BASELINE REPORT
Child Survival Knowledge, Practice and Vaccination Coverage Survey in Mono Department (Rural Areas), Benin

MSPSCF/Catholic Relief Services

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List of Acronyms

AC Community Health Promoter

AGR Income Generating Revenue

CHP Community Health Promoters

CPS *Centre de Promotion Sociale* -- Social Promotion Center

CS Child Survival

CSSP Child Survival Support Program attached to Johns Hopkins University

CVDS Village Social Development Committee

DAP Detailed Activity Plan

DAS *Direction des Affaires Sociales* -- Department of Social Affairs

DHS Demographic Health Survey

DPP Detailed Program Plan -- Multi-year program plan, currently DAP

DPS *Direction de la Protection Sociale* -- Department of Social Protection

FACS Food-Assisted Child Survival Program

FHA/FFP Food and Humanitarian Assistance/Office of Food for Peace (FHA/FFP)

EPI Expanded Programme on Immunization

IGA Income Generating Activity (small or micro-enterprise).

KPC Knowledge, Practice, (vaccination) Coverage Survey developed by Johns Hopkins University

MCH Maternal Child Health Program

MSPSCF *Ministère de la Santé, de la Protection Sociale, et de la Condition Féminine* -- Ministry of Health, Social Protection and Promotion of Women's Condition

NGO Non-governmental Organization

ORT Oral Rehydration Therapy

PAN Food and Nutrition Program administered by CellulePAN

PEV Expanded Immunization Program

SGI Management Information System

TMI Infant Mortality Rate

WHO World Health Organization

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EXECUTIVE SUMMARY

Since 1982, the Government of Benin in partnership with CRS/Benin has carried out a Maternal Child Health (MCH) Program whose principal objective has been the reduction of malnutrition rates for children aged 0 to 24 months of age. In the course of previous years, this program has undergone a number of programmatic revisions designed to improve the program strategy and measure impact on the poorest groups and those most at risk.

Despite encouraging results and continuous improvement in program activities, two principal constraints remained in 1995. On the one hand, it was necessary to implement an advanced strategy to: 1) improve targeting of beneficiaries so that the most needy are participating, and 2) ensure the sustainability of program activities such that the beneficiaries themselves progressively took over program management. On the other hand, the donor community was unanimous in its need to have concrete results showing improved impact in order to justify the resources given to such programs worldwide. This required not only the identification of measurable indicators but also the development of new tools that are inexpensive enough to be useful to PVOs and accurate enough to show progress.

It was primarily for these two reasons that:

First, MSPSCF and CRS/Benin designed the community based Food Assisted Child Survival (FACS) Program to have the following objectives: a) improved targeting of food insecure zones, and b) the training of local populations to manage the program and seek solutions to their health problems.

Second, the two counterparts have decided to use the KPC survey as a principle means for collecting management and impact data about vaccination coverage and the health knowledge and practices of mothers in key child survival areas.

In order to collect baseline data, the MSPSCF and CRS/Benin conducted a Knowledge, Practice and Coverage survey from March 4, 1998 to April 24, 1998, in the Mono Department. Funded by USAID/Benin, this survey was conducted with the technical support of Health and Nutrition Section of CRS/Benin and covered all 86 targeted communities of the Food Assisted Child Survival (FACS) program in the Mono Department. The following groups collaborated on the survey: the Food and Nutrition Program Unit (Cellule/PAN), the Direction of Social Protection, the Direction of Family Health, and the Regional Institute of Public Health (IRSP).

The survey questionnaire was initially designed at the Department of International Health and Hygiene at Johns Hopkins University in Baltimore, MD, in consultation with CRS. The KPC methodology suggested by Johns Hopkins University provides for reliable data collection in a relatively short period of time. In discussion groups, decisions about program orientation and strategy are then made based on this information. Strategic choices are made in regard to the maternal/child health programs so as to develop, define and adapt the best messages for a particular milieu. Ways of disseminating this information in order to guarantee the best results are also

discussed.

The MSPSCF and CRS/Benin completed their survey goals in a period of four weeks. Numerous work sessions allowed for the interpretation and comprehension of the different results obtained. Strategies to correct the large gaps in knowledge and practice were also defined. These discussions allowed for an evaluation of the activities programmed for 1996-2000, including any corrections needed. The KPC results have also created a list of indicators which will be measured in the year 2001 when the program is evaluated, as a whole, in order to observe the impact of the FACS program.

The questionnaire used for the survey was conceived by the Child Survival Support Program (CSSP) located in Baltimore, MD, in consultation with CRS headquarters and CRS/Benin. After being reread and corrected it was translated into French using words appropriate for the Beninese context. The questionnaire was next translated into the three national languages most used in the Mono Department, namely, Adja, Mina and Fon.

The survey methodology recommends that project staff and counterparts be included in the Core Team so as to empowered them to conduct future surveys. Thus, MSPSCF/CRS selected and contributed staff to be members of the core team, who participated in a five-day training program in conducting a KPC Survey in Lokossa given by Paul Macek of CRS/Benin. After having completed a training in the KPC survey methodology, which included sampling, how to select households for the survey, interview techniques, organizing manual tabulation, writing a survey report, and feedback to the authorities, the core team then trained survey supervisors and the interviewers.

In sum, the core team acquired all of the knowledge necessary to conduct this type of survey and measure the impact of health programs based on the participants' behavior and knowledge.

Following the core team training session, they in turn trained four survey supervisors and 21 interviewers during a five-day training seminar. Six groups of three interviewers and two supervisors/core team members were identified to conduct the survey over a three-day period in 30 clusters. Each cluster included 10 household interviews of mothers with children less than 2 years of age. A total of 300 households were interviewed.

RESUME

Out of the three hundred completed surveys, none were eliminated for being incorrectly filled out. Major findings show that only 14.9% (10/67) of all women with children aged 0-3 months practiced exclusive breastfeeding. 81.3% of mothers surveyed did not know that in order to stimulate the production of breastmilk, it is necessary to initiate breastfeeding as soon as possible after birth. Approximately two out of every five (41.8%) mothers of children less than 4 months of age initiate semi-solid and solid foods early and four out of every five was giving water and teas to their child less than 4 months of age. Of the mothers of children who had diarrhea during the two preceding the survey, 59.1% used oral rehydration therapy. BCG

coverage is at 71%, and Rouvax at 47.1%, the drop out rate between the second and third shots of DTC series being 13%. Only 42% of the children are completely vaccinated (EPI). Other background information from the survey showed that 95.7%, or 287 of 300 mothers, cannot read. 98.3% have some kind of income generating work. 56.7% of mothers surveyed take their children with them during the day and 37.3% leave the child with an older child in the family. Only 31.3%, or 94 out of 300, women surveyed know that the Tetanus Toxoid vaccine during pregnancy protects mother and child; however, a high percentage, 79% (237/300), knew that a pregnant woman needed two or more TT shots.

Based on these findings, MSPSCF and CRS have revised specific program objectives and defined necessary strategies in the section labeled Discussions and Recommendations.

I. INTRODUCTION

A. Background

CRS/Benin, a PVO with its headquarters in Baltimore, MD, has been implementing a national social sector program in Benin since 1958. This program has been jointly implemented with different ministries who, throughout the years, have been in charge of the agency for social affairs, CRS' principal counterpart. The project receives Title II resources from the American government through an AID grant from the Bureau for Food and Humanitarian Assistance, Office of Food for Peace (BHA/FFP). The early basis for the program was to assist those at risk for food insecurity and its primary activity was the distribution of imported foods from the United States. The U.S. public law No. 480 outlines the conditions under which the such foods are distributed by the USAID, while the BHA/FFP concerns itself principally with logistical management of these foods.

Beginning in 1982, CRS/Benin decided, in consultation with its Beninese government counterpart, to use these resources to reinforce a social development program **(The Food and Nutrition Program**) instead of outright social assistance for which the impact was difficult to estimate. The new national program, know as the Food and Nutrition Program **(PAN**), is being executed in 95 Mother Child Health Centers (MCH Centers) spread throughout Benin's six departments. The large majority of these centers (77) are government run (**MOH--68 centers; Ministry of Rural Development--9 centers)** while the rest are either Church run (**15 Centers**) or managed by Community Organizations (**3 Centers**). These centers are essentially located in the administrative seat of the subprefectures. Thus, the target group for the program, namely, the poorest populations, often have to travel long distances to take advantage of the services offered by the social centers.

Nevertheless, approximately 42,000 children aged 0 to 24 months, participate on a regular monthly basis in the program's activities of growth monitoring and follow-up of the vaccination schedule. The program also conducts health information, education, and communication (IEC) sessions for the children's mothers before the growth monitoring sessions. To provide incentive for the mothers to come regularly, a Title II food ration accompanies the growth monitoring and education activities. In addition, CRS/Benin has initiated over the years a project of **income generating activities** (IGA) for the mothers who wish to start a small commerce activity or micro-enterprise.

Despite the positive results of the previous center-based Maternal and Child Health program, past evaluations in 1993 and 1995 have shown the following insufficiencies:

- National program coverage remains low (around 7 % of the target population).
- The manner in which persons are selected for the program does not necessarily guarantee that the true target population is being reached. Given the location of existing centers, it is not surprising to find that the many of the mothers come from urban and semi-urban areas.
- Community involvement in the management of the program remains low.
- Malnutrition rates for children between 0 and 2 years of age has not significantly decreased from an average of 35% despite the many years in which the program has existed.

•Many of the messages used to educate and sensitize the mothers following the growth monitoring sessions are not put into practice in the households. Reasons for this include difficulty in purchasing necessary foods and lack of education of other family members who care for the children. In this respect, existing efforts to address the lack of household income have not been sufficient to address the magnitude of such problems.

•The association and support of other family members (husbands, aunts, grandmothers, and older children) besides the mothers themselves, is lacking and insufficient. They are often opposed to changes made by the mother, who is the only member of the household educated at the MCH centers. The support of other family members would encourage the mothers to implement important practices in the household.

