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Save the Children

Mali Field Office

**Training in Child Protective Behaviors and
Village Self-Management for Health**

**Kolondieba District and Zantiebougou Subdistrict
Sikasso Region, Mali**

Detailed Implementation Plan

Child Survival 8

September 30, 1992 - September 30, 1995

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DIP TABLE A: COUNTRY PROJECT SUMMARY

PVO/Country: Save the Children/Mali

Project Duration (mm/dd/yy)

start date 9/30/92

estimated completion date 9/30/95

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1. BUDGET SUMMARY IN U.S. DOLLARS

(a)	(b)	(c)	(d)
a. By year of project	A.I.D. Contribution (field + HQ)	PVO Contribution (field + HQ)	Total Contribution (field + HQ)
Year 1	234,552	69,455	304,007
Year 2	246,388	106,754	353,142
Year 3	225,410	59,535	284,945
Country Project total	706,350	235,744	942,094

b. Percent of PVO Match	25%
(PVO Contribution divided by Total Contribution: sum of column "c" divided by the sum of column "d")	

3. CALCULATION OF A.I.D. DOLLARS per BENEFICIARY per YEAR

a. Total A.I.D. Contribution to Country Project (sum of column "b" in table 1, this page)	706,350
b. Total Potential Beneficiaries (sum of column "f" in table 2, this page)	105,143
c. A.I.D. Funding per Beneficiary for Project (line a. divided by line b. in table 3, this page)	6.72
d. A.I.D. Funding per Beneficiary per year (line c. above divided by 3 years)	2.24

2. SIZE OF THE PROTELENTIAL BENEFICIARY POPULATION

Note: POTENTIAL BENEFICIARIES are defined as those in the project area who are eligible to receive services for a given intervention, not the percent you expect to provide services to - which may be smaller than the eligible population.

(e)	(f)
a. Current population within each age group*	Number of Potential Beneficiaries
infants, 0-11 months	6,757
children, 12-23 months	6,208
children, 24-59 months	17,513
children, 60-71 months (if Vitamin A component)	5,378
females, 15-19 years (high risk pregnancy)	13,790
females, 20-34 years	33,096
females, 35-49 years (high risk pregnancy)	8,274
Other (specify)	
Other (specify)	

b. Additional births	
Total estimated live births, years 2 and 3	14,129

c. Total Potential Beneficiaries	105,143
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* Note: Females (ages 15-49) should only be included as potential beneficiaries where they are direct beneficiaries of services (for example, TT immunizations, or family planning services), and not for educational interventions (for example, education on proper use of ORT)

4. PERCENT OF TOTAL A.I.D. CONTRIBUTION by INTERVENTION

Place percentages in shaded areas only: percentages must add to 100%

INTERVENTION	Percent of Project Effort %	Percent of A.I.D. Funds %
a. Immunization	15	15
b. Control of Diarrheal Diseases	10	10
c. Nutrition Education	15	15
d. Vitamin A	10	10
e. Control of Pneumonia	0	0
f. Maternal Care/Family Planning	15	15
g. Malaria Control	10	10
h. Other: Literacy	15	15
i. Other: Water	10	10
j. Other (specify)		
TOTAL	100	100

5. ACTIVITIES: Circle all activity codes that apply for each intervention

a. Control of Diarrheal Diseases

- 1 = Distribute ORS packets
- ① = Promote use of ORS packets
- ② = Promote home-mix
- ③ = Promote SSS home-available fluids
- ④ = Dietary management of diarrhea
- ⑤ = ORT training
- ⑥ = Hand washing
- Other _____
(specify)

b. Immunization

- 1 = Distribute vaccines
- 2 = Immunize mother/children
- ① = Promote immunization
- ② = Surveillance for vaccine
- ③ = Training in immunization practices
- Other _____
(specify)

c. Nutrition

- 1 = Distribute food
- ① = Provide iron, folic acid, vitamins
- ② = Provide scales and growth charts
- ③ = Sponsor mother-to-mother breastfeeding/promotion support groups
- ④ = Conduct food demonstrations
- ⑤ = Counsel mothers on breastfeeding and weaning practices
- ⑥ = Conduct group sessions
- ⑦ = Training in breastfeeding and weaning
- ⑧ = Training in maternal nutrition
- 10 = Training in growth monitoring
- Other _____
(specify)

d. Vitamin A

- 1 = Vitamin A deficiency treatment
- 2 = Vitamin A supplementation
- 3 = Vitamin A fortification
- 4 = Vitamin A education
- 5 = Vitamin A food production
- Other _____
(specify)

e. Control of Pneumonia

- 1 = Promote antibiotics
- 2 = Health education
- 3 = Improve referral sites
- 4 = Training
- Other _____
(specify)

f. Maternal Care/Family Planning

- 1 = Distribute contraceptives
- ① = Promote exclusive breastfeeding to delay contraception
- ② = Promote child spacing or family planning
- ③ = Antenatal care
- ④ = Promote malaria prophylaxis
- ⑤ = Train TBAs in improved birth practices
- ⑥ = Family planning training
- Other _____
(specify)

g. Malaria Control

- 1 = Residual insecticides
- 2 = Larvaciding
- 3 = Provision of bednets
- ① = Provision of commodities
- 5 = Treatment
- ② = Health education
- ③ = Training
- Other Pro-pharmacies in villages
(specify)

h. Other Specify

Clean water use
Literacy
Credit Program
Small Enterprise Development
Women in Development

SECTION B: LOCATION AND FORMAL AGREEMENTS

B.1 PROJECT LOCATION: Kolondièba and Bougouni districts in the Sikasso Region, 300 km SE of Bamako, Mali's capital (see attached maps). The project is being implemented in all 5 sub-districts of Kolondièba (Central, Kébila, Fakola, Kadiana, and Tousséguéla), and in the Zantiébougou Subdistrict of Bougouni. This is an extension of the CS4 grant that was implemented in 5 of the six districts listed below. Approximately 137,900 persons live in this rural, Sahelian area; all are Bambara-speaking, most are Muslim, and 90% gain their livelihood from agriculture. (Source: SC/M HIS, and National census, 1987).

B.2: CHOICE OF ZONE: The six sub-districts were selected as the target project area for the following reasons: a) While substantial progress has been made during CS-4 in the project area, much remains to be done, particularly in building lasting community health structures. b) Primary health care needs are great. c) Traditional community structures are strong in the project area, implying great potential for sustainability; d) The Medical Director for the Sikasso Region has for some time asked SC/M to expand its activities to other districts.

B.3. CURRENT STATUS OF AGREEMENTS: SC/M's "accord cadre" (country agreement) is with the Interior Ministry (as is the case for all NGOs); SC/M also has several agreements with the MOH governing EPI collaboration, community-based distribution of Ivermectin against oncho (in which the British NGO Sightsavers is a third signatory), community-based distribution of contraceptives, etc. All health project proposals, including CS-8, are reviewed by district and regional level health authorities.

SC/M has a memorandum of understanding with CERPOD (the Center for Research on Population and Development) for a collaboration reinforcing the health information system and testing the "health transition" hypothesis.

SC/M has two health-related grants from the USAID mission in Bamako, the first for operations research in community-based contraceptive distribution, and the second to coordinate the consortium of Malian and international NGOs working in the field of child survival in Mali (the "Groupe Pivot/Survie de l'Enfant"). Family Health International provide technical assistance for the family planning grant.

SC/M is actively seeking funding and partnership for an AIDS intervention; possible collaborators include the MOH (especially at the Regional level), USAID/Bamako, and Family Health International.

C. DIP SUSTAINABILITY STRATEGY

C.1. SUSTAINABLE COMPONENTS:

(a) At the level of the individual, certain lasting changes in health knowledge and behaviors will have come about. These include a demand for immunization; knowledge of the causes of diarrhea and how to treat it; an improved understanding of maternal and child nutrition and how to meet nutritional needs with local foods; protective practices for pregnancy (especially prenatal visits and child spacing); and how to protect family members from malaria.

(b) At the Village Health Committee level: At the end of CS-8, there will be a network of at least 200 village health committees (VHCs), each with the basic knowledge and skills to pass on simple health messages; to identify and organize target populations, to identify needs for outside coordination and assistance (e.g. EPI), and to maintain simple health records. Working relationships will have been established between these VHCs and subdistrict health authorities. Community demand for health services, particularly regarding immunization and prenatal consultations, will be robust (other functions can be managed without outside provision of services--e.g., ORT). VHCs will collaborate with other health

groups to work toward solutions to more complex health problems such as malaria and AIDS. It is hoped that groups of VHCs will pool their resources to meet their health needs (this has already happened in some instances, such as six villages hiring their own nurse for EPI and other functions).

