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WORLD VISION RELIEF AND DEVELOPMENT INC.

**Final Evaluation Report
Koutiala Child Survival Project
Sikasso Region, Mali**

**Beginning Date: October 1, 1987
Ending Date: September 30, 1991**

**Submitted to:
PVO Child Survival Grant Program
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Bureau for Food for Peace and Voluntary Assistance
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December 27, 1991

WORLD VISION RELIEF & DEVELOPMENT INC.

**PART I
KNOWLEDGE AND PRACTICE
SURVEY
KOUTIALA CHILD SURVIVAL PROJECT
SIKASSO REGION, MALI**

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in coordination with
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August 1991

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ACKNOWLEDGEMENTS

The Koutiala Child Survival Project gratefully acknowledges the contributions of the following to the successful completion of this report:

- **Dr. Richard Arnold, Consultant, who provided technical inputs at the design and implementation levels of the survey;**
- **Professor Helen Abey of the Department of Biostatistics, JHU, who provided very vital suggestions for the project designing;**
- **Dr. Fe Garcia of the International Health Program Department of WVRD, who acted as a liaison between Johns Hopkins and the project in Koutiala;**
- **Daniel Coulibaly, Director of World Vision Mali, who gave us the encouragement and cooperation we needed to get this work done, even at a time when we had just finished an evaluation survey of the same project; and**
- **The people of Koutiala district. Without their cooperation, this exercise could never be implemented.**

To all the above, the Koutiala Project staff give our deepest thanks.

EXECUTIVE SUMMARY

The CSIII Koutiala Child Survival Project began in April 1988 with the objective to "reduce the infant and child mortality and morbidity through preventive health care for mothers and children under six years over a period of four years."

The project activities were implemented mainly in the subdistricts of Koutiala Central and Mpelloba. From 1988 until 1991, the intervention area included 54 villages and the town of Koutiala. Future intervention areas will be the 54 villages in the Koutiala Central and Mpelloba subdistricts, including the town of Koutiala and six new villages from 1991 until 1994. The project components are nutrition, diarrheal disease control, growth monitoring, maternal health activities, and immunization for children and women of child bearing age. The immunization component was implemented throughout the district of Koutiala.

The K&P survey WV Mali carried out in Koutiala district had two purposes: (1) a final assessment of the immunization intervention in the entire Koutiala district; and (2) a baseline survey in the 60 villages of Mpelloba subdistricts and Koutiala Central, including Koutiala town.

The WHO model of 30 clusters was used in the two subdistricts and an additional 30 clusters were taken from the rest of the district. For the CS III FINAL SURVEY on immunization, a total of 391 mothers were interviewed on their knowledge and practice in the whole Koutiala district. The results showed coverage for children 12-23 months to be low—only 26 percent were fully immunized. Mothers' knowledge about how many immunizations are needed, and at what age measles immunization should be given, was poor—less than 10 percent.

For the CS VII BASELINE SURVEY, a total of 271 mothers were interviewed on the following topics: nutrition, diarrheal disease control, growth monitoring, maternal health activities, and immunization for children and women of child-bearing age. The baseline survey results showed a low level of knowledge across all the components in the project. In the *nutrition* component, only five percent of mothers were supplementing breast milk by six months. In the *diarrhea* component, only eight percent of mothers cited know that dry mouth, sunken eyes, and decreased urine output are important signs/symptoms of dehydration. In the *EPI* component, only 22 percent of the children 12-23 months were fully immunized. The results regarding maternal care intervention were more positive than in the other interventions: 53 percent visited a health post during their pregnancy.

The project staff recognized that they will need to focus their efforts on training and health education in the future as primary means to strengthen these interventions.

I. INTRODUCTION

A. Background Information

Mali is a West African country with a population of about eight million people, and covers 478,760 sq. miles. The GNP per capita is US\$230, with a life expectancy at birth of 45 years. The birth rate is 52 per 1,000 population, with an high infant mortality rate at 117 per 1000 live births.

World Vision started in Mali in 1982 with the implementation of five community-based projects in collaboration with the Project Bureau of the Association of Evangelical Churches and Missions.

In 1987, World Vision received \$600,000 from USAID to implement a CS III Child Survival Project in the Koutiala Cercle (District) in Sikasso Region 3.

The CS III Koutiala CSP began in April 1988 with the objective to "reduce the infant and child mortality and morbidity through preventive health care for mothers and children under six years over a period of four years."

B. Intervention Area

The project is located in the district (cercle) of Koutiala, 380 km. southeast of Bamako, the capital of Mali. The district has six subdistricts (arrondissements): Koutiala Central, Mpressoba, Konseguela, Kouniana, Zangasso, and Molobala.

The district has a population of 286,184 (1986 population census), including Koutiala town. The town of Koutiala is located in the subdistrict of Koutiala Central, with a population of about 40,000. The majority of the population in the district is rural, with primary activities focused on farming and raising livestock. The major ethnic groups are the Miankas and Bambaras.

Project activities occurred mainly in the subdistricts of Koutiala Central and Mpressoba, which have a combined population of 163,000 and account for 57 percent of the total population in the district. From 1988 until 1991, the intervention area included 54 villages and the town of Koutiala with a population of about 100,000. The project consisted of the following components: nutrition, monitoring, maternal health activities, and immunization for children and women of child-bearing age. The immunization component was implemented throughout the district of Koutiala. The project used about 50 percent of its budget for EPI intervention—it provided all the needed logistics and conducted a public awareness campaign in collaboration with the MOH staff and the local authorities, in accordance with the protocol agreement signed between the MOH and World Vision. Actual vaccination was done by the Ministry of Health staff.

Starting in October 1991, the project will receive \$375,000 from USAID for a three-year extension. The future intervention areas will be the 54 villages in the

Koutiala Central and Mpepassoba subdistricts, including the town of Koutiala and six new villages (population 4,600). The population to be covered by the project will be about 105,000 including the town of Koutiala. The components of the CS VII project will be the same as in the earlier project.

C. Purpose of the Knowledge and Practice Survey

This standardized knowledge and practice survey was carried out following an agreement between WVRD and the PVO Child Survival Support Program (CSSP) at Johns Hopkins University. Subsequent arrangements were made by the project staff in collaboration with WVRD for Dr. Ciro Franco, a CSSP survey trainer, to train the project staff and to provide technical assistance to the survey.

The K&P survey has two purposes: to conduct a final assessment of the immunization intervention in the entire Koutiala district and a baseline survey in 60 villages in Mpepassoba subdistricts and Koutiala Central including the town of Koutiala.

The baseline survey contains the following information:

- Target groups for health education;
- Level of knowledge of mothers with children under two about the management of diarrheal episodes, immunization, and birth spacing;
- Mothers' practice in the following interventions: nutrition, diarrhea case management, birth spacing, immunization, and prenatal care;
- Coverage rate of children 12-23 months with BCG, DPT, OPV, measles vaccine; and
- Coverage rate of mothers of children under two with TT.

The following information was provided by the final survey:

- The level of knowledge of mothers with children under two about immunization;
- Coverage rate of children (12-23 months) with BCG, DPT, OPV, measles vaccine; and
- Coverage rate of mothers of children under two for TT immunization.

D. Schedule of Activities

11-12-13 August—Dr. Ciro Franco arrives in Bamako; receives orientation to the project; works with project coordinator(s) on the survey questionnaire.

14 August—Train supervisors.
15 August—Train interviewers.
16 August—Pilot-test the questionnaire; review; modify and reproduce the same.
17-18-19-20 August—Collect data.
21-22-23-24 August—Tabulate results by hand; write the report; feedback results.
25 August—Dr. Ciro Franco departs for the United States.

II. METHODOLOGY

A. The Questionnaire

The questionnaire was first designed at the PVO CSSP office in Baltimore according to the objectives of the WV Mali project. During this process, many discussions were held with WV Mali staff and WVRD to reach an agreement about the content of the questionnaire.

The questionnaire was designed to be administered to mothers aged 14 to 49 with a child less than 24 months of age. It was first developed in English and translated into French. Questions 1-6 cover demographic and socio-economic indicators; questions 7-9 deal with breastfeeding and nutrition practice; questions 10-19 include knowledge and practice regarding management of diarrheal disease; questions 20-26 deal with mothers' immunization knowledge and coverage rates; questions 27-28 refer to growth monitoring; and questions 29-38 cover knowledge about and practice of family planning, prenatal care, coverage rate with TT immunization, and delivery assistance.

The questionnaire for the baseline (Appendix 1) for the two subdistricts, containing 38 questions, was designed to collect information about maternal and child health relevant for WV Mali's primary health care Child Survival (CS) interventions.

The questionnaire for the evaluation of immunizations (Appendix 2), contained 11 questions (questions 1-2, questions 20-28 as in the first questionnaire), and was designed to gather information about the immunization intervention throughout the entire district.

B. Determination of Sample Size

Ideally, there should have been three surveys: (1) a CS III final survey in the 54 villages, including Koutiala town for all the mentioned interventions, (2) a CS III final survey in the whole district for the EPI intervention, and (3) a CS VII baseline survey for the new six villages for all the interventions. However, such a design would have created not only logistical problems but also the potential of interviewing the same household for several surveys. It was decided to divide the Koutiala district into two different areas: (1) the 54 old villages, plus the 6

new villages (including Koutiala town), and (2) the rest of the district. In the first area, the CS VII baseline survey was conducted. For the CS III final survey (only for the EPI intervention), the two areas were summed up. In the 54 old villages, plus the 6 new villages, 30 clusters were picked. In the rest of the district, another 30 clusters were drawn.

In order to determine the two sample sizes for the two surveys, this formula was used:

$$n = z^2 pq/d^2$$

where n = the sample size, z = statistical certainty chosen, p = coverage rate; level of knowledge, $q = 1-p$; and d = degree of precision.

For the 60 villages, the sample size was determined this way: the degree of precision (d) was set up at 0.1 and the p was set up at 0.5. The resulting minimum sample size was 210, but was increased to 270 to account for possible non-respondents. For the rest of the district $d = 0.1$ and $p = 0.2$. The resulting sample size was 120. Thus, for the final survey regarding immunization, there was a total of 60 clusters with a sample size of 390.

C. Selection of Sample

The WHO model of 30 clusters was followed for each area. The Bureau of Census had a list of the district's villages with their population and a list of Koutiala town broken down into wards. The total population for each area covered by the survey was divided by 30, and using a random number as a starting point, 30 clusters were chosen.

The starting point in each cluster was determined differently in the villages and in the wards of Koutiala. In the villages, the center of the village was located and a random direction selected. The first household was the starting point. In Koutiala town, the list of population for each ward was utilized. From the list, a starting household was picked randomly. The second and subsequent households were chosen in the same way as in the villages and for Koutiala town, the one nearest to the first household was picked.

A fixed number of mothers with children under two were interviewed at each survey area. For the 60 villages (with Koutiala town), nine mothers from each cluster were interviewed, while for the rest of the district, four mothers in each cluster were interviewed.

III. THE SURVEY

A. Training

The training of supervisors and interviewers (the pilot test) lasted three days. There were three supervisors and 12 interviewers resulting in a ratio of one

supervisor to four interviewers. Before the first day of training, the survey trainer and the project staff discussed the training curriculum. Responsibilities were assigned for various topics in the training. The first day was set aside for the training of the supervisors. The trainer and the project technical adviser went over the different topics, focusing on discussion and role play.

The second day was for the training of interviewers. The same topics were covered during the interviewers' training. The trainer and the project technical adviser conducted the training, again focusing on discussion and role play.

The third day was used to conduct the pilot test. A ward in Koutiala town (not included in survey) was chosen. Each interviewer and supervisor interviewed at least three mothers of children 0-23 months. After the pilot test, there was discussion with the interviewers and supervisors about their concerns related to the questions, and minor modifications in the questionnaire were made.

B. The Interviews

The interviews took four days. An appointment was scheduled in case a mother was not available at the time of the interview. If no appointment was possible or the appointment was not kept by the mother, another mother with a child under two was included to achieve the fixed number for the cluster.

The supervisors randomly identified the starting point in each cluster. They checked for completion of the questionnaires on the same day as the interview. Supervisors observed the interviewers for at least one interview each day. Because of logistical problems and distance between villages, the supervisors were not able to accomplish all the required observations.

C. Method of Data Analysis

Data analysis was carried out by hand to ensure better understanding by the project staff of all the steps in the survey process. Ten interviewers and two supervisors were divided into teams of two, and compiled the data. Frequencies were then analyzed.

IV. SURVEY RESULTS

A. CS III Final Survey

Age Distribution of Respondents

1. Age of Mother (years)

<u>AGE</u>	<u>N</u>	<u>%</u>
15	2	1
16	4	1
17	7	2
18	15	4
19	18	5
20	25	6
21	21	5
22	32	8
23	13	3
24	17	4
25	32	8
26	27	7
27	9	2
28	26	7
29	13	3
30	16	7
31	12	3
32	17	4
33	12	3
34	8	2
35	14	4
36	6	2
37	6	1
38	8	2
39	4	1
40	10	3
41	3	1
42	1	0
43	1	0
44	0	0
45	2	1
46	0	0
47	0	0
48	0	0
49	0	0

2. Age of Child (in months)	<u>AGE</u>	<u>N</u>	<u>%</u>
	0	15	4
	1	13	3
	2	22	6
	3	25	7
	4	28	7
	5	17	4
	6	15	4
	7	22	6
	8	25	7
	9	15	4
	10	25	6
	11	21	5
	12	21	5
	13	11	3
	14	13	3
	15	8	2
	16	17	4
	17	23	4
	18	21	5
	19	7	2
	20	10	3
	21	6	2
	22	8	2
	23	9	2

Immunizations

3. Has (name of child) ever received any immunizations?

	<u>N</u>	<u>%</u>
a. Yes	285	73
b. No	104	25
c. Don't know	2	0

4. At what age should (name of child) receive measles vaccine?

a. Specify in Months	<u>M</u>	<u>N</u>	<u>%</u>
	0	1	0
	1	6	2
	2	11	3
	3	33	8
	4	17	4
	5	10	3
	6	13	3
	7	4	1
	8	0	0

9	12	3
10	0	0
11	0	0
12	1	0

b. Don't Know N
174 %
73

5. How many vaccination contacts must (name of child) have to be fully vaccinated?

a. Specify the Number	<u>Cont.</u>	<u>N</u>	<u>%</u>
	0	0	0
	1	4	1
	2	19	5
	3	131	34
	4	40	10
	5	36	9
	6	3	1

b. Don't Know N
191 %
40

6. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?

	<u>N</u>	<u>%</u>
a. To protect the woman against tetanus	13	5
b. To protect the newborn against tetanus	47	17
c. To protect both mother/newborn against tetanus	62	23
d. Other	6	2
e. Don't know	143	53

7. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?

	<u>N</u>	<u>%</u>
a. None	3	1
b. One	20	7
c. Two	55	20
d. More than two	89	33
e. Don't know	104	38

8. Children with an immunization card
a. Yes N
170 %
63 CL.4-.6

9. The denominator is children 11-23 months in the sample.

	<u>N</u>	<u>%</u>
BCG	112	76
DTCoq/polio1	105	71
DTCoq/polio2	82	55
DTPCoq/polio3	42	28
Measles	73	49
Dropout rate DTC1-DTC3	60	
Children (12-23) fully immunized	38	26

10. Mothers with an immunization card.

	<u>N</u>	<u>%</u>
a. Yes	151	56

11. Mothers with number of TT immunizations (according to the card).

	<u>N</u>	<u>%</u>
None	5	3
One	17	11
Two	95	63
More than two	41	27

Summary—A total of 391 mothers were interviewed on immunization knowledge and practice. Seventy-three percent of the respondent mothers declared that their child had been vaccinated. Seventy-three percent did not know the age at which the child should be immunized against measles. Only nine percent knew the correct number of contacts the child should have to be considered completely vaccinated.

Twenty-one percent of the respondents know that the TT vaccine protects the mother and the child against tetanus. Twenty-nine percent know that a pregnant woman must be vaccinated with two or more TT doses to protect her newborn against tetanus.

