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WORLD VISION RELIEF & DEVELOPMENT, INC.

CHILD SURVIVAL/VITAMIN A PROJECT
FIRST ANNUAL REPORT
ASSABA, MAURITANIA

Project Beginning and Ending Dates:
October 1, 1989, to September 30, 1990

Submitted to:

PVO Child Survival Grants Program
Office of Private and Voluntary Cooperation
Bureau for Food for Peace and Voluntary Assistance
Room 103C, SA-2
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TABLE OF CONTENTS

I. CHANGES IN PROJECT DESIGN

A. Statement of Country Project Objectives

Project objectives have not been modified since the Detailed Implementation Plan (DIP). The main objective of the Child Survival/Vitamin A project is to reduce infant and child mortality and morbidity in the Assaba region and to reduce Vitamin A deficiency among children under six in collaboration with the Ministry of Health.

The objectives, as stated in the Detailed Implementation Plan (DIP) for FY90, are the following:

OBJECTIVES	DEGREE ACHIEVED
1. Eleven MOH personnel will be trained in Child Survival/Vitamin A interventions, training, and supervision.	Completed as planned
2. Fifteen community health workers, 15 traditional birth attendants, and 15 community health committees, will be selected and trained in collaboration with the MOH.	Completed as planned
3. Thirty-five percent of children 12-23 months will be fully immunized before their first birthday with BCG, DPT3, OPV3, measles, and yellow fever vaccine.	Partially completed: BCG 52% Measles 18% DPT1 49% DPT3 6% (?)
4. Forty-five percent of women 15-45 years will receive two doses of tetanus toxoid.	Partially completed: TT1 30% TT2 18%
5. Thirty-five percent of infants (0-11 months) in the PHC villages are appropriately fed (breastfeed, no complementary foods if 0-2 months, receiving complementary foods if 6-11 months).	To be documented by survey
6. Twenty-five percent of children under five years with diarrhea are treated with ORT.	To be documented by survey

7. Thirty percent of children 6 months to 59 months will receive two doses of high-dose VAC.	14,868 VAC distributed
8. Twenty-five percent of children 5 to 9 years of age will receive two doses of high-dose VAC.	16,782 VAC distributed
9. Thirty percent of mothers who delivered in medical facilities will receive a single dose of VAC within one month of delivery.	46.8 percent (731/1,562)
10. Fifteen percent of mothers who deliver at home will receive a single dose of VAC within a month of delivery.	11.2 percent (676/6,056)
11. Eighteen garden cooperatives will be trained in vegetable gardening, vegetable-drying/and cooking through demonstration sessions.	Completed as planned

B. Location and Size of the Priority Population

There have been no changes in the location or number of people in the target population in the DIP. The project is located in the Assaba region consisting of five departments: Barkeol, Boumdeid, Kiffa, Guerou, and Kankossa.

ASSABA TARGET POPULATION

Year	Annual No. of Births	Infants 0-11 Months	Children 12-23 Months	Children 12-59 Months	Children 5-9 Years*	Women 15-49
1990	7,618	6,772	5,918	27,083	22,006	38,934
1991	7,816	6,947	6,071	27,789	22,578	39,946
1992	8,019	7,128	6,229	28,511	23,165	40,984

C. Health Problems Which the Project Addresses

There are no changes in project focus as described in the DIP such as vaccine-preventable diseases, malnutrition, improper weaning practices, diarrhea and Vitamin A deficiency. The training of Community Health Workers in the use of essential drugs, allows them to deal with other health problems, such as malaria, and children's respiratory infections.

D. Child Survival Interventions

The type and scope of CS/Vitamin A interventions remain the same except malaria prophylaxis among mothers and children has been included in the project. The interventions include immunization, management of diarrheal diseases, improvement of nutrition including Vitamin A activities, instituting cost-recovery mechanisms using fees for essential drugs at village pharmacies.

In response to the concerns and recommendations of the FVA/PVC technical committee who reviewed the DIP and the recommendations of the evaluation team, some strategies were modified:

1. The project's emphasis shifted from direct service delivery to training and supervision of MOH staff and community health workers.

2. MOH staff seconded to the project are assuming greater responsibilities in project planning, implementation, and supervision of CS activities.

3. The training of Community Health Workers and Committees, was modified. In the past, the CHW was trained as a Female Health Educator with curative responsibilities. CHWs are now trained using the MOH syllabus and are called either "Hygienist-Secouriste" or Traditional Birth Attendants depending on the tasks performed.

4. The project discontinued weighing children to document malnutrition on a monthly basis. This practice is not performed by MOH staff. Instead, the use of an arm-circumference bracelet is now encouraged, and taught to community health workers. Although less accurate, this is more appropriate technology for the Assaba and easily understood by most mothers.

5. Community Health Workers participate in enrollment activities, vital events collection, use and analysis. Refer to section III on HIS, in the report.

6. Malaria prophylaxis. In FY90 the project included treatment of malaria in the curriculum for training Community Health Workers. The supervisory visits check the use and stocks of chloroquine at the village level. Chloroquine is included in the list of thirteen other essential drugs, utilized by the CHW, as part of the village pharmacy. Funds generated from the village

pharmacy are used as a revolving fund to secure cost-recovery of essential drugs.

7. How the need for water resource development is addressed. The project promotes purification of water by filtration and chlorination at the domiciliary level. Well drilling, or other sources of water, are not part of this project. There are other agencies in the Assaba, dedicated to provision of water, like the Italian Cooperation Agency. In FY89 World Vision conducted a research study on water situation of the Assaba. Its results are available upon request.

1. Immunization

EPI activities are conducted in coordination with the Assaba EPI system. For example, in February 1990, a geographic division of the Assaba assigned two departments (Kiffa and Kankossa), to the MOH mobile team; and three departments (Boumdeid, Barkeol, and Guerou) to World Vision. Supervision of fixed vaccination sites was to be conducted mainly by World Vision, with the support of MOH EPI personnel.

In the special three-month vaccination campaign Magrebine Vaccination Days (October through December 1989) both World Vision and key MOH staff were trainers to 40 MOH staff that participated in the campaign. Thirteen vaccination teams were formed, with a mixed composition of both MOH and World Vision staff. Other coordination efforts are not listed here.

IMMUNIZATION STATUS IN THE ASSABA REGION FY 1990
Children Under Five

Age group	0-11 months	12-59 months	0-59 months
Target population	6,772	27,083	33,855
BCG	3,522	3,108	6,630
Polio 0	313	0	313
Polio 1	3,265	3,836	7,101
Polio 2	1,182	3,134	4,316
Polio 3	451	2,640	3,091
DPT1	3,313	3,818	7,131
DPT2	1,114	3,152	4,266
DPT3	419	2,659	3,078

Measles	1,226	5,818	7,044
Yellow fever	1,200	6,192	7,392
Children vaccinated	4,248	8,600	12,846
Children completely vaccinated	485	3,004	3,489

Women of Childbearing Age

Tetanus Toxoid	Pregnant Women	Non-Preg. Women	Total
Target Population	7,618	33,316	40,934
Tetanus 1	785	11,624	12,409
Tetanus 2	458	6,962	7,420
Tetanus 3+	327	4,016	4,343

2. Management of Diarrheal Diseases

The main activities on ORT in the Assaba have been performed by World Vision. Attempts to strengthen this component at the existing MOH facilities have not been successful. The new strategy to use Community Health Workers is more promising, as it takes advantage of an already on-going activity, with people trained in diarrhea and ORT activities. As documented in the baseline survey 30 percent of mothers in the Assaba have been exposed to health education messages. ORT education methods used include, among others, theater sketches, demonstrations on home preparation of sugar-salt-water, slide shows, and posters. Mothers and CHWs are taught dietary management of diarrhea including, the addition of extra protein-rich foods for at least a week following the diarrhea episode.

In August 1990, a survey documented some of the ORT skills and knowledge retained by health workers trained in the previous 11 months.

3. Improvement of Nutrition

a. Malnutrition

The CHWs identify children who are malnourished through the use of the arm circumference bracelet. The results are interpreted as follows:

(1) Green: the child's nutritional status is satisfactory.
CHW's action: Encourage the mother to continue the present feeding practice.

(2) Yellow: Moderate (second degree) malnutrition
CHW's action: discuss with the mother the child's condition, counsel the mother about health risks associated with poor nutrition and dietary management of the child.

(3) Red: Severe (third degree) malnutrition.
CHW's action: Refer the child to the nearest health post and whenever feasible, follow up the child.

b. Vitamin A Activities

The initial A.I.D. funding that started in October 1987 was specifically designed as a Vitamin A grant to supplement existing Child Survival interventions. Documentation of the levels of Vitamin A deficiency in the Assaba have been reported in previous annual reports and the Mid-term evaluation of January 1989.

No. of VAC distributed by Target Group FY90

Age Group	Number
Children (6-59 months)	14,868
Children (5-10 years)	16,782
Mothers (hospital delivery)	731
Mothers (home delivery)	676
Adults	2,390
TOTAL	**35,447**

Because of the high prevalence of Vitamin A deficiency in the Assaba, VAC distribution was employed as a short-term intervention coupled with promotion of nutrition gardens as a long-range intervention. In the training of CHWs and mothers, vegetables are frequently mentioned as rich sources of vitamins and minerals under the category of protective foods. Additional information about the gardening project is in Appendix A.

4. Strategies for Identifying and Providing Service to Individuals at Higher Risk

The community health workers at the village level and the staff at the MOH facilities (dispensaries, and health posts), have received specific training to recognize high risk individuals.

a. Children who have diarrhea

The treatment strategy for diarrhea is aimed at improved home-based clinical and nutritional management. This includes immediate fluid replacement with either home-mix solution or ORS packages after each diarrheal episode, continuation of breast-feeding, small but frequent feedings of caloric/protein-dense food during the diarrhea episode, and gradual increase after the cessation of diarrhea.

b. Children who have incomplete immunization for age

Surveys in the Assaba show that more than 80 percent of children under three have vaccination cards. The vaccination card is the instrument utilized to identify children with incomplete immunization. Mothers are encouraged by the MOH staff and community health workers to attend nearest fixed vaccination site or mobile vaccination sessions. Political and religious leaders such as the Imam remind households through nationwide television (produced by the project in cooperation with the Ministry of Health and Ministry of Education) and occasionally during leaders' meetings. Immunization, though, remains a great challenge in the Assaba.

c. High-risk pregnancies

Prenatal visits are utilized to determine high-risk pregnancies. Pregnant women are referred to the health post or the hospital when they present the following signs:

Pedal edema, any vaginal bleeding, pale conjunctivitis, persistent vomiting, persistent headaches that do not respond to treatment, absence of fetal movement after the fifth month, seizures.

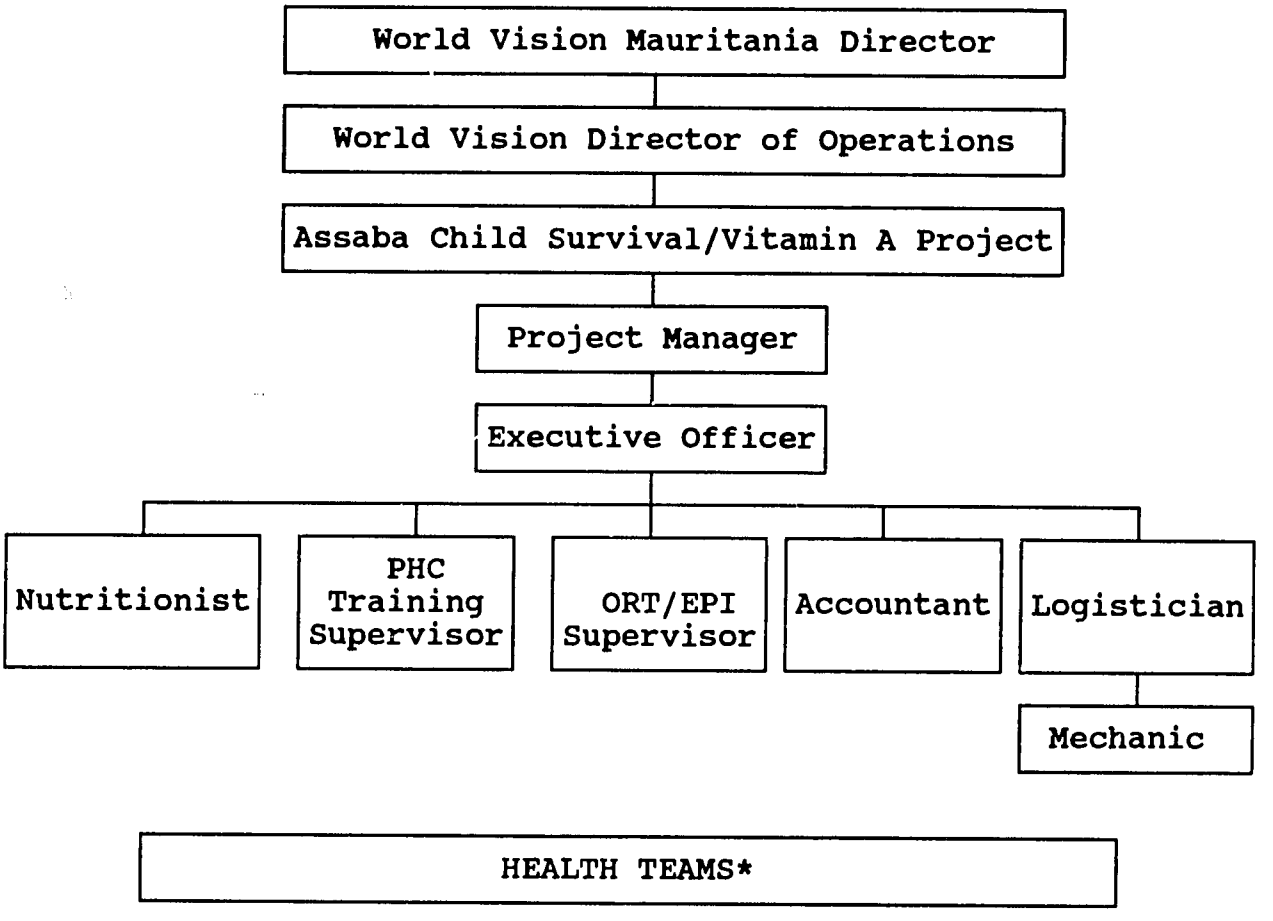
d. High-risk deliveries

Pregnant women with the following characteristics are referred to the nearest health post or hospital for delivery:

Previous caesarian section, previous miscarriages and abortions, young (under 16) first-time deliverers, old (over 35) first-time deliverers.

II. HUMAN RESOURCES AND COLLABORATION

A. The Current Organizational Chart



*These teams are led by a nurse and composed of community health workers.

The job descriptions are in Appendix B.

B. PVO Headquarters/Regional Office and A.I.D.-Sponsored Technical Assistance

1. Dr. Sally Stansfield, external consultant, led the final evaluation/baseline survey team in January 1989.

2. WVRD, represented by Dr. Milton Amayun and Dr. Fe Garcia, provided ongoing backstopping through different means of communication: telephone, fax, telexes, and airmail. Both the CSP/Vitamin A Executive Officer and Project Manager, met personally with Drs. Amayun and Garcia in August 1990 to discuss the management and training issues.

WVRD has provided technical assistance in the following areas:

a. Preparation of and completion of the final evaluation of CS/Vit A project, January 1990.

b. Preparation of and completion of the Baseline Survey, January 1990.

c. Preparation of the Detailed Implementation Plan.

d. Feedback on monthly and quarterly project reports.

Sandra Jenkins, WVRD Field Financial Coordinator, provided training on A.I.D. grants and regulations to the staff of World Vision Mauritania, including CSP, in September 1990.

C. Community Activities to Support CS Project

1. A network of 20 Community Health Committees (CHC) was formed in the departments of Kiffa, Boumdeid, and Guerou. In October 1990, 13 of the committees are actively carrying on health promotion interventions. Community health workers and traditional birth attendants were selected and trained during an intensive five-week-long program. The training emphasized child survival interventions, such as nutrition and vitamin A, diarrhea and ORT, immunizations, breastfeeding and weaning; use of essential drugs, revolving funds at the village level through the village pharmacy, and health information system.

2. Community leaders from different departments of Assaba participated in training seminars of three days' duration each during FY90. The program was organized by World Vision, Assaba Ministry of Health, and the Nouakchott World Health Organization office. The seminars were held in the departmental capital towns of Barkeol, Guerou, Kiffa, and Kankossa. Attendees included religious (Imams), school teachers and principals, cooperativists, prefects, local leaders of the "structure d'education de masses," physicians, nurses, and representatives of other agencies such as literacy, cattle raising and agriculture.

3. In FY90 World Vision and the Assaba Ministry of Health contacted politico-administrative authorities of the Assaba to get their support for the development of Child Survival/Vitamin A interventions. Prefects and mayors of the Departments of Barkeol, Kankossa, Boumdeid, Kiffa, and Guerou were involved at different levels of either planning or implementation of some child survival interventions in the region. In three of the departments, public community meetings led by the prefects served to create awareness of child survival issues in the general population.

4. Seven cooperatives, run by women in Kiffa, received intensive follow up in nutrition education and Vitamin A related gardening. The social marketing tools developed were widely used--slide-shows, posters, demonstrations and theater. These cooperatives now grow vegetables, a source of nutrients and a source of income. After learning the vegetable-drying techniques, they began small scale commercialization of their products, during the hot dry seasons when gardening is not possible and when vegetables were not previously available.