Financial support from communities is expected to grow as health benefits are increasingly recognized (especially in decreased infant mortality, and better maternal health). Continued Ministry and UNICEF financial support are crucial for the success of EPI, but not relied on extensively in other subsectors.

(c) At the Policy level: During CS-8 and thereafter, SC/M will also work at the District, regional, and national levels to promote interest in and links with this village-based strategy, and to work for its replication. An example of this promotional approach is SC/M's participation in an April 1993 seminar on the establishment of a similar primary health care project in the neighboring districts of Yorosso and Koutiala.

Certain parts of CS-8 are not intended to be sustained beyond the project life: paid village health agents (they have been recruited to stimulate demand for health services, establish a sort of village baseline, and organize and train VHCs; they will be replaced by VHCs); nurse-midwives, whose functions will be taken over by trained TBAs; and the computerized Health Information System (HIS), which exists mainly for sophisticated data analysis; the village-level manual HIS in local language will certainly be sustained.

Indicators of sustainability (especially of VHC capability) are included as Appendix C.

C.2. COMMUNITY PRIORITIES: Community health priorities include decreased infant and child mortality, especially due to malaria, diarrhea, malnutrition, and vaccine-preventable diseases. SC/M's experience also shows a growing interest in child spacing, though limited by reticence and unfamiliarity. The principal indicators of community interest are the pre-existence of village healers and TBAs; the amount of time devoted to VHC activities by members, and to health discussions by the communities in general; expressed desire of communities to improve their health status; and the willingness of families to purchase certain inputs (e.g. growth monitoring cards, chloroquine, etc).

To foster a sense of community ownership, all activities are planned jointly by the FTs and the VHCs, with the VHCs increasingly taking the lead and the initiative. Family Trainers are SC-paid employees whose major task is to promote health protective behaviors among the target groups. The sustainability of each health undertaking and strategy will be discussed by the FT with the VHC and other village leaders, and unsustainable approaches discouraged. Since wide community participation is a feature of most of the health activities described below, support (or lack of support) will be clear. This DIP reflects five years of close cooperation between SC/M, village structures, and district health authorities at all levels.

C.3. COLLABORATION WITH HEALTH AND DEVELOPMENT AGENCIES:

The three-year duration of a Child Survival grant often makes SC/M the partner with the most limited vision of sustainability; our village and MOH partners tend to take a much longer-range view of the development of their health capacities. SC/M has tried to extend its sustainability strategy beyond the mere passing on of the financial baton to a partner or trying to maintain the highest levels of benefits and coverage rates attained with CS-8 funding; rather, SC/M aims at actually building a "lightweight but durable" health infrastructure, especially at the village level, which is both affordable and effective.

All SC/M health strategies are developed in collaboration with the MOH at national, district, or subdistrict levels; MOH participation is invited in evaluations, and results of all surveys are widely shared. At present the MOH and SC/M collaborate financially in

EPI and anti-oncho activities; at the end of CS-8, all partners are clear that all EPI logistical support responsibilities revert to the District Health Center.

SC/M is the coordinator of the Groupe Pivot Survie de l'Enfant, which is the consortium of NGOs working on maternal and child health. In this position, SC/M represents all NGOs in discussions of national health policy, and promotes the role of NGOs as important partners of the MOH. The consortium also presents SC/M and other US NGOs with an opportunity to share the lessons and practices of Child Survival with Malian NGOs, which will go a long way toward professionalizing these local NGOs' health procedures (and toward sustaining child survival-type interventions after the end of direct USAID CS funding). Using funds provided by USAID/Mali, SC/M organizes workshops and trainings to increase NGO impact in health.

In country agencies contributing to the DIP include the MOH (especially at the district and regional levels), CERPOD, UNICEF, and the Groupe Pivot/Survie de l'Enfant.

C.4. PHASING OF TRANSFER OF RESPONSIBILITIES: The phaseover to village management of health activities will begin in late 1993/early 1994, with the first FT trainings of VHCs (FTs will be trained in training techniques during spring and summer of 1993). VHC trainings will generally be held in the dry seasons of 1994 and 1995, which is the least busy time of the agricultural calendar. There will be VHC training modules in EPI, CDD, nutrition and growth monitoring, maternal health care, and malaria prevention, each of which will include refresher training on health problems and solutions, and specialized literacy training for the particular problem. Problem-solving sessions on needs assessment, cost-recovery, and sustainability will also be included.

C.5. COST RECOVERY FOR COMMUNITY MEMBERS: Preventive health costs currently paid by individual villagers and families include: the cost of the vaccination card, and the growth monitoring card; transport costs to reach health services (for vaccination, consultations, obstetrical emergencies, etc); the cost of malaria prophylaxis (chloroquine and/or bednets), contraceptives, and nutritional supplements for pregnant women (e.g., iron and folic acid). Community labor for health activities is substantial (cleanliness campaigns, construction of rural maternity wards, all VHC activities) and sometimes carries an opportunity cost in terms of other tasks foregone. Generally speaking these costs are affordable at the family level, though rational economic decision-making may cause families to forego more expensive items (e.g. bednets).

Cost recovery efforts are made at the level of the individual. For example, on growth card sales, VHCs make a 60 francs (150%) profit, the proceeds of which go toward health expenses (often the purchase of chloroquine), though in a typical village the amount thus generated is rarely greater than 10,000 francs (\$40). Contraceptives are sold for a smaller profit margin by village family planning animateurs. In both cases, delivery and resupply are entirely subsidized; eventually, to be serious about financial sustainability, provisions will have to be made to recoup the cost of delivery. Vaccination cards are currently sold by the MOH EPI nurses as part of GRM cost recovery.

The existing village pro-pharmacies in Nangalasso and Farako cover the costs of the purchase of basic medicines and contraceptives, plus their delivery, and have been successful at repaying the loans that established them. These enterprises should easily be financially self-sustaining, and constitute an activity of great potential benefit to the district.

It is SC/M's working assumption that the MOH and UNICEF will continue to honor their engagements regarding EPI, health agents salaries, and other recurrent costs. But it must be noted that the Malian rural tax base has never been robust and is eroding. Thus SC/M is continually proposing ways of reducing fixed costs, finding less expensive models of service delivery, and encouraging groups of villages to consider funding certain health services directly (usually EPI).

Cost recovery and cost control are closely watched at all levels of the project, including the level of Field Office Director. Technical assistance in local health care financing in areas of very limited resources would be of great value.

SECTION D. PROJECT DESIGN

D.1. BASELINE MAIN FINDINGS: 99.3% of the mothers interviewed declared that they breastfed their children. In the age group 7-9 months, 88.6% of the mothers declared that they give semisolid foods to their children. 48.7% of the children had been weighed at least once during the last three months. 69.5% of mothers said they would use chloroquine if their child had a fever, while 37.4% would take the child to a health center. 14.9% of the children had had diarrhea in the 2 weeks preceding the survey; respectively, 35.6% 57.8%, and 40.0% of the mothers of these children reported that they had given more breastmilk, other liquids, or semi-solid foods than usual during this period of diarrhea. Mothers showed a marked confidence in traditional healers (47.6% said they would consult a healer if their child had a fever, and 35.5% if the child had diarrhea); 82.3% of mothers also reported that a TBA had assisted at their delivery. 41.9% of children aged 12-23 months are completely vaccinated, and 75.5% of mothers have received two or more doses of Tetanus toxoid. 79.5% of mothers with prenatal consultation cards had had two or more prenatal consultations, and 56.6% said that they should see a trained health agent at least three times during their pregnancy. Of the 14.8% of women who reported their own or their husbands' use of a child spacing method, 68.4% practiced abstinence as the principle method. 95.0% of mothers cannot read or write, and only 4.3% ever attended primary school.

Progress made during CS-IV was illustrated by the striking differences between the baseline results in Kolondieba, where SC/M has been working for four years, and the new zone of Zantiebougou. The statistics for Zantiebougou are indicative of the general state of health coverage in Mali.

In general, Kolondieba mothers showed better knowledge than Zantiebougou mothers about nutritional supplementation, malaria prevention and treatment, diarrhea symptoms and treatment, immunization, and the nutritional needs of pregnant women.