Fifty-eight percent of children in the sample had vaccination cards; however, only 26 percent of children 12-23 months were fully immunized. The dropout rate (DPT1-DPT3/DPT1) was 60 percent. The results indicate that 55 percent of mothers interviewed had vaccination cards, and 15 percent of mothers with vaccination cards had received at least two or more doses of TT.

Comparison With National Data—The overall results of the survey for EPI in Koutiala district do not differ from the national rates.

1. The national percentage for the fully immunized child (11-23 months) is 22 percent. The survey results for the project were similar (26 percent).

2. The national figure for mothers correctly knowing the child needs 5 contacts to be fully immunized is 4 percent, while the Koutiala figure was 12 percent.
3. Concerning the importance of TT immunization, the national figure is 7 percent, whereas the figure in the project area is 17 percent.

B. CS VII Baseline Survey

Age Distribution of Respondents

1. Age of mother (years)	<u>AGE</u>	<u>N</u>	<u>%</u>
	15	1	0
	16	4	1
	17	5	2
	18	10	4
	19	11	4
	20	16	6
	21	17	6
	22	19	7
	23	11	4
	24	13	5
	25	22	8
	26	13	5
	27	3	
	28	17	6
	29	8	3
	30	23	9
	31	9	3
	32	13	5
	33	5	2
	34	5	2
	35	12	4
	36	5	2
	37	5	2
	38	6	2
	39	4	2
	40	6	2
	41	2	1
	42	1	0
	43	0	0
	44	0	0
	45	1	0
	46	0	0
	47	0	0
	48	0	0
	49	0	0

2. Age of child (months)	<u>AGE</u>	<u>N</u>	<u>%</u>
	0	12	4
	1	10	4
	2	16	6
	3	19	7
	4	21	8
	5	12	4
	6	8	3
	7	15	5
	8	19	7
	9	13	5
	10	17	6
	11	16	6
	12	12	4
	13	10	4
	14	7	3
	15	7	3
	16	11	4
	17	11	4
	18	10	4
	19	2	1
	20	8	3
	21	4	1
	22	5	2
	23	6	2

Mother's Education/Occupation

3. What was the highest educational level you attained?	<u>N</u>	<u>%</u>
a. None	214	79
b. Primary does not read	19	7
c. Primary reads	13	5
d. Secondary	3	1
e. Functional literacy	9	3
f. Other	13	5

4. Do you work away from home?	<u>N</u>	<u>%</u>
a. Yes	107	39
b. No	164	61

5. Do you do any "income-generating work"? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. Selling agricultural products	38	14
b. Harvesting	3	1
c. Selling foods	57	21
d. Other	51	19
e. None	121	45

6. Who takes care of (name of child) while you are away from home? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. Mother takes child with her	83	31
b. Husband/partner	5	2
c. Older children	80	30
d. Relatives	108	40
e. Neighbors	3	1
f. Friends	1	0
g. Maid	5	2
h. Other	0	0

Breastfeeding/Nutrition

7. Are you breastfeeding (name of child)?

	<u>N</u>	<u>%</u>
a. Yes	258	95

8. Have you ever breastfed (name of child)?

	<u>N</u>	<u>%</u>
a. Yes	13	5

9a. Are you giving (name of child) juices?

	<u>N</u>	<u>%</u>
1) Yes	129	48

9b. Are you giving (name of child) bottle milk?

	<u>N</u>	<u>%</u>
1) Yes	12	4

9c. Are you giving (name of child) semisolid foods such as gruels, porridge or semolina?

	<u>N</u>	<u>%</u>
1) Yes	132	49

9d. Are you giving (name of child) enriched semisolid foods?

	<u>N</u>	<u>%</u>
1) Yes	69	25

9e.	Are you giving (name of child), mango, carrot, or baobab leaves?		
		<u>N</u>	<u>%</u>
1)	Yes	119	44
9f.	Are you giving (name of child) leafy green vegetables, such as spinach (gombo)?		
		<u>N</u>	<u>%</u>
1)	Yes	109	40
9g.	Are you giving (name of child) meat, beans, or fish?		
		<u>N</u>	<u>%</u>
1)	Yes	246	91
9h.	Are you giving (name of child) eggs or liver?		
		<u>N</u>	<u>%</u>
1)	Yes	75	28
9i.	Are you adding honey or sugar to (name of child)'s meals?		
		<u>N</u>	<u>%</u>
1)	Yes	136	50
9j.	Are you adding oil to (name of child)'s meals?		
		<u>N</u>	<u>%</u>
1)	Yes	54	20

Age Groups: 1 = 0-3 months; 2 = 4-6 months; 3 = 7-9 months; 4 = 10-12 months; 5 = 13-15 months; 6 = 16-18 months; 7=19-23 months.
Practice for each age group, by type of food given.

	1		2		3		4		5		6		7	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Jus Fruit	12	20	14	35	26	54	28	62	17	71	19	63	13	52
Bottlemilk	3	5	3	8	4	8	2	5	0	0	0	0	0	0
Porridge	0	0	2	5	30	60	33	79	24	96	32	100	21	84
Enriched Porridge	0	0	0	0	15	29	17	40	13	52	15	47	9	36
Carrot	0	0	1	3	16	33	32	73	21	91	28	93	21	81
Gombo	0	0	0	0	14	29	27	61	20	87	27	90	21	81
Bean	5	8	2	6	17	36	30	67	80	87	89	94	23	100
Eggs	3	5	0	0	14	29	18	39	10	43	19	51	11	48
Add Sugar	5	9	2	5	26	54	32	74	22	92	28	85	21	84
Add Oil	1	2	0	0	7	14	12	29	12	52	12	35	10	40

Diarrheal Diseases

10. Children who had diarrhea during the last two weeks

a. Yes	<u>N</u> 95	<u>%</u> 35 CL.3-4
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11. During (name of child)'s diarrhea, did you breastfeed?

a. More than usual?	<u>N</u> 14	<u>%</u> 15
b. Same as usual?	50	53
c. Less than usual?	27	28
d. Stopped completely?	0	0
e. Not breastfeeding?	4	4

12. During (name of child)'s diarrhea, did you provide (name of child) with fluids other than breast-milk?

a. More than usual?	<u>N</u> 11	<u>%</u> 12
b. Same as usual?	38	40
c. Less than usual?	27	28
d. Stopped completely?	1	1
e. Exclusively breastfeeding	18	19

13. During (name of child)'s diarrhea, did you provide (name of child) with solid/semisolid foods?

	<u>N</u>	<u>%</u>
a. More than usual?	5	5
b. Same as usual?	25	27
c. Less than usual?	24	25
d. Stopped completely?	1	1
e. Exclusively breastfeeding?	40	42

14. After (name of child)'s diarrhea, did you provide (name of child) with solid/semisolid foods?

	<u>N</u>	<u>%</u>
a. More than usual?	18	23
b. Same as usual?	30	38
c. Less than usual?	3	4
d. Stopped completely?	1	1
e. Exclusively breastfeeding?	27	34

15. When (name of child) had diarrhea, what did you do? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. ORS sachet	8	8
b. Sugar-salt solution	27	28
c. Antibiotics or anti-diarrhea medicine	26	27
d. Other fluids	9	9
e. Other	33	35
f. Nothing	14	15

16. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?

	<u>N</u>	<u>%</u>
a. Yes	39	41
b. No	56	59

17. From whom did you first seek advice or treatment for the diarrhea of (name of child)? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. General hospital/health center.	11	28
b. Private clinic/doctor	1	3
c. Community health workers	7	18
d. Traditional healer	6	15
e. Health educator	13	33
f. Parents	12	31
g. Traditional birth attendant	0	0
h. Other	0	0

18. What are important actions you should take if (name of child) had diarrhea? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. Take the child to the general hospital	58	21
b. Take the child to the health center/ health educator	94	35
c. Give the child more to drink than usual	58	21
d. Give the child less to drink than usual	13	5
e. Give the child smaller more frequent feeding	7	3
f. Withhold fluids		
g. Withhold foods	3	1
h. Other	59	15
i. Don't know	41	15

19. What signs/symptoms would cause you to seek advice or treatment for (name of the child)'s diarrhea? (Multiple answers possible.)

	<u>N</u>	<u>%</u>
a. Vomiting	18	7
b. Fever	75	28
c. Dry mouth, sunken eyes, decreased urine output	22	8
e. Diarrhea of prolonged duration (at least 14 days)	88	32
f. Blood in stool	11	4
g. Loss of appetite	25	9
h. Weakness or tiredness	76	28
i. Other	40	15
j. Don't know	68	25

Immunizations

20. Has (name of child) ever received any immunizations?

	<u>N</u>	<u>%</u>
a. Yes	202	75
b. No	68	25
c. Don't know	1	0

21. At what age should (name of child) receive measles vaccine?

	<u>M</u>	<u>N</u>	<u>%</u>
a. Specify in months	0	1	0
	1	5	2
	2	7	3
	3	27	10
	4	13	5
	5	8	3
	6	11	4

	7	4	1
	8	0	0
	9	11	4
	10	0	0
	11	0	0
	12	1	0
b. Don't know	183	68	
22. How many vaccination contacts must (name of child) have to be fully vaccinated?			
	<u>Cont.</u>	<u>N</u>	<u>%</u>
a. Specify the number	0	0	0
	1	3	1
	2	11	4
	3	97	36
	4	28	10
	5	33	12
	6	2	1
b. Don't know	97	36	
23. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?			
		<u>N</u>	<u>%</u>
a. To protect the woman against tetanus		13	5
b. To protect the newborn against tetanus		47	17
c. To protect both mother/newborn against tetanus		62	23
d. Other		6	2
e. Do not know		143	53
24. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?			
		<u>N</u>	<u>%</u>
a. None		3	1
b. One		20	7
c. Two		55	20
d. More than two		89	33
e. Don't know		104	38
25. Children with an immunization card			
		<u>N</u>	<u>%</u>
a. Yes		170	63
26. The denominator is children (11-23 months)			
		<u>N</u>	<u>%</u>
BCG		75	81
DTCoq/polio1		70	75

DTCoq/polio2	54	58
DTCoq/polio1	22	24
Measles	48	52
Dropout rate DTC1-DTC3/DTC1	69	
Children (12-23) fully immunized	20	22

Growth Monitoring

27. Children who have a growth monitoring card		
	<u>N</u>	<u>%</u>
a. Yes	44	16
28. Children who have been weighed at least once during the last three months (according growth monitoring card).		
	<u>N</u>	<u>%</u>
a. Yes	27	55

Maternal Care

29. Do you want to have another baby in the next two years?		
	<u>N</u>	<u>%</u>
a. Yes	106	39
b. No	148	55
c. Don't know	17	6
30. Do you know of any methods to avoid getting pregnant?		
	<u>N</u>	<u>%</u>
a. Yes	46	17
b. No	225	83
31. What method(s) are you or your husband using to avoid/postpone getting pregnant? (Multiple answers possible.)		
	<u>N</u>	<u>%</u>
a. Pill	22	48
b. IUD	2	4
c. Gel/Spermicide	0	0
d. Condom	2	4
e. Injectable	4	9
f. Traditional Method	1	2
g. Coitus interruptus	4	9
h. Other	16	35
32. How soon after a women knows she is pregnant should she see a health professional (physician, nurse, midwife)		
	<u>N</u>	<u>%</u>
a. First trimester	91	34
b. Middle of pregnancy	77	28

c.	Last trimester	25	94
d.	No need to see health worker	8	3
e.	Do not know	70	26
33.	When you were pregnant with (name of child), did you visit any health site (dispensary/health center, aid post) for pregnancy/prenatal care?		
		<u>N</u>	<u>%</u>
a.	Yes	143	53 CL.4-.6
b.	No	128	47
34.	Mothers with a maternal card?		
		<u>N</u>	<u>%</u>
a.	Yes	91	33
35.	Mothers with at least one prenatal visit?		
		<u>N</u>	<u>%</u>
a.	Yes	91	100
36.	Mothers with an immunization card?		
		<u>N</u>	<u>%</u>
a.	Yes	151	56
37.	Mothers with number of TT immunization (according to the card)?		
		<u>N</u>	<u>%</u>
	None	5	3
	One	17	11
	Two	95	63
	More than two	41	27
38.	At the delivery of (name of child), who tied and cut the cord?		
		<u>N</u>	<u>%</u>
a.	Yourself	4	2
b.	Family member	20	7
c.	Health educator	18	7
d.	Health professional (physician, nurse, midwife)	175	64
e.	Traditional birth attendant	54	20
f.	Other	0	0

Summary—A total of 271 mothers were interviewed for the CS VII baseline survey.

A majority of these mothers (79 percent) have not had any formal education. Less than half of the mothers (39 percent) work outside their house. In the absence of the mother, the older siblings (30 percent) and members of the family (40 percent) take care of the children.

Breastfeeding/Nutrition. Almost all (95 percent) currently breastfeed. However, only 5 percent of mothers give porridge (bouille) to their children by 4-6 months. Only 3 percent of mothers with children 4-6 months give them food containing Vitamin A.

Diarrheal Disease Control. Ninety-five children (35 percent) had diarrhea in the previous two weeks. Among the mothers whose children had diarrhea, only 15 percent declared they breastfed more than usual, while 53 percent declared they breastfed normally. Twelve percent of mothers asserted they gave more liquid than usual, while 40 percent declared they gave liquid in normal amount. Five percent of mothers declared they fed the children more than usual, whereas 42 percent declared they only breastfed during the diarrhea episode. Although 23 percent of mothers stated they fed their children more than normal after the diarrhea episode, 38 percent fed their children normally.

Among the mothers whose children had diarrhea in the last two weeks:

- 27 percent had used antibiotic and antidiarrheal drugs.
- 28 percent had used the sugar-salt solution.
- Only eight percent had used ORS.

Only eight percent of all mothers in the sample know that dry mouth, sunken eyes, and decreased urine output are important signs/symptoms of diarrhea while 25 percent do not know the signs/symptoms of diarrhea.

Immunization. Seventy-five percent of mothers know that their child has been immunized. Only four percent know at what age the child should receive measles vaccination. Twelve percent know how many contacts the child should have in order to be fully vaccinated.

While 23 percent of all mothers know that the immunization against tetanus is for the protection of the mother and the newborn against tetanus, 53 percent do not know the main reason why a pregnant woman needs to be vaccinated with tetanus toxoid vaccine.

Sixty-three percent of all children 12-23 months have an immunization card, but 22 percent of children are fully immunized. The dropout rate DTP1-DTP3/DPT1 is 69 percent.

Growth Monitoring. Only 16 percent of eligible children have a growth card. Among children who possess a card, 55 percent have been weighed at least once in the last three months. Ten percent of eligible children 0-23 months have been weighed at least once in the last three months.

Maternal Care. More than half (55 percent) of mothers in the sample do not want to have another child in the next two years. Eighty-three percent of mothers do not know what to do to avoid/postpone a pregnancy. Of those who

know a contraceptive method, the most frequently mentioned is the pill (48 percent). On the question of how soon she should see a health professional when she is pregnant, 34 percent of the respondents stated the first trimester; 8 percent the second trimester; and 26 percent did not know.

Half of the mothers (53 percent) said they visited a health post during their pregnancy for a prenatal visit but about one third of these women had lost their prenatal card. Fifty-six percent of mothers have their own immunization cards. Among these women with immunization cards, 63 percent had two vaccinations, and 27 percent had more than two. Among all mothers with or without cards, 15 percent had more than two vaccinations, and 35 percent had two vaccinations.

Sixty-four percent of all women sampled had been assisted during delivery by a physician, a nurse, or a matrone, while only 20 percent of the women had been assisted by a traditional birth attendant.

C. Implication of the Data for the Project

The project staff recognized that these baseline survey results can be used to improve the various interventions over the next three years. They developed some strategies, which are reported below.

