and health personnel for the good health of children. This is only possible when both parents and health personnel have access to the knowledge, skills and resources to provide their children with good care. A one-sided program cannot bring about these fundamental conditions to success.

The assessment team believes that a good base has been created. Now is the time to use that base to rapidly expand and strengthen the program so that the goal of widespread availability of and access to effective, high quality diarrhea care becomes a reality in Cameroon. This accelerated effort will require more resources, human and financial, both of which are available if the will exists to mobilize them.

The following sections of the report provide more detailed findings and suggestions for the future.

2. CASE MANAGEMENT/ CRT CORNERS

2.1 FINDINGS:

- * The case management protocols and policies as described in the recently published official Ministry of Health Strategy for Diarrhoeal Disease Control are generally good, conforming to WHO guidelines. They are, of necessity, lacking in specific detail, however, and are, thus, insufficient as exact practical guidelines for health professionals practicing diarrhea case management in health facilities
- * The evaluation team was pleased to note that many of the facilities visited were using CRS salts and that some were providing very good diarrhea care. Despite the need for improvements, it was clear that the training and other efforts of the national CDD program were bearing fruit.
- * There is wide variation in case management practices for diarrhea in health facilities in Cameroon. Specifically, great differences were observed by the evaluation team among various health facilities concerning:
 - the standard length of stay of children with diarrhea at the treatment facility for rehydration therapy,
 - the recommended home treatment after the child was released from clinical care: many facilities prescribe only SSS (sometimes recommending an incorrect formulation), others provide one or more packets for mothers to take home, almost none recommend other home available fluids (HAF),

-referral practices: many FMI's refer all B level cases of dehydration to the pediatric service at the hospital. Also many were not initiating oral therapy prior to such referrals,

-In some facilities, complete physical examination is neglected,

-some facilities routinely order laboratory analysis of stools even though systematic stool examinations are not necessary for good treatment,

-recommendations made to mothers concerning feeding during and after diarrhea: often dietary modifications and restrictions are recommended

-drugs prescribed in addition to ORS.

- * There continues to be widespread misuse of medication other than ORS for the treatment of diarrhea in both government and private (confessional) health facilities. Specifically:

-poly-pharmacy is common: it is not unusual to see the prescription of 7-9 different medications for a case of acute diarrhea

-prescription of potentially dangerous drugs: Flagyl for children as young as 3 months, hydrocortisone for a child of 10 months, sulfaguanidine as a routine medication for all cases of child diarrhea in many places

-routine prescription of drugs of little or no specific usefulness in diarrhea case management: charcoal, actapulgate, ultra levure, periactin, biolactyl, etc.

- * While prescription of useless or dangerous drugs for diarrhea is done by both physicians and nurses, it is not unusual to find nurses who are knowledgeable about and willing to give good diarrhea care (liquids and feeding), but who are constrained from doing so by standing orders prescribing other medications by the supervising physician. This phenomenon appears to be more common in the pediatrics departments of hospitals than in FMI's or health centers. Where the diarrhea care provided is often much better. (In the Northwest Province, it was found that the best care was provided at the health post) The evaluation team suspects that many mothers who are not convinced of the effectiveness of ORT are seeking out health facilities which continue to prescribe other drugs. These facilities are thus undermining the efforts of the National CDD program to educate mothers.

- * There is wide diversity in the organization of ORT corners and units:

-in some, all diarrhea cases are sent to the physician, who prescribes medication, then sent to the CRT corner for rehydration,

-in some, all diarrhea cases are assessed and treated at the triage point,

-in some, most cases are referred directly to the CRT corner for care,

-some units use treatment (clinical management) forms as part of the case management, others only record care recommendations in mother's health booklets.

- * There is a tendency to think of an "CRT unit" as a special room with special equipment—separate from the other health services provided by the facility (whether hospital or FMI or health center). This leads to an attitude that good diarrhea case management cannot be initiated at a facility until there is such a special unit or that good care can only be provided when the "person responsible for the unit" is there. Consequently many hospitals and other health facilities which have trained personnel do not provide good diarrhea care management even when ORS packets are available: the absence of a "real unit" is used as an excuse for not adopting good diarrhea case management practices.
- * While effective rehydration was being practiced in some health facilities, the nutritional aspect of effective diarrhea case management was neglected or underemphasized:
 - many health workers incorrectly continue to recommend modified or restricted diets for all cases of diarrhea.
 - health personnel are not recommending increased feeding during and after diarrhea.
 - children who spend a long time at CRT units for rehydration are not fed while they are given ORS.
 - growth cards, where available, are not being used to educate mothers about the link between diarrhea and undernutrition or malnutrition.
 - The CRT corner is a good place for the promotion of good breast feeding practices. This is not being done effectively in many health facilities.
- * Not infrequently, the interaction between the nurse and the mother is not supportive and not encouraging to the mother. Many nurses are brusque with mothers, talk down to them or

even yell at them. This behavior may drive mothers away from health facilities or deter them from returning.

2.2 RECOMMENDATIONS.

1. The National CDD team should develop, publish and distribute to all health personnel, specific and detailed guidelines or technical notes concerning diarrheal case management and the organization and management of ORT corners or training units (see Annex 4 for suggested content of these guidelines).
 2. The Ministry of Health should take steps to actively discourage the prescription of costly, dangerous or useless drugs by all health personnel for diarrheal disease. The practice of poly-pharmacy should be actively discouraged. Administrative steps should be taken, if necessary, to eliminate existing supplies.
 3. The Ministry of Health should contact Directors of Provincial Hospitals to solicit their support for the institution of good diarrhea case management in the pediatrics departments, mobilizing staff who have been trained to provide that care.
 4. The National Diarrhea Disease Control Program should impose fairly rigid treatment guidelines (including elements such as length of stay of a child at the health facility for rehydration) until such time as good diarrhea case management becomes standard practice at most health facilities. Use of a standard case management form in all ORT corners for a limited number of patients (50) after initial training will assist in the development of standard care practices. Standard treatment protocols should be developed for the most common forms of diarrhea (acute watery diarrhea, "bloody" diarrhea, cholera, chronic diarrhea). The organizational patterns of ORT corners should be evaluated and guidelines developed to ensure that particular organizational patterns facilitate, rather than hamper, good care.
 5. To the extent possible, care of diarrhea patients should be delegated to nurses in all health facilities. Physicians should serve as supervisors and as reference in complicated cases only.
 6. Hospital, FMI or health center staff who have received training in good diarrhea case management should be encouraged to initiate good practices in their health facilities with as few extra materials, equipment and special additions as possible. Those hospitals and other health facilities practicing good case management may then be considered for further development into ORT training units (e.g. institute good treatment practices, then develop training units—not vice-versa).
- The National CDD team needs to work with provincial health authorities to clarify the referral relationship and other interactions between Hospitals, FMI's, health centers and health posts in regard to diarrheal disease case management.

8. The National CDD team should develop a detailed CDD Nutrition plan to reinforce the nutritional aspect of effective diarrhea case management. This plan should include:
- the use of growth card in all CRT corners and units as an instrument to integrate CDD within FHC,
 - food preparation demonstrations for mothers at CRT corners/units,
 - the possible ways and means to integrate feeding of children with rehydration in health facilities,
 - mechanisms for targeting malnourished or other children at risk (e.g. those with measles) for special diarrhea and nutrition education,
 - review of breastfeeding policy and education
9. There does not appear to be a rationale for the routine laboratory examination of stools for parasites, especially in areas where there is a high prevalence of certain intestinal parasites. Mothers should be believed, and if they state the child has worms and there are known parasites in that region, treatment should be given. Consideration should be given to periodic de-worming in those regions, NOT to cure the children of worms, but to reduce the "worm burden" and hopefully to improve nutritional status. This is being done by many already.
10. Official ministry policy concerning the preparation of ORS and SSS with clean but not boiled water as is stated in the "Fiches Techniques" should be actively and widely disseminated among health personnel.

It should be clarified to health workers that boiling water is not necessary when making ORS or SSS. Simply use the cleanest drinking water available. (purchase of bottled water is also unnecessary).

3. TRAINING/ PROFESSIONAL EDUCATION

3.1 FINDINGS:

- * A good start has been made in the CDD program toward initiating an effective nationwide training effort. All provinces now have a core group of trainers who have completed a Training-of-Trainers course. Approximately 100 health personnel have received clinical management training in country since late 1987.

Effective expansion of these initial training activities has been hampered by a number of factors:

-The effort is young and some of the necessary preparatory steps have not been completed: The final preparation of a draft training guide—materials—for use in clinical management courses, for example.

-Funding has been limited, especially for provincial and departmental level training activities.

-There have been limited opportunities for follow-up in the field, especially of the provincial-level trainers trained May and July 1988.

-A comprehensive training strategy and plan has not yet been developed.

-At the central level, the national CDD staff consists of two part-time MOH professionals and one expatriate. There is limited time to do all the preparatory and field work necessary to manage a successful CDD program on a national scale.

- * The training of provincial trainers has led to the development of some good training skills as witnessed by the training programs they have conducted in collaboration with the national training team (Ebolowa, Ngaoundere, Yokadouma, Doukcula, Ntui). Provincial training conducted without assistance from national trainers appears to have been less successful.
- * The majority of the provincial level trainers have not yet planned or organized training activities in their province. In several provinces there are, as yet, no functional diarrheal treatment units in the provincial PMI and hospital which could serve as a training facility.
- * It is CDD program policy to include representatives from confessional health services in CDD training activities. In many cases cooperation between the MOH and the confessional sector has been very good in the CDD program. However, in some provinces, local health staff neglect to systematically include confessional health personnel in CDD activities for a variety of reasons. This is unfortunate as many mothers use these health facilities in addition to government health services. Diarrheal treatment should be uniform in all health facilities in order to convince mothers of the effectiveness of CRT.
- * To date, follow-up activities have not been systematically built into the training activities, nor have specific plans been formulated by training participants about how they would specifically put into practice their new learning once they returned to post. In some case this has meant that no concrete use was made of the training received after the participant worker returned to his or her work site.

- * The Cameroun CDD program is to be congratulated for its efforts to work with health professional schools to improve the training of medical and nursing students in CDD and ORT. These efforts have already born fruit in the modification of teaching occurring at the CUSS and CESSI. As yet, however, the teaching is not consistently uniform and some students are not instructed in good diarrhea care. Curriculae in paraprofessional schools have not yet been modified, although this will be dicussed at the meeting of the Conseil de Direction in March, 1989.
- * A wide variety of costly, useless and dangerous drugs for diarrhea continue to be available and prescribed at private sector pharmacies. One CDD staff member purchased 20 different drugs for 26,000 CFA at a small rural pharmacy. Private sector pharmacists have not yet been brought into efforts to improve diarrhea case management in Cameroun and remain largely ill-informed concerning appropriate diarrhea treatment.

3.2 RECOMMENDATIONS

1. Clinical Management Training of health personnel at all levels, but especially at the health center level, should be accelerated. If this is to occur and be effective the following preconditions must be met:

- Clinical Management training materials should be completed in draft as soon as possible and distributed to trained provincial trainers.

- At least one, and preferably two, supervisors from each province should participate in the mid-level management course as soon as possible. (Later the program plans to train management teams in each sub-division to supervise health centers as part of the new FHC structure.)

- National CDD staff should work with a team of supervisors and trainers from each province to elaborate detailed provincial training plans and budgets.

- Physicians supervising health center and FMI staff should receive training prior to or concurrently with their staff in order to assure their active support of the program

- Adequate financial resources should be sought to support provincial training activities.

-The ORT training units in the province should be functioning well, providing a good and replicable model to trainees. National CDD staff should work actively with these units to improve their functioning whenever possible.

2. Once provincial supervisors have been trained and provincial training plans have been developed, the national CDD staff should give priority to assisting those provinces and, later, divisions and sub-divisions, demonstrating the most active interest in and motivation for CDD activities. Provinces participating in the SESA and GTZ programs should benefit from support from the staffs of these programs (under occasional supervision of MOH/CDD staff) freeing national CDD staff to concentrate primarily on provinces not benefitting from donor support.
3. Follow-up or supervision activities should be a scheduled part of all training. Training budgets should include funds for necessary on-site follow-up for a period of at least 3 months after completion of training.

Every training activity should end with the preparation of a specific action plan detailing next steps to be taken by participants once they have returned to their work stations. These plans should be reviewed and revised during follow-up meetings or visits and serve as a basis for supervision.

4. Key decision-makers from confessional sector health services should be specifically included in all CDD training activities. These key decision makers should be identified at the provincial level while preparing training plans.
5. Appropriate training of medical students in CDD should be assured by:

- developing model ORT corners in the 3 regional health centers used by CUSS for rotations in community health for fourth and fifth year medical students.

- Assuring that all medical students pass through the ORT unit at the Central Hospital pediatric unit and/or FMI (see Annex for recommendations concerning improvement at this unit).

- Working with CUSS staff to revise medical curriculum as soon as the FRITECH/WHO medical curriculum materials become available. (currently being pretested)

- organizing CDD training activities (an expert workshop ?) for CUSS professors to

convince them of the scientific validity and effectiveness of CRT.