Given these insufficiencies, a community based Food Assisted Child Survival (CS) Program has been chosen as the new, preferred strategy. This approach provides an integrated health program that targets specific communities, instead of individuals, and seeks to reinforce community capacity to solve their own health problems. With a well elaborated program of activities, sufficient resources, and education messages targeted to the needs of each community according to the strengths and weaknesses revealed by the KPC, the FACS program will be able to surmount the aforementioned insufficiencies of the old center-based MCH program.

With funding from USAID/Benin, CRS/Benin and MTEAS conducted the first KPC survey in January/February 1997 in the Ouémé Department. The following are the results of that survey:

•Only 7% of the mothers surveyed exclusively breastfeed their children 0 to 3 months old;
•Only 28% of the mothers give their weaned children a complete nutritional meal;
•Barely half the mothers surveyed use ORT (Oral Rehydration Therapy) during a diarrheal episode;
•Only 29% of the children aged 12 to 23 months were fully vaccinated; and
•Only 33% of the mothers knew that the Tetanus vaccination protected both the mother and the unborn baby and that at least two shots were needed.

For the new strategy to succeed, it is critical to identify a number of measurable progress indicators, many of which are part of the KPC survey, and determine realistic objectives given the project's time frame. The KPC methodology was developed by the PVO **Child Survival Support Program (CSSP**) in Baltimore, MD. The KPC is an essential tool that allows us to rapidly measure progress indicators every four or five years. The KPC methodology, having been accepted by donor agencies, is therefore an indispensable tool for estimating the impact of the new community based FACS program in Benin and, therefore, justifies the KPC survey the Mono Department, which was conducted from 30 March to 24 April 1998. Moreover, the results presented herein constitute the baseline data against which a final KPC will estimate change and also assist the project to set achievable objectives for the years to come.

MSPSCF and CRS/Benin have determined a number of target messages for IEC activities for the community based Child Survival Program. These key messages can be grouped under four subheadings and all of which have been extensively researched by UNICEF and World Health

Organization (WHO), in their book, Facts for Life. The subheadings are as follows:

Vaccinations - Principal project activities attempt to sensitize mothers as to the benefits of vaccinating their children and themselves against the preventable childhood illnesses and tetanus while pregnant. Follow-up checks of the vaccination card also allow the project to verify that the communities' children have completed their vaccination schedule by the age of 12 months.

Growth Monitoring - It is necessary to sensitize the mothers to the importance of monitoring the children's weight according to age (0 to 24 months) and what each of the weight categories signifies in terms of the child's nutritional status and health. Mothers also need to experience first hand the benefits of growth monitoring.

Breastfeeding/Nutrition - Similarly, the program attempts to inform mothers about the importance of exclusive breastfeeding for children age 0 to 4 months, and the quality of weaning foods to be introduced between 4 and 6 months. Moreover, education messages also address the importance of including specific foods to address specific local nutritional deficiencies.

Treatment of Diarrhea - Mothers are also given information about appropriate practices when the child has diarrhea; how to treat it; and when it has become serious enough to warrant medical attention.

The KPC survey permits project staff to collect precise baseline data on the vaccination coverage, and level of knowledge, and actual practice of mothers who live in the communities targeted by the FACS program. The ideal indicator, Infant mortality rates (IMR), are not available nor expected for the project communities. However, a recent Demographic Health Survey (DHS) was conducted in Benin in 1996 and the results are available for national and departmental jurisdictions. The 1996 DHS found that nationally, 104 children die before their first birthday per 1,000 live births and that the maternal mortality rate is 498 per 100,000 births. Infant mortality rates for the Mono Department mirrored those of the national rate with 104 per 1,000 live births; however, the rates for the Mono were ranked as the third highest among the nation.[1] Information from MSPSCF/CRS maternal child health program indicates that diarrhea, malaria and malnutrition are the most serious threats to child survival in Benin. Program information also suggests that the vaccination coverage rate varies widely from one region to another. This information has also been supported by the results of the DHS. According to the Benin DHS, only 55.6% of children aged 12 to 23 months have received all the vaccinations of the Expanded Vaccination Programme and that 64.3% of children aged 12 to 23 received their vaccination against the measles. In addition, statistics produced by CRS/Benin indicate that the malnutrition rate for children age 0 to 3 years of age participating in the FNP varies between 31% and 37%, and that the Mono Department consistently has one of the nation's highest malnutrition rates.

In 1991, USAID recommended that all PVOs with new FHA/PVC Child Survival grants conduct a

[1]MPREPE, INSAE, et Macro International Inc., Enquête Démographique et de Santé au Benin 1996, Avril 1997.

30-cluster baseline KPC survey using a standardized questionnaire developed by JHU. This questionnaire was developed to collect information about mothers' child survival knowledge and practices.

B. Objectives of the Survey

The method of choice for this kind of survey is a 30 cluster sampling technique of 10 individuals per cluster on the basis of a random selection. The study population consists of mothers of the children under the age of 24 months living in any of the target communities of the Mono Department. By restricting the sample to mothers of children less than 24 months of age, repeat surveys can ascertain the project's ability to reach children born during the life of the project, and establish whether the project was successful in communicating to the mothers, through community health promoters (CHPs), certain action messages about key CS interventions.

A population based sample survey is one method of obtaining rates; i.e. data relative to denominators, which are an important part of project's health information system. The data collected from a sample survey can be used for project/activity design, management information and evaluation purposes.

The primary objectives of the survey are to provide MSPSCF and CRS/Benin with information about the following:

1) Behavior and practices of mothers of children under two years of age by:
•suggesting more effective means for delivering messages
•highlighting major threats to infant, child and maternal health due to poor or insufficient knowledge
•highlighting major threats to infant, child, and maternal health due to inappropriate health practices of mothers and a non-supportive environment for the implementation of key messages
•encouraging the proper treatment of diarrheal diseases;
•emphasizing the importance and value of growth monitoring; and
•emphasizing appropriate nutrition/weaning practices and proper nutrition for target children

2) Target specific groups for health education action messages.

3) For children aged 12-23 months: the coverage rates of BCG, DTC3, Polio 3, measles vaccine and drop out rates between series antigens.

To perform the analysis, the methodology recommends that project staff use a certain number of key child survival indicators. These indicators are determined by the standard formula for calculating a given indicator. The formulation of these indicators is also determined by a number of key health messages from organizations such as WHO, UNICEF, UNESCO and FNUAP in collaboration with 165 other medical organizations. These messages on knowledge and practices have already been developed in Facts for Life, produced by the already mentioned organizations. The survey establishes estimates of child survival knowledge and assesses the extent of practices (K & P) of the project's primary health care interventions.

C. Schedule of Activities in Benin (see Annex A, page 41)

II. METHODOLOGY

A. The Questionnaire

The questionnaire contains 47 questions, 40 of which were selected from the standard questionnaire developed by the staff at Johns Hopkins University's PVO Child Survival Support Project (CSSP). This questionnaire was designed to collect health information from mothers of children under 24 months of age. The Core Team decided, at the request of MSPSCF and IRSP, to include 7 questions that did not come directly from the standardized questionnaire.

The first two questions ask about the age of the respondent (mother) and her youngest child under 24 months of age. Questions 3 to 8 collect data regarding mother's literacy, hours of absence from the home, and who looks after the child when the mother is away from home. Questions 9 - 15 deal with the mother's practice and knowledge in relation to breast-feeding and other feeding practices. Questions 16 to 19 confirm the child's attendance at growth monitoring sessions. Questions 20 to 29 refer to the mother's responses to diarrheal disease and care for the child with diarrhea. Questions 30 to 36 determine the immunization status of the child against infectious diseases and the mother's knowledge of the vaccination schedule. Questions 37 to 42 concern pre-natal care during pregnancy.

In addition to these, CRS/Benin's principle counterparts, the MSPSCF and IRSP, requested that four questions, 43 to 46, be included to determine the frequency of respiratory illness and mother's practices in treating these illnesses. The final question, number 47, was included as an exit question to end the interview on a good note since all mothers can respond to this question and to obtain information on what type of medical assistance they received during the child's birth.

The questionnaire was originally written in English and translated into French for the Core Team, which made additional modifications in order to customize the questionnaire for the CRS/Benin project area. The Benin questionnaire was then translated into the three predominant languages of the Mono Department--Fon, Mina and Adja.

B. Determination of Sample Size

Sample sizes were calculated with the following formula:

$$\mathbf{n = z^2(pq)/d^2}$$

where **n** = sample size;
z = statistical certainty chosen;
p = estimated prevalence/coverage rate/level to be investigated;
q = 1 - **p**; and
d = precision desired.

The value of **p** was defined by the coverage rate that requires the largest sample size (**p** = .5). The

value **d** depends on the precision, or margin of error, desired (in this case **d** = .1). The statistical certainty was chosen to be 95% (**z** = 1.96). Given the above values, the following sample size (**n**) needed was determined to be:

n = (1.96 x 1.96)(0.5 x 0.5)/(0.1 x 0.1)

n = (3.84)(0.25)/0.01

n = 96

It takes much time to randomly select an identified individual from the survey population, and then perform this selection 96 times to identify a sample of **n = 96**. Time can be saved by doing a 30 cluster sample survey in which several individuals within each cluster are selected to reach the required sample size. However, in order to compensate for the bias which enters the survey from interviewing persons in clusters, rather than as randomly selected individuals, experience has shown that a minimum sample of 210 (7 per cluster) should be used given the values of **p, d, and z** above (Henderson, et. al., 1982).

In general, when using a 30 cluster sample survey, the sample size used should be approximately double the value **n**, to take into account the design effect or clustering of population characteristics when: **n = (z x z)(pq)/(d x d)**. In this case, a sample size of 300 (10 per cluster) was selected so as to ensure that sub-samples would be large enough to obtain useful management information. This is the case, for instance, when mothers are asked the series of questions regarding the treatment of diarrhea, namely, questions 17 to 22.

The estimates of confidence limits for the survey results were calculated using the following formula:

95% confidence limit = p ± z(square root of {pq/n})

where: **p** = proportion in population found from survey; **z** = statistical certainty chosen (if 95% certainty chosen, then **z** = 1.96); **q** = 1 - **p**; and **n** = sample size.