1. Target Group for Health Education. Other family members should be targeted for future health education interventions.
2. Nutrition. Only five percent of the mothers provide supplemental food by 4-6 months. The project staff recognized that they should place more focus on this problem. This message should be emphasized by the animatrices who are in constant touch with the village target groups.
3. Vitamin A. Mothers virtually do not supplement the food of their their 4-6 month olds with Vitamin A-rich food. It was decided to investigate whether there are any national data on xerophthalmia prevalence. Based on this data, the project staff could decide whether there is a need to carry out a survey in Koutiala district to detect its prevalence.
4. CDD Intervention. The survey reveals that although mothers continue to feed their children during a diarrhea episode, only 15 percent feed them more than normal. The project staff will need to emphasize this message during the training of the animatrices, as well as the message about giving the children more liquid when they suffer from diarrhea. In addition, the project staff decided to focus their attention on the health messages relating to identification of signs and symptoms of dehydration.
5. EPI Intervention. The project staff felt there was a need to stress the need for vaccination and the service contacts needed to complete the series. Half of the mothers do not know the reason why they are vaccinated

against tetanus and only 12 percent of them know that the child needs five contacts in order to be fully immunized.

6. **Maternal Care.** Fifty-five percent of mothers do not want a baby in the next two years but only 17 percent of them know how to avoid/postpone the pregnancy. In the light of these results, the project staff recognized the need to strengthen and reinforce the health messages about the family. Focus group discussions will be conducted more often to promote a better understanding of the issues.

Only one out of three mothers goes to the health center in first trimester of their pregnancy. The project staff judged it useful to conduct focus group discussions here too, to detect why an early prenatal visit is not a priority for the mothers.

In addition to a focus on individual interventions, the project staff decided on an eventual reallocation of jobs at various levels:

Village Level. Animatrices will be trained in all sixty villages to disseminate the key health messages mentioned above, not only among mothers, but also among older girls and grandparents who assist in taking care of the child. Aide-soignants and matrones in the villages will be trained to assist in the supervision of the animatrices.

Koutiala Town. Trained animatrices in the twelve districts will be assigned to organize mothers for weekly meetings during which health messages will be taught. They will also be responsible for conducting home visits to educate mothers and help them practice what they learn.

The project technical staff in collaboration with the Ministry of Health staff, will be responsible for the training and supervision of aide-soignants and matrones. They will also carry out periodic supervision for the animatrices in the town and the villages to ensure that the right messages are being delivered.

VII. SURVEY COSTS

The total cost of the survey was US\$2,855.

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WORLD VISION RELIEF & DEVELOPMENT, INC.

**PART II
SUSTAINABILITY ASSESSMENT REPORT
KOUTIALA CHILD SURVIVAL PROJECT
KOUTIALA, MALI**

**Beginning Date: October 1, 1987
Ending Date: September 30, 1991**

**Submitted by:
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September 30, 1991

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ACKNOWLEDGMENTS

The evaluation team would like to extend a special "thank you" to Mr. Sam Asare, World Vision Child Survival Project Manager, for his constant attention and concern for the needs of the evaluation team as well as his assistance in understanding the project; and special thanks to Save the Children/Mali for permitting Dr. Doumbia to participate in this very useful exercise and also to the Regional Health Office in Sikasso for the very worthwhile participation of Dr. Karambiri.

LIST OF ABBREVIATIONS

AMPPF	Association Malienne pour la Protection Familiale, Mali's Planned Parenthood organization
AT	Accoucheuse Traditionelle (TBA in English)
A/S	Aides-Soignant (First Aid Attendant in English)
BCG	Bacillus Calmette-Guerin—vaccine against Tuberculosis
CMDT	Compagnie Malienne de Developpement de Textiles
CNI	Centre National de Immunization
CSSP	Child Survival Support Program
CSP	Child Survival Project
DIP	Detailed Implementation Plan
DPT	Diphtheria, Pertussis, Tetanus Vaccine (DTC in French)
EPI	Expanded Program for Immunization (PEV in French)
FAA	First Aid Attendants (Aides-Soignants in French)
FP	Family Planning
FVA	Food for Peace and Voluntary Assistance (USAID)
FY	Fiscal Year
HIS	Health Information Systems
KAP	Knowledge, Attitudes, Practice
LPN	Licensed Practicing Nurse, Infirmiere de ler Cycle
MCH	Maternal and Child Health (SMI in French)
MOH	Ministry of Health
MTE	Midterm Evaluation
NGO	Nongovernmental Organizations
OPV	Oral Polio Vaccine
ORS/ORT	Oral Rehydration Solution/Therapy, SSS in Mali
PACD	Project Activity Completion Date
PRITECH	Diarrheal Disease Control Project
PVO	Private Voluntary Organization
SSS	Sugar Salt Solution
TBA	Traditional Birth Attendant, Accoucheuse Traditionelle in French
VA	Village Association
VHC	Village Health Committee
VHV/HV	Village Health Volunteer/Health Worker
VP	Village Pharmacist, Hygieniste/Secouriste in French
WHO	World Health Organization
WV	World Vision
WRD	World Vision Relief and Development Inc.

TRANSLATION OF SOME FRENCH TERMS NOT ABBREVIATED

Medecin Chef	Chief Medical Officer
Sage Femme	Midwife
Matrone	Assistant Midwife
Animatrice	Village Health Volunteer
Chef de Post d'Arrondise	Chief of Subdistrict Health Post
Cercle	District
Arrondissement	Subdistrict
Centre de Santè Medicale	Health Center

I. EXECUTIVE SUMMARY

In October 1987, USAID/Washington provided a grant to World Vision (WV) to implement a four-year Child Survival Project (CSP) in the District of Koutiala in the Sikasso Region of Mali. This project had four components: vaccination, diarrheal disease control/ORT, nutrition, and birth spacing. Later the third component was expanded to include maternal health activities. The target population for the vaccination component included the entire district, or 286,244 people, while the other interventions were conducted in the subdistricts of Koutiala Centrale and M'Pessoba with a combined population of 164,387.

During the first three years of the project, Maternal/Child Health activities were carried out by the MOH personnel working in the 17 maternities and 16 dispensaries in the project zone. To facilitate this, project staff, a nutritionist and a nurse organized training programs, and the project provided equipment and supplies to the health facilities. Activities included growth monitoring in dispensaries; health/nutrition education concerning diarrhea management (ORT preparation and administration); weaning practices, and family planning; prenatal consultations and assisted deliveries; and food demonstrations. Working through the maternities and dispensaries the project was able to reach only 60 percent of the target population.

In the third year of the project, an outreach strategy was adopted which included the recruitment, training and supervision of village health volunteers (animatrices) who identify and follow up malnourished children, conduct food demonstrations, and promote family planning.

The project's support of the Expanded Program for Immunization (EPI) was all-inclusive. It financed every aspect of the EPI except the salaries of the MOH personnel and vaccination cards. It also provided long-term technical assistance. The project's EPI strategy was the same as that of the National Center for Immunization: urgent and complete coverage through the efforts of a mobile team of vaccinators, followed by a maintenance vaccination phase.

A final evaluation of the project was conducted in three phases between June and September 1991. Phase one consisted of a quantitative survey and analysis of the project objectives; phase two consisted of a standardized Knowledge, Attitudes, Practice (KAP) survey. During the last phase, an analysis and synthesis of the two surveys and review of the strategies were conducted. Recommendations for the extension (second phase) project were made, based on the findings and conclusions.

II. EVALUATION PLAN

A. Background—In 1987, World Vision/Mali received a grant from A.I.D./Washington in the amount of \$654,000, with a matching fund of \$400,000, to implement a Child Survival Project in the District of Koutiala, in the Sikasso Region of Mali. The project, which began in October 1987, was funded for four years. As part of the monitoring and evaluation process, the project has

conducted annual internal progress evaluations, and in September 1988 a Midterm Evaluation (MTE) was also conducted. A final evaluation of the project is also required.

In December 1990, WV submitted a proposal for an extension project to the Koutiala Child Survival Project. This is a three-year project with a \$620,848 budget. The Child Survival components remain the same as in the first project, but financial support of the EPI has been eliminated and there will be a Vitamin A component. The project has been funded in the amount of \$338,395 and will begin operations on October 1, 1991.

Oftentimes, the results of a final evaluation are to be used to design an extension project. Waiting for the results, however, causes interruptions in funding and, therefore, an interruption in project activities. In this case, where funding has already been secured and activities will be continued, the results of the final evaluation can be used by project staff to elaborate the Detailed Implementation Plan and, if necessary, to modify the original project design.

- B. **Purpose**—A final evaluation differs from other evaluations in that the measurement used is "impact on the target population" rather than the progress of the activities carried out by the project. One is looking to see the effect the activities have had on the beneficiaries. Because changes in such indicators as infant, child, and maternal morbidity and mortality, reduction of diarrheal disease and malnutrition are very slow and dependent on a multitude of factors, Child Survival projects are encouraged to focus their attention on increasing knowledge and changing attitudes and practices among the targeted groups, in an effort to promote achievement of the general objectives (morbidity and mortality reduction, etc.) and the ultimate goal (improved quality of life, etc.).
- C. **The Approach**—The final evaluation of the World Vision (WV) Child Survival Project (CSP) in Koutiala was conducted in three phases. The first phase was carried out by the National Institute for Public Health Research (INRSP) and consisted of a survey to evaluate the quantifiable specific objectives of the project as they are stated in the Third Annual Report (these objectives differ slightly from those stated in the Detailed Implementation Plan (DIP) (see Table II 3). This survey was conducted in June and the report submitted to World Vision in July.

In July, World Vision received a directive from A.I.D./Washington regarding end-of-project evaluations. The memo indicated that all final evaluations should contain (a) the results of a standardized Knowledge, Attitude and Practices (KAP) study; (b) a project sustainability assessment; and (c) an end-of-project financial accounting. In August, a consultant from the Child Survival Support Project (CSSP), Dr. Ciro Franco, came to Mali to oversee implementation of the standardized KAP study in the WV CSP impact zone.

Armed with the results of these two studies, the third part of the evaluation was conducted September 3-30, 1991. The purpose of this phase was to study the reports from the two previous phases and research aspects that merited further clarification. During the third phase particular attention was given to project design and strategies used to achieve the results. These results are discussed under Part IV section of this final report. At the direction of A.I.D./Washington (Child Survival and Health Bureau of Food for Peace and Voluntary Assistance, a special focus was placed on sustainability issues. In general, the team made an effort to look at the big picture, focusing on basic issues rather than implementation details.

- D. Team Composition**—The team was composed of four people. Bonnie Kittle, a local private consultant with 15 years' experience in Child Survival project management, served as the team leader and principal writer. Dr. Fode Doumbia, the Save the Children/Mali Child Survival Project Manager, also participated, as did Dr. Benoit Karambiri from the Regional Health Office in Sikasso. Dr. David Miller, a development anthropologist with extensive experience in West Africa and knowledge of Bambara (the local language), was the fourth member of the team.
- E. Methodology and Schedule**—Before the evaluation team came together in early September, the team leader met with the INRSP team to discuss the first phase of the evaluation. At that point it was decided not only to consider the number of health workers trained, but to try to evaluate their knowledge as well.

The evaluation implementation plan was divided into three parts. The first week was spent reviewing project documents, delegating tasks and developing a questionnaire-guide for field use. The second week was spent in the project zone, interviewing project staff, MOH and CMDT (Compagnie Malienne de Developpement de Textile) personnel and beneficiaries. Two days were spent visiting villages (eight in all) and interviewing Village Association members, health committee members, as well as various health workers. On the last day of the field visit the evaluation team reviewed the preliminary findings with the WV CSP staff. Upon return to Bamako, the team members wrote up their findings (Dr. Karambiri did not participate in the write-up phase). These were reviewed by Sam Asare and Dr. David Coulibaly, and feedback was provided to the team leader, who then put the report in its final form.

The work schedule was as follows:

June, Five Days—Team leader works with INRSP evaluators and reviews project documents;

September 3-7—Evaluation Team in Bamako—review documents, delegate tasks, plan for field visit;

September 10-14—Field visit to Koutiala including visits to eight project villages;

September 16-20—Write up findings and submit first draft for review;

September 23-30—Discuss draft with Sam Asare and David Coulibaly, make revisions, submit final report.

III. SUSTAINABILITY

Although it has always been a concern, in recent years USAID has begun to focus on the issue of sustainability. The different elements contributing to the sustainability of an activity have been dissected, and now USAID is trying to monitor NGOs' efforts to make their projects (or at least some of the activities of the project) sustainable. To facilitate evaluation of progress toward sustainability, FVA has developed sustainability guidelines which are a series of questions subdivided into eight categories. This chapter responds to those questions which are listed in Appendix 2.

Before a project can progress toward making activities self-sustaining, project designers and staff must determine which activities need to be sustained and/or which ones have a good chance of being sustained. Then a plan or plans must be developed and followed. Sustainability cannot happen on its own or as an afterthought, but rather, it must be a part of the strategy with corresponding activities and objectives. So far, USAID has asked for sustainability indicators but not objectives.

In most developing countries, sustainability is a long-term goal, with intermediary objectives being measured by such indicators as regular meetings of village health committees, communities supporting VHWs, etc. Small steps such as these increase self-confidence which can lead to self-reliance and sustainability. This is a slow process, incorporating few steps forward and many steps backward before any progress is noticeable. Therefore, sustainability usually cannot be achieved during the short life of a project.

In the Malian public health context it is not possible at this time for NGOs to target vaccinations as a sustainable activity—that is, for community members themselves to sustain this service. This is because vaccination is a national program which has been strictly controlled by the National Center for Immunization (CNI). The current policy within the CNI is that the EPI should be run in the same manner throughout the country without exception. Attempts to improve on the system or to get communities to pay for vaccines, or otherwise cover the related costs, are not allowed. Given this situation Child Survival grantees in Mali might try, as World Vision has done, to improve the MOH's abilities to run the EPI, or focus their sustainability efforts on other activities.

- A. Sustainability Status**—Assessment of the sustainability status of the World Vision CSP activities is complicated by the fact that the project has received an extension. MCH activities will be continued in the extended project; CSP has not turned over responsibility for these activities. However, the CSP extension will not include EPI activities, and WV has turned over most EPI responsibilities to the Ministry of Health.

Initial funding for World Vision's Child Survival Project ended on September 30, 1991. World Vision applied for a project extension on December 1, 1990, when ten months remained in the original project. A.I.D. granted an extension until September 30, 1994. The Proposal for the extension includes the continuation of MCH activities for three years. World Vision contributions to the EPI will be limited to social mobilization and referral of incompletely vaccinated individuals.

Accordingly, CSP staff have turned over the EPI activities that continue in the maintenance phase. Initially, while the program was in the mobile team phase, the WV technical team leader and EPI Supervisor took great responsibility for the vaccination program. He assisted in all program activities, including planning, logistics, supervision, and reporting. In the last year, as the EPI has shifted into the maintenance phase, certain activities have been discontinued, while the technical team leader has gradually turned over others to the MOH EPI officer. In the final months of the project, the technical team leader has only occasionally done reporting for the EPI component.

MCH activities continue to be directed and conducted by WV staff; their interventions in this area will continue. The three members of the technical team, sometimes assisted by local personnel, conduct training and supervision. They remain the driving force in promoting activities and making decisions. WV expects to turn over these activities before the end of the extended project, although no calendar of phase-out is included in the extension project proposal.

- B. Sustainability Plan**—Both the DIP and the MTE present brief sustainability plans, neither of which includes commitments by government agencies to continue project activities once funding stops. For its part, the DIP is neither detailed nor exhaustive. Although the CSP staff has implemented this plan, sustainability has not been assured. Recurrent costs, in particular, remain a significant problem. Evaluators recognized this at the time of the MTE, and included an expanded cost-recovery plan in their report. Unfortunately, project staff have been unable to implement the MTE plan.

The DIP sustainability plan includes five points:

- Social mobilization by village leaders;
- Collaboration with the Compagnie Malienne de Developpement de Textiles (CMDT);
- Training and gradual turnover of responsibilities to MOH personnel;
- Collaboration with a wide variety of local and national organizations; and
- Cost recovery through the sale of vaccination cards.

