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FINAL EVALUATION REPORT
CHILD SURVIVAL/VITAMIN A PROJECT
WORLD VISION MAURITANIA
ASSABA REGION

Beginning Date: October 1, 1989
Ending Date: September 30, 1992

Submitted to:

Ms. Rose Robinson, Chief
Child and Health Division
Office of Private Voluntary Cooperation
Bureau for Food and Humanitarian Assistance
1515 Wilson Boulevard
Rosslyn, VA 22209

PVO Headquarters Contact:

Milton Amayun, M.D., M.P.H.
World Vision Relief & Development Inc.
919 West Huntington Drive
Monrovia, CA 91016

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TABLE OF CONTENTS

Page #

LIST OF ACRONYMS ii

MAPS OF MAURITANIA AND THE ASSABA REGION iii

I. EXECUTIVE SUMMARY 1

II. INTRODUCTION AND PURPOSE OF THE EVALUATION 2

III. BACKGROUND 3
- A. National and Regional Information 3
- B. Chronology of World Vision's Involvement in the Assaba 7

IV. EVALUATION METHODOLOGY 9

V. FINDINGS/ OBSERVATIONS 11
- A. Objectives 11
- B. Project Design/Implementation Plan and Funding 13
- C. Interventions 14
- D. Strategies 17

VI. SUSTAINABILITY 20
- A. Sustainability Status 21
- B. Estimated Recurrent Costs and Projected Revenues 22
- C. Sustainability Plan 23
- D. Monitoring and Evaluation of Sustainability 26
- E. Community Participation 29
- F. Ability and Willingness of Counterpart Institutions to Sustain Activities 31
- G. Project Expenditures 33
- H. Attempts to Increase Efficiency 34
- I. Cost Recovery Attempts 34
- J. Household Income Generation 35
- K. Summary 36

VII. LESSONS LEARNED 37

VIII. CONCLUSIONS 38

IX. RECOMMENDATIONS 39

APPENDICES

LIST OF ACRONYMS

APP	Assaba People's Program
ASC	Agent de Santé Communautaire (CHW)
AT	Accoucheuse Traditionnelle (TBA)
BCG	Bacile Calmette-Guérin (tuberculosis vaccine)
BHU	Basic Health Unit (Village)
CHC	Community Health Committee
CHW	Community Health Worker (ASC)
DIP	Detailed Implementation Plan
DPT	Diphtheria, Pertussis and Tetanus Vaccine (French DTC)
DRASS	French acronym for Regional Directorate of Health and Social Action
FY	Fiscal Year
GOM	Government of Mauritania
GW	Guinea Worm
ICV	Infant Completely Vaccinated
IRM	Islamic Republic of Mauritania
MOH	Ministry of Health
NGO	Nongovernmental Organization
ORS	Oral Rehydration Solution
PHC	Primary Health Care (SSP)
PVO	Private Voluntary Organization
RIM	République Islamique de la Mauritanie
SSP	Soins de Santé Primaire (PHC)
SSS	Sugar and Salt Solution
TBA	Traditional Birth Attendant (AT)
USAID	United States Agency for International Development
USB	Unité de Santé de Base (BHU)
WVM	World Vision Mauritania
WVRD	World Vision Relief & Development

MAPS OF MAURITANIA AND THE ASSABA REGION

MAURITANIA

I/HODH EL CHARGHI
I_1 AMOURJ
I_2 BASSIKONOU
I_3 DJEGUENI
I_4 NEMA
I_5 OUALATA
I6 TIMBEDRA

II/HODH EL GHARBI
II_1 AIOUN
II_2 KOBENI
II_3 TAMCHEKETT
II_4 TINTANE

III/ASSABA
III_1 BARKEOL
III_2 BOUMDEID
III_3 GUEROU
III_4 KANKOSSA
III_5 KIFFA

IV/GORGOL
IV_1 KAEDI
IV_2 MAGHAMA
IV_3 MBOUT
IV_4 MONGUEL

V/BRAKNA
V_1 ALEG
V_2 BABABE
V_3 BOGHE
V_4 MAGTA-LAHJAR
V_5 MBAGNE

VI/TRARZA
VI_1 BOUTILIMIT
VI_2 KEUR MACENE
VI_3 MEDERDRA
VI_4 OUAD NAGA
VI_5 RKIZ
VI_6 ROSSO

VII/ADRAR
VII_1 AOUJEFT
VII_2 ATAR
VII_3 CHINGUETTI
VII_4 OUADANE

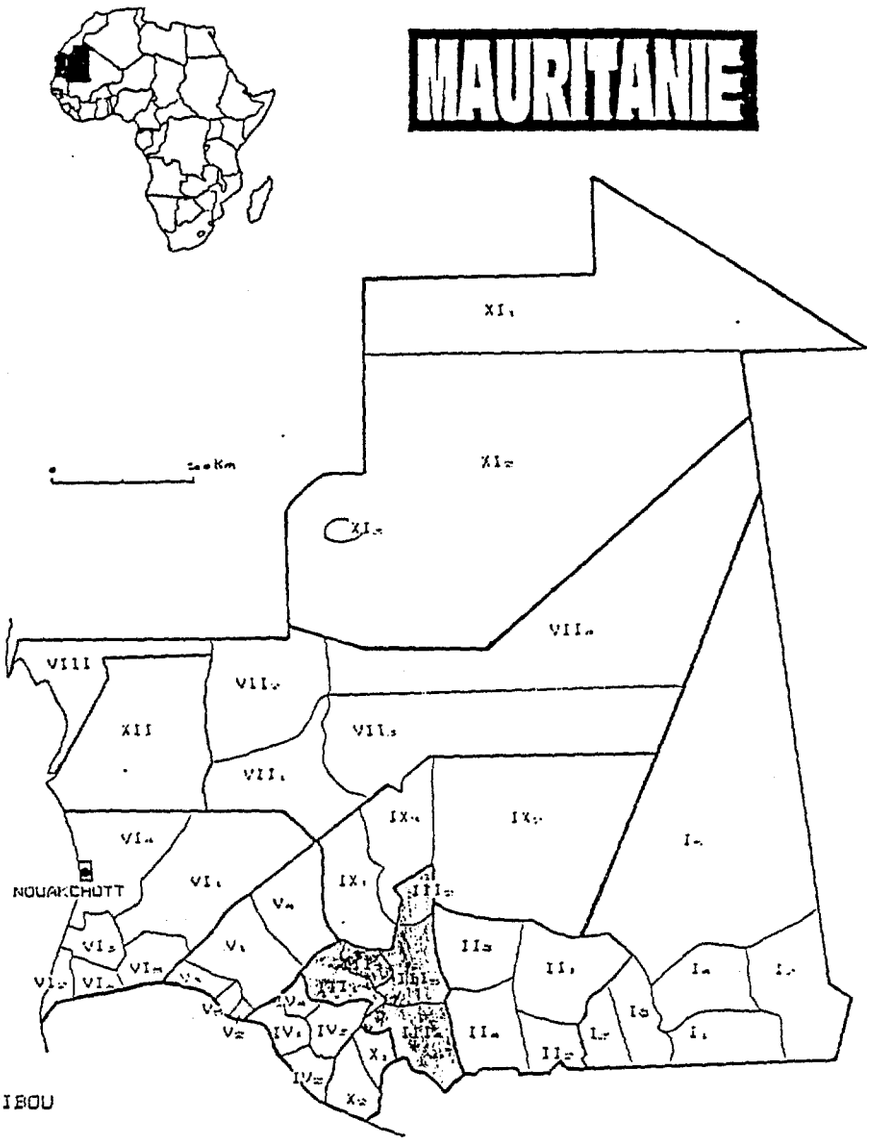
VIII/DAKHLET NOUADHIBOU

IX/TAGANT
IX_1 MOUDJERIA
IX_2 TICHIT
IX_3 TIDJIKJA

X/GUIDIMAKHA
X_1 OULD YENGE
X_2 SELIBABI

XI/TIRIS ZEMMOUR
XI_1 BIR MOGHREIN
XI_2 FDERIK
XI_3 ZOUERATE

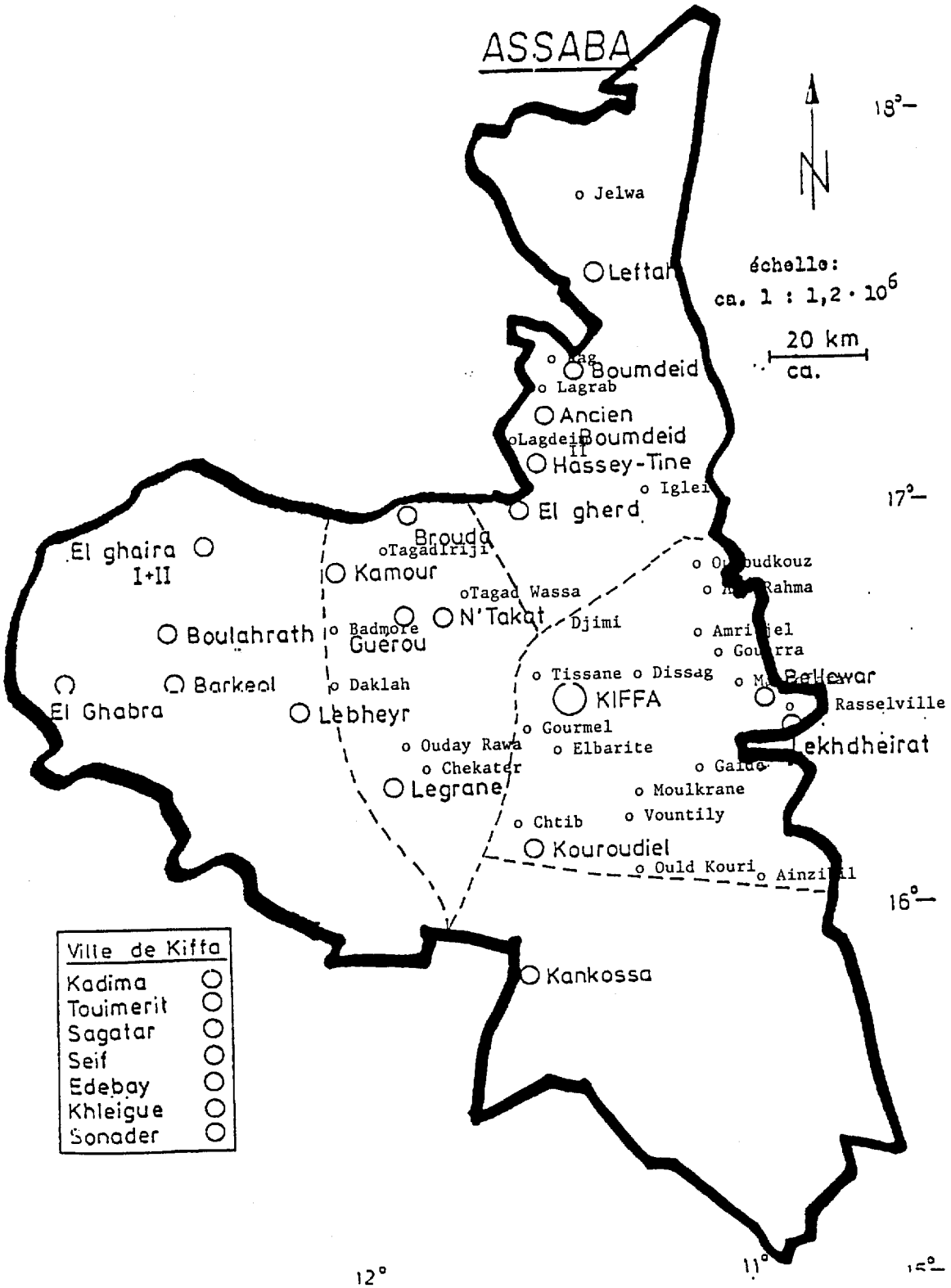
XII/INCHIRI



DIVISIONS ADMINISTRATIVES DE LA MAURITANIE (WILAYA ET MOUGHATAA)

— Limite de département (moughataa)
— Limite de région (wilaya)
I. Numéro de classification des unités administratives

THE ASSABA REGION



I. EXECUTIVE SUMMARY

World Vision Mauritania (WVM) received a matching grant from the FVA/PVC Office of USAID to extend a two-year Child Survival/Vitamin A project for three years from October 1, 1989 through September 30, 1992. The project was interrupted after approximately 15 months of activity by the Gulf War when WVM temporarily closed its office in Mauritania. After 10 months of inactivity, the project resumed in October 1991. At that time, the original Detailed Implementation Plan (DIP) was revised in collaboration with the Ministry of Health (MOH) representatives in the Assaba region. The major change in the revision of the project objectives concerned World Vision's agreement to integrate training efforts into the MOH's Primary Health Care (PHC) program.

World Vision received permission to continue its activities until September 30, 1993 and the final evaluation was held between August 30th and September 15th. As of the final evaluation, World Vision has achieved or surpassed all numeric goals related to the training of community health workers (CHWs) (45) and MOH staff (20) and the formation of community health committees (CHCs) (45). It has surpassed its objective of promoting gardening activities in 90 villages or cooperatives. It has achieved its objective of promoting breast-feeding and oral rehydration in its emphasis villages—the basic health unit (BHU) villages. It has fallen just slightly short of its objective of seeing that 70% of childbearing women receive at least 2 doses of tetanus toxoid in its emphasis villages—the BHU villages.

While World Vision started out in the first years of the project aggressively promoting the distribution of Vitamin A capsules to children aged 6 months to 9 years and to mothers who had just given birth, it has phased out these activities over the past year. Thus, the final evaluation did not measure the objectives related to this activity. Given that Vitamin A distribution was always considered a temporary activity, and that the evaluation team saw ample evidence that promotion of Vitamin A gardening was leading to increased intake of Vitamin A-rich foods, the evaluation team believes that World Vision's decision was sound at this time.

The only domain in which numerical goals have not been met is vaccination. The evaluation team, considering the local circumstances, believes that the initial objective of 70% of infants being completely vaccinated before their first birthday was unrealistic. The team is not surprised that this goal has not been met.

The project has therefore largely met its numeric objectives. However, perhaps more important than simply meeting these targets, the project has apparently left a lasting mark on the region through its emphasis on training health workers who are actively promoting health issues in many villages around the region. In addition to this, structures have been put into place that act as a first step to seeing communities genuinely confronting their health problems themselves. Gardening also has become a very important activity throughout the region and this project has played an important part in its promotion. Finally, through its emphasis on training MOH personnel and assisting the MOH with immunization and its PHC program, the project has contributed to institution-building within the state structure.

It is the evaluation team's hope that the more recently begun process of turning over more and more responsibility to the regional health authorities (DRASS) will continue in the follow-on project. The team also encourages the follow-on project to continue to emphasize health education, participatory decision-making processes at the village level, institution-building, and close collaboration with the DRASS, the Ministry of Rural Development and various UN agencies, and nongovernmental organizations (NGOs) operating in the region.

II. INTRODUCTION AND PURPOSE OF THE EVALUATION

World Vision Mauritania began its activities in the Assaba region in 1985 in response to drought conditions that had led to widespread malnutrition (see chronology below). WVM's initial involvement was in administering nutritional rehabilitation centers in the region. In 1986, WVM added to its program child immunization, nutrition and health education. In October 1987, WVM obtained funding from USAID to carry out a two-year Child Survival/Vitamin A (CS/Vit A) project. After the initial two-year period the project was extended for three years in 1989.

This report presents the findings and recommendations of the final evaluation of World Vision's extended CS/Vit A project. We note at the outset that this three-year extension should normally have ended in September 1992. However, because of project inactivity during the Gulf War, the project received approval to continue its activities until September 1993. Also, because of the Gulf War and the subsequent project inactivity, World Vision revised, in collaboration with the Regional MOH officials, the project objectives that had been outlined in the DIP. These updated objectives are detailed below in the findings section.

The three-year project has assisted the Regional MOH to:

- Train MOH staff in CS/Vit A activities and in training and supervision techniques.
- Train Community Health Workers (CHWs) and Traditional Birth Attendants (TBAs).[1]
- Assist communities in the creation of Community Health Committees (CHCs).[1]
- Promote appropriate breast-feeding and weaning techniques.
- Vaccinate childbearing-age women against tetanus.
- Vaccinate children under two against tuberculosis, diphtheria, tetanus, pertussis, polio and measles.
- Treat children under five suffering from diarrhea with oral rehydration solutions.

[1] As part of the Mauritanian Government's Primary Health Care Strategy.

- Distribute Vitamin A capsules to children aged 6 months to 9 years and mothers within the first month of delivery.

- Promote and give technical assistance to vegetable gardening and preservation.

The purpose of this final evaluation is to:

- Measure if, and to what extent, the project accomplished its objectives as outlined in the Detailed Implementation Plan and as revised in the FY91 Annual Report.

- Evaluate the sustainability of project efforts via a series of discussions with various agency and ministry representatives and focused discussions with community leaders.

- Measure the accomplishment of specific quantitative project objectives via a structured survey of mothers.

- Identify what elements of the project are successful.

- Continue to train MOH personnel in the preparation and conduct of a survey of knowledge and practices.

- Summarize lessons learned from this project that may be generalizable to child survival projects elsewhere.

- Obtain a baseline measure of various indices that will inform the next phase of health activities of the Assaba project.

- Make recommendations that will assist World Vision as it considers continuation of various project activities in the next phase of its Assaba project.

III. BACKGROUND

A. National and Regional Information

Mauritania is an Islamic Republic situated in Northwest Africa, bordered by Morocco and Algeria in the north, Mali in the east, Mali and Senegal in the south, and the Atlantic ocean in the west. The northern two-thirds of the country lies in the Sahara desert and is largely uninhabitable. The southern one-third is situated in the Sahel, a band of semiarid land that stretches across much of West Africa. The Sahelian area of Mauritania and the two major coastal towns contain 70-80% of the current Mauritanian population. The Assaba region is located primarily within the Sahel, with a single northern administrative department lying in a transition area between the Sahel and Sahara.

The 1988 National Census of Mauritania places the Mauritanian population at 1,864,236; by contrast, the 1977 census found a total population of 1,419,939. The intercensal growth in population implies an annual growth rate of about 2.5% per

year or a doubling of the population every 28 years. Such rates are not uncommon in sub-Saharan Africa. Behind the simple census numbers is a complex process of social transformation. This transformation is occurring as a result of long-term drought, political tension, and historical processes that have resulted in Mauritania having a very heterogeneous population.

The political event that has had the most impact on the Mauritanian population is the so-called "événements" (the events) of 1989. A border conflict between Senegal and Mauritania quickly escalated into a major international conflict that led to the repatriation of some 50 to 100,000 Mauritanians from Senegal and perhaps as many Senegalese from Mauritania to Senegal. In addition, some 50,000 to 75,000 Mauritanian nationals were expelled from Mauritania towards Senegal and Mali. The 1988 census occurred before these 1989 political events and thus it is difficult to say exactly what the current population is.

Recurrent and severe drought hit the region during the 1970s and 1980s, leading to massive population redistribution and a rapid sedentarization of the population. The droughts led to substantial external aid arriving in many forms, including food. The population of the capital city of Nouakchott grew at an annual rate of over 10% during the years of the drought, as many of those living in rural areas arrived there in search of a means of survival. Nouakchott now contains over a quarter of the nation's population.

Historically, the country is made up of three distinct ethnic groups: the White Maures or Beydan, the Black Maures or Harratine, and various Black African groups, the majority of whom speak the Poular language. The Black Maures were historically subservient to the white tribes and thus have adopted their language and culture to a great degree. There is much debate over the ethnic makeup of the population (Marchesin 1992), and results of the 1988 census related to ethnicity or native language have not been released. Best guesses put the ruling White Maure (Beydan) population at between 20% to 30% of the total, the Black Maure (Harratine) population at 40% to 50% of the total and various Black African ethnic groups (Soninke, Wolof, Toucolour) at 30% to 40% of the total.

These points illustrate the fact that Mauritania is a unique country in West Africa and one that is passing through a time of much change and great challenges. The four major features of the Mauritanian population that are clear from these points and are borne out by the 1988 census results are the following:

- Relatively high rate of growth of the population;
- Continual sedentarization of a population that was formerly largely nomadic (the 1988 census results show that 12.57% of the population was nomadic in 1988 versus 33% in 1977 and perhaps 75% in 1965);
- Rapid urbanization of the population; and

- Related to the previous two, a high volume of internal migration (though up until now not well documented).

The Assaba region is a microcosm of the entire nation in many respects. Its population is divided, as is the country, between Black and White Maure and Black African tribes. Its northern-most administrative department lies in the Sahara and its southern region in the Sahel. It has experienced rapid urbanization and an increasingly sedentary population.

Table 1 summarizes recent population information for the Assaba region, including the population of each department and the population of the two largest towns, Kiffa and Guerou.

Table 1. Evolution of the Population of the Assaba Region

Department/ Town	1977 Pop*	1988 Pop*	Annual Growth Rate 1977-1988	1993 Pop+
Barkeol	31,690	37,171	1.45%	39,970
Boumdeid	12,520	8,390	-3.64%	6,990
Kankossa	26,897	38,084	3.16%	44,600
Guerou (Dept)	16,345	24,866	3.81%	30,080
Kiffa (Dept)	41,710	58,612	3.09%	68,400
Kiffa (Town)	10,703	29,292	9.15%	46,290
Guerou (Town)	3,712	9,665	8.60%	14,930
Regional Total	129,162	167,123	2.34%	190,040

*1977 and 1988 Censuses Respectively
+Projection assuming annual growth rates 1977-1988 continue through 1993

Clearly, the Assaba is experiencing rapid growth in all departments except Boumdeid and to a lesser extent Barkeol. Boumdeid is the northern-most department in the Assaba with little fertile soil and a general shortage of water. Barkeol is a department that is somewhat isolated in terms of transportation, with most of the department completely isolated in the rainy season.

Another point to notice concerning the Assaba is the rapid growth of its two largest towns, Kiffa and Guerou. Both towns have experienced growth rates between 1977 and 1988 comparable to that of the capital city of Nouakchott during the same period. Kiffa is now the fourth-largest city in Mauritania and all current indications are that it continues to grow.