EXAMPLE: If the proportion of children in the survey who were completely and correctly immunized is 37% and **n** = 297:

95% confidence limit = 0.37 ± 1.96(square root of {0.37 x .63/297})
(**z** = 1.96)

Confidence limit = 1.96 =0.37 ± 0.03 (or, 34% to 40%)

In other words, we are 95% sure that the actual proportion of children in the survey area who are completely and correctly immunized varies between 34% and 40%.

C. Selection of the Sample

The sample consisted of 300 women with children 0-23 months of age randomly selected in the 86 target communities of the FACS Program of the Mono Department. By restricting the sample to mothers of children less than 24 months of age, repeat surveys can ascertain the project's ability to reach children born during the life of the project, and establish whether the project was successful in communicating to mothers certain action messages about key child survival indicators. Ten women were selected in each of 30 randomly selected cluster sites following the process described in The EPI Coverage Survey training manual (WHO, Geneva, Oct. 1988). **(See Annex B.)**

Once the survey teams reached the designated cluster site, the initial household surveyed within the cluster, and the direction from the initial household, were randomly selected.

D. Training of Supervisors and Interviewers

Prior to the training of supervisors and interviewers, the 8 person Core Team received a five-day training of survey trainers for the KPC survey methodology, given by Paul Macek, the CRS/Benin Survey Trainer. The Core Team was exclusively made up of health professionals of CRS/Benin's counterpart, MSPSCF, the Regional Institute for Public Health, and the staff of the Food and Nutrition Program Unit, a semi-autonomous management structure for the FACS program.

In consultation with the KPC Survey Trainer of CRS/Benin, the Core Team selected **4 supervisors** based on their prior survey experience and preselected **21 interviewers** with the ability to read and write in at least one of the three languages of the 30 cluster sites. The interviewers were recruited from the UNB and consisted of 2nd, 3rd, and 4th year FLASH students.

From 30 March to 3 April 1998, members of the Core Team trained the supervisors and interviewers at ENI in Lokossa during a five day period. This training included one day for supervisors only (April 6th) and four days for supervisors and interviewers together (April 14 to 17) to ensure that every participant mastered the survey methodology.

The first training day was dedicated to: survey administration/logistics, an explanation of the methodology, and understanding the questionnaire. The Core Team conducted the following training sessions: (a) goals and objectives of the survey; (b) selection of the sample size; © selection of the starting household and survey direction; (d) community protocols and taboos; and (e) review of the customized questionnaire with precise explanation of each question.

The second and third days of training concentrated on interviewing techniques. To help familiarize the participants with the questionnaire, the Core Team organized role playing activities that emphasized the role of the supervisors and interviewers. Each participant was also given an opportunity to role play an interview as a supervisor, an interviewer, and an interviewee receiving feedback afterwards.

The fourth day of training began with a half-day field test of the survey questionnaire in three peripheral communities of Lokossa, which had been pre-selected for the field test. All supervisors and interviewers utilized this opportunity to practice the various techniques learned during the training. In particular, they practiced interviewing techniques and random household selection in a real setting. Each group of supervisors and surveyors interviewed on average two mothers of children 0-23 months old during this exercise.

The afternoon of the fourth-day was reserved for finalizing the translation of the questionnaires into the local languages and to review linguistic difficulties that were brought to light during the field exercise. In the late afternoon, a manual tabulation exercise followed the session using the questionnaires that were completed during the field exercise.

The final day of the training session included: a revision of the previous day's sessions; a continuation of the manual tabulation exercise; a brief discussion of the field results; an evaluation of the whole training; and a session for each of the survey teams to finalize any last minute logistical issues. Of the 21 interviewers, 18 were selected to collect the final data for the KPC survey. The 8 members of the core team also played the role of supervisors during the data collection.

E. Conduct of the Survey

The survey was conducted over three consecutive days from April 20-22, 1998. Thirty survey areas (communities) were randomly selected from the 86 project communities in the Mono Department by the core team with the assistance of the CRS/Benin survey trainer. In consideration of the difficulty in reaching these communities, the core team decided to constitute 6 survey teams of three surveyors and two supervisors per team. Thirty (30) surveyors and supervisors/core team members were retained for the actual survey due to their proven interviewing skills. Among the skills desired for surveyors were the ability to read, write, and speak the local language. In order to ensure that the survey was adequately supervised, a team leader was designated for each team from among the members of the Core Team and the CRS/Benin survey trainer.

As soon as the teams arrived in a community, the team leader and supervisor were responsible for the random selection of the initial household and survey direction. The method consists of the supervisor randomly selecting the first household to be surveyed by spinning a bottle or some other pointed object to choose a direction and numbering all consecutive houses along an imaginary line in that direction. The supervisor then randomly selected one of the various houses along that line as the initial house to be interviewed by throwing a dice or pulling straws. The supervisor then instructs the interviewers to proceed to the first house where they determine whether there is a mother with a child 0-23 months. If the mother has a child within the age range, the interviewer begins the first survey for that cluster site. If there is no child within the age range, the interviewer proceeds to the second house within that cluster. Selection of the second and all consecutive houses within the cluster is done on the basis of the house whose door has the closest proximity to the first house. Since we can be assured that the first house and direction were randomly selected, then we can be assured that all subsequent houses will be selected randomly. Thus, the interviewers proceed by going from house to

house until the 10 interviews are completed. In a number of cases, surveyors made appointments to return to the house if the mother or her health documents were not available.

The supervisors observed at least one complete interview by each surveyor per day. Before leaving the cluster, the supervisor checked the questionnaire for completeness so that, in the case of missing or contradictory information, the mother could be visited again the same day or during another survey day. In addition, supervisors randomly chose one survey among the 10 for each cluster and re-asked the mother a few of the survey questions to ascertain that the mother's responses were correctly noted by the interviewer the first time.

Special information used during the survey

In certain cases, it is very difficult to determine exact ages for many individuals and especially for children who do not have birth certificates or other documents. This is particularly true in rural areas of Benin where birth registration is not common and where the exact birth date is rarely required for official documents. To reduce the importance of age misreporting, we limited the tabulations to broad age groups and emphasized determining age correctly according to the month. In most cases, the tabulations are for all children under the age of 2 (0-23 months). However, for vaccination indicators, two age groups are particularly important. The first concerns all children from 0 to 11 months, and the second group for children from 12 to 23 months of age. In all cases and especially where a child is "about one year old" or "about 2 years old", the interviewers were trained to probe to try to determine the exact month in which the child was born. For the mother's age, surveyors were instructed to try and obtain information concerning three age groupings: less than 19 years old, between 19 and 35 years old, and older than 35 years old. Interviewers developed a list of local events to help determine ages.

In order to ensure consent and confidentiality, a consent form was given to each interviewer to be explained to the mother before commencing with the survey. The consent form advised the potential respondent that she was not obligated to participate in the survey, and that no services would be withheld from her if she chose not to participate. The consent form also assured the mother that all information would be held in confidence, and that the information would be used to help health workers plan health activities. The interviewers were required to obtain the mother's consent before beginning the survey and agree that she had voluntarily agreed to participate before beginning the interview. The consent form also informed the mother of the goal of the survey and names of all persons responsible for the program in her locality.

F. Method of Tabulation

April 23 was dedicated to manual data tabulation of 17 of the 47 questions and computer tabulation in EPI INFO (version 6.04c) of all questions took place on April 22-28th. The Core Team along with the CRS/Benin Survey Trainer organized 10 groups of 2 persons each for the task. Members of the Core Team selected these individuals from the larger group of supervisors and interviewers.

As mentioned above, manual tabulation lasted one day at ENI in Lokossa. The questionnaires were initially organized by cluster site, and each cluster of 10 questionnaires was circulated between each group of tabulators. After a short refresher session on the techniques of manual tabulation, each 2 person group was given one or two questions to tabulate. The tabulators recorded the responses to one question at a time going through each of the 300 survey questionnaires until all the responses to that particular question had been tabulated. One team member read the question's response aloud while the other noted the response on the manual tabulation tables that the CRS/Benin Survey Trainer had developed. The tabulators were trained to analyze the results of the questions they had each tabulated and then write out the analysis on the hand tabulation sheets. Members of the core team supervised this exercise.

G. Method of Analysis and Discussion of the Results in Groups.

Following the tabulation, the different results were compared with the DHS, national/departmental objectives of the Ministry of Health, UNICEF, WHO, and those of the KPC survey in the Ouémé Department from 1997. Using the results of the computer tabulations and analysis, members of the core team obtained frequency distributions for each of the questions and cross tabulations for certain key indicators.

The KPC survey results and comparisons with other international data were initially discussed by CRS/Benin Survey Trainer and the Core Team, whose members were divided into four small groups according to the project objectives. As noted above, these objectives initially served as the basis for the selection of specific questions for the survey. The areas are:

-Diarrhea Case Management/Treatment,
-Vaccination,
-Maternal Breast-feeding/Infant Nutrition,
-Growth Monitoring of Children 0-23 months of age, and
-Maternal Care.

The various groups were asked to identify the principal problems raised by the survey results and to determine the chain of causality which led to these problems. The objective of this exercise was to link each effect to its potential cause(s) in order to design appropriate solutions to address the source of the problem. This process allows the analysis to identify different causes and various possible programmatic activities given the available resources and desire for improved program impact. Finally, after discussions with project communities, relevant authorities, the counterpart, and USAID, this KPC-Mono Department report was drafted to include precise recommendations for targeting CRS/Benin's community based child survival program.

III. RESULTS

Of the 47 questions, 17 were manually tabulated. All 47 questions and indicators were tabulated by computer. No questionnaires or specific questions were eliminated from the analysis.

Identification

1. The mean age reported by mothers surveyed is 27 years. The youngest mother is 15 years old and the oldest mother is 49 years old. 88.9% of mothers surveyed (266 out of 300) are between 18 and 35 years old. 2.3% of mothers surveyed are younger than 18 years of age and 9% are over 35 years.