The MTE added a new dimension to cost-recovery plans. The evaluation recommended that the project collaborate more closely with CMDT to encourage Village Associations (VAs) to set aside funds at harvest time. From this fund,

well organized villages would pay a portion of their vaccinations and the per diems of community health workers. The MOH would be requested to pay the balance of the cost. This proposal was not feasible, however, because the National Center for Immunization strictly controls every aspect of the EPI throughout Mali, and individual agencies and different sections of the country are not allowed to deviate from the national EPI strategy.

To implement the DIP, CSP staff have involved village leaders in social mobilization; worked with CMDT and VAs; trained MOH staff and turned over some responsibilities to them; and collaborated with a wide range of other organizations. However, the project has not been able to establish cost-recovery mechanisms to insure the continuation of activities after the end of project funding. The sale of vaccination (which is a CNI policy) and growth-monitoring cards raises only a fraction of funds required. Nor has either MOH or CMDT committed to sustain project benefits and maintain activities villagers themselves can't pay for. Aside from minutes of monthly meetings where roles and responsibilities may be defined for specific activities, no written agreement has been made with CMDT. In the "Protocol D'Accord," the project's one written agreement with the MOH, the ministry promised only to contribute staff time and facilities during the project's lifetime.

In the last year, project staff have been promoting women's gardens as an alternative mechanism to support nutritional demonstrations and other MCH activities.

- C. **Community Participation and Perception of Project Effectiveness**—The CSP staff have made a great effort to insure project sustainability through community participation. Members of local communities show enthusiastic support for project activities, and in the last year, the locally chosen members of health committees (VHCs, Comites de Sante) and health volunteers (HVs, animatrices) have contributed much time and labor to the CSP. To date, they have provided only limited cash and in-kind contributions, however.

Group interviews were held with the Village Associations, Village Health Workers, Village Health Volunteers, Village Health Committees and village councils of eight villages, two of which were identified by project staff as model villages. Village and government representatives, HVs, and health workers were also interviewed in Koutiala and M'Pessoba. These members of local communities indicated that they strongly support the program and consider MCH and EPI activities effective.

The communities have backed up this enthusiasm with action. In the town of Koutiala, where project staff initially concentrated much of their effort, women have strongly influenced the project. The local branch of a national women's organization, the Union Nationale des Femmes du Mali (UNFM, now defunct and reconstituted locally as "Dembaya Nyuman"), has helped define project activities in Koutiala. For example, the project staff credits an influential member

of this organization with inspiring the training of HVs, which has since become a central project activity. The UNFM also influenced the decision to promote women's gardens.

Rural communities, on the other hand, have not contributed to project development and planning, but both urban and rural communities have participated in the implementation of health services. In Koutiala, women have raised funds through their gardens and other activities, and volunteered to be trained as village health volunteers. In villages, Village Associations (VAs) may provide financial or material support to VHVs who, with the help of local health workers, conduct nutritional and Salt and Sugar Solution (SSS) demonstrations. They also identify, refer, and follow up malnourished infants, and campaign to keep public areas clean. Village leaders play an important role in the dissemination of information and social mobilization for vaccinations.

VHCs form the link between the VAs and the VHVs. In principle, each of the 54 villages targeted in the project area has a health committee. CMDT established these committees, and the CSP has reinvigorated them. They meet irregularly throughout the year, only when members find it necessary, and don't take minutes of their meetings. The evaluation team did not survey all villages to determine the number of working committees. WV staff consider all of the 54 VHCs functional, although the VHC in one of the eight villages visited for this evaluation was not functional.

Communities do not democratically elect the members of the organizations working with the project, the VAs and VHCs. Instead, established organizations determine membership. As a result, the committees often embody such inequities as exist in Malian society. As mentioned above, the women of Koutiala women's health group were members of the UNFM, the women's union that was associated with the nation's single legal party. VHWs and animatrices have been selected by the senior males of village councils.

In addition to providing the link between VAs and VHVs, VHVs organize village cleaning and information campaigns, purchase and distribute medicines, and host health-sector visitors. VHC members may also supervise or assist VHVs.

Communities, working through these health committees, have contributed a variety of non-cash resources. They have contributed food for cooking demonstrations, and men and women have contributed time and labor to village clean-up campaigns and establishing gardens. Perhaps most important, the women who have become VHWs have contributed their time and effort; they will remain in constant contact with the villages long after project funding ends.

- D. Institutional Sustainability—Strengthening Local Management—**In addition to working directly with communities, CSP staff members have worked closely with their partners, the MOH and CMDT, and representatives of both of these institutions clearly appreciate the new life the project has injected into their

activities. However, WV has not been able to negotiate full collaborative relationships with these institutions. The relationships that do exist have been reinforced with project funding. Furthermore, commitments from the Malian institutions have been lacking and the collaboration has not reinforced partner management systems. As result, the MOH and CMDT have neither the commitment nor the management capability to maintain project activities after funding ends.

Project staff has worked closely with both the MOH and CMDT. The three partners have held monthly meetings in which they plan activities and discuss problems. Members of the CSP team have counterparts at MOH, and MOH employees from the Chief Medical Officer down to the nurse at the subdistrict level participate in planning and conducting training and implementing certain activities. CMDT agents, who have other priorities, work on the project less frequently than MOH, yet have participated in village identification, social mobilization, and the training of VHVs. Both MOH and CMDT employees have worked on CSP activities independently of project staff members.

Interviews indicate that MOH staff and CMDT staff appreciate this collaboration; the project has invested their activities with new energy. CSP reintroduced health activities in the district after the CMDT Mali Sud II project funding ended. MOH staff show particular appreciation for the equipment the project has provided.

Despite amicable relations and frequent contact, the relationships developed fell short of full collaboration. In the EPI campaign, project staff felt obliged to submit to national and regional demands, and simply provided funds instead of negotiating solutions satisfying both parties. In MCH activities neither MOH and CMDT were fully included in the identification and planning of new project activities. CMDT made itself available to the project and assisted in a limited number of activities, but never played the support role in community development projected in the DIP and MTE.

Unidirectional financial exchanges supported these linkages with government institutions. Neither MOH nor CMDT contributed resources to the project other than staff time and facilities. The project, on the other hand, in addition to providing a large quantity of equipment—\$104,366 in medical and pharmaceuticals alone—insured the participation of MOH staff time with per diems, fuel and other incentives. The project paid a total of \$21,887 in per diems.

Although the project also provided training for MOH staff, this training did not include formal training in management or administration. Managerial capabilities have been transferred to nurses in charge of the fixed vaccination centers, however, who are now capable of managing the cold chain and the maintenance phase of the EPI. Institutional support was not included in the project DIP, and CSP provided only technical training, such as nutrition education and ORT. CSP

team members themselves provided primarily technical assistance to MOH and CMDT staff, not management support.

Thus, despite their participation in the project, MOH and CMDT would not be able to maintain most of the project activities were project funding discontinued in September. Although MOH and CMDT will continue to use information and materials gained during the MCH activities, neither institution has made the necessary shift in priorities and financial commitment to continue the program in its entirety. In the MCH component, CSP staff continue to invest much energy in supervision and training sessions which CMDT and MOH are currently unable to replace. Financially, MOH has not committed to replace even less expensive equipment purchased by the project, such as MUAC tapes, SSS demonstration cups, and VHV report forms, let alone the more expensive baby scales and nivaquine. The EPI program is even less likely to continue without further assistance. The MOH cannot finance the mobile unit necessary to vaccinate the 70 percent of target population not fully vaccinated in the department, and no provision has yet been made for the replacement of equipment necessary for maintenance phase activities.

- E. Monitoring and Evaluation of Sustainability**—WV has not developed and used a consistent system of evaluation for sustainability in the CSP project. It has, nevertheless, contributed to local institution building by working with a number of local institutions in the evaluation of the CSP project.

The indicators the project used to track sustainability changed over the course of the project. In the DIP they are identified as:

1. MOH assumption of project management responsibilities.
2. Proportion of Village Associations budgets allocated for health; and
3. Proportion of cost incurred delivering services supported by recipients.

The First Annual Report lists the following indicators:

1. Demand for vaccinations;
2. Number of VAs that support their Village Health Workers;
3. Number of VHCs committed to the support of MCH activities; and
4. Revenues of village pharmacies.

The project has not systematically tracked sustainability by using any of these sets of indicators. Local institutions were, however, included in project evaluation. Representatives of the Institute du Sahel assisted in the development and implementation of the MTE, as well as representatives from the local WHO and PRITECH offices. A team from the Institute National de la Recherche en Santé Publique developed and implemented the evaluation of objectives for this final evaluation. MOH and Save the Children representatives also participated.

F. Calculation of Recurrent Costs—Project volatility and the nature of the accounting system make the calculation of the project's recurrent costs difficult. CSP staff themselves do not calculate recurrent costs. Yet even without these calculations, it is clear that for project activities to continue the Malian government and local communities would have to provide sums representing a large proportion of the project budget. Available documents do not enable an assessment of the project environment and cost per beneficiary; it is, nevertheless, evident that few project activities are sustainable.

Table I 1 shows the Project Pipeline Analysis as of August 31, 1991, one month prior to Project Activity Completion Date (PACD). The table indicates that the amount of the grant was \$783,833 which was matched by the grantee in the amount of \$382,862, or 32 percent of the project budget.

With one month left in the project, 85 percent of the grant funds had been expended leaving \$111,408 to be allocated. These will be used to cover the costs of the Final Evaluation, including the standardized KAP study conducted with assistance from CSSP.

Only one line item, Equipment and Supplies, was exceeded by \$4,382, otherwise all other line items were respected.

**TABLE I 1
PROJECT PIPELINE ANALYSIS**

Item	USAID			World Vision		
	Budget	Expend.	Balance	Budget	Expend.	Balance
Personnel	\$ 246,524	\$ 193,021	\$ 53,503	\$ 195,597	\$ 99,251	\$ 96,346
Consultants	40,430	33,207	7,223	0	0	0
Travel/Per Diem	157,969	139,345	19,624	47,325	4,804	42,521
Equipment and Supplies	178,847	183,229	-4,382	131,718	87,821	43,897
Other Direct Costs (Rent, Training, Etc.)	99,063	72,623	26,440	8,222	7,479	743
Subtotal	722,833	620,425	102,408	382,862	199,355	183,507
Indirect Cost	61,000	52,000	9,000	0	0	0
GRAND TOTAL	\$ 783,833	\$ 672,425	\$ 111,408	\$ 382,862	\$ 199,355	\$ 183,507

Budget analysis underlines CSP volatility and responsiveness. It suggests the intensity of changes not planned in the DIP. Because CSP participated in the Yellow Fever vaccination campaign and distributed much more deworming medicine and nivaquine than planned, the initial budget underestimated "Medical

medicine and nivaquine than planned, the initial budget underestimated "Medical and Pharmaceutical Supplies" by 44.2 percent. The unscheduled late start-up of the EPI campaign meant that only 26.2 percent of funds budgeted for per diems for MOH employees was spent.

Despite the changing course of the project, we may identify the activities funded by the project that involve recurrent expenses for their continuation, primarily the EPI maintenance phase and MCH activities. We list below the items that were not borne by MOH during the project, items necessary for these project components to be continued. Costs for the immunization "clean sweep" phase, a one-time activity, may normally be considered start-up costs. Yet they are itemized here because they too are costs that will be borne by MOH or another donor if the remaining 70 percent of the project target population is to be completely immunized.

Recurrent Costs: Actual yearly expenditures for single-starred items (*) have been calculated by WV. Cost-recovery mechanisms exist for double-starred items (**), and are discussed in section F below.

1. The EPI Maintenance Phase:

Vaccines

Fuel and maintenance for the cold chain

Fuel and maintenance* for motorcycles

Fuel, maintenance, and per diems for the simplified mobile team serving the areas not otherwise reached by the maintenance phase

Regular replacement of all equipment

Vaccination cards**

2. MCH activities:

Per diems for volunteers trained in cities and outside of their own villages

Replacement of VHV equipment: MUAC tape, SSS cups, training brochures, report forms, etc.

Cooking equipment**

Ingredients for cooking demonstrations**

Replacement of baby scales

Nivaquine

Deworming medicine

Growth cards**

3. Renewed Mobile Team Campaign:

Vaccines*

Per diem for Mobile Team*

Fuel* and maintenance for Mobile Team

Fuel* and maintenance for Cold Chain

The project's calculation of recurrent costs for EPI is divided into two parts:

a. **Recurrent Costs of the EPI—Mobile Team Effort (Sweeping Phase)**

Cost of Vaccine	\$ 26,921
Per Diem Mobile Team	16,163
Fuel for Mobile Team	22,717
Fuel for Cold Chain	<u>8,351</u>
Total	\$ 74,152

b. **Recurrent Costs of the EPI—Maintenance Phase**

Fuel for Motor Cycles	\$ 5,210
Repairs Motor Cycles	1,111
Spare parts	<u>4,474</u>
Total	\$ 10,795

Project staff have not regularly calculated recurrent costs, and CSP staff members interviewed were not completely familiar with the concept. Despite recommendations made in the MTE, accountant records are not designed in a way that enables regular calculation of these costs. Nor does the project keep independent records for the different project components, making it difficult to calculate cost per beneficiary for the two target populations.

In the absence of these figures, we propose the following calculations as a rough estimate: As of August 1991, the project had spent \$819,780. Of this, \$544,098 was spent on items directly related to keeping the staff functioning (project staff salaries and benefits, office supplies, travel, per diem for project staff, rent and utilities, communications and professional services). The remaining 34 percent, \$275,689, was spent conducting project activities. These items include per diems for MOH teams and trainees, training costs, medical and pharmaceutical supplies, repairs and maintenance, and capital expenditures. The items of this latter category—all costs related to EPI except salaries, MCH equipment, and supervision which depends on fuel—are the recurrent costs unlikely to be sustained.

- G. Cost-Recovery Attempts**—WV has kept recurring project costs down primarily by limiting salary expenses. They have also implemented cost-recovery mechanisms that generated minor sums. These efforts didn't detract from staff time and justified the effort put into them. However, village selection, also influenced by cost-recovery and sustainability concerns, did introduce inequity in the access to project services by limiting MCH activities to the villages with Village Associations.

CSP kept project costs down by not hiring a large staff of field workers. Early in the project, CSP also decided to refuse to pay per diems to MOH employees to supervise MCH activities outside of Koutiala town or to health workers implementing the maintenance phase of the EPI. In the last year of the project, staff time was economized through project integration. Instead of applying their specializations over the whole project area, each of the three staff covered 18 villages and promoted all of the MCH and EPI activities.

In addition to these cost-reduction practices, CSP implemented some cost-recovery mechanisms. Growth-monitoring cards are sold in the 15 dispensaries at 100 CFA each (\$0.34). Forty percent of revenues from their sale is deposited in a "blocked" bank account for use after the end of the CSP project. Village Health workers manage the remaining 60 percent. As of September 1991, 3,100 growth-monitoring cards have been sold.

Sale of growth-monitoring cards generated approximately \$1,050. Although this represents a very small proportion of the funds needed to continue MCH activities, MCH projects do not always succeed in selling these cards at all. This demonstration of participation by the community, as well as the benefits of the cards themselves, justifies the effort involved in their sale.

As part of the national program, vaccination cards are also sold. As of September 1991, 122,538 vaccination cards have been sold, generating 12,253,800 CFA, or \$40,846. The MOH manages the revenues of these sales. In the last year of the project, villagers have contributed food to the cooking demonstrations as another cost-recovery mechanism. Initially, participants and VHVs contributed food. More recently, project staff encourages village councils to set aside a portion of the village's harvest for this purpose. In Koutiala town, participants in cooking demonstrations contribute a nominal amount, either 25 CFA (\$0.084) or 50 CFA (\$0.169), depending on the location of the demonstration. The management of this limited cost-recovery system did not significantly reduce time and effort committed to health services.