D. New Agreements and Linkages to Other Health and Development Activities

1. A new protocol of agreement was signed on 20 May 1990 between the Government of the Islamic Republic of Mauritania, represented by the Minister of Health, Mr. Mohamed Abdarahmane O. Maine, and World Vision Mauritania, represented by the Vice-President for Africa of World Vision International, Mr. Nathaniel Fields. The protocol is dedicated to the Assaba Project, and it stipulates the responsibilities of the MOH, as well as the assistance that World Vision will provide in the areas of:

   - Training and supervision of community health workers.
   - Social mobilization and health education.
   - Nutrition, including weaning, Vitamin A, and back-up to the nutritional rehabilitation centers (CRENs).
   - Immunizations of children less than 3 years and mothers of child-bearing age.
   - Essential drugs.
   - Environmental hygiene and sanitation.
   - Diarrheal diseases and oral rehydration.

   A copy of this protocol is enclosed as Appendix C in its original French version.

2. In June 1990, a "Document of Agreement on Primary Health Care" was developed between the villages where CHWs are to be trained and the MOH in collaboration with World Vision. Each village selected will sign a copy of this agreement. A copy is attached as Appendix D.

III. PROJECT HEALTH INFORMATION SYSTEM

A. Baseline Survey

This Child Survival Project is a three-year extension of the Vitamin A project initiated in October 1987 under the Bureau of Nutrition, Office of Science and Technology. As part of the final evaluation of the original project, a Baseline Survey was undertaken in January 1990. The cost of the final evaluation with Baseline Survey included was US$6,250; this amount does not include the honorarium paid to the external consultant.

Local World Vision staff designed the survey instrument start-up in late November 1989, and continuing through January 1990. It followed the cluster-survey methodology. Using 1987 census data, the 30 clusters (per standard EPI methodology) were selected from among the five departments, giving each village a chance of inclusion in the sample proportional to its population. The assignment of the 30 clusters was made by weighing the populations in a way comparable to that of the national EPI survey completed in March 1989.

The actual survey took ten days to be completed. On the average, it took five hours to identify and interview seven households that met the required criteria; i.e., the presence of at least one child in the age group of 12-23 months, and the presence of a mother that had delivered a child in the last 12 months.

Technical assistance (TA) was particularly helpful in all phases of the process: questionnaire design, sampling, data collection and preparation of data entry. Most of this TA was provided by WVRD and the external consultant. Local consultants participated in the revision of the survey questionnaire, supervision of the data collection, and analysis of the information.

Some of the findings of the survey follow:

1. VAC receipt among children during the past six months
   - one out of four children 2-5 years
   - nearly one out of four school children six to nine years
   - one out of five nonschool children

2. VAC receipt among women delivered during the past twelve months
   - over one out of five delivered in health facilities
   - nearly one out of five delivered at home

3. 13.9 percent of mothers in the region (27 percent in "emphasis" villages) can name one of the health effects of vitamin A.

4. Weaning
   - nearly half of infants 6-12 months of age receive no complementary foods.

5. ORT usage
   - 20.5 percent of diarrheal episodes in the region (37.6 percent in "emphasis" villages treated with ORT.

6. Immunization

	Assaba General	Pilot Villages
BCG	54.1%	76.6%
DPT1/polio1	53.1%	75.3%
DPT2/polio2	25.1%	42.9%
DPT3/polio3	16.4%	31.2%
Measles	28.0%	46.8%
Yellow fever	28.0%	46.8%
Completely vaccinated	13.0%	29.9%

Complete results of the baseline survey are attached as Appendix E.

The Baseline Survey findings were communicated to Assaba MOH authorities and to the staff of the national PEV in Nouakchott through a series of meetings to discuss future interventions to improve the health status of the region. Other community authorities and leaders were later informed through departmental local meetings attended by these leaders, MOH and World Vision staff. A summary of the baseline was presented to senior Mauritanian MOH staff in Nouakchott, during the Second Congress of Primary Health Care at the end of January 1990. During the training of community health workers findings of the survey and its implications were discussed with them.

The Assaba Child Survival project did redesign some interventions, taking into consideration the information obtained in the survey. Some examples are:

1. World Vision would provide more training and supervision.

2. MOH staff would take more responsibilities to carry on child survival interventions.

3. Other decision makers in the Assaba, besides the MOH, would be contacted to mobilize the population for health interventions. These include traditionally recognized regional chiefs and religious leaders, as well as politico-administrative authorities of the region.

4. The health information system was modified.

Refer to Appendix F for the survey questionnaire.

B. Routine Data Collection

1. Collection of Data at the Community Level

The CHWs collect the following data periodically:

a. Nutritional status of children under three, based on the MUAC.
b. VAC receipt by target children in the last six months, by checking the VAC cards.
c. Number of children completely vaccinated.
d. Number of children under five.

The data are used to identify and follow up high-risk children. Forms are printed in the Arabic and French languages, accompanied by a picture for use by illiterate health workers. The community health workers complete these forms and these are periodically reviewed during supervisory visits.

There are several forms utilized to document the collection of data:

a. The Hygiene and Prevention Report (see Appendix G). It contains:

- date of supervisory visit.
- number of health education meetings held.
- number of meetings held by the community health committee.
- number of cases of measles, according to age group (less than five and older than five) and number of deaths caused by measles.
- number of cases of whooping cough by sex and age groups (0-5 and 5-15, and adults); number of deaths due to whooping cough.
- number of children age 6 months - 10 years who have received a capsule of Vitamin A.

b. The TBAs Activity Report (Appendix H). It allows up to five supervisory visits. The information includes:

- number of health education meetings conducted by the TBA.
- number of pregnant women who consulted with the AT.
- number of pregnant women who received iron tablets.
- number of pregnant women with clinical evidence of anemia.
- number of miscarriages.
- number of women detected to have pedal edema.
- number of women evacuated to the dispensary.
- number of deliveries attended by the TBA.
- number of umbilical clampings performed by the TBA.
- number of women who received VAC immediately after delivery.
- number of newborns who received ophthalmic tetracycline.

c. Annual Sanitary Survey (Appendix I). Community Health Committees in each village complete this form. It documents the following:

- total number of families.
- number of children 0-11 months; 1-5 years.
- number of children 1-5 years completely vaccinated.
- number of women 15-44 years who received two doses of tetanus toxoid.
- number of children 6 months to 35 months, according to nutritional status using MUAC color codes.
- number of families who have a vegetable garden or other vegetation.
- water source: well, bore-hole,river, or pond.
- number of families by type of purification of drinking water: chlorine filtration or chlorination.
- number of latrines built.
- number of garbage pits built.

d. Appendix J shows the Supervisory Form for CHWs. Registered nurses complete this form. It is written in both Arabic and French. It contains the following:

- name of village, date of supervision, name of supervisors.
- quantitative data: hygiene and preventive activities, with section for general observations on hygiene and prevention activities; prenatal and perinatal activities; curative activities; community financing and management, and an essential drug kit inventory and restocking form.

e. The Essential Drugs Kit. The kit contains ORS packets, iron/folic acid, Vitamin A and chloroquine plus nine other drugs and supplies such as cotton and gauze. The form ends with a section on reprovision of drugs, stating name of drugs, dosage and quantity, and a section for final comments on supervision.

The Nomad Clan Enrollment Log will be implemented in FY91. The log will be maintained by clan leaders to estimate immunization and VAC needs, to schedule and to track high-risk groups.

2. Problems in Data Collection

a. The Assaba region is vast and includes more than 584 villages and towns. Population figures are only estimates. There are only a few health centers and community health workers, so health statistics and indicators obtained from the fixed centers on a regular basis provide only a limited profile of the general population.

b. It is not possible to differentiate the percentage of funds that have been used to support immunization vs. ORT, as the same staff member will perform both functions and use the same vehicle.

3. Compiling and Evaluating Data

CHWs, community health committees, nurses at health centers, schoolteachers, and project staff are responsible for collecting and compiling data. Data is analyzed by the regional MOH personnel and core project staff. The project manager, the executive officer, and regional MOH officers monitor the quality of project data through spot checks and periodic supervisory visits. Monthly and quarterly reports are distributed to all project partners, including other government offices.

4. About 10 percent of expenditures since October 1989 have been devoted to the health information system.

The project monitors service performance and sustainability indicators, using the supervisory forms described above on a regular basis, to monitor the performance of the community health workers and community health committees.

CHWs, nurses at Health Centers, schoolteachers, and World Vision project health staff are responsible for collecting and compiling data. The project is emphasizing the analysis of data by those who also collect it. The project manager, the executive office, along with MOH regional officers, carry the responsibility for monitoring the quality of data in the project HIS. Other project staff such as nurses and nutritionist also participate in this process.

The quality of this data is monitored on a monthly basis. This is then included in monthly and quarterly reports distributed to all project partners including non-MOH governmental offices. MOH staff at the health centers and CHWs at the village level get feedback during the supervisory visits. During any month, two or three World Vision/MOH teams will visit a number of villages in the Assaba.

Approximately 10 percent of the money spent since October 1989 has been spent on the project's health information system.

IV. IMPROVEMENTS IN PROGRAM QUALITY AND TECHNICAL EFFECTIVENESS

A. Improvements in Project Management

1. The organizational structure was changed to provide greater autonomy to the CS executive officer based in Kiffa, while the project manager deals with the MOH at the national level (Nouackchott). This assures smooth collaboration at various levels.

2. Performance evaluations will be a significant activity of the project, beginning this fiscal year.

3. More emphasis has been put on supervision. Supervision is being conducted every quarter, using a checklist. Immediately after each supervisory visit, feedback is given to the person supervised. In August 1990, a supervisory visit that utilized a specially prepared questionnaire was conducted to determine three aspects: a) Whether the WHE had retained what she had learned, b) Whether she had shared this with the villagers; and c) What problems she had found in her work. (Refer to Appendix K on the supervision of the Femmes Educatrices trained by World Vision in Assaba Region).

4. Development of human capital is the project's best investment. The groups that have received and continue to receive training include CSP/Vitamin A staff, MOH staff, Community Health Workers, Community Health Committees, mothers, and formal and informal community leaders.

B. Training Activities to Improve Technical Effectiveness

1. In-service training for staff was conducted every two weeks by the staff themselves, in rotation. Topics included benefits of consuming vegetables, treatment of diarrhea, harmful effects of smoking, communication of health messages, energy requirements of different age groups, weaning foods, anemia, hygiene and treatment of water, environmental hygiene, breastfeeding, vegetable gardening, malaria, treatment of lice, immunizations, and sustainability issues of the CS Project.

2. World Vision/Child Survival Project sponsored the following seminars, in collaboration with Assaba MOH:

   - Immunization Seminar and Preparation for the Maghreb Vaccination Days, October 3-5, 1989, Kiffa, Mauritania.

   - Seminar for Community Health Workers/Women Health Educators. May 6-8, 1990. Kiffa, Mauritania (Appendix L).

   - Training of Primary Health Care Trainers Seminar May 12-17, 1990, Kiffa, Mauritania. Courses included: Definition and analysis of PHC concepts, Mauritanian National Policies on PHC; the EPI in the Assaba, Community Participation; Structure and Function of a Community Health Committee; Structure and Function of a Community Health Worker; Essential Drugs; the Village Pharmacy; Prenatal Care, Treatment of Common Diseases; First Aids.

- Four "Workshops on Social Mobilization for Vaccination" were conducted in four departments. They were addressed to community, spiritual, traditional and governmental leaders. They included:

  a. June 11-12, 1990, Barkeol
  b. June 14-16, 1990, Guerou
  c. June 17-19, 1990, Kiffa
  d. June 21-23, 1990, Kankossa

- A five-week training program for Community Health Workers, "Hygienist-Secouristes," was held June 16 - July 27, 1990, in Kiffa, Mauritania.

- A three-week training program for Community Health Workers, "Traditional Birth Attendants," July 7 - 27, 1990, was held in Kiffa, Mauritania.

  The training curriculum of CHWs and TBAs incorporated the use of locally prevalent animal products such as fresh milk to complement vegetable sources of Vitamin A.

3. Other Regional Conferences

- Diarrhea and Oral Rehydration. MOH Diarrheal Disease Control Unit. February 6-8, 1990. Participants: Aichetou mint Oumar and Myfamwy Lloyd.

- Vegetable Gardening. February 24-26, 1990. Ministry of Agriculture/FAO. Participants: Mohammed Saleck and David Scheiman.

- Food and Nutrition Seminar. University of Nouakchott/Institute Superior Scientifique. February 8-14, 1990. Nouackchott. Participant: Prosper Sapathy, who presented a paper on "'Social marketing strategy in the fight against malnutrition."

4. National Training and Conferences

- Workshop on the determination of Vitamin A Index by Cell Impression Cytology. National Hospital, Nouakchott. Participant: Wesley Vargas.

- MOH Regional Primary Health Care Seminar: "Integration of Primary Health Care activities into the MOH structure". January 8-12, 1990. Guidimaka, Mauritania. Participant: Prosper Sapathy.

- EPI Management Seminar January 28 to February 1, 1990 Nouakchott. Participant: Pierre Mbairessem, project nurse.

- Second National Seminar on Primary Health Care - Cost Recovery, sponsored by MOH/UNICEF, January 1990, Nouakchott. Participant: Dr. Wesley Vargas.

- Hypovitaminosis and malnutrition. MOH/FAO. March 17-20, 1990 Participant: Wesley Vargas.

5. International Training and Conferences

- Management of Primary Health Care Programs, a three-month intensive program at the Liverpool School of Hygiene and Public Health, UK, attended by Prosper Sapathy (Sept.-Dec. 1989).

- Orientation into World Vision and WVRD policies and procedures, at World Vision Headquarters, Monrovia, California, USA, attended by Wesley Vargas, M.D., Project Manager, Sept. 1989.

- World Vision/WHO International Conference on Health. November 2-9, 1989. Geneva, Switzerland. Participants: Prosper Sapathy and Wesley Vargas.

- World Vision Community Development Workshop, Nairobi, Kenya, November 1990. Participant: David Scheiman.

- World Vision PHC/CSP Sustainability Workshop. Kenya, August 11-18, 1990. Participants: Dr. Dah ould Cheikh from Mauritania MOH, Prosper Sapathy, and Wesley Vargas.

C. Improvements in the Health Information System

1. We have developed a system for routine monitoring of project costs and effectiveness. In the past year, we have been collecting data on an ad hoc basis for decision-making.

2. We designed the baseline survey in correspondence with Dr. Sally Stansfield and WVRD health staff.

3. We are computerizing our records to facilitate storage and retrieval of information.

4. Indicators toward sustainability have been incorporated to track project performance such as percent of VAC distributed each year through mobile teams and community workers or structures, the number of fixed sites for immunization and other services.

D. Improvements to CSP Programming for Sustainability

1. Selection of PHC/CS villages was undertaken by national MOH officers and politico-administrative authorities.

2. Along with the MOH, the project explored and tested the effectiveness of new strategies for social mobilization and health communications in support of PHC/CS activities, using both traditional and modern social structures. Religious leaders known as imams, traditional village leaders, mayors, prefects, and schoolteachers participated in FY90 as communicators and mobilizers in PHC/CS activities. Village chiefs in the bush mobilized hundreds of mothers and children, utilizing megaphones to call the villagers to participate in vaccination campaigns.

3. In the past two years, we have been involved in direct service delivery, including VAC distribution using our mobile teams. We have started to distribute VACs through community infrastructures such as TBAs, schools and health posts.

4. The project has assisted the MOH in increasing the frequency and quality of supervision in the Assaba. This relates specifically to fixed vaccination sites, mobile vaccination sites, dispensaries, vaccination reporting systems, and CHWs, including TBAs.

5. Our team has been closely collaborating with the MOH in testing models for cost-recovery schemes such as the village pharmacy.

6. We have increased the participation of MOH staff in the project. Mauritanian nationals are now World Vision team leaders. Mr. Sy Mahmadou, Assaba MOH regional supervisor of PHC, has assisted the project since May 1990, in the design and implementation of the training program and the supervision schedule for the CHWs. The MOH Director of PHC services has given full cooperation to the project.

   The number of expatriate employees decreased from seven to five during this fiscal year. Two positions previously held by expatriates were replaced by nationals: in vegetable gardening, Mohammed Saleck replaced David Scheiman from USA; and in vaccination, Piere Mbairassem from Chad was replaced by Mohammed Ali and Mohammed Lamine Diakite, both Mauritanian registered nurses.

7. A new strategy for management of malnourished children at the village level was developed in the region. Instead of Project staff or MOH personnel mobile teams weighing children, CHWs identify and monitor the progress of malnourished children using MUAC technique.

8. An ethnographic study will be conducted in FY91 to gain in-depth insight into factors which influence infant and child feeding at the village level, and the narrowing of the ORT knowledge-practice gap. From these, we hope to develop approaches that will facilitate and expedite behavioral changes.

9. We have accessed the services of a local social marketing consultant. He is a Mauritanian sociologist, Dr. M. Camara, who has been providing consultancy on sociological issues to World Vision. He serves as external consultant to several agencies, like World Bank, in several African countries. He can assist in the design and testing of questionnaires, interpretation of results, targeting of messages.

The project has strengthened its tracking system to document performance in enhancing sustainability. Some indicators in use are:

1. Retention of trained health workers.

   a. Twenty-two women were trained as Woman Health Educators (F.E. - Femme Educatrice, in French) from 11 villages/cooperatives in May 1990. Fourteen weeks later there was at least one FE still functioning in each village. One had later become a Traditional Birth Attendant.

   b. Of 18 women trained as FE from 9 villages/cooperatives in September 1989, there was at least one FE functioning in each village 11 months later.

2. Percent of demonstration gardens sustained following the end of the demonstration period.

   A survey during August 1990 showed that all of the villages targeted by the FY89 and FY90 gardening programs intended to repeat the gardening in FY91 (gardening season is from November 1990 to March 1991). Empirical evidence during the evaluation of January 1990 suggested that there were at least three village gardens for each demonstration garden initiated. This is indeed remarkable, in view of the harsh desert conditions of the Assaba, and it marks a sustained behavioral change. Vegetable gardening was still unpopular in the Assaba three years ago.

3. Percent of villages trained in vegetable drying who still use the technique.

   In August 1990, 50 percent of villages targeted in FY89 and FY90 reported they performed vegetable drying during the gardening season.