Coverage rates in immunization, growth monitoring, and prenatal consultations were markedly higher in Kolondieba than in Zantiebougou, as shown below:

	Kolondieba	Zantiebougou
Children fully immunized	41.9%	6.7%
Women immunized against Tt	85.8%	36.5%
Children weighed this quarter	61.3	1.6%
Women rcvg 2+ prenatal visits	49.2	3.2%

Kolondieba mothers took better care of their health documents and could interpret them better (e.g. growth cards), and were more likely to use sugar-salt or other home fluids than the outside medicines preferred by Zantiebougou mothers. Family planning usage rates are so low in both areas that significant comparisons are difficult to make.

D.2. PROJECT OVERALL GOALS AND OBJECTIVES: By August 1995, the following objectives will be achieved:

VILLAGE LITERACY AND SELF-MANAGEMENT FOR HEALTH (20%):

- 1) 80% of FTs will conduct functional literacy training for VHCs and 80% of VHCs will thereby acquire the skills, knowledge, and responsibilities to manage project activities in their villages; 80% of VHCs will have one literate woman member.

MATERNAL AND ADOLESCENT HEALTH (20%)

- 2a) 75% of villages will have at least one trained TBA
- 2b) 80% of pregnant women will know how to seek prenatal care and 75% will have a trained TBA or health professional assist at their delivery.
- 2c) 50% of pregnant women will receive two ante-natal checkups, and 40% will receive a postnatal checkup.
- 2d) 60% of girls aged 12-19 years will know their nutritional needs and will be able to identify practices that ensure their normal physical development
- 2e) 60% of girls aged 15-19 years will learn protective behaviors for pregnancy and motherhood, with emphasis on safe pregnancy and childbearing, ORT, immunization, and breastfeeding.
- 2f) 60% of adolescents aged 12-19 years will know 3 methods of STDs and AIDS prevention.

CONTROL OF DIARRHEAL DISEASES (20%)

- 5a) 90% of mothers are trained by VHC members in ORT preparation and use, including home available fluids and cereal based ORT.
- 5b) Increase by 80% the number of mothers who use ORT in the treatment of diarrhea and provide appropriate feeding during the last 2 weeks; this figure will be monitored by VHCs.
- 5c) 60% of women know the importance of acquiring clean water in a manner that maintains the cleanliness of the well or other sources, and know the importance of applying appropriate sanitation measures.

IMMUNIZATION AND DISEASE SURVEILLANCE (15%):

- 3a) 80% of children aged 12-23 months are fully immunized against the six immunizable diseases and 90% of women of child bearing age are immunized against Tetanus.
- 3b) 75% of cases diagnosed by FTs, VHCs as measles, neonatal tetanus, or pertussis, will be reported to the health post and followed up by the MOH.

NUTRITION AND BREASTFEEDING (15%):

- 4a) 80% of mothers with severely or moderately malnourished children will attend at least one nutrition demonstration session, and 60% of mothers of children <24 months will be competent in the preparation of appropriate weaning foods.
- 4b) Increase by 80% the number of infants who are exclusively breastfed up to 3 months old, and receive appropriate supplementation from 4 months on.

MALARIA PREVENTION (10%)

- 6a) 65% of mothers with children under five know appropriate preventive measures against malaria, and how to access care in serious cases.
- 6b) Increase by 90% the number of village pro-pharmacies which have a stock of Chloroquine tablets, and increase to 40% the VHCs which have a reliable supply of tablets in their kits.

Project inputs include the following:

Training:

- New project staff orientation
- Training of trainers for FTs (to train VHCs in literacy)
- Literacy for health training for VHCs
- Training for TBAs in maternal care
- Training for women of CBA in maternal health, immunization, nutrition, CDD, AIDS/STD prevention, and malaria prevention

Salaries of project staff

Fuel and maintenance of 1 vehicle and about 40 mopeds
Logistical support for EPI
Family enrollment of Zantiebougou subdistrict
Baseline study and 2 evaluations

Project outputs include the following:

Health Information System (manual rosters, and computerized)
250 VHCs with literate members (incl 200 w/1+ literate woman)
200 self-managing VHCs
188 villages with trained TBAs
19,500 fully immunized children
29,700 fully immunized women of CBA
18,800 child weighings per quarter
1,900 exclusively breastfed infants 0-3 months
11,300 adolescents (male & female) knowing AIDS/STD prevention
19,800 women of CBA competent in clean water use
26,400 women of CBA competent in ORT
19,800 women of CBA competent in malaria control

Project outcomes are expected to be

Reduction in rates of mortality and morbidity due to vaccine-preventable diseases, malnutrition, diarrhea, and malaria
Increase in village-level capacity to diagnose and resolve own health problems
Increase in village-level capacity to record, interpret, and act upon health information
Reduction in age-specific fertility rate

Baseline data provided an understanding of the current status for each component (especially since new and old zones could be compared side-by-side, giving a clear indication of the effectiveness of SC/M interventions). Project objectives were revised upward or downward according to what the project is judged to be able to achieve in its lifetime (3 years), and within its resources.

D.3. PROJECT DESIGN: SC/M's child survival intervention is in its fifth year and has thus reached a certain maturity: project and health center staff are largely trained, as are a good percentage of the zone's women of childbearing age. The challenge for the three years to come, in the older zone of Kolondieba, is to pass on the management of the child survival activities to competent and motivated Village Health Committees (in the new zone of Zantiebougou, SC/M will attempt to introduce and phase over child survival activities, but the base is not likely to be as solid).

The greatest obstacle to this transfer of responsibilities is illiteracy and associated lack of skills in problem solving, tracking and analysis of information, and effective interaction with health authorities. For this reason, SC/M has chosen to devote 20% of its CS resources to the improvement of VHCs' health literacy skills.

SC/M has targeted 5 specific health interventions (maternal health, CDD, immunization, nutrition/breastfeeding/growth monitoring, and malaria prevention) since they are of great concern in the zone, and continued activity will solidify village-level demand for services and health-seeking behavior.

For the health interventions, the target groups are standard (children under 3 and women of childbearing age). For the literacy intervention, VHC members, particularly women members, are targeted.

It should be noted that SC/M's Child Survival project is only a part of a larger SC/M integrated development program, which includes natural resource management (village wells, small dams, food security, erosion control, gardening, and agricultural committee training),

education (basic and advanced adult literacy, non-formal primary education, early childhood development), and economic development (credit, savings, and microenterprise promotion). Many of these programs directly support health interventions (e.g. basic literacy, gardening, and credit for the establishment of village pro-pharmacies), and greatly increase the likelihood of sustainability.

D.4. ENTRY OF ELIGIBLES INTO PROGRAM: In general, all members of the target population will enter and participate in the child survival activities. The HIS described in Section E identifies eligible women, children, and newborns. Demographic, immunization, ORT, and growth monitoring information for each village are monitored by SC/M family trainers on a monthly basis, and consolidated by the SC/M health supervisors (subdistrict level) and project coordinator, who produces quarterly monitoring reports. A midterms evaluation will be conducted around March of 1994, and a final evaluation in September of 1995.

Information is also routinely gathered on the number of persons attending trainings; FTs can ascertain training effectiveness by comparing mothers' training attendance with their children's immunization, ORT, or growth monitoring status through the rosters.

D.5. PROJECT DESIGN

5a1: IMMUNIZATION COVERAGE RATES: (Source: Baseline)

	BCG	DTP1	DTP2	DTP3	MEAS.	FULLY	DROPOUT
Kolond.	93.0	91.5	76.1	49.3	73.2	49.3	46.2
Zantieb.	33.3	20.0	6.7	6.7	6.7	6.7	66.7
Both	82.6	79.1	64.0	41.9	61.6	41.9	47.1

"Completely immunized" means children aged 12-23 months who have received BCG, 3 doses of DPT, 3 doses of OPV, and measles vaccinations. 75.5% of women of CBA (85.8% K, 36.5% Z) have received two or more Tetanus toxoid doses; thus we can estimate that three quarters of newborns are protected against tetanus.

5a2. MOTHERS' VACCINATION KNOWLEDGE AND PRACTICE: 99% of mothers surveyed knew whether their child had been vaccinated. 53.0% of mothers knew that nine months was the proper age for measles vaccination. 70.9% knew that the purpose of Tt was to protect both the mother and the infant. 76.2% knew that at least two Tt injections are necessary to protect the mother and the newborn. 64.6% of children had vaccination cards, as did 79.8% of mothers. 9.3% of mothers had lost their own vaccination cards, and 4.3% had lost their child's card.