These cost-recovery activities of the project do not appear to have had a negative effect on WV's reputation in the community. However, income generation and sustainability concerns may have introduced inequity of MCH service delivery. The project selected villages with VAs for MCH activities. Villages with these CMDT-created associations are not only better organized, but are likely to be more wealthy. Villages that don't grow cotton are not organized, have no literate inhabitants, and do not have associations, and thus no access to CSP MCH

activities. Project designers made this decision to better assure continuance of the project after funding ended. Furthermore, the villages chosen are to stand as models for surrounding villages who will be inspired to organize themselves. Unfortunately, project interventions have not yet had sufficient impact for this to develop.

- H. Income Generation**—The CSP turned to income-generation activities outside of urban zones only in the last year of the project. So far, they have produced limited results.

In October 1990, a year before project termination, staff distributed seeds to villages and encouraged vegetable gardens as a means to supplement food available for the food demonstrations. Rather than creating service inequities, these activities may increase women's access to health services that would otherwise be unavailable to them. Unfortunately, although gardening activities promoted by the project seem to have been accepted by villagers, a variety of factors hinder the gardens. These include lack of sufficient water and organizational problems. Outside of the garden in Koutiala, where a garden had been begun earlier in the project, gardening has not yet generated significant results.

IV. CONCLUSION/RECOMMENDATIONS

The project has avoided many pitfalls to sustainability, particularly the employment of many local staff.

- A. The project staff still takes responsibility for and subsidizes such key tasks as supervision.
- B. The concept of recurrent costs and other sustainability issues are not well understood by project staff.

Recommendations: The project should continue to try to get along without increasing its staff substantially.

- A. To reduce the workload of the staff and promote self-sufficiency, responsibility for supervising animatrices and other key health workers should be gradually turned over to others and subsidies decreased incrementally. The ability of the MOH to supervise the more peripheral levels should be examined realistically, and creative solutions identified to monitor and supervise health workers. Community members (VAs and the VHC) should become more involved and responsible for supervision.
- B. Training in supervision should be provided to all supervisors.
- C. Information regarding recurrent costs and other sustainability issues should be made available to WV staff. Staff should take advantage of seminars/workshops on sustainability issues. If possible, technical assistance in developing a

sustainable strategy or analyzing an existing strategy for sustainability should be provided.

- D. In general, WV should avoid assuming financial responsibility for costs that were previously covered by some other source.

WORLD VISION RELIEF & DEVELOPMENT, INC.

**PART III
END-OF-PROJECT PIPELINE ANALYSIS
KOUTIALA CHILD SURVIVAL PROJECT
KOUTIALA, MALI**

**Beginning Date: October 1, 1987
Ending Date: September 30, 1991**

September 30, 1991

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1991 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS
W.V.R.D./MALI KOUTIALA CHILD SURVIVAL PROJECT
#OTR-0527-A-00-7216-00

FIELD	Actual Expenditures To Date (9/30/87 to 9/30/91)			Projected Expenditures Against Remaining Obligated Funds (10/1/91 to 10/15/91)			Total Agreement Budget (Columns 1 & 2) (9/30/87 to 10/15/91)		
	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL
COST ELEMENTS									
I. PROCUREMENT									
A. Supplies/Equipment	115,788	158,585	274,373	26,504	(58,212)	(31,708)	142,292	100,373	242,665
B. Services/Consultants	25,640	19,198	44,838	(21,140)	(9,198)	(30,338)	4,500	10,000	14,500
SUB-TOTAL I	141,428	177,783	319,211	5,364	(67,410)	(62,046)	146,792	110,373	257,165
II. EVALUATION/SUB-TOTAL II	0	0	0	0	0	0	0	0	0
III. INDIRECT COSTS									
Overhead on Field 20%	54,000	107,383	161,383	0	0	0	54,000	107,383	161,383
SUB-TOTAL III	54,000	107,383	161,383	0	0	0	54,000	107,383	161,383
IV. OTHER PROGRAM COSTS									
A. Personnel	290,572	118,257	408,829	(85,624)	30,243	(55,381)	204,948	148,500	353,448
B. Travel/Per diem	133,477	6,809	140,286	11,252	44,398	55,650	144,729	51,207	195,936
C. Other Direct Costs	74,423	6,266	80,689	69,008	83,261	152,269	143,431	89,527	232,958
SUB-TOTAL IV	498,472	131,332	629,804	(5,364)	157,902	152,538	493,108	289,234	782,342
TOTAL FIELD	693,900	416,498	1,110,398	(0)	90,492	90,492	693,900	506,990	1,200,890

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**PART IV
OTHER EVALUATION FINDINGS
KOUTIALA CHILD SURVIVAL PROJECT
KOUTIALA, MALI**

**Beginning Date: October 1, 1987
Ending Date: September 30, 1991**

**Submitted by:
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September 30, 1991

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APPENDICES

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2. FVA Memo on Sustainability
3. People Interviewed
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I. BACKGROUND

- A. Introduction**—The World Vision (WV) Child Survival Project (CSP) began in October 1987 and culminated four years later on September 30, 1991. An initial budget of \$1,066,760 was developed and then increased to \$1,093,507 (from Third Annual Report) in the last year of the project. During the five years prior to this project, WV had implemented five community development projects in Koutiala District (Cercle).

The project is being implemented in the district of Koutiala which is located 350 km southeast of Bamako on a very good paved road. The District of Koutiala is in the Third Region of Mali, Sikasso, and the Regional Health Office is located in the capital, Sikasso, some 135 km south of Koutiala. The area covered by the Mother and Child Health (MCH) activities of the project (Koutiala and M'Pessoba subdistricts) is relatively small and is served by many good dirt roads. The most distant village is only a little over an hour's drive from the project office. A few villages are inaccessible in the rainy season, however.

The need for Child Survival activities in this area was documented in a 60-cluster survey conducted in the subdistricts of Koutiala and M'Pessoba in August/September 1988. The findings of the survey included (1) infant mortality rate of 112 deaths per 1000 live births; (2) very low full vaccination rate among children 12-23 months (3 percent in Koutiala and 0 percent in M'Pessoba); (3) high prevalence of diarrhea and low use of ORT; and (4) 25 percent of children 0-4 years severely malnourished (more than 2S/D below the mean).

The district was also chosen because it was felt that the presence of the Compagnie Malienne de Developpement de Textile (CMDT) would increase the chances of sustaining project-initiated activities upon the departure of WV. The CMDT had already initiated village-level curative care and had developed training capacities among their staff. They had also created village associations (VA) and some village health committees (VHC), structures through which the project hoped to work.

- B. Target Populations**—The WV CSP implements four types of activities: vaccination, diarrheal disease control, nutrition, and maternal health. Generally these are grouped into two categories: vaccination and MCH activities. The size of the target population for vaccination differs from that for the MCH activities, because the vaccination program covered the entire district (six subdistricts) whereas the MCH activities were only carried out in two of the six subdistricts (arrondissements), namely Koutiala Centrale and M'Pessoba.

The target populations for vaccination and other MCH activities can be broken down as follows (from Midterm Evaluation page 6):

TABLE II 1
Initially Proposed Target Population
(1988 figures)

Target Groups	Vac. & MCH Activities (M'Pessoba & Koutlala subdistricts only)	Vaccination Only (entire District)
Children:		
0-11 months	6,081	10,591
12-23 months	6,000	10,453
24-35 months	5,919	10,244
0-6 years	36,163	62,973
Women:		
15-49 years	35,300	61,500
Total Population:	164,387	286,244

Table II 1 does not accurately define the target population for MCH activities, however, because during the first three years of the project, MCH activities were directed exclusively toward the towns and villages with a maternity or dispensary. This meant that until mid-1990, the total population (including men) being served was only 75,748, or 26 percent of the population of the two subdistricts. The breakdown is shown in Table II 2.

TABLE II 2
Population Targeted for MCH Activities 1988—1990

<u>Village/Subdistrict</u>	<u>Maternity</u>	<u>Dispensary</u>	<u>Total Population</u>
1. N'golonianasso/K	X		2,509
2. Zamblala/M	X		641
3. Zanzoni/M	X	X	2,163
4. Niessoumana/K	X (new)		1,335
5. Ferme/M	X	X	325
6. Fonfana/M	X	X	1,905
7. M'Pessoba/M	X	X	4,977
8. Kanko/K	X	X	1,001
9. Signe/K		X (new)	738
10. Nampossela/K	X		1,180
11. Karangasso/K	X	X	2,509
12. Yafola/K	X		1,239
13. Zebala/K	X	X	3,670
14. IRCT/M		X	?
15. Debela/M		X	2,046
16. N'Tossoni/M	X	X	2,664
17. Karagouna/M	X	X	2,089
18. Kola/M		X	1,163

19. Peguena/M	X	X	1,184
20. Miena/M	X	X	5,387
SUBTOTAL	16	15	<u>38,735</u>
21. Koutiala Town	X	X	<u>37,000</u>
GRAND TOTAL	17	16	<u>80,748</u>

In mid-1990, when the strategy changed to include outreach activities through village health volunteers (animatrices), the target population eventually expanded to include not only the villages with maternities or dispensaries, but 34 additional villages in relative proximity to these facilities. Thus, at the end of the project, the population covered by MCH activities was 98,987, or 60 percent of the population anticipated in the original proposal.

II. SUMMARY OF ACHIEVEMENT

The project has succeeded in achieving only a few of its objectives. This is primarily due to a faulty project design and strategy which was not changed until the last year of the project. Objective achievement is summarized below:

<u>Objectives</u>	<u>Results</u>
- Vaccinate 70% of children 0-11 months against the six EPI diseases	- 27% children 0-11 months were fully vaccinated
- Vaccinate 70% of women of childbearing age against tetanus (two doses)	- 42% of women aged 14-44 years received two doses of TT
- 80% of children with diarrhea treated in clinics get ORS packet	- 11% get ORS packets at clinics
- 30% of children with diarrhea in past two weeks are treated with SSS (homemade ORT) by mothers	- 33% with diarrhea in last two weeks were treated with SSS
- Increase to 30% the number of mothers who continue feeding and breastfeeding during diarrhea	- 68% continue nursing; 52% continue feeding during diarrhea
- 60% of Village Health Committees (VHCs) will be involved in environmental sanitation activities	- Not evaluated
- Follow up 80% of children discovered to be malnourished during weighing sessions	- 29% of children discovered to be malnourished during weighing sessions are followed up
- Increase to 50% the mothers who gave supplemental food at the proper age (7-11 months)	- 39% gave supplemental food between 7-11 months
- Increase to 20% the mothers who can correctly interpret the growth card	- 26% (30% rural, 26% urban) can correctly interpret the growth card
- Increase to 60% the number of adults aware of modern FP methods	- 29% of married women are aware of modern FP methods

- Increase to 20% the number of households using a modern FP method
- Increase to 20% the number of women who are seen at least twice for prenatal care
- Increase to 50% the number of assisted deliveries (matrone and midwives) of all women who have given birth in the last 12 months
- 7% (5.6% rural, 14% urban) married women use modern FP methods
- 63% of pregnant women are seen at consultations
- 73% of deliveries are assisted by a matrone or midwife

The most important recommendations for the extension project include the following:

- A. WV should hire a Project Manager or Technical Team Leader with substantial public health programming experience and/or training and proven capabilities.
- B. WV should focus its attention on increasing knowledge about and demand for vaccinations.
- C. The CSP staff, MOH, CMDT should review the animatrice strategy and make long-term plans regarding their role and participation in sustaining public health in the project zone. This role and other important issues regarding this strategy should be documented.

End-of Project/impact objectives (changes in the beneficiaries) should not be mixed up with operational objectives (activities of the project). The Impact objectives should not change from year to year.

- D. To reduce the workload on the staff and promote self sufficiency, responsibility for supervising animatrices and other key health workers should be gradually turned over to others (and subsidies decreased incrementally). The ability of the MOH to supervise the more peripheral levels should be examined realistically and creative solutions identified to monitor and supervise health workers. Community members (VAs and VHC) should become more involved and responsible for supervision.
- E. A special survey(s) by professionals in the field of growth monitoring should be carried out to confirm the level and kinds of malnutrition and determine the causes. If the strategies in operation do not address the true causes, new strategies should be developed and tried.
- F. WV should not get involved in income-generating activities, unless food demonstrations are deemed the most effective way to improve feeding habits and villagers are deemed unable to support the activity otherwise. If WV decides to support long-term income-generating activities, expertise in this area should be sought.

III. PROJECT DESIGN AND IMPLEMENTATION

During the first three years of the project, the World Vision technical staff was divided into two camps, one responsible for the vaccination program and the other responsible for MCH activities. The priority was indisputably the EPI, which overshadowed the MCH component until mid-1990.

The project financed all aspects of the district-wide mobile vaccination team effort, such as cold chain equipment, renovations and fuel related to the cold chain, vaccines, logistical support, training of personnel, per diem, evaluation and reporting, except the salaries of the vaccinators and their MOH supervisor and vaccination cards. It also provided technical assistance in the form of a WV technical team leader and EPI Supervisor, who, in his own words, lived and breathed EPI for the first three years of the project. It is not clear from the DIP whether it was intended that the EPI Supervisor become so involved in this intervention. The midterm evaluators, however, suggested that he "gradually turn over EPI responsibilities to MOH counterpart(s) who should assume the major role in management, logistics, and supervision in the district" (MTE, page 20). This was done during the third year of the project and as of the fourth year, the technical team leader and EPI Supervisor began to share responsibilities for MCH activities with the other staff members.

In addition to financing the mobile vaccination teams, the project supported the establishment of fixed vaccination centers whose role it is to maintain the levels of immunization in the area.

During the first three years of the project, MCH activities were carried out by maternity and dispensary staff after training was organized and provided by the project and certain supplies and equipment were provided. Project staff, in collaboration with MOH personnel, developed and modified existing training modules and then organized various training programs for the health workers in the project zone.

For the most part, project staff and MOH personnel conducted the initial training sessions together. Subsequent sessions were then conducted by other health workers with project staff assisting. Because of its previous experience in training these health workers, the Compagnie Malienne de Developpement de Textile (CMDT), took responsibility for training the village pharmacists (hygienist/secouristes) and the traditional birth attendants (TBAs, accoucheuses traditionnelles). The CSP staff expanded on this training by teaching lessons on EPI and MCH topics.

Villages with a maternity have access to the services of an assistant midwife (matrone) who conducts prenatal consultations, provides malaria prophylaxis to pregnant women, and attends deliveries. The TBAs just attend deliveries. Dispensaries usually have a first aid attendant (aide-soignant) and may even have a nurse (usually LPN). Villages with dispensaries, therefore, have access to well-baby clinics (growth monitoring for under-threes) at which malaria prophylactics and anti-parasitics are provided, and ORT packets are available. Limited curative care is also available, with more sophisticated care being provided if a nurse is present.

The project staff has taken primary responsibility for supervising the health workers in the maternities and dispensaries since supervision by the MOH is sporadic and not very effective.

In 1990, the project began to train village-level health volunteers, called animatrices. This unplanned initiative resulted from an incident in Koutiala town involving the recuperation of a malnourished child through the efforts of the mother. Recruitment and training of village health volunteers began initially in Koutiala town and then extended into the 20 villages with maternities and dispensaries. Finally, in late 1990, volunteers were trained in 34 villages with no health facility. These 34 villages were chosen based on proximity to a maternity or dispensary and the existence of a CMDT-created village association (VA). It was felt that the economic means of VAs, which is linked to cotton production, would help support the animatrice's activities.

On average, two village health volunteers (animatrices) per neighborhood were chosen by the village, for a total of 520 animatrices in the project zone. The volunteers are mostly middle-aged married women with children of their own. Almost all are illiterate. Their training was designed and organized by WV but was conducted by assistant midwives and first aid attendants (aid-soignants). During the training the volunteers were given a very basic introduction to nutrition and were taught to conduct food demonstrations. They were also taught to prepare homemade ORS, identify malnourished children by measuring arm circumference, and the benefits of birth spacing.

Although WV would like to continue extending its outreach services by training more animatrices in other villages, it has had to halt extension because the WV staff cannot supervise more villages and the MOH has not begun to take responsibility for supervision.