4. Number of fixed sites for immunizations.

   During FY90, there were four permanent fixed vaccination sites (in Guerou Town, Barkeol Town, Kiffa Town, and Kankossa town). In October 1990,

a fifth permanent vaccination site opened in El Ghaire, Department of Guerou. During a special campaign that ran for three days per month during three months (October-December 1989), as many as 13 vaccination sites were operational.

5. Percent of immunizations delivered through fixed versus mobile teams.

   An analysis of six months of activities, from January to June 1990, shows that 17 percent of immunizations were delivered by a MOH/EPI mobile team, 52 percent by World Vision mobile teams, and 31 percent at MOH fixed vaccination sites.

6. The national-to-expatriate ratio among project staff increased from 2.62 at the beginning of FY90 to 4.2 at the end of fiscal year.

V. WORK PLAN

A. Problems/Constraints to Implementation Encountered Since October 1989

1. High turnover of Assaba MOH personnel. Historically, this has been a deterrent to establishing stable relations with MOH, undermining the project's current efforts to strengthen the MOH's capacity to conduct the necessary training and supervision.

   Strategy: We will explore joint solutions with MOH to slow down if not completely halt the turnover of MOH personnel. The project plans to develop a timetable for transferring more control of project activities to Mauritanian nationals.

2. Vastness of the land, dispersed nature of communities, and the nomadic lifestyle of the residents. The project with its limited resources is trying to expand its coverage in a region (not the entire country) whose land area is bigger than Belgium.

   Strategy: Establish peripheral fixed facilities in strategic locations. Assist the MOH in social mobilization activities to increase use of these services. Maximize the use of indigenous leaders, community workers and social/religious gatherings to inform communities of scheduled services such as immunization and VAC distribution. Use every contact with mothers as an opportunity to reinforce health training and correct improper practices.

3. Weak MOH infrastructure in the region. The district/regional health care system needs to be developed and strengthened.

   Strategy: We will work closely with the regional health office to assess fixed sites and do a "work redesign" to maximize staff time. For example, if more than half of the cases seen are children for diarrhea management,

we will encourage MOH to spend more efforts for community health education, improving its logistics system for ORS distribution, etc.

4. Under-utilization of vaccination resources available. In towns like Kiffa, with more than 24,000 inhabitants, the fixed vaccination site has been operational one day per week. At the fixed vaccination site of Kankossa, which serves a total population of 40,000, only an average of 80 persons per month (mothers and children) were immunized. This contrasts with World Vision mobile teams that in one day vaccinate from 100 to 150 persons.

   Strategy: same as for #3.

5. MOH mobile vaccination team was inoperable for more than two years, producing negligible results in two of the five departments in the Assaba. In addition, at least one of the four fixed vaccination sites in the Assaba remained closed for three months because the nurse in charge was absent.

   Strategy: same as for #3. We will also emphasize to them the importance of using the statistics they generate.

6. Most objectives set for FY90 were geared to the Assaba region as a whole, considering that the MOH would also work to achieve the objectives. In practice, the MOH achieved only a fraction of these objectives. The majority of CS/Vitamin interventions are still being implemented by project staff.

   Strategy: Continue to support MOH by providing logistics only when really necessary. In regular meetings with MOH, update them on project progress and performance, so they will eventually realize that we are partners in these activities.

7. MOH vehicles programmed to carry on child survival interventions repeatedly were utilized by other governmental offices for other purposes for periods of up to one month.

   Strategy: Show to MOH in advance of scheduling of vehicle for use in implementing CSP interventions and inculcate the importance of achieving project plans on time.

8. Limited involvement of community leaders. Although politico-administrative authorities in the Assaba are aware of some of the child survival activities, they are not fully involved in the social mobilization of the populations.

   Strategy: Continue to schedule periodic meetings with these leaders, so they will realize the project is interested in their involvement.

9. There is a series of traditional beliefs and taboos that determine the health-seeking behavior of the population of the Assaba, thus greatly affecting the utilization of the Child Survival interventions. They permeate all health domains: eating habits, pregnancy control, puerperium, care of the newborn, need of vaccination in children and women, weaning practices, treatment of children's diarrhea, personal and environmental hygiene, etc.

   Strategy: Conduct an ethnographic study of practices, attitudes and beliefs related to CS interventions. The results will be the basis for the development of targeted training activities.

B. Work Plan Outlining Critical Activities to Be Carried out for Fiscal Year 1990/1991

	QUARTER			
	I	II	III	IV
- Discussions on the first Annual Report	X			
- Staff orientation	X			
- Meetings with MOH, MAg, MEd	X	X	X	X
- Selection and training of CHCs/CHWs in 30 villages	X		X	
- Supervision of CHWs, CHCs	X	X	X	X
- Retraining of PHC/CSP trainers	X			
- Procurement of training material	X			
- Development and pretesting of 8 health education training modules	X	X	X	X
- Conduct ethnographic study on health beliefs/practices		X		
- VAC distribution target groups	X	X	X	X
- Schoolteachers training on Vitamin A	X		X	
- Health education sessions	X	X	X	X
- Vegetable gardening in 30 villages	X	X		
- Ongoing immunization activities	X	X	X	X
- Promotion of ORT	X	X	X	X
- Promotion of breast-feeding and weaning foods	X	X	X	X
- Training of MOH staff in:				
Health management		X		X
CS interventions			X	
- Supervision of fixed facilities and schools		X		X
- In-service staff training	X	X	X	X
- Midterm evaluation and coverage survey (ORT, EPI, VAC)		X		

VI. PROJECT EXPENDITURES AND BUDGET REVISION

1990 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS
W.V.R.D./ASSABA, MAURITANIA CHILD SURVIVAL PROJECT
#OTR-0500-A-00-9156-00

FIELD	Actual Expenditures To Date (09/01/89 to 9/30/90)			Projected Expenditures Against Remaining Obligated Funds (10/1/90 to 08/31/92)			Total Agreement Budget (Columns 1 & 2) (09/01/89 to 08/31/92)		
COST ELEMENTS	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL
I. PROCUREMENT									
A. Supplies	6,977	16,450	23,427	13,023	79,550	92,573	20,000	96,000	116,000
B. Equipment	8,222	61,995	70,217	9,618	20,165	29,783	17,840	82,160	100,000
C. Services/Consultants	11,331	1,056	12,387	44,669	50,944	95,613	56,000	52,000	108,000
SUB-TOTAL I	26,530	79,501	106,031	67,310	150,659	217,969	93,840	230,160	324,000
II. EVALUATION/SUB-TOTAL II	0	0	0	28,000	25,000	53,000	28,000	25,000	53,000
III.INDIRECT COSTS									
Overhead on Field (20%)	7,159	68,886	76,045	29,501	25,914	55,415	36,660	94,800	131,460
SUB-TOTAL III	7,159	68,886	76,045	29,501	25,914	55,415	36,660	94,800	131,460
IV. OTHER PROGRAM COSTS									
A. Personnel	50,000	180,799	230,799	108,000	281,201	389,201	158,000	462,000	620,000
B. Travel/Per diem	23,778	47,484	71,262	24,222	137,516	161,738	48,000	185,000	233,000
C. Other Direct Costs	7,533	34,818	42,351	7,967	31,182	39,149	15,500	66,000	81,500
SUB-TOTAL IV	81,311	263,101	344,412	140,189	449,899	590,088	221,500	713,000	934,500
TOTAL FIELD	115,000	411,488	526,488	265,000	651,472	916,472	380,000	1,062,960	1,442,960

There were no other major budget revisions

VII. SUSTAINABILITY

A. Estimate of Potential for Recovery of Recurrent Costs

After A.I.D. CS funding ends, the project will go through major transformations. The government has said it is unable to budget for the project at the end of project life. It is possible that the community health workers and community health committees that will have developed a solid village pharmacy will be able to continue the support for the running of PHC/CS activities at the village level. The potential for sustainability rests at the community level, where activities will modestly continue at the end of the actual funding.

Immunization activities utilizing mobile teams that depend on vehicles are unlikely to be absorbed by the MOH at the end of funding. The total operational cost per year of a mobile vaccination unit in the Assaba is US$14,763. Other means of transportation such as the traditionally used camels, chariots, and donkeys do promise to be sustainable.

In FY90, World Vision provided direct CS program benefits to more than 230 villages out of a total of 580 villages in the Assaba. It is expected that at the end of the project life, at least 80 villages will continue having active community health committees, and community health workers.

As stated in the Detailed Implementation Plan, there are two sources of revenue that would help the villages: 1) vegetable gardening; and 2) the village pharmacies with the revolving funds from the sale of essential drugs. The cost of an essential drugs kit is presently US$125: the total income it generates would be US$312, thus allowing for restocking. A village would require the equivalent of three kits per year. Eighty villages would produce then the equivalent of US$74,880 per year from the sale of essential drugs.

These figures represent estimates. Data is not available yet for FY90, as the village pharmacy program was started two months ago in August 1990. By September 1990, more than 13 village pharmacies are actively functioning in the Assaba. The funds generated are administered by the communities themselves and are not part of MOH or World Vision accounting.

B. Strategies for Reducing Sustainability Concerns

The project's approach to creating sustainable health programs, outputs, or benefits in local communities include:

1. Community participation has been strengthened and encouraged steadily during FY90. This includes feedback to communities of health problems and solutions found.

2. Existing assets of local community organizations have been tapped: religious leaders (imams and marabous), schools, and cooperatives have been enlisted in the effort to improve villagers' health.

3. Some interventions are done through intersectorial coordination. For example, vegetable gardening is promoted through the Ministry of Education, and VAC distribution is in part done through the local school system.

4. Training for PHC/Child Survival activities is a major emphasis of the project.

5. Supervision of trainees after their return to practicing sites has increased steadily during FY90.

6. The Health Information System has been revised so that it becomes more operational and useful for monitoring objectives.

7. Feedback of health problems has increasingly been discussed with MOH regional authorities, as well as other non-MOH decision makers and community representatives.

8. Local means of producing supplies have been worked out. For example, vegetable seeds and vegetable gardening tools are both now produced locally in the Assaba.

9. Phasing-in of responsibilities to Mauritanians. The viability of permanent child survival interventions in the Assaba depends on the training of Assabans and the development of an appropriate primary health-care infrastructure. This is acknowledged both by World Vision and MOH. The objective of establishing 90 villages where PHC will be conducted by CHWs and CHCs by the end of the project's life addresses this issue.

10. The project continues to assist in the establishment of appropriate support groups to carry on this mission, such as the Assaba Primary Health Care Committee. These groups would be in charge of running the program in collaboration with MOH staff. Section VII of the report discusses other issues concerning sustainability.

VIII. NUTRITION CURRICULUM AND ACTION MESSAGES

As requested in the guidelines for this report, the nutrition curriculum used to train project health workers is here described:

MODULE ON FOOD AND NUTRITION (Duration: 15 hours)

Lesson 1: Nutritional Needs

Objectives:

- To explain the role of each of the three food groups.
- To classify various foods into the three different food groups.

Materials needed:

- Local foods (bring a sample of each locally available food item, if possible).

Time: 2 hours

What is the role of the different food groups?

People need to eat good food so that their body develops harmoniously, they can work in a productive way, and enjoy good health. It is necessary:

- To eat foods for the construction of the different body parts. These are called builder/constructor foods (proteins).

- To eat foods that provide energy. These are called the energizing foods or force-giving foods.

- To eat foods necessary to protect our organism against diseases. These are the protective foods.

- The three food groups are, thus, the builder foods, the energy foods, and the protective foods.

The builder foods

They are needed to build the different human body parts. Children specially need the builder foods, because they are in a period of fast growing. Builder foods are found in:

- Meat (mutton, beef, camel, goat, poultry).
- Eggs
- Milk
- Fish

- Peanuts
- Beans

The energizing or force-giving foods

They are as wood to the fire, as fuel to a vehicle. The harder the person works, the more force-giving foods are needed. You find these foods in:

- Bread, rice, millet, sorghum, corn, peanuts, potatoes, sweet potatoes, manioc, sugar, honey, fats (oil, butter).

The protective foods

They protect us against diseases. They are notably the vitamins and minerals. You can find them in:

- Vegetables (salads, carrots, cabbage, beets).
- Fruits (dates, bananas, mangoes, oranges, lemons, apples, guavas).

Notes:

- Make the list of food items locally, according to the food items available in the villages of origin of the health workers.
- Divide them in three categories.
- Ask each health worker to prepare a local meal.
- Obtain approval or criticism from the other trainees.
- Gather a set of food items on the table and ask the trainees to classify them in the three food groups.

LESSON 2: INFANT FEEDING

Objectives:

- To list the advantages of breast-feeding.
- To explain how to make a progressive weaning.

Time: 2 hours

At every age the infant needs to have a distinct feeding. The infant's feeding can be divided in two periods:

- The period of exclusive breast-feeding (0-4 months).
- The weaning period.

1) The breast-feeding exclusive period

During the first four months of life the infant meets all his nutritional needs from his mother's milk.

What are the advantages of breast-feeding?

The mother's milk provides the following advantages:

- It is easy to digest: it is adapted to the baby's stomach.
- It is always fresh: it presents no problems due to preparation or conservation.
- It allows the development of the child's brain.
- It is available at no cost.
- It helps the spacing of future births.
- The milk of the first three days is particularly rich. Nurse your infant during the first three days of life.

How to increase the milk supply

In order to produce plenty of milk, the mother should:

- Breast-feed her child at least six times per day, giving first one breast followed by the other. The more the baby is nursed, the more milk is produced.
- Drink plenty of liquids.
- Eat green vegetables.
- Do less work than usual.
- The mother should always wash or clean her breasts before breast-feeding the baby.

2) Weaning

Weaning is the period that extends from the moment the mother introduces a food other than breast milk until the time that breast-feeding is definitely stopped. In general, it lasts from the age of 4-6 months until the age of 24 months. During this period, the feeding of the children requires great care. If weaning is not done properly, it will open the doors to malnutrition.

How should a mother wean her child?

Breast milk is not enough food for a child older than 4 or 6 months. It must be supplemented with other foods. These other foods should be soft such as porridge because the child does not yet have teeth. Porridge must be enriched by mixing it with animal and vegetable proteins (mashed meat and fish, milk, peanuts, beans, green leaves). The porridge should later be given in a thicker and thicker form. When the child is one year old and thereafter he can eat from the same family meals. Adult family members should assist the child by preparing and providing him with small bites of food.

How to give the porridge to the infant?

At the age of four months give the infant two spoonfuls of porridge before each breast-feeding. If the baby spits out the porridge, it is not because he does not like it but only because the flavor is new to him. Within a week the infant will get used to the porridge. At the age of six months, the infant should have four meals: two food meals (porridge), and two milk meals (breast-feeding).

Notes:

- Prepare a discussion on breast-feeding and weaning.
- Have the trainees (and mothers) repeat the benefits of breast-feeding and the purpose of a progressive weaning.
- Highlight the benefits of breast-feeding as compared to artificial formulas.

LESSON 3: MALNUTRITION

Objectives:

- To list four signs of mainutrition.
- To identify and measure the nutritional status of a child from six months to three years, by the use of an arm bracelet.
- To explain the measures to take in case of malnutrition.

Material: Arm bracelet

Time: 2 hours

How to recognize that a child is malnourished

A diet that lacks the necessary food for a harmonious growth will delay a child's development and cause malnutrition. This malnutrition can have severe repercussions on the intellectual, physical, and mental state of the child and in some cases may cause the death of the child. Interruption of the child's growth is the first sign of malnutrition.

The signs of malnutrition include:

- The child is too thin or lean.
- The child is sad and cries often.
- The child has lost his appetite.
- The child has reddish, brittle hair.
- Occasionally, the child has swollen feet, face, and hands (edemas).
- The look of the child resembles that of an old person.
- Often the child has a big prominent stomach.

How to measure the nutritional status of a child

To measure the nutritional status of children, we use the arm bracelet, as follows:

- Place it around the middle of the upper right arm, bending it softly.
- Look at the color shown in the bracelet.
- If the bracelet shows green, the nutritional status of the child is satisfactory.
- If the bracelet shows yellow, the child is suffering from moderate malnutrition.
- If the bracelet shows red, the child is suffering from severe malnutrition.

Using the arm bracelet, the nutritional status of children in the age group from six months to three years should be measured every six months. Once a year the children should be measured during the annual sanitary survey that the CHW should conduct, assisted by his community.)

What to do in case of malnutrition?

- If the bracelet shows yellow, give advice and recommendations to the mother to improve the nourishment of the child.
- If the bracelet shows red, refer the child to the health center.

Notes:

- Arrange a discussion on malnutrition.
- Highlight the importance of the arm bracelet as a tool to identify malnutrition.
- Insist that the nutritional status of children from six months to three years of age should be measured every six months.

LESSON 4: AVITAMINOSIS A

Objectives:

- List three signs of Avitaminosis A.
- Explain the treatment schedule in case of Avitaminosis A.
- Describe the measures to take in order to avoid Avitaminosis A.

Material: One container of Vitamin A

Time: 2 hours

How to recognize a person who has Avitaminosis A

Avitaminosis A is manifest by:

- Reduction of night vision, or night blindness.
- Dryness of the eyes (tears become rare).

- Gray plaques covered by a frothy layer over the white parts of the eye.
- White spots on the iris and pupil of the eye.

What treatment to give in case of Avitaminosis A?

The treatment of Avitaminosis A is Vitamin A (the program uses capsules of 200,000 IU). The dosage is as follows:

- Children 6 months - 1 year: 1/2 capsule per day (Day 1, day 2, day 8).
- Older than 1 year: 1 capsule per day (Day 1, day 2, day 8).

- Do not give Vitamin A capsules to children less than six months old or to pregnant women.

How to prevent Avitaminosis A?

In order to prevent Avitaminosis A, one should:

- Recommend that villagers consume foods containing Vitamin A: fresh milk, carrots, mangoes, fish, oils, butter, baobab leaves, beans. Once cooked, these foods lose the Vitamin A as it is destroyed by heat.