5a3. INTERVENTIONS/POPULATIONS/HIGH RISK: The MOH recommends vaccination of children during their first year with BCG, DPT, OPV, and measles; and of women of CBA with Tt. Actual vaccination will be done by MOH's EPI nurses; SC/M role will be in mobilization of communities for vaccination, and in tracking down incompletely vaccinated children through the HIS.

Beneficiary populations (entire project zone, from HIS):

	Year One	Year Two	Year Three
Children <3yrs	16,345	17,925	19,505
Women of CBA (15-49yrs)	26,120	27,915	29,711
Newborns	3,747	3,849	3,953

Each child needs five contacts by age 12 months. In practice immunization teams have not visited villages with sufficient frequency to reach high levels of complete

immunization by 12 months; SC/M is working with the Health Center to increase the regularity of mobile team visits (including the provision of EPI logistical support funds).

Any incompletely immunized woman or child is at high risk. Especially high risk children may include those living in communities with less-motivated VHCs, those living furthest from fixed centers, those in villages inaccessible during the rainy season, and those whose parents have not vaccinated older siblings promptly or whose siblings have died in infancy (according to the HIS).

5a4. IMMUNIZATION OBJECTIVES

	Baseline	Yr1	Yr2	Final
12-23 mos. fully vacc'd.	41.9	55%	70%	80%
Women CBA recvg. 2+ TT	75.5	80%	85%	90%
Women CBA knowing age for measles vaccin.	53.2	65%	80%	90%
Women CBA w/immunization card (own and child's)	64.6	75%	85%	90%
Women CBA able to interpret cards	n/a	10%	15%	20%

5a5. The project's immunization strategy is to strengthen the MOH existing immunization campaign (5a.3), and to increase access of mothers to the immunization services. The MOH promotes an immunization strategy that consists of 2 components: (1) Vaccination at fixed centers conducted on a regular basis (daily at the District Health Center and twice a week at the subdistrict centers), mainly for the population living in a 5km radius; (2) Vaccination by mobile teams of MOH EPI nurses on motorcycles for villages within 5-30km, and in vehicles for villages beyond the 30km radius. Each village beyond the 5km radius is to be visited quarterly by the mobile team. In SC/M's project zone, the district of Kolondieba is covered by a combination of the fixed and mobile strategies, while the new subdistrict of Zantiebouyou is covered by entirely by the mobile strategy.

SC/M is also encouraging the establishment of secondary fixed centers in the three largest subdistricts, to better manage vaccination coverage; operating cost of these centers would be covered by SC/M, except for the EPI nurse's salary and moped, which are to be covered by the villages s/he serves.

The project's strategy to increase access of mothers will be carried out by SC/M's Family Trainers and, increasingly, by VHCs, who will train mothers about immunization. This will be conducted in village based health education and promotion sessions, village meetings, and women's groups, followed by home visits to reinforce the messages.

MOH EPI nurses meet monthly with SC/M Family Trainers to set a schedule of mobile team visits. Before the arrival of the vaccination teams, FTs and VHCs identify mothers of eligible children (through the HIS), and inform them of the visit.

During the immunization sessions, Family Trainers and VHCs will assist the mobile team to organize the sessions, fill out the vaccination cards, and call upon eligible mothers who did not come. They will also provide feedback to the community and to the MOH on the coverage status which they will compute using the HIS roster for the village. Mothers who did not attend will be visited to ensure that they be present at the next mobile team visit.

Support for the MOH will include fuel and some maintenance for the Kolondieba EPI vehicle, per diem for the EPI driver, petrol for the refrigerators (cold chain), and training of Health Center staff. For inputs/outputs/outcomes, see D2.

5a6. IMMUNIZATION COMPONENT TECHNICAL OVERSIGHT will be the shared responsibility of District Medical Officer Sory Bamba, MD, SC/M Project Coordinator Fodé Doumbia, MD, and Assistant Coordinator Souaïbou Sacko, MD.

The ultimate responsibility for quarterly monitoring of immunization progress is with Dr. Doumbia. At the village level, ongoing monitoring is conducted by FTs and VHCs in the village children's and women's rosters; this information is then summarized monthly at the subdistrict level, and quarterly at the project level.

5a7. PROJECT HEALTH WORKERS AND IMMUNIZATION: The 3 new FTs and the new nurse to be recruited for Zantiebouyou will be trained in strategies for social mobilization for vaccination (the other FTs have already been trained).

All the FTs will be given a special training of trainers (TOT) to enable them to pass on their immunization-related skills to VHCs. They will in turn train the 250 VHCs to manage immunization mobilization, recordkeeping, and follow-up.

5a8. IMMUNIZATION CARD: The French-language national immunization card is attached (Appendix D). For its literacy training for health, SC has devised a Bambara-language model of the card. EPI nurses sell the card to villagers for 100 francs CFA (\$0.38). The HIS child roster (see section E) and the growth monitoring card (which has vaccination data) will be used in case an immunization card is lost. SC/M will also advise families to store the cards carefully. Immunization data will be recorded on vaccination cards, HIS rosters, and growth monitoring cards, and the vaccination team's rosters.

5a9. DROPOUTS/FOLLOW-UP OF DEFAULTERS: To reduce dropout rates, the project will use its 100% family enrollment system (see Section E) to promote the use of immunization services, to target mothers and children needing vaccinations, and to follow up with defaulters through home visits.

5a10. Same as a.9.

5a11. There have been no serious problems with the cold chain. SC/M ensures the supply of kerosene for the EPI fridges.

5a12. SC/M's FTs will work with VHCs to report to the subdistrict health authorities cases of the six vaccine-preventable diseases, especially in the case of measles, tetanus, and pertussis, which are easily identifiable by villagers. Each case will be investigated by the health center. These reports will be included in SC/M's quarterly CS reports.

5b DIP FOR DIARRHEAL DISEASE CONTROL (CDD)

5b1. The number of diarrheal episodes per child per year varies widely with the season. Diarrhea is most prevalent during the rainy season. On average, episodes last 3-5 days (SC/M staff estimate).

The baseline study, conducted during the beginning of the rainy season (June), found that 14.9% of the children surveyed had had a diarrheal episode in the previous 15 days.

5b2. MOTHERS' KNOWLEDGE AND PRACTICE OF CDD: 71.2% of mothers breastfed their children as much as or more than usual during diarrheal episodes; 68.9% gave them as much or more other fluids, and 64.4% gave them as much or more semi-solid food. None of the mothers stopped giving breastmilk, other fluids, or semi-solid foods during episodes. 95.6% gave some sort of treatment for diarrhea, as shown below: sugar/salt solution (60.0%), infusions (40.0%), antibiotics or anti-diarrhea medicine (35.6%), ORT packets (15.5%), home fluids (11.1%), or other treatments (26.7%).

64.4% of mothers whose children had had diarrhea during the previous 15 days sought advice from others to treat the episode, as follows: 41.9% from family members; 35.5% from traditional healers; 29.0% from village-level health agents (e.g. SC/M FTs);

22.4% at health posts, pharmacies, or clinics; 12.9% from TBAs; and 13.3% from other sources.

Mothers' knowledge of diarrhea symptoms requiring referral: 11.3% of all mothers surveyed did not know any; others mentioned vomiting (25.9%), fever (29.6%), dehydration (27.6%), prolonged diarrhea (26.9%), bloody stools (9.3%), lack of appetite (23.3%), weakness/fatigue (41.2%), or other symptoms (19.3%).

Regarding actions to be taken when a child has diarrhea, 7.3% of mothers did not know any actions; 53.0% would give the child more to drink than usual; 46.0% would take the child to the health center or clinic; and 27.5% would give the child smaller and more frequent feeds. Only 1.3% said they would stop giving the child food or liquids.

For the most important actions to help a child recover from a diarrheal episode, 14.9% did not have any idea; 39.7% said smaller and more frequent feeds; and 53.6% said more food than usual.

5b3. MOH PROTOCOL FOR CDD MANAGEMENT promotes the use of ORT packets and semi-solid foods in health centers, and the use of sugar-salt solution in homes.

5b4. PROJECT CDD OBJECTIVES: 90% (25,883) of women of CBA are trained by VHC members in ORT preparation and use, including home-available fluids and cereal-based ORT, and use ORT in the treatment of diarrhea, and provide appropriate feeding for the child's recovery.