IV. CHILD SURVIVAL OBJECTIVES

The World Vision CSP, as initially planned and elaborated in the DIP, cited four areas of intervention with corresponding objectives. These objectives were modified upon recommendation of the MTE and following changes in the program strategy during the last 18 months of the project. The project objectives, both original and modified, are cited in Table II 3.

Given the progress recorded as of September 1989, the midterm evaluators suggested that the levels of the objectives be reduced. As a result, many of the percentages were reduced and objectives were reformulated to reflect the new focus on outreach activities rather than on the MCH centers. At this point also, many operational objectives were introduced and a few other objectives were added; i.e., gardening, environmental sanitation (see Tables III 1-4 for achievement of specific objectives).

TABLE II 3
Project Objectives—Original and Modified

<u>As Stated in the DIP</u>	<u>As Stated in the 3rd Annual Report</u>
Immunization:	
- Vaccinate 80% of children below six years of age against the six childhood diseases	- Vaccinate 70% of children 1-11 months against the six EPI diseases
- Vaccinate 80% of pregnant women against tetanus	- Vaccinate 70% of women of child-bearing age
	- Strengthen fixed vaccination centers at the subdistrict capitals so that 50% of vaccinations will be done through them
	- Maintain a vaccination coverage rate of 80% from 1990 to end of project
Oral Rehydration Therapy:	
- Ensure that 60% of mothers know how to prepare and administer ORT correctly	- 60% of animatrices will teach mothers' classes in proper preparation and administration of ORS and diarrhea management
- Ensure that 90% of children suffering from dehydration due to diarrhea receive ORT at dispensaries	- 80% of children with diarrhea treated in clinics get ORS packet
- Increase to 50% the proportion of mothers who use ORT regularly for their children with diarrhea	- 30% of children with diarrhea in past two weeks are treated with SSS (homemade ORT) by mothers
	- 60% of VHC will be involved in environmental sanitation activities
	- Train 60% of VHC in 54 villages in ORT
	- Train 80% of animatrices in ORT and diarrhea management
	- Retrain AS and matrones in ORT and diarrhea management
Nutrition:	
- Document existing malnutrition rates and reduce by 50%	- Follow up 80% of children discovered to be malnourished during weighing sessions
- Organize training sessions on breast-feeding, proper weaning practice, and food supplementation for mothers at least twice a year in each of the five largest villages	- Increase to 50% the mothers who give supplemental food at the proper age (7-11 months)

- Organize weighing sessions in each of the dispensaries (eight) in the district
- 60% of children in the village where dispensary is located shall be weighed at least once per trimester
- Increase to 20% the mothers who can correctly interpret the growth card
- Retrain 90% of the AS and matrones
- Train 80% of the animators in villages without animators
- Retrain 80% of the former animators
- Train 60% of the VHC in nutrition
- Promote vegetable gardens in 10% of areas where water is available
- Regular supervision (monthly) of MCH centers

Birth Spacing/Maternal Health:

- Develop a referral system between mothers at the village level and MOH workers
- Increase the demand for birthspacing methods by 100%
- Organize discussions for mothers on birth spacing at least twice a year in each of the five largest villages
- Increase to 60% the number of adults aware of modern FP methods
- Increase to 20% the number of households using a modern FP method
- Increase to 20% the number of pregnant women who are seen at least twice for prenatal care
- Increase to 50% the number of assisted deliveries (matrone and midwives) of all women who have given birth in the last 12 months
- Retrain 80% of animatrices and VHC in FP

V. ACHIEVEMENT OF OBJECTIVES—Accomplishments, Strategies

The project staff has had difficulties in setting clear and feasible objectives and developing strategies to achieve the objectives. A weak project design and DIP have contributed to this. Each year in the project work plan, objectives are established. Often these objectives are different from the preceding year. Operational objectives have been confused with impact objectives, allowing the staff to lose track of what the project was supposed to achieve. Some of the activities do not correspond to the objectives. In the Third Annual Report one important objective regarding the maintenance phase of the EPI was inadvertently omitted and thus not evaluated.

Tables III 1-4 show the end-of-project objectives and the results as measured by the INRSP study. Following each table is a discussion of the specific intervention and explanation of the results.

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A. Immunization

TABLE III 1
Objectives and Achievements—IMMUNIZATIONS

Objective	Results
Impact/Operational:	
- Vaccinate 70% of children 0-11 months against the six EPI diseases	- 27% of children 0-11 months were fully vaccinated
- Vaccinate 70% of women of child-bearing age against tetanus (two doses)	- 42% of women aged 14-44 years received two doses of TT

1. **EPI Objectives:** The original EPI objective in the DIP cited the target group for vaccination as children from 0-6 years. Upon recommendation of a REACH consultant, this objective was changed to children between 0-11 months, although the mobile team continued to vaccinate all children 0-6 years old. The project then decided to conform to the national vaccination policy by vaccinating women of childbearing age (14-45 years) and not just pregnant women. This was not only more efficient but also increased coverage and cut down on vaccine wastage.

2. **Strategy:** The strategy followed by the project to achieve the immunization objectives included the provision of all of the materials, supplies, equipment, fuel, training and technical assistance necessary for the District Assistant Chief Medical Officer to launch a mobile vaccination team. The salaries of the vaccinators and their supervisor were paid by the MOH who was also responsible for the provision of vaccination cards. Following the national vaccination program implemented throughout the country, the mobile team circulates around the district in a pre-planned pattern and vaccinates all children under age six and women of childbearing age (14-45 years). To completely vaccinate a child against the six childhood diseases, three rounds of the mobile vaccination team are required, with preferably no more than six to eight weeks between visits.

In addition to financing the mobile team, the project paid for the renovations and equipping of one central vaccine depot at the Koutiala Health Center and established a cold chain at eleven fixed vaccination centers, dispensaries with refrigerators and/or other cold chain materials. Four are in Koutiala town, five in the subdistrict capitals, and two are in other rural areas. In addition to cold chain equipment, training was provided as well. In each of the two subdistricts, the MOH (head nurse) was given a mobyette to facilitate restocking of vaccines and other supplies. According to the original objectives, by the end of the project, 50 percent of vaccinations have been done through these fixed centers. This was not evaluated.

To expand coverage further, fourteen first aid attendants were given mobylettes, spare parts, and fuel to facilitate vaccinating women and children in the vicinity of the dispensary. These first aid attendants were supplied with a cool box and replenished their stock of vaccines and other supplies from the fixed center nearest to them.

3. **EPI Implementation and Results:** The vaccination campaign got off to a late and inauspicious start in April 1988. Instead of adopting a strategy that would ensure complete coverage of a given population in a short period of time, under pressure from the CNI to avoid a potential outbreak of measles, the Assistant Chief Medical Officer decided to vaccinate the whole district during the first round (thus ensuring immunization against measles which is a one-dose vaccine). This meant that the periods between the rounds ranged from six to eight months, making social mobilization much more difficult. Further delays were caused by vaccination card shortages, particularly between the second and third rounds. Villagers also mentioned that the planned schedule of the mobile team was sometimes not respected and that a team scheduled to stay two days in an area might stay one day only, thereby missing the children and mothers who needed to travel from more distant hamlets. On two occasions, WV tried to accelerate the vaccination effort by organizing a second mobile team. This strategy was deemed prohibitively expensive, however, and was abandoned.

Although it was planned that the mobile team's work would be finished in 1989, the mobile team completed its last round only in June 1990. After that, beginning in November 1990, a simplified mobile team (with only four vaccinators) was organized to service parts of two subdistricts which are particularly inaccessible and were poorly covered by the regular mobile team.

The fixed vaccination centers have been established, but it is not certain they will be able to maintain the 50-percent-level of vaccination anticipated. The vaccination rate of children 12-23 months for the six childhood diseases is 27 percent. This is very low considering the amount of financial and material assistance provided and the human resources dedicated to this endeavor. When asked his opinion about the vaccination rate, the Chief Medical Officer (Medecin-Chef), Dr. Maiga, expressed satisfaction. Unfortunately, Dr. Bamba, the physician directly in charge of EPI, was on vacation during the evaluation and not interviewed.

4. **EPI Technical Assistance:** The project's technical team leader and EPI Supervisor was responsible for coordinating the EPI with his MOH counterpart, Dr. Bamba, and providing technical assistance. Instead of limiting his efforts to supervision of the EPI program, the EPI Supervisor ended up doing much of the work himself. It is not clear why he assumed this responsibility, but it's likely that, given his youth and inexperience and lack of authority over the MOH personnel, he felt the only way to get things done was to do them himself.

An analysis of the vaccination program shows that despite delays and other problems, the first two rounds of the mobile team succeeded in vaccinating 70 percent of the population (DPT 1 and 2). It was the drop in coverage between the second and third rounds (51.4 percent) which caused the rate of complete vaccination to fall to 27 percent. This poor result may be linked to the much-reduced participation of the EPI Supervisor, since it was at about this time that, upon recommendation of the MTE, he began to turn responsibility for the program completely over to the MOH. If this is true, then unfortunately it shows that the MOH did not gain any managerial expertise through the efforts of the EPI Supervisor, but rather were too dependent upon him.

B. Diarrhea Disease Control—ORT

**TABLE III 2
Objectives and Achievements—ORT**

Objective	Results
Impact:	
- 80% of children with diarrhea treated in clinics get ORS packet	- 11% get ORS packet at clinics
- 30% of children with diarrhea in past two weeks are treated with SSS (homemade ORT) by mothers	- 33% with diarrhea in last two weeks were treated with SSS
- Increase to 30% the number of mothers who continue feeding and breastfeeding during diarrhea	- 68% continue nursing; 52% continue feeding during diarrhea
- 60% of VHC will be involved in environmental sanitation activities	- Not evaluated
Operational:	
- Train 60% of VHCs in 54 villages in ORT	- 58.7% (222/378)
- Train 80% of animatrices in ORT and diarrhea management	- 98% trained (513/520)
- Retrain aides-soignantes and matrones in ORT and diarrhea management	- 69% trained (41/59)
- 60% of animatrices will teach mothers' classes in proper preparation and administration of ORS and diarrhea management	- Not evaluated

The strategy adopted for this intervention consisted of educating health workers about the benefits, preparation, and administration of ORT packets and homemade ORS (locally called SSS). Messages encouraging mothers to continue nursing and feeding during diarrheal episodes and to improve environmental

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sanitation were also disseminated by health workers to mothers at the dispensaries and maternities.

In the fourth year, when the project started to train Village Health Volunteers (VHVs) (animatrices) these same messages were passed on to them for further dissemination in their villages. The training of VHC members also included messages on ORT and SSS.

Initially the project proposed "to assist in the provision of additional ORT sachets," but a strategy to provide this assistance was not developed. Frequent stock shortages occurred making ORT packets inaccessible, and as a result, animatrices and other health workers have been enthusiastically promoting the use of SSS in its place.

The shortage of ORT packets explains why so few (11.46 percent) children with diarrhea are treated with ORT packets at the dispensaries. The lack of ORT packets may also have stimulated the use of SSS. This, coupled with their promotion by the animatrices and other health workers, helps to explain the relatively high reported use of SSS, particularly in the rural areas (45 percent).

With regard to nursing and feeding practices during diarrheal episodes, the standardized KAP study provides additional information to the INRSP survey. The KAP study shows that while no one actually stops nursing or feeding during diarrhea, only a small percent increase liquids (12 percent) and/or feeding (23 percent) after an episode of diarrhea.

All levels of health workers have received training in ORT packet and SSS preparation and administration. Trainees include nurses and midwives and various other MOH/MCH personnel, assistant midwives and villages pharmacists (hygienists/securities), animatrices, and some members of the VHCs. The INRSP survey shows acceptable levels of understanding with regard to diarrhea management and SSS preparation among aid-soignants, matrones and animatrices. Training includes preparation and administration of the ORT packets and SSS, and proper nutrition during diarrheal episodes. Training of VHC members also incorporates environmental sanitation issues. To encourage the animatrices to conduct demonstrations in the villages, WV supplied them with a one-liter measure. Animatrices conduct group and individual SSS preparation demonstrations in their villages on an irregular basis and are sometimes assisted by VHC members or another health worker.

C. Nutrition

**TABLE III 3
Objectives and Achievements—Nutrition**

Objective	Results
Impact:	
- Follow up 80% of children discovered to be malnourished during weighing sessions	- 29% of children discovered to be malnourished during weighing sessions are followed
- Increase to 50% the mothers who gave supplemental food at the proper age (7-11 months)	- 39% gave supplemental food between 7-11 months
- Increase to 20% the mothers who can correctly interpret the growth card	- 26% (30% rural, 2.6% urban) can correctly interpret the growth card
Operational:	
- Retrain 90% of the AS and matrones	- 69% retrained (41/59)
- Train 80% of the animators in villages without animators	
- Retrain 80% of the former animators	
- Train 60% of the VHC in nutrition	- 58.7% trained (222/378)
- Promote vegetable gardening in 10% of areas where water is available	- 14 of 54 villages have planted gardens (7.6%)
- Regular supervision (monthly) of MCH center	

1. **Strategies:** The nutrition component of the project focused on malnutrition, with nutrition education, food demonstrations, and growth monitoring being the main activities. Initially MOH and other health workers (aides-soignants, matrones, etc.) were trained to recognize malnourished children, conduct well baby clinics (baby weighing), and to promote proper weaning and feeding habits through mother's classes. In addition to training, the project also provided the health workers with the equipment and supplies necessary to conduct MCH services. This included baby scales, and growth cards, pots, pans, and utensils for cooking.
2. **Growth Monitoring:** Aid-Soignants (A/S) are in charge of monitoring the growth of children at under-three clinics held at the 15 dispensaries in the project zone. They also distribute nivaquine (an anti-malarial) during the rainy season and deworming medicine. Growth cards are sold for 100 CFA apiece, with 40 percent of the proceeds to be used by WV to purchase new cards at the end of the project, and 60 percent being used by the dispensary to buy ingredients for food demonstrations.

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The purpose of growth monitoring in the overall context of the program is not clear, particularly since only 11 percent of the population (people living in villages with dispensaries) has access to this service. In light of this, it is not clear why two out of three nutrition objectives relate to growth monitoring indicators. Furthermore, even if growth monitoring were available throughout the project zone, the aides-soignants and matrones would not be able to motivate women to participate in this activity since many of them do not know the purpose of growth monitoring (INRSP survey) themselves.

The fact that only 11 percent (15 out of the 54 villages, or 27 percent of villages) of the population has access to a well baby clinic explains why so few mothers (26 percent) can interpret the growth curve correctly. This fact, coupled with the fact that only 27 percent of the population has a growth card at all, however, puts the level of knowledge in a different light. Indeed, it seems that the few mothers who have growth cards can interpret them correctly.

During the under-three clinic, children at risk or already malnourished should be identified and followed up with a home visit and individual counseling. Only 29 percent (39 percent in rural areas, 12 percent in Koutiala town) of malnourished children identified during the under-three clinic are followed, indicating either low performance by the aides-soignants or perhaps delegation of follow-up responsibility to animatrices in the last year of the project.

In the last year of the project the animatrices were trained to identify malnourished children by measuring arm circumference, and to organize and conduct food demonstrations in their neighborhoods. Clinical identification of malnourished children might be difficult for the animatrices, since, when tested, only a few could name three signs of each type of malnutrition.

It is important to note that, with regard to following malnourished children identified during the under-three clinics and interpreting the growth card, the performance in the town of Koutiala was significantly lower. In town, only 15 percent of women have a growth card and only 3 percent can interpret it correctly. The percent of malnourished children followed after being identified at the under threes clinic is only 12 percent. These results are disappointing since project-supported MCH activities in Koutiala town began two years before the outreach activities started, and they are managed by workers with a higher level of education.

3. Nutrition Education and Food Demonstrations: Before animatrices were selected and trained, aides-soignants and matrones were responsible for organizing mothers' classes to disseminate nutritional messages and conduct food demonstrations. It is not clear whether this was done on any regular basis.