- Give 1 capsule of Vitamin A:
- To all children one to ten years old; repeat every six months.
- To women who have delivered a baby, one capsule immediately after the delivery.

Note:

- Organize a discussion on Avitaminosis A.
- Highlight the foods available locally that are rich in Vitamin A. Highlight the risks of overdosage with Vitamin A capsules.

APPENDIX A
DESERT GARDENING - GROWING HOPE IN MAURITANIA

Mauritania is one of the least known (how many of you have ever heard of it?) and least densely populated countries in the whole world. Most of its territory lies in the Sahara Desert, the largest desert in the world, starting in Mauritania on Africa's West coast and then stretching across Africa all the way to Sudan on the East coast. "Maur"-itania is so named because it is the "land of the Maures."

These proud nomadic people are descendants of Arab and Berber stock. It's hard to believe that these simple Muslim nomads are the same group of people that once controlled so much of Northern Africa and Spain for hundreds of years, making the Spanish town of Cordoba one of the great centers of learning in the known world. The Maures were finally completely driven out of Spain by Ferdinand and Isabella in 1492, the same year they financed Columbus' first voyage to America.

Now this once powerful and proud tribe has been reduced to a small remnant of its former glory. They are the same scattered nomads that inhabit Mauritania today. Time seems to have stood still here and the great patriarch Abraham would have felt right at home with the Mauritanian shepherds of today. They still live in tents and are always on the move trying to find enough grass and water to keep their precious goats, sheep, cows, and camels alive. Their nomadic lifestyle of today is very similar to the way the Israelites lived thousands of years ago.

World Vision first came to Mauritania in 1984 during a terrible drought that ravaged the land. The shepherds saw their beloved animals die one by one until there was nothing left. Now that their livestock and way of life were gone, they had no way to feed or support themselves. These once proud "lords of the desert" were reduced to village squatters who lived off of whatever hand-outs they could find. During the drought, World Vision contributed large quantities of food and medical supplies to keep people alive until the rains came again. Later on, a World Vision immunization program was started to vaccine Mauritanian children against the six childhood "killer diseases." After all, what good does it do to save children from malnutrition and starvation if they are only going to die from easily preventable diseases later on?

It was also during this time that it was noticed that many of the children were suffering from "night blindness" due to a lack of Vitamin A in their diets. If a child suffering from "night blindness" does not receive any Vitamin A, he will be condemned to become blind for the rest of his life. It was not surprising that many of the children had Vitamin A deficiencies since their traditional diets consist of nothing but couscous and an occasional piece of meat without any vegetables or fruit. Because of their unbalanced diets, the children were not receiving the Vitamin A and other vitamins and minerals that their bodies needed to develop properly.

A short and long-term Vitamin A strategy were implemented to stop any more children from needlessly going blind. For the short-term, Vitamin A capsules would be periodically distrib-

uted to the village and school children. For the long-term, a sustainable way had to be found to make sure that children would naturally receive enough Vitamin A in their diets since Vitamin A capsules might not always be available.

This is where gardening comes in. A bold attempt was made to start a gardening program in a desert land with people who had never grown anything before. The cultural and climatic restraints seemed insurmountable. The Maures (traditional ruling tribal class) detested anyone who worked the soil. Until quite recently, they had slaves to do all their manual labour. Now they themselves would have to do the unthinkable and get their hands dirty. Also, the soil and climatic conditions were about as unfavorable as you could get. The soil usually consisted of dry shifting sand without any organic material in it. The rains, if they come at all, last for a maximum of one and half months. The temperature can reach a scorching 124° F in the shade, sucking the life out of anything growing. Then don't forget the always hungry livestock that will ravish any greenery they can find. If this was not enough, there are periodic plagues of locusts that destroy everything in their path. Everyone knew that making gardens under such conditions would not be easy, but World Vision had to try because there was no better option to give the people better diets and make them more self-sufficient.

Seeds and gardening tools were delivered to the most promising villages and World Vision's staff helped the villagers plant their first gardens. As more and more gardens were planted, it became evident that there were many problems that would have to be worked out in order for the program to be successful. One has to remember that many of these people had never seen or eaten a vegetable before. The idea of growing and eating vegetables to improve your diet was totally foreign to them. After all, did Mohamed their beloved prophet ever have a vegetable garden? Probably not! Their parents never ate vegetables, so why should they? Many of the people believed that anything green should only be fed to animals and not be eaten by people because it would make them sick.

A good example of resistance to eating vegetables occurred with Bah, a World Vision nurse. No matter how many times we talked to him, he would not eat or even taste a vegetable because his parents taught him as a child not to do so. If it was this difficult to get a well educated nurse to eat vegetables, imagine how difficult it would be to get illiterate shepherds to eat this strange new food. Traditions die hard!

You need four main ingredients in Mauritania to have a successful garden: a reliable source of water (usually hand-dug wells), strong fencing to keep the livestock at bay, seeds and gardening tools, and most importantly, motivated people to water the gardens and take care of them every day.

It was quite a challenge to make a fencing from locally available materials that would be strong enough to keep away all the hungry animals. Thorny limbs and palm fronds were woven into fencing with good results. A few villages tried building sturdy walls out of mud bricks. They were happy and thought they had finally found a way to make a "goat proof" enclosure. The only problem was that although the goats could not penetrate the wall, the camels could easily reach over it with their long necks and eat the vegetables at their leisure.

It's ironic that while it's very difficult to get the nomads to eat vegetables, it's almost impossible to keep their animals away from them.

It's always difficult to find dependable sources of water in the desert. When the wells started drying up during the hot season, the animals would always have first priority to the remaining water and the gardens would be allowed to dry up before they could be harvested. Also, it is extremely exhausting to pull water out of a deep well to water the garden every day. Few people are willing to invest so much time and effort on such a new and unsure idea.

The infertile sandy soil was another obstacle to successful gardening. None of the people realized that the solution to enriching the unfertile soil was lying under their feet. When approaching nomadic settlements, one immediately notices that the ground around the settlement is usually dark black while the surrounding countryside is a light sandy color. The mound of "black gold" that the villages are sitting on is actually animal manure. Their animals forage in the countryside during the day and return to the villages at night to leave behind this valuable and renewable resource. The villages were taught to gather the abundant manure and put it in their garden plots instead of letting it go to waste. When the manure is mixed with the sand, it produces a fertile soil that drains well and is excellent for growing vegetables. The use of expensive and hard to find chemical fertilizers is no longer necessary.

At first, World Vision supplied "Garden Starter Kits' (all the essential seeds and tools needed to start a garden) and continuing technical assistance to the villages. Few people would be willing to spend what little money they had on such a risky proposition as gardening. The idea was to do everything possible to make sure the villages had a good initial experience with gardening. Then by the next gardening season, they would be willing to buy the seeds and supplies necessary to continue gardening. All of the seeds and gardening tools given by World Vision had to be brought in since nothing was locally available. The seeds were GIK (Gifts-in-Kind), all the way from America. Unfortunately, several of the vegetable varieties from America were poorly adapted to local conditions. The gardens could only be grown November until March, the coolest months of the year. Any other time of the year, the plants would wither away due to the excessive heat or be destroyed by the insects.

Many people, particularly the old ones, doubted that gardening would work in their villages. At first, I was skeptical that gardens could be grown in this "land of shifting sand" without sophisticated and costly irrigation systems. No one in their right mind would consider trying to grow anything under such difficult conditions in America. It would be like trying to raise strawberries in Death Valley.

The problem was that there were almost no suitable places to grow gardens in Mauritania except for a few oases. We would have to make do with what we had. I told Dave Robinson, WV Mauritania Director, that even an "Alabama Boy" like me knows that you can't grow gardens on shifting sand. His response was a wise one. He said, "Even if sand dunes eventually blow in and destroy the present gardens, the villagers will still remember

the techniques and will be able to try again when they move to a more favorable location. We must have a long-term perspective. We are developing people as much as the land."

One of our most discouraging moments occurred when we visited the village of Kewalla. A group of poor women, without the help of any men, had worked very hard to plant their gardens. The gardens were coming in fine and the women were excited that they would soon have plenty of vegetables to feed their families. On our next visit to Kewalla, the normally cheerful women looked sad and downcast. Also, their mulahffas (traditional pieces of material that the women wrap around themselves as a covering) were full of holes and falling apart. I could not figure out what was going on. Then I went with the women to the gardening area and was taken aback by what I saw. Their beautiful gardens had been reduced to only stems. Almost nothing remained. I was speechless and asked what happened. The women responded that a swarm of locusts had come into the village during the afternoon. In order to save some of the vegetables, the women tried covering them with their mulahffas. By the time they returned next morning, they saw that the locusts had eaten through the mulahffas, destroying both their vegetables and clothing. It was hard to think of anything consoling to say to them after everything they worked so hard for was destroyed in one night.

Yet, little by little, vegetable gardening was catching on across the region. The trickle of villages asking World Vision for gardening assistance turned into a flood. What's even more encouraging, gardens were now springing up in different villages without any outside assistance. A "critical mass" of gardening activities had been achieved. Now gardening had become widespread enough that it was self-sustaining and would continue on its own even if World Vision left the area.

For the first time, merchants are selling seeds and locally made gardening tools in town. The villages will no longer be at the mercy of outside suppliers. Vegetables are now available in the markets for most of the year and it's becoming common to be served cooked vegetables with your meal of couscous. The consumption of carrots which are rich in Vitamin A should lead to a marked decrease in the amount of children suffering from "night blindness." Another benefit of gardening is that it's lifting the people out of a state of dependency to an early stage of self-reliance. Many of the women's cooperative groups have directly benefitted from gardening. Some of the women had been left by their husbands and had no way to feed or support their children. Now not only do they have nourishing food for their children, they also can sell some of the vegetables as a source of income.

Now that gardening has caught on, World Vision is shifting its emphasis from actually planting the gardens to showing the people how to prepare the vegetables they harvest for the maximum nutritional benefit. It's not enough to assume that now that the people have vegetables, they will eat them. I have seen many beautiful vegetables being fed to the goats because the villagers did not know what to do with them. During the harvest period, World Vision does vegetable cooking and drying demonstrations in each of the villages it works with. The tendency of the village women is to cook the vegetables for long periods of time, the same way they do for meat, destroying much of the vegetable's nutritional value. The women are encouraged to boil their vegetables for a few minutes and serve them on top of their mainstay of couscous.

Also, vegetable drying is being taught since canning or freezing vegetables is not possible. Vegetable drying is very appropriate in Mauritania since the hot, dry air dries out the vegetables very quickly and they can be stored for several months until they are needed.

It's almost miraculous to see lush vegetable gardens bursting forth from where there was nothing but sand before. Gardens offer the Mauritanian people much more that mere vegetables; they give hope, a new way for nomadic people to feed and support their families. Gardening just may become the biggest thing to hit Mauritania.

APPENDIX B
JOB DESCRIPTIONS

1) Project Manager, Assaba Child Survival Project

Nature of position: Coordinate all aspects of the Child Survival Project.
Reports to: Director of Operations World Vision MRT

Responsibilities:

1. Responsible for the preparation of World Vision documents.
2. Prepares the budget along with the finance officer and the director of operations, for the field director's approval.
3. Plans health surveys for the team's implementation.
4. Responsible to develop strategies for Child Survival interventions within the Assaba Region.
5. Directs the overall Child Survival activities.
6. Orients the expatriate staff in relation to life conditions, cultural context, specific duties.
7. Guides and directs the project's overall staff in order to achieve set objectives.
8. Plans and organizes the monthly objectives for the project, along with the executive officer and team leaders.
9. Evaluates project activities on a regular basis.
10. Responsible for the development of continued education activities for World Vision's staff.
11. In collaboration with the chief medical officer for the Assaba region, organizes seminars on relevant public health issues for all health personnel in the region.
12. Responsible for producing health literature and providing training booklets for staff and general population.
13. Reviews monthly reports prepared by the executive officer before submitting to field director or his assistant.
14. Keeps daily radio contact with the executive officer.

15. Authorizes and approves cash transfers from program office to the project cash box.

16. Approves expenditures over 80,000 UM before implementation, and any exceptional expense.

17. Responsible along with the director of operations to develop policies for services and communications to governmental offices in the Assaba (authorization of vehicles, fuel, materials, and protocol/official communications).

18. Overseas the management of human resources at the project level.

19. Represents World Vision at regional level.

20. Works in close collaboration with the Assaba governor and prefects of five departments (Boumdeid, Guerou, Barkeol, Kankossa, and Kiffa), regarding the security and protection of the WV expatriate staff, their movements throughout the region, and project activities in general.

21. Represents World Vision with existing NGOs, and UN organizations in the region.

22. With the executive officer and director of operations, plans for the visits of World Vision visitors such as consultants and donors.

23. Serves as consultant for World Vision Mauritania on all issues related to primary health care and Child Survival:

    a. Is responsible for contact and joint collaboration with World Health Organization and UNICEF in Nouakchott.
    b. Attends or delegates staff to attend all monthly technical meetings of NGOs, UNICEF, and the national EPI.
    c. Assists director of operations and field director in making contracts with organizations which can support the program financially and professionally (USAID, HKI, World Bank, CPHA, etc.).

2) Executive Officer, Assaba Child Survival Project.

Reports to: Project Manager

Nature of position: Provides day-to-day execution of the Child Survival Project in the Assaba.

Responsibilities:

1. Implements with team leaders health surveys as approved by the project manager.

2. Implements action plans prepared along with the project manager.

3. Supervises the Child Survival activities, through weekly reports and meetings with staff, and bimonthly on-site visits to ensure the smooth completion of planned objectives of the project.

4. Responsible to collect data and analyze the project activities on a monthly basis for:

    a. The preparation of monthly, quarterly, and annual reports.
    b. Evaluation of project activities.
    c. The accurate accomplishment of established objectives according to the DIP.

5. As directed by project manager, implements in-training activities for the World Vision staff.

6. Provides logistical support for the conduction of relevant public health seminars for MOH and community-level personnel in the Assaba.

7. Communicates daily by radio with staff in the field and with the project manager.

8. Reviews and signs expense vouchers to a maximum of 40,000 UM.

9. Works in close collaboration with the Regional Inspector of Agriculture on matters related to nutritional gardening.

10. Coordinates and approves the services provided by World Vision to governmental offices in the Assaba, according to established World Vision policies.

11. Supervises and directs the following personnel:

    a. Chef de garage
    b. Logistician/administrator
    c. Accountant
    d. Team leaders

3) Registered Nurse (Team Leader)

Reports to: Executive Officer

Employment category: Seconded by MOH to World Vision.

Language requirements: French and Hassaniya (Arabic dialect); command of another national language is a plus. Must have creativity, sociability and flexibility.

Nature of his functions: Planning, execution and evaluation of primary health care activities of one health team.

Responsibilities:

1. Organizes community meetings for social mobilization and social awareness.
2. Serves as liaison between World Vision, MOH, and the communities.
3. Participates fully in the training and supervision of community health workers.
4. Provides orientation to the communities in order to identify their needs and proposes adequate solutions, according to available resources at the community, MOH, and World Vision levels.
5. Collects and analyzes health data, in order to monitor project's accomplishments.
6. Collaborates with and encourages all the health team members in achieving project objectives.
7. Actively participates in the activities of the health team, in order to facilitate smooth functioning of the team.
8. Prepares and submits weekly and monthly reports of activities.
9. Promotes formal and informal discussions with community leaders, in order to evaluate sanitary activities.

4) Logistician

Accountable to: Assaba C. S. Project Manager

Purpose of position: Ensures the daily administrative task of the project. Responsible for purchasing all items needed. Responsible for daily communication between the operational base, the health teams, and the field office.

Qualifications:

- Good administrative skills
- Well organized, practical minded
- Good communicator, willing to work as intermediary
- Knowledge of French and English; some Arabic an asset
- Experience in dealing with employee relations
- Basic understanding of bookkeeping
- Ability to work in a difficult physical environment
- Typing and computing skills desirable
- Prior work experience under difficult living conditions in a third-world country a must (minimum of two years)
- Preferably holds a B.A. in Business Administration

Responsibilities:

Purchasing

1. Responsible for ordering all items needed for the project. Although he may and will use other agents to do the purchasing, the logistician will determine all needs and prepare detailed specific orders. This means he will need to work in close contact with the mechanic, cook, and team leaders to assure that all needs are met.

2. Prepare purchase orders.

Receiving shipments:

1. Responsible for receiving all shipments.

2. Responsible for verifying that shipping papers correspond with items received, noting any discrepancies or damaged material.

3. Responsible for keeping adequate records of purchase orders and shipping orders to provide for internal control and verification.

4. Responsible for disbursing items received to their recipients.

Stock Control/Inventory:

1. Establishes adequate systems of control of stock in the following categories: medicines, food, capital assets, team materials, auto parts.

2. Maintains regular and systematic control of all above materials.

3. Maintains updated inventory on all capital and fixed assets, noting replacement needs.

Maintenance, repairs and construction:

1. Arranges for daily/weekly maintenance of all project property--houses, storage areas, offices.

2. Regularly evaluates repair needs in all above-mentioned places.

3. Contacts local laborers for needed repairs and establishes price before work begins.

4. Arranges with local laborers for construction materials as needed, always receiving estimates before work starts.

5. Verifies quality of all repairs and construction before payment.

Communication:

1. Maintains daily radio communication with field office and mobile health teams.

2. For messages unsuitable for radio transmission, he assures that clearly written memos are prepared and sent to field office.

3. Maintains close contact with team leaders to ascertain communication needs.

Personnel relations:

1. Works closely with workers' "labor delegate" to assure that worker needs are met.

2. Travels periodically with teams to maintain a "feel" for the work in the field, using the occasion to maintain close working relations with team members.