Efforts to improve nursing and paraprofessional education in CDD should continue by continued collaboration with CESSI and the "Conseil de Direction" of the paraprofessional schools. Efforts should be made to increase the numbers of centers at which nursing students can do their practical training.

6. A strategy should be developed to target private sector pharmacists for CDD training and education.
7. All training for CDD should include exercises on the practical means to integrate CDD with other components of Primary Health Care. Also, each clinical management course should include activities designed to improve the interactions and communications between the health professionals and the mothers (role plays, case studies, discussions).
8. An evaluation plan should be developed to assess the effectiveness of training activities. Training effectiveness should be assessed not only during and directly after training but also after a period of application of learned skills in the field.

4. INFORMATION SYSTEMS: HIS, Evaluation and Monitoring, Supervision

Information is needed in the CDD program in order to:

- Keep the system functioning smoothly (e.g. ORS stock management),
- measure progress toward CDD goals and objectives (outputs and impact),
- identify problems or deletions in moving toward those goals and objectives,
- identify effective strategies and methods which could usefully be replicated on a broader scale,
- make pragmatic decisions.

This information can be collected through routine information channels or special studies and surveys. The information collected should be collected and analyzed at the level of organization (local, provincial, national) which will make use of it to keep activities, as necessary. Only information for which there is a clear and specific operational use should be collected and analyzed. The necessary information should be sent to the person or manager who needs it by the most rapid channel.

In this context, we have included under the heading of "Information Systems" three topics which are often treated separately:

Health Information Systems
Evaluation and Monitoring
Supervision

4.1 FINDINGS:

- * The information component of the CDD program is, as yet, relatively undeveloped. No detailed systems or strategies have yet been developed. This is partly due to a concern that most, if not all, CDD information should be integrated into the FHC systems.
- * The National CDD program wants to keep to a minimum the burden of additional or specialized information tasks placed on health personnel at all levels. Nevertheless certain information needs must be met to ensure the success of the program. These include:
 - ORS stock management records (usage rates, stock levels)
 - health facility CDD "coverage rate": what percentage of health facilities have trained staff.
what percentage are practicing good diarrhea case management.
 - The quality of care provided by trained health workers (e.g. access to good care),
 - The percentage of mothers practicing good diarrhea care for their children and related "impact data".
- * The National CDD team has made a start toward establishing an ORS stock management system. The stock card designed by the program appears to be in use in many health facilities which practice ORT. However, program managers are not using this information. The monthly stock management reports are not systematically sent in to the central level, nor analyzed once they get there. There is no information available in Yaounde concerning the number of ORS packets being imported and used by health services not using Ministry of Health packets (e.g. GTZ supported pharmacies in the N.W. Province, Ad Lucem, etc.).
- * The general data collected through the OCEAC designed reporting form is not useful to the CDD program:
 - standard definition for "serious diarrhea" (current indicator) is used at the facility level,

-in the case of diarrhea combined with another illness (e.g. measles), health facilities sometimes report the case under the other illness only, sometimes under diarrhea and sometimes under both,

-A large percentage of health facilities do not send in regular reports.

- * The lack of effective follow-up and supervision, especially of recently trained personnel, hampers and progress program effectiveness. Training alone is not sufficient to assure effective application of skills and knowledge covered during the training sessions. Supervision serves to reinforce learned skills, to help personnel apply those skills effectively in the real work setting, to motivate people to try to use their new skills and to collect information on actual health facility practices (e.g. health facility "coverage" in terms of effective case management).
- * The nature and content of registers and other information collection instruments (growth cards, case management forms) at the health facility level is very variable. Not all the information collected is useful. The filling in of forms often seems to take a disproportionate amount of staff time.

4.2 RECOMMENDATIONS:

1. The special information collected for CDD program management should be limited to those data specifically necessary for effective program operations and should be sent only to levels at which there is practical need (rarely more than one level up). Priority should be given to the design and implementation of an effective stock management system for ORS.
2. The extensive information regarding ORS usage rates available through GTZ in the Northwest Province should be analyzed and form the basis of needs estimates for national ORS packet needs.
3. Personnel at different levels of the health system should be trained to collect and use the information useful to themselves and to pass on only that information specifically needed by supervisors. In other words, appropriate information collection, analysis and use must occur at all levels, not just at the center. Health facility staff should be trained to prepare simple charts and graphs showing such things as monthly caseload (according to treatment plan), nutritional status of children coming to the CRT corner, ORS usage and other data which allows them to follow progress of the unit. This information need not be forwarded to supervisors, but should be available upon request; at each management level similar graphs can be developed for the territory covered.
4. Provincial and divisional personnel should be tasked with collecting information concerning the "coverage" of health

facilities with trained personnel (% health centers, health posts, FMI's and hospitals with 1,2 or more trained health professionals in effective diarrhea case management). Divisions should track this by sub-division, provinces by division, at the center by province, each working with composite data from the level immediately below.

5. If and when OCEAC develops a sentinel surveillance system, CDD should coordinate with them to assure that CDD activities are effectively monitored.
6. The registers used in ORT corners and units should be standardized. The case management form currently being used by some corners should be revised and simplified to become a training and reinforcement tool. The form should be used by newly trained personnel for a limited number of cases (50?) to reinforce the recommended treatment process. Yearly repetition of the use of the form for a limited period, on a regular basis (or for a specific number of cases) could serve as a program monitoring and evaluation mechanism.
7. A comprehensive supervisory system should be developed which takes into account the logistical and financial constraints of the health system. Emphasis should be placed on intense follow-up/supervision directly after training (actually planned as part of the training process). Thereafter, to the extent possible, CDD supervision should be absorbed in FHC supervision. A "think tank" should be convened to explore supervisory mechanisms feasible within local constraints.

5. RESEARCH

5.1 FINDINGS:

- * The research component of the CDD program has been relatively under-developed due to the youth of the program: two WHO Mortality and Treatment Practices Surveys have been completed by OCEAC, focus group study of home treatment practices has been recently completed by CDD and Dr. Tetanye, head of pediatrics at Central Hospital in Yaounde is conducting research on Maize-based ORS in collaboration with WHO. The ADDR project is sponsoring a KAP study.
- * The evaluation team found study protocol being conducted in ORT corners and units under sponsorship of the Esoufour Laboratory, producer of Actapulgate, an antidiarrheal. (see Annex 7 for questionnaire)
- * To date, there has been an excellent partnership between local researchers and donors and expatriate consultants in the conduct of diarrheal studies. This has led to the strengthening of the local skills base in research approaches.

5.2 RECOMMENDATIONS

1. CDD should encourage and sponsor appropriate research studies, especially short, practical studies designed to resolve CDD operational issues and problems. (see Annex 7 for a list of possible topics)
2. Local resources should continue to be mobilized to conduct these studies: the medical and nursing students, the university, the Nutrition Institute, local health personnel, funds from the SESA and GTZ projects, OCEAC etc.. Complementary financial and technical resources should be sought, as necessary, from FRITECH, WHO and ADDR.
3. The currently existing research review and selection process should be reinforced—the link between MESIRES and the MOH, the Diarrhea subcommittee of the FHC committee.
4. The MOH should take steps to assure that all studies including those sponsored by private sector pharmaceutical companies meet minimum standards of scientific validity and ethics, especially if MOH personnel is involved in conducting them. (The Actapulgitte study does not appear to meet the criteria)

6. LOGISTICS: ORS AND OTHER DIARRHEA PRODUCTS AND EQUIPMENT

6.1 FINDINGS:

- * Supplies of ORS currently available in the MOH system derive from a supply of 600,000 UNICEF packets which arrived in Cameroon in March, 1983. Approximately half this supply remains in the central warehouses.
- * Accurate estimates of national usage rates of ORS are currently unavailable as, in addition to MOH supplies, there are a number of additional sources and channels of ORS procurement and distribution: GTZ imports from its own off-shore sources and distributes ORS packets to 61 pharmacies and 7 village health post supply points in the Northwest Province, Ad Lucem supplies professional facilities from independently imported stores, other NGO's also import packets for distribution in their own zones of operations, at least one private sector pharmaceutical distributor may be importing ORS packets which conform to WHO standards. The CDD program does not monitor these extra-ministerial sources and channels of ORS supplies.
- * Onapharm, the national parastatal pharmaceutical distributor, has been commissioned by the MOH department of Preventive Medicine to purchase an additional 2.5-3 million 1 liter ORS packets. Funding for this purchase is to be drawn from Preventive Medicine budget. The money became available when the director of Preventive Medicine banned the purchase of antidiarrheals, especially sulfaguanidine, with its funds.

diverting estimated savings to the purchase of ORS. This excellent initiative appears to have run into difficulties. Onapharm has not yet purchased the ORS packets for reasons which remain unclear.

- * To date, the MOH has not yet widely and officially communicated its decision to ban the purchase of anti-diarrheals with government funds. As a result, provincial and departmental level health services continue to send Onapharm orders for the diarrheal drugs which have been banned. The decision to ban these drugs was also not thoroughly discussed with the Directorate of Health, in charge of curative care and hospital services. Hospitals continue to use and prescribe many anti-diarrheals. Also, hospitals receive almost all their drugs, besides ORS and a few medications for the treatment of leprosy and T.B. patients, from the Onapharm depots and not from Preventive Medicine. This special supply channel may result in a decreased rate of ORS usage by health facilities which perceive their role as primarily curative.
- * The evaluation team applauds the decision of the CDD program to support the distribution of ORS packet supplies, including those furnished by the MOH, through all available channels. Especially encouraging is the willingness to supply packets to private non-profit organizations which then sell them through their health care facilities (e.g. missions, Save the Children, CARE). Policy needs to be developed, however, to clarify the respective roles and responsibilities of the MOH and their collaborators in these arrangements.
- * Judging from the relatively scarce and limited information currently available on ORS usage rates, the evaluation team judges that the expected order of 2.5-3 million packets will be sufficient to meet Cameroun's needs for a period of 2 years or more. This large quantity will pose storage and distribution problems to Preventive Medicine.
- * Another very positive initiative of the CDD program is the willingness to work closely with the private sector to promote eventual private sector production and marketing of ORS. Specifically, the continued dialogue with Plantecam concerning technical and logistics issues is likely to benefit both the national program and the company. During a team visit to Plantecam it was revealed, however, that the company was planning to produce a 750 ml. packet, not conforming to national policy.

6.2 RECOMMENDATIONS

1. The national CDD team should collect any easily available information concerning the quantities of ORS salts imported into Cameroun from all sources as well as the quantities used by health facilities and institutions which are not being supplied by the MOH. A special effort should be made

to study usage patterns in the N.W. Province where GTZ has collected extensive data and a well established supply system exists through both government and non-government channels. Also, the N.W. Province has an extension network of health services which sell ORS packets (GTZ project, propharmacies and health posts) and others which give them away free (the MOH health centers and hospitals). Such a study should yield useful information for estimating national trends.

2. The reasons for the delay in the ordering of the 2.5-3 million ORS packets requested from Onapharm should be clarified so as to move this order through as quickly as possible. (Particularly if there is any possibility that funds will be blocked as the end of the fiscal year approaches.)
3. A circular letter from the MOH should be sent to all health facilities, public and private, and to Onapharm announcing and explaining the MOH decision to ban the purchase of antidiarrheal drugs with government funds. All health facility administrators and physicians should be encouraged to refrain from ordering or prescribing such drugs.
4. ORS should be treated, in every instance, the same as any other drug: it should be provided free of charge where other drugs are provided free of charge, it should be sold where other drugs are sold. It should be distributed through the same channels as other drugs. The evaluation team suggests that upon arrival of the 2.5-3 million packet order, ORS packets be distributed to the Onapharm provincial depots. Until most health facilities have trained personnel, Preventive Medicine should work with Onapharm to distribute packets beyond the province.
5. There is a need to clarify policy regarding the distribution of MOH packets through non-MOH channels. This policy development must be based on an initial information gathering effort. For example: Should the MOH supply interested mission health facilities with an ORS stock only on a one-time basis (e.g. provide a "starting supply" only) or continue supplying ORS to these facilities over a longer time period? What other sources of supply are available to these facilities? Are there any constraints to their continued purchase of ORS packets from other suppliers?
6. Upon arrival, most of the expected order of 2.5-3 million packets should be immediately distributed to the provinces. Only approximately 30% of these packets should be kept in the national level storage warehouses. All possible channels should be mobilized for their distribution. The channels, especially, which are currently underexploited, should be strengthened: the propharmacies and the village health posts.
7. The national CDD team should continue its excellent collaboration with Plantecam. Of immediate concern is the following:

-The official MOH decision to use 1 liter packets should be formally communicated to Plantecam as soon as possible.

-The CDD team should continue to work with Plantecam on a packet design which includes a common logo and pictorial instructions for mixing the solution.

8. Ringer's Lactate is the best solution for I.V. rehydration of diarrhea patients, but is not widely available in Cameroun. Onapharm orders only very small quantities because few requests for it are received from hospitals. The CDD team should explore the desirability of increasing the use (and stocks) of Ringer's Lactate with Hospital administrators, pediatricians and other concerned parties.