Looking at the available health indices and considering the general lack of information on cause-specific morbidity and mortality, it is clear that Mauritania is a less-developed nation. Many measures that are commonly available in more-

developed nations are simply not available in Mauritania because of a lack of vital registration systems, including birth registration and cause of death reporting. For this reason, most of the available health and fertility data come from sample surveys and various estimation and projection procedures. But despite the variable nature of this data, we present here a brief picture of Mauritania's health and fertility profile and indicate the source of the data presented.

Much of the information on child mortality in the world is published annually by UNICEF in its *State of the World's Children* Report. The 1993 Report lists Mauritania as having the 13th highest under-five child mortality rate in the world at 209 deaths per 1,000 live births. Mauritania's infant mortality rate is 120/1,000 live births (cf U.S. 11/1,000 and 9/1,000, respectively). These numbers indicate that more than 1 in 5 children die before the age of five and more than 1 in 10 die before their first birthday. Typically, throughout the less-developed world, the causes of such high infant and child mortality include deaths from measles and its complications, acute respiratory infections (ARI), diarrhea leading to dehydration, neonatal tetanus, malnutrition, and malaria.

All of these are well known in Mauritania but there is little data available to indicate which are the most important causes of death. Surveys carried out at various times in the past eight years by World Vision teams in the Assaba indicate that between 20% and 40% of mothers surveyed said that they had a child under five who had had diarrhea in the past 14 days. Information on the other diseases mentioned above is not available, but measles epidemics in various departments of the Assaba occur with some regularity. Malaria and bronchitis are commonly encountered in the rainy and cold seasons, respectively. Some research on night blindness indicates that Vitamin A deficiency is also a public health concern.

Nutrition is linked to many of the above diseases and represents a serious concern in a country like Mauritania that imports or receives in aid up to 60% of its food and experiences much seasonal variation in food availability. In terms of micro-nutrient deficiencies, Vitamin A has already been mentioned and, as in much of the world, anemia in women and children is common. According to World Health Organization (WHO) estimates, 31% of Mauritanian children aged between birth and five years suffer moderate to severe malnutrition as measured by low weight for age.[2] A series of growth-monitoring activities carried out by World Vision in the Assaba between 1988 and 1989 (sampling procedure unknown) showed much variation in moderate to severe malnutrition as measured by weight for age, with the lowest rate of 15% in the months of November to January, and up to 38% in the months just before and at the beginning of the rainy season. Severe malnutrition ranged from 4% to 19% in the same period according to World Vision results. In addition, World Vision

[2] Moderate to severe malnutrition is defined as falling between 2 and 3 standard deviations below the median of the standard (US) population for a given age. Severe malnutrition is thus falling 3 standard deviations below the median weight of the standard by age.

analyses carried out in October 1987[3] indicate that 56% of children under five fell into the lowest decile of height for age compared to the standard population and that 27% of children under five fell into the lowest decile of weight for height compared to the standard population.

B. Chronology of World Vision's Involvement in the Assaba

The following chronology is intended to give a rapid account of World Vision's activities in Mauritania and specifically in the Assaba since its arrival in the country in 1984.

1983 Mauritanian government declares a state of emergency and requests assistance from the international community to fight the effects of the drought.

1984 Feb: World Vision International conducts a survey of needs as part of the Africa Drought Task Force. The final report becomes the basis for further research and planning.

June: World Vision enters Mauritania and follows the Ministry of Health (MOH) counsel to consider work in the Tagant and the Adrar regions. Immediate work begins in the Tagant, which is identified as the neediest area in terms of child malnutrition.

Sept: The Atar Flood Relief project is started in the Adrar region in response to a flash flood that wiped out half the town of Atar, the regional capital. This project leads to a longer-term involvement in the Adrar in activities similar to those started in the Tagant—primarily child feeding centers.

1985 A protocol "Convention de Coopération" is renewed for six more months by the MOH (the original convention having been signed in 1984).

Oct: The Swiss Disaster Relief team in the Assaba region invites World Vision to follow up on their relief project in that region.

Nov: World Vision takes over the Swiss project to train Mauritanian nurses and maintain 25 supplementary child feeding centers.

1986 World Vision participates in immunization in Tidjikja (Tagant) and in Nouakchott.

[3] These measures represent children who fall 2 standard deviations or more below the median of the standard population.

A mobile immunization program is added to the Assaba Child Survival Project which has become a broader-based regional development project.

Work in the Tagant and Adrar regions is suspended in order to concentrate on work in the Assaba.

1987 World Vision launches the Child Health Media Project, the goal of which is to produce video spots and other media interventions to promote growth monitoring, immunization, breast-feeding, and sanitation.

Oct: USAID funding begins for a two-year project to promote the use of foods rich in Vitamin A and to distribute Vitamin A capsules (VAC) to children in the Assaba. This project is in addition to continued Assaba Child Survival Project activities related to growth monitoring, weaning, diarrheal diseases, and immunization.

Nov: Vegetable gardening activities begin in the Assaba.

1988 Oct/ Nov: A major infestation of desert locusts in the country leads to a two-month project supported by World Vision Relief Division to assist the Assaba Regional Agriculture Service in its fight against locusts.

Oct: The second year of the A.I.D.-funded Vitamin A project begins with an emphasis on the social marketing of Vitamin A.

Nov: A cholera epidemic in the Assaba leads to a two-month suspension of all project activities as the Assaba team assists the MOH to contain the outbreak.

1989 Jan: A midterm evaluation of the Vitamin A project is carried out in the Assaba.

Mar: "Les Événements" (the events) of 1989 that started as a border dispute on the Senegal River have led to the repatriation of 75,000 Senegalese from Mauritania to Senegal and up to 100,000 Mauritanians from Senegal. Diplomatic relations between the two countries are broken and a flood of "refugees," pushed from their villages, arrive at the Senegalese border on the Mauritanian side. World Vision assists these refugees as well as the Senegalese who are being repatriated.

Oct: The second and final year of the Vitamin A project begins, but an extension of three years is granted to continue the project activities to the end of FY92.

1990 Jan: Endterm evaluation of the Vitamin A project in the Assaba.

Dec: Project closes because of the Gulf War—all project activities cease.

1991 June: Two vehicles are sent from Nouakchott to assist the immunization program in the Assaba. No other project activities are undertaken.

Oct: Expatriate staff returns to Kiffa and activities in the Vitamin A/Child Survival Project are restarted. Because of the lack of activity in FY91, an extension is obtained that ensures funding for activities until September 1993 (FY93).

1992 Oct: Midterm evaluation of the extended program on Vitamin A is carried out.

Dec: The remaining expatriate team leader in the Assaba leaves and project activities slow until February 1993.

1993 Feb: The project manager post is filled and normal project activities start up again.

Sept: End of the Assaba Child Health Development Project and the A.I.D.-sponsored Vitamin A project and endterm evaluation of the project and beginning of the Assaba People's Program in the Assaba.

IV. EVALUATION METHODOLOGY

While this Final Evaluation concerned only a three-year project, it presented an opportunity for WVM to take a look back over more than seven years of involvement in the Assaba region. This is an important time of reflection as World Vision moves into a new phase of program activity with the inception of its Assaba People's Program (APP). The information collected via the standardized questionnaire and the open-ended survey of project sustainability (both discussed below) not only allows the team in the Assaba to assess the results of its work but also provides a baseline of information related to health that it can use in the new project, which is a more broad-based community development effort.

The evaluation team leader, Mr. Robert Evans, arrived in Nouakchott on Sunday, August 29, and worked with program staff in the National office until Tuesday, August 31. From August 31 through September 12, an evaluation team made up of participants from Nouakchott and the Assaba assembled in Kiffa and was trained in the use of a standardized survey. They then carried out a rapid pretest of the questionnaire and the survey in the field. The evaluation team divided itself into two committees, one to concentrate on issues related to project sustainability and the other to concentrate on the accomplishments of project objectives. The standardized survey, which related to the project objectives most

directly, was carried out using the WHO 30-cluster survey technique.[4] The questionnaire used in the survey is found in its French version in Appendix D. The sampling technique used and the selection criteria for the choice of clusters, households, and women are found in Appendix E. The division of the team into the two committees is listed in Appendix B.

In the selection of the 30 clusters to be included in the survey, only three villages in which World Vision had concentrated its efforts—the Basic Health Unit (BHU) villages—were selected at random. In order to have some basis for comparison of the BHU villages with the region as a whole, seven more of the 47 BHU villages were chosen at random, bringing the total number of clusters chosen to 37. The list of all clusters chosen, including the 10 BHU clusters, is found in Appendix E. While 10 total BHU villages can only yield suggestions of differences between the region and the BHU villages, this procedure was adopted because of severe time and logistical constraints. In the future, it is hoped that a stratified sampling process will be used to increase the power of the survey to detect differences between the BHU villages and the region as a whole.

In addition to the standardized survey, an open-ended discussion guide with questions related to sustainability was used in all randomly selected BHU villages and five that were purposefully selected because of their proximity to Kiffa town. The team carried out discussions with village leaders and members of the Community Health Committees using the guide. This discussion guide can be found in Appendix G.

While the field work was being carried out, teams returned to Kiffa with completed questionnaires and data were entered for analysis in the Epi Info program. We were thus able to carry out data analysis within hours of the completion of the last clusters, also using Epi Info. Frequencies were presented to the evaluation team and we held a discussion on September 12 and 13 on issues related to the questionnaire itself (problems with question format, language issues), the results of the standardized questionnaire based on the frequencies, and the results of the informal sustainability question guide.

Representatives of each of the two committees mentioned above (and listed in Appendix B) reassembled in Nouakchott on September 14 and 15 to finalize a draft of lessons learned, recommendations, and conclusions.

Throughout the entire stay in Kiffa and Nouakchott, the team (primarily team leader Robert Evans) visited the directors of various international NGOs, UN agencies, and government ministries. A list of visits is presented in Appendix C. Also, during the entire period, the team reviewed various documents. The list of documents reviewed is found in Appendix A.

Logistics and personnel for the evaluation were well mobilized and coordinated both in Nouakchott and Kiffa. The WVM Kiffa team in particular showed a high level of competency in organizing the evaluation in the face of severe time and weather constraints.

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[4] This survey of knowledge and practices related to nutrition, diarrhea, vaccination, breast-feeding, and weaning was adapted from the English version required by FY92 USAID guidelines (found in Appendix L). This survey differs substantially from the one used in previous midterm and final evaluations. The questions were posed to women who had had a birth in the previous two years. Strict analysis of the objectives will not, therefore, always be possible.

Another key point to be made is the way that WVM seized the occasion of this final evaluation to train a significant number of regional MOH personnel—including three Chief Medical Officers from three different departments of the Assaba region—in issues related to sample surveys. This commitment to training is a key element in all that World Vision is doing in the Assaba and they should be commended for it.

Evaluation Team Composition

Team Member	Title/ Location
Mr. Robert Evans	Team Leader Marietta, Georgia
Dr. Thierno Ousmane Coulibaly	Physician, MOH, Nouakchott
Dr. Sidi Cheikh	MOH Chief Medical Officer, Boumdeid
Dr. Yemehlou Ould Mohamed Vadel	MOH Chief Medical Officer, Kankossa
Dr. Aboubekrine Ould Waffy	MOH Chief Medical Officer, Kiffa
Mr. Sidiina Ould Isselmou	English Teacher and Director of Youth Activities, Kiffa
Mr. Ethmane Ould Ebyaye	MOH Nurse, Kiffa
Mr. Nouha Diakoye	MOH Nurse, Kiffa
Mr. Isselmou Ould Meslah	MOH Nurse, Kiffa
Mr. Sagho Oumar	MOH Nutritionist, Boumdeid
Mr. Hame Camara	Health Worker (formerly with World Vision, Kiffa)
Mr. Mohamed Camara	Health Worker (formerly with World Vision, Kiffa)
Ms. Fatimata Diallo	Health Educator (formerly with World Vision, Kiffa)
Mr. Ahmed Ould Majed	Nurse, World Vision, Kiffa
Mr. Naji Ould Yekber	Nurse, World Vision, Kiffa
Mr. Hamidou Mamadou Semba Sille	Health Worker, World Vision, Kiffa
Mr. Samba Harouna	Logistician, World Vision, Nouakchott
Mr. Robert Davis	Technical Advisor for Health Issues, World Vision, Nouakchott

V. FINDINGS/ OBSERVATIONS

A. Objectives

Listed below are the objectives as agreed upon by WVM and the MOH. The results apply to 47 BHU villages with which WVM works. Attainment of those objectives follow (for regionwide results and additional survey information, refer to Appendix F). As noted above, the survey used in the final evaluation does not permit a strict analysis of all the objectives. Please refer to the notes on the following table for details.

Table 2.	Project Objectives and Attainment	
Task	**Objective**	**Attainment**
Train CHWs	45	76
Train regional MOH staff	20	20
Train village hygiene assistants midwives	45 45	47 29
Form village health committees	45	47
Vaccinate children <1 yrs against DPT, Polio, Measles and TB	75%	27.1%[3]
Vaccinate childbearing women with 2 doses of tetanus toxoid	70%	63.3%[4]
Promote appropriate breast-feeding and weaning techniques among mothers in 45 BHU villages	60%	63%[5]
Treat children <5 yrs with diarrhea using oral rehydration solutions	50%	61%[6]
Administer Vitamin A capsules to children <5 yrs every 6 mos[1]	40%	N/A
Administer Vitamin A capsules to children 5-9 yrs every 6 mos[1]	35%	49.1%[2]
Administer vitamin A to mothers who deliver in medical facilities within the 1st month of delivery[1]	70%	20.5%[2]
Administer Vitamin A to mothers who deliver at home within the 1st month of delivery[1]	25%	N/A
Promote gardening, vegetable consumption and drying in villages	90	90+

[1] Due to the success of garden promotion of vegetables rich in Vitamin A, the distribution of Vitamin A capsules was phased out over the last year of the project. No information was collected concerning this activity in the final evaluation survey.

[2] Results from 1992 midterm evaluation survey.

[3] This result concerns all children under two in the survey.

[4] Women who gave birth to a child in the last two years.

[5] Based on question concerning when to begin to add food to the child's diet. For other results related to this point, see Appendix F.

[6] Based on very few cases of diarrhea and concerns all forms of ORT-SSS, ORS, and cereal-based solutions.

B. Project Design/Implementation Plan and Funding

Mauritania's Child Survival and Vitamin A project design and implementation plans are clearly defined in the Assaba, Mauritania Child Survival and Vitamin A Project DIP, March 1990, and updated in the 1991 Assaba CS/Vit A Project Annual Report.

In order to ensure long-term sustainability, the project was designed to be implemented in collaboration with the Regional Directorate of Health and Social Action (DRASS) at the regional level. The idea was to train MOH personnel to be able to take over the immunization efforts of WV at the close of the project. Overall, the approach has been sound, particularly in the training of CHCs and CHWs. It has been extremely difficult to deliver services such as regionwide vaccination coverage and Vitamin A distribution because of limitations of resources and trained personnel. For example, it is physically impossible for two regional vaccination teams to visit over 500 villages for a minimum of three times a year. In addition, the population remains highly mobile, even while it is increasingly sedentarized, making it extremely difficult to track down a child on three separate occasions. Thus, it is not surprising that the vaccinations rates are well below those recommended by UNICEF (80% of children completely vaccinated in their first year). This goal is unrealistic for Mauritania and influenced the setting of unattainable vaccination objectives.

For FY94, World Vision will be phasing out its mobile vaccination teams and will be concentrating on setting up more fixed vaccination sites and supporting the DRASS in its vaccination efforts. This will include full support of the DRASS during the National Vaccination Days. Experience has shown that it is very time-consuming and expensive to chase down children in isolated villages. It is much more effective to set up easily accessible, fixed vaccination sites. Health education and social mobilization will be the key to creating a demand for these services.

Funding

World Vision Mauritania received a matching grant in FY90 from the FVA/PVC office of USAID to extend its Child Survival/Vitamin A activities for three years (October 1, 1989 - September 30, 1992) past the original two-year grant. After 15 months of project implementation, the project was closed in December 1990 for 10 months because of the Gulf War crisis.

In October 1991, project activities slowly resumed with the revision of the initial DIP to reflect the changed realities in the project area. The revised objectives are documented in Section V.A. of this evaluation. Because of the project's ten-month shutdown, completion of some of the planned objectives has been delayed. A no-cost extension was negotiated with USAID for FY93 (October 1, 1992-September 30, 1993). Approximately $250,000 for FY92 activities was carried forward into FY93 to accomplish the revised DIP objectives.

In addition to the CS/Vitamin A financial review, periodic meetings are held to review the project budget by the Project Manager and Accountant, the Director of Finance, and the WVM Program Director. Each month, the current financial state of the project is submitted in a report to the WVM. Levels of expenditures which may be authorized without additional approval have been established for the Project Manager, Project Director, and Logistician.

The control of project expenditures and accounts has been decentralized from the program office in Nouakchott to Kiffa and is being done by a project Accountant. Each month, the project accounts are controlled by the Director of Finance. In addition, the cash box is controlled with unscheduled "spot-checks" by the Logistician. The project Accountant uses Lotus 1-2-3 to manage the project finances. The Logistical Department has also computerized its internal control system for all its commodities and capital assets.

C. Interventions

1. Vaccinations

WVM works closely with the Regional MOH (DRASS) to vaccinate women of childbearing age and children under five against diphtheria, tetanus, pertussis, polio, measles, and tuberculosis. WVM assistance includes training, planning, management, supervision, logistics, personnel, and social mobilization activities throughout the region.

Fixed vaccination sites exist in all five regional capitals where over 50% of the population is centered. Two regional mobile vaccination teams, which are supported by World Vision, attempt to provide vaccination coverage to isolated villages that do not have easy assess to fixed vaccination sites.

In general, the transport and conservation of vaccines has been done in a professional manner. Occasional stock-outs do occur because of the difficulty of transporting vaccines to the inaccessible departmental capitals and remote villages. The region uses propane gas to run small, well-insulated chest-type refrigerators, which is a more reliable system than traditional kerosene-operated refrigerators. The drawback to bottled gas is that it cannot be bought locally. Each department tries to have a reserve tank on hand to prevent their refrigerators from running out of fuel.

See Appendix F for information on vaccination coverage rates from the final evaluation survey.

Why Vaccination Objectives Were Not Fully Realized

- Much of the Assaba's population is highly mobile. This makes it extremely difficult for the vaccination teams to find a child on three separate occasions.

- The climatic conditions are very harsh, with the temperature soaring to 122°F (50°C) during the hot season. This slows work down and makes it difficult to keep the vaccines from being damaged by heat. When the rains do come, they often make the roads to many villages inaccessible.

- The population in the Assaba region is spread out over a huge geographic area. In the north, there are no roads and only 4WD vehicles can plow through the loose sand. This takes a heavy toll on the mobile vaccination vehicles and results in frequent breakdowns. Spare parts for the vehicles are difficult to find and very expensive.

- Only a small percentage of the population is literate and many of the people do not understand the value of vaccinating their children. In fact, in some of the villages, the women hid from the vaccination teams because they thought they would try to sterilize them. This indicates a need for more health education related to immunization.

2. *Oral Rehydration Therapy (ORT)*

Diarrhea is one of the leading causes of death of children in the Assaba Region, making the knowledge and use of ORT of vital importance. In the final evaluation survey, we found that 42% of children in the region who had diarrhea in the last two weeks were treated with ORT.[5] The percentage of children treated with ORT in the BHU villages was 51%. Eighty-nine percent of mothers in BHU villages said that they gave the same amount or more to drink to their children who had diarrhea; 63% of mothers regionwide responded in this way. For mothers in BHU villages, 77% said that it was important to increase food intake of their child once the diarrhea had stopped and 67% said that during diarrhea they gave the same or a greater quantity of food to the sick child.

All CHWs in the Assaba are trained and tested in the use of ORT. This includes preparing the premixed packets of oral rehydration salts (ORS) and making an oral rehydration solution out of sugar and salt that is readily available in most Mauritanian homes. The majority of mothers surveyed continue breast-feeding and give nutritious food to children with diarrhea. Since packets of ORS are not always available and many mothers forget how to make the solution, mothers are encouraged to keep giving their children liquids when they have diarrhea.

3. *Vitamin A Distribution*

It is estimated that the prevalence of night blindness in children under 10 years of age ranges between 0.1% and 1.9%. During a baseline survey in the Assaba region in January 1990, clinical cases of corneal perforation and permanent loss of vision due to Vitamin A deficiency were detected.

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[5] ORT here includes ORS, SSS, and rehydration drinks with a cereal base.

Vitamin A capsules were previously distributed in health facilities and by mobile vaccination teams and CHWs. The capsules were distributed to children from six months to ten years of age every six months. Women were to be given Vitamin A within one month after delivery.

Distribution of Vitamin A was always considered a temporary measure until sufficient sources of Vitamin A became available through the promotion of nutritional gardening. In FY93, Vitamin A capsule distribution was gradually phased out due to the success of gardening efforts in the region, and because World Vision's follow-on project will no longer distribute the capsules.

4. Nutrition

During the month of June 1993, a nutritional survey was conducted in the department of Boumdeid. Age-for-weight measurements were taken of children in villages throughout the region. The results of the survey showed that 66% of the children were suffering from malnutrition.

The project has chosen to combat malnutrition by assisting the MOH in promoting appropriate weaning and infant feeding practices, develop locally appropriate weaning foods, and promote milk consumption and vegetable gardening. The results of the final evaluation survey show that 63% of mothers in BHU villages and 48% of the region as a whole know to start introducing supplementary foods between 4 and 6 months after birth. More than half the mothers in BHU villages mentioned that it was necessary to add oil and iron-rich products to weaning food. Breast-feeding up to two years of age is universal in the Assaba. However, 70% of mothers interviewed start breast-feeding more than eight hours after birth, which implies that colostrum is not being given to newborns.

5. Gardening

Vegetable gardens are promoted by World Vision in the Assaba Region to achieve better nutrition and to provide a long-term solution to Vitamin A deficiencies. Carrots, tomatoes, lettuce, onions, and potatoes are among the vegetables grown in the majority of the BHU villages. When World Vision first started working in the Assaba Region, gardening was rare. Through the efforts of World Vision and other NGOs, gardening is now well established and is occurring spontaneously throughout the region.

6. Guinea Worm Eradication

During the last national guinea worm (GW) search in 1990, over 5% of the villages were reportedly infected with GW in the Assaba. This is higher than in any of the other 11 regions in Mauritania.