2. The mean age of children in the survey is 11 months. Of the 300 children, 21 (7%) are 17 months of age and 21 are 3 months; these figures represent the most frequently observed ages. The lowest frequency is 5 observations (1.7%) was for 5 month old children. 67 children (22.3%) were younger than 4 months. 162 children (54%) were younger than 12 months and 138 (46.0%) were between 12 and 23 months. Table 1 below represents the distribution of children's ages.

Table 1: Distribution of Children's Ages (months)

Children's Age	Frequency	Percentage	Cumulative Percentage
0	16	5.3%	5.3%
1	12	4.0%	9.3%
2	18	6.0%	15.3%
3	21	7.0%	22.3%
4	14	4.7%	27.0%
5	05	1.7%	28.7%
6	12	4.0%	32.7%
7	14	4.7%	37.3%
8	16	5.3%	42.7%
9	11	3.7%	46.3%
10	11	3.7%	50.0%
11	12	4.0%	54.0%
12	09	3.0%	57.0%
13	14	4.7%	61.7%
14	14	4.7%	66.3%
15	16	5.3%	71.7%
16	08	2.7%	74.3%
17	21	7.0%	81.3%
18	10	3.3%	84.7%
19	10	3.3%	88.0%
20	11	3.7%	91.7%
21	13	4.3%	96.0%
22	06	2.0%	98.0%
23	06	2.0%	100%

Total	**300**	**100%**	

Mother's Instruction and Occupation

3. 89.7% (269 out of 300) of the mothers surveyed reported that they could they had no formal education. 6% (18 out of 300) mother reported that they had attended primary school, but could not read. 4% (12 mothers) reported that they had attended primary school and could read (French-2.3% or literate in a local language-1.7%). 7 mothers (2.3%) reported that they had either a secondary or higher level of education. 5 mothers (1.7%) reported that they were literate in a local language.

4. 96.7% of mothers (290/300) reported that they were away from home during the day.

5. Among those who work away from home, there were 263 mothers (90.7%) who left in the early morning, 24 (8.3%) who left in the late morning, et 2 who left at noon, 1 left in the afternoon and no mother responded that she left in the late afternoon or early evening.

6. Among those who work away from home, none responded that they came home in the early morning, 30 (10.3%) came home in the late morning, and 155 (53.4%) at noon, 52 (17.9%) in the afternoon, 45 (15.5%) in the late afternoon, and 8 (2.8%) in the evening.

7. 1.7% (5 mothers) stated that they performed no income generating work at all. 98.3% (295 mothers) reported that they had an income generating activity. Of those activities the most important, one can cite the following in descending order of importance: 72.% (216 mothers) reported that they earn income from selling food products; 48.% (144 mothers) stated that they earn income from selling agricultural products; manual work (18/300) and selling food (92 mothers) accounted for 6% and 30.7% respectively. Three mothers work as maids/servants and 9 have shops. Only 2 mothers out of 300 earn income from a salaried job. 36 mothers (12%) mentioned work in other categories.

8. In response to the question about who took care of the child when the mother was not home, the survey found that: 56.7% of mothers (170 out of 300) reported that they took the child with them. For 80 mothers or 26.7% of cases, relatives and co-wives in polygamous families took care of the child when the mother was away from home. 5.3 % of mothers left their children with their husbands while 37.3% (61 mothers) left their children with older children. 8 mothers (2.7%) leave their children with neighbors. One mother responded that she left her child with a maid servant and another at a nursery.

Breast-feeding/Nutrition

9. and 10. Breast-feeding is a regular practice in the project area. 95.3% (286 mothers) reported that they were currently breast-feeding their children. Of the 14 mothers who were not breastfeeding their children, all reported that they had breast-fed their children in the past.

11. 82 mothers (27.3%) reported that they had breast-fed their children within one hour after delivery. 85 mothers (28.3%) reported breast-feeding between one and eight hours after delivery. 133 mothers (44.3%) reported breast-feeding more than eight hours after delivery, and no mother stated that she did not remember when she first breast-fed her child after delivery.

12. Of the children 0-3 months of age (67 mothers), 14.9% (10/67) mothers **exclusively breast-fed** their children. In other words, they were not being given any of the food/fluids in question 12. 82.1% of mothers give water or teas in addition to mother's milk. 34.3% of these mothers (23/67 mothers) stated that they give solid and semi-solid food to their children in addition to breastmilk. 6% (4/67 mothers) of these mothers give artificial milk or cow milk to their children.

Of the children 6-9 months of age (53 children), 100% (53/53) had been introduced to solid or semisolid foods.

Among the 300 mothers interviewed, 209 (67.7%) gave their children foods rich in vitamin A. 212 mothers (70.7%) gave food rich in protein and 214 (91.8%) gave food rich in calories.

13. 15.3% (46/300 mothers) reported that they did not know which actions would sufficiently stimulate breast milk production during their children's first four months of life. 2% of mothers (6 mothers) stated that care of breasts or nipples was an action a mother could take to continue to breast-feed during the first four months of a child's life. 4.0% (12 mothers) stated that frequent sucking by the child was an action that a mother must encourage. 0.3% (1 mothers) responded to this question with breast-feeding as soon as possible after delivery as an action to continue breast-feeding, no mothers responded with "relactation", and 1.7% (5 mothers) responded with "exclusive breast-feeding" as an action to take to continue to breast-feed during the first four months of life. No mothers stated that avoiding bottle feeding was an action a mother could take to keep on breast-feeding during the first four months of life. 244 out of the 300 mothers surveyed (81.3% of all mothers) responded with a response other than those stated as possible responses. Of these other responses, 119 mothers (63%) stated that the mother should eat well in order to stimulate breast milk production.

14. When asked when a mother should start giving a child food in addition to breast milk, 58.3% (175 out of 300) mothers responded with an age between four and six months. 10.3% (31 mothers) indicated an age of six months or later and 29% (87 mothers) indicate at an age younger than 4 months. 7 mothers stated that they did not know when. In sum, 41.7% (125/300) of all mothers surveyed did not know that they should give their children food in addition to breast milk between four and six months of age.

15. When asked what those additional foods to breast milk should be, 1.7% (5/300) responded that they didn't know, 69.3% (208/300) responded with a food rich in iron and 40.7% (122/300) responded with a food rich in vitamin A. 33% (44 mothers) stated that a mother should add palm oil to the child's food. 39.3% (118/300) responded with a category other than those listed in question 13. Among the other foods cited, many carbohydrate rich foods, such as cassava, corn,

rice and pasta, were frequently mentioned.

Growth Monitoring

16. 144 mothers (48%) in the survey did not have a growth monitoring card for their child or had lo their child's growth monitoring card. 52% (156 mothers) were able to present a growth monitoring card for their child.

17. Of the 156 mothers who had growth monitoring cards, less than one-third or 29.5% (46 mothers) had a card which indicated that they had been weighed at least once in the four months prior to the survey.

18. Of the 156 mothers who had growth monitoring cards, few, 14.7% (23 mothers) had a card which indicated that they had been weighed at least once in the two months prior to the survey.

19. Of the 156 mothers who had growth monitoring cards, 20 mothers, 12.8%, had produced the yellow growth monitoring card for the Food and Nutrition Program and 136 (87.2%) presented a health card/book. No mother produced the growth monitoring card of another project.

Diarrheal Disease

20. All 300 mothers surveyed were asked whether their child had diarrhea during the 15 days prior to the survey. This question provides background information for next series of questions and allows the surveyor to obtain accurate information regarding treatment during and after the diarrhea episode. 38.3% (115 of 300) of the mothers surveyed stated that their child had diarrhea within the two weeks prior to the survey.

21. Of the 115 children with diarrhea during the two weeks prior to the survey, 112 (97.9%) were still being breast-fed. Of these 112 children, only 10.4% of mothers (12 mothers) gave more breast milk than usual to replace lost liquids. 68.8% (77 mothers) gave the same amount of breast milk as usual. 17.9% of mothers (320/112) gave less than normal amount of breast milk and 3 mothers stopped completely during their child's diarrheal episode. In sum, 79.5% or 89 mothers of children who had diarrhea were giving breast milk more or the same amount as usual during the diarrhea episode.

22. Of the 115 children with diarrhea during the two weeks prior to the survey, 37 (32.2%) mothers were giving more fluids other than breast milk to replace lost fluids. 46 mothers (40%) gave the same amount of fluids as usual. 17 mothers (14.7%) gave their children less fluids than usual and 4 (3.5%) stopped giving their children fluids completely during the diarrhea episode. 11 mothers (9.6%) gave only breast milk. Thus, 83 mothers or 72.2% gave fluids other than breast milk or the same amount as usual or more during the diarrhea episode. However, it is noteworthy that the MSPSCF considers only the practice of giving more liquids than usual as the correct practice in accordance with its national health message and therefore only the first response (more fluids than usual) should be considered the correct response.

23. Of the 115 children with diarrhea during the two weeks prior to the survey, 102 (88.7%) were being given solid or semi-solid food. 51 mothers (44.3%) continued giving solid or semisolid food to their children. However, 30 mothers (26.1%) were giving less food than usual and 3 mothers (2.6%) had stopped completely. 21 mothers (18.3%) of mothers were giving more or the same amount of food as usual. 10 mothers (8.7%) gave their children only breast milk. In sum, 72 of the 115 mothers (62.6%) adopted proper feeding practices during their child's diarrhea episode.

24. Of the 115 children with diarrhea during the two weeks prior to the survey, 21 children (18.3%) were given oral rehydration salts. Of the mothers with children who had diarrhea, 5 mothers or (4.3%) used sugar-salt solutions, and 45 mothers (39.1%) gave their children teas. 3 mothers (2.6%) gave a cereal based oral rehydration therapy. In sum, 59.1% (68 mothers) gave at least one form of the Oral Rehydration Therapy while 60% (69 mothers) gave anti-diarrhetic medicines and antibiotics. 8 of the 115 mothers (6.9%) gave a treatment other than those in the survey categories. 13 mothers did not treat their children's diarrhea.

25. Of the 115 mothers of children with diarrhea during the two weeks prior to the survey, 44.3% (51 mothers) sought advice or treatment for their children's diarrhea and 55.7% (64 mothers) did not seek treatment for their children’s diarrhea.