7. COMMUNICATIONS

7.1 FINDINGS:

- * To date, the national CDD program has not emphasized the development of communications activities directed at mothers, concentrating its efforts in the area of improved clinical management of diarrhea in health facilities. This was appropriate. Now that a growing number of health facilities are providing good care, consistent with national policy, the time has come to launch intensive mother (and other family caretakers) education.
- * The National program has developed a good base preparatory to launching a national communications effort in CDD:
 - initial meetings of the D.D. advisory group bringing together interested parties from several different ministries, MOH departments and donors created an expectation and willingness to collaborate.
 - Production of a series of 3 excellent posters to guide health personnel in providing good ORS and mother education established a working relationship between CDD staff, Health Education Service and AMA, the private health education materials production organization.
 - Collaboration on the production of a calendar (including one month devoted to diarrhea) further strengthened that relationship.
 - The recent completion of a focus group study of diarrhea home care practices has provided a solid information base to use in the

development of effective and appropriate messages, as well as increasing local skills in this approach.

- * The CDD team has started a good effort to provide concerned health professionals with updated information by regular distribution of Diarrhea Dialogue and the FRITECH Technical Literature update (TLU) to provincial level health staff. It is not certain that regular distribution of this literature is continued beyond this level.
- * Many inappropriate or outdated visual materials about diarrhea treatment are to be found in health facilities around the country. These include:
 - outdated AMA materials about the mixing of SSS solutions,
 - posters and advertising materials produced by drug companies,
 - promotional materials for infant foods or infant formulas other than breastmilk.

7.2 RECOMMENDATIONS

1. As soon as is feasible a workshop should be organized for health education service staff and other collaborators with the objective of producing a detailed national communications strategy for CDD and operations plans to implement the strategy under the leadership of the Health Education Service and the CDD team.
2. Before the start of the workshop, the national CDD staff should collaborate with the Health Education Service to produce a clear, simple logo for the CDD program. A pictorial instructions leaflet should be developed for mixing instructions for ORS. Plantecam should participate in the development of this material. And the instructions should be widely pretested to assure understanding by mothers. W.H.O. should be contacted to provide technical assistance for this effort.
3. Considerable planning and management responsibility for communications should be delegated to the provincial level. Provincial health staff interested and available for participation in CDD communications should be invited to the workshop referred to in recommendations #1 above.

The CDD team should strengthen its efforts to provide health professionals with up to date technical information on CDD:

- an up-dated mailing list including all key provincial and divisional health staff should be sent to CRANA for direct mailing of Diarrhea Dialogue and the TLU in French.

-production of a quarterly local CDD/FHC Newsletter containing articles by and about Cameroonians involved in CDD activities.

-continued mailing of available CDD materials from Yaounde to all levels of the health system.

-encouraging publication of CDD articles and research findings in publications widely read by Cameroonian physicians.

5. All available local educational materials about diarrhea should be collected and compiled by the national CDD team. Those which conform to national policy should be used in CDD communications efforts. Steps should be taken to remove those that do not conform to national policy from governmental and private health care facilities.

8. PROGRAM ORGANIZATION AND MANAGEMENT

8.1 FINDINGS:

- * To date, the CDD program has been highly centralized. Planning, management and technical direction has come from a central Ministry of Health team composed of two MOH professionals each working part-time on CDD and one full-time PRITECH technical advisor. During the start-up phase, this centralized management style was appropriate and the existing team did an excellent job developing basic policy and guidelines and getting initial activities started. To complement the scarce human resources of this central management team, they were able to develop collaborative relationships with other MOH services such as Health Education to accomplish specific activities. Now that the pace and scope of CDD activities is accelerating, however, the current management structure is inadequate.
- * It has been a strength of the CDD program in many ways that the persons within the MOH who have been responsible for the program, the Assistant Director for Preventive Medicine and the Assistant Chief of Service of Epidemiology, have had other responsibilities within the Primary Health Care system. This reality has helped CDD move toward integration with other FHC activities. At the same time, the diverse responsibilities of the CDD team core staff has been a constraint on the rapid growth of the program both in coverage and in breadth of activities. Especially during program launching, many things have to happen at once: planning, policy development, development of technical guidelines, training, initiation of a diverse range of activities in the field, follow-up, etc.. For the program to be successful in any given geographic location, all the various components of the program: clinical training, supplies and logistics, communications,

management and supervision, etc., have to start together in an integrated way. Doing this requires a substantial initial input of time, energy and resources. A certain degree of verticality at central and provincial levels is necessary to get things started.

- * There have been no clear job descriptions for any of the MOH personnel involved in the CDD program. This occasionally leads to an almost ad hoc approach to program management. While this style has led to good team work, a lot of necessary activities tend to slip between the cracks because no-one is directly and clearly responsible for making sure they get done.
- * The CDD program has developed excellent collaborative working relationships with GTZ, the SESA project, CARE and Save the Children. Some of the volunteer organizations (AFVP, SNV and Peace Corps) work closely with the MOH but have not been fully tapped by the CDD program.

8.2 RECOMMENDATIONS

1. Two strategies are recommended for the strengthening of the core national CDD staff during this crucial acceleration phase of the CDD program:

- whenever possible the central team should delegate responsibilities for planning implementation and follow-up of activities to others (see recommendation #2),

- the existing team should be supplemented by the assignment of other MOH personnel on either a part-time or a full-time basis to take on specific tasks during this program launch period (see recommendations #3 and 4).

2. CDD planning and management responsibilities should be delegated to :

- provincial health personnel as soon as these have received proper CDD management and supervisory training,

- the staffs of the GTZ and SESA projects in those provinces covered by these projects,

- other primary health care programs such as Save the Children and CARE, whenever possible,

- other Ministry of Health services (such as Nutrition) whenever this is appropriate.

The CDD central team should then concentrate its energies in those provinces not covered by other projects, in those

technical areas not covered by other collaborators and in overall program direction and technical guidance. Delegation of responsibilities does not mean abandonment, however. For the delegation to be successful, the CDD central team needs to give significant initial guidance to its collaborators. Initial activity plan should be jointly conceived and received. Regular follow-up meetings should be held to review progress and seek solutions to problems, as well as to be sure that the efforts are on the right track.

3. Job descriptions for all persons assigned to work on CDD activities need to be carefully defined based on a detailed operational work plan covering all components of CDD. Each task that needs doing should be clearly assigned to a particular individual or group of individuals as appropriate. The relative amount of time each individual should spend on CDD activities must also be made clear and agreed to by all concerned parties.
4. Reinforcement of the central team should be for a specific time period - say, 2 years - after which the number of man-hours spent on CDD program management by central MOH staff should start to diminish as CDD becomes a routine part of health systems operations. It is not the intention to install a permanent CDD department in the MOH. Reduction of man-hours can be achieved either by reducing numbers of staff or by reducing the amount of time individual staff members spend on CDD-related activities.
5. After initial development of provincial or departmental plans, the central CDD team should give priority to making a success of CDD programs in those provinces or departments which demonstrate active interest in and enthusiasm for CDD activities.

9. PROGRAM PLANNING AND BUDGETS

9.1 FINDINGS

- * Whereas a good overall 5 year (1987-1991) budget has been developed for the CDD program during the development of the official national strategy, detailed operations plans and strategies are still lacking. This has constrained giving clear indications to potential donors concerning program needs.
- * Original plans have undergone periodic reviews and revision on an ad hoc, informal basis. This has been fairly effective due to the close collaborative working relationship between the three key national level CDD staff members. However, as the program has become more complex and more diverse, these informal planning review mechanisms have led progressively to a more reactive rather than proactive style of program management. As one person expressed it: "It sometimes feels as if the program runs us rather than that we run the program."

- * Planning has been a joint responsibility of the three key team members, but occasionally, individual members of the team have had to react independently in response to donor requests, for example, when the others have been unavailable. Occasionally this has led to the scheduling of activities not fully coordinated with the rest of the program.
- * The fiscal years of each of the major donors (USAID, WHO, UNICEF) as well as that of the Government of Cameroon are all different. The multi-year planning cycles also differ. This makes coordination planning of inputs into CDD more difficult.

9.2 RECOMMENDATIONS

1. The first priority of the national CDD team after completion of the FRITECH assessment should be the development of a detailed operational plan and budget covering at least the next two years. This planning document will facilitate the process of obtaining commitment from eventual donors to support the CDD program activities.
2. Requests to donors for budgetary or material support should be accompanied by statements of intent, strategy and rationale to justify the need for specific inputs and to convince donors to commit necessary resources.
3. Once the detailed operations plan has been developed, a systematic and regular review and revision process should be agreed to including at least 2 or 3 reviews each year and as replanning at the end of each fiscal year. The purpose of these sessions is to keep track of what needs to be done during the next activity period. Periodic review will lessen the possibility that some important but not urgent activities will be neglected in the press of implementation.

The CDD team should seek information from each potential donor concerning their planning and budgeting cycles so as to better coordinate with them and to be prepared to respond to their requests for documents and other input.

10. OTHER DONOR/MINISTRY COLLABORATION

10.1 FINDINGS

- * The CDD program supports strong collaborative links to related programs and other agencies working with health activities. The program strategy emphasizes the need to provide training to private/confessional health personnel. Efforts by the CDD program to involve other Ministries in promotion of good home management of diarrhea have helped create a model for inter-Ministry work in all aspects of primary health care. The program's efforts in this area have given an important boost to

the proposal to create a national coordinating commission for FHC. Private voluntary organizations working in health in Cameroon and bilateral health projects have also been tapped to carry out the broad lines of the MOH CDD program in their project impact areas. CDD from the beginning has functioned as a multi-donor, multi-partner activity.

- * The program does not have a firm commitment for funding of all its planned activities. Unicef and WHO have thus far provided punctual support for material and some training needs. Unicef's donation of 616,000 ORS packets early in the program provided a crucial boost to the program, pending ordering and delivery of the Ministry's own stocks. WHO has funded some key training at the national level, including the first national ORT course, and contributed a small amount of material support to get the national DTUs opened. With program progress, both organizations have recently indicated an interest in significantly increasing their support to the program. Mr. James Grant, Unicef Director, confirmed this desire in discussions with Cameroon's high-level delegation to the ICORT III conference in December.
- * Three groups have significant numbers of volunteers/technical assistants working with counterparts in the health system in Cameroon: SNV, Volontaires du Progres, and the Peace Corps. The CDD program has had input into the technical training of the Peace Corps Volunteers.

10.2 RECOMMENDATIONS:

1. The CDD program should continue its efforts to include collaborating Ministries, projects, and FVOs in the process of planning and implementing program activities.
2. As mentioned earlier, as soon as possible, the key donor agencies should be presented with a concise, detailed plan of activities, with a clear request for support. The program team should maintain open communications with these donors and should include them in any meetings of the FHC Coordinating Commission.
3. The CDD program should look at the potential for contributing to the orientation/training of personnel for the "volunteer organizations" SNV and AFVP, as it has done with Peace Corps, in order to take full advantage of these volunteers as potential promoters of the national program policies.

ANNEX 1

PERSONS/PLACES VISITED BY THE ASSESSMENT TEAM

YAOUNDE:

- Dr. Mbede Joseph, Minister of Public Health
- Mr. Mbondjo-Ejangue, Secretary General, MOH
- Dr. Ghogomu Amida, Director of Preventive Medicine and Public Hygiene
- Dr. Kollo Basile, Chief of Service of Rural Medicine
- Mme. Djob, Chief of Procurement, ONAFHARM
- Mme. Geh, Chief of Distribution, ONAFHARM
- Dr. Mezolo, DTU, FMI Centrale
- Mme. Monda, DTU, FMI Centrale
- Mme. Mpanjo Ndieme Elise, Pharmacist, FMI Centrale
- other members of FMI staff (triage, DTU, pharmacy) FMI Centrale
- Mr. Emmanuel, Chef du Magasin, D'FHF
- Mr. Belinga, Magasinier, SSF/D'FHF
- Dr. Tetanye Ekoe, Chief of Pediatrics, Yaounde Central Hospital
- Dr. Epee, Pediatrics, Yaounde Central Hospital
- Assistant Pharmacist, Pediatrics Unit, Yaounde Central Hospital
- Mme. Assong Julienne, Nurse in charge of DTU, Yaounde Central Hospital
- Mr. Aguirre Fernando, Unicef Representative
- Fr. Sanokho, Unicef
- Dr. James Sonneman, Chief of Party, SESA Project
- Mr. Robert deWolfe, Training Officer, SESA Project
- Dr. Bergis Schmidt-Ehry, GTZ Project Coordinator

SOUTH PROVINCE:

Sangmelima:

- Dr. Mbam Mbam, Chef de Service Departemental de la Medecine Preventive et Rurale
- Mme. Tchialeu, Infirmier Major de la Pediatrie, Hopital Departemental
- Infirmier en Pediatrie, Hopital Departemental
- Infirmier Major de la FMI
- Sr. Francesca Tassini, Catholic Mission dispensary

CENTRAL PROVINCE:

Ntui:

- Dr. Fewou Amadou, Medecin Chef, Hopital d'Infirmiers
- Mr. Matamba, Save the Children health coordinator
- Sr. Bernadette, Dispensaire de la Mission Catholique
- two nursing school trainees assigned for 3 weeks with Sr. Bernadette

Saa:

- Sr. Anne, Centre Rural d'Appui Technique

WEST PROVINCE:

Bafoussam:

- Dr. Ngufor George, Provincial Delegate of Public Health
- Major and staff of Provincial FMI, Bafoussam
- 2 nurses in Pediatrics, Provincial Hospital, Bafoussam
- nurse-midwife of Ad Lucem Hospital in Mbouda

NORTH WEST PROVINCE:

Bamenda:

- Dr. Obed Nana, Provincial Delegate of Public Health
- Dr. Andy Tembong, Provincial Chief of Preventive Medicine
- Sister George, Nurse in Charge, FMI Nkwen, Bamenda
- Dr. Ekanbi, Pediatrician, Provincial Hospital, Bamenda

Bafut:

- Mr. Jackson, Nforya Health Post
- nurse-midwife of Presbyterian Health Center
- nurses of Ntem Health Center

SOUTH WEST PROVINCE:

Limbe:

- Mrs. Jeanette Takam, Nurse in charge of Pediatric OPD, Bota Annex Hospital
- Sister Etame, Nurse in charge, FMI

Buea:

- Sister Njie, Head Nurse, FMI

Kumba:

- Sister Tata, Midwife, Grade 1, FMI

LITTORAL PROVINCE:

Douala:

- Provincial Delegate of Public Health
- Mme. Essiben, Nurse in charge of ORT Unit, FMI

Note: Health Officials also visited in Maroua, Garoua, and Ngaoundere during week prior to evaluation.