3. Transmits worker needs to appropriate leaders.

Clerical:

1. Files all necessary documents, rent contracts, workers' dossiers, policy papers, shipping and purchase orders, vehicle insurance and registration papers, social security records and labor laws. The filing must be done so that anyone, even those unfamiliar with the system, can retrieve the necessary information.

APPENDIX C

Protocole d'Accord

entre

Le Gouvernement de la République Islamique de Mauritanie, représenté par son Excellence, Le Ministre de la Santé et des Affaires Sociales

et

World Vision (ONG), représenté par le Représentant Résident en R.I.M.

Projet

DEVELOPPEMENT SANITAIRE DANS LA REGION DE L'ASSABA

NOUAKCHOTT
MAURITANIE

PROTOCOLE D'ACCORD ENTRE LE GOUVERNEMENT DE LA REPUBLIQUE ISLAMIQUE DE MAURITANIE ET WORLD VISION (ONG)

PREAMBULE

- Considérant que le Gouvernement de la République Islamique de Mauritanie encourage les efforts des organisations non gouvernementales, comme auxiliaires du développement;
- Considérant que World Vision a déjà signé quatre conventions avec le Ministère de la Santé et des Affaires Sociales : le 19 Juin 1984, le 15 Avril 1985, le 11 Décembre 1985 et le 22 Décembre 1986;
- Considérant que World Vision, organisation chrétienne, humanitaire, non gouvernementale, à but non lucratif se déclare désireuse de continuer et d'élargir son assistance en faveur du développement socio-économique de la population mauritanienne;
- Considérant que certains projets dans le domaine de la santé publique de World Vision ont reçu la garantie de financement jusqu'à fin 1992;
- Les parties se mettent d'accord sur les points suivants :

CHAPITRE I : DISPOSITIONS GENERALES

Article 1 :

World Vision s'engage, dans le cadre de ses objectifs, à apporter une assistance dans le domaine de la santé publique dans la région de l'Assaba. La mise en application du présent accord se fera conformément aux options en matiére de politique sanitaire et aux objectifs prioritaires établis par le Ministère de la Santé, en particulier la mise en œuvre du système des Soins de Santé Primaires (SSP).

Article 2 :

L'effectif de World Vision sera composé de personnes expatriés dans la mesure ou un personnel Mauritanien de même qualification ne serait pas disponible. Elles seront basées à Kiffa et Nouakchott. Les équipes travailleront en étroite collaboration avec les

- Médicaments essentiels
- L'Hygiène et l'assainissement
- La lutte contre les maladies diarrhéïques et Réhydration par Voie Orale (RVO).

Article 5 :
World Vision travaillera en étroite collaboration avec le Directeur Régional de l'Action Sanitaire et Sociale et elle veillera constamment au respect des priorités définies dans la région.

Article 6 :
A fournir au Ministère de la Santé, par l'intermédiaire du Directeur Régional de l'Action Sanitaire et Sociale, un rapport trimestriel sur la situation sanitaire de la région, la planification et les activités menées dans la région.

Article 7 :
A intégrer le personnel mauritanien médical et nutritionnel mis à la disposition de World Vision par le Gouvernement dans ses projets, mais se réserve le droit de remettre à la disposition du Ministère de la Santé toute personne ne donnant pas satisfaction après application des procédures administratives éxistantes.

Article 8 :
World Vision apportera sa contribution à la formation du personnel mauritanien dans la perspective de la continuité des services de la DRASS suivant l'article 1.

Cette formation visera également les responsables de la DRASS et les agents de santé communautaires (ASC).

Article 9 :
Obtenir l'appui financier nécessaire à l'acquisition du matériel des projets, la mise en place du personnel, les équipements de transport, les services techniques ou d'autres formes d'assistance qui s'avèreront nécessaires à la mise en œuvre du projet.

46

Article 10 :
Se procurer, pour la réussite de son programme et de ses projets diverses fournitures telles que : denrées alimentaires, produits pharmaceutiques, équipements médicaux et autres produits soit localement ou en dehors du pays.

Tous ces équipements seront à la charge de World Vision et resteront sa propriété.

A la fin des projets, tout le matériel restant sera :
- soit muté aux autres projets de World Vision en Mauritanie;
- soit cédé à une organisation non-gouvernementale poursuivant les mêmes objectifs dans le pays;
- soit cédé à la partie mauritanienne;
- soit exporté, s'il s'agit d'un matériel spécifique;
- soit rétrocédé conformément aux lois en vigueur.

CHAPITRE III - ENGAGEMENT DU GOUVERNEMENT DE LA REPUBLIQUE ISLAMIQUE DE MAURITANIE

Le Gouvernement Mauritanien s'engage :

Article 11 :
A fournir toute assistance administrative nécessaire au bon fonctionnement des projets; à donner aux autorités centrales et régionales les instructions appropriées afin qu'elles apportent à World Vision tout l'appui dont ils auront besoin pour la bonne marche des projets.

Article 12 :
A accorder au personnel expatrié affecté en Mauritanie les visas de séjour nécessaires à son entrée et sortie du territoire Mauritanien.

Il s'engage d'autre part à faciliter l'octroi de visa d'entrée au personnel administratif du siège de World Vision, ainsi qu'aux

47

donateurs désirant se rendre sur place pour observer la marche des projets.
Accorder, sans frais, au personnel expatrié de World Vision affecté en Mauritanie, les cartes de séjour et permis de travail.

Le Gouvernement permettra également la libre circulation du personnel de World Vision dans les zones d'intervention.

Article 13 :
A autoriser le personnel médical de World Vision de pratiquer les soins en cas d'urgence, en étroite collaboration avec le Médecin-Chef concerné et dans les lieux isolés où il n'y a pas d'Agent de la Direction de la Santé.

Article 14 :
A mettre à la disposition de World Vision le personnel médical et nutritionnel mauritanien nécessaire au fonctionnement et à la continuité du projet.

Article 15 :
A faciliter et participer au cours des évaluations périodiques du projet pour mesurer l'impact et rectifier la planification et la collaboration entre les deux partis. La DRASS et la DPHS seront ouvertes aux recommendations objectives des évaluateurs externes pour modifier des stratégies d'interventions pour améliorer le projet.

Article 16 :
A accorder à World Vision l'autorisation d'importer tous matériels tels que : véhicules, équipements, médicaments, vivres, appareils ménagers etc., destinés aux projets, ainsi que des effets personnels de ses employés expatriés en exonération de tous droits et taxes de quelque nature qu'ils soient, conformément à l'Ordonnance No 80-323 du 10 Décembre 1980 et d'autres ordonnances, lois, textes en vigueur.

48

Article 17 :
A autoriser World Vision à acheter hors taxes tout matériel et fournitures auprès des fournisseurs mauritaniens ayant des entrepôts fictifs destinés à la vente en RIM. Et lui permettre d'acheter sur le marché local tout le gasoil, essence, graisse, huile, pièces de rechange et pneumatiques nécessaires à un prix hors taxes, et exonéré de la taxe de consommation et d'autres taxes fiscales.

Article 18 :
A accorder une exemption de toutes taxes fiscales sur tous les véhicules et équipements appartenant à World Vision et cette exemption s'appliquera également à son personnel expatrié. Mettre à la disposition de World Vision l'assistance directe de ses services compétents pour accomplir dans les meilleurs délais, toutes les formalités d'immatriculation et de souscription de l'assurance des véhicules appartenant à World Vision.

Article 19 :
A exonérer World Vision des taxes sur les traitements, indemnités, allocations, et autres avantages matériels du personnel expatrié.

Article 20 :
A accorder à World Vision les autorisations nécessaires aux transmissions radiophoniques à l'intérieur du pays pour la gestion, la logistique et la sécurité de son personnel.

Article 21 :
A autoriser World Vision à disposer d'un compte bancaire "étranger convertible", lui permettant d'obtenir des devises pour toutes ses opérations extérieures (paiements et transferts) conformément aux lois bancaires en vigueur.

CHAPITRE IV - DISPOSITIONS DIVERSES

Le présent accord peut être modifié d'un commun accord ou dénoncé sous réserve d'une notification écrite. Chacune des partis peut mettre fin au présent accord au terme d'un préavis écrit de quatre

49

(4) mois dûment envoyé aux adresses respectives des deux parties, libellées ainsi qu'il suit :

Ministère de la Santé
et des Affaires Sociales
B.P. 169 ou 177,
Nouakchott, Mauritanie

World Vision Mauritanie
B.P. 335 (Ilot O-95)
Nouakchott, Mauritanie

En cas de litige les deux parties chercheront un arrangement à l'amiable ou faire recours aux lois Mauritaniennes en vigueur. Cet accord entre en vigueur à la date de sa signature pour une durée de trois (3) ans.

Fait à Nouakchott le 20 Mai 1990

Pour le Gouvernement de la
République Islamique de Mauritanie
Le Ministre de la Santé
et des Affaires Sociales

Mr. Mohamed Abdarahmane o. Moine

Pour World Vision Mauritanie
Le Vice Président de
World Vision International
pour l'Afrique

Mr. Maxwell Fields

WORLD VISION INTERNATIONAL
Directeur de Programme
Nouakchott - Mauritanie

APPENDIX D

DOCUMENT OF AGREEMENT ON PHC

ISLAMIC REPUBLIC OF MAURITANIA
MINISTER OF HEALTH AND SOCIAL AFFAIRS
ASSABA REGION
REGIONAL DIRECTION OF HEALTH
WORLD VISION INTERNATIONAL/ASSABA
DEPARTMENT OF PRIMARY HEALTH CARE

Honor-Fraternity-Justice

The village of: _____ and the Ministry of Health and Social Affairs, in collaboration with World Vision International, accept to respect, each participant according to what is hereby stipulated, the following:

FIRST. The village is responsible to:

1) Elect a committee composed of 7-9 members (of which 4 will receive specific training), in charge of taking care of the village health's problems, specifically:

- Hygiene and sanitation
- Nutritional monitoring
- Prenatal monitoring
- Weaning of infants

2) To select two adults who will be trained as community health workers. These candidates must comply with the following requirements:

- Have stability.
- Be volunteers.
- Be available.
- Preferably within the age of 30 to 50 years.
- Enjoy the esteem and confidence of the villages
- Be married.
- Preferably to have some experience in health matters (traditional birth attendant, traditional healer, ...).
- Be capable of following a training course
- Preferably literate.

3) To identify a system to support and encourage the CHWs (TBA and H.S.-Hygienist/Secouriste)-- according to the possibilities and organization of the village.

4) Oversee the regular replenishing of drugs for the CHWs kits.

SECOND. The Ministry of Health and Social Affairs, with the collaboration of World Vision International, will be responsible to:

1) To train the community health workers, i.e, the traditional birth attendant and the 'hygieniste-secouriste', the committee manager, and other agents in charge of health education and essential aspects of prevention.

2) To provide the village with an appropriate quantity of medicines after the training of the CHWs.

3) To supervise on a regular basis the village (CHW and CHC).

4) To assure the proper continuous education of the CHW and the CHC through supervision and refreshment courses.

5) To give priority, using discernment, to the sick evacuated by the CHW.

6) To assure the availability of essential drugs at the village level at a cost affordable at the regions level (Kiffa).

This agreement shall be terminated in case any of the parties break its rules.

This agreement replaces all other previous agreements on this matter.

Issued in Kiffa on June 2, 1990.

Follows signatures:

VILLAGE REPRESENTATIVE

MINISTRY OF HEALTH AND S. A. REPRESENTATIVE

WORLD VISION INTERNATIONAL REPRESENTATIVE

THE REGIONAL SUPERVISOR OF PHC

APPENDIX E
SUMMARY OF BASELINE SURVEY RESULTS

INDICATOR	REGIONAL [n]	EMPHASIS [n]
Percent of women delivered in the last 12 mos with 2 doses of TT documented prior to delivery	32.7% [153]	65.4% [52]
Percent of deliveries in the last 12 mos which took place in the home	79.5% [153]	82.7% [52]
Percent of women delivered in the past 12 mos who have a vaccination card	55.5% [153]	72.3% [52]
Percent of women delivered in the past 12 mos who received vitamin A (by history or card)	15% [153]	17.3% [52]
Percent of women delivered at home in the past 12 mos who received vitamin A	12.3% [122]	18.6% [43]
Percent of women delivered in health institutions in the past 12 mos who received Vitamin A	22.6% [31]	11.1% [9]
Percent of children 1 to 4 years of age who received vitamin A in the past 6 mos (card documented only)	27.4% [558]	26.7% [232]
Percent of children 1 to four years of age who have received vitamin A in the past 12 mos	52.0% [558]	73.7% [232]
Percent of children 6 to 9 years of age who have received vitamin A in the past 6 mos	24.7% [263]	22.2% [142]
Percent of children 6 to 9 years of age who have received vitamin A in the past 12 mos	47.1% [263]	75.4% [142]

Percent of school children 6 to 9 years of age who received vitamin A in the past 6 mos	23.7% [38]	30.6% [36]
Percent of girls 6 to 9 years of age in school	7.7% [222]	19.1% [68]
Percent of boys 6 to 9 years of age in school	16.8% [137]	32.9% [139]
Percent of infants (0 to 11 mos) who are appropriately fed (breastfed, receiving no complementary foods if 0 to 2 mos, and receiving complementary foods if 6 to 11 (mos)	70.9% [151]	79.2% [53]
Percent of infants 6 to 11 mos who receive no complementary foods	45.5% [77]	38.1% [21]
Percent of children under 5 with diarrhea (4 or more loose/watery stools per day) in the past 2 weeks	37.7% [738]	39.1% [279]
Percent of children with diarrhea in the past 2 weeks who were treated with ORT (SSS/ORS)	20.5% [278]	37.6% [109]
Percent of households unable to name one or more vitamin A-rich vegetables	31.0% [504]	10.4% [201]
Percent of households reporting they never eat vitamin A-rich vegetables	31.1% [499]	8.7% [195]
Percent of households reporting they eat vitamin A-rich vegetables 3 or more times a year	54.3% [499]	78.5% [195]
Percent of children under five with a vaccination card	61.1% [373]	51.8% [218]
Percent of children 12 to 23 mos with a vaccination card	68.4% [209]	84.7% [77]

Percent of children 12 to 23 mos who received the following immunizations before age 12 mos:

	[207]	[77]
BCG	54.1%	76.6%
DTP1/polio1	53.1%	75.3%
DTP2/polio2	25.1%	42.9%
DTP3/polio3	16.4%	31.2%
measles	28.0%	46.8%
yellow fever	28.0%	46.8%
completed	13.0%	29.9%

APPENDIX F

BASELINE SURVEY QUESTIONNAIRE

W.V.I. ASSABA

FORMULAIRE D'ENQUETE.

PROJET DE SURVIE DE L'ENFANT/VITAMINE A

WORLD VISION INTERNATIONAL
MAURITANIE

DU 02 AU 14 JAN. 1990

Département _____/ Grappe N° _____/ Maison N° _____/

Remplissez une fiche si quelqu'un qui habite à la maison :
1 – a moins de 10 ans, ou 2 – a accouché pendant les derniers 12 mois.

I. COUVERTURE DE VITAMINE A.

A. FEMMES QUI ONT ACCOUCHE PENDANT LES DERNIERS 12 MOIS.

AGE	Lieu de l'accouchement				Carte de Vacc.		Doc. de 2 Doses		Date du dernier Dose de Vit.A		
	Hopil.	Matern.	Disp.	Maison.	OUI	NON	OUI	NON	01/89-06/89	07/89	Présent
1. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

B. ENFANTS MOINS DE 10 ANS :

AGE	Sexe		Carte de Vacc.		Enfants scolarisés.		Date du derniers Dose de Vit.A.			Hemeralopie et durée	
	M	F	OUI	NON	OUI	NON	1/89-7/89	7/89-prés.	Pas reçu	NON	>1 mois
1. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
5. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
8. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9 _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10. _____	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

II. PRATIQUES ALIMENTAIRES

A. ENFANTS DE MOINS D'UN AN:

N°	Date de Naissance	Allaitement Au Sein		Allaitement Artificiel		Autres Aliments	
		OUI	NON	OUI	NON	OUI	NON
_____	_____	☐	☐	☐	☐	☐	☐
_____	_____	☐	☐	☐	☐	☐	☐
_____	_____	☐	☐	☐	☐	☐	☐

IV - REHYDRATATION PAR VOIE ORALE (RVO)

POUR LES ENFANTS DE MOINS DE 5 ANS

N°	Diarrhées pendant les dernières 2 semaines	Parmi les Enfants qui ont eu la diarrhée, Etaient-ils traités avec RVO (Sachets ou SSS)?
_____	NON ( ) OUI ( ) __	NON ( ) OUI ( ) _____
_____	NON ( ) OUI ( ) __	NON ( ) OUI ( ) _____
_____	NON ( ) OUI ( ) __	NON ( ) OUI ( ) _____

V. PARTICIPATION COMMUNAUTAIRE

Y'A T'IL DANS LE VILLAGE DES AGENTS OU GROUPES ACTIFS SUIVANTS

	OUI	NON
A. Agent de Santé Communautaire	( )	( )
B. Femme Educatrice	( )	( )
C. Comité de Jardin Maraîcher	( )	( )
D. Comité de Santé	( )	( )
E. Accoucheuse Traditionnelle	( )	( )
F. Secouriste	( )	( )
G. Coopérative	( )	( )

VI. COUVERTURE DE MARKETING SOCIAL

POUR LES FEMMES DE PLUS DE 15 ANS

1. AVEZ VOUS DEJA REGARDE UNE PROJECTION DE DIAPOSITIVE DE LA SANTE ?

OUI	NON
( )	( )

APPENDIX G

REPUBLIQUE ISLAMIQUE DE MAURITANIE

MINISTERE DE LA SANTE ET DES AFFAIRES SOCIALES

DIRECTION DE L'HYGIENE ET DE LA PROTECTION SANITAIRE

الجمهورية الاسلامية الموريتانية
وزارة الصحة والشؤون الاجتماعية
ادارة الوقاية والحماية الصحية