In 1992, the Government of Mauritania (GOM) embarked on a GW elimination program to reduce transmission of GW to zero by 1995.

WVM has supported the MOH in this effort by assisting the Regional MOH to communicate GW elimination plans to all health districts. WVM has also trained its personnel and education villages in how to protect themselves from GW, as well as distributed 528 anti-GW water filters to high-risk villages.

D. Strategies

1. Social Mobilization/Community Participation

The Community Heath Workers (CHWs) and Community Health Committees (CHCs) are the cornerstones of community participation in the Assaba. When comparing the results of evaluations between BHU and non-BHU villages, the BHU villages are almost always better off. Much of this can be attributed to the dedicated efforts of the CHWs and CHCs.

a. Community Health Committees (CHCs) (see Appendix M for a list of BHU villages and CHCs)

All the CHCs were elected by a general assembly at the community level. Meetings are initiated by different members with the majority being called by the CHW or the CHC president. The committees are composed of seven members and, on average, there are four members present at each meeting.

Overall, the CHCs meet on a regular basis and are familiar with the procedure of distributing and restocking medicines. The topics most frequently discussed are as follows:

- Health/hygiene
- Vegetable gardening
- Hydraulics (water)

The following list indicates solutions to problems discussed according to their frequency:

- Village cleanliness/upkeep
- Medical supplies
- Community feeding centers
- Disinfection of wells
- Training of traditional birth attendants
- Planting of vegetable gardens, and
- Well construction

See Section VI, Sustainability, for further discussion of these issues.

b. Community Health Workers (CHWs)

All the CHWs trained this year are women, in accordance with the policy of the MOH. Men have been trained in the past but often leave the village in search of work. The female CHWs are much more likely to stay in the villages and it is more culturally appropriate for women to talk to mothers about the care of their children. After the CHWs went through an intensive 35-day training course in Kiffa, they were periodically followed-up and received additional training by WV CHW trainers. Many of the CHWs were illiterate and were trained orally and through the use of pictures (see, for example, the health information reporting system in Appendices I, J and K).

c. Mothers

As in most of the world, mothers are the key care-givers of children and families in Mauritania. Their involvement and input are vital for any health intervention to succeed. More than half of the mothers indicated that they had heard several health messages on the radio.[6] They ranked the importance of the health education subjects covered on the radio as follows:

- Hygiene
- Use of health services
- Vaccination
- Diarrhea and weaning foods

Almost all of the mothers (91%) in the BHU and 64% in the non-BHU villages know that a child under one year must be vaccinated several times. Few mothers (10%) from the BHU villages and none of the mothers from the non-BHU villages knew the recommended age, type of vaccination, or the number of doses necessary to protect mothers against tetanus. More health education from the CHWs is necessary in this area.

2. Training

Training of the project staff is done through weekly in-service training and planning sessions and also through participation in national and international seminars.

The following table refers to training received by project staff, MOH personnel and participating communities.

[6] Information in this section was gathered in the 1992 Midterm Evaluation survey.

Table 3.		Training Activities
Date	**Training Seminar/Workshop**	**Participants**
Oct. 14-20, '91	6th Africa Regional PVO Child Survival Workshop, Sikasso, Mali	Prosper Sapathy
Nov. 23-27, '91	Assaba Regional Planning Seminar	All Project and 30 MOH Staff
Dec. 1-13, '91	CHW/TBA Refresher Training	13 CHW/TBA
Jan. 3-10, '92	Rapid Rural Appraisal Training	20 Staff
Feb. 5-11, '92	Training of Trainers	8 MOH Staff
Feb. 5-11, '92	Training for Mother Monitors	26 Mothers
Feb. 25-Mar. 30, '92	CHW/TBA Training	28 Graduates
July 5-11, '92	Seminar on "Local NGO"	Majed, Diallo & 18 others
Oct. '92	CHW Refresher Training (Guerou)	20 CHWs
Mar. 23-25, '93	Peace Corps Water and Sanitation Course (Kankossa)	David Scheiman & Diallo
April '93	Training of CHW Trainers	2 TBAs & 4 MOH nurses
Apr. 17-May 25, ' 93	Training of CHWs (Kiffa)	18 Women
Aug. '93	CHW Refresher Training	19 Women
Aug.-Sept. '93	Computer Training	6 WV Staff
Sept. '93	Training for USAID evaluation	Evaluation Staff
Oct. '92-Sept. '93	Monthly Training of MOH Fixed Vaccination Sites	Majed, Naji, and Diallo

3. *Management Supervision*

The CS/Vitamin A project sends monthly, quarterly and annual reports to WVM in Nouakchott, the MOH, and WVRD in California. The reports are written both in English and French and are distributed to all interested parties. Each week, the WV staff meets to plan its activities. Weekly and monthly plans of action are submitted to the Project Manager. The WV staff periodically meets with the Regional MOH to plan and to ensure good collaboration.

While WV and the Regional MOH make efforts to work together, collaboration could be improved. At times, it appears that WV is running a parallel health sector to the existing structure of the MOH. It can be argued that this is more efficient, but its long-term sustainability is in question. If WV and the Regional MOH are truly to be equal partners, each side must do its part. For example, while WV submits

monthly reports and planning to the MOH, it is rare to receive any kind of documentation or planning from the MOH.

VI. SUSTAINABILITY

Introduction

The purposes of this report are to: (1) document the activities carried out by World Vision Mauritania to promote the sustainability of effective child survival interventions; (2) assess whether World Vision Mauritania carried out these activities in a competent manner; (3) identify any lessons learned; and (4) draw conclusions about the applicability and relevance of lessons learned in sustainability.

The information in this report was gathered through the following methods:

- Extensive reviews of the Detailed Implementation Plan (DIP), evaluation reports, monthly reports, and office files and records;
- Interviews with World Vision staff, governmental agencies staff, nongovernmental organizations, and bilateral governmental agencies; and
- Analyses and observations of results of program activities.

The topics covered in this report are consistent with those suggested in the USAID 1992 guidelines (found in Appendix L) and are as follows:

A. Sustainability, Status
B. Estimated Recurrent Costs and Projected Revenues
C. Sustainability Plan
D. Monitoring and Evaluation of Sustainability
E. Community Participation
F. Ability and Willingness of Counterpart Institutions to Sustain Activities
G. Project Expenditures
H. Attempts to Increase Efficiency
I. Cost Recovery Attempts
J. Household Income Generation
K. Summary

Comments/Observations (General)

When assessing the sustainability of a program or activity, one often asks "*Are we determining if the activity (the organized program) will continue in its current or slightly modified form once the benefactor withdraws its support?*," or "*Are we determining if the impact and the growth and change in behavior or methods of doing things will continue, without the input of the private voluntary organizations?*" The important point, of course, is that there will be and (has been) continuing positive change with lasting impact on the at-risk population. For instance, the mothers will grow vegetables and feed them to their children and continue to demand

Vitamin A supplement from various sources (if needed). Literally, just as the seeds sown to grow the leafy green vegetables which contain high amounts of Vitamin A, the seeds (knowledge) sown in the minds of individuals will germinate and generate forces for continued (sustained) positive change. Thus, an activity is successful and sustainable if there is long-lasting, positive impact upon those at risk—mothers and children.

It should be understood by those concerned that not all programs or aspects of programs should or need to be sustained. Some service delivery programs and training programs need not be continued for more than a set period of time. Some programs which are not continued (sustained) are not necessarily failures. They have served their useful purpose, eliminated problems and deficiencies, and now efforts and energies can be directed toward other important issues.

In this report and the responses that follow, we hope to show evidence of program sustainability, as well as self-sustainability of efforts and the potential for continued impact of selected program efforts.

Specific Findings/Responses

A. Sustainability Status

A1. The USAID funding for the Assaba Mauritania Child Survival and Vitamin A Project is scheduled to end.

Originally, funding was scheduled to end September 30, 1992, but an extension was granted because of an interruption of activities during the Gulf War, until September 30, 1993.

A2. World Vision Mauritania plans to cease its current child survival activities (i.e., this project) as scheduled on September 30, 1993. However, the organization will focus its future efforts in the Assaba region on integrated community development that includes health and child survival issues (immunizations, fixed sites and special campaigns; primary health care training and supervision of community health workers; cost-recovery pilot studies to increase accessibility; health education as part of the school curriculum; increased literacy; and operational research methodology).

A3. As indicated above, the Assaba Child Survival/Vitamin A Project will terminate September 30, 1993; however, many of the project responsibilities and activities will be borne and carried on by (1) a subsequent project conducted by WVM, (2) governmental agencies such as the MOH, Ministry of Fundamental Education (DREF), Women's Cooperatives Department, and the Department of Agriculture; (3) nongovernmental agencies such as the Lutheran World Federation (continued maintenance of wells), UNICEF (provision of vaccines and supplies, training); (4) U.S. Peace Corps volunteers in health education and vegetable gardening; and (5) perhaps most importantly, the actions/activities that will be continued by the highly motivated participants/communities, CHWs, and CHCs.

To facilitate these changes and to promote sustainability, the GOM is in the process of decentralizing its service delivery strategy, giving more autonomy to the local level. This will enable the communities and community groups to determine their own needs and goals, as well as the resources required to solve their own problems.

For more information on the sustainability status, see responses to questions in Section C, Sustainability Plan.

B. Estimated Recurrent Costs and Projected Revenues

B1. The key child survival activities that the project management sees as most effective are:

- Health education related to weaning and hygiene
- Gardening activities that promote Vitamin A
- Training of CHCs and various MOH personnel

Projected costs (yearly) $:

1. Essential Drugs Program $16,094
2. Village Health Committees $8,233
3. Immunizations $171,260
4. PHC Training of MOH Staff Village Health workers $16,174
5. Promotion of vegetable gardening, consumption and preservation $35,472

B3. Total costs for 3 years $741,699

B4. These costs are reasonable considering the local conditions and circumstances.

B5. The projected revenues that appear likely to fund some child survival activities for at least three years after USAID CS funding ends are (per year):

Funding for aspects of new WV projects $50,000

UNICEF costs for vaccines $63,000

B6. Costs which are not likely to be sustainable are:

- Mobile vaccination strategy
- Vitamin A capsule distribution

B7. Lessons to be learned from this project and projection of costs and revenues are:

- Very careful planning in transferring responsibility to local communities is necessary
- Flexibility and creativity are crucial to the success in sustaining efforts

- Development of projects with strong education and behavior change components which for the most part are self-sustaining are necessary (knowledge given to mothers and young mothers-to-be is passed on to their children, etc).

C. Sustainability Plan

C1. Please see table below for project staff who were interviewed and the extent of their involvement in project design, implementation, monitoring, and evaluation.

Table 4. Program Staff Interviewed and Involvement		Project Involvement	
Name	Position	Implementation	Monitoring evaluation
Mr. Paul Abbott	Program Director	1	1
Mr. David Scheiman	Project Manager	3	3
Mr. Robert Davis	Technical Advisor	2	3
Mr. Thomas Stocker	Logistician	2	2
Mr. Ahmed O. Majed	MOH Nurse	3	3
Mr. Naji O. Yekber	MOH Nurse	3	3
Mr. Samba Harouna	Logistician	1	1
Mr. Timothy Biscaye	Pgm Administrator	1	1
Mr. Hamidou Mamadou	Community Development Coordinator	3	3
Mr. Cheikh O. Zein	Accountant	2	3
Mr. Nassim Nour	Director of Finance	1	2

1 Marginally involved 2 Moderately involved 3 Extensively involved

C2. The project's plan for sustainability is well described in Section H, Sustainability Strategy of the Detailed Implementation Plan (DIP). It consists of the following aspects:

- Community Ownership and Support Strategy
- Participating Institutions/Agencies Governmental Agencies Bilateral Governmental Agencies
- Income Generation/Cost Recovery Schemes
- Recurrent Costs
- Resource Generation

C3. The sustainability-promoting activities carried out by WV during the project were:

- Assist the MOH to experiment with cost recovery through community pharmacies supported by community beneficiaries. Other potential resources will be proceeds from women's agricultural cooperatives of the Assaba region.

- Assist the MOH to train CHCs in single management skills including cost analysis of sustainable CS components, monitoring progress in CS interventions using pictorial board presentations, and integrating the village health system into the bigger MOH health care system. (The various health information system recording forms are provided in Appendices I, J and K.)

- Encourage local institutions (mainly the MOH) to develop the capacity to implement and manage child survival interventions through the strengthening of its fixed facilities, enhancing community participation, and recruiting and training of CHWs.

- Strengthen the management skills in local health institutions through a combination of the following:

  - Training of MOH staff seconded to World Vision.

  - Supervising of fixed sites for vaccination activity by World Vision mobile teams, which include at least one MOH staff from the geographic department visited.

  - Providing co-management practice opportunities to MOH personnel in the execution of this project.

  - Assisting the Regional MOH in the development of a permanent management in-service program.

C4. All of the steps or aspects of sustainability were implemented to some degree and some more successfully than others. For instance:

- A supply of drugs was given to the village health committee free of charge. The restocking of these drugs is now the responsibility of the MOH. (Drugs are sold as needed to the community members, and the funds received are placed in "la boîte" for purchase of replacement drugs.)

- Training and supervision of the CHCs and CHWs were conducted by regularly scheduled visits and periodic management courses.

- Day-to-day project management has been gradually and successfully shifted to the Mauritanians.

Unplanned activities which increased the likelihood of project sustainability, implemented as a result of open window of opportunity, were:

- Increased interaction with the departmental chief medical officers is key. The fact that these staff are in place and motivated bodes well for sustainability.

- Assistance in the opening of new fixed vaccination sites has been occurring and will continue to be part of WV activities in the future. This involves training of health staff in vaccination administration, record-keeping, and cold chain maintenance.

- The beginning of a "new" project—the APP has acted to open the door for discussion about sustainability at all levels of the MOH. Very important.

- The real test of success of the sustainability efforts will, of course, come during the period following the termination of the project. Fortunately, WVM and other agencies will be available to provide assistance (if nothing more than encouragement) in sustaining many of the project's activities.

C5. The following agencies made commitments during the design phase of the project proposal:

- MOH through Assaba Regional Direction/EPI, National and Regional Office, Dept. of Primary Health Care (cooperation, support, staff space, data).

- Assaba DREF (Ministry of Fundamental Education) to continue to distribute Vitamin A capsules

- Women's Cooperatives Dept. (developed and are implementing long-range educational plan on Vitamin A vegetable gardening)

- Lutheran World Federation maintenance of wells and gardening

- UNICEF cost recovery schemes and training

- U.S. Peace Corps/volunteers health education and vegetable gardening

Whereas these agencies have not made financial commitments to an organized body or to a subsequent project sponsor, they have committed their support and cooperation which require substantial financial outlays of their resources.

In addition to the commitments described above, which were made by other agencies, WVM is designing a general economic social development project which contains similar activities carried out in the C.S. project, activities such as:

- Fixed-site vaccination centers and special campaigns

- Institutionalized PHC training for MOH supervisors and CHWs
- Pilot studies in cost recovery
- Increased emphasis on health education at various levels—schools, CHWs, with mothers, etc.

Thus, there is a gradual shift or weaning away from being dependent upon the donor organization.

C6. We see no reasons to think that counterpart and other participatory offices will fail to keep their commitments.

D. Monitoring and Evaluation of Sustainability

D1/2. The indicators used by the project to track achievements in sustainability are shown below:

Table 5. List of Indicators for Measuring Sustainability	**Successful**	
	Yes	**No**
1. Cost Recovery Schemes	✓	
2. Training and Retraining CHWs	✓	
3. Resource Generation	✓	
4. Training of MOH Staff (WV Staff)	✓	
5. Operational Fixed Vaccination Sites	✓	
6. Operational Gardens	✓	
7. Demand for Gardening Assistance	✓	
8. Other Training	✓	

D3. Qualitative data available to WVM indicating change in sustainability potential include:

- A strong verbal commitment by the MOH and the Assaba Regional Directorate
- The intense enthusiasm and interest in the project's activities exhibited by the participants, CHW, community leaders, and others

- WVM's plan to implement development project with health components
- Potential for formal agreements between WV and DRASS on roles and investment of each
- Increasingly well-trained MOH workers
- Government commitment to train more doctors in Public Health
- A growing sense of community spirit in various villages.

D4. In-country agencies who worked with WVM on the design, implementation and analysis of the midterm and final evaluation include:

- The Mauritanian Ministry of Health Assaba Regional Directorate, EPI National and Regional Office, Dept. of Primary Health Care, Directorate of Hygiene and Preventive Health, Dept. of Ophthalmology, National Hospital, Dept. of Blindness Control
- Dept. of Health Education (EPS) and Rural Radio Dept.
- The Assaba's DREF/Ministry of Fundamental Education
- The Women's Cooperative Dept.
- Dept. of Agriculture (Mauritania)
- Lutheran World Federation
- UNICEF
- U.S. Peace Corps

D5. World Vision Mauritania received eight recommendations regarding project sustainability from the project proposal reviewers. They are:

- Use project resources in the follow-on project to strengthen DRASS capacity and to conduct the necessary training and supervision in support of sustaining and expanding primary health care according to the first three objectives of the Plan Director (PD). Begin clarifying job descriptions and relationships among each type of health worker. The project should obtain technical assistance for these purposes to ensure that approaches to training and supervision reflect the "state of the art."
- Avoid use of WV resources to fill gaps for recurrent cost items for DRASS (such as secretarial support and maintaining the mobile teams), as such a role

for WV assistance only interferes with the sustainability of health services in the Assaba by delaying the GOM's recognition and addressing of these needs.

- Begin a phase of transition from distribution of Vitamin A using mobile teams to Vitamin A distribution using community structures (such as TBAs, schools, health posts) to enhance sustainability of service delivery. Such a strategy will require strengthened supervision of Vitamin A distribution (and other health service) activities.

- Explore and test the effectiveness of new strategies for social mobilization and health communications in support of primary health care, using both traditional and modern social structures and channels of communication.

- Enhance project sustainability through improved collaboration with the MOH by: (1) ensuring that WV assists in implementing DRASS objectives; (2) developing a timetable for transfer of more control of project activities to Mauritanian nationals; (3) emphasizing a high frequency and quality of supervision; and (4) systematically examining incentives and strategies for motivating health workers.

- Track project performance of enhanced sustainability, selecting from among indicators such as: percent of health workers trained who are retained after two years; level of financial and personnel commitment by DRASS; percentage of demonstration gardens sustained following the end of the demonstration period; percentage of persons trained in vegetable drying who still use the technique two years following their training; percentage of Vitamin A distributed each year through mobile teams and stable community workers or structures; number of fixed sites for immunization and other services; the ratio of expatriates to nationals among project staff; sustained changes in health behaviors such as immunization dropout rate, ORT use, and gardening; and cost per beneficiary.

- Work with GOM to explore potential for WV collaboration in testing models for cost recovery schemes, pursuant to the Bamako initiative.

- Balance organizational development and personnel training for World Vision staff with the need to develop Mauritanian staff to enhance project sustainability.

For the most part these recommendations were carried out.

D6. WVM received six recommendations in the midterm evaluation which are related to or impact upon sustainability (see midterm evaluation, Section VIII, Recommendations.)

World Vision Relief & Development (WVRD) needs to secure approval for a no-cost extension from USAID for fiscal 1993 (October 1, 1992, through September 30, 1993) for the WVM Child Survival/Vitamin A project.

WVM and DRASS/Assaba weigh the advantages and disadvantages of decentralizing Child Survival/Vitamin A project services from the regional to the departmental (district) level as described in Section V.B of this report, and if a decision to decentralize is made, begin taking the necessary steps before calendar year 1993.

Technical support for the project should be provided primarily by the MOH on the regional and central levels and, secondarily, from WVM in Nouakchott and WVRD/California.

More emphasis should be placed on mothers giving liquids in general to children with diarrhea rather than insisting on sugar/salt solutions.

CS/Vitamin A project should ensure that ORS packets are available in all BHU villages for treatment of mild and severe cases of dehydration.

Again, to some degree these recommendations have been implemented and the follow-on project (APP) will continue to address some of these issues.

E. Community Participation

E1. Community leaders interviewed and groups they represent are:

	Groups	Leaders	Designation
1.	Gvava	El'Hadj Hussein Yero	Président
		Ba Maimouna	AT
		Diallo Mariem	H.S
2.	Amredjel	Mohamed O. Salek	Président
		Mohamed O. Sid'Ahmed	H.S
		Vatimettou mint El' Moustapha	Caissière
3.	Oumoul Khez	Isselmou O. Boba	Presidént
		Isselmou O. Hamed	H.S
		Salka mint Blal	AT
		Moctar O. Mbareck	V.-Président
4.	TaKadet Iriji	Jeddou O. Salem	Président
		Sidi Mohamed O. M.Elabd	Caissier
		Mustapha O. Jeddou	
5.	Gueiva	Ahmed O. Dahmane	V.-Président
		Mohamed Lemine O. El Moctar	
		Aicha M. Sidi Abdellahy	Polyvalent

6.	Legneb	Ahmedou O. Bilal	Représentant du Comité de Santé
7.	Jelwa	Mohamed O. Boukhreiss	Chef du village
8.	Djegoum	Mahfoudh O. Mohamed Zeinabou mint Moctar	Président Polyvalente
9.	Nkhaiba	Abdellahy O. Elmami Fatimettou M. Elmami	Chef du village Polyvalente
10.	Elkheide	Mahfoud O. Mohamed	Chef du village
11.	Hsaydhine	Brahim O. Wenass	Chef du village

E2. Community leaders perceive the following activities as being most effective:

- Vaccination
- Struggle against diarrheal diseases
- Gardening
- Vitamin A
- Others Mentioned:
  - Availability of basic care
  - Deliveries of essential medicines are made without any problem
  - Blindness rate has decreased thanks to gardening
  - Consciousness on the importance of green vegetables
  - Application of diarrhea treatment with salt and sugar solutions
  - Availability of medications
  - Treatment of current diseases

E3. WVM carried out the following activities to help communities meet their basic needs and increase ability to sustain CS project activities:

- Development of organizational and management skills
- Training in delivery and PHC services
- Establishment of cost recovery system for essential drugs
- Assisting communities to establish health committees
- Assistance with gardening activities

E4. Throughout the life span of the project, the philosophy of community ownership and community support has been emphasized. Through its appointed leaders and representatives, the community participated in the design, implementation, and evaluation of the project. CHCs meet periodically to discuss health problems, and suggestions are then passed on to the appropriate MOH or project staff for their reaction and response.