Annex 2

ANNEX PARTICIPANTS AT ROUND TABLE DISCUSSION OF PRELIMINARY KEY RECOMMENDATIONS OF PRITECH ASSESSMENT

LISTE DES PARTICIPANTS

NOM	ADRESSE/ORGANISATION
1. Prof. NGUETE-KIKHELA	Représentant OMS Yaoundé/Cameroun
2. Dr. DENIS PIGOT	PRITECH WASHINGTON
3. AGMA Prins	Représentante Régionale de PRITECH à Nairobi
4. Mr. NDESO ATANGA	Chef Service Adj. Epidemologie MINSANTE
5. Mme Robin STEINWAND	PRITECH /Cameroun
6. Dr. James SONNEMANN	Projet S.E.S.A Yaoundé/Cameroun
7. Mr. Robert de Wolfe	Projet S.E.S.A Yaoundé/Cameroun
8. Mr. Gary LEINEN	USAID/Cameroon Yaoundé
9. TIM MANCHESTER	Save The Children Yaoundé
10. Judith Collins	CARE/Cameroon Yaoundé
11. NGOUANA Elie	MINSANTE SFP Yaoundé
12. Mme Comfort EFFIOM	MINASCOF Yaoundé
13. Mr. NOUMBISSI Joseph	MINSANTE/SMR A'
14. EKOKO EKWA Jacobson	Chief of Office SHPA-MSP
15. ANYANGWE Regina	MINSANTE/SMR A'
16. Deberah ACEOR-TABI	SEP
17. Dr. MEZOLO FOUMENA Adrean	PMI Centrale Yaoundé
18. Prof. Paul WCHOJI NKWI	MESIRES Yaoundé
19. Dr. Anne DABAN	Service Catholique de la Santé Yaoundé
20. Dr. TETANYE EKOE	CUSS. Hôpital Central
21. Mrs. AWASUM Helen M.	CESSI/CUSS
22. Mme PENTANG Rosaline	MINAGRI/DDC
23. Dr. Marie-Thérèse OBAMA	C.U.S.S. C.H.U Yaoundé
24. Prof. CARTERET Pierre	Directeur du CUSS, Université de Yaoundé
25. Prof. KAPTUE Lazard	Directeur de la Santé MINSANTE
26. Dr. OWONA ESSOMBA	DAMPHP MINSANTE
27. KOUAMOU Jean	DMPHP S/L
28. MBELLA Colette	MINSANTE (SSP) MINSANTE
29. Mme MPOULI Sarah	SSMI/A MINSANTE
30. Mme NK'HOHO Cathérine	DAMPHP (SSP) MINSANTE
31. Mr. TAH Shadrack	DMPHP/SES
32. mr. ATINA Emmanuel	DMPHP/SN

ANNEX 3

FRITECH ASSESSMENT OF THE NATIONAL CDD PROGRAM

MAIN RECOMMENDATIONS (DRAFT)

CASE MANAGEMENT

1. The National CDD team should develop, publish and distribute to all health personnel, specific and detailed guidelines or technical notes concerning diarrheal case management and the organization and management of CRT corners or training units.
2. The Ministry of Health should take steps to actively discourage the prescription of costly, dangerous or useless drugs by all health personnel for diarrheal disease. The practice of poly-pharmacy should be actively discouraged. Administrative steps should be taken, if necessary, to eliminate existing supplies.

A circular letter from the MOH should be sent to all health facilities, public and private, and to Unapharm announcing and explaining the MOH decision to ban the purchase of antidiarrheal drugs with government funds. All health facility administrators and physicians should be encouraged to refrain from ordering or prescribing such drugs.

3. Hospital, FMI, or health center staff who have received training in good diarrheal case management should be encouraged to initiate good practices in their health facilities with as few extra materials, equipment and spacial additions as possible. Those hospitals and other health facilities practicing good case management may then be considered for further development into CRT training units (e.g. institute good treatment practices first, then develop training units—not vice-versa).

TRAINING

1. Clinical management training of health personnel at all levels, but especially at the health center level, should be accelerated. If this is to occur and be effective the following pre-conditions must be met:

- Clinical management training materials should be completed in draft as soon as possible and distributed to trained provincial trainers.

- At least one and preferably two supervisors from each province should participate in the mid-level management course as soon as possible.

- National CDD staff should work with a team of supervisors and trainers from each province to elaborate detailed provincial training plans and budgets. Adequate financial resources should be sought to support provincial training activities.

- Physicians supervising health center and FMI staff should receive training prior to or concurrently with their staff in order to assure their active support of the program.

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-The ORT training units in the province should be functioning well, providing a good and replicable model to trainees. National CDD staff should work actively with these units to improve their functioning whenever possible.

2. Follow-up or supervision activities should be a scheduled part of all training. Training budgets should include funds for necessary on-site follow-up for a period of at least three months after completion of training.

3. Key decision-makers from confessional sector health services should be specifically included in all CDD training activities. These key decision-makers should be identified at the provincial level while preparing training plans.

4. Every training activity should end with the preparation of a specific action plan detailing next steps to be taken by participants once they have returned to their work stations. These plans should be reviewed and revised during follow-up meetings or visits and serve as a basis for supervision.

5. Appropriate training of medical students in CDD should be assured by:

-developing model ORT corners in the three regional health centers used by CLSS for rotations in community health for fourth and fifth year medical students.

-assuring that all medical students pass through the ORT unit at the Central Hospital pediatric unit and/or PHU.

-working with CLSS staff to revise medical curriculum as soon as the FRITECH/WHO medical curriculum materials become available (currently being pretested).

6. Efforts to improve nursing and paraprofessional education in CDD should continue by continued collaboration with CLSSI and the "Conseil de Direction" of the paraprofessional schools.

7. All training for CDD should include exercises on the practical means to integrate CDD with other components of Primary Health Care. Also, each clinical management course should include activities to improve the interactions and communications between the health professionals and the mothers (role plays, case studies, discussions)

INFORMATION SYSTEMS

1. The special information collected for CDD program management should be limited to those data specifically necessary for effective program operations and should be sent only to levels at which there is practical need (rarely more than one level up). Priority should be given to the design and implementation of an effective stock management system for CRS.

2. A comprehensive supervisory system should be developed which takes into account the logistical and financial constraints of the health system. Emphasis should be placed on intense follow-up/supervision directly after training (actually planned as part of the training process). Thereafter, to the extent possible, CDD supervision should

be absorbed in FHC supervision. A "think tank" should be convened to explore supervisory mechanisms feasible within local constraints.

RESEARCH

1. CDD should encourage and sponsor appropriate research studies, especially short, practical studies designed to resolve CDD operational issues and problems.
2. Local resources should continue to be mobilized to conduct these studies: the medical and nursing students, the university, the Nutrition Institute, local health personnel, funds from the SESA and GTZ projects, OCEAC, etc. Complementary financial and technical resources should be sought, as necessary, from FRITECH, WHO, and ADDR.
3. The MOH should take steps to assure that all studies including those sponsored by private sector pharmaceutical companies meet minimum standards of scientific validity and ethics, especially if MOH personnel is involved in conducting them. (The Actapulgitte study does not appear to meet the criteria.)

LOGISTICS

1. The national CDD team should collect any easily available information concerning the quantities of ORS packets imported into Cameroon from all sources as well as the quantities used by health facilities and institutions which are not being supplied by the MOH.
2. ORS should be treated, in every instance, the same as any other drug: it should be provided free of charge where other drugs are provided free of charge, it should be sold where other drugs are sold. It should be distributed through the same channels as other drugs. The evaluation team suggests that upon arrival of the 2.5-3 million packet order, ORS packets be distributed to the Onapharm provincial depots. Until most health facilities have trained personnel, Preventive Medicine should work with Onapharm to distribute packets beyond the province level.
3. There is a need to clarify policy regarding the distribution of MOH packets through non-MOH channels. This policy development must be based on an initial information gathering effort. For example: Should the MOH supply interested mission health facilities with an ORS stock only on a one-time basis (e.g. provide a "starting supply" only) or continue supplying ORS to these facilities over a longer time period? What other sources of supply are available to these facilities? Are there any constraints to their continued purchase of ORS packets from other suppliers?

COMMUNICATIONS--

As soon as is feasible a workshop should be organized for Health Education Service staff and other collaborators with the objective of producing a detailed national communications strategy for CDD and operations plans to implement the strategy under the leadership of the Health Education Service and the CDD team.

2. All available local educational materials about diarrhea should be collected and compiled by the national CDD team. Those which conform to national policy should be used in CDD communications efforts. Steps should be taken to remove those that do not conform to national policy from governmental and private health facilities.

PROGRAM ORGANIZATION AND MANAGEMENT

1. Two strategies are recommended for the strengthening of the core national CDD staff during this crucial acceleration phase of the CDD program:

- whenever possible the central team should delegate responsibilities for planning, implementation and follow-up of activities to others.
- the existing team should be supplemented by the assignment of other MOH personnel on either a part-time or a full-time basis to take on specific tasks during this program launch period

2. After initial development of provincial or divisional plans, the central CDD team should give priority to making a success of CDD programs in those provinces or divisions which demonstrate active interest in and enthusiasm for CDD activities.

PROGRAM PLANNING AND BUDGETS

1. The first priority of the national CDD team after completion of the FRITECH assessment should be the development of a detailed operational plan covering at least the next two years and a detailed accompanying budget. This planning document will facilitate the process of obtaining commitment from eventual donors to support the CDD program in terms of specific, targetted, technical, material, and financial inputs for various program activities.

Yaoundé, 15 March 1989

ANNEX 4A

CASE MANAGEMENT IN DIARRHEA

A. Assessment

The first step in treating a patient with diarrhea is to assess the patient and determine how serious the problem of dehydration is. The methods employed to do this assessment are as follows:

1. ASK the following questions -

Diarrhea: How many liquid stools in past 24 hours? How long has the child had diarrhea?

Blood/Mucous: Is there any blood and/or mucous in the stool? How much?

Vomiting: Has there been any vomiting? How much? How often?

Thirst: Is the child able to drink? If so, is he/she more thirsty than usual?

Feeding: What has the child been eating? Breast feeding? Artificial formula? Mixed diet?

Appetite: Is the appetite normal, or decreased?

Urine: Has the child passed urine in the last 4 hours? If so, is the amount normal? What is the color of the urine?

Medications used for the illness: Antibiotics? Antidiarrheals? ORS? SSS? Other?

Immunization status: BCG? DPT? OPV? Measles?

2. LOOK for the following:

General Condition: Is the child alert? weak? irritable?

Eyes: Does the child have tears when crying? Are the eyes sunken?

Mouth (Mucous Membranes): Is the child's mouth wet? dry? or very dry?

Breathing: Is the child's breathing normal? faster than normal? or very fast? Is there difficulty in breathing?

Convulsions? Pallor?

3. FEEL for the following:

Skin: Is there decreased turgor, or decreased elasticity?

Fontanelle: Is it normal, sunken, or very sunken?

Fever: Is there an elevated temperature?

4. MEASURE the following:

Weight: and plot on a weight chart to determine weight for age.

Other body measurements (if possible): Length; mid-arm circumference.

Pulse: to establish a baseline.

5. Based on the above information, a decision should be made as to the Treatment Plan to be employed: A? B? or C? .

Plan A: No dehydration or mild dehydration

Plan B: Moderate dehydration

Plan C: Severe dehydration.

B. ORT THERAPY:

"Effective ORT" is the appropriate case management of acute watery diarrhea by families and health personnel including the following:

1. The administration of appropriate liquids in sufficient quantities from the onset of diarrhea.

a. Home solutions adapted to local circumstances will be administered by families at the onset of diarrhea as recommended (taught) by health personnel to prevent dehydration.

b. Oral rehydration salts and, in cases of severe dehydration, Ringer's lactate solution or normal saline (9%) by I.V. route will be used in health facilities according to the WHO recommendations to rehydrate children suffering dehydration.