26. Of the 51 mothers who sought advice or treatment for their children’s diarrhea: 86.3% (44 mothers) went to their relatives or friends for treatment; 7 mothers (13.7%) went to a health clinic or social center, and 5 (9.8%) went to the hospital. Two (3.9%) mothers also went to a pharmacy or medicine dispensary, and one mother (1.9%) went to a village health promoter and another went to a traditional healer

27. All 300 mothers surveyed were asked the question about the signs or symptoms that would cause them to seek advice or treatment for their children’s diarrhea. In sum, approximately one-third of mothers did not know any of the signs/symptoms of serious diarrhea. This question allows for multiple responses, the frequencies of which can be found in Table 2 below.

Table 2: Question 23

Question 23: What signs/symptoms would cause you to seek advice for your child's diarrhea?		
Possible Responses	Frequency	Percentage
a) Doesn't know	30	10%
b) Vomiting	22	7.3%
c) Fever	**72**	**24%**
d) Dry mouth, sunken eyes, decreased urine output	19	6.3%
e) Diarrhea of prolonged duration (at least 14 days)	28	9.3%
f) Blood in the stool	8	2.7%
g) Loss of appetite	54	18%
h) Weakness or tiredness	**158**	**52.7%**
i) Other	27	9%

28. Each of the 300 mothers were asked what typed of actions were the most important to take during their child's diarrhetic episode. The different response are presented in Table 3 below.

Table 3: Mother's Knowledge about Care of the Child with Diarrhea

Question 24: What are important actions you should take if your child has diarrhea?		
Possible Responses	Frequency	Percentage
a) Doesn't know	29	9.7%
b) Initiate fluids rapidly	62	20.7%
c) Give the child more to drink than usual	42	14%
d) Give the child smaller and more frequent feeds	21	7%
e) Proper mixing and administration of ORS	**58**	**19.3%**
f) Take child to hospital/health center	**158**	**52.6%**
g) Feed more after the diarrhea so that the child can re-gain weight	6	2%
h) Withhold fluids	**0**	**0%**
I) Withhold foods	1	0.3%
j) Other	92	30.7%

29. Surveyors asked each of the 300 mothers what type of actions were the most important to take following their children's diarrhea. 190 mothers (63.3%) responded that they should give foods high in calories. 90 mothers (30%) responded that they should give smaller portions, more frequently. 82 mothers (27.3%) said that they should give more food than normal to a child recently cured of diarrhea. 58 mothers (19.3%) gave responses other than those listed in question 29. These other responses were: teas, salt/sugar solutions, and give medicines. 40 mothers (13.3%) did not know what to do during their child's diarrhea.

Immunization for children 0 to 23 months of age

30. 244 of 300 mothers (81.3%) stated that their children had been vaccinated. 56 mothers (18.7%) stated that their child had not received any immunizations.

31. Each of the 300 mothers was questioned about who took the child to be vaccinated the last time. The different responses are on Table 4 below.

Table 4 : **Person Who Accompanied the Child for Most Recent**

Question 31: Who brought the child to be vaccination the last time?

Possible Responses	Frequency	Percentage
1) the mother took the child	238	97.5%
2) husband/partner	3	1.2%
3) older child(ren)	1	0.4%
4) other family members/grandmother	2	0.8%
5) neighbors/friends	0	0%
6) the maid/servant	0	0%

32. Presence of vaccination card or book for the child.

217 mothers (72.3%) had an immunization card for their child. 55 mothers (18.3%) stated that they had lost their child's immunization card, and 28 (9.3%) stated that they never had a card for their child.

33. The immunization status for children 0-23 months of age is based on the immunization card or book actually seen by the interviewers. This verification according to documentation permits project staff to calculate vaccination coverage for the target project area in the Mono for the 138 children. The following are coverage figures for the for BCG, DTC, Polio, and measles.

Table 5: BCG Status

Age group	Number of children vaccinated	Percentage
12 to 23 months	98 out of 138	71%

Table 6: Polio Status
Polio 1, 2, & 3: children 12-23 months of age

Polio 1		Polio 1 & 2		Polio 1, 2, & 3		Drop-out between Polio 1 and 3	
Freq. #	%	Freq. #	%	Freq. #	%	Freq. (1-3)	Rate (1-3)/1
91 out of 138	65.9%	82 out of 138	59.4%	73 out of 138	52.8%	18	13%

Table 7: DTC Status
DTC 1, 2, & 3: children 12-23 months of age

DTC 1		DTC 1 & 2		DTC 1, 2, & 3		Drop-out between DTC 1 & 3	
Freq. #	%	Freq. #	%	Freq. #	%	Freq. (1-3)	Rate (1-3)/1
95 out of 138	68.8%	86 out of 138	62.3%	77 out of 138	55.8%	18	13%

Table 8: Measles Status
(children 12-23 months of age)

Age group	Number of children vaccinated	Percentage	Drop-out between BCG & Rouvax	
12 to 23 months	65 out of 138	47.1%	33	23.9%

Table 8: Fully Immunized Status
(BCG + DTC123 + Polio 3 + Measles)*

Age group	Number of children fully immunized	Percentage
12 to 23 months	58 sur 138	42%

***Of those children who were vaccinated for Rouvax 7 (5%) were not completely vaccinated.**

34. This question asked about the mother's knowledge of when the vaccine against measles should be given. Only 52 mothers (17.3%) stated that a child should receive their measles vaccine at the age of nine months. 248 mothers (78.3%) responded with incorrect ages and 165 (55%) mothers stated that they did not know.

35. 94 mothers (31.4%) stated that the main reason why pregnant women need to be vaccinated with the tetanus toxoid (TT) vaccine is to protect both the mother and child. 91 mothers (30.4%) stated that the main reason for the TT vaccine was to protect the newborn infant against tetanus, and 18 mothers (6.0%) stated that the main reason was to protect the pregnant woman. 96 mothers (32.1%) stated that they did not know.

36. All 300 mothers were asked the question about mother's knowledge of the number of tetanus toxoid vaccinations a pregnant woman needed to protect the mother and newborn. 187 mothers (62.3%) stated that a pregnant woman needs more than two tetanus toxoid injections and 50 mothers (16.7%) stated that a pregnant woman needs two TT injections.

In sum, 79% of mothers gave the correct answer. 6 mothers (2%) stated that a pregnant woman only needs one injection and 57 mothers (19%) stated they did not know how many TT injections a pregnant woman needs. In other words, 28.7% of all mothers did not know the correct number of TT injections a pregnant woman needed to protect the newborn against tetanus. In sum, 21% of these mothers (63/300) did not know the number of injections necessary to protect a pregnant woman and her unborn child.

Maternal Care

37. Of all mothers surveyed, 219 mothers (72.7%) surveyed had maternal health cards and 81 (27.3) reported never having a maternal health card or having lost it.

38. Verification of tetanus toxoid (TT) vaccine according to the maternal health card.

Of all mothers interviewed, 213 (71%) had at least two TT injections indicated, 13 mothers (4.3% of 247) had one TT injection indicated on the card, and 21 mothers (7%) had no TT injections indicated on the card.

39 and 40. Of the 219 maternal health cards looked at by interviewers during the survey, 213 had a space to record prenatal care visits. Of the 219 maternal cards with space to record prenatal visits, 209 (69.9%) indicated that the mother had made at least one prenatal visit. 4 mothers' cards indicated that the mothers had made no prenatal visits.

41. When asked how soon after a woman knows she is pregnant should she see a health professional, 176 mothers (58.7%) indicated a time period within the first trimester of pregnancy, 90 mothers (30%) indicated a time period within the second trimester, and 16 mothers (5.3%) indicated a time period within the third trimester. 18 mothers (6%) stated that they did not know when a

pregnant woman should see a health professional. No mothers stated that it was not necessary to see a health professional.

Table 8: Mothers' knowledge and practice related to antenatal care

CONNAISSANCE			PRATIQUE		
	Effectif	Taux		Effectif	Taux
-First trimester - Second trimester - Third trimester	291	97%	At least one visit during pregancy	209	69,6%
-Doesn't know - No need to visit a health professional	9	3%	Did not visit a health professional+no card or has antenatal card without space	91**	30.3%

**For purposes of analysis, the authors assume that a mother made no antenatal visits when she was without an antenatal card, or had a card which did not have a space for recording visits, or had no visits recorded.

42. When asked what foods are good for a woman to eat to prevent pregnancy anemia, 213 mothers (71%) indicated eggs, fish, meat, etc. (a protein food rich in iron) and 204 mothers (68.%) indicated a green leafy vegetable (foods rich in iron). 47 mothers (15.7%) indicated a food other than the categories listed in the questionnaire. 43 mothers (14.3%) stated that they did not know which foods would help prevent anemia.

Respiratory Illness

The question **"Has the child had a cough, difficulty breathing, or a runny nose during the previous 15 days?"** was asked of all mothers surveyed in order to determine the background information for question 45. This question asks about the nutrition of the sick child.

43. Of the 300 mothers surveyed, 139 mothers (46.3%) indicated that their child had a cold/respiratory illness (defined as a cough, difficulty breathing or a runny nose) during the 15 days prior to the survey.

44. Of the 139 children who had cold or respiratory illness during the 15 days prior to the survey, there were 96 children who suffered from rapid and difficult breathing in addition to a cough, difficulty breathing or a runny nose in the 15 days prior to the survey. In other words, there were 96 children who suffered from an *acute* respiratory illness.

45. The 96 children who suffered from an acute respiratory illnesses during the 15 days prior to the survey, 95 (98.9%) were still breastfeeding. Of the 95 breastfeeding mothers, only 3 (3.1%) were breastfeeding more than usual during the sickness. 38 mothers (40%) breast-fed the same amount as normal, 49 mothers (51.6%) were breastfeeding less often, and 5 (5.2%) had completely stopped breastfeeding their child. 3 (3.1%) children were no longer breastfeeding.