5b5. CDD COMPONENT POPULATION: CDD beneficiaries will be children ≤ 3 years (18,800). The project will ensure at least one contact per woman per year (either in group meetings or in home visits). This will be monitored through the HIS. High risk for case management of diarrheal diseases means children under 2, children with diarrhea for more than 48 hours and signs of dehydration, malnourished children, children in villages without a nearby water source, and children living in non-hygienic conditions.

5b6. CDD COMPONENT DESCRIPTION: The project will train mothers in the use of ORT, focusing on preparation and use of home available fluids, cereal-based ORT, the importance of continued breastfeeding, extra feeding during recovery, recognition and referral of severe dehydration cases, and appropriate hygiene, emphasizing handwashing and basic sanitation. Acquired behavior will be reinforced through home visits.

5b7. ORS PACKET PROMOTION: SC/M primarily promotes home-available fluids, SSS, and cereal-based ORT, but secondarily does promote ORS packets, which are available through subdistrict health posts for free, and at pharmacies at modest cost (about US\$ 0.04 per packet). The supply of ORS packets at health posts is often interrupted.

5b8. HOME-AVAILABLE FLUID/CEREAL-BASED ORT PROMOTION: Home-available fluids include traditionally-prepared infusions. The cereal-based ORT promoted by SC/M is a light, easily-prepared porridge (bouillie) made from millet, sorghum, or maize, with a bit of salt and karite butter, and sometimes some cow's milk. These ingredients are easily available year-round.

5b10. CDD MESSAGES FOR MOTHERS: The anti-diarrheal messages passed to mothers include: handwashing, keeping drinking water clean, continuous breastfeeding during diarrheal episodes, semi-solid foods during recovery, the correct preparation of SSS, and severe case referrals. FTs and VHCs will organize educational sessions at village gatherings, women's group meetings, or home visits. A simplified pre-/post-test method will be used to assess the amount of knowledge the mothers acquire. This will be reinforced through the monitoring system and the midterm and final evaluations.

5b11. OTHER DIARRHEAL DISEASE CONTROL STRATEGIES: Other diarrheal disease control strategies include general hygiene within the village environment, handwashing with soap before handling food, cleanliness of water points, and well disinfection. Mothers will be trained in acquiring, transporting, and storing water hygienically. Water activities will be carried out by the SC/M water sector, which has six years experience in the area. Child survival funds will supply bleach for wellwater disinfection.

5b12. CDD COMPONENT TECHNICAL OVERSIGHT will be the shared responsibility of Drs. Doumbia and Sacko (see 5a6). Mothers' knowledge of ORT will be monitored on a regular basis by the FTs and, increasingly, the VHCs. SC/M's six subdistrict-level supervisors will ensure the quality of FTs' and VHCs' instruction to mothers.

5b13. CDD TRAINING OF FT'S AND VHC'S: The four new FTs to be recruited for Zantiebougou will receive 18-24 hours of training including the prevention, diagnosis, and management of diarrheal disease, and appropriate nutritional practices during and after an episode.

All the FTs will be given a special training of trainers (TOT) to enable them to pass on their CDD-related skills to VHCs. They will in turn train 250 VHCs to manage training and motivation of mothers, CDD recordkeeping, and follow-up. Training of newly-hired FTs will begin by May 1993; the FTs' TOTs will be given starting in the summer of 1993, and FT-led training sessions for VHCs will begin by fall of 1993.

FT training will be evaluated at the midpoint and the end of the project. VHC training results will be continually monitored through VHC sustainability indicators (see Appendix C).

5b14. RECORDING OF WOMEN'S CDD TRAINING will be monitored through the universal enrollment HIS, which will permit FTs and VHCs to record whether a mother has been taught proper measuring and administration of ORT, and given other important messages (handwashing, drinkable water, etc) for home management of childhood diarrhea.

5c DIP FOR NUTRITIONAL IMPROVEMENT

5c1. MALNOURISHED CHILDREN: Among 1,626 children aged 0-29 months in the central subdistrict of Kolondieba who were examined in 1990, 7.9% (128/1626) suffered from wasting (weight for age deficit), while 33.6% suffered from stunting (weight for height deficit) (Source: Beffon Cissé, "Evaluation de l'état nutritionnel des enfants âgés de moins de 3 ans dans le cercle de Kolondieba." Doctoral thesis, 1990). In both cases, the rate is for those children two standard deviations below the mean.

If these percentages are extrapolated to cover all the children of the project area aged 0-3 years, we can expect 1,485 children suffering from wasting, and 6,050 children suffering from stunting.

SC/M FTs continue to take quarterly anthropometric measures of weight for age, once per month for children in the yellow and red bands on the growth monitoring card (see section on Growth Monitoring).

5c2. FOOD AVAILABILITY: The project zone receives a mean annual rainfall of 1000mm, and is thus subject to food shortages during the lean pre-harvest season (May-September), but is not threatened by drought or civil strife. The SC/M credit and agriculture sectors collaborate to establish cereal banks to provide food security during the lean months.

5c3. BREASTFEEDING BASELINE: The baseline survey done in the project area showed that 99.2% of mothers of children under two breastfeed, but that only 35.9% of mothers

of children 0-3 months old breastfeed exclusively (62.0% of mothers of children aged 0-3 months give water or infusions to their children, and 2.2% give cow's or goat's milk).

Weaning foods consist essentially of porridges. At four to six months, 26.8% of children received semi-solid foods, at 7-9 months, 88.6% did. 27.2% of the mothers said they should start giving food in addition to breastmilk at 4-6 months; 58.6% said they should begin at six months or later. 78.8% of all mothers surveyed knew that they should add oil (karite butter) to the porridge, 35.4% knew to add food rich in iron (liver or milk), and 42.4% said food rich in Vitamin A (sauces made from green leaves).

The sick child is breastfed and given other fluids and semi-solid foods (see 5b2).

5c4. **NUTRITION BENEFICIARIES/HIGH RISK:** The number of beneficiaries eligible for nutrition interventions includes 12,963 children under three. The children will be weighed quarterly. During the weighing, mothers with malnourished children will be asked to attend nutrition education and demonstration sessions. Average annual contacts per mother will thus be five or six. Eligible children will be identified through the HIS. At high risk of malnutrition are children whose weight decreases between weighings, or who are two standard deviations or more below the mean weight for age.

5c5. **NUTRITION OBJECTIVES:** 80% of mothers (approximately 1,200) with severely or moderately malnourished children (weight for age) will attend at least one nutrition demonstration session, and 60% of mothers with children < 2 years (26,410) will be competent in preparing appropriate weaning foods. 60% of infants < 4 months will be exclusively breastfed (no water or infusions), and will receive appropriate supplementation from 4 months on.

5c6. **NUTRITION STRATEGY:** The project's strategy for improving nutritional status of infants and weaning age children is focused around training Family Trainers, Village Women Nutrition Agents ("animatrices villageoises en nutrition") and mothers in good nutrition for their children; lessons include the importance of breastfeeding, proper supplementation, weaning practices, and nutritional demonstrations.

Constraints on improving children's nutritional status include food availability and cost, particularly of iron-rich foods. Cereal availability will be addressed through the above-mentioned grain banks, and home gardens will be encouraged. For inputs/outputs/outcomes, see section D2.

5c7. **LOW BIRTH-WEIGHT BABIES:** Will not be specifically addressed.

5c8. **NUTRITION STRATEGY FOR PREGNANT AND LACTATING MOTHERS** will focus on training women of CBA in good nutrition and health practices--special sessions will also be given for adolescent girls. According to the baseline, 6.0% of all mothers surveyed did not know what special foods a pregnant woman should eat; 77.2% knew to eat protein-rich foods (meat, fish, eggs); 90.6% knew to eat sauces made from green leaves.

For constraints on improving maternal nutrition, and SC activities to counter these constraints, see 5c6; SC/M will also emphasize the particular need for pregnant and lactating women to consume milk, green leaf sauces, and occasionally liver. For inputs/outputs/outcomes, see section D2.

5c9. The project will not provide supplementary foods.

D5c.10. **TECHNICAL OVERSIGHT** will be assured by trained Ms. Haby Siby, a trained nurse/nutritionist (see Appendix G). TA will be provided by the Nutrition Communication Project (AED-managed), and by the "Groupe Pivot/Survie de l'Enfant"

(consortium of NGOs working on child survival in Mali), and by Dr. Ahmed Zayan of SC's headquarters health unit; dates not yet scheduled.