2. Appropriate feeding during and after an episode of diarrhea.

a. Continued breastfeeding during diarrhea in the case of breastfed children. More than the usual number of breastfeeds should be offered.

- b. Feeding of 4 - 5 small meals per day during diarrhea.
 - c. Feeding of one extra meal per day for at least one week after diarrhea has stopped.
3. Appropriate health care when necessary.
- a. Mothers will be encouraged to bring children with diarrhea to health care facilities for treatment.
 - b. Health care providers will be trained to provide appropriate care.
 - c. Adequate supplies of ORS packets and other necessary diarrhea medications will be provided to trained health care providers. (Taken from ANNEX I of National Program for the Control of Diarrhea, Strategy 1987 - 1991)

C. Protocol for the Use of ORS Salts in Health Care Facilities:

1. Until such time as a constant and adequate supply of ORS salts can be assured to all existing health care facilities, ORS packets will be used exclusively in health care services to treat patients according to the WHO recommendations.
2. Diarrheal patients who are not dehydrated will be instructed to drink adequate quantities of locally available safe and effective home solutions to maintain an adequate level of hydration and to prevent dehydration.
3. Dehydrated patients will be rehydrated at the health care service using ORS. In the case of severe dehydration (Category C of WHO guidelines), Ringer's Lactate or 9% Normal saline solution will be administered intravenously, in addition to ORS and in accordance with WHO recommended protocol. Appropriate home solutions will be recommended for maintenance of hydration status after leaving the unit.
4. All mothers of *child patients with diarrhea, regardless of dehydration status, will be instructed in proper nutritional management of diarrheal disease: 5 small meals per day while diarrhea persists and one extra meal daily for at least one week after diarrhea ceases (or until the child regains his strength).*
5. *An average of 2 packets of ORS salts per diarrhea patient will be used to calculate packet supply needs for CRT units in health care services. (From ANNEX IV of the National Program for Diarrhea, Strategy 1987 - 1991)*

ANNEX 4B

PREVENTIVE STRATEGIES TO CONTROL DIARRHEAL DISEASES

Current knowledge based on existing research suggests that the following are cost-effective strategies for the prevention of diarrhea:

1. The promotion of exclusive breastfeeding from birth until the age of 4-6 months of age.
2. Measles vaccination.
3. The promotion of personal hygiene, especially hand-washing with soap after defecation and before the preparation or eating food.
4. Installation of water supplies (with particular attention to provision of adequate quantity of water, as well as quality) and sanitation facilities (with particular attention to adequate maintenance).
5. Proper handling (disposal and hygiene) of child stools.
6. Promotion of good weaning practices.

The Cameroon National CDD Program will emphasize these preventive strategies within the context of CDD educational and training activities. (From ANNEX II, National Program for Diarrhea, Strategy 1987 - 1991).

INTEGRATION OF CDD WITH OTHER PHC INTERVENTIONS

GROWTH MONITORING:

Using the Ministry of Public Health's Growth Card, we have the ideal opportunity to integrate many different aspects of Child Survival and PHC. For example, obviously, nutrition education and growth monitoring are a major feature of the card. With the writing either the word "diarrhea" or the symbol ☒ for diarrhea, every time the child is seen at an ORT corner, the mother can connect weight loss, if any occurs, with that episode of diarrhea and adjust with the provision of additional feedings.

EPI:

There is a place for recording dates of immunizations, and these should be noted each time the child is brought to the PMI, pediatric clinic, health center, or health post, i.e. whenever there is a contact to point out any immunization needs. If immunizations are being provided on a day when the child is being rehydrated at the ORT corner, he can be given any missing immunizations that are due.

BREASTFEEDING:

Along with provision of ORS, reinforcement of the major role that breast milk plays in the protection of the infant against diarrheal disease. The provision of breastfeeding during rehydration will serve to reinforce the importance of breastfeeding. It is for this reason that bottles for delivering ORS should be discouraged, and cup and spoon encouraged for this purpose. Similarly, while promoting breastfeeding, it is a good time to discuss appropriate weaning foods with the mother.

ORT:

There is a section on the Growth Card for the date(s) that ORT is taught and used by the mother. This, along with the small picture depicting cup and spoon administration of ORS is on the card.

FAMILY PLANNING:

This is shown on the Growth Card by symbols, and could be reinforced at the appropriate time.

GROWTH INTERPRETATION:

There is an indication as to the path to good health, both in symbols and in the interpretation of adequate growth, faltering, and weight loss as being dangerous. This can be reinforced if the nurses (and doctors) at each health facility would indicate how essential good nutrition is, especially when the child has diarrhea, acute respiratory infection, malaria, and any other infection or infestation.

De-Worming:

Periodic de-worming may be indicated in certain locales, as might periodic anti-malarial prophylaxis. There is a spot on the card for this to be mentioned, as well as small pictures of good foods for growth along the bottom and beneath the growth pathway itself. There is also a section as to risk factors that may indicate to the nurse, doctor, and mother that the infant and child is at special high risk and that special attention should be provided.

ANNEX 4D

Recommendations for improvement of the ORT unit at Central Hospital
in Yaoundé

1. Health personnel in charge of the unit should encourage mothers to hold their children on their laps and give ORS continuously- not waiting for the child to get thirsty. Children who are somnolent should be encouraged to take ORS, not to sleep (They are sleepy because they are dehydrated!)
2. Mothers should be actively encouraged to continue breastfeeding regularly while ORS is being given.
3. Cups and spoons only should be used to give ORS. No baby bottles should be used to give ORS under any circumstances. If a child will not or cannot drink from a spoon a syringe with no needle can be used to give ORS until the time the child will drink.
4. Enough cups and spoons should be available for all patients. For mixing ORS there should be a 1 liter measure, preferably a measure locally available to mothers (e.g. beer bottle + fanta bottle, a Diamor oil bottle ect.), a bowl to mix in, and a spoon for stirring. There should also be a large container for pre-mixed ORS, a bucket and cleaning materials.
5. Arrangements should be made for feeding children while they are being rehydrated in the unit.
6. Growth cards should be introduced and used for all diarrhea patients to teach mothers about the link between diarrhea and malnutrition. Vaccination records should be checked and vaccinations updated if necessary.
7. The available CDD treatment and other education posters should be put up on the wall of the ORT unit.
8. An easily accessible supply of ORS packets (e.g. not locked up) should be available in the unit at all times.

ANNEX 4 E

PRINCIPLES OF GOOD ORT MANAGEMENT:

1. Take the history in triage area.
2. Rapid assessment as to severity of dehydration.
3. Refer ALL patients with diarrhea to the ORT Corner (not necessarily an ORT Unit).
4. Weigh the child and plot the weight on a weight for age chart.
5. Check the immunization status and past medical history; recent similar episodes of diarrhea?
6. Complete the assessment (see appendix on Case Management for protocol) and decide on Treatment Plan A? B? C?
7. Start ORS by mouth showing the mother HOW to give the ORS by cup and spoon, NOT by bottle! Or, by 3-5 ml syringe.
8. Continue to have the mother breastfeed, and offer other food.
9. Thorough physical examination for other problems associated with the diarrhea, i.e. otitis media, pneumonia, anemia, malaria, measles, malnutrition etc.
10. Decide whether other laboratory examinations are indicated, eg. Hemoglobin, stools microscopy, etc. and send to laboratory while the mother continues to administer ORS and food.
11. Check for passage of urine (ideally, this would be measured and specific gravity measured).
12. As mother continues to administer ORT (= ORS + food), follow-up examination or reassessment after 2 hours to include another weighing, temperature.
13. Disposition of the child determined as to referral if indicated, follow-up on the following day, or later.
14. During the ORT process, there are opportunities to provide the mother(s), either individually or in groups or both, actual demonstration in the correct way of preparation of ORS and SSS, reasons for concern about nutritional status, need for provision of any missing immunizations, how to prevent future episodes of diarrhea (see annex on prevention), and why medications for diarrhea are both unnecessary and often dangerous.

ANNEX 5

TRAINING

The national CDD plan calls for in-service training in case management of appropriate health personnel at all levels. All should receive hands on (clinical) practice in either national, provincial, or divisional diarrhea units (DTUs). MOH plans for such training expressly include private/confessional health personnel as well as public health employees.

Supervisors and managers are scheduled to receive additional training specific to their roles.

Table I (below) lists courses and personnel trained to date.

TABLE I:

<u>DATE</u>	<u>NUMBER/CATEGORY</u>	<u>TRAINED IN</u>	<u>LOCATION/SPONSOR</u>	<u>STILL WORKING</u>
<1987	4 M.D.s 5 MOH	clinical*	outside Cameroon (various)	4/4 4/5
10/87	1 M.D. 1 major 2 MOH	clinical* " "	Mama Yemo, Zaire " (WHO)	1/4
11/87	16 M.D.s 1 major	clinical* "	FMI Centrale " (WHO)	14/17 1/1
12/87	10 FHC Coor	CDD/FEV/ARI	CUSS (WHO/CDD)	9/10
5,7/88		TOT—see Table 2		
6/88	39 nurses	seminar-clinical overview	Maroua (MOH)	est. 100%
7/88	5 nurses 6 aides	clinical* "	Ngoundere DTU " (SESA/MOH)	4/5 4/6
7/88	10 nurses	clinical	Bertoua (MOH)	10/10

8/88	2 nurses	clinical*	Bamenda DTU (GTZ/MCH)	2/2
8/88	3 M.D.s 1 AssisCoor 6 nurses 3 aides	clinical* " " "	Ebolowa DTU " " (SESA/MCH)	2/3 1/1 6/6 3/3
9/88	2 M.D.s 5 Coor (Div) 7 nurses 2 aides	clinical* " " "	Ngacundere DTU " " (SESA/MCH)	2/2 5/5 7/7 2/2
10/88	TOT—see Table 2			
11/88	1 M.D. 9 nurses 6 aides 1 other	clinical*	Doukoula (STC/Fritech/MCH)	1/1 9/9 6/6 1/1
11/89	2 M.D.s 23 nurses	proj. overview for Dist. Coordinators	Mvolye (CHS)	2/2 23/23
1/89	2 Coor (Div, Dist) 8 nurses 12 aides 1 other	clinical*	Yokadouna (STC/FRITECH/MCH)	2/2 8/8 12/12 1/1
1/89	1 Coor (Arr) 4 nurses 5 aides 2 other	clinical*	Ntui (STC/Fritech/MCH)	1/1 4/4 5/5 2/2
3/89	74 VW/TEAs	FHC (w/CRT)	Ntui (STC)	74/74

* = hands-on clinical training included

To date the following numbers have received clinical training in CRT (excluding overview courses in Maroua and Mvolye):

27 M.D.s
9 Coor FHC
48 nurses
39 aides
11 MCH and other

Of the 134 trained as detailed above, 14 per cent have been from the private and confessional health sector.

In addition to those trained in the above courses, within each province trained personnel have trained staff in the intended provincial training unit in case management. In all an estimated 40 nurses and nurses aides have been trained on the job for this purpose. In most cases these people have not received formal training in an CRT course and the results are of varied quality.

According to the national strategy document, Annex VIII, by the end of FY 88/89 (June 1989) a total of 470 doctors, nurses, and other paramedical personnel were to have received clinical management training. Approximately 40 % of that goal has been reached.

WHO/AFRO recently responded favorably to the CDD program's request for funding for four supervisory and management courses which are scheduled to be held May-July 1989. Participants in these courses will include sub-divisional FHC Coordinators who are the primary supervisors of health center personnel, according to the new MOH organigram.

TRAINERS:

A key element of the national CDD training plan is the training of a core group of trained trainers in each province and at the national level. To this end three courses have been held to date (in May and July 1989) in which a total of 48 participated from all 10 provinces and the national level. In most cases, the provincial chief of preventive medicine and his assistant (FHC Coordinator) as well as the head nurse in the designated provincial DTU participated in the course. In the case of the anglophone TOT which, with only two provinces represented, had space for additional participants, other key trainers such as the nursing school instructors or health educators were included. (See Table II)

The goal of the course was that participants develop skills in the design and conduct of training. The SESA USAID/MOH bilateral health project also sponsored a TOT in October 1988, in which an additional 16 key personnel from the divisional level in the two provinces received training as trainers.

Though examples in all the above TOT courses focused on CRT, the skills acquired apply to any type of training. The TOT course participants form a pool of people in each province who are expected to organize and carry out the training of personnel in CRT/clinical management. Some of the provincial trainers will also assist with the supervisory/management courses.