HYGIENE AND PREVENTION REPORT

التقرير الاضافي للنشاطات (النظافة والوقاية)

RAPPORT D'ACTIVITE COMPLEMENTAIRE

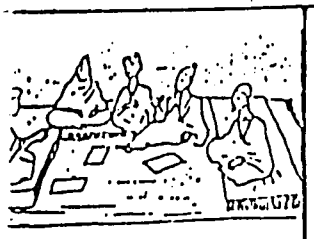
HYGIENE - PREVENTION

Date de remise		تاريخ الاستلام
Supervision 1		الاشراف الاول
Supervision 2		الاشراف الثاني
Supervision 3		الاشراف الثالث
Supervision 4		الاشراف الرابع
Supervision 5		الاشراف الخامس

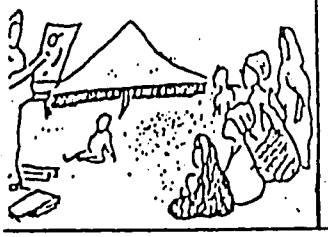
WILAYA DE : : الولاية

MOUGHATAA DE : : المقاطعة

VILLAGE DE : : القرية



Nombre de réunions du CSC. عدد اجتماعات اللجنة الصحية



Nombre de séances d'E.P.S* عدد حصص التوعية الصحية

ROUGEOLE nombre de cas عدد حالات الحصباء

Moins de 5 ans اصغر من ٥ سنوات

Nombre de décès عدد الوفيات

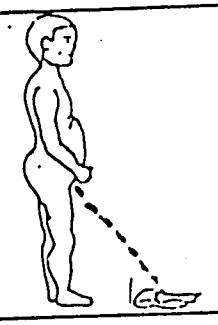
Plus de 5 ans اكبر من ٥ سنوات

Coqueluche nombre de cas عدد حالات السعال الديكي

Moins de 5ans. اصغر من ٥ سنوات

Nombre de décès عدد الوفيات

Plus de 5ans اكبر من ٥ سنوات



Nombre de cas
de bilharziose

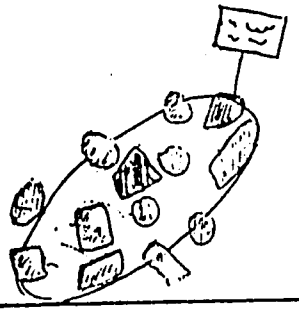
عدد حالات البلهراسيا

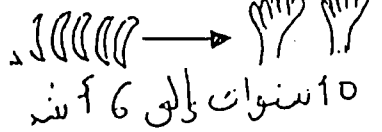
Nombre de cas
de ver de Guinée

عدد حالات "بودرت"

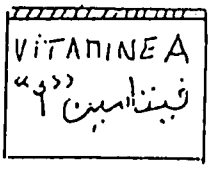
Nombre de décès

عدد الوفيات





6 أشهر إلى 10 سنوات



عدد أقراص فيتامين "أ" التي وزعت
إلى الأطفال "من 6 أشهر إلى 10 سنوات"

Nombre d'enfants de 6 mois à 10 ans ayant reçu une capsule de Vitamine A

REPUBLIQUE ISLAMIQUE DE MAURITANIE

MINISTERE DE LA SANTE ET DES AFFAIRES SOCIALES

DIRECTION DE L'HYGIENE ET DE LA PROTECTION SANITAIRE

الجمهورية الاسلامية الموريتانية

وزارة الصحة والشؤون الاجتماعية

ادارة الوقاية والحماية الصحية

E1

APPENDIX H

TRADITIONAL BIRTH ATTENDANT REPORT

تقرير عن نشاطات المولدة التقليدية

RAPPORT D'ACTIVITE DE L'ACCOUCHEUSE TRADITIONNELLE

Date de remise		تاريخ الاستلام
Supervision 1		الاشراف الاول
Supervision 2		الاشراف الثاني
Supervision 3		الاشراف الثالث
Supervision 4		الاشراف الرابع
Supervision 5		الاشراف الخامس

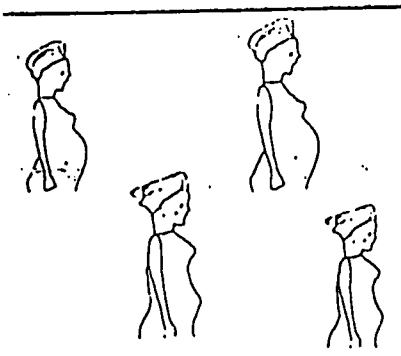
WILAYA DE : : الولاية

MOUGHATAA DE : : المقاطعة

VILLAGE DE : : القرية

Nombre de réunions d'I E P S organisées par l'AT

عدد اجتماعات التوعية الصحية المنظمة من طرف الولادة التقليدية.

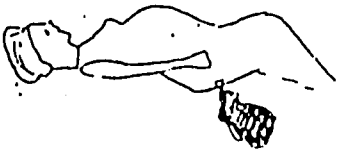


Nombre de femmes enceintes ayant visitées l'A.T

عدد النساء الحمل اللواتي زرن الولادة التقليدية

Nombre de femmes enceintes ayant reçu une prophylaxie de l'anémie

عدد النساء اللواتي وجدنه وقاية من فقر الدم



Nombre de femmes ayant fait une fausse couche

عدد النساء اللواتي أصبن بإجهاض

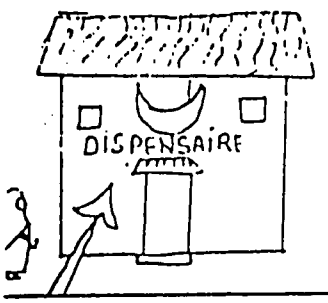
Nombre de femmes enceintes anémiées

عدد النساء الحمل المصابات بفقر الدم

Nombre de femmes oedemateuses dépistées au cours des visites

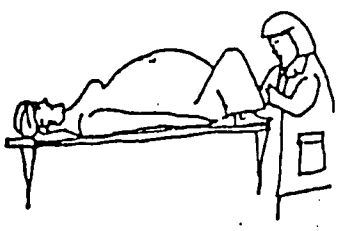
عدد النساء المصابات بالورم

E3



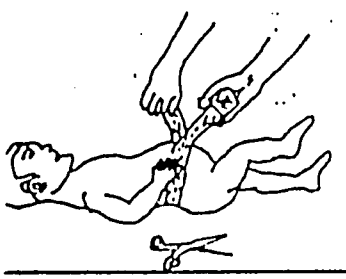
Nombre de femmes enceintes évacuées au dispensaire

عدد النساء الحمل الموجهات الى المستوصف



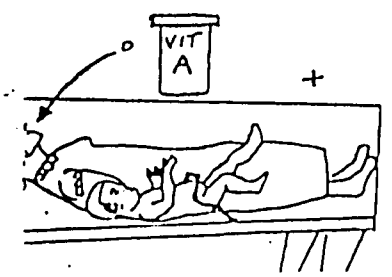
Nombre d'accouchements effectués par l'AT

عدد الولادات المجراة من طرف المولدة التقليدية



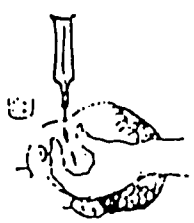
Nombre de pansements ombilicaux faits

عدد تضميدات السرة



Nombre de femmes ayant reçu une capsule de vitamine A après l'accouchement

عدد النساء اللواتي وجدن قرصا من فيتامين "A" بعد الولادة.



Nombre de nouveaux nés ayant reçu la tétracycline pour les yeux

عدد المواليد حديثا الذين جعلت لهم "تتراسكلين" في الأعين

REPUBLIQUE ISLAMIQUE DE MAURITANIE

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DIRECTION DE L'HYGIENE ET DE LA PROTECTION SANITAIRE

جمهورية الاسلامية الموريتانية

وزارة الصحة والشؤون الاجتماعية

ادارة الوقاية والحماية الصحية

B

APPENDIX I.

ANNUAL SANITARY SURVEY

البحث الصحي السنوي

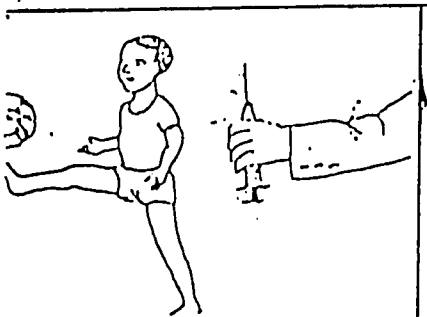
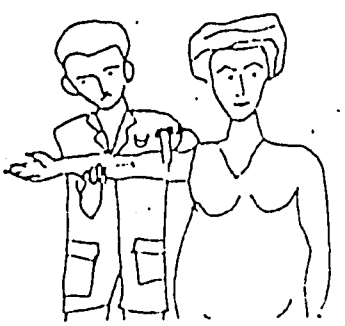
ENQUETE SANITAIRE ANNUELLE

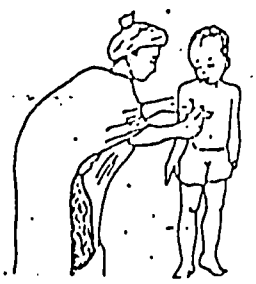
Date : التاريخ

WILAYA DE : الولاية :

MOUGHATAA DE : المقاطعة :

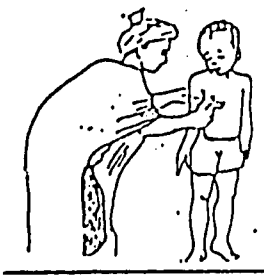
VILLAGE DE : القرية :

	Nombre total de familles B2 العدد الاجمالي للعائلات
0 - 11 m 	Nombre d'enfants de 0 à 12 mois عدد الأطفال من 0 الى 12 شهرا
	Nombre d'enfants de 1 an à 5 ans عدد الأطفال من سنة الى 5 سنوات
	Nombre d'enfants de 1 an à 5 ans complétement vaccinés عدد الأطفال من 0 الى 5 سنوات الملقحين تماما
	Nombre de femmes de 15 à 44 ans ayant reçu au minimum 2 doses de VAT عدد النساء من 15 الى 44 سنة اللواتي لقحن بالكزاز من جرعتين من التلقيح ضد الكزاز



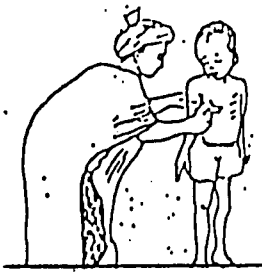
Nombre d'enfants de 6 mois à 3 ans dans la zone verte

عدد الأطفال من ٦ أشهر الى ٣ سنوات في المنطقة الخضراء



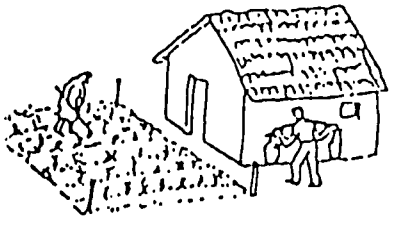
Nombre d'enfants de 6 mois à 3 ans dans la zone jaune

عدد الأطفال من ٦ أشهر الى ٣ سنوات في المنطقة الصفراء



Nombre d'enfants de 6 mois à 3 ans dans la zone rouge

عدد الأطفال من ٦ أشهر الى ٣ سنوات في المنطقة الحمراء



Nombre de familles ayant un perimetre maraicher ou agricole

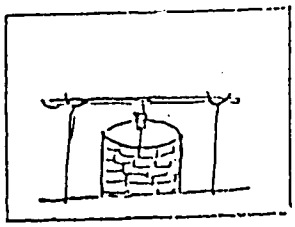
عدد العائلات المتمتعة بمزارع أو خضروات

مصدر التزويد بالماء

Source d'approvisionnement en eau

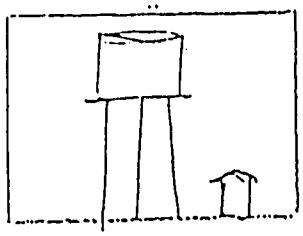
B4

بير



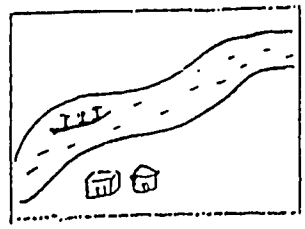
Puits

خنفيرة



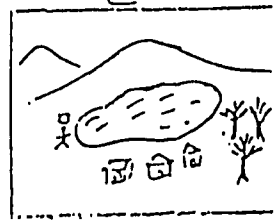
Forage

نهر

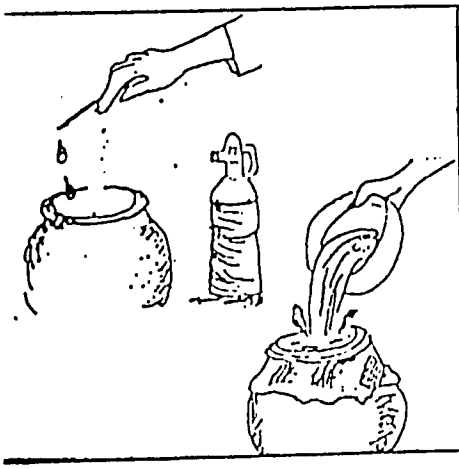


Fleuve

مستنقع

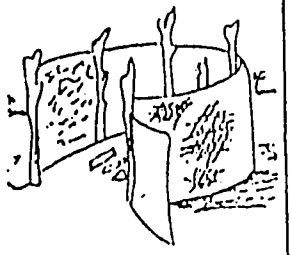


Marigot



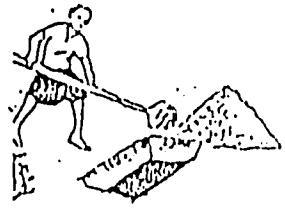
Nombre de familles traitant l'eau par filtration ou javelisation

عدد العائلات اللواتي يصفين الماء أو يستعملن "جفل"



Nombre de latrines construites

عدد المراحيض المبنية



Nbre de trous à ordures construits

عدد حفرات القمامات

REPUBLIQUE ISLAMIQUE DE MAURITANIE
MINISTERE DE LA SANTE ET DES
AFFAIRES SOCIALES
DIRECTION DE L'HYGIENE ET DE
LA PROTECTION SANITAIRE

الجمهورية الاسلامية الموريتانية
وزارة الصحة والشؤون الاجتماعية
إدارة الوقاية و الرقابة الصحية

APPENDIX

SUPERVISORY FORM

FICHE DE SUPERVISION
بطاقة المراقبة

Wilaya :		الولاية
Moughaata :		المقاطعة
Village :		القرية

DATE DE SUPERVISION				تاريخ المراقبة
NOMS DES SUPERVISEURS				اسماء المراقبين
ACTIVITES HYGIENE ET PREVENTION				عمل الوقاية
Nombre de réunions du CSC				عدد اجتماعات الجنة الفنية
Thème des réunions				مواضيع الاجتماعات

APPENDIX J

S1

Nombre de réunions d'EPS					عدد اجتماعات التوعية الصحية	
Thème des réunions					مواضيع الاجتماعات	
ROUGEOLE	Nombre de cas de moins de 5 ans				عدد الحالات من ٥ - ٥ سنوات	الحصباء (بوسيرو)
	Nombre de cas plus de 5 ans				عدد الحالات أكثر ٥ سنوات	
	Nombre de décès moins de 5 ans				عدد الوفيات من ٥ - ٥ سنوات	
	Nombre de décès plus de 5 ans				عدد الوفيات أكثر ٥ سنوات	
COQUELUCHE	Nombre de cas moins de 5 ans				عدد الحالات من ٥ - ٥ سنوات	السعال الديكي (تقوت)
	Nombre de cas plus de 5 ans				عدد الحالات أكثر من ٥ سنوات	
	Nombre de décès moins de 5 ans				عدد الوفيات أقل من ٥ سنوات	
	Nombre de décès plus de 5 ans				عدد الوفيات أكثر ٥ سنوات	
Nombre de cas de Bilharziose					عدد حالات البلارزيوز	
Nombre de cas de vers de guinée					عدد حالات "بورموتا"	
NOMBRE DE DECES	Enfants 0-5ans				الأطفال ٥-٥ سنة	عدد الوفيات S2
	Enfants 5-15ans				الأطفال ٥-١٥ سنة	
	Femmes				النساء	
	Hommes				الرجال	
Nombre d'enfants ayant reçu une capsule de vitamine A					عدد أقراص فيتامين أ التي وزعت	

Remarques générales sur les activités Hygiéne/Prévention				ملاحظات عامة على العمل الوقائي
ACTIVITES PRE ET PERINATALES				عمل ما قبل الولادة وما حولها
Nombre de réunions EPS organisées par l'AT				عدد الإجتماعات للتوعية الصحية من طرف القابلة
Thèmes des réunions EPS				مواضيع لجتماعات التوعية الصحية
Nombre de femmes enceintes ayant visité l'AT				عدد النساء الحوامل اللواتي قابلهن القابلة
Nombre de femmes enceintes ayant reçu une prophylaxie de l'anémie				عدد النساء الحوامل اللواتي وجدن وقاية فقر الدم
Nombre de femme enceinte ayant fait une fausse couche				
Nombre de femmes enceintes anémiées				عدد النساء الحوامل المصابات بفقر الدم
Nombre de femmes oedemateuses dépistées au cours de la visite				عدد النساء الحوامل المصابات بالورم
Nombre de femmes enceintes évacuées au centre de santé				عدد النساء الحوامل اللواتي رُفعت إلى المركز الصحي
Nombre d'accouchements effectués par l'AT				عدد النساء اللواتي ولدن على يد القابلة
Nombre de pansements ombilicaux faits				
Nombre de femmes ayant reçu une capsule de Vitamine A après l'accouchement				عدد النساء اللواتي وجدن قرعة من فيتامين أ بعد الولادة