5c11. **NUTRITION MESSAGES.** Promotion of colostrum, exclusive breastfeeding to 4-6 months (specifically, no water or infusions); balanced diets for pregnant women; promotion of local foods rich in Vitamin A; promotion of proper weaning foods. The strategy will use a combination of cooking demonstrations, group discussions and role play, all adapted to the cultural milieu.

Vitamin A Prevention

5c12. **PREVALENCE OF VITAMIN A DEFICIENCY AND NIGHT BLINDNESS:** A 1990 HKI survey of Vitamin A deficiency in Kolondieba found that "factors of risk, availability, diet, and culture suggest that Vitamin A deficiency is not currently a major problem in Kolondieba District.. taking into account the availability of foods rich in Vitamin A during the entire year and the apparently satisfactory consumption of these foods, and given the other health problems in the region (onchocerciasis, malaria, etc.), it is not currently a priority for SC to put in place a system of preventive Vitamin A capsule distribution."

In order to assure the validity of these conclusions for the lean season, SC/M will conduct an assessment of the availability of dietary Vitamin A sources during the lean season (summer 1993). If Vitamin A deficiency is found to be a problem, appropriate action will be taken.

5c13. **NATURAL VITAMIN A SOURCES:** The HKI survey identified 23 common sources of dietary Vitamin A, including baobab leaves, manioc leaves, bean leaves, onion leaves, palm oil, mangoes, papaya, carrots, sweet potato, squash, fresh milk, eggs, butter, smoked fish, fried fish, and liver. Sources of Vitamin were available year-round.

Questions 5c14 through 5c19 will be considered should evidence point to the need for a Vitamin A supplementation program.

Growth Monitoring

5c20. The project will have a **GROWTH MONITORING COMPONENT** for children aged 0-3 years. Baseline data (for children under 2 only) show that 56.1% have a growth monitoring card (cards are rare in the new zone). 61.3% of Kolondieba area children surveyed had been weighed during the previous quarter, while only 1.6% (one sole child) in the new zone of Zantiebouyou had evidence of being weighed during the previous quarter.

5c21. **GROWTH MONITORING PRACTICES:** FTs and VHCs weigh each child under three quarterly; if the child is in the yellow or red bands of the growth monitoring card, s/he is then weighed monthly. Mothers attend GM sessions regularly and with interest; most can interpret the bands of the GM card. In the old zone (Kolondieba) 56.7% of mothers say they must take their child to the health center if s/he is in the red band, and 35.3% said they would consult the traditional healer; 21.8% of mother did not know what action to take. In the new zone (Zantiebouyou), 98.4% of mothers did not know what action to take if their child was in the red band.

5c22. The MOH recommends 4 GM visits per year for all children under the age of 3 years. The type of scale used is the Salter ("pese-bebe portatif"). GM is conducted at health centers on a regular basis; FTs and VHCs organize quarterly village-wide baby-weighings

in each village; children who are targeted for monthly weighings are weighed during home visits.

- 5c23. GM OBJECTIVES:** GM objectives for the three years of the project are as follows: 70% (13,449), 85% (16,124), and 100% (18,800) of children under 3 will be weighed at least quarterly. Children in the red and yellow bands of the GM card will be weighed monthly.
- 5c24. End-of-project populations eligible for GM** are 6,757 children (0-11 months), 6,206 (12-23 months) and 5,838 (24-35 months). Full coverage for non-malnourished children is four visits per year; malnourished children will require at least two additional contacts per year. "High risk" means any child whose weight has decreased or who falls in the red or yellow bands of the growth monitoring card.
- 5c25. GM DESCRIPTION:** SC/M GM intervention is based on FTs' and VHCs' discussions with mothers of the benefits of growth monitoring; quarterly growth monitoring sessions involving all eligible village children; monthly growth monitoring involving at-risk children; entry of all weights, dates, and symbols for increase/decrease in weight in the children's rosters of the HIS and on growth monitoring cards. GM activities are ongoing in all Kolondieba villages and will be started in all Zantiebouyou (new zone) villages by June 1993.
- VHCs are now capable of assuring all tasks of growth monitoring and promotion (discussing growth monitoring with mothers, organizing sessions, weighing the baby, interpreting the charts) except the recording of data, which will be the subject of a special literacy training module for VHC members.
- For inputs/outputs/outcomes, see section D2.
- Constraints include tracking children who are away from the village, and the possibility of mothers of malnourished children avoiding weighings because of embarrassment over the nutritional state of their children. Both constraints are handled effectively by VHCs, who track absences and returns among the children of their fellow villagers, and who take pains to avoid stigmatizing mothers of malnourished children. Weighing sessions are carefully planned so as not to coincide with periods of intensive work or with local celebrations, in order to ensure good attendance.
- 5c26. GM TRAINING:** SC/M will train 3 new FTs in GM (theory, demonstration, and practice of baby weighings, documentation, health and nutrition information, and monitoring and referral systems); current FTs have already received this training.
- All 40 SC/M FTs will also be trained in training 250 VHCs in GM (same curriculum as for FTs, but less theoretical), and in a literacy training in growth monitoring for VHCs (how to read scales, how to fill in GM charts and blanks, and how to record weights, dates, and increases/decreases in weight in the rosters). By the end of the project, VHCs should have mastered all aspects of growth monitoring, including keeping basic records.
- SC/M HIS staff will receive training in analysis of GM data and the interpretation of trends. Quality assessment will take place during midterm and final evaluations, and also in the ongoing collaboration with CERPOD.
- 5c27. GM TECHNICAL OVERSIGHT** will be the ultimate responsibility of SC/M's Drs. Doumbia and Sacko. At the village level, ongoing monitoring is conducted by FTs and VHCs in the village children's rosters; the FTs GM activity is monitored by subdistrict level health supervisors. HIS staff monitors the quality of data coming from the villages.
- 5c28. National GM CARD** is attached. The card is in French and also contains spaces for immunization information. The card is being translated into Bambara for the training of

VHCs, and each village will have at least one copy of the card in Bambara to aid in interpretation.

The card is provided by SC/M to the VHC for sale to mothers at a price of 100 francs (\$0.38); funds thus generated are set aside by the VHC for health-related expenses, such as the purchase of chloroquine.

If the card is lost, the mother will be encouraged to purchase a new one, and the children's roster will be used to update the missing information. SC/M will redouble its efforts to encourage mothers to take good care of cards (only 3.5% of mothers surveyed in Kolondieba had lost cards, while seven out of nine mothers--77.9%--in the new zone of Zantiebougou who had had cards had lost them).

Nurse-midwives will encourage mothers to buy cards before their delivery, so that even infants will have card (nearly three-quarters of Kolondieba children with no growth card were under 6 months old).

5c29. TRACKING GROWTH FALTERERS: Using the HIS described in Section E, FTs and VHCs will use their rosters to identify falterers (those marked with a stationary or descending arrow). These will be visited on a monthly basis. During the visit, the child will be weighed a gain, and a food demonstration session will be conducted.

5c30. Mothers with malnourished children identified during the GM sessions will be invited to participate in nutrition demonstrations and education sessions. Severely malnourished children will be closely monitored during monthly home visits, and referred if necessary.

DIP FOR CARE OF MOTHERS

5d1. The most up-to-date estimate of maternal mortality in the project area is 115 per 100,000. (Source: SC/M HIS). Specific causes have not been studied in detail.

5d2. ACCESS TO ANTE-NATAL CARE: 50.5% of mothers had a pre-natal consultation card. 47.9% of Kolondieba mothers surveyed had had at least two pre-natal consultations (in Zantiebougou, the figure was 11.1%; UNICEF reported in 1987 that only 15% of Malian women receive even one pre-natal consultation). 56.6% of mothers knew that they should have at least three pre-natal consultations. Chloroquine, iron, and usually folic acid are available at subdistrict health posts, but most women lack the means to purchase them. See 5c8 on nutritional practices of pregnant and lactating women.

5d3. EXISTING BIRTHING PRACTICES: The importance of TBAs is shown by the fact that in 82.3% of births in the baseline survey, a TBA cut the umbilical cord; in other cases, this was done by a health professional (10.3%) or a family member (6.3%). A substantial minority of the TBAs in Kolondieba District have received training from SC or other organizations.