46. Question 46 asks what actions a mother should take if their child had a respiratory illness in order for the child to eat correctly. This was a pilot question asked to obtain information about the mother's feeding practices of her child during a sickness and is not linked to any message recommended by the Ministry of Health. However, it is generally recommended that mothers continue to breastfeed their sick children. The results of question 46 are listed in Table below.

Table 9: Results of Question 46

Question 46: What are important actions you should take if your child has a respiratory illness so that (name of child) can eat correctly?

Possible Responses	Frequency	Percentage
a) Doesn't know	57	19%
b) Initiate fluids rapidly	48	16%
c) Give the child more to drink than usual	25	8.3%
d) Give the child smaller and more frequent feeds	18	6%
e) Take child to hospital/health center	**138**	**46%**
f) Feed more after the illness so that the child can re-gain weight	5	1.7%
g) Withhold fluids	0	0%
h) Give child hot fluids to unblock nose	20	6.7%
I) Unblock nose so that child can breathe	38	12.7
j) Withhold foods	0	0
k) Other	77	25.7%

47. The purpose of this question is to close the interview as well as obtain information about the type of medical assistance a mother may have received at birth. When asked who tied and cut the cord at the child's delivery, 166 mothers (55.3%) indicated a health professional (physician, nurse, or midwife). 105 mothers (35%) indicated a family member, 19 mothers (6.3%) indicated a traditional birth attendant. 6 (2%) mothers stated that she herself had tied and cut the cord. One mother (0.3%) indicated someone other than the categories listed in this question and one mother did not remember.

Synthesis of Results

The KPC methodology allows for an analysis of the survey results using the key child survival indicators. These indicators are calculated by inserting the variables (results) for certain questions into the standard formulas.

The main indicators that will be presented here provide the baseline data for the community based

FACS program. Moreover, CRS/Benin and MSPSCF will use these indicators to fix program objectives to be reached by the next KPC survey, which will be performed in the year 2001. Thus, the 1998 KPC will be compared to the results of the 2001 KPC in order to note the progress and the level of change that has occurred which will demonstrate a direct impact of the FACS program in these communities.

Principle Baseline Indicators from the 1998 KPC-MONO:

A. Appropriate Infant Feeding Practices:

1. Initiation of Breast-feeding: Children for whom breast-feeding was initiated within the first 8 hours of life: **55.7%**

2. Exclusive Breast-feeding: Infants less than 4 months who are being given only breast milk: **14.9%**

3. Introduction of first foods: Infants between 6 and 10 months begin given solid or semi-solid foods: **100%**

4. Persistence of breast-feeding: Children 20 to 23 months who are still being given breast milk: **77.8%**

B. Management of Diarrheal Diseases:

5. Continued breast-feeding: Children with diarrhea in past two weeks who were given the same amount or more of breast milk: **79.5%**

6. Continued Fluids: Children with diarrhea in past two weeks who were given the same amount or more of fluids other than breast milk: **79.8%**

7. Continued food: Children with diarrhea in past two weeks who were given the same amount or more food: **68,6%**

8. ORT usage: Children with diarrhea in the last two weeks who were treated with ORT: **59.1%**

C. Immunization Coverage

9. EPI Access: Children 12-23 months who received DTC1 + Polio: **68.8%**

10. EPI coverage: Children 12-23 months who received DTC3 + Polio: **55.8%**

11. Measles coverage: Children 12-23 months with measles vaccine: **47.1%**

12. Drop-out rate: Drop out rate between Polio1 and Polio3: **13%**
Drop out rate between BCG and Measles: **23.9%**

13. Children Completely Vaccinated: Children aged 12 to 23 months of age completely vaccinated (BCG, DTC 1,2,3, Polio 1,2,3, and Measles): **42%**

D. Maternal Care (Maternal Health Card):

14. Antenatal Visits: Mothers who reported at least one antenatal visit during last pregnancy: **95.4%**

15. Tetanus Toxoid coverage: Mothers who received two doses of Tetanus Toxoid vaccine: **80.8%**

16. Attended births: Deliveries attended by skilled health personnel: **55.3%**

E. Knowledge Indicators:

17. Time of measles vaccine: Mothers who know measles vaccine is given at 9 months: **17.3%**

18. Tetanus Toxoid protection: Mothers who know that Tetanus Toxoid protects both the child and the mother: **31.4%**

19. Time of prenatal care: Mothers who know that prenatal care should be by first trimester: **63.7%**

20. Literacy: Mothers having been to school and who know how to read: **4.3%**

IV. DISCUSSION AND RECOMMENDATIONS

In general, the survey results reveal that mother's knowledge and practices of the key child survival messages are weak in the Mono Department. The data and indicators presented in the previous section confirm this weakness. However, a few basic indicators in rural zones of the Mono are at a relatively acceptable levels, indicating the progress of previous programs and messages. These good results may also be due to the influence of positive cultural practices (indicators 3 & 4), or to the positive impact of prior health programs by CRS, Unicef, and MSPSCF (indicators 10 & 14).

In analyzing the results, we have organized our discussions around key issues and problems identified by the survey. MSPSCF and CRS were fortunate to have assembled a group of health professionals with a varied background and expertises in each of the areas to be members of the Core Team, all of whom contributed to this final report. In addition, this discussion benefits from the contribution of many other national experts who participated in the national presentation of results, held in Lokossa on 30 June 1998. Moreover, the discussion section has been enriched by the invaluable contribution of the FACS project's Community Health Promoters and members of the Social Development Committees of the Mono Department who offered their opinions and insights during three days of presentation.

These varied discussions of the results have enabled us to make specific recommendations about program strategy and orientation that will allow for the improvement of health situation, where the indicators are weak, and the encouragement of positive practices, where levels are acceptable. In certain areas, we call for additional investigation of the cause since the KPC helps to define and prioritize the problem but not always explain the underlying causes. However, we have drawn on our professional experience and knowledge of Benin in trying to analyze the causes and problems.

BREASTFEEDING

Among the priority issues raised by this survey, breastfeeding practices and knowledge remain the most alarming and should be the focus of this program's key messages for mothers of children aged 0 to 4 months. The results of the KPC-Mono 1998 show that breastfeeding is almost universally practiced in the department; however, only 14.9%, are breastfeed exclusively. These results are analogous to the 1996 DHS survey, but superior to those revealed by the KPC-Ouémé in 1997. Among the mothers of children 0-3 months of age who do not exclusively breastfeed, almost all (91.2%) were given water or teas to their children in addition to breastmilk. For example, the survey found that among the 16 children aged 0 months, 75% were being given waters and teas in addition to breastmilk. This use of teas and water in the feeding of newborns is a cultural phenomenon in the Beninese society. Presently, breastfeeding tactics include giving the infant water from birth every morning and teas are frequently used as medicine to protect the baby against certain diseases. A large portion of mothers continue to breastfeed their children until the age of two.

According to the Mono KPC, almost half of the mothers (44.3%) initiate breastfeeding more than 8 hours after giving birth. This may be due in part to that fact that some health agents may not know

about the protective benefits of colostrum and hence, the importance of suckling during the first few hours of lactation. There is also the widespread belief in the project area that colostrum is not milk and therefore should be discarded.

The KPC results can be compared to three messages taken from the golden rules of Facts for Life with regards to breastfeeding:

•Breastmilk is the best nourishment and the best drink for an infant, who needs no other nourishment until 6 months of age.
•The baby should begin breastfeeding as soon as possible after birth.
•Breastfeeding should continue until the second year of the child's life and even longer if possible.

According to the official health messages of the Ministry of Health, the correct practices for creating a sufficient amount of breastmilk during the first 4 months after birth are: proper care of the breasts and nipples, frequent feedings to stimulate milk production, avoid using a bottle, and initiate breastfeeding as soon as possible after childbirth. The surveyed mothers' knowledge of these messages was very limited. Only 8% of the mothers knew these recommended practices. In the Mono, 63% of the mothers believed that they themselves must be well-fed in order to stimulate and produce breastmilk, whereas 21% did not know what to do. Only 4% know that it is necessary to start breastfeeding as soon as possible after childbirth to stimulate milk production. 2% were aware of the positive results of caring for the nipples and breasts and 16% knew that it is necessary for the newborn to suckle frequently.

The survey team's discussions about breastfeeding led to the conclusion that current practices have been passed down from generation to generation and that it would be extremely difficult to obtain dramatic change in breastfeeding practices especially when linked to exclusive breastfeeding during the first 4 months. We have therefore opted for a modest objective for the year 2001 in the area of exclusive breastfeeding.

Principal recommendations in the area of breastfeeding are as follows:

Recommendation 1: Community health teachers and center administrators must be sensitized to the benefits of applying the golden rules of breastfeeding in Facts for Life. At the community level, other health sessions must be organized concerning the benefits of exclusive breastfeeding during the first 4 months of life so that mothers will progressively accept and adopt this behavior.

Recommendation 2: Ask for collaboration of the Friends of Babies Hospital Initiative (IHAB) which has already begun a decentralized breastfeeding campaign in order to reach the community level.

Recommendation 3: FACS must begin treating pregnant women as beneficiaries separate from the program so that they are informed about the benefits of breastfeeding before giving

birth. INFANT NUTRITION

The second most important result of this survey is that for children in Mono Department weaning begins too early. Survey results show that weaning foods are introduced immediately after birth. For instance, the survey found that among the 16 children aged 0 months, 25% were being given solid and semi-solid foods in addition to breastmilk. Among the children aged 0 to 3 months, 41.8% were being given solid and semi-solid foods and 82.1% were being given water and teas.

41.7% of mothers surveyed did not know that it was necessary to begin giving their children food by the age of 6 months, whereas 100% of mothers of children aged 6 to 10 months were giving semi-solid and solid foods such as "bouilli" to their child. When comparing these results with those of the Ouémé KPC of 1997, we find the same tendencies exist in both departments, except that mothers in the Mono are more knowledgeable in this area than those in the Ouémé, 58.3% compared to 48.7%. We conclude from these results that mothers' practice of weaning by the age of 6 months remains well in advance of knowledge.