TABLE II: TRAINING OF TRAINERS

<u>NUMBER/POSITION</u>	<u>DATE TRAINED</u>	<u>ADDED EXPERIENCE</u>	<u>STILL WORKING</u>
SMFHP: 7	5/88	4	6
2	7/88	1	2
other MDs, incl. MOH: 4	5/88	3	4
2	7/88	2	2
Prov. FHC Coord.: 7	5/88	4	6
2	7/88	2	2
Div. FHC Coord. 1	7/88	0	1
5	10/88	1	5
others SMFR: 7	10/88	0	7

clinical nurses:	9	5/88	7	9
	5	7/88	1	5
	4	10/88	0	4
other(misc)	7	5/88	5	7
	3	7/88	2	3

TRAINING MATERIALS:

The CDD program team has worked jointly with SESA and Save the Children staff to select and develop standardized CRT training materials. Course design and handouts have been tested and modified with successive courses. WHO materials and materials which have been developed for use in other countries have provided the bulk of course materials used to date in Cameroon. The program team's plan to produce a standard course booklet, with session plans and handouts, has not yet been realized.

Course content consists of the following:

- introduction/pretest
- expectations/objectives/previous experiences of participants with CRT
- overview of national CDD program
- diarrhea: etiology, dehydration, complications
- CRT, other medicines, diarrhea and nutrition
- evaluation of the child (reception, case history, exam)
- signs of dehydration
- diagnosis and classification by plan
- treatment and follow-up
- communications: important messages for the mother.
- communications: adult learning/health education
- supervision of good CRT
- hands-on/clinical practice with CRT
- organization of the CRT corner/record books
- stock management
- evaluation of the course/feedback/review of pretest
- closing

PROFESSIONAL SCHOOLS (Pre-Service Training):

Directors of several of the health professional training institutions in Cameroon met with the original British assessment team in 1986 to discuss the possibility of integrating CDD into the curricula of these schools. The national CDD strategy supports their willingness to include CDD as a part of the formal curriculum, but activities in this area have been postponed for another school year.

However, pending a formal change in the curriculum, many students receive training in good diarrhea case management through a number of informal initiatives, as follows:

- medical or nursing school professors who are themselves trained in ORT include this in their own courses (ex: Dr. Tetanye Ekoe, professor of Pediatrics at CUSS),
- the director of one of the CUSS annexes (Bambili) participated in the CDD TOT held in N/P and has applied his training to the organization of an ORT corner in the center so that fourth and fifth year medical students who pass through that center will be exposed to ORT,
- medical students all do a rotation in the Pediatrics at Yaounde Central Hospital, during which most pass through the ORT training unit there,
- nursing students at schools located in the provincial capitals usually do a practicum in the provincial FMI. Treatment units are operational in provincial FMIs in Bafoussam, Bertoua, Douala, Yaounde, Garoua, Maroua,.....? In addition, students of the schools in Bamenda receive training in the provincial hospital DTU,
- the director of CESSI recently began a series of guest lectures in effective diarrhea case management for the graduate nursing students, pending the development of formal curriculum materials and consequent teacher training.

The CDD team is scheduled to participate in the semi-annual meeting in late March 1989 of the national Directors' Council ("Conseil de Direction") for all professional and paraprofessional schools to discuss eventual revisions in the curriculae that would formalize and standardize instruction in good diarrhea case management.

ANNEX 6A

HEALTH MANAGEMENT INFORMATION SYSTEM

Registers are kept at health facilities. Presentation and contents are not standardized, but in addition to identifying the patient, age and gender, and diagnosis seem to be regularly recorded and treatment is often noted. Some registers are much more detailed, and in some places there are registers devoted exclusively to diarrhoea patients. The CDD program recommends maintenance of separate diarrhoea registers.

There is a weekly report on communicable diseases which includes diarrhea and is sent by telegram to the Epidemiology Department. We have no information on the completeness of reporting or use of the data for CDD management.

The weekly report is followed by a monthly report on communicable diseases, including diarrhea, which is transferred to an OCEAC form at the Department level. The reports are sent on to the Epidemiology Department and to OCEAC for computer processing. This data is presented by age group. The form also reports by age group on numbers of consultations.

A rather detailed patient form for diarrhoea cases has been developed by the CDD program (see Attachment A). We are told it was to be used as a research tool, but it was found in fairly general use in places visited.

In mid-1988, the CDD program distributed to participants in training courses a stock control ("fiche de stock") form to be used in all health facilities by those managing ERC stock (Attachment B).

A stock management reporting form was also developed in mid-1988 (Attachment C). Its distribution was the same as that of the "fiche de stock" and it is to be sent to the central CDD staff monthly.

There is no CDD activity report, but in different areas forms have been introduced containing such information. SEGA has developed a variant of the stock management form which drops estimates of consumption and need and adds information on numbers of people treated for diarrhoea by age group, numbers of treatments, and numbers known to have been cured. GTZ (in Northwest Province) has a ERC monthly report form used down to the health post level; it includes ERC stock at the end of the month, "diarrhoea and dysentery" cases by age group, number treated and number referred, deaths due to diarrhoea by age.

FICHE D'EVALUATION ET DE TRAITEMENT DE DIARRHEE

A. Enregistrement par l'Infirmier

1. NOM: _____ PRENOM: _____ 2. SEXE M F

3. AGE: _____ (mois) 4. QUARTIER/VILLAGE: _____

5. DATE _____ HEURE D'ARRIVEE _____

PLAINTES PRINCIPALES:

6. DIARRHEE: a) No. de selles depuis 12 heures _____ b) No. de jours de diarrhee _____
c) Type: Liquides _____ Muco-purulentes _____ Sanguinolentes _____ Autre _____

7. VOMISSEMENTS? _____ si oui, No. de vomissements depuis 12 heures _____

8. FIEVRE? _____ 9. ROUGEOLE? _____ 10. AUTRE _____

11. ETAT VACCINAL (encercler tout déjà reçu):
BCG DTC 1 2 3 Antipolio 1 2 3 Antirougeole

12. ALLAITEMENT: (1a) Maternel _____ (1b) Artificiel _____ (1c) Mixte _____
Allaitement depuis début de la diarrhée:

(2c) Arrêté _____ (2a) Normalement _____ (2b) Diminué _____

13. ALIMENTATION depuis début de la diarrhée:
(a) Augmenté ou Normale _____ (b) Diminué _____ (c) Arrêté _____

Medicament(s) Recu(s) Depuis Début De La Diarrhée:

14. ANTIBIOTIQUES:	Oui	Non	si oui, d'où?	1	2	3	4	5	1. Domicile
15. ANTIDIARRHEIQUES:	Oui	Non	si oui, d'où?	1	2	3	4	5	2. Pharmacie
16. SRO:	Oui	Non	si oui, d'où?	1	2	3	4	5	3. Cabinet Privé
17. SSS/SOLUTION MAISON:	_____ (quelle solution?)								4. Centre de Santé
18. TRAITEMENT INDIGENE:	Oui	Non	si oui, d'où?	1	2	3	4	5	5. Hôpital
19. AUTRE(S)	_____ si oui, d'où?								1 2 3 4 5

B. Evaluation Clinique

20. TEMPERATURE: _____ °C 21. POIDS _____ Kgs.

22. TAILLE: _____ Cms. 23. CIRCONFERENCE BRACHIALE: _____ Cms.

24. Est-ce que l'enfant a des signes de malnutrition:
Non _____ Oui _____

signes: _____

VOIR RESPONSABLE DE L'UNITE DES QUE LE MALADE SE PRESENTE AVEC UN DES SIGNES SUIVANTS:

25. FIEVRE (≥ 39°C) / FRISSONS? _____

26. CONVULSIONS? _____

27. DIFFICULTES RESPIRATOIRES? _____

28. ANEMIE? _____

C. Tnérapie de Rehydratation Orale

TRO débutée: _____ (heure) Fin TRO: _____ (heure)

Evaluation de:	Admission	2 heures après:	4 heures après:	Fin TRO	:
Deshydratation:	:	:	:	:	:Observ.
Etat Général	:	:	:	:	:
Fontanelle	:	:	:	:	:
Yeux	:	:	:	:	:
Larmes	:	:	:	:	:
Muqueuse	:	:	:	:	:
Pli Cutané	:	:	:	:	:
Soif	:	:	:	:	:
Respiration	:	:	:	:	:
Urine	:	:	:	:	:
Plan de Tx	: A : B : C :	A : B : C :	A : B : C :	A : B : C :	:
Evolution Poids:	:	:	:	:	:
QtéSRO-Préscrite:	:	:	:	:	: TotalPréscrite:
-Administrée:	:	:	:	:	:Tot.Administrée:

D. Etat à la Sortie

40. Rehydratation Complète _____ Rehydratation Incomplète _____
 Transféré _____ Décédé _____

41. Diarrhée Continue? Oui _____ Non _____

42. Vomissements? Oui _____ Non _____

43. Fièvre? Oui _____ Non _____

44. Autres remarques _____

5/88

RAPPORT MENSUEL DE GESTION DE STOCK

Designation: Sels de Réhydratation Orale Unité: Sachet

Formation Sanitaire: _____

Province: _____ Département: _____

Date du Rapport: _____ Pour le Mois de: _____

Niveau Stock de Reserve: _____ Consommation Mensuelle Estimée: _____

En Stock au Début du Mois: _____

Arrivages Pendant le Mois: _____

Distribué Pendant le Mois: _____

Reste en Stock à la Fin du Mois: _____

(Prochaine commande prévue le _____)

Besoins Estimés pour la Période en Cours: _____

Stock de Reserve: _____

Total Nécessaire pour Cette Période: _____

Stock Actuel (Voir Reste Stock): _____

Totale à Commander (Différence): _____

Remarques:

ANNEX 6B

MONITORING - EVALUATION - SUPERVISION

The implementation phase of CRT units supervision was scheduled to start in March 88, according to the strategy document (National Program - Control for Diarrheal Diseases) and to be carried out on a regular basis till the end of the four year period (june 91).

At the provincial and divisional level, Médecins Chefs have the responsibility of the supervision of all facilities, public and private.

The implementation calendar suffered financial problems, mostly lack of fuel to run cars and arrangement in "Médecins Chefs" schedule in keeping time for field supervision, as it has been identified by the assessment team through field visits to regional and divisional health facilities.

Other problems identified were the lack of timely completion of activities reports sometimes performed only on a sporadic basis, and the lack of regular meetings to discuss current problems.

Thus, despite interest in supervisory activities, it is indeed very difficult for the supervisors to achieve the initially defined objectives.

Monitoring and supervisory issues in facilities run or assisted by the confessional missions and the NGOs are somehow different. In the area assisted by the GTZ teams, the management regarding transportation matter insures a more regular follow-up at the most peripheral level.

In the division of Ntui, a combined effort from the personnel of the divisional hospital, the catholic mission and Save the Children Corporation provides the system with a better communication down to the peripheral units in the monitoring and supervision activities.

Reporting forms are lacking standardization. The CRSC form, of widespread use, is in its present format more a gathering of raw data than a tool for monitoring of activities. A revised form was introduced in 1987, but still old models are circulating.

A form designed for monitoring was designed by the UNF program and distributed in January 89. Results are not yet available. SUSA is currently working on the design of such a form, adopting the ERICOR form (similar to the WHO Case Management supervision form).

Training in management and supervisory skills was initially planned as follows: four sessions were to take place, three during FY 88-89 period and a last one in 89-90. Funds for these sessions (MO) were obtained only recently, and implementation should take place before the end of FY 89-90 for the first session, after a needs assessment and selection of trainees among the physicians who have administrative responsibilities at the regional and divisional level.

Two evaluations were planned. The first one, defined as the mid-term evaluation was initially scheduled for June 1988, but could not take

place before this month of March. The assessment is carried out by the CDD director, the CDD manager and the FRITECH team. The final impact evaluation should take place as scheduled at the end of the four year period (end of FY 90-91).

ANNEX 7A

SPECIAL STUDIES

In the initial CDD programme implementation calendar, three subjects were identified:

1. SSS safety/efficacy study
2. Home solution safety/efficacy studies
3. Nutrition/ORT studies

These studies were scheduled to take place during FY 88-89 and beginning of FY 89-90. Among these, one has been completed.

A KAP study has been carried out in four regions, with use of focus group technique to collect information about socio-cultural aspects of diarrheal disease. The results will be exploited to refine case management strategy and IEC material development.

Among the other studies completed in the country were noted:

1. 1983-84 WHO survey of diarrhea etiologies
2. 1988 OCEAC KAP interview of mothers. OCEAC is also collecting on a regular basis secondary based data on demographic factors and diagnoses performed in the health facilities
3. A maize-based ORS is currently under study in a therapeutical trial in the Central hospital pediatric ward, conducted by Dr. Tetanye with the support of WHO. Dr. Tetanye is currently running other studies, to be documented.
4. A study is currently carried out by the Beaufour laboratory in at least two FMIs. This is a therapeutical trial of the drug Actapulgate. One could wonder of the interest of it, provided that there is no defined protocol, a lack of direct supervision and the drug cost is supported by the patient.