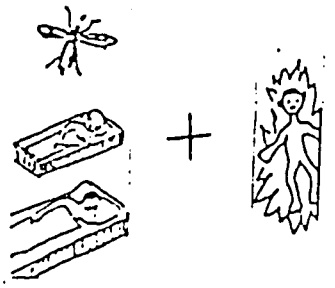
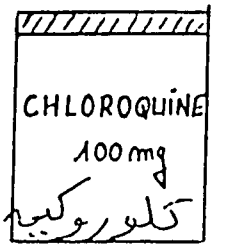
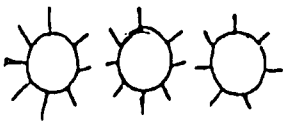
Nombre de nouveaux nés ayant reçu la tétracycline pour les yeux				عدد المولوديه الذيه وجدو تنز اسكليه 1% ف العيون
Remarques générales sur les activités pré et périnatales				ملاحظات عامة حول عمل الولادة وما حولها.
ACTIVITES CURATIVES				العمل العلاجي
Nombre de consultations — Enfants moins de 5 ans				عدد المرضى — الأطفال أقل من 5 سنوات
Nombre de consultations — Enfants 5-15 ans				عدد المرضى — الأطفال من 5 إلى 15 سنة
Nombre de consultations — Femmes				عدد المرضى — النساء
Nombre de consultations — Hommes				عدد المرضى — الرجال
Fièvre				الحمى
Paludisme				الملاريا
Diarrhées				الإسهال
Conjonctivites				الرمد
Plaies				الجرحات
Douleurs diverses				الآلام
Toux				السعال
Otites				ألم الأذنيه
Anémies				فقر الدم

Vers intestinaux			احتوشات الحي
Autres affections			أمراض أخرى
Nombre de references au centre de santé			عدد الروح الى المركز
Motif des references au centre de santé			سبب الروح
Remarques générales sur les activités curatives			ملاحظات عامة على العمل العلاجي
GESTION COMMUNAUTAIRE			التسيير الجماعي
Argent enregistré sur la feuille de consultation			جمع المبلغ الموجود في بطاقة العلاجات
Argent total disponible			جمع المبلغ الموجود
Crédits en cours			الديونات
Dépenses effectuées			
Remarques générales sur la gestion communautaire			ملاحظات عامة على التسيير الجماعي

ETAT DE LA TROUSSE				حالة الأدوية
Acide Acetyl Salicylique				آسبرين
Paracétamol				بريستامول
Chloroquine				كلوروكين
Cotrimoxazole				كوتريمكسازول
S.R.O				المحلول
Tétracycline 1 % ophtalmique				تتراسكلين 1%
Mebendazole				مبادزول
Hydroxyde Aluminium				هدروكس ألمنيم
Fer - Acide Folique				فير - الحديد
Vitamine A				فيتامين م
Benzoate Benzyle				بنزوات بنزيل
Chlorhexidine				الكلوروكسيدين
Violet de Gentiane				فيولي جانسيانه
Bandes de gaze PM				بند الغار
Compresses G.M				كومبرس
Coton				القطنه
Sparadrap				أسبترادرا
Remarques générales sur l'état de la trousse Médicaments Essentiels				ملاحظات عامة حول تسيير الأدوية

REAPPROVISIONNEMENT EN MEDICAMENTS				تجديد الأدوية
Médicaments, dosage et quantité				الأدوية والجدد
CONCLUSION DE LA SUPERVISION				خلاصة المراقبة

A4

الملاريا PALUDISME			مدة العلاج  durée du traitement

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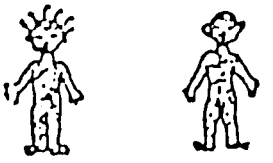
	2 ☀	◐
	3 ☀	◐
من سنة إلى 5 سنوات 1 → IIIII 1 à 5 ans 	1 ☀	◐ ◐
	2 ☀	◐ ◐
	3 ☀	◐
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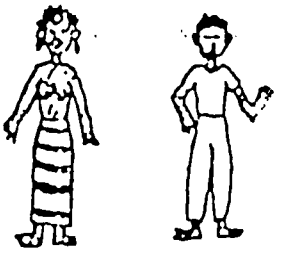
الأطفال من 10 الى 15 سنة IIIII IIIII → IIIII IIIII 10 à 15 ans 	1 ☀	◐ ◐ ◐ ◐
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	3 ☀	◐ ◐
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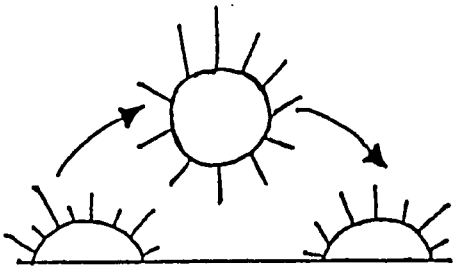
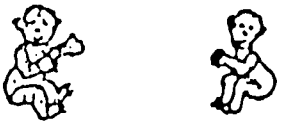
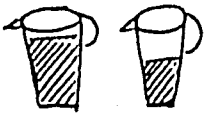
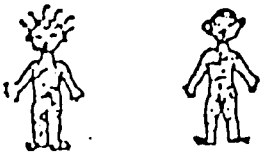
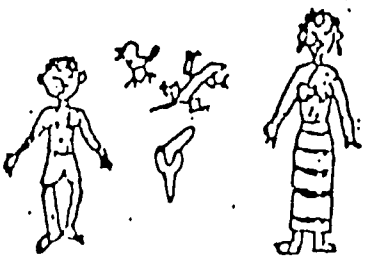
	2 ☀	◐ ◐ ◐ ◐ ◐ ◐
	3 ☀	◐ ◐ ◐

A5

الإسهال DIARRHEE		SACHET DE REHYDRATATION ORALE المحلول	مدة العلاج Continuer jusqu'à l'amélioration durée du traitement



من الولادة إلى سنة واحدة 0 → 1 0 à 1 an		
من سنة إلى 5 سنوات 1 → IIIII 1 à 5 ans		
من 5 سنوات الى 15 سنة IIIII → IIIII IIIII 5 à 15 ans		
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APPENDIX K

Report on the Supervision of the Femmes Educatrices trained by World Vision in Assaba Region : August 1990

1. Introduction

World Vision has been training "Femmes Educatrices" as part of the Child Survival activities in the Assaba for the past few years. A "Femme Educatrice" is a woman who has been selected on the recommendation of her village chief as being respected by the villagers, responsible, and suitable for such a position. Two FE were selected from WV targetted villages, and were encouraged to participate as the mobile nutrition team visited the village and presented its education programme. Each FE then attended a three day seminar during which time she was trained in these same subjects. The topics covered include infant nutrition, with emphasis being placed on the promotion of breastfeeding, the correct introduction of complementary foods, including a "double-mix" porridge locally called "Dizaad", identification and treatment of malnutrition and the promotion of Vitamin A consumption, largely through vegetable gardening and the drying of surplus vegetables, hygiene and treatment of diarrhoea including the preparation of the rehydrating "sugar/salt" drink, and the importance of vaccinating mothers and children.

The goal of these training programmes was to equip mothers at the village level with the knowledge which they require to raise healthy children, and the use of village women as communicators was seen as the potentially most effective and sustainable way of affecting changes in the knowledge, attitudes and practices of the villagers. The women work on a completely voluntary basis.

Following a period of approximately 3 months, the FEs were visited in their villages, and asked a series of questions. The two FEs trained from each village were supervised together when they were both present.

The supervision aimed to determine three things :

1. Whether the FE had retained what she had learnt
2. Whether she had shared this with the villagers
3. What problems she had found in her work

Questions were devised and posed to determine these 3 points, in the key areas of her instruction.

It was also intended to encourage the women and to use the experiences of the FE to improve future training and work.

A supervisory sheet, in French, was produced. The sheet was explained by an accompanying set of notes, translated into English as follows :

2. Supervision Methods applied for Femmes Educatrices

2.1 WEANING PRACTICES

a. Preparation of Dizaad

Objective: To see whether the FEs had taught the village women how to wean their children using a porridge called "Dizaad". Specifically, to see if the FE understand how to make this porridge, if they have shown this to the women, and if they have encountered any problems.

Method : Give the FEs sorghum flour and bean flour and tell them to show you how to make "Dizaad" porridge.
Evaluation :

Did the FE use 4 parts of sorghum and one part of beans ?

Did the FE mix the flours well and explain how to make the porridge correctly ?

Does she know that one can equally well use millet, maize, rice or wheat flours instead of sorghum, and peanuts or melon seeds instead of the beans ?

Does she know that it is good to add mashed vegetables, ground dried meat or dried fish, eggs or oil to the porridge, in addition to the usual butter, milk or sugar?

2. Has she already shown the women how to make Dizaad ? Approximately how many women attended this demonstration ?

3. Did the women accept the Dizaad as an infant food ?

The FE are in a good position to see if women accepted the food, but attitude and practice are not always the same !

4. Did the women accept to give beans to their children ?

Traditionally beans are seen as "gassy" and therefore they are sometimes not accepted as a food for babies. This might be a factor against the acceptance of Dizaad.

b. Introduction of complementary foods

Objective: To know what women do at the moment, and if the F.E. understood the need to introduce complementary foods into the diet from the age of 4 - 6 months, and whether she has promoted this in the village.

1. In this village, at what age do mothers start feeding their children foods other than breast milk ?

2. At what age should complementary food be introduced ?

3. Has the FE advised mothers, and was her advice received ?

10

2.2. BREASTFEEDING

Objective: To know whether the FE understands the value of breast milk, particularly colostrum, and the main points concerning breastfeeding.

Method: Ask the following questions :

1. Should a women who has just given birth give her first milk to her baby ?

Lactation should start as soon as possible after birth.

2. Does she know the importance of colostrum ?

Colostrum is very rich in antibodies which protect the baby from many diseases. It is also rich in nutrients which give the baby strength.

3. Has she advised women to give colostrum to their babies ?

4. Did the women accept this advice ? (i.e. did they give it?)

5. Ask the FE what advice she would give in the event of a women coming to her complaining of a lack of breast milk.

For a mother to have more breastmilk, she should breastfeed more often, and should eat and drink more herself, and get enough rest. She can give her child to other mothers to breastfeed if she really lacks milk.

Bottle-feeding is dangerous because it is very difficult to keep the bottle clean. If other milks are given, they can be given using a clean bowl and spoon. If fresh milk is given it should be firstly boiled and then diluted using previously boiled water, 2 parts milk to one part water, with the addition of a teaspoon of sugar. If evaporated milk is used the proportions are one part boiled water to every part of water.

6.What should a mother do who falls pregnant in the middle of breastfeeding an infant ?

She can slowly wean her child, by giving other milks and foods instead of breastmilk. In this way, the child can be completely weaned by the third or fourth month of pregnancy. Her milk is never bad for her child, but it is very draining for a mother to breastfeed at the same time as being pregnant.

7. Has the FE seen any sudden weanings in the village ?

Precipitous weaning is distressing and dangerous for a child who is not yet used to eating solid foods.

8. Up until what age should a child be breastfed ?
(the Koran states until 2 years)

2.3. ORT/DIARRHOEA

Objective : To see if she had understood the salt and sugar drink, as a medicine for children who have diarrhea. To see if she understands how to use it, and if she has already held a demonstration for the village women, and if the women agreed to use it.

Method : a. Ask the FE to demonstrate how to prepare the drink

- Did she wash her hands with soap before starting ?
- Did she wash all the bowls etc. correctly ?
- Did she use 12 tea glasses of clean water ?
- Did she add half a tea glass of sugar ?
- Did she add 2 pinches of salt using three fingers ?

b. How should a child with diarrhea be treated ?

Give him the salt and sugar drink after every loose stool he passes. Continue to breastfeed, and to feed him. If the diarrhea contains blood or mucus, or if the diarrhea continues after three days of giving the solution, seek medical advice. The child should be given one extra meal a day for one week after he gets better, to make up for any weight loss.

c. If a child cries but does not have any tears, why is this ?

It is because the child is dehydrated. The other signs of dehydration include thirst, a loss of elasticity in the skin, small quantities of dark urine, dry tongue and mouth, sunken fontanel, sunken eyes and sleepiness.

d. Has the FE held a demonstration of the drink in the village

e. Did the women follow this advice ?

2.4. HYGIENE

Objective: To see if the FEs understand and practice good hygiene.

Method : a. Evaluation of the state of her house
Has she swept, washed, done the washing-up, where does her water come from and is there a pit dug for household rubbish?

b. Ask her how children catch worms, and how to avoid this.

Worms are contracted as a result of poor hygiene - undercooked and contaminated food or not wearing shoes.

c. Does she understand the dangers of houseflies ?

2.5. MALNUTRITION

Objective: To see if the FEs can recognize malnutrition, if they understand how to treat it, and if they have advised mothers.

Methods: show a photograph of a malnourished child and ask the following questions:

a. Look at this child, what is the matter with him ?

b. What are the signs of being malnourished ?

the signs : - the child is very thin and emaciated
- the child is sad and cries often
- the child refuses to eat
- his hair is red and breaks easily
- he has the face of an old man
- the child often has a swollen belly, feet, hands, face

c. If the FE sees a malnourished child in the village, what advice will she give to it's mother ?

Evaluation : She should determine the event which began his malnourishment, and the advise appropriately. The child needs to take an enriched porridge, for example with milk, oil, butter etc) or other energy-rich foods at least 5 or 6 times a day. In the beginning, the child may refuse this if he has lost his appetite, but she needs to continue to give it patiently. The important things is that the child eats, and she can give him all sorts of soft foods. Advice on the treatment of diarrhoea and on breast-feeding may also be appropriate.

d. Ask if the FE has already advised such mothers.

e. Show the Brassard to the FE and explain how to use it.

The Brassard is a simple three colour tape measure which enables a rapid evaluation of nutritional status based on mid-arm circumferences. Between the ages of one and five years the measurement remains remarkably constant, and the same brassard is used for this age-group.

The brassard comprises three sections:

Red	0 - 12.5 cm	:	Severely malnourished
Yellow	12,5 - 13,5 cm	:	Moderately malnourished
Green	13,5 - end cm	:	Satisfactory nutritional state

To use the tape measure, undress the left arm and let it hang loosely. Measure the arm at the mid-point between the shoulder and the elbow, holding the brassard around the arm firmly without pulling it. The zero point is at the start of the red colour, match this up with the tape and according to the colour band one may assess the state of the child.

2.6 THREE FOOD GROUPS

Objective : To see if the FE understands the three food groups and the concept of balanced meals.

Method: Ask the following questions:

a. There are three food groups; tell me the group of each of the following foods, and the purpose of this group.

Cous-cous, meat, peanuts, carrots, baobab leaves

Evaluation:

Cous-cous : Energy Food
Energy foods are like wood for a fire. The harder someone works, the more energy food they need to eat.

Meat, Peanuts : Constructor Foods
Constructor foods build up the different parts of the body, children need these foods to grow strong, and their requirement increases when they fall sick.

Baobab leaves, Carrots : Protective Foods
Protective foods protect the body against illnesses. It is important to feed children this group.

All the family needs to take balanced meals, and importantly breastfeeding and pregnant women who are not overweight need to eat more, the equivalent of one extra balanced meal a day.

After being ill people need to eat more "constructors"

2.7 GARDENING

Objective: to obtain "feed-back" from the womens' experiences last year with vegetable gardening, to determine the problems, the successes and whether they wish to continue the work.

a. Are the villagers going to make a garden this year ?

b. What were the major problems encountered last year?

For example, insects, animals, lack of water, too much work, lack of seeds etc...

c. Which vegetables grew best ?

List the vegetables, for example carrots, beetroots etc...

d. Did they sell their produce (if so, which and where ?)

e. Did they dry their produce (if not, why not ?)

2.8 VITAMIN A

a. Why is it necessary to eat foods rich in vitamin A ?

To protect ones health, particularly for eyes, but also to protect one against diarrhoea and respiratory infections.

b. List three foods that are rich in vitamin A ?

For example, milk, butter, liver, green vegetables (dark green leaves such as bean leaves, beetroot leaves) and yellow vegetables such as carrots or sweet potatoes

c. The mobile teams give out vitamin A, do you know what age children should start taking these capsules ?

6 months

d. Do the FEs know when women must take vitamin A ?

In the first month after giving birth.

e. If a child takes a capsule of Vitamin A today, when should he next take one ?

6 months later

f. Have you dried vegetables in your village ?
g. If not, why not ?

2.9 VACCINATION :

Objective : To determine whether the FE are convinced of the benefits of vaccinations for children and women of child-bearing age.

Method : Ask the following questions:

a. Do the FE know the use of the vaccination cards ?
b. Why should women aged between 15 and 44 years be vaccinated

Vaccination is necessary because women frequently give birth on bare earth, and consequently may easily contract tetanus.

2.10 MANAGEMENT:

Objective : to determine the womens' reactions to their training, responsibilities and position as "FEs"

Method : After she has answered all the questions, ask her:

a. How did she find life as a F.E. ?
b. Did women ask her for advice ?
c. What are the most pressing health problems in the village ?

3.0 RESULTS

Two groups of the FEs were supervised, those trained in May 1990 and those trained in September 1989. The results are as follows:

EVALUATION OF THE FEs TRAINED IN MAY 1990

22 women were trained from 11 villages/cooperatives in May 1990. The supervision was 14 weeks later, the team visited each village to evaluate their work and their effectiveness, and to encourage them.

There was at least one FE functioning in each village. One of the FE was subsequently trained as a AT by the MSAS/WV and so was expected to be followed under that programme.

EVALUATION OF THE FEs TRAINED IN SEPTEMBER 1989

18 women were trained from 9 villages/cooperatives in September 1989. The supervision was 11 months later, this was the first visit the women had received after their training.

There was at least one FE functioning in each village. The villages were taken as a unit, so that were both FEs were present they were interviewed together, where there was only one she was interviewed alone.

The villages were taken as a unit, so that were both FEs were present they were interviewed together, where there was only one she was interviewed alone.