When animatrices were trained, they assumed responsibility for conducting food demonstrations. Although they do not have a formal "job description," all of the animatrices interviewed said that they conduct weekly food demonstrations for the entire neighborhood. Mothers contribute food according to availability, and ingredients, such as oil, sugar and vegetables are purchased with funds donated by the Village Association. It is the VA's responsibility to help support the food demonstrations (usually in-kind), but the degree and frequency of the financial assistance varies much and remains undetermined. The project has not tried to persuade the VAs to allocate a certain percent of their annual revenues to the village health activities. In Koutiala town, women in the neighborhoods pay 25 CFA per child to participate in the food demonstrations organized by the animatrices.

In order to secure ingredients for the food demonstrations, in some 14 villages and in Koutiala town, gardens have been planted. Some villages grow the food they need for the demonstrations, while others plan to sell the produce and purchase the necessary ingredients. WV assisted this effort by providing the seeds. In some villages, VA and village health committee members helped by constructing an enclosure around the garden/field. As this is a recent activity, the results are as yet unknown.

At the MOH Health Center in Koutiala, WV has also supported MCH activities. With the provision of cooking equipment and an initial supply of ingredients and construction of an outdoor shelter, weekly food demonstrations began. Women who take part in the demonstrations pay 50 CFA which will help to replenish the supply of food. Approximately 30 women per week participate in this activity at the health center.

The objective related to supplemental feeding actually targets the 4-6-month group but uses the 7-11-month-old group of children as indicators of achievement. It is not clear from the work plan, however, what specific activities actually focus in on the 4-6-month group. The results of the INRSP survey show a 30-percent increase in supplemental feeding over that recorded in the base line data survey (13.1 percent compared to 39 percent). What remains to be determined is the effect increased supplemental feeding has had on reducing the 33-percent malnutrition rate in this age group.

D. Maternal Health

TABLE III 4
Objectives and Achievements—Maternal Health

Objective	Results
Impact:	
- Increase to 60% the number of adults aware of modern FP methods	- 29% of married women are aware of modern FP methods
- Increase to 20% the number of households using a modern FP method	- 7% (5.6% rural, 14% urban) married women use modern FP methods
- Increase to 20% the number of pregnant women who are seen at least twice for prenatal care	- 63% of women have had at least two prenatal consultations
- Increase to 50% the number of assisted deliveries (matrones and midwives) for women who have given birth in the last 12 months	- 73% of deliveries are assisted by a matrone or midwife

Operational:

- Retrain 80% of animatrices and VHC in FP

1. **Objectives:** Originally the focus of this component was on birth spacing and the activities were motivational, not service delivery. During the first year of the project this changed, and the component was broadened to include the knowledge and use of modern contraceptives and increased use of obstetrical services (prenatal consultations and assistance at deliveries).

Although the First Annual Report states that objectives were changed in light of the results of the baseline data survey, no explanation of the results is provided in support of the modifications. And since no link is made between training midwives and their assistants (the project activity) and increasing the use of their services (the project objective), it is difficult to credit the project for achievement of these objectives.

2. **Strategy:** The strategy consisted of training the MOH midwives (sage-femmes), and assistant midwives (matrones) in the project zone and providing equipment to the maternities and delivery kits to the TBAs. Training of TBAs was conducted by MOH and CMDT, with project staff teaching modules on EPI and MCH topics. The training included a lesson on family planning. To increase contraceptive use, the project focused on increasing knowledge, motivation, and demand, since contraceptives were not made available directly by the project.

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The midwives and assistant midwives conduct prenatal consultations during which appropriate health and FP education is provided. Nivaquine is also provided to pregnant women and vaccination against tetanus encouraged.

In the area of assisted deliveries and prenatal consultations, the objectives were surpassed. It is difficult to know if this is due to improved services as a result of project-supported training and equipping, or if use of midwives was always this high. What is known is that only 50 percent of women in the project zone have access to the services of a matrone (prenatal consultations and more expert delivery care), and 16 percent of all rural deliveries are attended by untrained TBAs.

3. **Family Planning:** Despite the low FP utilization rate (7 percent) recorded in the project zone, the demand for family planning is high. In response to this demand and in an effort to increase utilization, WV facilitated the establishment of two AMPPF-supported family planning centers in each of the two subdistrict capitals and supported the training of one center's nurse. Despite this improvement, women in the project zone requested that contraceptives be made more accessible by providing methods at maternities and dispensaries. They attribute the low utilization rate, particularly in the rural areas (5.6 percent), to inaccessibility rather than lack of interest. The fact that the rate in Koutiala town, where contraceptives are more obtainable, is fairly high (14 percent), would lend credence to this.

Accessibility is only one part of the problem, however. The KAP study shows that while 55 percent of mothers would like to postpone a subsequent pregnancy, 83 percent are unaware of FP methods. Furthermore, the INRSP survey results indicate that the FP modules of the training given to matrones and animatrices did not succeed in teaching the various methods or the benefits of birth spacing.

- E. **Training**—One of the main activities of the project was training, with a total of 886 people having been trained under the project. Most of the training modules were either developed or modified by the project staff, with both CSP staff and other health workers acting as trainers. The most in-depth training financed by the project was a six-month course for matrones and aides-soignants which was conducted by the assistant medical officer in the Koutiala Health Center. Courses for the H/S and TBAs were organized by the CMDT and MOH, but the project staff developed and presented lessons on EPI and MCH topics. The training of animatrices begins with a one day introduction to all of the MCH topics and is followed up by in-service training conducted by the staff and other health workers.

The INRSP survey shows that among the A/S and matrones, retention of information following training in the areas of growth monitoring and family planning was weak; and among animatrices, the clinical signs of malnutrition and the advantages of birth spacing were somewhat forgotten.

Table III 5 shows the various types and numbers of health workers trained by the project and the subject matter.

**TABLE III 5
TRAINING**

Trainees	Total in Proj. Zone	Total Trained	EPI	Nut./ORT/FP	%
Registered Nurse	8	5	5	4	62
LP Nurse	19	16	9	9	84
Midwives	2	1	1	1	50
TDC	2	1	*	1	50
F.A. Attendants (A/S)	27	19	23	23	85
Assistant Midwives	21	19	*	19	82
Village Pharmacists	*	54	54	*	100
TBA's	*	29	29	29	*
Animatrices	520	520	520	520	100
VHC Members	378	222	222	222	58

*Exact number not known.

VI. PROJECT DESIGN AND ORGANIZATIONAL MANAGEMENT

- A. Project Design**—Project implementation was hindered by a weak and unclear project design and a vague DIP. Although detailed in many respects, the DIP remains vague on several key issues. For example, the primary "implementers" of each of the activities are not specified. The roles and responsibilities of the MOH and of CMDT, the two partners of WV, were outlined generally and left open to interpretation. The target population, defined as the two subdistricts, Koutiala and M'Pessoba (all 100+ villages), cannot be covered using the proposed strategy (working through maternities and dispensaries). Furthermore, this strategy was based on the naive assumption that training and equipment are the only barriers preventing MOH personnel from providing adequate Child Survival services. At least one of the objectives, "reduce malnutrition rate by half," is extremely unrealistic. Others had to be modified as well.

Many of the inconsistencies of the project design and DIP were recognized during the life of the project, and attempts were made to adjust approaches or objectives.

Some were recognized but no deliberate action was taken (inability to cover target population using proposed strategy), and others have gone completely unnoticed (objectives don't correspond to project activities).

Although the MOH and CMDT are identified as partners of the project, and the CMDT identified as the key to sustainability, neither of these two agencies were integrally involved in the development of the DIP or subsequent changes in objectives and strategies. Their endorsement of the activities, strategies and the definition of their roles in the project are conspicuously lacking. As a result, there have been misunderstandings regarding the expectations of each party.

- B. Strategies**—The DIP stipulates that services will be provided through the maternities and dispensaries in the project zone (and mothers' classes), but does not specify who exactly will carry out the activities. Since there is no provision in the budget for WV to hire their own health workers, it is presumed that the MOH personnel employed at the dispensaries and maternities would be the primary implementers of the project's activities. This strategy assumes that if the project provides training and additional equipment and supplies, the target population could be reached and the objectives achieved. This turned out not to be the case, primarily because the MOH also lacks sufficient numbers of personnel, personnel support, and motivation.

Even though the strategy proved ineffective in reaching the target population, the project design must be commended for proposing to work through the existing Ministry of Health personnel. Instead of hiring a group of village-level workers to carry out specific activities, thus creating sustainability problems later on, the project tried to strengthen and reinforce the skills of the Ministry employees in the areas of Child Survival.

The training in particular has helped to achieve this, and the results of the INRSP survey shows that in most areas the information has been retained. The MOH staff has also benefited from the regular supervision and material assistance that WV staff has provided them. Both the training and equipping have resulted in a re-dynamism of certain activities, such as growth monitoring, nutritional demonstrations, and prenatal consultations.

The project staff has also demonstrated an openness and flexibility in responding to the felt needs of the population. During the first year of the project, World Vision partially financed a yellow fever vaccination campaign in the district which was not planned in the Detailed Implementation Plan. Sensitivity to the community's felt needs also moved World Vision staff to approach AMPPF (the private family planning organization of Mali) to establish family planning centers in each of the two subdistrict (arrondissement) capitals.

In 1990, the fourth year of the project, an alternative strategy was identified and adopted, purely by happenstance; a malnourished child was "miraculously" recuperated through the diligent feeding efforts of the Koutiala MCH center staff.

This gave the CSP nutritionist the idea to train and use mothers as animators in the villages. This strategy, as yet undocumented and unplanned, has enabled the project to expand coverage. It is too early, however, to attribute changes in knowledge, attitudes, or practices to the training or outreach activities of the animatrices.

A positive result of the adoption of this strategy, and for which the CSP staff should be congratulated, is their creativity in working with illiterate women. Materials for training illiterate people have been developed by the staff and recent initiatives have seen the development of information systems for illiterates which will facilitate supervision of the animatrices.

- C. **Human Resources**—Working with an inadequate project design and implementation plan would have been challenging for even the most experienced staff, but the project seemed to have floundered more than necessary, due to the senior staff's inexperience and lack of expertise particularly in programming. Neither the Project Manager nor the Technical Team Leader had training or previous experience in public health (Child Survival). The Project Manager, who was recruited from another WV project, has very good language capabilities and administrative and interpersonal skills, but little understanding of Child Survival issues. The Technical Team Leader, a young physician, had only nine months of working experience when he joined the project.

This absence of public health expertise is in part responsible for the senior staff's inability to recognize inconsistencies between project design and strategy, and take remedial action. Their lack of expertise is also responsible for their tendency to rely on happenstance and to change direction in mid-stream with little documentation of the change.

Perhaps because of this lack of expertise and experience, the staff has spent considerable time networking with other Child Survival grantees in Mali to share information and to look into the different strategies for achieving similar results. Within the project zone, the staff has also been instrumental in bringing various groups together to provide MCH services cooperatively. Thus, both the Catholic and Protestant mission clinics have been established as fixed vaccination centers and will support the "maintenance phase" of the EPI. In the same way, World Vision sought to avoid duplication of effort by coordinating activities with the CMDT in the district.

WV CSP staff has been conscious of their own staff development needs. They have frequently taken advantage of training courses, seminars and workshops held in country and in the region, thus increasing their knowledge of specific Child Survival and primary health care issues.

- D. **Technical Support**—The project has received much technical assistance from WVRD headquarters, from USAID and through local individuals and institutions. Much of the technical assistance has been related to reporting (annual reports),

monitoring and evaluation requirements (data collection forms, survey techniques, etc.) and training. It is perhaps due to this assistance that World Vision has been so systematic about measuring progress of the project. Annual surveys have been conducted, and the staff has become proficient in organizing and implementing surveys. This technical assistance, while necessary and worthwhile, did not make up for the staff's lack of experience and particularly its weakness in programming.

- E. Intra-Agency Collaboration**—During the first three years of the project, collaboration between the Technical Team Leader/EPI Supervisor and the two MCH technical team members was very limited. Despite the small size of the staff, the different components were not integrated. Annual work plans were prepared at the direction of the Project Manager but independent of each other. The weakness of this approach was identified during the MTE, and once the EPI Supervisor relinquished his daily involvement in EPI activities, he began to share responsibility for overseeing MCH activities. Currently each of the three staff members supervises activities in 18 villages.
- F. Inter-Agency Collaboration**—WV Child Survival Project staff have taken advantage of the many support organizations that operate in Mali to the benefit of the project. They have sought and received support from PRITECH for the ORT component, and from REACH for advice on the EPI. The Academy for Education Development's HealthCom project conducted a KAP survey during the third year of the project, the results of which have not yet been shared with CSP staff.

More importantly, the project has sought to collaborate effectively with its partners, the MOH and the CMDT. The CSP staff and the MOH have collaborated on almost every aspect of the project, but they worked most closely on the implementation of the EPI. Each of the three technical staff members has a counterpart in the MOH with whom they coordinate activities and share responsibility. The closest collaboration has been between the CSP nutritionist and the MOH technical development coordinator (TDC) and between the EPI Supervisor and his counterpart. Relations between the Chief Medical Officer and the project staff were very good during the first year of the project when that post was held by Dr. Traore, a very dynamic and foresightful physician. In November 1988, Dr. Traore received an educational scholarship and was replaced by Dr. Maiga. Despite honest effort on the part of the CSP staff, the project has not enjoyed the same support and friendly rapport under Dr. Maiga's direction.

For the most part, the WV staff have served as catalysts, revitalizing activities through personal motivation and the provision of materials and equipment. Collaboration has been in the areas of training and supervision, although the CSP takes almost full responsibility for supervising the maternity and dispensary staff outside of Koutiala town.

The CMDT has been identified in both the DIP and the MTE as the key to sustainability, and while efforts to collaborate have resulted in monthly meetings

(also including MOH) and some collaborative ventures such as choice of villages and training, no long-term collaborative plans have been made between the project and CMDT. Project staff have not identified areas of collaboration that do not involve financial support, which CMDT is unable to provide.

- G. **Reporting**—The Project Manager and other CSP staff have been very diligent about adhering to the reporting schedule and requirements. Monthly, Quarterly, and Annual Reports are submitted to numerous interested parties including USAID/ Washington and Bamako, WVRD headquarters, and field personnel. The Annual Report is translated into French and shared with the MOH. It is estimated that the Project Manager spends a quarter of his time on reporting.

The format used for reporting stipulated by A.I.D. for Annual Reports makes it very difficult to follow the progress of the project and easy to gloss over important changes and issues. As a result, important changes in objectives are mentioned in a few words (First Annual Report, page 1), and a major new strategy adoption is revealed in one sentence (Third Annual Report, page 21). The reports respond more to the needs of the donor (A.I.D. and/or WVRD) than to the project implementers, with limited use as an internal monitoring and planning tool to the project staff.

VII. CONCLUSIONS AND RECOMMENDATIONS

The following recommendations are made in light of the fact that the project has received funding for a three-year extension.

A. Child Survival Components

1. Immunization

Findings/Conclusions—Despite the considerable amount of effort and financial assistance put into the EPI, the EPI has proven not to be cost effective.

Knowledge among women and parents with regard to the benefits of immunization is still minimal.

Recommendation—WV should focus its attention on increasing knowledge about and demand for vaccinations.

The objectives related to EPI should reflect a change in knowledge and attitudes regarding vaccinations and not vaccination levels.

2. Oral Rehydration Therapy/Diarrheal Disease Control

Findings/Conclusions—The MOH has not been able to guarantee the supply of ORT packets in health facilities.

- a. Women are willing and able to learn to make and use the homemade ORS (SSS).
- b. While mothers continue to nurse and/or feed their children during diarrheal episodes, they do not increase food and liquids.
- c. The environmental sanitation objective is too vague.

Recommendations—The project should continue to accentuate the use of SSS, in the absence of ORT packets.

The project's ORT objectives should not be related to the provision of ORT packets, but rather to the KAP of mothers.

The training of animatrices and other VHWs should include more specific information regarding feeding diarrhetic children.