Obstetrical emergencies are referred to the subdistrict health post. Since no vehicle is available for transport, the family is obliged to pay for transport by moped, bicycle, or cart. The obstetrical qualifications of subdistrict health personnel are limited.

5d4. The only POSTNATAL CARE readily available is that provided by SC/M nurses on their regular village visits (the nurses examine the mother and the newborn). But since an SC/M nurse visits each village quarterly, she will see only about a third of the post-partum women during the forty days after their delivery. Visits to health posts for post-natal check-ups are rare.

5d5. CHILD SPACING PRACTICES (see also section 5h). Among women surveyed in the baseline who were not pregnant, 82.7% did not want another child within two years. Of these women, 14.8% were using a method to avoid pregnancy. Of the 38 women trying

to avoid pregnancy, 68.4% were abstaining from sexual intercourse, 15.8% were breastfeeding, two (5.3%) were using the pill, one (2.6%) each using spermicide, coitus interruptus, the rhythm method, and traditional methods. The modern contraceptive prevalence rate is 1.0%.

5d6. At project end there will be 33,012 women of CBA in the project zone. Approximately 8,000 pregnancies can be expected to occur each year of the project.

A "high-risk" pregnancy is one in which the mother is less than 1.5m (5 feet) tall, younger than 15 or older than 35, giving birth for the first time, or has had more than five pregnancies.

5d7. MATERNAL CARE OBJECTIVES:

- 75% of villages will have at least one TBA trained in a) appropriate pre- and post-natal care; b) diagnosis and referral of high-risk pregnancies; c) use of iron and folic acid; and d) AIDS prevention and education.

- 80% of women of CBA (26,400) will know that they should seek at least three prenatal consultations (up from 56.6%), and 75% of pregnant women (7,600) will have a delivery assisted by a trained TBA or a health professional.

- 65% of pregnant women (5,200) will have at least three pre-natal consultations (currently at 39.4% for two visits) according to their prenatal cards.

- 60% of girls aged 15-19 years (4,400) will know their nutritional needs and will be able to identify practices that ensure their normal physical development (no baseline data).

- 60% of girls aged 15-19 years (4,400) will learn protective behaviors for pregnancy and motherhood, with emphasis on safe pregnancy and childbearing, ORT, immunization, and breastfeeding (no baseline data).

5d8. **MATERNAL HEALTH CARE STRATEGY:** The project's maternal health component will include: pre- and post-natal care, maternal nutrition, referral of high-risk pregnancies, training of TBAs, and operations research on community-based contraceptive distribution.

The project's nurse-midwives, the FTs and the TBAs will inform village leaders, women's groups, and age-groups ("tòn") of adolescent girls about prenatal care, child-spacing, and AIDS/STD prevention. Women members of the VHCs will identify the pregnant women in each village, and the SC/M nurse-midwife will follow up by visiting each village at least quarterly to conduct pre- and post-natal consultations. During the visit, the nurse-midwife will engage the TBAs in a continuing education process to improve their skills. The nurse-midwives will conduct group discussions on maternal nutrition. The same messages will be reinforced during the consultation, and later on by the FT and VHC members through home visits. Detected high-risk cases will be identified and followed by TBAs and FTs.

SC/M is promoting contraceptive knowledge and use in four subdistricts of Kolondieba, and contraceptive sales (contraceptives and spermicide) in two dozen villages to test the effect of reliable contraceptive supply on modern contraceptive usage rates. Condoms are sold by male village family planning animateurs, and spermicide by female animatrices, with a modest profit margin as a motivation. Monitoring of the family planning activities is the responsibility of the family planning nurse, Ms. Fatimata Kane; resupply is assured through Malian Planned Parenthood (AMPPF). Lessons learned by the end of this project in late 1993 will be applied to the CS-VIII project.

The median age of mothers in the baseline survey was 27.92 years. 10.6% of the mothers were 19 years old or younger. Adolescent girls typically come together in "tòns" or age groups; SC/M FTs and nurse-midwives will seek these groups out for special sessions on family planning, maternal nutrition, safe childbirth, and AIDS prevention.

AIDS and STD prevention messages will be promoted through health education sessions, women's and men's group discussions, and home visits. SC/M will experiment with various approaches at promoting condom availability.

5d9. INPUTS/OUTPUTS, PHASING, CONSTRAINTS

For inputs/outputs/outcomes, see section D2. Activities have already begun in all subdistricts of Kolondieba, and will commence in Zantiebougou by summer 1993. The constraints include the long distance between villages and health posts, lack of knowledge, women's seasonal workloads, and lack of services and of availability of methods of child spacing. Solutions proposed by SC/M are bringing maternal care services to the villages (nurse-midwives and FTs visit regularly, VHCs are in place); women's literacy and other education efforts planned around the seasonal calendar (e.g. light during the agricultural season), and stimulating demand for child spacing methods.

5d10. PRENATAL CONSULTATION CARD: The MOH prenatal card which SC/M uses is attached as Appendix F. A Bambara-language version is being developed for VHC health literacy training. SC HIS will be used as a reference in case the maternal health card is lost.

5d11. MATERNAL CARE TRAINING: SC/M will train 3 new FTs in maternal care. All 40 FTs will attend a training of trainers module to allow them to train at least 200 VHCs, in particular TBAs (or, where the TBA is too old, her younger "assistant"), in appropriate pre- and post-natal care; diagnosis and referral of high-risk pregnancies; use of iron and folic acid; AIDS prevention and education; and appropriate child spacing methods. Where possible, literate women will be trained to maintain women's pregnancy records. If the contraceptive sales and promotion approach of SC's family planning component is successful, FTs will train male and female villagers as Family Planning Agents.

5d12. FAMILY PLANNING TRAINING: See 5d11.

5d13. MATERNAL CARE MESSAGES include: (a) the importance of pre-natal consultations (come early; at least 3 visits; postnatal visit within 40 days after delivery if possible; get help during delivery by a TBA or health professional; go to the health post if you have a high-risk pregnancy; (b) Nutrition: eat enough of available good food; (c) birth spacing: it is better to wait 2 years between births; promotion of condoms, spermicides, and the pill and how to obtain them; (d) AIDS/STDs: these diseases are sexually transmitted; they can be prevented by abstinence, fidelity, one partner, and changing sexual behavior. Both men and women will receive the child spacing and AIDS/STDs messages.

5d14. MATERNAL CARE EQUIPMENT AND MATERIALS: SC/M has provided obstetrical equipment for four health posts. The project will work with the MOH to ensure the availability of maternal health materials. TBA supplies are to be covered by a Swiss NGO.

5d15. TECHNICAL OVERSIGHT will be provided by Drs. Doumbia and Sacko, and by seven trained nurse-midwives. Job description is in Appendix H.

D5e. DIP FOR ACUTE RESPIRATORY INFECTIONS (not applicable to this project)

D5f. DIP FOR MALARIA

5f1. MALARIA MORTALITY AND MORBIDITY: During the baseline (conducted at the beginning of the rainy season), 20.9% of mothers reported that their child had had a fever

within the preceding two weeks. Villager and health authorities alike consider malaria a major problem for children and for women.

5f2. **CHLOROQUINE AVAILABILITY:** Chloroquine is available at health posts and private pharmacies and is often resold at the village level. 69.5% of mothers whose children had had fever in the preceding two weeks had given their children chloroquine, making this the most common treatment. Chloroquine resistance has not been demonstrated in the project zone, but certain common insecticides seem to be ineffective.

5f3. **BIOMEDICAL DATA** was not collected during the survey.

5f4. **TRADITIONAL TREATMENTS** include infusions. No traditional malaria treatments have been found to be harmful.

For protection from malaria, baseline data indicate that 37.4% of mothers know to burn plants to repel mosquitos, 23.5% to cut down grasses around the village, 13.2% to fill in ditches (often created by brickmaking), and 5.0% to sleep under a bednet. 22.2% do not know how to avoid malaria, and 5.3% say there is no way to avoid malaria.

For treatment of fevers, 69.5% said they would use chloroquine, 54.6% said they should go to the traditional healer, 37.4% to the health center, 9.9% to SC/M Family Trainer, 5.0% did not know; only one mother said she would do nothing to seek treatment of a fever.

5f5. **ELIGIBLE/HIGH RISK GROUPS FOR MALARIA:** All the population is eligible for malaria prevention. SC/M will, however, emphasize prophylaxis for women of CBA and children under five. High risks include pregnant lactating women, and children under 2.