E5. There are functioning health committees in the project area. They meet, on average, about once per month. The committees seem representative of their respective communities; however, this may not be the case in some villages with two or more ethnic or tribal groups or factions.

E6. The most significant issues being addressed by the committees are problems regarding the price and sale of medicines, construction of meeting area for the health committee, problems of hygiene, discussion of sicknesses in the village and their causes, gardening, building schools and mosques, treatment of wells (purification), and cleaning of the village.

E7. The communities to varying degrees have committed or agreed to commit the following resources: some form of compensation for health workers, fencing for gardens, resources to construct more wells, and repair of schools and roads to the villages.

E8. Some possible reasons for success or failure of the committees to contribute resources for continuation of effective project activities are:

Success

- The energy and enthusiasm of the committees and the communities
- The unity of the villages supporting the committees as "une seule famille"
- The intelligence and good guidance of the health committees
- The committees' plans to build wells and schools with excess funds from their activities
- The regular meetings of the committees which permit the committees to solve problem issues
- The energy and responsibility (motivation) of the health agent

Failures

- The dissolution or ineffectiveness of the health committees
- Disputes in the villages resulting from tribal differences
- Favoritism (nepotism) in village health committees

F. Ability and Willingness of Counterpart Institutions to Sustain Activities

F1.

Persons interviewed	Title/Relation to project
1. Mr. Lovenou G. Justin	Agricultural Engineer with LWF assists communities in development and maintenance of wells for clean water and gardening.
2. Dr. Moulaye El Hacen	Director of the DRASS.

3. Dr. Diallo Yaya	Medical Officer, WHO, advises MOH as requested.
4. Denise Lahelle Harrison	Project Manager of the Social Mobilization for Health project—WV staff.
5. Sidina O. Isselmou	President of a cooperative and English teacher in Kiffa.
6. Fodié Amadou Diagana	Agricultural Engineer, FENU.
7. Nabil Kahala	UNDP Deputy Representative.
8. Mary Pecaut	Director of the Peace Corps.

F2. There are official and unofficial links between the CSP and the MOH, Ministry of Agriculture, and nongovernmental agencies. Whereas there was little or no financial exchange, there was extensive collaboration and exchange of goals, services, supplies, and information.

F3. The key local institutions to take part in sustaining project activities include:

- World Vision Mauritania (Follow-on project)
- MOH (DRASS)
- Peace Corps (Vegetable Gardening)
- UNDP (Development Project for Kiffa)
- WVM (Social Mobilization)
- UNICEF (Immunization)
- WHO

F4. The CSP activities with the MOH and other key local institutions perceived as being effective are:

- Organization of community health committees
- Gardening
- Essential Drugs Program
- Vaccinations
- Control of diarrhea

F5. WVM conducted extensive training of MOH staff and community health agents in the delivering of primary health care services and child survival activities, as well as conducted management and supervisory courses for local staff. The training was sufficient for the staff to carry on the essential aspects of the CS project after A.I.D. funding terminates.

F6. The MOH and other local institutions, although limited somewhat in their financial resources, have adequate ability to carry on the key elements of the CSP. The

follow-on WVM economic development project will be a key player in sustaining the activities. Village health committees will continue to be visited and guided. Economic development will be centered on the existing—albeit new—community infrastructure. The Director of DRASS has a strong personal commitment to transformation of the communities and the improvement of life in the Assaba region.

F7. Counterpart organizations perceive the following project activities as most effective:

- Organization of health committees
- Training of MOH staff and CHW
- Provision of essential drugs
- Gardening

G. Project Expenditures

G1. Pipeline Analysis is found in Appendix H.

G2. Reasons why several categories of expenses were lower-than-projected include:

- Gulf War Crisis - not only did the project close down, but restarting was slow and many activities did not begin again for several months after start-up.

- The departure of the Project Manager in December 1992 led to much reduced activity and lower salary expenses until March of 1993.

- The local currency (ouguiya) was devalued by 40%.

- Earlier than expected departure of the expatriate Logistician led to no salary or benefits being paid in this category between February and June of 1993.

- Project slowdown in December, January, and February led to the laying off of seven local staff members, and thus projected salaries and benefits were not paid. Even when regular activities resumed, three of these workers were not rehired.

G3. The project handled the finances in an extremely competent manner, especially in terms of accountability and frugality.

G4. Lessons learned regarding project expenditures are:

- There is a need for contingency planning (if the unexpected should occur).

- There is a strong need for flexibility in funding the costs of CS activities (must be able to respond to windows of opportunity which are so vital to the implementation of public health programs.

- Donor and implementing agency should share the same philosophy (as much as possible) on re-expenditure of funds.

H. Attempts to Increase Efficiency

H1. In order to reduce costs and increase productivity and efficiency of the project during the course of its operations, the following strategies or efforts were advocated or implemented:

- Instituted more formalized training of staff in areas of computing, report preparation, and planning of activities. Local staff now perform duties that previously only expatriates could do.

- Increased responsibility for day-to-day planning to national teams.

- Encouraged and convinced the MOH to decentralize certain aspects of health services delivery, thereby giving more autonomy to the local level.

- Encouraged mothers to give liquids to children in cases of diarrhea rather than insisting on sugar and salt solutions.

- Trained project chauffeurs to assist with project activities in the field, instead of only driving.

H2. The strategies succeeded to a large degree because the teams were highly motivated. The staff could readily see the benefits of their new efforts. The decisions made "good sense" to all concerned.

H3. There are lessons to be learned regarding attempts to increase efficiency. Always involve the staff in formulating changes, solicit their ideas and show how changes can benefit them. Involve Ministries and the communities, seek their suggestions and ideas, and show how there will be immediate and long-term gains from reduced costs or increased productivity.

Focus and intensify efforts with women and women's groups. Women are highly motivated to improve the health and well-being of their children. They proudly present and display their clean, healthy, and happy children. They will "spare no effort" in seeing that their children are growing and developing as they should. The women hunger and thirst for information and knowledge about health care of their children and quickly share this knowledge with other women. It is reported however that men seem to be more interested in power and wealth for themselves and are less concerned about the care of the children—the general feeling among men is that this is the women's responsibility.

I. Cost Recovery Attempts

I1. The following cost recovery mechanisms were an integral part of the project:

- Cost recovery for health services in some areas (fee for services).

- MOH to assume some responsibility for fuel costs of vehicles and refrigerators.

- Operating of village pharmacies where essential drugs and medicines were sold at a cost affordable to the villagers. These village pharmacies are based on the Bamako Initiative.

These cost recovery efforts were implemented as a part of the overall project and not as a separate entity. The Project Manager was responsible for the implementation of these efforts.

I2. It is extremely difficult to estimate the dollar amount of cost recovery from the efforts. However, what is important at the field level is the concept and the principle and the acceptance of these ideas and practices by the communities and villages. As individuals press for and are given more opportunities to control their lives, as governments become less paternalistic in their policies, the new individual freedom brings additional responsibilities. One's ability to shoulder these new responsibilities (health care) provides a true sense of pride and increased self-esteem as one gradually takes charge of one's own destiny. The ability to choose and purchase health care and medicines with one's own resources is just one example.

I3. There were no known negative impacts on the PVO's reputation as a result of implementation of cost-recovery activity within the communities. WVM is well respected for its honesty, integrity, and high quality of its programs. This good reputation facilitates promotion and acceptance of new ideas within the communities. There were no known serious inequities in service delivery as a result of cost-recovery efforts.

I4. The gardening activities originally instituted for the purpose of increasing Vitamin A consumption have turned out to be an income-generating activity, as excess vegetables are sold to others and bring funds to the home, to be used for whatever purposes deemed appropriate. To the extent that these activities provided discretionary/disposable income for the families, the activities were/are successful.

I5. See Sections I2. and I3. above for lessons.

J. Household Income Generation

J1. See Section I4. above.

J2. It is difficult to estimate a dollar value for household income generated from the gardening activities. What is important is that surplus vegetables were produced and they were sold, not wasted, and this provided income that the family ordinarily would not have had.

WVM, in its new project, plans to carefully examine the effects of marketing the excess produce which was intended for self-consumption and to determine if the fluctuation in prices of goods (vegetables) has negative effects on family consumption.

J3. Revenues from household income-generating activities (gardening) were used at the discretion of the householders. Some were used to pay for the cost of health activities. This area will be studied more in a follow-on project.

J4. See Section I2. above.

The reputation of the PVO is crucial in promoting and gaining acceptance of new ideas and concepts within the communities. If the PVO is well respected for its honesty, integrity, and quality of its programs, then new ideas are more readily accepted.

K. Summary

K1. The project's accomplishments in enabling communities to meet their basic health needs and in promoting sustainability of effective child survival activities are:

- Successfully promoted community ownership of the project. Assisted communities to organize health committees to meet and discuss the communities' needs.

- Involved and encouraged other agencies, government, and nongovernmental agencies to do what they do best. Agencies complemented each other so as to benefit from the synergistic effect, as well as help with sustainability.

- Established and maintained "la boîte," the fund for the continuous purchase of essential medicines.

- Assisted, to some degree, in promoting income-generating activities.

- Established copayment procedures for the gardening activities.

- Trained MOH and other staff in community organization methods.

- Made a significant step toward community transformation. Helped the communities gain confidence in their own ability to help themselves and solve their own problems.

Project competence

World Vision, from the beginning of the project, understood the importance of sustainability of activity and conducted its efforts accordingly. This is evident in the Detailed Implementation Plans, Annual Reports, and Internal Review. With the

exception of strong income-generating schemes, the project is/was quite competent in fulfilling its sustainability commitment.

Lessons learned are given in the next section below.

K2. Evaluation team members are listed in Section IV, Evaluation Methodology.

VII. LESSONS LEARNED

The following section summarizes the suggestions of both the sustainability committee and the committee assessing the accomplishment of project objectives and lessons learned from the Assaba Child Survival/Vitamin A project:

- Women are highly motivated to participate in child survival activities when there are immediate and long-lasting benefits for their children. They are extremely proud of and will often display their clean, healthy, and happy children. When given the privilege and wherewithal, they will spare no effort to improve the condition of their children.

- Knowledge-based or training-based activities are often self-sustaining, as well as sustained by external sources. The more one knows, the more one "needs" and wants to learn. This may be especially true for women in the Mauritanian culture.

- There is a strong need for careful and intense planning and gradual phasing over of the activities and responsibilities to the local communities (health committee, etc.).

- Income-generating activities may develop from unexpected sources. One should be prepared to seize and make the best use of these opportunities.

- Tribal rivalries within villages may cause dissension within the community and lessen the effectiveness of the health committee.

- The village committees have been successful at being advisory councils that have organized the villages to achieve economic development and solve issues. Each committee sees itself as being responsible to develop its community. In the meetings they exchange their wisdom and everyone feels pride in being consulted. The contacts between the village committees and the project staff gives an exact understanding of the population needs.

- With the health committee, the village benefits from a local administration that solves different types of issues, such as health, economic, and educational.

- Slowly, but forever, a change from within is taking place in people's attitudes, behavior, and mentalities. Some old medical practices (full of risks) are ending eg traditional treatment of diarrhea.

- Supplying the villages with drugs provides access to modern medicines. It saves money that would be used to transport patients to the city. It is a motivation for people to take better care of themselves and take responsibility for their own health.

- A few key lessons learned concerning the final evaluation survey include:

  - The training in use of the survey instrument was a very positive experience and the first time that most of the team members had ever participated in putting into place a sample survey.

  - It would have been better to use a stratified sampling approach to permit comparisons between BHU villages and the rest of the region. Time and logistical constraints did not permit this, however.

  - Doing the survey during the rainy season did introduce a bias, as several clusters had to be changed because of inaccessibility.

  - More time needs to be given to discussing the questionnaire as a survey team and to a pilot-testing of the instrument. Of particular importance is the issue of a standardized approach to translating questions into various local languages.

  - More involvement of women in the process is absolutely necessary, from the discussion of question formulation, to female interviewers, to analysis of results.

VIII. CONCLUSIONS

The evaluation team, having reviewed and analyzed the findings of the sustainability committee and the committee assessing the accomplishment of project objectives, concludes that the Assaba Child Survival/Vitamin A project was highly successful and would like to note the following significant points:

- The successful organization of the village health committees has tremendous potential to stimulate future self-help and development activities in the region. It stands as a model for future efforts in the area of community organization.

- The project provided a strong stimulus for the "transformation of the villages"—a new way of doing things.

- The timing for implementing the project was excellent in that many of the villages are relatively newly established. The prolonged drought has brought an end to continuous nomadic life, forcing many into a new sedentary lifestyle.

- Knowledge-based and training-based activities are especially important in that they stimulate the quest for more knowledge. The training activities of this project were excellent examples.

- The project's activities stimulated interest in self-improvement (of the villages) and helped the people to develop confidence in their abilities.

Thus, the Assaba Child Survival/Vitamin A project accomplished its numerical goals but more importantly, established the potential for greater development in the future.

The implementors of this project and all associated with it are to be congratulated for a job well-done.

IX. RECOMMENDATIONS

The evaluation team makes the following recommendations to World Vision Mauritania:

1. The transformation of the communities is the key to improve the well-being and health of the villagers. Presently, with the success of the current project and the community health committees, the communities are receptive to new ideas and methods of doing things. Follow-on projects should take advantage of this golden opportunity and direct their activities at the motivated communities, as well as strengthen and or enlarge the committees to enable them to respond to issues other than health.

2. Collaboration and sharing of information on projects with the UN and other agencies operating in Mauritania is important. An official or formal forum should be established which will permit the regular sharing of information on project activities with the UN, GOM, and PVOs.

3. Health and economic development activities essentially outside of urban areas should closely involve the Ministry of Rural Development.

4. The communities need a better understanding of the participatory approach to decision-making. Before the village committee is established, the villagers need to have enough information about the system. Stress should be placed, from the start, on the breaking off of a spoon-feeding approach.

5. Accumulating knowledge in one person to produce a polyvalent CHW reduces by half the chances of knowledge. It would be better to have two health agents in each village.

6. Women's cooperatives should be promoted as a means to an end to achieve various objectives: hygiene messages, literacy programs, and skills transfer–gardening, vegetable drying, etc.

7. Promotion of gardening should continue. Guidance and assistance with seeds, fencing, wells, and tools are necessary.

8. The role of each member of the CHC should be clearly defined for him or her. Everyone should know their responsibilities and roles. These roles and responsibilities should be explained to the entire village.

9. Vegetable preservation and drying may be used as a means to solve the problem of seasonal nutritional problems and ensure a greater return on the gardening investment.

10. Literacy projects should be promoted alongside health projects to enhance the transmittal of the health education message.

11. There should be continued promotion of breast-feeding with the greatest emphasis being placed on giving colostrum to the newborn. Messages disseminated in this area need to target health professionals as well as mothers.

12. Research that enhances decision-making should be built into future project efforts. Local medical officials need to be continually trained in data collection and analysis techniques so that they will be actively involved in using data generated in their decision-making processes.

13. World Vision should consider not only following up and supervising the CHWs that they have already trained but should consider, in the follow-on project, participating in the training of CHWs in other villages not yet touched by the PHC program.

The evaluation team strongly encourages World Vision to press ahead with its follow-on project—the Assaba People's Program—in the Assaba. The team is particularly impressed with the practical steps that WVM has taken to involve communities, via a participatory process, in decision-making at all levels of project development.

APPENDICES

APPENDIX A

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Monthly CS/Vitamin A Project Reports, November 1991-July 1993

APPENDIX B

Survey Teams for the Final Evaluation

ÉQUIPE I - Standard Survey 1. AMED O/ MAJED 2. DR. ABOUKRINE O/ WAFFY 3. ISSELMOU O/ MESLEH 4. HAME CAMARA 5. CHAUFFEUR	ÉQUIPE II - Standard Survey 1. NAJY O/ YEKBER 2. DR. YEMEHLOU O/ MED VADEL 3. SAMBA HAROUNA 4. CHAUFFEUR
ÉQUIPE III - Standard Survey 1. DIALLO HAMIDOU 2. DR. SIDI O/ SIDI CHEIKH 3. MOHAMED CAMARA 4. CHAUFFEUR	ÉQUIPE IV - Sustainability 1. ROBERT EVANS 2. SIDINA O/ ISSELMOU 3. FATIMATA DIALLO 4. CHAUFFEUR
ÉQUIPE SUPERVISION 1. ROBERT DAVIS 2. DR. THIERNO OUSMANE COULIBALY	ÉQUIPE V - Standard Survey 1. SAKHO MAMADOU 2. ETHMANE O/ EBYAYE

APPENDIX C

Key Contacts and Visits Made During the Final Evaluation

NAME	POSITION/ORGANIZATION
Dr. Moulaye Ould Hacen	Director of the DRASS, Assaba
Mr. Mohamed Ould Mahmoud	Director PHC program, Assaba
Dr. Sidi Ould Sidi Cheikh	Chief Medical Officer, Boumdeid*
Dr. Yemehlou Ould Mohamed Vadel	Chief Medical Officer, Kankossa*
Dr. Aboubakrine Ould Waffy	Chief Medical Officer, Kiffa*
Mr. Gordon Brown	U.S. Ambassador to Mauritania
Mr. Justin Lovenou	Program Manager LWF, Assaba
Mr. Mohamed Ould Sidati	Assistant to the Governor for Administration—Assaba
Dr. Diallo Yaya	Medical Officer, WHO
Ms. Denise Harrison	Project Manager—World Vision Social Mobilization for Health
Mr. Fodié Amadou Diagana	Agricultural Engineer, Rural Development Office
Mr. Nabil Kahala	UNDP Deputy Representative
Ms. Mary Pecaut	Director of Peace Corps Mauritania
Mr. Sidiina Ould Isselmou	English Teacher, Cooperative Leader and Director of Youth Activities, Kiffa*
Ms. Cynthia Bicklian	Peace Corps Volunteer, Assaba
Mr. Sean Hines	Peace Corps Volunteer, Assaba
Mr. Chris Bowser	Peace Corps Volunteer, Assaba
Ms. Carla Hunt	Peace Corps Volunteer, Assaba
Ms. Anne Dilallo	Peace Corps Volunteer, Hodh El Gharbi

Members of World Vision's Health Team:

Mr. Ahmed Ould Majed	Nurse, MOH
Mr. Naji Ould Yekber	Nurse, MOH
Mr. Hamidou Mamadou Samba Sille	Community Development Worker

* Also a member of the Final Evaluation Team

APPENDIX D

World Vision/Mauritania **Grappe____ Fiche____**

Maison____

ONG/SURVIE DE L'ENFANT: QUESTIONNAIRE DE CONNAISSANCE ET PRATIQUE

Introduction: L'objectif de l'interview que nous aurons ensemble est relatif aux connaissances et pratiques en matière de santé. Soyez rassurée a l'avance que les réponses seront confidentielles et ne seront utilisées que pour l'étude en cours.

Toutes les questions seront posées à une mère (femme de 15 à 49 ans) avec un enfant de moins de 2 ans (moins de 24 mois).

Date d'Interview (jour/mois/1993) ____/____/1993

Début ___h___mn Fin ___h___mn Durée_____mn

Nom de l'Intervieweur _____ Signature _____

Superviseur _____ Signature _____

1. Quel âge avez-vous ? . . . . . ____
2. Quel est le nom de votre enfant (MOINS DE 2 ANS)? . . . . . _____
3. Quelle est la date de sa naissance? (JOUR/MOIS/ANNEE) . . . . . ____/____/19___

(CALCULEZ LE NOMBRE DE MOIS ET METTEZ LE NOMBRE DE MOIS CI-CONTRE) . . . _____

QUESTIONS SUR L'ÉDUCATION ET LE TRAVAIL DE LA MÈRE

4. Quel est votre niveau de formation?

Rien 01
Cours d'alphabétisation 02
Primaire, ne sait pas lire 03
Primaire, sait lire 04
Secondaire ou plus 05
Pas de réponse 08
Ne sait pas 09

5. Travaillez-vous à l'exterieur de la maison?

Oui 01
Non (PASSEZ À LA QUESTION N 14) 02
Pas de réponse (PASSEZ À LA QUESTION N 14) 08
Ne sait pas (PASSEZ À LA QUESTION N 14) 09

6. Votre travail, est-il "générateur de revenu"?

Oui 01
Non (PASSEZ À LA QUESTION N 14) 02
Pas de réponse (PASSEZ À LA QUESTION N 14) 08
Ne sait pas (PASSEZ À LA QUESTION N14) 09

7. Ce travail générateur de revenu, est-il dans l'artisanat?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

8. Dans la vente de produits agricoles?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

9. Dans la vente de produits laitiers?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

10. Dans la main d'oeuvre? (ex., MÉNAGÈRE)

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

11. Dans le commerce?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

12. Dans une position salariée?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

13. Dans un autre domaine?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09
(SI OUI, LEQUEL) . . . . . _____

14. Maintenant je voudrais vous poser quelques questions concernantes la garde de (NOM DE L'ENFANT). Repondez oui ou non.

a. Etes-vous tout le temps avec (NOM DE L'ENFANT) au travail comme à la maison?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

b. Arrive-t-il que son père le garde?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

c. Ses frères ou soeurs?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

d. D'autres parents?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

e. Les voisins ou les amis?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

f. D'autres personnes?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

(SI OUI, PRÉCISEZ LESQUELLES)

_____

QUESTIONS SUR L'ALLAITEMENT ET LA NUTRITION

15. Allaitez-vous (NOM DE L'ENFANT) au sein?

Oui (PASSEZ À LA QUESTION N 17) 01
Non 02
Pas de réponse 08
Ne sait pas 09

16. Avez-vous déjà allaité (NOM DE L'ENFANT) au sein auparavant?

Oui 01
Non (PASSEZ À LA QUESTION N 19) 02
Pas de réponse (PASSEZ À LA QUESTION N 19) 08
Ne sait pas (PASSEZ À LA QUESTION N 19) 09

17. Après l'accouchement, à quel moment avez-vous commencé à allaiter (NOM DE L'ENFANT) au sein? (NE LISEZ PAS LES CHOIX SUIVANTS)

Dans la première heure après l'accouchement 01
Entre une (1) et huit (8) heures après l'accouchement 02
Plus de huit (8) heures après l'accouchement 03
Pas de réponse 08
Ne sait pas (plus) 09

18. Quelle est la fréquence des tétées par 24 heures (NE LISEZ PAS LES CHOIX SUIVANTS)

<3 fois par 24 heures 01
4 a 9 fois par 24 heures 02
A volonté 03
Pas de réponse 08
Ne sait pas 09

19. Maintenant je voudrais vous poser quelques questions sur les boissons et les aliments que vous donnez actuellement à (NOM DE L'ENFANT). Répondez oui ou non à chaque question.

a. Donnez-vous de l'eau ou du thé a (NOM DE L'ENFANT)?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

b. Du lait de vache, de chèvre ou en poudre?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

c. Des aliments semi-solides commes de la bouille?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

d. Des fruits ou des jus de fruits?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

(RÉPÉTEZ DE TEMPS EN TEMPS "DONNEZ-VOUS...?)

e. des carrottes, des courges ou des mangues?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

f. Des feuilles vertes comme les feuilles d'haricots?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

g. De la viande ou du poisson?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

h. des haricots ou des arachides?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

i. des oeufs ou du lait caillé?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

j. Ajoutez-vous des feuilles vertes comme les feuilles de haricots aux repas de (NOM DE L'ENFANT)?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

k. Ajoutez-vous du sucre ou du miel aux repas de (NOM DE L'ENFANT)?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

l. Ajoutez-vous de la graisse ou de l'huile aux repas de (NOM DE L'ENFANT)?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

20. Les gens qui travaillent dans le domaine de la santé pensent qu'il est très important d'allaiter un enfant au sein pendant les premières années de sa vie. Que pourrait faire une mère, selon vous, pour continuer à allaiter un enfant au sein pendant les 3 ou 4 premières journées de sa vie?