During the assessment of the program a need for the following studies was identified:

1. Use of nasogastric tube in case management, plan C. According to the results of the field visits, there is very little use of this technique. A study is needed to identify if the nasogastric rehydration route is adapted to the local conditions and if its use should be encouraged.
2. Composition of Sugar Salt Solution and Home Available Fluids given to the children with diarrhea in Cameroon: safety and efficacy. This information is necessary to determine the role they should take in the ORT strategy.
3. Importance of Shigellosis in bloody diarrhea: According to the therapeutic practices observed, it seems that most part of cases of bloody diarrhea are primarily considered and treated as amoebiasis

cases. Information needs to be collected about the importance of Shigellosis in this pathology. A literature review of possible studies already done on this subject in Cameroon should take place, the completion of an epidemiologic study if necessary. A workshop with the care providers to determine standardized therapeutical guidelines should follow

4. As determined in the conclusions of the study on the socio-cultural aspects of the diarrheal disease, more is needed to know about the current feeding practices during and after diarrheal episodes, and the understanding of the dehydration status by the mothers. A continuation of this study is thus desirable.
5. Further investigations are needed to identify the medical literature available locally and read by the health professionals. Use of such media should be considered for diffusion of information related to CDD program.

Identification of local potential human resources for the carrying out of studies:

1. A doctoral candidate in social sciences, Mr. Flavien, has been a precious collaborator during the first KAP focus group study.
2. Dr. Ekambi, Médecin Chef in Baranda expressed interest in studying socio-economic factors associated to persistent diarrhea.
3. IMFM (Institut Médical des Plantes Médicinales): Fr. Abondo is currently performing research on natural drugs.
4. The Center of Nutrition is doing research on diet adapted to malnutrition care.
5. ~~SESSA~~ and GTZ expressed their interest in participating in diarrheal diseases related studies.
6. Assistance could be sought among the six year medical students who are working on medical theses.
7. Some Cameroonian physicians got a MFH training in overseas universities; among those Johns Hopkins and Tulane (Schistosomiasis project). List to be provided.
8. More information is needed on possible collaborative work with institutions like the department of epidemiology (Mr. Ndeso), the department of Public Health at the University (CUSS) and OCEAC.

ACTAPULGITE "P"

PEDIATRIQUE

FICHE CLINIQUE

CODE PATIENT

CODE PAYS

(NE RIEN INSCRIRE DANS CES CASES)

A / ENFANT

1. NOM

(trois premières lettres)

2. PRENOM

(trois premières lettres)

3. SEXE

(M - F)

4. AGE

(mois)

5. POIDS

(grammes)

6. TAILLE

(cm)

7. TYPE D'ALIMENTATION

(allaitement maternelle = 1)

(lait maternisé..... = 2)

(diversifiée..... = 3)

B / SYMPTOMES

8. ANCIENNETE DE LA DIARRHEE

(heures)

9. NOMBRE DE SELLES DURANT LES DERNIERES 24 HEURES

10. ELEMENTS ASSOCIES AUX SELLES

(absence = 1)

(sang..... = 2)

(mucus.. = 3)

11. DESHYDRATATION

(absence = 1)

(1 à 4 % = 2)

(5 à 9 % = 3)

12. VOMISSEMENTS

(absence... = 1)

(modérés.. = 2)

(francs..... = 3)

(intenses.. = 4)

13. TEMPERATURE

(degrés celsius C°)

C / EVOLUTION

14. TRANSIT NORMALISE EN

- 24 heures
- 25 à 48 heures .
- 49 à 72 heures .
- 72 heures . . . :

15. HYDRATATION A L'ARRET DU TRAITEMENT

- normale
- déshydratation
- 1 à 4 %
- déshydratation
- 5 à 9 %

16. POIDS A L'ARRET DU TRAITEMENT
(grammes)

--	--	--	--

17. TEMPERATURE A L'ARRET DU TRAITEMENT
(degrés celsius C°)

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18. VOLUME DE SOLUTION REHYDRATANTE RECUE
(en ml)

--	--	--	--

19. NOMBRE DE SACHETS D'ACTAPULGITE "P" RECUS
(N)

--	--

20. ACCEPTABILITE DE L'ACTAPULGITE "P"

- très bonne .
- bonne . . .
- assez bonne .
- médiocre . .

21. TOLERANCE DE L'ACTAPULGITE "P"

- très bonne .
- bonne . . .
- assez bonne .
- mauvaise . .

22. REMARQUES

NOM ET CACHET DU PRATICIEN

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ANNEX 8

LOGISTICS

Oral Rehydration Salts (ORS)

Policy calls for ORS to be used exclusively in health facilities until it is generally available in the commercial sector.

MINISTRY OF HEALTH (MOH)

The CDD program is currently operating with a supply of 600,000 packets supplied by UNICEF in March 1988 (see attached table). Later in 1988, it was decided that the MOH would ban purchase of anti-diarrhoeals (particularly sulfaguanidine) with its funds and use the resulting savings to buy ORS. On the basis of estimated savings some 3 million packets were to be ordered during the 1988/89 fiscal year. That order is now being processed, we are told, but the final quantity may be closer to 2.5 than 3 million packets.

The packets are to be ordered by the Preventive Medicine Department through ONAPHARM, the para-public entity responsible for Government drug supply. The normal practice in the case of Preventive Medicine Department orders is for the goods to be delivered to the Ministry in Yaounde, where Provincial authorities must fetch them. (Drugs ordered through ONAPHARM for other MOH services are delivered to Province level depots by the suppliers.)

Standard procedure is for each level to request drugs from the next higher level, and to fetch them. It is common for the order to be presented for immediate pick-up. The same procedure is followed in the case of ORS.

In general, the quantity of drugs available to health facilities is less than their perceived needs. In the case of ORS, this should not be the case in the immediate future as best one can tell from recent consumption levels relative to the size of the pending order.

NON-GOVERNMENTAL, NON-PROFIT

Church-related health facilities. Much of the health care in Cameroon (estimates go up to near 50%) is provided through church-affiliated health facilities. A similarly affiliated organization - Ad Lucem - imports drugs for many of the organizations operating these health facilities. The evaluation team visited very few of these facilities, but found one Catholic health center which reported that they bought drugs in institutional quantities from Ad Lucem, but products wanted in smaller packages they found less expensively at other wholesalers in Yaounde.

A 1986 report indicated that Ad Lucem was not offering ORS at that time, but we understand that they do now sell ORS packets (FOPA 45). (This has not been confirmed directly with the organization.)

Other NGOs. GTZ, Save the Children (US), CARE and other Non-Governmental Organizations are active in the health sector in Cameroon. Some (e.g. GTZ, Save the Children) participate in the distribution of JG packets which they import themselves, or in a few cases obtain from the Ministry of Health.

10.3.89

- Best Available Document -

COMMUNITY PHARMACIES

ProPharmacies. These small community-based pharmacies, locally funded and managed, and technically supervised by health facility staff have been widely established in Cameroon. They operate on a revolving fund and are expected to be self-sufficient. Their success has varied from one place to another; the team has no information on the numbers now effectively operating, or on those which include ORS packets among their products. However, in Northwest Province, GTZ has been providing assistance to the ProPharmacies since 1986 and reports 61 now functioning well and including ORS on their product list.

Village health posts. In many areas, village health workers man posts in their villages on a volunteer basis. They are provided with a small drug kit when they are trained and are expected to sell their drugs, then use most of the proceeds to renew their stock, thus to continue sales. There does not appear to be a standard resupply system for them everywhere. In the area in which GTZ is working in Northwest Province they have added seven village health post stores for this purpose; elsewhere, how well the village health post system works depends on whether ways of getting resupplied can be found (e.g. in one area the team visited, a Sister from a Catholic Health Center does the purchasing for village health teams when she goes to Yaoundé). It is our understanding that the village health posts with which GTZ is working sell ORS, but that others have not been trained in its use and thus far do not sell it.

COMMERCIAL CHANNELS

There are unconfirmed reports that at least one drug firm is importing ORS packets and that they are sold in pharmacies at approximately FCFA 100.

A local firm, Plantecam, working with PATH and Project SUPPORT, is setting up a production line for ORS packets. In consultations with the Ministry of Health in 1988, they agreed to produce the packet size adopted by the Ministry for its CDD program (subsequently fixed at 1 liter). Informal reports indicate that they hope to be able to sell the product for FCFA 55-60 and aim for a production of up to one million packets their first year. No start-up date has been given, but it appears unlikely to be before the second half of 1989.

Other Products

Other medical supplies (antibiotics, scalp-vein needles, IV fluids) are supplied through the Ministry's purchases and/or the commercial sector and ProPharmacies. It was noted that according to ONAPHARM, Ringers Lactate is little demanded by the MOH and thus it purchases very little.

Material for ORT Units/Corners (see Annex VI of the CDD Strategy document) not already available is being provided from local resources or by UNICEF.

CAMEROON CDD PROGRAM - ORS DISTRIBUTION, 1988-1989

PROVINCE	YEAR	MONTH	DESTINATION	PACKETS
ADAMAOUA	88	6	NGAOUNDERE	10,000
CENTRAL	88	5	DISP MVOLYE	1,000
		6	PAV BEAUDELOGUE	3,000
		9	DISP MVOLYE	1,000
		10	PMI NKOLNDONGO	2,000
		11	DIOSCESE OBALA	2,000
			DISP MIS CATH BAFIA	1,000
			PAV BEAUDELOQUE	3,000
		12	PMI CENTRALE YDE	10,000
			SPMPHP DU CENTRE	10,000
	89	1	DIOCESE OBALA	3,000
			PROV CENTRE	3,000
		2	CENTRE MED SOCIAL ESSOS	500
		3	DISP MVOLYE	1,000
EST	98	6	PROV EST	5,000
	89	1	PROV EST	10,000
EXTREME NORD	88	6	MAROUA	1,000
		11	PROV EXT-NORD	1,000
	89	2	PROV EXT-NORD	7,000
GENERAL	88	5	PAUL BELON JRNLISTE	100
		10	M.ZIBI	10
			PROJ GESA	100
		11	DISP ST ALBERT SOMAEN	1,000
			DR OMONA	100
				100
		12	MSP - GEB	1,000
	89	1	M. YAOUSA	100
			MIN SANTE	1,400
			MME BASSONG ISABELLE	100
			MME NOUNKOURE	50

10 March 89

CAMEROON CDD PROGRAM - ORG DISTRIBUTION, 1988-1989

PROVINCE	YEAR	MONTH	DESTINATION	PACKETS
GENERAL	89	1	PAUL DELON JRNLISTE	100
		2	CORPS DE LA PAIX DAMPHP	500 400
LITTORAL	89	2	PROV LITTORAL	5,000
NORD	88	8	PMI GAROUA	1,000
		11	PROV NORD	1,000 20,000
NORD OUEST	88	11	PROV NORD-OUEST	4,000
	89	2	GTZ YDE PROV NORD-OUEST	2,000 4,000
		3	PROV NORD-OUEST	1,000
OUEST	88	11	PROV OUEST	1,000
SUD	88	6	SEMFR OCEAN	1,000
		7	PROV SUD	3,000
		10	PROV SUD	20,000
		11	PROV SUD	10,000
	89	2	MISS CATH SANGELIMA	1,000
SUD OUEST	88	6	PMI KUMBA	2,000
		8	PROV SUD-OUEST	5,000
	89	2	PROV SUD OUEST	2,000
===== Total:	====	====	=====	===== 167,560

10 March 89

ANNEX 10 -

PROGRAM ORGANIZATION AND MANAGEMENT

FACTORS TO CONSIDER IN ASSESSING ORGANIZATION AND STAFFING

REQUIREMENTS FOR GOOD DIARRHEAL CASE MANAGEMENT & SUCCESSFUL CDD

	HEALTH FACILITY	HOME
KNOWLEDGE	Mgt/Sup.staff must understand CDD & ORT enough to encourage & support proper case management Staff dealing with diarrhea patients must know how to diagnose and how to treat...	Those who care for children must know how to prevent dehydration, how to recognize it, and what to do when it is present.
ATTITUDES	Mgt/Sup and staff working with patients must believe in ORT and in educating mothers to proper care in the home	Mothers must see diarrhea, and particularly dehydration as potentially dangerous, and as avoidable & curable.
PRACTICES	Look for signs of dehydration; provide ORS in the clinic and otherwise <u>follow CDD policy</u> ; explain home care to mothers..	Liquids and continued feeding during diarrhea; ORS then if available, always in case of dehydration.
SUPPLIES	ORS Scalp-vein needles Ringers lactate Selected antibiotics	ORS, or the ingredients to make another recommended home solution.

What determines whether and how well these requirements are met?

	Health Facilities	Homes
Knowledge	PRE-SERVICE ED. TRAINING SUPERVISION CONTINUING ED.	MED/P-MED STAFF HEALTH EDUCATORS MEDIA COMM.HLTH.WRKRS ...
Attitudes	KNOWLEDGE SUPERVISION EXAMPLE PEERS	KNOWLEDGE PEERS
Practices	KNOWLEDGE ATTITUDES BELIEF IN ORT SUPERVISION SUPPORT ORS AVAILABILITY	KNOWLEDGE ATTITUDES BELIEF IN ORT ACCESS TO ORS OR RECOMMENDED ALTERNATIVES

tot

In a given locality, ALL of the necessary elements must be in place for the programme to be effective. With communications in one community, CRS in a second, management training in a third and clinical training in a fourth, CDD is incomplete and probably ineffective in all four.

To plan organization and staffing, it is useful to reflect on what must be done to bring together all of the essential elements in one place more or less at one time.