VHCs should be assisted (perhaps by CMDT) to plan environmental sanitation activities including latrine construction.

A few key messages concerning diarrhea prevention should be chosen for dissemination, and the impact of these messages monitored.

3. Nutrition

Findings/Conclusions—Because only 11 percent of the population can benefit from growth monitoring (where there are dispensaries in the vicinity), its use as a project monitoring tool and motivational factor for mothers is limited.

- a. The procedures for following up a malnourished child are vague.
- b. The reported incidence of malnutrition among 12-23-month-old children in the target zone is extremely high, 58 percent under two standard deviations below the median and higher than that recorded in the baseline data survey (51.6 percent). It is likely that the methodology or means of calculation or measurement were faulty.
- c. Many VAs cannot support the food demonstrations as they are currently implemented.
- d. Resource management and allocation is probably a greater problem than lack of resources (as related to income needed to support food demonstrations).
- e. Many animatrices cannot name the signs of malnutrition.

Recommendations—A strategy should be devised to weigh all of the targeted children in the project zone two or three times a year. The results of this should be used to identify those children in need of follow-up by health workers, including animatrices, and to monitor and evaluate the effects of their work.

A standard procedure/checklist for following malnourished children should be developed and taught to all health workers, volunteers, and VHCs.

A special survey(s) by professionals in the field of growth monitoring should be carried out to confirm the level and kinds of malnutrition and to determine the causes. If the strategies in operation do not address the true causes, new strategies should be developed and tried.

WV should reconsider the necessity and cost-effectiveness of weekly, village-wide food demonstrations. With the help of CMDT, WV should evaluate the village's ability to support this activity.

WV should not get involved in income-generating activities, unless food demonstrations are deemed the most effective way to improve feeding habits and villagers are deemed unable to support the activity otherwise.

If WV decides to support long-term income-generating activities, expertise in this area should be sought.

The training of animatrices needs to be revised to enable animatrices to clinically recognize malnutrition.

4. Maternal Health

Findings/Conclusions—While demand for contraceptives appears to be high, the lack of knowledge and inaccessibility hinder utilization.

- a. Matrones and A/S cannot name three FP methods; animatrices cannot name three benefits to birth spacing.
- b. Sixteen percent of deliveries in the project zone are done by untrained TBAs. TBAs do not conduct prenatal consultations.
- c. Training matrones affects quality of care, not necessarily increased use of services.

Recommendations—WV (perhaps in collaboration with AMPPF) should improve the FP modules in their training and look into other means of raising people's awareness of FP.

With AMPPF and the MOH, WV should develop means of making contraceptives available through maternities and dispensaries.

If CMDT is not committed to this, WV should support the training of TBAs so that all villages in the project zone have at least one trained TBA or matrone. WV should look into the possibilities of getting TBAs to conduct prenatal consultations. If this looks feasible, training should be organized for the TBAs.

If matrone training is an activity of the extension project then it should either monitor the quality of care provided by the trained matrones, or it should document the correlation between training and use of their services.

B. Long-Term Strategy

Finding/Conclusion: The strategy involving the animatrices has been in effect for less than a year and the results are promising, yet inconclusive. This strategy lacks direction.

1. The current strategy and staffing pattern is self-limiting and will not enable the project to achieve complete coverage of the two subdistricts.

Recommendations: The CSP staff, MOH, and CMDT should review the animatrice strategy and make long-term plans regarding their role and participation in sustaining public health in the project zone. This role and other important issues regarding this strategy should be documented.

WV, with the animatrices and VHCs, should set intermediate objectives for the animatrice-supported activities, and after one year, evaluate the results. Based on the results, the strategy should either be continued as is or modified.

WV needs to delegate responsibility for supervising the animatrices to others, such as A/S or matrones, VA, or VHC members. Training in supervision should be provided to supervisors.

Should the strategy involving animatrices and delegation of supervisory responsibility prove successful, WV should expand into 10-20 more villages during the last two years of the project.

C. Personnel

Findings/Conclusions: Senior staff lack experience and expertise in public health (Child Survival) programming and management and have been unable to respond to the needs of the project.

1. With regard to selecting senior project staff, it is apparent that WV has not respected generally accepted recruitment standards; i.e., considering first and foremost candidates with appropriate education, long-term experience and proven public health managerial capabilities.
2. WV is considering more involvement in income-generating activities, but CSP personnel do not have expertise in this area.

Recommendations: WV should hire a Project Manager or Technical Team Leader with substantial public health programming experience and/or training and proven capabilities.

Recruitment should be open to all and follow standard recruitment practices. Employment should be offered to the most qualified candidate(s).

If WV decides to support income-generating activities long-term technical assistance should be procured (see Nutrition Recommendations).

D. Reporting

Findings/Conclusions: Too much time is spent on reporting.

1. The format of the reports does not enable project staff to use the reports for project planning and monitoring purposes.
2. Many important events/changes are glossed over in the reports due to length limitations established by A.I.D.

Recommendations: Reporting should be limited to quarterly and annual reports.

WV headquarters staff should dialogue with CSSP and FVA to modify the A.I.D. reporting format. This format should track the progress of each component, achievement of operational objectives, and implementation of activities.

While trying to respect report length limitations, project staff should fully explain and justify changes in objectives and strategies and fully cover all other important aspects of the project.

E. Work Plan

Findings/Conclusions: Work plans are developed at the beginning of the fiscal year but are not reviewed on a regular basis by staff.

1. Objectives stated in the work plans change from year to year; operational objectives are confused with end-of-project/impact objectives.
2. Activities sometimes do not correlate with the objectives.

Recommendations: Work plans developed at the beginning of the fiscal year should be reviewed by the entire staff every month or every quarter.

1. End-of-Project/impact objectives (changes in the beneficiaries) should not be combined with operational objectives (activities of the project). The impact objectives should not change from year to year.
2. Staff should make certain that implementing activities assures achievement of the objectives, i.e., that there's a correlation between the two. If the correlation is not evident, an explanation should be given.

APPENDIX 1: TERMS OF REFERENCE

World Vision Child Survival Project Final Evaluation Terms of Reference

Background:

In September 1987, A.I.D./Washington provided a grant to World Vision Relief and Development Inc. (WVRD) to implement a four-year Child Survival project in the district of Koutiala in the Republic of Mali. In the proposal, later elaborated in the Detailed Implementation Plan (DIP), WVRD proposed to execute activities in the areas of vaccination, diarrhea disease control, nutrition and birth spacing. Specific objectives in each of these four areas were determined and cited in the DIP. There are two target groups in the Koutiala District. One for the vaccination program which includes the entire population of the district, or approximately 286,000 people; and a second, smaller portion of the population (126,300 or 64,600 children 0-6 years and 61,700 women of childbearing age), targeted to receive maternal and child health services. A staff of five professionals were engaged by the project and, after some delays, the project got underway in April 1988.

As part of the reporting requirements of the project, monthly and annual reports were written; a baseline data survey was conducted; a midterm evaluation was carried out (September 1989), and a final evaluation is called for.

The final evaluation of the Koutiala WVRD Child Survival Project seeks to achieve several ends: to measure achievement of the project objectives, as they have been redefined during the life of the project; to measure the impact of Child Survival activities on knowledge and practices among the target group; to assess the degree of sustainability of the project; to evaluate the strategies used in project implementation. The results and recommendations of the final evaluation will be used to detail the design of an extension Child Survival project.

The final evaluation of the Koutiala WVRD Child Survival Project will be carried out in three phases. The first phase, quantitative measurement of the objectives, was carried out by the National Institute of Public Health Research (INRSP) in June 1991. A standardized survey to measure the impact of Child Survival activities on knowledge and practices was conducted in late August 1991 with assistance from Dr. C. Franco of the PVO Child Survival Support Program (CSSP).

To complete the final evaluation, World Vision will engage the technical assistance of four consultants who will carry out the scope of work as detailed below.

Purpose:

The purpose of the final evaluation is to provide information to World Vision Relief and Development, Inc., to USAID, and collaborating partners regarding the results and lessons

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learned about the Koutiala Child Survival Project, so that these lessons can be used to improve the design and implementation of future Child Survival activities.

Objectives of the Evaluation:

The evaluation team will identify the strategies used to provide the Child Survival services, the problems encountered, and to determine to what degree the objectives of the project were achieved. They will identify and analyze the cause(s) for any major discrepancies between expected outcomes and the actual results. The team will identify general problems encountered, constraints to project implementation, major achievements, and lessons learned. The evaluation report will analyze different aspects of project sustainability, using the memo from John McEnaney as a guide. The team will make recommendations based on the findings. The final evaluation will provide end-of-project financial accounting data.

Scope of Work:

To achieve the purpose and objectives stated above, the consultants will research and respond to the following issues and questions:

1. *Achievement of Project Objectives.* What were the major findings reported in the INRSP report? Were there any major discrepancies between the stated objectives and the actual results? If any of the objectives were not achieved or only partially achieved, what is the explanation for this? What recommendations can be made, vis-a-vis these findings?
2. *Assess Efforts and Progress Toward Sustainability.* What is the status of sustainability with regard to the sustainability plan, the community's participation and perception of the project's effectiveness, the strengths of local management, monitoring and evaluation of sustainability, calculation of recurrent costs, attempts at cost recovery and income generation? (See Appendix I--Mr. McEnaney's memo to PVOs.) What recommendations with regard to strategies for sustainability can be made?
3. *Major Problems, Constraints, Achievements, and Lessons Learned.* Did the project encounter any problems that seriously hindered project implementation or obstruct achievement of the project's objectives? Did the project or its staff experience any serious constraints during the life of the project? If there were problems or constraints, how were these handled, what were the results? What recommendations can be made as a result of these findings?

In addition to the project objectives, were there any other notable achievements of the project? If so, how did these come about? Can these be planned for in the future? If so, how?

What other lessons were learned during the course of this project? In what ways can these lessons help future project designers and implementers?

4. *Impact of the Project on Knowledge and Practices.* What were the major findings of the standardized survey? What explanations for the findings can be derived/deduced? What recommendations can be made as a result of these findings?
5. *Financial Accounting.* What is the status of the project financially? Were the funds allocated according to the given line items?

Methodology:

The consultants will begin with a team planning meeting to review and redefine the scope of work, detail tasks and responsibilities, and prepare a work plan, and draw up a preliminary outline of the evaluation report. They will review and analyze the project documents, including the INRSP Report and the Standardized Survey, and develop instruments for gathering additional information in the project zone. The team will conduct interviews with project staff, project collaborators and beneficiaries in the project zone, and review documents in the field office. They will return to Bamako to write the draft final evaluation report. A summary of the report will be translated into French and distributed to key WVRD personnel for their comments and critique. These comments will be noted by the consultants, and the final report will be drafted taking these into consideration.

The Final Evaluation Report:

The Final Evaluation Report will be written in English, and one hard copy provided to the Project Manager. The Executive Summary, including the most important findings and recommendations, will be submitted in French as well. The INRSP and Standardized Survey Reports, or summaries of these, will be appended to the report.

Timing:

The evaluation will take place between September 2-30, with the final evaluation report being submitted no later than September 30, 1991.

MEMO

TO: Sam Asare, CSP Project Manager
FROM: Bonnie L. Kittle, Consultant
DATE: September 29, 1991
SUBJECT: Completion of Services—CSP Final Evaluation

In completion of the terms of my contract, enclosed please find a copy of the final draft of the final evaluation of the Koutiala Child Survival Project. As we discussed, I can either be paid locally with a dollar check or bank draft, or a check can be sent directly to my bank account. Please let me know the preferred procedures.

Sam, we discussed having the Executive Summary translated into French. Do you want me to arrange for this, or can Anna or another WV staff person do it? I would not be able to do it myself but would have Ousman Minta, who works at A.I.D., do it. I don't know if he is available now, however.

Could WV make two photocopies of the report? One for Daniel Coulibaly and one for David Miller? That would save some wear and tear on my printer.

Sam, I have enjoyed working with you and your staff. It has been an interesting assignment, and I hope the evaluation is useful in the development of the DIP.

Good luck in your new assignment.

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APPENDIX 2: FVA MEMO ON SUSTAINABILITY

Agency for International Development
Washington, D.C. 20523

WVRD
JUL 18 1991

July 12, 1991

Dear Colleague,

In recent years PVOs have made significant headway in Child Survival activities, and have demonstrated realistic and practical concern for sustaining project benefits. However, prior Child Survival project final evaluations indicate that PVOs continue to struggle with the challenge of assessing changes in health knowledge and practices among the beneficiary populations. To deal with this problem the PVO Child Survival Support Program (CSSP) at Johns Hopkins University has developed a standardized survey format which we believe will more accurately measure the impact of Child Survival activities on knowledge and practice. Consequently, we are requiring that all PVOs conducting final evaluations this year carry out surveys using the new methodology.

A.I.D. is requiring all projects to submit the following information for the final evaluation, in English:

- a) The results of a standardized survey;
- b) A project sustainability assessment in accordance with sustainability guidelines developed for the final evaluations; and
- c) An end of project financial accounting.

Under the process established by A.I.D., the PVO Child Survival Support Program will make available a pre-tested, standardized survey instrument to the country project which incorporates questions on each of the project interventions. The PVO CSSP will also provide a "survey trainer" to work with designated country project and PVO/HQ staff members. The PVO CSSP pays the salary for the survey trainer, while the PVO is responsible for the trainer's round trip flight and per diem. Each PVO should initiate arrangements for survey training support for projects completing final evaluation surveys in 1992. The point of contact with the PVO Child Survival Support Program is Dr. Ciro Franco (301-659-4100). Early scheduling of surveys is encouraged.

Projects which have received expansion funding for CSVII projects can use the standardized survey for both the final evaluation and the baseline survey for the population which will continue to be served under the expansion. Refunded projects which are expanding to new areas should utilize the standardized survey to measure baseline health knowledge and practice within new target areas.

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In September, a two-day survey workshop is planned for PVO/HQ staff who backstop PVO Child Survival projects. The purpose is to study in detail each of the survey question and review survey methodology and analysis.

In addition to the results of the standardized survey, A.I.D. is interested in obtaining an end-of-project assessment of the PVOs efforts at sustaining project benefits. Attachment 1 contains the guidelines to be addressed by all evaluation teams. In all cases the evaluation team should cite the source and year of data presented in the final report, and make some estimate of the data's validity and reliability.

The original and two copies of the final evaluation (survey results and sustainability guidelines) and the end of project financial accounting are due 90 days after the end-of-project date. Each project is also required to submit the A.I.D. Health and Child Survival Questionnaire-1991, which is due October 7, 1991 (you will be receiving this under separate cover). These are the only documents required for the final report.

Please contact your project officer should you have questions or require clarification of these guidelines.

Sincerely,



John McEnaney
Chief, Child Survival and Health
Bureau of Food for Peace
and Voluntary Assistance

ENCL: 1

APPENDIX 3: PEOPLE INTERVIEWED

World Vision Staff

Daniel Coulibaly—WV Country Director/Mali
Sam Asare—CSP Project Manager
Dr. David Coulibaly—CSP Technical Team Leader/EPI Supervisor
Maimouna N'Diaye—CSP Nutritionist
Katy Dolo—CSP Technical Coordinator MCH
Jean Calvin Tienou—CSP Administrator

MOH

Dr. Mahamane Maiga—Chief Medical Officer
Hawa Ouattera—Midwife
Fanta Diakiete—TDC
FuFa Saganta—MCH clinic Director

CMDT

Siaka Diarra—Training Coordinator
Abdoulaye Traore—Regional Director

Administrative

Mr. Ibrahama Guire—Commandant du Cercle, Koutiala

In Each of Eight Villages in the Project Zone:

Villages Councils
Village Associations
Village Health Committees
Matrones
Aides-Soignants
Animatrices

APPENDIX 4: DOCUMENTS REVIEWED

- Detailed Implementation Plan
- First, Second, Third Annual Reports
- Midterm Evaluation Report
- Monthly reports from February 1988 to August 1991
- INRSP Survey Report
- Standardized KAP Study Report

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