(ENCERCLEZ LES CAS MENTIONNÉS PAR LA MAMAN OU LES CAS NON-MENTIONNÉS SUIVANT L'INDICATION CI-APRÈS, SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Commencer l'allaitement aussitôt que possible après l'accouchement	Mentionné	01
	Pas Mentionné .	02
b. Éviter les biberons	Mentionné	01
	Pas Mentionné .	02
c. Laisser l'enfant au sein plus longtemps pour stimuler la production de lait	Mentionné	01
	Pas Mentionné .	02
d. Prendre soins des seins et des mamelons	Mentionné	01
	Pas Mentionné .	02
e. D'autres choses	Mentionné	01
	Pas Mentionné .	02

(SI ELLE MENTIONNE AUTRES CHOSES, NOTEZ LES CI-APRÈS)

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_____

Pas de réponse 08
Ne sait pas 09

21. Que pourrait faire une mère pendant les quatre (4) premiers mois de la vie de l'enfant pour continuer l'allaitement?

(ENCERCLEZ LES CAS MENTIONNÉS PAR LA MAMAN OU LES CAS NON-MENTIONNÉS SUIVANT L'INDICATION CI-APRÈS, SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Allaiter au sein exclusivement pendant les quatre premiers mois — Mentionné . . . . 01 / Pas Mentionné . 02

b. Éviter de donner le biberon à l'enfant — Mentionné . . . . 01 / Pas Mentionné . 02

c. Laisser l'enfant au sein plus longtemps pour stimuler la production de lait — Mentionné . . . . 01 / Pas Mentionné . 02

d. D'antres choses — Mentionné 01 / Pas Mentionné . 02

(SI ELLE MENTIONNE AUTRES CHOSES, NOTEZ LES CI-APRÈS)

_____

Pas de réponse 08
Ne sait pas 09

22. A partir de quelle âge la mère doit-elle ajouter d'autres nourrittures à l'allaitement de l'enfant? (NE LISEZ PAS LES CHOIX SUIVANTS)

Entre 4 et 6 mois 01
Avant 4 mois 02
Après 6 mois 03
Pas de réponse 08
Ne sait pas 09

23. Quelles nourritures faut-il ajouter?

(ENCERCLEZ LES CAS MENTIONNÉS PAR LA MAMAN OU LES CAS NON-MENTIONNÉS SUIVANT L'INDICATION CI-APRÈS, SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. De l'huile — Mentionné . . . . 01 / Pas Mentionné . 02

b. De la nourriture riche en Vitamine A et en fer (CARROTTES, FEUILLES VERTES, FRUITS JAUNES, VIANDE, POISSON, LAIT, JAUNE D'OEUF)
Mentionné 01
Pas Mentionné . 02

c. D'autres choses — Mentionné 01
Pas Mentionné . 02

(SI ELLE MENTIONNE AUTRES CHOSES, NOTEZ LES CI-APRÈS)

_____

Pas de réponse 08
Ne sait pas 09

24. A quoi sert cette capsule (MONTREZ LA CAPSULE DE VITAMINE A. NE LISEZ PAS LES RÉPONSES)

Pour éviter la cécité 01
Pas de réponse 08
Ne sait pas ou autres 09

25. Quel est le nom de cette capsule (MONTREZ LA CAPSULE DE VITAMINE A. NE LISEZ PAS LES RÉPONSES)

Vitamine A 01
Pas de réponse 08
Ne sait pas ou autres 09

26. Quelles nourritures protègent contre la cécité?

(ENCERCLEZ LES CAS MENTIONNÉS PAR LA MAMAN OU LES CAS NON-MENTIONNÉS SUIVANT L'INDICATION CI-APRÈS, SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS." SI ELLE MENTIONNE QUELQUE CHOSE NON VALABLE, ENCERCLEZ "NE SAIT PAS" EN BAS.)

a. Les feuilles vertes — Mentionné 01
Pas Mentionné . 02

b. Les fruits jaunes — Mentionné 01
Pas Mentionné . 02

c. La viande/le poisson — Mentionné 01
Pas Mentionné . 02

d. Le lait maternel — Mentionné 01
Pas Mentionné . 02

e. Le jaune d'oeuf — Mentionné 01
Pas Mentionné . 02

f. Les carrottes — Mentionné 01
Pas Mentionné . 02

g. Autres laits — Mentionné 01
Pas Mentionné . 02

Pas de réponse 08
Ne sait pas 09

QUESTIONS SUR LES MALADIES DIARRHÉIQUE

27. (NOM DE L'ENFANT) A-t-il eu la diarrhée dans les 2 semaines passées?

Oui 01
Non (PASSEZ À LA QUESTION N 35) 02
Pas de réponse (PASSEZ À LA QUESTION N 35) 08
Ne sait pas (PASSEZ À LA QUESTION N 35) 09

28. Pendant la période de diarrhée de (NOM DE L'ENFANT), l'allaitiez-vous au sein? (LISEZ LES CHOIX SUIVANTS)

Plus que d'habitude 01
Comme d'habitude 02
Moins que d'habitude 03
Arrêté l'allaitement au sein 04
L'enfant n'est pas allaité au sein 05
Pas de réponse 08
Ne sait pas 09

29. Pendant la période de diarrhée de (NOM DE L'ENFANT), lui donniez-vous à boire des boissons autres que le lait maternel? (LISEZ LES CHOIX SUIVANTS)

Plus que d'habitude 01
Comme d'habitude 02
Moins que d'habitude 03
Pas de boisson du tout 04
L'enfant a été allaité au sein uniquement 05
Pas de réponse 08
Ne sait pas 09

30. Pendant la période de diarrhée de (NOM DE L'ENFANT), lui donniez-vous à manger la nourriture solide ou semi-solide....(LISEZ LES CHOIX SUIVANTS)

Plus que d'habitude 01
Comme d'habitude 02
Moins que d'habitude 03
Aucune nourriture solide ou semi-solides du tout 04
L'enfant a été allaité au sein uniquement 05
Pas de réponse 08
Ne sait pas 09

31. Pendant la période de diarrhée de (NOM DE L'ENFANT), que lui donniez-vous?

(ENCERCLEZ LES CAS MENTIONNÉS PAR LA MAMAN OU LES CAS NON-MENTIONNÉS SUIVANT L'INDICATION CI-APRÈS, SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS." SI ELLE NE MENTIONNE RIEN OU DIT RIEN, FAITES UN CERCLE AUTOUR DE RIEN)

a. Sachet de SRO — Mentionné 01
Pas Mentionné . 02

b. Solution de sel et de sucre — Mentionné 01
Pas Mentionné . 02

c. Traitement pour la rehydratation à base de céréale — Mentionné 01
Pas Mentionné . 02

d. Infusions ou d'autres boissons — Mentionné 01
Pas Mentionné . 02

e. Médicaments anti-diarrhéiques ou antibiotiques — Mentionné 01
Pas Mentionné . 02

f. D'autres — Mentionné 01
Pas Mentionné . 02

(S'IL Y A AUTRES IL FAUT LES PRECISER CI-APRES)

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g. Rien — Mentionné 01
Pas Mentionné . 02

Pas de réponse 08
Ne sait pas 09

32. Pendant la période de diarrhée de (NOM DE L'ENFANT) avez-vous cherché pour lui l'avis d'une autre personnes sur les traitements à suivre?

Oui 01
Non (PASSEZ A LA QUESTION N 35) 02
Pas de réponse (PASSEZ A LA QUESTION N 35) 08
Ne sait pas (PASSEZ A LA QUESTION N 35) 09

33. Où ou à qui avez-vous demandé de l'aide?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. l'Hôpital — Mentionné 01
Pas Mentionné . 02

b. Au Poste de Santé, au Centre Medical ou au Dispensaire — Mentionné 01
Pas Mentionné . 02

c. À la Pharmacie — Mentionné 01
Pas Mentionné . 02

d. Chez l'Agent de Sante Communautaire — Mentionné 01
Pas Mentionné . 02

e. Chez le Guerriseur Traditionnel — Mentionné 01
Pas Mentionné . 02

f. Chez l'Accoucheuse Traditionelle — Mentionné 01
Pas Mentionné . 02

g. Chez les amies ou parents — Mentionné 01
Pas Mentionné . 02

h. Autres — Mentionné 01
Pas Mentionné . 02

(PRECISEZ CI-APRES LES AUTRES)

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Pas de réponse 08
Ne sait pas 09

34. Quels sont les signes de gravité qui vous poussent à demander de l'aide pour traiter la diarrhée de (NOM DE L'ENFANT)?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Le vomissement — Mentionné 01
Pas Mentionné . 02

b. La fièvre — Mentionné 01
Pas Mentionné . 02

c. Le deshydratation (reduction d'urine, bouche seche, yeux creuses) — Mentionné 01
Pas Mentionné . 02

d. Du sang dans les selles — Mentionné 01
Pas Mentionné . 02

e. La manque d'appetit — Mentionné 01
Pas Mentionné . 02

f. La fatigue ou la faiblesse — Mentionné 01
Pas Mentionné . 02

g. Autres — Mentionné 01
Pas Mentionné . 02

(PRECISEZ LES AUTRES REPONSES CI-APRES)

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Pas de réponse 08
Ne sait pas 09

35. Quelles sont les actions les plus importantes que vous devez prendre si (NOM DE L'ENFANT) a la diarrhee?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Amener l'enfant à un centre medical, un dispensaire ou l'hôpital — Mentionné . . . . 01 / Pas Mentionné . 02

b. Donner abondement à boire a l'enfant — Mentionné . . . . 01 / Pas Mentionné . 02

c. Donner de la nourriture en petites quantités et plus fréquement — Mentionné . . . . 01 / Pas Mentionné . 02

d. Ne pas donner de la boisson — Mentionné . . . . 01 / Pas Mentionné . 02

e. Ne plus donner de la nourriture — Mentionné . . . . 01 / Pas Mentionné . 02

f. Autres — Mentionné . . . . 01 / Pas Mentionné . 02

(PRECISEZ LES AUTRES REPONSES CI-APRES)

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Pas de reponse 08
Ne sait pas 09

36. Quelles sont les actions les plus importantes qu'une mere doit faire quand son enfant n'a plus la diarrhée?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Donner de nourriture comme d'habitude — Mentionné . . . . 01 / Pas Mentionné . 02

b. Donner de nourriture plus que d'habitude — Mentionné . . . . 01 / Pas Mentionné . 02

c. Donner de la nourriture riche en énergie (SUCRE, MIEL, GRAISSE, DATTES) — Mentionné . . . . 01 / Pas Mentionné . 02

d. Donner la nourriture en petites quantités et plus fréquement — Mentionné . . . . 01 / Pas Mentionné . 02

e. Autres — Mentionné . . . . 01 / Pas Mentionné . 02

(PRECISEZ LES AUTRES REPONSES CI-APRES)

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Pas de reponse 08
Ne sait pas 09

QUESTIONS SUR LA VACCINATION

37. (NOM DE L'ENFANT) a-t-il déjà été vacciné?

Oui 01
Non 02
Pas de réponse 08
Ne sait pas 09

38. A quel âge un enfant doit-il recevoir la vaccination contre la rougeole?

(NOTEZ LA REPONSE EN MOIS) . . . . . __
Pas de réponse 08
Ne sait pas 09

39. Pouvez-vous me dire la raison la plus importante pour laquelle une femme enceinte doit etre vacciner avec le vaccin anti-tétanique?

(NE LISEZ PAS LES REPONSES SUIVANTES. SI ELLE METIONNE UNE REPONSE FAITES UN CERCLE AUTOUR DE LA RESPONSE)

Pour protéger la mère et le nouveau né contre la tétanos 01
Pour protéger la mère (seulement) contre la tétanos 02
Pour protéger le nouveau (seulement) né contre la tétanos 03
Pas de réponse 08
Ne sait pas ou Autres 09

40. Combien d'injections de vaccin anti-tétanique faut-il donner à une mère pour protéger son nouveau-né contre la tétanos?

(NE LISEZ PAS LES REPONSES SUIVANTES. SI ELLE METIONNE UNE REPONSE FAITES UN CERCLE AUTOUR DE LA RESPONSE)

Une seule 01
Deux 02
Plus que deux 03
Zéro 04
Pas de réponse 08
Ne sait pas 09

41. Avez-vous une carte de vaccination pour (NOM DE L'ENFANT) comme celle-ci (MONTREZ UN EXEMPLAIRE DE LA CARTE DE VACCINATION)?

Oui (IL FAUT QU'ELLE VOUS MONTRE LA CARTE) 01
L'enfant a recu une carte mais elle est perdue (PASSEZ A LA QUESTION N 45) 02
L'enfant a recu une carte mais elle est ailleurs (PASSEZ A LA QUESTION N 45) 03

L'enfant n'a jamais recu une carte de vaccination (PASSEZ A LA QUESTION N 45) 04
Pas de réponse (PASSEZ A LA QUESTION N 45) 08
Ne sait pas (PASSEZ A LA QUESTION N 45) 09

42. (REGARDEZ LA CARTE DE VACCINATION ET NOTEZ CI-DESSOUS LES DATES DE TOUTES LES VACCINATIONS-JOUR/MOIS/ANNEE)

BCG . . . . . ___/___/19___
POLIO PREMIERE DOSE . . . . . ___/___/19___
POLIO DEUXIEME DOSE . . . . . ___/___/19___
POLIO TROISEIME DOSE . . . . . ___/___/19___
DTC PREMIERE DOSE . . . . . ___/___/19___
DTC DEUXIEME DOSE . . . . . ___/___/19___
DTC TROISIEME DOSE . . . . . ___/___/19___
ROUGEOLE . . . . . ___/___/19___

43. (REGARDEZ L'INTERIEUR DE LA CARTE DE VACCINATION OU SE TROUVE LA SURVEILLANCE DE CROISSANCE-L'ENFANT A-T-IL ETE PESE DANS LES QUATRES (4) DERNIERS MOIS?)

Oui 01
Non 02

44. (REGARDEZ LA CARTE DE VACCINATION LA OU IL Y A DE L'INFORMATION SUR LES DOSES DE VITAMINE A. NOTEZ LES DATES DE TOUTES LES DOSES DE VITAMINE A RECUES PAR CETTE ENFANT CI-DESSOUS- JOUR/MOIS/ANNEE)

PREMIERE DOSE . . . . . ___/___/19___
DEUXIEME DOSE . . . . . ___/___/19___
TROISEIME DOSE . . . . . ___/___/19___
QUATRIEME DOSE . . . . . ___/___/19___

45. Avez-vous une carte VAT pour noter les doses anti-tétanique?

Oui (IL FAUT QU'ELLE VOUS MONTRE LA CARTE) 01
Elle a recu une carte mais elle est perdue (PASSEZ A LA QUESTION N 47) 02
Elle a recu une carte mais elle est ailleurs (PASSEZ A LA QUESTION N 47) 03
Elle n'a jamais recu une carte de vaccination (PASSEZ A LA QUESTION N 47) 04
Pas de réponse (PASSEZ A LA QUESTION N 47) 08
Ne sait pas (PASSEZ A LA QUESTION N 47) 09

46. (REGARDEZ LA CARTE ET NOTEZ LE NOMBRE DE DOSES ANTI-TETANIQUE RECUES PAR CETTE FEMME CI-DESSOUS)

UNE (1) 01
DEUX (2) 02
TROIS (3) 03
QUATRE (4) 04
CINQ (5) 05

47. Lorsque une femme se trouve enceinte quand doit-elle aller voir pour <u>la première</u> <u>fois</u> une sage-femme, un infirmier ou un medecin (PRECISEZ QUE VOUS VOULEZ SAVOIR COMBIEN DE MOIS APRES LE DEBUT DE GROSSESSE. NE LISEZ PAS LES REPONSES SUIVANTES)

Premier trois mois 01
Quatrième au sixième mois 02

Sixième au neuvième mois 03
Elle n'a pas besoin de voir ces personnes 04
Pas de réponse 08
Ne sait pas 09

48. Avez-vous fait des visites pre-natales au cours de votre grossesse

Oui 01
Non (PASSEZ A LA QUESTION N 50) 02
Pas de réponse 08
Ne sait pas 09

49. Combien de visites prenatales avez-vous faites?

Une 01
Deux ou plus 02
Pas de réponse 08
Ne sait pas 09

50. Quelle nourriture faut-il manger pendant la grossesse pour eviter l'anemie de grossesse?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Protéines riches en fer (OEUFS, VIANDE, POISSON) — Mentionné 01
Pas Mentionné . 02

b. Feuilles vertes riches en fer (FEUILLES DE BAOBAB, D'OIGNON, OSEILLE DE GUINEE,HARICOTS) — Mentionné 01
Pas Mentionné . 02

c. Autres — Mentionné 01
Pas Mentionné . 02

(SI ELLE EN MENTIONNE D'AUTRES NOTEZ LES CI-APRES)

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Pas de réponse 08
Ne sait pas 09

51. Combien de kilos, une femme devrait-elle gagner normalement pendant sa grossesse? (NE DONNEZ PAS LES REPONSES SUIVANTES)

10-12 Kilo 01
le Poids du bébé 02
Autres 03
Pas de réponse 08
Ne sait pas 09

52. Lorsque vous étiez enceinte de (NOM DE L'ENFANT) la quantité de nourritture que vous mangiez était...(LISEZ LES CHOIX SUIVANTS)

Supérieur à la quantité habituelle 01
La même que celle de votre nourriture habituelle 02
Inferieur à celle habituelle 03
Pas de réponse 08
Ne sait pas 09

53. A la naissance de (NOM DE L'ENFANT) qui a coupé le cordon ombilical?
(NE LISEZ PAS LES REPONSES SUIVANTES)

Elle même l'a coupé 01
Un membre de la famille 02
l'Accoucheuse traditionelle 03
l'Agent de Santé Communautaire 04
d'Autres professionels de santé (infirmier, sage femme, médecin) 05
Autres 06
Pas de réponse 08
Ne sait pas 09

QUESTIONS SUR L'HYGIENE

54. Avez-vous l'habitude de traiter l'eau que vous utilisez?

Oui 01
Non (PASSEZ A LA QUESTION N 56) 02
Pas de réponse (PASSEZ A LA QUESTION N 56) 08
Ne sait pas (PASSEZ A LA QUESTION N 56) 09

55. Que faites-vous exactement pour le traitement de l'eau?

(ENCERCLEZ LES CAS MENTIONNES PAR LA MAMAN OU LES CAS NON-MENTIONNES SUIVANT L'INDICATION CI-APRES SANS LES LUI MONTRER NI LES LIRE. SI ELLE NE SAIT PAS, ENCERCLEZ L'INDICATION "NE SAIT PAS")

a. Filtrage	Mentionné	01
	Pas Mentionné .	02
b. Javelisation	Mentionné	01
	Pas Mentionné .	02
c. Chauffage	Mentionné	01
	Pas Mentionné .	02
d. Autres	Mentionné	01
	Pas Mentionné .	02

(SI ELLE EN MENTIONNE D'AUTRES NOTEZ LES CI-APRES)

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Pas de réponse 08
Ne sait pas 09

56. Avez-vous l'habitude de laver (NOM DE L'ENFANT) tous les jours?

Oui	01
Non	02
Pas de réponse	08
Ne sait pas	09

APPENDIX E

SELECTION CRITERIA FOR CLUSTER SAMPLE (CLUSTERS, HOUSEHOLDS, WOMEN)

For the Child Survival survey, we followed the methodology set down by the World Health Organization for choosing clusters for a 30-cluster analysis of vaccination coverage. A brief description of the steps followed to choose the 30 clusters and the criteria used to select the household and the woman to be interviewed are given. Deviations from the standard approach are noted, as well as replacement criteria used to complete unfinished clusters and clusters that were inaccessible because of the weather.

We begin with a complete listing of villages and towns with their population sizes. The list we used, which is attached below, comes from the Office National de Statistique (ONS) and is the Resultat de la Cartographie Censitaire de 1987 (the mapping list used to carry out the 1988 census). While this list is certainly outdated, it is the most recent complete list of villages in the Assaba region with population estimates. The results of the 1988 census have not yet been released. We have evidence that certain villages listed no longer exist following the political crisis "les evenements" of 1989. In addition, recent projections done by the ONS and World Vision indicate that the population of Kiffa town has grown faster than that of the rest of the Assaba region and that Kiffa town is thus relatively larger, vis-a-vis the region, than it was in 1987. Because we are not certain of the relative increase in Kiffa town's population, we chose to use the existing information despite the bias it likely introduces.