Key activities and sub-activities are listed below. In each case, someone - not always the same person - must,

- take initiative,
- do what is to be done,
- check to see that what is planned is done,
- be available to resolve problems when called upon.

For some of these activities, responsibility may be at one level of the system; for others it may be at several or all levels at one time or another: Center; Province; Department; Arrondissement; health facility.

The role and degree of involvement of different sectors will vary from one activity to another, but must always be considered and often promoted:

Health facilities: Government, NCO;
Sales outlets: Community & Commercial

1. CASE MANAGEMENT POLICY: Identify needs
Propose positions (or options)
Obtain approval
Disseminate positions appropriately
2. TRAINING: Strategy development
Materials development, production, supply maintenance
Implementation planning
Course organization, staffing, logistics, etc.
Course execution
Field follow-up
3. LOGISTICS: Plan supply strategy and logistics system
Calculate needs
Order from supplier
Distribute to lower levels
Monitor system operation
4. I.E.C.: Plan strategy
Prepare and test messages/media
Produce materials
Distribute materials
Make appropriate use of materials
Evaluate effectiveness
Review/revise messages, materials

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CDD must be successful in the population surrounding a health facility, then in the populations surrounding most, and eventually all health facilities for it to be successful in the country.

For a CDD effort to succeed in a given locality requires that in that locality care providers - medical staff and mothers - know what to do and how to do it, are convinced it should be done, have the necessary supplies, and do it. For that, all of the key activities are needed at the same time. That is the organization and management challenge.

QUESTIONS: For which activities is there responsibility (1) major or (2) some at which levels?

Who is, or should be, responsible at each level, in the case of each activity, for initiative, checking, doing, help?

Which are essentially start-up activities (at each level)? Which on-going?

"Start-up" - to be successful - normally requires more management attention and extra resources than subsequent routine operation, and needs can often be met with temporary personnel assignments and technical assistance inputs.

Bearing in mind that effectiveness depends on having most of the activities take place simultaneously, or closely in time, and considering in turn the center, a province, a department and an arrondissement, and individual health facilities, how realistic is the current distribution of responsibilities for these activities in terms of the effort required for start-up? .. for on-going operation? For example, for each level, try grading each activity from 0 = not at all to 5 = perfectly.

How to maximize likelihood of success and most effective use of limited resources? Temporary staff is a useful option if start-up activities are causing overload. Delegation can also help, for example where there are "projects" in a region they may be able to take over some of the central role locally (for planning assistance, checking, help...). More geographic focus may be needed (the greater the area to be covered, the more time it takes for follow-up, supervision).

The results sought are changes at the health facility level. The value of efforts at any other level is the extent to which they influence and support the attainment of those results.

ANNEX 11
COMPARISON PLANNED ACTIVITIES TARGETS (1987-1989)
AND ACTUAL ACHIEVEMENTS

<u>ACTIVITY TARGET (ONLY FOR 87-89)</u>	<u>COMPLETION DATE PLANNED</u>	<u>CURRENT STATUS (MARCH, 1989)</u>
<u>URT UNITS/CORNERS</u>		
* 2 national and 9 provincial units/corners fully operational	June, 1988	2 national and 5 provincial units fully operational, 3 provincial units partially operational
* 20 divisional URT units/corners fully operational	June, 1989	10 divisional units fully operational
* 2 supervisory visits within first 6 months of operation per unit/corner	continues through 1991 in current plan	many visits to Yaoundé unit; 2 visits within first year to most units
<u>TRAINING (SEE ANNEX FOR ACTUAL NUMBERS OF PERSONS TRAINED)</u>		
* 2 physicians from each province trained to establish provincial URT unit/corner	June, 1988	completed
* 10 nurses and auxiliary health personnel trained by provincial physicians to operate provincial units/corners	June, 1988	completed by January, 1989
* National CDD staff to receive management training	June, 1989	Two CDD staff members completed a management course

<u>ACTIVITY TARGET</u>	<u>COMPLETION DATE PLANNED</u>	<u>CURRENT STATUS MARCH, 1989</u>
* 120 provincial and divisional senior health personnel trained in management, supervision, information collection	December, 1989	Courses planned for May-July, 1989. Funding approved by WHO
* Training-of-Trainers for national trainers and two trainers from each province	September, 1988	Completed
* 60 divisional physicians (3/division) and nurses trained to establish divisional CRT units	June, 1989	30 trained
* 20 divisional coordinators trained (nurses)	June, 1989	Strategy revised
* a training schedule for national CRT units for personnel from health centers and clinics in and around Yaoundé established	February, 1989	not yet done, but the director of the FMI has instituted weekly training for his personnel
* a unit on CDD incorporated into medical and nursing school curriculum (including practice training)	June, 1989	in process at OAES and CESST. Meeting with paramedical schools scheduled end of March, 1989
* annual training assessment conducted and materials revised	end of each fiscal year	not yet planned. Draft materials not completed.
<u>LOGISTICS</u>		
* functional supply and stock control of ORS established for 2 national and 9 provincial units	June, 1988	Done, some problems systematizing supply but no stock-outs
* functional supply and stock control system in 20 divisional units established	June, 1989	standard stock card designed and introduced to most functioning units (not yet well used)

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<u>ACTIVITY TARGET</u>	<u>COMPLETION DATE PLANNED</u>	<u>CURRENT STATUS MARCH, 1989</u>
* a system to monitor requests and receipts, utilization of ORS and related DD drugs in CRT facilities established at DMFHP central store and ONAFHARM	January, 1989	DMFHP store maintains stock card; monitoring not yet systematized
* steps taken to ensure that private commercial pharmacies and non-MCH health-care providers receive information re: ORS efficacy	June, 1989	planned for medical and pharmaceutical association meetings in late March, 1989
<u>INFORMATION, EDUCATION AND COMMUNICATIONS</u>		
* Basic research conducted on diarrheal disease KAP	June, 1989	completed February, 1989
* Development/adaptation of appropriate educational materials	June, 1989	to start immediately through late 1989
* At least one poster for health personnel	unspecified	done
* health and non-health personnel trained to carry out educational activities	June, 1989	not yet organized (late 1989?)
* educational activities implemented and supervised	June, 1989	pending above activities
* 2 representatives from every collaborating organization and service with extension workers participated in T-O-T	June, 1989	not yet planned
<u>INFORMATION SYSTEMS AND MONITORING</u>		
* essential baseline information gathered for project start-up	June, 1989	done, as needed, from existing sources and O/EAC/NOH KAP (5/83)

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<u>ACTIVITY TARGET</u>	<u>COMPLETION DATE PLANNED</u>	<u>CURRENT STATUS MARCH, 1989</u>
* Systems for necessary routine information studied and amended. Personnel in units trained to use information collection tools	June, 1988	in process, some registers and sheets being tested and revised
* adjustments/amendments to above instituted in all health facilities	June, 1989	unrealistic, dependent on development of an effective FHC information system
* 10 sentinel surveillance posts designated	June, 1989	strategy changed to favor integrated FHC information system
* supervisory checklist adopted	June, 1989	in process; should be complete by June, 1989 (SS course)
* Quarterly program updates to provide information to field personnel	from early 1988	not yet initiated
<u>RESEARCH AND SPECIAL STUDIES</u>		
* SSS mixing study completed	January, 1989	still awaiting research protocol from FRITECH
* safe and effective home solutions study completed	June, 1989	some information gathered during focus group study. Awaiting protocol for more detailed studies.
* Feasibility of including feeding at ORT units	June, 1989	Discussed but not yet done
<u>EVALUATION</u>		
* one annual assessment starting in June, 1988	Annual	FRITECH assessment completed, March, 1989
<u>MULTI-SECTORAL COLLABORATION</u>		
* at least 4 coordinating meetings with non-MOH ministries and other organizations	June, 1988	Done, periodic meetings continue to be organized

<u>ACTIVITY TARGET</u>	<u>COMPLETION DATE PLANNED</u>	<u>CURRENT STATUS MARCH, 1989</u>
* national coordinating committee established	June, 1988	official decree drafted and reviewed; pending signature
* Non-MOH health personnel included in training	June, 1989	ongoing, especially with confessional sector
* Specific objectives and modalities of collaboration with following services defined: EPI, Nutrition, Hygiene and Sanitation, Rural Water, Agriculture	June, 1989	Collaborative relationship established with the Nutrition Service, but no establishment of specific objectives with others, as yet

OTHER (UNFORSEEN) CDD PROGRAM INITIATIVES

- * preparation of Clinical Management training materials/draft in process.
- * Ministry of Health decision to ban further purchase (by MOH) of antidiarrheals
- * a nutrition/EPI coordination effort initiated in 6 centers in Yaoundé.

ANNEX 12: OTHER DONOR / MINISTRY COLLABORATION

12A. Collaboration in planning and implementation:

The national CDD program places a strong emphasis on multisectoral collaboration as the best way to encourage the integration of CDD into general primary health care. The broad-based support of other agencies and ministries is actively sought also as the best means of reaching the primary caregivers in child diarrhea—the parents. A number of steps have already been taken to reinforce necessary collaborative links and assure that all collaborative agencies and ministries are on board with program direction/policies:

-Dec. 1987: meeting of all partners to standardize key messages to mothers and other child caretakers regarding home care of the child with diarrhea.

-Jan.-March 1988: series of meetings with collaborating ministries, NGOs and donors leading to draft document of Presidential Decree creating a National Primary Health Care Coordinating Commission, to formalize the coordinating mechanism for all primary health care activities. Document has been reviewed by all Directors in MOH and is awaiting signature pending reorganization of at least two of the ministries involved (MOH and Minagri). Pending signature to formalize the commission, collaborating partners are nevertheless still called together as deemed necessary or appropriate (e.g. meeting on Bamako Initiative, meeting to devise system for sale of growth charts).

-July 1988-Feb. 1989: Active participation in CDD-led focus group research of several partners (Minascof, Community Development, Care); the entire group will be called together to review study conclusions and recommendations for message content and materials development.

-There have been several collaborative training efforts in CRT including Save the Children, SESA, Fritsch, and CDD/MOH staff.

-Feb. 1989: meeting of several key collaborators in delivery of health care to coordinate sale of new national growth surveillance card (Unicef, SESA, GTZ, SNV, AFVP, Save the Children, Care, Fritsch).

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12B. Technical and Financial Contributions to the National Program:

<u>AGENCY/PROJECT</u>	<u>PARTICIPATION/ACTIVITIES</u>	<u>RESOURCE INPUTS</u>
UNICEF	-emergency supply of ORS -donation of 600,000 packets -partic. of 3 Cameroonian officials at ICORT III -scales, growth charts	material " (in-kind) full sponsorship financial
WHO	-CAMCORT (3/87) -training: 4 to Mana Yemo (10/87) first natl course in ORT (11/87) EPI/CDD/ARI course (12/87) managers/supervisors courses (upcoming) -equipment for natl DTU -small materials for ORT corners (upcoming) -CDD Tech. Dir. attendance at: Brazzaville, regional mtg.(9/88) CDD Prog.Mgrs. course (10/88) Chad sub-regional mtg. (2/89) -general technical & training documents	partial funding financial technical, financial " " funds committed materials funds committed full funding " " " " in kind
FRITECH	-preliminary assessment -CAMCORT (3/87) -tech. assis. missions by Senior Prog. Manager -full-time tech. assis. (12/86-6/87;11/87-present) -CDD/FHC documentation unit -3 TOT workshops -eval.&treatment posters(Fr.) -printing strategy document -focus group research -training	consultants technical(speakers) financial,organiz. technical technical tech.documents small constr.mater. consultants, full funding financial financial technical, financial support trainers training documents
PATH (Project Support)	-local ORS prod.feasibility study	consultants, 3 follow-up visits to Flantecam
OCEAC	-Diarrhea KAF-baseline survey	technical

<u>AGENCY/PROJECT</u>	<u>PARTICIPATION/ACTIVITIES</u>	<u>RESOURCE INPUTS</u>
SESA	<ul style="list-style-type: none"> -equipping QRT units in 2 provinces -training: <ul style="list-style-type: none"> training mater.development clinical management courses TOT workshop (10/88) -HIS-development/modification of info. systems -cost recovery study of possibilities -supervision (ongoing) 	<ul style="list-style-type: none"> materials, finan. technical technical, financial consultant, full funding technical (ongoing) consultant financial, tech.
GTZ	<ul style="list-style-type: none"> -eval.&treatment posters(Eng) -training&supervision(ongoing) -HIS 	<ul style="list-style-type: none"> financial financial technical (ongoing)
Care	<ul style="list-style-type: none"> -focus group research -IEC 	<ul style="list-style-type: none"> interviewers, some transport posters
Save the Children	<ul style="list-style-type: none"> -training: <ul style="list-style-type: none"> courses & materials development -supervision (ongoing) 	<ul style="list-style-type: none"> technical, organizational, financial technical, finan.
Minascof	<ul style="list-style-type: none"> -focus group -IEC materials (posters, matchboxes) 	<ul style="list-style-type: none"> interviewers, tech. design, funding
Minagri/DDC	<ul style="list-style-type: none"> -focus group 	<ul style="list-style-type: none"> interviewers

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