When asked about types of weaning foods, only 5 of 300 mothers did not know the proper kinds of foods to give when beginning the weaning process. A large majority cited iron-rich foods, vitamin A foods and those with caloric value. In comparison with the Ouémé results, 23 out of 300 mothers did not know proper weaning foods. In general, the mothers surveyed know about and practice weaning; however, they do not know at what age to begin weaning. For example, 87 of the 300 mothers or 29% believe that weaning should begin before 4 months of age. Thus, the problem in the Mono Department is not necessarily the type or method of weaning but early weaning which contributes to low levels of exclusive breastfeeding identified earlier.

Recommendation 4: During the implementation of the Mono FACS program, CRS/Benin and MSPSCF will place an emphasis on the training of CHPs to carry out further focus group discussions to determine why women are introducing foods so early on and specific messages will be designed to discourage this practice and teach proper weaning practices. Messages should emphasize practices that can be changed fairly easily and meet the least resistance. The FACS program must also train the community teachers on how to present proper weaning foods to the mothers. CRS will furnish each community with kitchen supplies and pictorial diagrams which will help in conducting hands-on educational cooking sessions for the preparation of weaning foods.

GROWTH MONITORING

The KPC found that 52% of mothers had growth monitoring cards. Of the mothers with cards, the documents most frequently presented were health cards (87.2%) and individual Food and Nutrition Program cards (12.8%) from CRS' previous center-based program. Of all mothers surveyed, only 21.5% of their children had been weighed at least once in the four months prior to the survey compared to 51.5% in the Ouémé and only 14.7% of mothers had had their babies weighed in the two months prior to the survey. This low level of usage of growth monitoring services suggest that there

may either some service provider problems and access difficulties. Clearly, many preventable childhood illnesses are not being detected early on. It is worth noting that the Facts for Life message stipulates that a child must be weighed every month until his third year of life and if he has not gained weight during any two consecutive months, this indicates a problem.

Several reasons explain the lack of regular growth monitoring in the two to four months prior to our survey. They are as follows:
•Access: The centers where it is possible to weigh children are far from the mothers' households and the FACS communities. The DHS results show that in the Mono (rural and urban), 76.6% of women must travel from 4 to 9 km. from their communities before they reach the nearest maternal child health service. Many of the FACS communities are also difficult to access during the rainy season which basically ensures their isolation for a large portion of the year.
•Knowledge: Mothers do not understand or have not experienced the importance of growth monitoring each month to see if the child has gained or lost weight, and to question the child's overall health as a result of growth monitoring.
•Lack of Personnel at MCH Centers
•Lack of Materials: A number of centers where children would normally be weighed actually lack the necessary material (scales, weighing slips, cards, etc.). Similarly, the women report that the attitude of certain health agents is that it is not their role to weigh babies. The combination of these reasons ensures that any mother who wishes to weigh her baby must go to other structures than health centers to do so, and as a result is discouraged by this preventative (non-curative) activity.

Recommendation 5: During the implementation of the FACS program, CRS and its governmental partners, MSP and MPSCF, must ensure:
•access to Growth Monitoring by supplying communities with the necessary material and encouraging a receptive and hospitable environment for the women who do come to growth monitoring activities.
•improvement of the quality of services (materials, schedule of events, etc.)
•training and retraining of CHPs on growth monitoring techniques
•ease with which mothers can obtain growth monitoring cards for children 0-24 months; mothers should be taught how to read and interpret the results of these cards.

IMMUNIZATIONS

The Expanded Programme on Immunization (EPI), which was started up again in Benin in 1987, has obviously had a positive influence on immunization practices and coverage among different communities. According to the 1998 KPC in the Mono Department, 81.3% of mothers had their children vaccinated at least once. However, the following was reported concerning their knowledge of immunization practices:
•only 17.3% know when to vaccinate against the Measles
•only 1 out of 3 mothers (31.4%) know that vaccinating a pregnant woman protects the unborn baby as well as the mother against this disease

•79% of mothers know how many times a pregnant woman should be vaccinated against tetanus.
•97.5% brought their own child to the last vaccination
•72.3% of mothers had immunizations cards

Vaccination coverage is calculated for children between 12 and 23 months. In the surveyed population, 71% of children received the BCG shot against tuberculosis, 52.8% received all three polio shots, 55.8% the three DTC shots. The drop-out rates or difference between the first and third DTC and between the Polio1 and Polio3 Vaccine are the same at 13%. 47.1% had received the measles shot. 23.9% were not completely vaccinated for BCG and Rouvax. However, 42% of children 12 to 23 months had received all the necessary vaccinations. These lower percentages differ from those obtained by the DHS in the Mono which show that 60.1% of children were vaccinated against the measles and 53.5% had been completely vaccinated. This difference could be explained by the fact that the KPC survey took place in a rural zone whereas the DHS surveyed both rural and urban areas.

The noticeably high drop-out rate midway through the series of shots, 13% for both Polio and DTC series and 23.9% between BCG and Measles, could be explained by the following:
•the nine month delay that separates the BCG and Rouvax, for example, which leaves ample time for the mothers to forget the next appointment;
•poor comprehension of the vaccination calendar by the mothers;
•insufficient information furnished to mothers about the effects of post-vaccination; and
•poor coordination of activities between nurses/doctors and local health promoters.

Recommendation 6:

•Increase vaccination check-ups and insist upon completion of all of the vaccinations when due, especially the measles vaccine. The community health promoters and the village social development committees must help those who administer vaccines in tracking down children without the proper vaccinations in order to refer them to health centers. They must also coordinate calendars with those who administer vaccines so that the vaccinations would coincide with baby weighing sessions.
•The Government must follow through with the Expanded Program on Immunizations (EPI), which dictates and provide necessary resources to reach isolated communities. CHPs will be trained to assist health agents to regularly follow-up the children's vaccination schedule and provide referral to children that need vaccinations.
•Mothers must ensure the proper follow through of the maternal and child health activities they've been taught.

DIARRHEAL DISEASES

Of all mother surveyed, 38.3% of children suffered from diarrhea during the 15 days prior to the survey. This number mirrors the rate for the same age group in the Mono(35%) as revealed by DHS,

and is close to the KPC-Ouémé rate of 31%. These percentages bear witness to poor hygiene, poor water quality and poor nutritional practices for breastfeeding babies in rural areas. Furthermore, the early introduction of other liquids and foods increases the risk of exposure to bacteria and viruses. In general, in the Mono the mothers handle diarrheal sickness in their children well, as indicated by the following results:

•79.2% breastfeed their child more or as normal;
•72.2% give other liquids as they usually do or more; and
•62.6% give as much food or more as usual.

These rates are higher than those surveyed in the Ouémé which are 59.4%, 57.3% and 39% respectively. According to the DHS, only 56.7% of the mothers at the national level give more or the same amount of liquids during diarrhea and 54% give more or the same amount of food.

Despite the barrage of media publicity at the national level recommending oral rehydration therapy (ORT), 60% of the mothers surveyed still turn to anti-diarrhetic and antibiotics to cure diarrhea when if fact, it is proven that viruses cause most diarrheal afflictions which do not respond to these medicines used by mothers. These habits in our country stem from the rampant phenomenon of self-medication due to ambulatory selling of medicines and the weak media coverage in rural zones. According to the DHS, only 21% of women in the Mono listen to the radio

The results of the survey also revealed that the majority of mothers asked for advice from relatives and friends when confronted with treating their child's diarrhea. The same tendency was observed in the Ouémé. Most of the mothers recognize the signs leading to diarrhea. Nevertheless, 52.7% wait for the child to become very weak before treating the diarrhea, whereas this rate was at 42.7% in the Ouémé.

On the whole, the mothers surveyed know how to treat diarrhea thus their adequate practices. Also, a lot of mothers (63%) know to give food rich in calories to their child after a diarrhetic episode. This rate was 41.7% in the Ouémé. The ideal situation would be to give the child food rich in calories, but in smaller and more regular portions.

Recommendation 7:

•Train the CHPs on how to treat diarrhea in children so that they can pass this knowledge on to the mothers. In these messages, emphasis must be made on preventing dehydration by the use of oral rehydration therapy (ORT) and not medicines. Oral Rehydration Salts are readily available through the national Orasel program and can be made accessible to project communities.
•During educational health sessions, CHPs must strongly advise mothers not to wait until the child is at an advanced stage of the illness before asking for help or consulting a health agent. Target the family and other members of the family so that they, too, benefit from these messages.
•Messages delivered by FACS program will emphasize hygiene, good eating habits according to

age and the drinking of potable water. These messages must show a clear relationship with the early introduction of food and liquid, other than breastmilk, and the prevalence of diarrhea.

MATERNAL CARE

An impressive number of mothers surveyed in the Mono (72.7%) had access to maternal health care as evidenced by the possession of cards (Ouémé 82.3%, DHS/Mono 76.2%). Of those mothers with cards in the Mono, more than three quarters (80.8%) had received at least two TT injections. The percentage in the Ouémé was 71% and 53.4% for the DHS/Mono. 69.6% had made at least one prenatal visit compared to the Ouémé's 94.2%. In both departments, only 58.7% knew that it was essential to have the first prenatal visit during the first trimester of pregnancy. This weak percentage could be, in part, explained by financial and other costs associated with prenatal visit or by the fear of taboos (fear of witchcraft, sorcery). Another influencing factor could be the lack of knowledge of the benefits of prenatal visits.

As for the prevention of anemia in the pregnant woman, it was observed that mothers' knowledge of appropriate maternal nutrition practices is high: 71% knew that is important to eat green vegetables and animal proteins rich in iron to prevent anemia.

With regards to birth assistance, it should be noted that only 55.3% were assisted by a trained health professional during the birth of their youngest child, (67% in the Ouémé) 35% at home. According to the DHS, 63.9% of births are assisted by qualified health personnel in comparison to 34.9% at home. This suggests the low level of access to qualified health personnel at childbirth or poor understanding of the benefits of qualified assistance at childbirth.