The next step is to determine the sampling interval. Combined with the random start number, this will be used to determine the clusters chosen. The formula for the sampling interval is:

$$\textit{Sampling Interval} = \frac{\textit{Total Population}}{30\ \textit{Clusters}}$$

Thus, in this case with a total population of 136,776 (see below), the sampling interval is:

$$\frac{136{,}776}{30} = 4559.2 = 4559$$

The first cluster is chosen using a random number that must be less than the sampling interval. We did this using a 500 ouguya note (local currency) and using the middle four digits. Using this method, we obtained the number 3,143 as the random starting number. Thus, the first cluster was the cumulative population interval containing 3,143. To obtain the remaining clusters we added 4,559 to 3,143 and 4,559 to that result until 30 clusters were chosen. The results of this process are attached below. Because of problems of abandoned villages and inaccessibility, some villages (clusters) chosen had to be exchanged

for others. In three cases, this happened during the selection process, and in several cases, this happened in the field when villages were found to be inaccessible. During the selection process, three clusters had to be discarded for the above reasons. In these cases, we used the village previous to the one chosen on the list of villages. In the cases where a change had to be made in the field, the nearest village to the one that was inaccessible was chosen. This was also the method used to complete a cluster that could not be completed because the population of the cluster was too small. (See the notes accompanying the following village listing for details on all changes made.)

To choose the houses to be selected in each cluster, we first determined a central point in the cluster. This central point was often a mosque, a school, a health post, or the chief's house. At this central point, a pen was thrown into the air and the first house in the direction that it pointed was the starting point. From there, the next nearest door was chosen until the cluster was completed.

For this survey, we sought women who had given birth in the previous two years. We specified that the woman chosen had to be the mother and not the nurse of the child. If a woman had two children under 24 months, questions posed about the child were to concern the younger of the two. We specified also that the child had to be alive. In order to be sure that we had a woman with a child under two, we used the following flow chart (Figure 1) to standardize our approach to identifying such a woman.

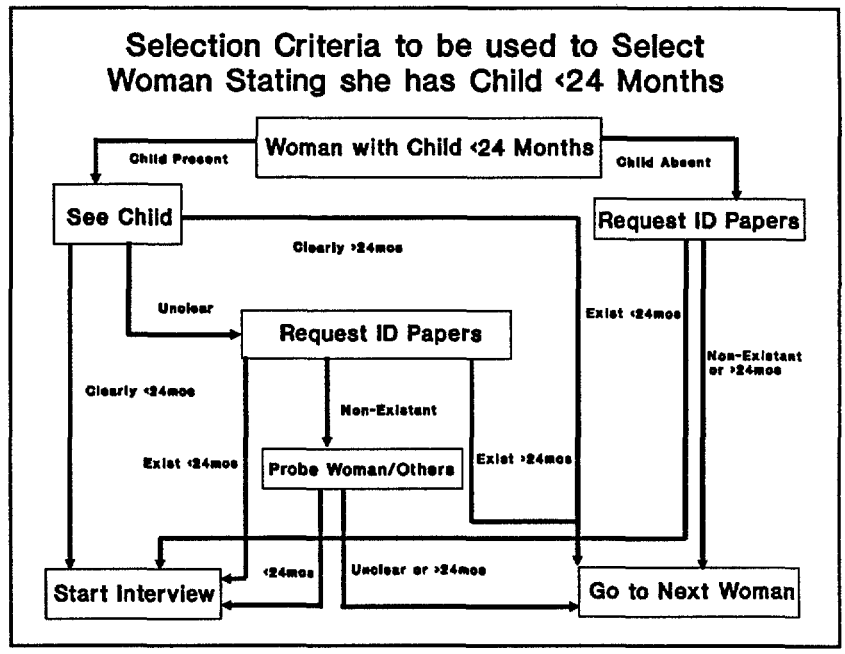


Figure 1

If there were two women in a household saying that they had a child less than 24 months, we flipped a coin to choose one. If there were three or more such women in a household, two women were chosen at random in this way. This approach was adopted so as to maximize the variability of response while attempting to optimize time use so that small clusters could be completed without having to go to another village. In practice, few such situations (three or more women in a household) were encountered.

Problems encountered in the field in the selection of clusters, houses, or women were noted on a Fiche de Controle (control card) for that cluster by the team. We also noted the landmark that was used to identify the center of the cluster on the control card.

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen	
Leweisse	1	588	588		
Bedelhmar	2	150	738		
Chelkeher Amoire	3	150	888		
Chekelt Ehel Thefagha	4	192	1,080		
Debaye Namous	5	96	1,176		
Onaba (Dionaba)	6	186	1,362		
Galoula	7	270	1,632		
Gdem M'Balla	8	564	2,196		
Hassi Sidi Ahmed 1	9	354	2,550		
Hassi Sidi Ahmed 2	10	36	2,586		
Hsey Ladoum	11	420	3,006		
Hsey Sidi[1]	12	336	3,342	1-	3,143
Jerk (Kourassa)	13	324	3,666		
Lebhor	14	1,380	5,046		
Oudoi El Kelbe	15	120	5,166		
Oum Serwale	16	240	5,406		
Eckha	17	408	5,814		
Aftout Barkewol	18	1,602	7,416		
Akoijile[2]	19	294	7,710	2-	7,702
Ambaye	20	150	7,860		
Barmoire	21	126	7,986		
Barkewol Lakhohar	22	978	8,964		
Barkewol Senhoury	23	330	9,294		
Barkewol Wouro Senne	24	114	9,408		
Bave	25	264	9,672		
Beidia Ehel Ely Baby	26	222	9,894		
Boubaghije 1 et 4	27	456	10,350		
Boubaghije 2	28	480	10,830		
Boubaghije 3	29	222	11,052		
Boughe Elme	30	132	11,184		
Boubahraze 1	31	834	12,018		
Boubahraze 2	32	660	12,678	3-	12,261
Bousreiwite	33	306	12,984		
Bouzreibiya	34	108	13,092		
Cheikh El Hadrani	35	330	13,422		
Cheiklett Chouave	36	198	13,620		
Chekkhet Ehel Mahan Bewbe	37	132	13,752		
Chelkhet Le Hriza	38	192	13,944		
Dagvegue Cheikh Med	39	630	14,574		
Daghvegue Ver Ejerke	40	120	14,694		
Dakhla	41	222	14,916		
Debaye Barkewol	42	162	15,078		
Debaye Ehel Ely	43	150	15,228		
Debaye El Ghabra	44	144	15,372		
D'Gheivegue	45	60	15,432		
Diowol	46	216	15,648		
Diski Ehel Abghary	47	228	15,876		
Diski Peuls Diski	48	186	16,062		
Djeb	49	264	16,326		
El Bezoule	50	90	16,416		
El Ghabra	51	1,080	17,496	4-	16,820
El Gaar	52	276	17,772		
El Hetania	53	90	17,862		

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen	
El Mechroue	54	126	17,988		
El Medersa	55	246	18,234		
Greigui	56	270	18,504		
Guelbe Neaje	57	426	18,930		
Guiller	58	768	19,698		
Naye Chayere	59	474	20,172		
Hsey Aar (Akoitile)	60	60	20,232		
Hsey Ayare	61	234	20,466		
Jedida (Thioum Bal)	62	336	20,802		
Kedoure	63	528	21,330		
Keleyla[3]	64	102	21,432	5-	21,379
Kerbale	65	72	21,504		
Lemragha	66	84	21,588		
Magha	67	252	21,840		
Mou El Barke	68	180	22,020		
NBeike Teri	69	198	22,218		
Nidhame	70	252	22,470		
Oudeye Nouss	71	588	23,058		
Oudei Nouss Debaye	72	186	23,244		
Ould Moilid	73	384	23,628		
Redeidhia	74	658	24,286		
Sedra	75	402	24,688		
Shelkha Beidha	76	240	24,928		
Simsia (Smeissiya)	77	126	25,054		
Thoiumbal	78	504	25,558		
Tijania	79	138	25,696		
Tijare	80	336	26,032	6-	25,938
Touichitt	81	132	26,164		
Touisil Ehol Boubacar	82	156	26,320		
Treibe El Hamra Chouawve	83	48	26,368		
Verjerke 1 Debaye 2 Boubahrezke 2	84	120	26,488		
Ver Jerke 2	85	60	26,548		
Ver Leachencha	86	762	27,310		
Verleine	87	114	27,424		
Zleilioue	88	24	27,448		
Boumdeid Nouveau	89	730	28,178		
Aagrane	90	68	28,246		
Agweilil Touga	91	46	28,292		
Boumdeid Ancien	92	382	28,674		
Broude	93	348	29,022		
Dahara	94	46	29,068		
Dakhle	95	103	29,171		
Devae	96	160	29,331		
El Bahrye	97	80	29,411		
El Guimbe	98	194	29,605		
Gandeiga	99	34	29,639		
Hassey Tine	100	325	29,964		
Jelwa	101	148	30,112		
Kouz[4]	102	638	30,750	7-	30,497
Laghche 1	103	148	30,898		
Laghche 2	104	177	31,075		
Leftah	105	376	31,451		
Legdeim 1	106	125	31,576		

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen
Legdeim 2	107	148	31,724	
Igleib	108	450	32,174	
Legneb	109	718	32,892	
Legsi	110	46	32,938	
Lemhamel	111	131	33,069	
Lemnagae	112	125	33,194	
Rag	113	194	33,388	
Sed Ad Taleb	114	137	33,525	
Tevaraditt	115	103	33,628	
Vrae Sder	116	217	33,845	
Guerou[5]	117	10,399	44,244	8, 9, 10
Adlet Ehel Moulaye	118	224	44,468	
Adlet Ehel Sehraine	119	11	44,479	
Ainit Sehara	120	17	44,496	
Baghdade	121	67	44,563	
Bamoire	122	521	45,084	
Bedeizougue	123	168	45,252	
Bouguarve	124	67	45,319	
Boutiathe	125	168	45,487	
Chkata	126	224	45,711	
Daklet Kourouraye	127	90	45,801	
Diouk	128	174	45,975	
El Ghayere	129	3,024	48,999	11- 48,733
Elmessyele	130	157	49,156	
Eweinet Elvilla	131	28	49,184	
Gueive	132	302	49,486	
Hevrett Ouyoune	133	45	49,531	
Kamour	134	1,775	51,306	
Lektatine	135	168	51,474	
Lemghass	136	112	51,586	
Lemtewegue	137	49	51,635	
Moudly	138	162	51,797	
Ntakatt	139	1,960	53,757	12- 53,292
Tegadit Ehil Boige	140	224	53,981	
Tegadit Ehil Henoune	141	17	53,998	
Tegadit Iriji	142	56	54,054	
Weide Ijride	143	392	54,446	
Wedei Rahme	144	168	54,614	
Ziyara	145	58	54,672	
Ain Rahma	146	101	54,773	
Amredji	147	269	55,042	
Aroueji	148	56	55,098	
Arzake	149	140	55,238	
Barde	150	56	55,294	
Bellewar	151	694	55,988	
Benbisale	152	168	56,156	
Berelle	153	179	56,335	
Bou Gadoum	154	252	56,587	
Bou Gueara	155	560	57,147	
Bou Guemara	156	101	57,248	
Bou Hevra	157	39	57,287	
Bou Mlane	158	246	57,533	
Bou Naeje	159	56	57,589	

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen
Chegue (Weide Senna)	160	102	57,691	
Chtibe	161	207	57,898	13- 57,851
Dakhlet Dembe	162	112	58,010	
Dar Ould Taleb	163	56	58,066	
Diandiourou	164	224	58,290	
Djegoume	165	112	58,402	
Djemme	166	157	58,559	
Eghewratt Boutweletmit	167	745	59,304	
Eguenni	168	162	59,466	
Ejare	169	34	59,500	
El Fouz	170	56	59,556	
El Meskine	171	84	59,640	
Fam Lekdeiratt	172	1,349	60,989	
Ferrenni	173	90	61,079	
Foulbedieri	174	118	61,197	
Gayde	175	258	61,455	
Ghile	176	78	61,533	
Gourmel	177	207	61,740	
Guete Legleye	178	112	61,852	
Guiguihe	179	123	61,975	
Gvava	180	179	62,154	
Hassi El Barka	181	11	62,165	
Hassi Maryeme	182	112	62,277	
Hsey Devea	183	90	62,367	
Hsey Dhenne	184	168	62,535	14- 62,410
Hsey El Berkaye	185	230	62,765	
Hsey Nouss	186	448	63,213	
Hsey Tematt	187	78	63,291	
Jdour	188	118	63,409	
Levtenni	189	130	63,539	
Kendra	190	722	64,261	
Kiffa[6]	191	24,472	88,733	15, 16, 17, 18, 19
Kouroudjele	192	689	89,422	
Kreirett Chareb	193	185	89,607	
Kreirett El Atchane	194	106	89,713	
Legrane	195	1,260	90,973	20- 89,764
Lemvraique	196	112	91,085	
Lemserta	197	11	91,096	
Lemzeimett	198	168	91,264	
Lereigue	199	39	91,303	
Levcheiche	200	302	91,605	
L'veiya	201	218	91,823	
Magta Sveire	202	39	91,862	
M'Bane	203	56	91,918	
M'Beidra	204	17	91,935	
M'Beighir	205	34	91,969	
Meila	206	140	92,109	
Meil Meil	207	11	92,120	
Melgue	208	90	92,210	
Messiyel Teidouma	209	112	92,322	
Mouchgag	210	319	92,641	
M'Sab El Gharegue	211	151	92,792	
Nouamiline	212	409	93,201	

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen	
Ould Kouni	213	448	93,649		
Oumou El Khez 1	214	246	93,895		
Oumou El Khez 3	215	90	93,985		
Ouyoune Ehel Isse Bewbe	216	487	94,472	21-	94,323
Rass El Vil	217	414	94,886		
R'Kab	218	90	94,976		
Roumde	219	280	95,256		
Samougua	220	314	95,570		
Soudou	221	476	96,046		
Tahmere	222	84	96,130		
Taskaye	223	140	96,270		
Tenguinni	224	118	96,388		
Tezekre	225	179	96,567		
Tguigue	226	146	96,713		
Tissame	227	308	97,021		
Toumeimirett Ejeavra	228	56	97,077		
Toueimratt	229	28	97,105		
Vreikike	230	280	97,385		
Waad Radha	231	353	97,738		
Wekre	232	112	97,850		
Werti	233	39	97,889		
ZBeiratt	234	112	98,001		
Kankossa	235	2,708	100,709	22-	98,882
Adelegane	236	70	100,779		
Agmamine	237	445	101,224		
Agouanit	238	120	101,344		
Agouanit Ehel Aidout	239	86	101,430		
Aizouba	240	131	101,561		
Akabaye	241	388	101,949		
Archane Hamoud	242	97	102,046		
Areyridh	243	34	102,080		
Arweiji	244	57	102,137		
Atchane	245	137	102,274		
Atila	246	182	102,456		
Aweinat Dheleb Peulh	247	63	102,519		
Aweinat Dheleb Maures	248	125	102,644		
Awoinit Zbil	249	154	102,798		
Bambeire	250	40	102,838		
Barda	251	137	102,975		
Batha Ehel MBareck	252	51	103,026		
Batha Ehel M'Keitri	253	40	103,066		
Batha Ehel Seigue	254	120	103,186		
Bedne	255	154	103,340		
Bembi Saleh[7]	256	251	103,591	23-	103,441
Benara	257	51	103,642		
Bilmizawoud	258	46	103,688		
Blajmil	259	211	103,899		
Boudioubaye Diami	260	40	103,939		
Boudioubaye Ehel Abeidy	261	86	104,025		
Boukhachb	262	103	104,128		
Boulel	263	34	104,162		
Bounass	264	63	104,225		
Bou Srewil	265	268	104,493		

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen
Cheberni	266	114	104,607	
Cheg El Baghari	267	80	104,687	
Cheg Foutankobe	268	68	104,755	
Cheg Louteidatt	269	91	104,846	
Chegueig Dhalma	270	103	104,949	
Cheigueig Levraghle	271	51	105,000	
Chig	272	148	105,148	
Chigaou Bourgouni	273	80	105,228	
Chiguey Baba Kaw	274	68	105,296	
Chiguey Fhieyia	275	57	105,353	
Chig Woid Sersar	276	86	105,439	
Daghfeg MBoiloudy	277	34	105,473	
Daghfeg Mel Ainine	278	91	105,564	
Daghfeg Sidi	279	29	105,593	
Debaye Magha	280	114	105,707	
Debaye Niaghle	281	80	105,787	
Debaye Ifra	282	23	105,810	
Di	283	57	105,867	
Diafaye Alpha	284	34	105,901	
Diafaye Leyre	285	68	105,969	
Diafaye MBaye	286	57	106,026	
Diafaye Mody Niade	287	29	106,055	
Diafaye Saidou	288	34	106,089	
Diafaye Soubaye	289	80	106,169	
Diandiarrou	290	200	106,369	
Diegoum	291	114	106,483	
Djib	292	34	106,517	
Djibeib	293	160	106,677	
Dvea	294	154	106,831	
El Awje 1	295	131	106,962	
El Awje 2	296	279	107,241	
El Awje Lemdheibab	297	125	107,366	
El Baghoui	298	86	107,452	
El Erg	299	302	107,754	
El Gora	300	171	107,925	
El Ghar	301	23	107,948	
El Hnoikiya	302	120	108,068	24- 108,000
El Mabrouklekhadhar	303	63	108,131	
Ereir	304	251	108,382	
Erg Ellemal	305	34	108,416	
Faraa	306	171	108,587	
Garalla Elminvga	307	296	108,883	
Garalla Medene	308	29	108,912	
Garalla Menkoussa	309	553	109,465	
Garalla Paris	310	450	109,915	
Goupou Diedyi	311	17	109,932	
Gourel Dadi	312	34	109,966	
Gourel Demba Thieboub	313	29	109,995	
Gourel Falli	314	257	110,252	
Gourel Pate	315	57	110,309	
Gourel Sada	316	40	110,349	
Gourel Sileye Djigo	317	29	110,378	
Goweira El Bedha	318	108	110,486	

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen	
Goweira El Khadra	319	57	110,543		
Goweira Teidouma	320	182	110,725		
Guervava	321	302	111,027		
Guervava Ehel Boiba Didy	322	74	111,101		
Gueveira	323	154	111,255		
Habibiya Maure	324	68	111,323		
Habibiya Peulh	325	57	111,380		
Haikame	326	131	111,511		
Harach Beida	327	160	111,671		
Hartane	328	279	111,950		
Hel Sehel Foulabes	329	171	112,121		
Henerdou	330	57	112,178		
Ibachline	331	68	112,246		
Iriji El Khachbaya	332	46	112,292		
Jifteuni	333	257	112,549		
Kawam[8]	334	17	112,566	25-	112,559
Kayout	335	86	112,652		
Keibab	336	103	112,755		
Keivalla	337	239	112,994		
Kelebelle Maures	338	57	113,051		
Kelebelle Peuhls	339	137	113,188		
Kelebelle Malal	340	40	113,228		
Khereni	341	80	113,308		
Kimbiss	342	74	113,382		
Kmache Maures	343	57	113,439		
Kmache NGaye	344	57	113,496		
Kmach Wouro Hogo	345	40	113,536		
Koundiandji	346	114	113,650		
Kouye	347	450	114,100		
Le Afia	348	40	114,140		
Lebhaire	349	222	114,362		
Lebheire	350	57	114,419		
Legoissiya	351	114	114,533		
Lehmeikiya Hel Taleb	352	63	114,596		
Lehraijat	353	57	114,653		
Lekhtouta	354	143	114,796		
Lekhtouta Oulad Maintesse	355	108	114,904		
Lekhtouta Samba	356	23	114,927		
Lemgheita	357	610	115,537		
Lidara	358	40	115,577		
Ligleita	359	143	115,720		
Loudeye Boundoukobe	360	239	115,959		
Loudye Ehel Cheyis	361	285	116,244		
Loudeye Foulabes	362	143	116,387		
Loudeye Talaba 1	363	182	116,569		
Loudeye Talaba 2	364	80	116,649		
Loumbi	365	80	116,729		
Louveid	366	34	116,763		
Massiyal Lebiyadh	367	183	116,946		
MBeighir	368	57	117,003		
Medeire	369	51	117,054		
Messiel El Laham[9]	370	86	117,140	26-	117,118
Messiel Teidouma	371	171	117,311		

Village Name	Village Number	Population	Cumulative Population	Clusters Chosen
Messiel Yatta	372	137	117,448	
Miskine	373	137	117,585	
Mkhaizino	374	125	117,710	
Moile	375	262	117,972	
M'sab El Boune	376	57	118,029	
M'sab Sidi Mohamed	377	160	118,189	
M'Saib Zirg	378	74	118,263	
M'soub Weringuel	379	86	118,349	
NDaouda Arweiji	380	171	118,520	
NDaouda El Jama	381	182	118,702	
Ndayniye	382	211	118,913	
Niargo	383	108	119,021	
Oudhene Levrass Hel Hamady	384	86	119,107	
Oudhene Levrass Radhy	385	86	119,193	
Oudhene Levrass Sidi Mohamed	386	234	119,427	
Ould Khouyaty	387	80	119,507	
Ould Kouny	388	410	119,917	
Roumde Tezekre	389	211	120,128	
Sadra	390	325	120,453	
Samouga	391	34	120,487	
Sonie	392	610	121,097	
Seifar	393	57	121,154	
Selleme	394	114	121,268	
Seyel	395	319	121,587	
Sey Hamed Taleb[10]	396	97	121,684	27- 121,677
Souroumelli	397	171	121,855	
Tabal Samba Diambar	398	11	121,866	
Tabal Worde	399	182	122,048	
Tabal Wouro Mody	400	148	122,196	
Tabal Yero NDoungou	401	171	122,367	
Tabilanke	402	51	122,418	
Tachot El Khadar	403	51	122,469	
Teidouma El Meh Mouda	404	47	122,516	
Texithieine	405	86	122,602	
Teskaye	406	91	122,693	
Tezekre	407	211	122,904	
Thiermguel Dole	408	23	122,927	
Tichouteu	409	40	122,967	
Tney Kiba	410	86	123,053	
Tou Noimiratt	411	34	123,087	
Weringuel	412	393	123,480	
Weringuel El Hadj O/ Zemal	413	29	123,509	
Weringuel Hel Malam	414	154	123,663	
Woide Senaa	415	86	123,749	
Woide Sersar	416	245	123,994	
Wouro Diogou	417	46	124,040	
Wouro NGouda	418	23	124,063	
Yengui	419	142	124,205	
Zaene	420	40	124,245	
ZBeira	421	29	124,274	
Hamed Poste	422	342	124,616	
Acreidid	423	143	124,759	
Afrara I	424	57	124,816	