The following is an analysis of the results, taking all 20 villages together.

3.1 WEANING PRACTICES:

Porridge is a traditional food in Mauritania, and all of the FE were able to make this. 70% of the FE correctly remembered the proportions of flours to make Dizaad, and 80% of women knew about enriched porridges.

Over half of the women had held demonstrations in their villages, for an average of 13 women.

All of the women giving demonstrations said that Dizaad was accepted, whereas the women who had not given a demonstration were less positive, this might be because they themselves felt less positive towards the porridge. In the May group 30% of the villages refused the beans, whereas in the September group the beans did not apparently cause a problem, everyone accepting them.

94

This was in the same villages were refusal was cited in the same villages where no demonstration was given, except for in one village where the women did not have materials for a demonstration, and in another where the demonstration was given but beans refused.

It is good to promote both beans, melon seeds and peanuts, since availability varies from season to season and village to village.

All of the women from May knew that children should receive complementary feeding from the age of 4 months, and all stated that the women in their villages were introducing foods at an appropriate time. They had all given advice on this subject to mothers.

Results were less unanimous from the September training, suggesting that memories were less clear. Three women gave times that were too early as "correct" and one too late. All of the women had advised others.

3.2 BREASTFEEDING

All of the women, except for one explained correctly that colostrum is good and protects the newborn.
90% of the women reported that their advice was accepted.
All of the women correctly responded that one should breastfeed until 2 years of age.

The problem of lack of breast-milk was tackled by 85% of the FE by giving more food, in the form of porridge, to the baby. Heated milk was also mentioned by some. There is a lot of room to increase the training on the management of lack of milk, since only 10% of the FE mentioned the need to breastfeed more often, and only 35% of the women stated that the mother herself should drink and eat more.

While 80% of women were prepared to proffer advice to breastfeeding pregnant women which was to wean the child gradually, 65% of women said that they had seen children precipitously weaned in their villages.

3.3 ORT/DIARRHOEA

All of the FE knew that children with diarrhea should be given ORT, and 80% of them could prepare this correctly. The error of the others was to add three pinches of salt instead of two- this makes the solution actually worsen the diarrhea rather than heal it.

In the two villages in Guerou only one of the FE was present for the supervision. These were the only villages where the solution had not been demonstrated, and where the FE said the treatment had not been accepted. In Tagad Iriji the FE was old and did not know the formula either.

Demonstrations of the solution had been held in all but two the villages in Guerou and in one village where the FE claimed "there is not any diarrhea". All but two of the villages where the solution was demonstrated accepted it, so that according to the FEs themselves, the ORT was used in 75% of villages.

Sixty percent of the women were able to recognize that no tears when crying was a sign of "lack of water" or dehydration.

3.4 HYGIENE

Hygiene was generally good, the FE set good examples with swept houses and clean children, and 85% of them had rubbish pits. Well water was used in all but one Kankossa village.

All of the FE said that the reason children caught worms was lack of hygiene, while 70% specified dirty water, and 25% recognized the link with undercooked food, particularly meat.

All of the FE recognized the dangers of flies transmitting disease.

3.5 MALNUTRITION

The FE were aware of malnutrition in terms of two major criteria, a thin body, and a swollen belly. Other signs that were listed included being sad (50%), having weak hair (10%) the face of an old man (10%), being dehydrated (55%) and "lacking vitamins" (20%).

Generally the link between diarrhea and malnutrition is seen clearly, and there was some confusion between the treatments for the two from the May group. One of the women just prescribed ORT for a malnourished child, the FE of Tagad Iriji had no idea. However, all the others (95%) gave good replies concerning the need to give the child food, more to eat of richer food or enriched porridge.

More than half the FEs had already advised the mothers of malnourished children concerning their treatment.

3.6 3 FOOD GROUPS

All but two of the village FEs had grasped the idea of the 3 food groups well, and understood the concepts of energy foods, construction foods and protective foods. The main confusion concerned the classification of peanuts as constructors. All of the women classed carrots as protective foods..

3.7 GARDENING

It was encouraging to hear that all of the villages targetted by our 1989 and 1990 gardening programmes (where the FE could reply) intended to repeat the gardening this year, in spite of difficulties last season. The major problems cited included lack of protection from animals (80%), insects (80%), lack of materials/seeds (70%) and lack of water in 25% of villages. All these villages were given starter kits of seeds and tools as part of the WV programme. It should be noted that these villages were previously chosen for their suitability, including adequacy of water supply.

Carrots were the real success story, understandable since they like a sandy soil. Other crops growing very well included beetroot and Irish potatoes, while others mentioned cabbages, onions and tomatoes as being successful.

Six of the villages had crops that were good enough both to sell their produce in local towns and to dry. Vegetables were dried in 50% of the villages, and where they had not been dried it was explained by lack of sufficient produce.

3.8 VITAMIN A

Knowledge concerning Vitamin A was the least consistent area of knowledge. There seems to be a popular misconception that all vegetables are rich in Vitamin A - that the two are almost synonymous, in spite of the emphasis in education the point that this should only be green and yellow vegetables. The other sources of Vitamin A were little known.

FE in 80% of the villages were able to give a reasonable answer about the benefits of vitamin A capsules, 50% mentioning that Vitamin A is good for the eyes/night blindness.

14 out of 20 of the groups of FE gave at least two foods rich in Vitamin A, and 35% of women gave completely correct responses. The answers were only vegetables, however. Carrots and tomatoes were the foods most frequently mentioned, while beetroot (Vitamin A only in the leaves) also was cited

Responses concerning the Vitamin A capsules were not clear, but the training did not emphasize the details on doses since the FE are not directly involved in distribution. The FEs in only 20% of villages knew that children should start taking Vitamin A from the age of 6 months, and it was only known in 30% of villages that Vitamin A should be taken by women who had just given birth. 55% of the women did remember that the children should take a capsule every 6 months.

3.9 VACCINATION

All of the women knew the benefits of the vaccination card, while around half of them knew why women of child-bearing age should be vaccinated, and some of the answers (such as it causing sterility) reveal a need for further teaching.

3.10 MANAGEMENT

Generally the women were very pleased to be thus trained, and had all been asked questions. The only problems appeared in the Department of Guerou. One of the FE in this department has already graduated to be a TBA, but in the remaining two villages the FE did not appear to be functioning. In one the women complained that they were not accepted by the village, there were evidently some complications of a political nature. In the other village the FE that we interviewed was really too old and also said that no women has asked her any questions. It remains to be seen how the other FE had treated her job.

4.0 DISCUSSION

There are inevitably a number of biases in a study such as this, and it should be remembered that the general Objective of the supervision was exactly that, a supervision, focused on the women themselves, rather than a scientific inquiry.

Respondent bias : as the women seek to please us by replying with the answer they think we want. This is particularly true concerning the acceptance of the Dizaad and ORT drink, the stated acceptance does not necessarily imply that this is a widespread practice. Lack of materials might also be emphasized if it is thought that the organization in question might give more.

Interviewer bias : although training tried to avoid this problem, it is possible that sometimes women were influenced by the comments of the interviewer - for example taking time until a woman gave the correct response.

5.0 RECOMMENDATIONS

The Femmes Educatrices' programme has now been superseded, but useful lessons remain in the effectiveness of the training that we have given to these women. Areas of their weakness reflect possible gaps in the health education programmes given by World Vision ASCs, and so may be applied in the strengthening of our teams' education programmes.

Areas that immediately present themselves as weak include the teaching on Vitamin A and the need for women to be vaccinated against tetanus.

Teaching has also been given on measures that breast-feeding women can make to improve their milk supply, in response to the perceived gap in knowledge of the women.

The proportions of the flours in Dizaad should be emphasized more clearly during demonstrations of this, so that the actual mixing of flours is shown. The interchangability of the peanuts/beans/seeds should be emphasized also, so that the unavailability of one of these does not mean the outright rejection of the porridge.

Particular emphasis should be made on the correct amount of salt in the ORT drink, since confusion renders the drink dangerous rather than beneficial !

The gardening was particularly encouraging, especially as it is seen that women continue to dry the vegetables where they have sufficient. Carrots are evidently a great success, producing good yields, being rich in Vitamin A and well liked by people, particularly children, and easily dried. The problems of insect and animal attack continue to be the major constraints on production, as well as the strenuous efforts involved in watering.

6.0 CONCLUSION

The women who have been trained over the last few years by World Vision have retained much useful information, and are generally active in promoting the simple steps for the health of their villages. Care should be taken not to suddenly "drop" these women - where new formations (for example the Ministry of Health ASCs) are held these women will often be excellent candidates. The training these women received is one step to sustainable changes in health practices - as we move to new training in more depth, these women should not be forgotten and contact should continue to be made as we pass through their villages.

7.0 POSTSCRIPT

Since this supervision, we have received requests for assistance from two of our FE who have responded to the malnutrition in their communities by starting feeding programmes. These are initiatives that have come directly from the women themselves, who have also implemented their ideas with participation from the mothers. This is an encouraging movement, as the development process is seen, the women have been able to tackle the problem of malnutrition within their communities as a result of their training, by feeding enriched porridges. World Vision has supported these efforts by the loan of large cooking pots and appropriate advice, but the programmes remain very much "self-help" efforts by the communities.

WORLD VISION INTERNATIONAL
PROJET ASSABA

SUPERVISION DES FEMMES EDUCATRICES

Date:

Nom de la Femme Educatrice:.....
Village:..... Nombre habitants:.....
Nombre des habitants:.....

Notes:

I. LE SEVRAGE

a. Préparation du Dizaad

1. Questions:

Est-ceque la femme éducatrice a prit 4 parts de farine de sorgho et 1 part de farine de haricots ? O / N

Est-cequ'elle a mélangé des farines et a expliqué comment faire une bouillie avec les farines? O / N

Est-cequ'elle sait qu'elle peut également utiliser la farine du mil, du maïs, du riz ou du blé au lieu du sorgho, ou au lieu de la farine des haricots, des arachides ou des pastèques? O / N

Est-cequ'elle sait qu'on peut y ajouter des légumes écrasés, de la viande ou du poisson séché écrasé, des oeufs, de l'huile et toujours du beurre, du lait ou du sucre? O / N

2. Est-cequ'elle a fait une démonstration de Dizaad? O / N

Pour combien de femmes environ?.....

3. Est-ceque les femmes ont accepté de faire le Dizaad?

Et par exemple est-cequ'elles ont accepté de donner des haricots aux enfants?

.....

.../...

b. Introduction des aliments complémentaires

1. Dans ce village, à quel âge les femmes commencent - elles à donner la nourriture aux enfants?.....

2. A partir de quel âge doit-on- donner la bouillie aux enfants, comme alimentation complémentaire?

3. Est-ceque la F.E. a donné des conseils aux femmes et est-ceque ces dernières ont-elles commencé à pratiquer ces mêmes conseils?
.....

II. ALLAITEMENT MATERNEL

1. Est-cequ'une femme qui vient d'accoucher doit-elle donner son premier lait au nouveau né?

O / N

2. Est-ceque vous savez l'importance du premier lait maternel?
.....

3. Est-ceque vous avez conseillé les femmes de donner le colostrum aux premiers nés? O / N

4. Est-ceque les femmes ont-elles accepté ce conseil?
.....

5. Une femme vient vous voir, pour signaler une insuffisance de son lait. Quels conseils pourrez-vous lui donner?
.....

6. Une femme qui au cours de l'allaitement de son enfant, tombe enceinte que doit-elle faire?
.....

7. Est-cequ'elle a vu des sevrages brusques au niveau du village?
.....

.../...

8. Jusqu'à quel âge doit-on allaiter les enfants?

.....

III. SRO/DIARRHEE

a. Demandez la F.E. de faire une démonstration SRO

Est-cequ'elle a lavé ses mains avant de commencer ? O / N

Est-cequ'elle a bien lavé tous les bols etc...? O / N

Est-cequ'elle a mésuré 12 verres à thé d'eau propre? O / N

Est-cequ'elle a ajouté un demi verre de sucre? O / N

Est-cequ'elle a ajouté 3 pincées de 3 doigts de sel? O / N

b. Comment doit-on- traiter un enfant diarrhéique?

.....

c. Si un enfant pleure, sans ses larmes n'apparaissent qu'a-t-il donc?

.....

d. Est-ceque la F.E. a fait une démonstration SRO aux femmes villageoises? O / N

e. Est-ceque ces femmes avaient elles pratiqué ces mêmes conseils? O / N

IV. HYGIENE

a. Evaluation sur l'état de sa maison:

Est-cequ'elle a balayé? O / N

Est-ceque ces enfants sont propres? O / N

Est-cequ'elle a nettoyé ses plats? O / N

D'où vient son eau? Puits/Marigot/Sondage.....?

Est-cequ'elle a un fossé pour dépôt d'ordures? O / N

...../

b. Demandez elle, comment les enfants peuvent-ils avoir des vers?
.....

Comment peut-on les éviter?.....

c. Est-cequ'elle sait les dangers que peuvent causer les mouches?
O / N

V. LA MALNUTRITION

a. L'a demander de regarder cet enfant: qu'a-t-il comme maladie?
.....

b. Quels sont les signes de la malnutrition?
.....

c. Si la F.E. voit un enfant malnourrit au niveau du village, comment va-t-elle conseiller la mère de celui-ci?
.....
d. Est-cequ'elle a déjà donné des conseils dans ce sens? O / N

e. Montrez le brassard, à la F.E. et expliquez comment doit-on l'utiliser.

VI. 3 GROUPES DE NOURRITURE

a. Il y a trois groupes de nourriture:
pour chaque nourriture de la liste suivante dis-moi son groupe et sa fonction:
- Le cous-cous ?...../.....
- La viande ?...../.....
- Les arachides ?...../.....
- Les Carottes ?...../.....
- Feuilles de Baobab...../.....

Est-cequ'elle a bien répondu pour les aliments energétiques? O / N
Est-cequ'elle a bien répondu pour les aliments constructeurs O / N
Est-cequ'elle a bien répondu pour les aliments protecteurs? O / N

VII. JARDINAGE

a. Est-cequ'elles vont faire le jardinage cette année? O / N

93

c. Quels sont les légumes qui ont mieux poussés?

....

d. Est-cequ'elles ont vendu des produits? lesquels?.....

.....et où?.....

VIII. VITAMINE A

a. Pourquoi doit-on manger des aliments riches en Vitamine A?

.....

b. Dites moi trois sortes de nourriture qui contiennent la Vit. A

....

c. Les équipes mobiles donnent-elles la Vitamine A?.....

Est-ceque vous connaissez l'âge à partir duquel doit-on donner la vitamine A aux enfants? O / N

d. Est-cequ'elles savent quand, les femmes doivent-elles prendre la vitamine A O / N

e. Si un enfant prend une capsule de vitamine A aujourd'hui quand devra-t-il la reprendre encore?.....

f. Est-ceque vous avez seché des légumes au niveau du village? O / N

Si non, pourquoi?.....

IX. VACCINATION

a; Est-cequ'elles savent l'utilité des cartes de vaccination? O / N

b. Pourquoi les femmes âgées de 15-44 ans doivent être vaccinées? V / F

....

X. GESTATION

a. Comment a-t-elle trouvé l'emploi comme F.E.?..... .....

b. Est-ceque les femmes l'a demandent des conseils?.....

d. Quels sont les problèmes sanitaires les plus urgent dans le village?.....

.....

APPENDIX L

VILLAGES WHERE COMMUNITY HEALTH WORKERS WERE TRAINED

JULY 1990

	Name and type of CHW: HS/TBA	Village
1.	Lagdaf o. Mahmoud, HS Fatimetou mt M'Bareck, TBA	Jelwa
2.	Toutou mt Med El Hadi, HS Marieme mt Moctar Maouloud, TBA	Leftah
3.	Ahmed o. Bilal, HS Malouma mt Mahmoud Lalla, TBA	Legneb
4.	Marabott o. El Bare, HS Marieme Vall mt Sidi Mhmud, TBA	Igleib Skair
5.	Isselmou o. Med, HS Soueilka mt Blal, TBA	Oumoul Kouzz
6.	Med El Hadhi o. Cheikh, HS Marieme mt Sidi, TBA	Ain Rahma
7.	Mohamedou o. Sidi Ahmed, HS Marieme mt Yehdhid, TBA	Amridjel
8.	Diallo Mariam, HS Maimouna M'Barom, TBA	Gouvava
9.	Zeinabou mt Hamadi, HS	Rasselville
10.	Med Lemine o. Abdelahi, HS Tisslim mt Taleb, TBA	El Barik
11.	Med Abdramane o. Memoude, HS Vatimetou mt. Sidi Maouloud	Daklah
12.	Tayib Vall o. Tayib, HS	Tissane
13.	Marieme mt Moustapha, TBA	Boumdeid

Total: 23 CHWs from 13 villages.

TENTATIVE VILLAGES IN BARKEOL FOR CHWs TRAINING FY91:

1 Geler, 2 Erdedi, 3 Daghveg, 4 Barkeol Akdar, 5 Boulahrath II, 6 Var Ejerk, 7 Galoula, 8 Egdenballa, 9 Zekha, 10 Tenbel, 11 El Haramen, 12 Maga, 13 Enbeika, 14 El Wobek, 15 Kedan. As listed by Dr. Bounena, and Mr. Cheikh Tourad, from the Dispensary in Barkeol, 12 June 1990.

APPENDIX L - CONTINUATION

VILLAGES WHERE WOMEN HEALTH EDUCATORS WERE TRAINED

MAY 1990

Guerou Dpt:	1. Dakhla
	2. Tghade El Wassaa
	3. Taghadet Iriji
Boumdeid Dpt:	4. Djeolle
	5. Nouamleine
Kankossa Dpt:	6. Oulade Elemine
	7. Oulade Hame
	8. Agoueinit
Kiffa Dpt:	9. Cooperative CPF
	10. Cooperative Damgha
	11. Cooperative Mouchgag

2 WHE were trained in each village.

Qb