Recommendation 8:

•The CHPs must make the public aware of the advantages of giving birth in a health center. The MSP must ensure the training of traditional midwives so as to increase the level of assisted births in rural zones.
•Reinforce actions that would encourage women to use health services. During educational health sessions, the CHPs must convince mothers of the advantages or prenatal visits.
•CRS/Benin and its government partners should continue to reinforce the IEC concerning maternal nutrition during pregnancy.

RESPIRATORY ILLNESS

96 children (32%) of which 95 were still breastfeeding had suffered from an acute respiratory illness in the 15 days prior to this survey. What were the actions taken by the mothers? The 95 breastfeeding mothers fed their children as normal (43.1%) or more than normal, whereas 51.6% breast-fed less despite the fact that it is recommended to continue breastfeeding as normal during a respiratory illness. As a result, this predisposes the child to malnutrition. The MSP does not have a

precise message concerning this matter, however, a program focusing on children's illnesses is in the process of being elaborated.

Recommendation 9:

The MSP must take into account the current results so as to increase activities concerning child respiratory illness. A national study should be conducted which would serve as a basis for the development of a program addressing respiratory illness in children.

AGE DISTRIBUTION-CHILDBIRTH WITHOUT RISK

The survey's results show that 2.3% of mothers were less than 18 years of age and that 9% of the mothers surveyed were over the age of 35 years. The book Facts for Life published by UNICEF, WHO, UNESCO and UFNUAP states that the risks of child-bearing are greatest when the mother to be is under 18 years or over 35. On this basis, the survey shows that 11.3% of the population give birth at risk. 30.3% of mothers surveyed deliver without having had any prenatal visits and that 44.7% give birth without the assistance of qualified medical personnel.

Although the survey does not allow for a precise explanation of this phenomenon, it is evident that early marriages, a fact of our society, and the lack of schooling of young girls in rural areas, explains the existence of mothers under 18 years of age. Moreover, our largely rural, agrarian society encourages women to give birth continuously throughout their childbearing years and educational sessions which raise problems related to childbirth are often considered taboo. Therefore, while the project does not have any specific objectives with regard birth spacing, we recommend that:

Recommendation 10: The government must pursue programs which will encourage and increase school attendance, especially by young girls.

Recommendation 11: In the absence of hospitals and health clinics, the government must provide training to those capable of assisting during childbirth (traditional birth attendants and midwives) In addition, a system of financial remuneration must be created to encourage those trained to place importance upon their work as child-birth attendants.

MOTHER'S INSTRUCTION

Most of the mothers 15-49 years of age (95.7%) surveyed in the Mono were unable to read as in the Ouémé (92%). This confirms the elevated level of illiteracy in our country. The comparative study between these levels and the National DHS show that the level of instruction is probably lower in the Mono. According to the KPC Surveys, only 4.3% of women in the Mono could read compared with 8% in the Ouémé. This high level of illiteracy presents some constraints that must be considered in the programs progress and strategy.

Given that there is a direct link between the level of instruction and proper health practices, it appears fundamental that authorities should focus on creating literacy programs for young people in rural areas. This would provide the basis for the development of easily understandable health messages which could be distributed to the participants. However, given the current high percentage of mothers in the Mono who cannot read, it is recommended that the Information, Education and Communication (IEC) strategy of learning about hygiene, health and nutrition take advantage of non-written form of communication. The community health promoters, who would play the most important role in message delivery, must be trained on message content, group animation techniques, and adult education methodology.

Despite their illiteracy, the women of the Mono work outside the home. The majority (96.7%) have an income generating activity, which is superior to the rate of women in the Ouémé, (83.3%). Most of these mothers leave the home early in the morning (90.7%) and almost two-thirds come back home at noon at the latest (63.7%). As in the Ouémé, more than half of the women who work outside the home (56.7%) take their children with them. In the absence of the mothers in the Mono, the older children take care of the babies compared to the relatives in the Ouémé.

These results explained above provide us with the following information:
•Women work hard and so have income generating activities
•The ideal times during the day during which an educational talk could be organized.
•The ideal times to make home visits
•Those caretakers, other than the mother, who must be included in the educational talks

<u>Recommendation 12</u>: CRS and its governmental partners must contact specialized private and public literacy organizations in order to ameliorate the low level of instruction of women, particularly mothers, in the Mono Department. More specifically, CRS can contribute to this effort by soliciting the help of groups like the NGO-CERIDAA.

<u>Recommendation 13:</u> The FACS program must:
•revise the pictorial diagrams in its visual aids so as to reduce the number of messages on each;
•associate the use of these diagrams with other participatory visual tools;
•develop an appropriate communication system for the transmission of these messages;
•present educational sessions to mothers and visit homes in the afternoons; and
•initiate educational sessions for older children and relatives.

<u>Recommendation 14</u>: In order to target school-aged children with key CS messages, the government must introduce and require a health program in the school system including a minimum of themes such as hygiene, sanitation and nutrition. The comprehension of such messages by the school-aged children could create dynamics that would lead to change in home health practices and knowledge.

V. REVISED OBJECTIVES FOR MONO FACS PROGRAM FOR 2001

A. Breast-feeding

Practice:

1. 55.7% of mothers began breast-feeding within the first eight hours after birth

Objective: 75% of mothers will have begun breast-feeding within the first hour after birth.

2. 14.9% of mothers exclusively breast-fed their infants aged 0 to 3 months

Objective: 35% of children aged 0 to 3 months of age will be exclusively breast-fed.

Knowledge

3. 8.0% of mothers know that they should breastfeed their child frequently to stimulate the production of breast milk.

Objective: 30% of mothers will know that they should breastfeed their child frequently to stimulate the production of breast milk.

B. Growth monitoring and Infant Nutrition

Practice

4. 52% of all children had growth monitoring cards and 56% of the children who had growth monitoring cards had been weighed in the past four months prior to the survey.

Objective: 65% of the mothers will have growth monitoring cards for their children and these children will have been weighed in the past four months prior to the survey.

Knowledge

5. 58.3% of mothers know that they should introduce weaning foods in addition to breast milk between 4 and 6 months of age.

Objective: 75% of mothers will know that they should introduce weaning foods in addition to breast milk between 4 and 6 months of age.

Practice:

6. 58.7% of mothers give their children aged 6 to 10 months foods rich in vitamin A, iron, and calories.

Objective: 75% of mothers will give their children food rich in vitamin A, iron, and calories.

7. 78.1% of mothers of children aged 6 to 10 months give green leafy vegetables to their children.

Objective: 90% of mothers will give green leafy vegetables to their children.

C. Management of Diarrheal Diseases

Practice:

8. 62.6% of mothers give their non-exclusively breast-fed children solid and/or semi-solid foods during a diarrhea episode.

Objective: 80% of mothers will give their non-exclusively breast-fed children solid and/or semi-solid foods during a diarrhea episode.

9. 59.1% of mothers give their child some form of ORT during a diarrhea episode.

Objective: 80% of mothers practice will administer some form of ORT during their children's diarrhea episode(s).

10. 72.2% of mothers gave more fluids other than breastmilk to their child during a diarrhea episode.

Objective: 85% of mothers practice will give more fluids other than breastmilk to their child during a diarrhea episode.

D. Vaccinations

Vaccination Coverage:

11. The vaccination coverage for children aged 12 to 23 months in the survey found that:

71% had BCG
55.8% had DTC 3
52.8% had Polio 3
47.1% had the vaccine against the measles
42% were completely vaccinated

Objective: 60% of all children will be completely vaccinated (BCG + DTC3 + Polio3 + Measles Vaccine).

Knowledge:

12. 31.4% of mothers know that the tetanus vaccine protects both mother and newborn against tetanus toxoid.

Objective: 50% of mothers will know that the vaccination against tetanus toxoid protects both mother and child.

13. 62.3% of mothers know that a pregnant woman needs at least two TT injections in order to protect the newborn against tetanus toxoid.

Objective: 80% of mothers will know that a pregnant woman needs at least two TT injections to protect the newborn against tetanus toxoid.

14. 17.3% of mothers know that their children need to be vaccinated against measles at the age of 9 months.

Objective: 40% of mothers will know that their children need to be vaccinated against measles at the age of 9 months.

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ANNEX A

CALENDRIER DES ACTIVITES DE L'ENQUETE KPC
PAN à Base Communautaire Département du MONO 1998

Mercredi 4 Mars 1998	Première réunion: prise de contact avec les membres de l'Equipe de Conception: Présentation du KPC et préparation de l'enquête.
Mercredi 18 Mars 1998	Deuxième Réunion avec l'Equipe de Conception pour la préparation des formations pré-enquête.
Du lundi 30 Mars au Vendredi 3 Avril 1998	Formation des Membres de l'Equipe de Conception à l'ENI à Lokossa.
Lundi 6 Avril 1998	Formation des Superviseurs d'enquête par l'Equipe de Conception à l'ENI Lokossa.
Du Mardi 14 Avril	Formation des Enquêteurs par l'Equipe de Conception suivi du test du questionnaire. Sélection des enquêteurs et programmation de l'enquête sur le terrain
Dimanche 19 Avril 1998	Mise en place de toutes les équipes constituées pour faire les interviews d'enquête KPC.
Du Lundi 20 au Mercredi 22 Avril 1998	Conduite des enquêtes sur le terrain.
Mercredi 22 Avril 1998	Dépôt des questionnaires au centre de formation (ENI Lokossa).
Jeudi 23 Avril	Dépouillement manuel de quelques questionnaires par l'Equipe de conception les superviseurs et les enquêteurs retenus.
Du mercredi 22 au mardi 28 Avril 1998	Dépouillement des questionnaires sur EPI INFO.
Du mardi 28 Avril au mercredi 6 Mai 1998	Rédaction du premier jet du rapport (rapport préliminaire)
Vendredi 8 Mai 1998	Dépôt du rapport préliminaire à l' USAID.

Du Lundi 18 au Mercredi 20 Mai 1998	Travaux de groupe pour analyse et interprétation des résultats.
A partir du vendredi 22 Mai 1998	Rédaction du rapport final par le groupe de travail.
30 Juin 1998	Compte rendu aux autorités administratives et aux représentants des institutions partenaires.
14 Août 1998	Dépôt du rapport final à l'USAID.