Village Name	Village Number	Population	Cumulative Population		Clusters Chosen
Afrara II	425	34	124,850		
Afrara MBareck	426	57	124,907		
Afrara Oulad Mayemtess	427	137	125,044		
Aim Tess Maures	428	359	125,403		
Aim Tess Peulh	429	51	125,454		
Alanguede	430	68	125,522		
Baghdad	431	114	125,636		
Bele	432	63	125,699		
Bouhabche Ehel Aimar I	433	171	125,870		
Bouhabche Ehel Aimar II	434	633	126,503	28-	126,236
Bouhabche Ehel Lehwedy	435	200	126,703		
Boundou Worde	436	23	126,726		
Chalkhat MBelwat	437	228	126,954		
Chbar	438	86	127,040		
Chgueig	439	17	127,057		
Chkala	440	359	127,416		
Choueigharha	441	143	127,559		
Dakhle	442	74	127,633		
Dar Salam (Habibiye)	443	29	127,662		
Debaye Ismail	444	29	127,691		
Debaye Teidouma	445	68	127,759		
Derik Guervava	446	17	127,776		
Derik Keleylaya	447	108	127,884		
Diouguina	448	86	127,970		
Diatourou	449	46	128,016		
Ehel Aly	450	57	128,073		
Ehel Hamoinse	451	74	128,147		
El Dhalle	452	143	128,290		
El Mana	453	114	128,404		
Eyoune Levial	454	131	128,535		
Foile	455	97	128,632		
Foile Bekreye	456	137	128,769		
Gara El Mehroude	457	17	128,786		
Gourel Hadji	458	29	128,815		
Gourel MBoylandi	459	34	128,849		
Gourel NGaye	460	29	128,878		
Hamdat	461	80	128,958		
Hamod	462	29	128,987		
Iziwaz	463	462	129,449		
Iziwaz Med Lemine	464	17	129,466		
Khachba	465	200	129,666		
Dhalawourou	466	74	129,740		
Khalwa	467	40	129,780		
Khanguel Mahra Maures	468	143	129,923		
Khanguel Mahra Peulhs	469	40	129,963		
Ksar Saleck	470	12	129,975		
Leghlig	471	57	130,032		
Lehraije	472	23	130,055		
Lehwara	473	177	130,232		
Lebneye	474	120	130,352		
Lighara	475	68	130,420		
Mamoyra	476	74	130,494		
Maoudach	477	154	130,648		

Village Name	Village Number	Population	Cumulative Population		Clusters Chosen
Maoudach	478	97	130,745		
Maoudach Hel Bousalif[11]	479	57	130,802	29-	130,795
Messiel	480	86	130,888		
Messiel Leagares	481	23	130,911		
Minteikha	482	57	130,968		
Moutaileg Bouhabche	483	74	131,042		
Moyli	484	40	131,082		
NDerniye	485	502	131,584		
Oulad Dora Zebel	486	171	131,755		
Ould Kehel	487	29	131,784		
Ould Laab Riad	488	325	132,109		
Om Kcheira	489	131	132,240		
Oum Lekhtour	490	80	132,320		
Oumou El Barka	491	57	132,377		
Oumou Khanarra	492	120	132,497		
Roumde	493	285	132,782		
Smeyine	494	80	132,862		
Tabal	495	143	133,005		
Tabal Teguelweze	496	678	133,683		
Tachot	497	74	133,757		
Tachot Teissir	498	46	133,803		
Tafra Kotche	499	291	134,094		
Tafra Poudra	500	507	134,601		
Tamout + Lekwar	501	205	134,806		
Tamourt Lekwar Hel Telmoudy	502	114	134,920		
Tanaha	503	319	135,239		
Tbeibil	504	34	135,273		
Teguel Weze Maures	505	160	135,433	30-	135,354
Teguel Weze Peuhls	506	86	135,519		
Teissir	507	148	135,667		
Tengal	508	148	135,815		
Thiemdebe	509	51	135,866		
Tichilit Eyda	510	34	135,900		
Tlamid	511	137	136,037		
Vreyvira	512	125	136,162		
Wouro Mody Mala	513	23	136,185		
Zarac	514	34	136,219		
Zoueikiya Abderrahmane	515	11	136,230		
Zraguig	516	97	136,327		
Zoueikiya	517	325	136,652		
Dissaghe	518	84	136,736		
Guervava Mahmoud	519	40	136,776		

CLUSTER LISTING

See notes from the village listing for replacements of these original clusters

1 - HSSEY SIDI
2 - AKOUATIL
3 - BOULAHRATH
4 - EL GHEBRA
5 - KELLEILLA
6 - TIJARRE
7 - JELWA (BHU)
8 - GUEROU 1
9 - GUEROU 2
10 - GUEROU 3
11 - EL GHARAIRE
12 - N'TAKATT
13 - CHTIB (BHU)
14 - HSSEY DHINE (BHU)
15 - KIFFA (JEDIDDA)
16 - KIFFA (SAGUATAR)
17 - KIFFA (KHADIMA)
18 - KIFFA (TOUEIMIRITT)
19 - KIFFA (SEIF)
20 - LEGRANE
21 - OUDEY EHEL ISSA BABE
22 - KANKOSSA
23 - BEDNA
24 - EHEL NEKYA
25 - HAIKAMA
26 - MESSIEL LEHMAME
27 - HSSEY AHMED TALEB
28 - BOUHBCHA AIMAR
29 - OUMA OUDACHE
30 - TEGUEL WAZA

BHU Villages Chosen After Original 30 Clusters

31 - RASS ELVIL
32 - LEGNEB
33 - VOUNTILLY
34 - AIN RAHMA
35 - AINT ZBIL
36 - ELGUERDE
37 - DISSAGH

NOTES

1. Replaced by Agtawatia in the field because it was inaccessible.

2. Replaced by Hassi d'Ahot in the field because it was inaccessible.

3. Replaced in the field by Lebher because it was inaccessible.

4. Replaced during selection process by the previous village on the list (Jelwa) because the village was empty.

5. Note that Guerou divides naturally into three quarters and these were used to define the three clusters there.

6. Kiffa is made up of seven quarters and we assumed, given no evidence to the contrary, that each contained roughly the same population. Five of these were selected at random. The five were Jedida, Saguataar, Khadima, Toueimiritt, and Seif.

7. Replaced during selection by Bedna because this village no longer exists. Bedna was subsequently replaced by Sayel in the field because it was inaccessible.

8. Replaced during selection by Haikama because it no longer exists (Haikama closest Peulh village).

9. Replaced in the field by Kelebele because it was inaccessible.

10. Replaced in the field by Kewala because it was inaccessible.

11. Replaced in the field by Ould Moussa because it was inaccessible.

APPENDIX F

Summary of Results of the Final Evaluation
Child Survival Survey

All questions were posed to mothers who have a child under 24 months of age at the time of the survey. Unless specified in parentheses, n=210 in region and n=70 for the BHU villages.

INDICATOR	REGION[1]	BHU[2]
Mean age of the mother in years	27.5	28.1
Mean age of child in months	9.9	10.4
Rate of illiteracy among mothers	74.8%	70.0%
Percent of mothers currently breast-feeding child	95.2%	98.6%
Timing of start of breast-feeding after the birth of the child		
In the first hour after birth	7.6%	7.1%
Between one and eight hours after birth	18.6%	20.0%
More than eight hours after birth	73.3%	71.4%
Percent of mothers giving breast on demand	94.3%	95.7%
Age of child at which mothers said food should be added to breast milk		
Between four and six months (recommended)	47.6%	62.9%
Before four months	9.0%	14.3%
After six months	24.3%	5.7%
Percent of mothers mentioning (without prompting) that oil should be part of weaning food	20.0%	54.3%
Percent of mothers mentioning (without prompting) that foods rich in iron should be part of weaning food	49.5%	57.1%
Percent of mothers knowing purpose of Vitamin A capsule	22.2%	51.4%
Percent of mothers mentioning (without prompting) at least one food source that protects against night blindness	42.8%	70.0%

INDICATOR	REGION[1]	BHU[2]
Percent of mothers reporting child with diarrhea in past two weeks	31.9%	25.7%
Percent of mothers breast feeding as much as or more than normal while child had diarrhea	(n=67) 56.7%	(n=18) 88.9%
Percent of mothers giving as much as or more than normal to drink while child had diarrhea	(n=67) 62.7%	(n=18) 88.9%
Percent of mothers giving some form of ORT while the child had diarrhea	(n=67) 41.8%	(n=18) 61.1%
Percent of mothers having received at least two doses of tetanus toxoid	40.5%	62.9%
Percent of mothers knowing that tetanus toxoid protects the mother and the new-born	14.8%	25.7%
Vaccination coverage rates- all children <24 months		
BCG	50.5%	60.0%
Polio first dose	46.7%	55.7%
Polio second dose	27.1%	41.4%
Polio third dose	16.7%	30.0%
DPT first dose	45.7%	54.3%
DPT second dose	26.7%	41.4%
DPT third dose	16.7%	30.3%
Measles	19.0%	34.3%
Infant completely vaccinated	11.0%	27.1%
Vaccination coverage rates—children 12-24 months	(n=90)	(n=37)
BCG	58.9%	81.1%
Polio first dose	60.0%	81.1%
Polio second dose	42.2%	62.2%
Polio third dose	28.9%	45.9%
DPT first dose	58.9%	81.1%
DPT second dose	41.1%	62.2%
DPT third dose	28.9%	45.9%
Measles	41.1%	59.5%
Infant completely vaccinated	23.3%	45.9%

1. Refers to the results of the 30 cluster survey which is representative of the entire region

2. Refers to the basic health unit villages in which World Vision placed most of its emphasis.

APPENDIX G

SUSTAINABILITY REPORT
(FORMAT FOR SELECTED RESPONSES)[1]

E. Participation de la Communauté

E1. Nom du chef de la communauté

. . . . . .

Nom des groupes représentés

. . . . . .

E2. Les activités perçues comme étant efficaces pour réaliser les besoins de santé primaires.

a. Vaccination

b. Lutte contre les maladies diarrhéiques

c. Jardinage

d. Vitamine A

autres:

. . . . . .

. . . . . .

. . . . . .

E3. Nombre de personnes membres du comité de santé opérationel dans le village

. . . . . .

Combien souvent se réuni ce comité de santé?

. . . . . .

---

[1] See FY92 USAID Guidelines

E4. Comment étaient désignés les agents de santé?

___ Sur Proposition

___ Election

___ Liens de parenté

Est-ce-qu'ils representent tout le village?

___ Oui

___ Non

Commentaire:

. . . . . .

. . . . . .

. . . . . .

E5. Quels sont les problèmes les plus importants que ce comité de santé rencontre?

. . . . . .

. . . . . .

. . . . . .

E6. Quelles sont les ressources qui permettent d'encourager la continuation des activités du projet après l'épuisement des fonds des donateurs avec lesquels le village a participé?

. . . . . .

. . . . . .

. . . . . .

E7. Quelles sont les raisons de la réussite ou de l'echec du comité de fournir les ressources qui assurent la continuation effective des activités du projet?

.....

.....

.....

Autres commentaires, observations, impressions

.....

.....

.....

1993 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 9/30/93)			Projected Expenditures Against Remaining Obligated Funds			Total Agreement Budget (Columns 1 & 2) (09/01/89 to 09/30/93)		
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	60,634	28,034	88,668	(40,634)	67,966	27,332	20,000	96,000	116,000
B. Equipment	8,222	132,211	140,433	9,618	(50,051)	(40,433)	17,840	82,160	100,000
C. Services/Consultants	36,302	6,131	42,433	19,698	45,869	65,567	56,000	52,000	108,000
SUB-TOTAL I	105,158	166,376	271,534	(11,318)	63,784	52,466	93,840	230,160	324,000
II. EVALUAT./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%)	62,826	174,685	237,511	0	11,004	11,004	62,826	185,689	248,515
SUB-TOTAL III	62,826	174,685	237,511	0	11,004	11,004	62,826	185,689	248,515
IV. OTHER PROGRAM COSTS									
A. Personnel	170,166	502,839	673,005	29,346	(40,839)	(11,493)	199,512	462,000	661,512
B. Travel/Per diem	106,893	126,662	233,555	(8,893)	58,338	49,445	98,000	185,000	283,000
C. Other Direct Costs	26,534	123,363	149,897	54,288	(57,363)	(3,075)	80,822	66,000	146,822
SUB-TOTAL IV	303,593	752,864	1,056,457	74,741	(39,864)	34,877	378,334	713,000	1,091,334
TOTAL FIELD	471,577	1,093,925	1,565,502	91,423	59,924	151,347	563,000	1,153,849	1,716,849

APPENDIX H

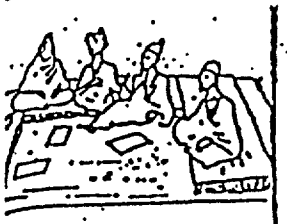
APPENDIX I

REPUBLIQUE ISLAMIQUE DE MAURITANIE
MINISTERE DE LA SANTE ET DES AFFAIRES SOCIALES

RAPPORT D'ACTIVITES DE L'HYGIENISTE/SECOURISTE

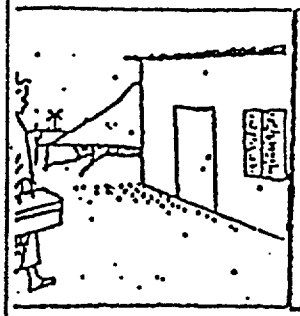
PERIODE DE: À:

VILLAGE DE:

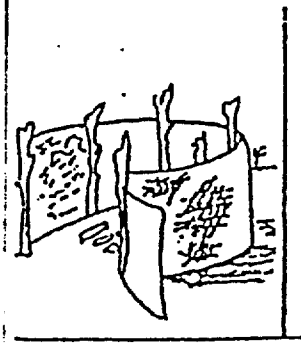


Nombre de reunions du CSC. عدد اجتماعات اللجنة الصحية

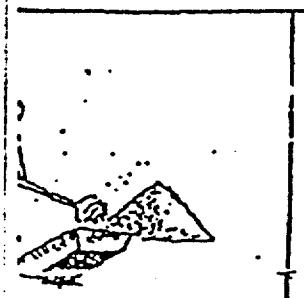
Nombre de séances d'E.P.S* عدد حصص التوعية الصحية



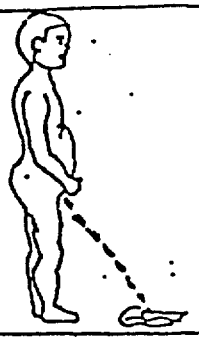
Nombre de visites à domicile. عدد الزيارات المنزلية



Nombre de latrines construites عدد المراحيض المبنية

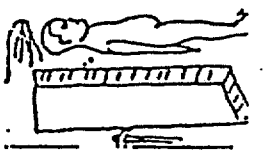


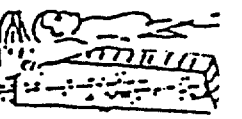
Nbre de trous à ordures construits عدد حفرات القمامات



Nombre de cas de bilharziose — عدد حالات البلهراسيا

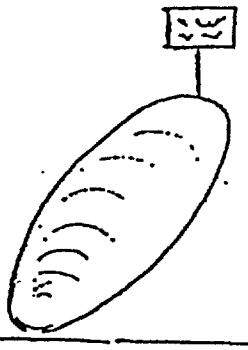
Nombre de cas de ver de Guinée — عدد حالات "يورُوث"

ROUGEOLE nombre de cas — عدد حالات الحصباء	Nombre de décès — عدد الوفيات
Moins de 5 ans — اصغر من سنوات	
Plus de 5 ans — اكبر من سنوات	

Coqueluche nombre de cas — عدد حالات السعال الديكي	Nombre de décès — عدد الوفيات
Moins de 5ans, — اصغر من سنوات	
Plus de 5ans — اكبر من سنوات	

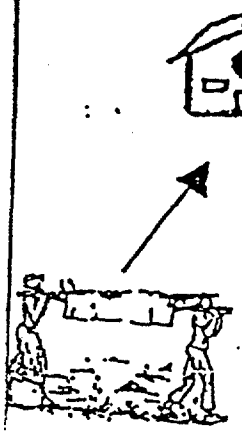
Nombre de décès chez les enfants de 0 à 5 ans

عدد الوفيات لدى الأطفال من 0-5 سنوات



Nombre de décès chez les enfants de plus de 5 ans et les adultes

عدد الوفيات لدى الأطفال الأكبر من 5 سنوات والبالغين



Nombre d'évacuations au dispensaire

عدد الحالات الموجهة الى المستوصف

APPENDIX J

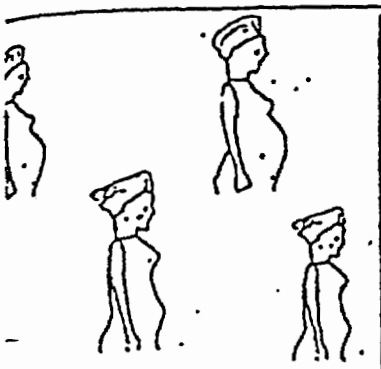
REPUBLIQUE ISLAMIQUE DE MAURITANIE
MINISTERE DE LA SANTE ET DES AFFAIRES SOCIALES

RAPPORT D'ACTIVITES DE L'ACCOUCHEUSE TRADITIONNELLE

PERIODE DE: A:

VILLAGE DE:

عدد اجتماعات التوعية الصحية المنظمة من طرف الولادة التقليدية.



Nombre de femmes enceintes recensées

عدد النساء الحمل.

Nombre de femmes ayant fait une fausse couche

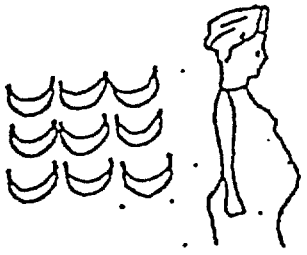
عدد النساء اللواتي أصبنة بإجهاض

Nombre de femmes ayant subi la visite du 3è mois

عدد النساء اللواتي فحصن في الشهر الثالث

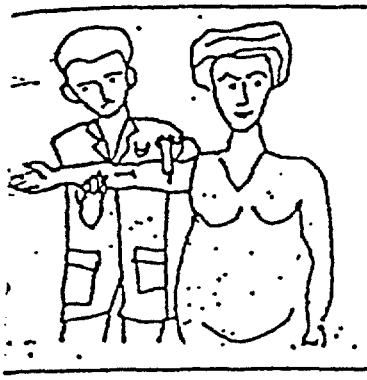
Nombre de femmes ayant subi la visite du 6è mois

عدد النساء اللواتي فحصن في الشهر السادس



Nombre de femmes ayant subi la visite du 9è mois

عدد النساء اللواتي فحصن في الشهر التاسع



Nombre de femmes ayant reçu le VAT عدد النساء اللواتي تلقين ضد الكزاز

1ère dose الجرعة الأولى	2ème dose الجرعة الثانية

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

عدد النساء اللواتي وجدن وقاية من فقر الدم

Nombre de femmes anémiées dépistées au cours des visites

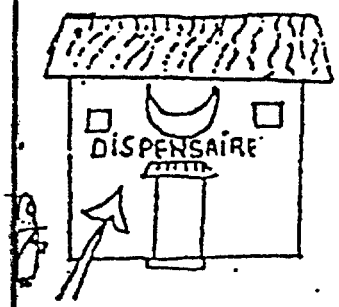
عدد النساء المصابات بفقر الدم

Nombre de femmes dénutries dépistées au cours des visites

عدد النساء المصابات بسوء التغذية

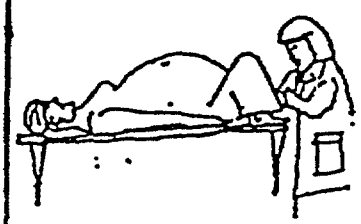
Nombre de femmes oedemateuses dépistées au cours des visites

عدد النساء المصابات بالورم



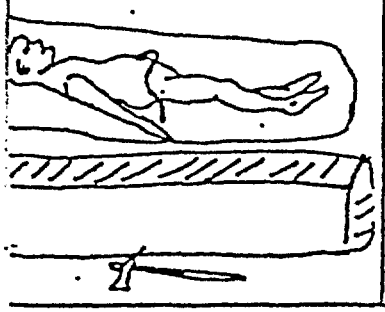
Nombre de femmes enceintes évacuées au dispensaire

عدد النساء الحمل الموجهات إلى المستوصف



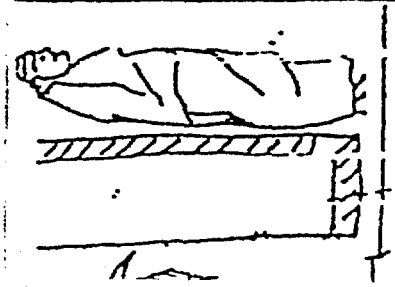
Nombre d'accouchements effectués par l'AT

عدد الولادات المجراة من طرف المولدة التقليدية



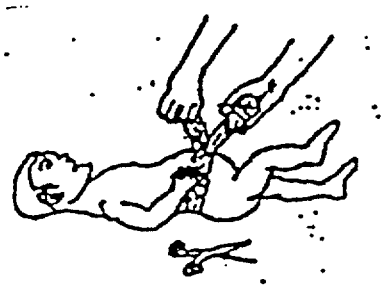
Nombre de nouveaux nés décédés

عدد وفيات المواليد حديثا



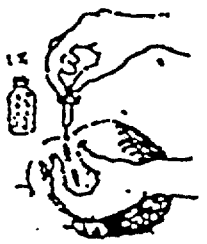
Nombre de femmes décédées lors de l'accouchement

عدد وفيات النساء خلال الولادة



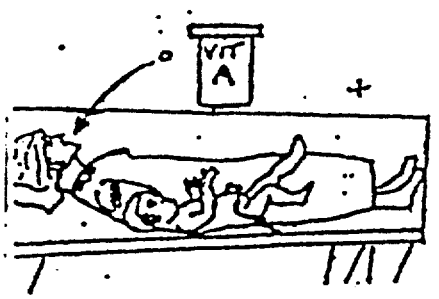
Nombre de pansements ombilicaux faits

عدد تطهيرات السرة



Nombre de nouveaux nés ayant reçu du nitrate d'argent

عدد المواليد حديثا الذين أعطيت لهم قطرة من نيترات دزجاه.



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

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

APPENDIX K

REPUBLIQUE ISLAMIQUE DE MAURITANIE
MINISTERE DE LA SANTE ET DES AFFAIRES SOCIALES

ENQUETE COMPLEMENTAIRE ANNUELLE
HYGIENE / PREVENTION

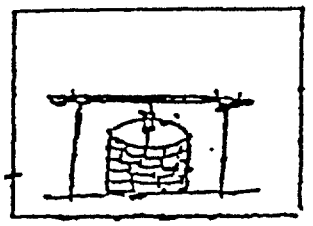
ANNEE: DATE:

VILLAGE DE:

Nombre total de familles: العدد الاجمالي للعائلات

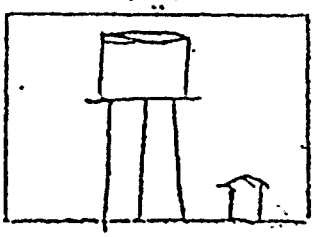
Source d'approvisionnement en eau — مصدر التزويد بالماء

بير



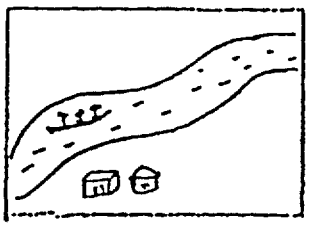
Puits

حنفية



Forage

نهر



Fleuve

مستنقع

Marigot

Nombre de familles traitant l'eau par filtration.

عدد العائلات التي يصفي الماء

Nombre de familles traitant l'eau par javélisation.

عدد العائلات التي يستعمل "جفل" في الماء

0 à 1 AN — من ٥ الى سنة واحدة

0-1

1 à 5 ANS — من سنة الى ٥ — من ١ الى ٥ سنوات

Nombre d'enfants dans la zone rouge

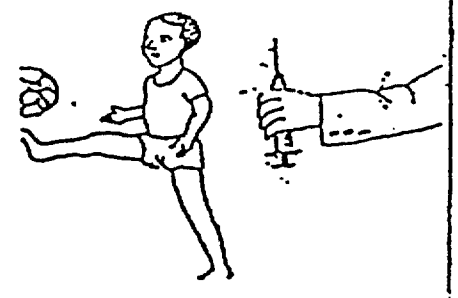
عدد الأطفال في المنطقة الحمراء

Nombre d'enfants dans la zone jaune.

عدد الأطفال في المنطقة الصفراء

Nombre d'enfants dans la zone verte

عدد الأطفال في المنطقة الخضراء



enfants complétement vaccinés.

الأطفال الملقحون تماما

APPENDIX L

USAID FY92 GUIDELINES: SUSTAINABILITY ISSUES TO BE ADDRESSED BY THE PVO Child Survival PROJECT FINAL EVALUATION TEAM

A. Sustainability Status

A1. At what point does A.I.D. funding for Child Survival project activities end?

A2. At what point does the organization plan to cease Child Survival project activities?

A3. How have major project responsibilities and control been phased over to local institutions? If this has not been done, what are the plan and schedule?

B. Estimated Recurrent Costs and Projected Revenues

B1. Identify the key Child Survival activities that project management perceives as most effective and would like to see sustained.

B2. What expenditures will continue to be needed (i.e., recurrent costs) if these key Child Survival activities are to continue for at least three years after Child Survival funding ends?

B3. What is the total amount of money in U.S. dollars the project calculates will be needed each year to sustain the minimum of project benefits for three years after CS funding ends?

B4. Are these costs reasonable given the environment in which the project operates? (e.g., local capacity to absorb cost per beneficiary)

B5. What are the projected revenues in U.S. dollars that appear likely to fund some Child Survival activities for at least three years after A.I.D. CS funding ends?

B6. Identify costs which are not likely to be sustainable.

B7. Are there any lessons to be learned from this projection of costs and revenues that might be applicable to other Child Survival projects or to A.I.D.'s support of those projects?

C. Sustainability Plan

C1. Please identify number and position of project staff interviewed and indicate the extent of their involvement in project design, implementation and/or monitoring/ evaluation.

C2. Briefly describe the project's plan for sustainability as laid out in the DIP or other relevant A.I.D.

C3. Describe what sustainability promoting activities were actually carried out by the PVO over the lifetime of the project.

C4. Indicate which aspects of the sustainability plan the PVO implemented satisfactorily and which steps were never initiated. Identify any activities which were unplanned, but formed an important aspect of the PVOs sustainability effort.

C5. Did any counterpart institutions (MOH, development agencies, local NGOs, etc.) make a financial commitment to sustain project benefits? If so, have these commitments been kept?

C6. What are the reasons given for the success or failure of the counterpart institutions to keep their commitment?

D. Monitoring and Evaluation of Sustainability

D1. List the indicators the project has used to track any achievements in sustainability outputs and/or outcomes.

D2. Do these indicators show any accomplishments in sustainability?

D3. What qualitative data does the PVO have indicating a change in the sustainability potential of project benefits?

D4. Identify in-country agencies who worked with the PVO on the design, implementation, or analysis of the midterm evaluation and this final evaluation.

D5. Did the PVO receive feedback on the recommendations regarding sustainability made by the technical reviewers of the proposal and DIP? Did the PVO carry out those recommendations? If not, why not?

D6. Did the PVO carry out the recommendations regarding sustainability of the midterm evaluation team? If not, why not?

E. Community Participation

E1. Please indicate community leaders interviewed and indicate which group(s) they represent.

E2. Which Child Survival activities do community leaders perceive as being effective at meeting current health needs?

E3. What activities did the PVO carry out to enable the communities to better meet their basic needs and increase their ability to sustain effective Child Survival project activities?

E4. How did communities participate in the design, implementation and/or evaluation of Child Survival activities?

E5. What is the number of functioning health committees in the project area? How often has each met during the past six months? Please comment on whether committee members seem representative of their communities.

E6. What are the most significant issues currently being addressed by these health committees?

E7. What resources has the community contributed that will encourage continuation of project activities after donor funding ends?

E8. What are the reasons for the success or failure of the committees to contribute resources for continuation of effective project activities?

F. Ability and Willingness of Counterpart Institutions to Sustain Activities

F1. Please identify persons interviewed and indicate their organization and relationship to the Child Survival project.

F2. What linkages exist between the Child Survival project and the activities of key health development agencies (local/municipal/district/provincial/state level)? Do these linkages involve any financial exchange?

F3. What are the key local institutions the PVO expects to take part in sustaining project activities?

F4. Which Child Survival project activities do MOH personnel and other staff in key local institutions perceive as being effective?

F5. What did the PVO do to build skills of local MOH personnel or staff of key counterpart NGOs? Did they teach them to train CHWs or manage Child Survival activities once A.I.D. funding terminates?

F6. What is the current ability of the MOH or other relevant local institutions to provide the necessary financial, human and material resources to sustain effective project activities once CS funding ends?

F7. Are there project activities that counterpart organizations perceive as effective?

G. Project Expenditures

G1. Attach a pipeline analysis of project expenditures.

G2. Compare the budget for planned expenditures identified in the DIP with the actual expenditures at the end of the project. Were some categories of expenditures much higher or lower than originally planned?

G3. Did the project handle the finances in a competent manner?

G4. Are there any lessons to be learned regarding project expenditures that might be helpful to other PVO projects or relevant to A.I.D.'s support strategy?

H. Attempts to Increase Efficiency

H1. What strategies did the PVO implement to reduce costs, increase productivity, or make the project more efficient?

H2. What are the reasons for the success or failure of the attempts to reduce costs, increase productivity or efficiency of this project?

H3. Are there any lessons to be learned regarding attempts to increase efficiency that might be applicable to other PVO Child Survival projects or to A.I.D.'s support of these projects?

I. Cost-Recovery Attempts

I1. What specific cost-recovery mechanisms did the PVO implement to offset project expenditures? If cost-recovery was part of the project, who managed implementation?

I2. Estimate the dollar amount of cost-recovery obtained during the project. What percent of the project costs did this revenue cover? Did the cost-recovery mechanisms generate enough money to justify the effort and funds required to implement the mechanisms?

I3. What effect did any cost-recovery activity have on the PVO's reputation in the community? Did the cost-recovery venture result in any inequities in service delivery?

I4. What are the reasons for the success or failure of the household income-generating activities of this project?

I5. Are there any lessons to be learned regarding cost-recovery that might be applicable to other PVO Child Survival projects or to A.I.D.'s support strategy?

J. Household Income Generation

J1. Did the project implement any household income-generating activities?

J2. Estimate the dollar amount of income added to a family or household's annual income, as a result of the income-generating activity of the project.

J3. Did the revenues contribute to meeting the cost of health activities? What percentage of project costs did income generation cover?

J4. Are there any lessons to be learned regarding household income generation that might be applicable to other PVO Child Survival projects or A.I.D.'s support strategy?

K. Summary

K1. Please give a brief (no more than one page), succinct summary of the responses to the previous questions concerning:

* The project's accomplishments (in terms of outputs and/or outcomes) in enabling communities to meet their basic health needs and in promoting sustainability of effective Child Survival activities.

* The project's competence in carrying out its sustainability promoting activities.

* Any lessons to be learned regarding sustainability that might be applicable to other PVO Child Survival projects, and/or relevant to A.I.D.'s support of these projects.

K2. Attach a list of all members of the final evaluation team and indicate institutional affiliation.

APPENDIX M

WORLD VISION MAURITANIE
PROJECT SURVIE DE L'ENFANT/VITAMINE A—ASSABA

LES UNITES DE SANTE DE BASE (USB) III (INSTALLEES EN AVRIL 1993)

	VILLAGES	NOM DES H.S./A.T.	REMARQUES
	Department of Kiffa (K), Boumdeid (B), Guerou (G)		
1.	Samougha (K)	Mreim m/ Chrif (polyvalente)	
2.	Hssey Dhine (K)	Eghaya m/ Taleb Mahmoud (polyvalente)	
3.	Bejdour (K)	Zeinabou m/ Isselmou (polyvalente)	
4.	Djogoum (K)	Zeinabou m/ Moctar (polyvalente)	
5.	N'kailla (K)	Fatimetou m/ Moud (polyvalente)	
6.	Levcheicha (K)	Mint Boilil m/ Sidi (polyvalente)	
7.	Leveiya (K)	Natou m/ Hmaity (polyvalente)	
8.	Oulkouny (K)	Lalla m/ Sidi Aly (polyvalente)	
9.	Jreive (K)	Mariem m/ Mohamed Lemine (polyvalente)	
10.	Soudou (K)	Mint Ihitt (polyvalente)	
11.	Edemb (K)	Medaja m/ Salek (polyvalente)	
12.	Hameida (K)	Touetou m/ Tambgha (polyvalente)	
13.	Hassy Roukwa (K)	Lekweidem m/ Salek (polyvalente)	
14.	Elkerde (K)	Khadijetou m/ Boyé (polyvalente)	
15.	Ain Rahma (K)	Souelka m/ Rchid (polyvalente, ancien village)	
16.	Brouda (B)	Oumoulkeiry m/ Med Mahmoud (polyvalente)	
17.	Gumba (B)	Selmha m/ Amar (polyvalente)	
18.	Lemneiguea (B)	Zeinebou m/ Med Billal (polyvalente)	

USB II (INSTALLEES EN MARS 1992)

1.	Magtasféra (K)	Sidi M'tar o/ Rachid Rabiye m/ Nouss	
2.	Djimé (K)	Sidi Med o/ Ahmed Marieme m/ Ahmed	
3.	Freikika (K)	Bocar Sandigui Koumba Nyana	
4.	Aint Zbel (K)	Poulal Ba Moly Ba	
5.	Gaide (K)	Salif Samba Sira Ousmane Ba	
6.	Oumoulkeran (K)	Med Yehdih o/ Med Ahd Matlouba m/ Abderahmane	
7.	Vountilly (K)	Moustapha o/ Sidina Moila m/ Ethmane	
8.	Ch'tib (K)	Zeidane o/ El Mamy Seltana m/ Merzoug	
9.	Gourmel (K)	Med o/ Cheikh Sebali Feitme m/ Batme	Démissionnaire, juste après la formation.
10.	Tissane (K)	Lemrabott o/ Dey Fatimetou m/ Dey	
11.	Chkata (G)	Dah o/ Med Lemine	
12.	Bameira (G)	Med Abderrah o/ Nassredin	
13.	Gueiva (G)	Aicha m/ Sidi Abdallahi	
14.	Taghada Irij (G)	Sidi Moctar o/ Radhi	
15.	Rag (B)	Vala m/ Adeid Nass Tislem m/ Avgueirich	
16.	Legdeim II (B)	Kleithime m/ Dedde Zeinebou m/ N'dah	

U.S.B. I (INSTALLEES EN AVRIL 1990)

1.	Jelwa (B)	Lagdaf o/ Mahmoud Fatimetou m/ M'barek	
2.	Leftah (B)	Toutou m/ Med El Hadj Marieme m/ M'tar M'lud	
3.	Legneb (B)	Ahmed o/ Bilal Malouma Mmud L'la	
4.	Legleib (B)	Lemrabott o/ El Bar Marieme Val m/ Sidi Med	
5.	Boumdeid (B)	Marieme m/ Moustapha	Formée pour Dispensaire de Boumdeid sur demand du Hakème.
6.	Oumoulkhouz (K)	Isselmou o/ Mohamed Soueilka m/ Bilal	
7.	Ain Rahma (K)	Med El Haj o/ Cheikh Marieme m/ Sidi	abandon de l'A.S.C.
8.	Amredjiel (K)	Mohamedou o/ Sid Ahd Marieme m/ Yehdih	
9.	Gouvava (K)	Diallo Marieme Meimouna M'barom	
10.	Rass Elvil (K)	Zeinebou m/ Hamady (A.S.C.)	
11.	Ehel Barik (K)	Med Lemine o/ Abdellahi Teslem m/ Taleb	abandonné abandonnée
12.	Tissane (K)	Tiyeb Val o/ Tiyeb	remplacé, suite à sa maladie
13.	Dakhle (G)	Med Adderah o/ Memoud Fatimetou m/ Sidi	

U.S.B. - PRSSR (INSTALLEES EN 1988)

1.	Oudey Jrid (G)	Med o/ Carabah Vleila m/ Med El Abd.

2.	Oudey Rahma (G)	Moustapha o/ Boubacar Isslemhoum m/ Bechir
3.	Taghada Wassa (G)	Ahmed Taleb o/ Nourba Lekheira m/ Ramdane
4.	Dissagh (K)	M'Bareck o/ Saleck Sghaira m/ Hamady
5.	Bellewar (K)	Loudéa o/ Saleck Zaghara m/ Soueilik
6.	Ould Kouni (K)	Ahemedna o/ Kathara Soueilika m/ Mariem

APPENDIX N

RESUME EXECUTIF

World Vision Mauritanie recoit une subvention du bureau FVA/PVC DE L'USAID lui permettant de prolonger le Projet Survie de l'Enfant/Vitamine A conçu initialement pour deux ans à une periode de trois ans allant du 1er Octobre 1989 au 30 Septembre 1992. Après environ 15 mois , une interruption d'activité, dûe à la Guerre du Golfe, entraine la fermeture temporaire des bureaux de WVMPO. Le projet redemarrera après 10 mois d'inactivité en octobre 1991. Au même moment, une revision du Plan Initial d'execution Détaillée (DIP) est faite en collaboration avec les représentants du Ministère de la Santé en Assaba. Dans cette revision des objectifs du Projet, le principal changement concerne surtout l'accord de World Vision pour intégrer des efforts de formation dans le Programme des Soins de Santé Primaires (SSP) du Ministère de la Santé.

World Vision reçoit la permission de continuer ses activités jusqu'au 30 Septembre 1993, et l'Evaluation Finale se tient entre le 30 Aôut et le 15 Septembre de la meme année. Dans cette evaluation finale, World Vision est allée au-dela de tous les objectifs numériques relatifs à la formation des Agents de Santé Communautaire (ASC) -45 le personnel du MSAS -20 et la formation des Comités de Santé Communautaires (CSC) -45. Elle surpasse ses objectifs de promouvoir les activités de maraichages dans 90 villages ou coopératives. Elle atteint son objectif de promouvoir l'allaitement maternel et la rehydration orale dans ses villages-cibles: les Villages USB. Mais concernant les objectifs de 70% des femmes enceintes devant recevoir au moins deux doses anti-tetaniques dans les villages USB, WORLD VISION est tombée legerement en-deçà.

Tandis que dans les premières années, World Vision fait promouvoir intensivement la distribution de capsules de vitamine A aux enfants de 6 mois a 9 ans et aux meres qui viennent juste d'accoucher ; dans la dernière année, elle a eliminé totalement cette activité. Par conséquent, aucun objectif n'est mesurable. Comme la distibution de vitamine A a toujours été consideré comme une activité temporaire, et comme l'équipe d'evaluation voit d'une façon très évidente la croissance de la consommation d'aliments riches en vitamine A dûe à la promotion du maraichage, cette equipe reconnait la sagesse de la décision de World Vision a ce sujet.

Seul, le domaine de la vaccination n'a pas atteint les objectifs numériques. Considerant les circonstances locales, l'équipe d'évaluation voit que l'objectif initial des 70% d'enfants vaccinés avant leur premier anniversaire est irréaliste, par conséquent, elle n'est pas surprise du resultat obtenu.

Le Projet a donc largement atteint ses objectifs numériques. Cependant, la plus importante trace durable laissée par le projet dans la region, et peut-être au-dela des objectifs atteints, est apparemment son insistance pour la formation des travailleurs de santé. En effet, ces derniers sont en train de promouvoir activement les questions de santé dans plusieurs villages environnants de la région. En plus, des structures comme premier pas pour pousser les communautes a faire face eux-même à leur problèmes de santé, ont

été mises en place. Le maraichage est devenu une activité très importante dans l'ensemble de la region, et ce projet a joué un rôle important dans sa promotion. Finalement, à travers l'accent mis sur la formation du personnel du MSAS et son asssistance en vaccination et soins de santé primaires, le projet a contribué à l'affermissement de l'Institution au sein de la structure de l'Etat.

L'espoir de l'équipe d'évaluation est de voir de plus en plus de responsabilites entre les mains des autorités régionales. Ce processus vient de commencer et l'équipe espère qu'il continuera avec le projet qui suit. L'èquipe encourage aussi le projet qui suit de continuer à mettre l'accent sur l'education pour la santé, le processus participatoire de prise de decision au niveau du village, la consolidation de l'Institution et la collaboration etroite avec le DRASS, le Ministère du Developement Rural et les differentes agences des Nations Unies et ONG opérant dans la region.

APPENDIX O

Recommandations

L'equipe d'evaluation a fait les recommandations suivantes a WVM:

1. La transformation des communautes est la cle vers l'amelioration du bien-etre et de la sante des villageois. Presentement, avec le succes du projet courant et des Comites de Sante Communautaire, les communautes sont receptives aux nouvelles idees et facons de faire les choses. Les projets de suivis doivent profiter de cette occasion en or et diriger leurs activites vers les communautes motivees et aussi renforcer et/ou elargir les comites afin de leur permettre de repondre a des questions autres que la sante.

2. La collaboration et le partage des informations sur les projets avec les Nations-Unies et autres agences operant en Mauritanie sont tres importants. Un forum officiel ou formel doit etre etabli, il permettra le partage regulier des informations sur les activites du projet avec les Nations-Unies, le GVT, et les PVOs.

3. Les activites de developpement economique et de sante qui se deroulent hors des zones urbaines doivent etroitement faire impliquer le MDRE.

4. Les communautes ont besoin d'une meilleure comprehension de l'approche participatoire a la prise de decision. Avant que le comite du village ne soit etabli, les villageois doivent disposer d'assez d'informations concernant le systeme. Un accent doit etre mis, des le depart, sur la rupture avec " l'approche nourriciere".

5. Proceder a l'accumulation du savoir sur une seule personne afin de produire un travailleur de sante communautaire polyvalant reduit les chances d'acquisition de ce savoir. Il serait mieux d'avoir deux agents de sante dans chaque village.

6. Les cooperatives feminines doivent etre promues comme moyens et fins d'atteindre differents objectifs :
   - Messages d'hygiene
   - Programme d'alphabetisation
   - Transfer de technique /maraichage, assechement des vegetaux, etc.

7. La promotion du maraichage doit continuer. L'orientation et l'assistance a l'aide des graines, clotures, puits, et outils sont necessaires.

8. Le role de chaque membre des CSC doit lui etre defini. Chacun doit connaitre ses responsabilites et roles. Ces roles et responsabilites doivent etre expliques au village entier.

9. La preservation et l'assechement des vegetaux doivent etre utilises comme moyens pour resoudre les problemes de nutritions saisonniers et assurer un plus grand retour de l'investissement maraicher.

10. Les projets d'alphabetisation doivent etre promus ainsi que des projets de sante afin de mettre en valeur le message d'education de sante qui est transmis.

11. L'allaitement maternel doit etre l'objet d'une promotion continu et un accent particulier doit etre place sur ledon du colostrum au nouveau-ne. Les messages qui sont dissimines dans cette direction doivent viser les professionnels de la sante ainsi que les meres.

12. Les recherches qui mettent en valeur la prise de decision doivent etre concues dans les efforts des projets futurs. Les fonctionnaires de sante locaux doivent etre continuellement formes dans les domaines de la collecte des donnees et des techniques d'analyses afin qu'il soient activement impliques dans l'emploi des donnees generees par leurs processus de prise de decisions.

13. World Vision ne devrait pas seulement considerer la porsuite et la supervision des travailleurs de sante communautaire qu'elle a deja forme, mais elle doit aussi considerer, lors du projet de suivi, la participation dans la formation des travailleurs de sante communautaire dans d'autres villages qui ne sont pas encore touches par le programme des soins de sante primaires.

L'equipe d'evaluation encourage fermement World Vision de perseverer avec son projet de suivi dans l'Assaba- le Programme des Populations de l'Assaba. L'equipe d'evaluation est particulierement frappee par les pas concrets que WVMPO est entrain d'entreprendre afin d'impliquer les communautes, via un processus participatoire, dans la prise de decision a tous les niveaux de developpement du projet.