5f6. **OBJECTIVES FOR MALARIA:** 65% of mothers with children under five (approximately 15,000) know appropriate preventive measures against malaria, and how to access care for serious cases.

100 VHCs (40%) will have reliable access to chloroquine; and at least one village per subdistrict (6) will have a model, self-financing "caisse pharmaceutique" (village pro-pharmacy) which provides essential medicines including chloroquine, condoms, and spermicides.

5f7. **MOH POLICY ON HOME AND HOSPITAL MANAGEMENT OF MALARIA:** MOH policy recommends individual prophylaxis and health post treatment of severe cases.

5f8. **SC/M HOME MANAGEMENT PROTOCOL:** SC/M will train families and VHCs to use chloroquine properly for prophylaxis. VHCs will be trained to manage chloroquine stocks. Managers of the village pro-pharmacy will be trained to sell entire courses of chloroquine, and SC/M and MOH health personnel will monitor the proper use and the timely resupply of these drugs.

5f9. **PROMOTION OF TREATMENT WITH DRUGS.** SC/M will stress that it is important to seek medical help for serious fevers, and that any home treatment of fevers with chloroquine should be accompanied by a visit to a health post.

5f10. **SIMULTANEOUS MALARIA/DIARRHEA** will be referred to a health facility. If this is not feasible, both conditions will be treated simultaneously with chloroquine and ORT.

5f11-5f16. **BEDNETS:** Bednets are expensive, difficult to acquire, and are not commonly used by villagers. Only 5.0% of mothers surveyed mentioned bednets as a way to avoid malaria. SC/M's health and credit sectors will work together to examine the feasibility of village pharmacies' acquiring bednets on credit for resale to villagers. SC/M will also

increase the prominence of bednets in its discussions on malaria, as the baseline data indicates some simple unfamiliarity with the nets.

5f17. **CONSTRAINTS** are primarily economic: both chloroquine and bednets require substantial cash outlays, and raise questions of logistics and resupply. Long-term effective solutions to the problem of malaria in Kolondieba are closely linked to the efforts of SC/M's credit sector to establish a more secure economic base in the zone.

5f18. **TECHNICAL OVERSIGHT FOR MALARIA** is the direct responsibility of Drs. Doumbia and Sacko.

DIP FOR LITERACY AND SELF-MANAGEMENT FOR HEALTH

5g1. **BASELINE DATA ON ILLITERACY:** 90.3% of mothers surveyed for the baseline have never had any structured education, formal or non-formal. 2.3% have attended Koranic school (in Arabic, mostly rote memorization of the Koran, from age 3 to 5); 2.3% have attended Bambara-language adult literacy courses.

As for formal schooling (in French), only 4.3% of all mothers surveyed (1.7% in K, 4.8% in Z) ever attended primary school, and 0.7% of all women surveyed had achieved a level higher than sixth grade.

Only 5.0% of women claimed to be able to read and write in any language. Male literacy is estimated at 15% (SC/M Family Planning KAP survey, 1992).

Since SC/M's approach to primary health care involves a high intensity of data collection and use, it is necessary that basic and specialized literacy skills be transmitted to VHCs.

5g2. **LITERACY PRACTICES AND INFRASTRUCTURE:** Bambara-language literacy activities have been going on in the project area for more than ten years, but did not usually involve women until the beginning of SC/M courses in 1988-89. Currently about a third of SC/M literacy course participants are women (351 out of 1,227 in 1990-91). Booklets on basic health (vaccination, prenatal care, etc) exist in Bambara, but most official documents (vaccination cards, GM cards, etc) tend to be in French.

"Literacy" here signifies skills in both literacy and numeracy.

5g3. **BENEFICIARY POPULATION FOR HEALTH LITERACY:** The prime beneficiary population of SC activities in literacy for health are the approximately 1,250 members of the 250 VHCs, especially the 750 women members. Women VHC members typically include the TBA, the president of the women's association, and one younger woman (literate if possible).

5g4. **HEALTH LITERACY OBJECTIVES:** All village health committees (250) will have at least one literate/numerate member by project end, and 80% will have at least one literate/numerate woman member. Their literacy skills will include mastery of all the basic village-level documents in the SC/M health information system, as well as MOH documents such as the vaccination card and GM card, and the ability to read and use simple health education materials.

80% of VHCs (200) will be capable of managing their own health activities. Indicators of this autonomy are included as Appendix C.

5g5. **PROJECT STRATEGY RE LITERACY:** VHC members, especially women, will be strongly encouraged to become literate and numerate in Bambara through the five-month basic courses offered in their villages by SC/M and several government agencies. When no basic literacy courses are available in the village, SC/M will seek other already-

literate/numerate community members to become members of the VHC (there are usually at least five such persons in a village).

SC/M FTs will be trained in Year One to offer health literacy training sessions to all literate VHC members during Project Years Two and Three. Health literacy modules will cover the importance of health information; recordkeeping for immunization, growth monitoring, CDD, and prenatal consultations; how to do basic health calculations (e.g. percentages and averages); keeping track of village births, deaths, in-migrations and out-migrations; how to use simple health education texts; and how to learn more on one's own about health.

The transfer of these skills will take a significant amount of effort on the FTs' part, but will also ease his/her own recordkeeping responsibilities.

Another SC/M project (not financed by USAID) that aims to have an effect on health literacy is the primary non-formal education project. Its "village schools" are constructed and run by communities, and its teachers are villagers trained by SC/M. There are 15 boys and 15 girls in each class, aged 7 to 15, chosen so that there will be at least one child from every compound in the school and, after the three-year course, each compound should have one literate/numerate member. The Village Schools are still at the pilot phase, but if the project expands it could have a significant impact on literacy and health. Child-to-child health messages will figure prominently in the second and third year curricula.

Indicators of successful acquisition of health literacy skills are listed in Appendix C.

5g7. TECHNICAL OVERSIGHT for the Health Literacy component is shared between Dr. Doumbia and Mr. Bakary Keita, SC/M Literacy Coordinator (see Appendix G).

SECTION E. PROJECT HEALTH INFORMATION SYSTEM

E.1. HUMAN AND FINANCIAL RESOURCES: Human resources include a 3-person HIS data entry staff (coordinator, assistant, and clerk) with two and a half years of experience. Assistant Health Coordinator Souaibou Sacko will have primary responsibility for the analysis and quality of the HIS data. All FTs and VHCs are involved in manual data collection, and the foundation and most important part of the HIS will always be the village-level manual children's and women's registers.

Needed equipment and supplies include a large amount of printed materials, a computer, a printer and other peripherals, and related supplies such as fuel for the generator, pens, paper, etc. Over the life of the project, \$46,000 for family enrollment, printing of HIS forms, HIS salaries, and other components of the HIS, or approximately 6% of the project budget. A \$9,000 electric generator and a \$7,000 computer system are being acquired with non-CS funds.

Technical assistance in demographic analysis and data quality control is being supplied by the Center for Population and Development Research (CERPOD) in Bamako, which has assigned one demographer with extensive database experience to work full-time with SC/M's data. CERPOD is planning a second census of Kolondieba District in 1993, to update and test SC/M's data. For details of the partnership, see SC/M's CS8 proposal.

Data entry for the five subdistricts of Kolondieba is complete, and updating is ongoing. Data entry for the new zone should take only 3-4 months. It is expected that intensive analysis of HIS data will begin in fall of 1993.

SC/M envisages the eventual use of health data as the dependent variable in research about the effect of activities in other sectors (credit, education, agriculture) on children's and mothers' health. For example, can mothers' access to credit be correlated with improved child growth? TA for this research will be provided by Dr. Sally Findlay of Columbia University, in the context of research on the "health transition theory."

E.2. CENSUS DETAILS: Since the CS8 baseline was conducted simultaneously with SC/M's CS4 final evaluation, funds budgeted for the CS8 baseline were used to conduct a universal family enrollment (FE) in the new zone. The 10 FE data collectors, who on average had a ninth-grade education, had one week of training prior to the FE. Between November 1992 and January 1993, 1983 households and 22,207 individuals in 44 villages were registered on FE cards that note all family members' ages, sex, relationship to head of household, and educational level. For children, vaccination status was also recorded. For women, vaccination status, fertility history and contraceptive knowledge were also recorded. For the family as a whole, socioeconomic indicators were noted. A copy of this form is attached as Appendix B. The approximate cost of the family enrollment was \$6,000.

Following the FE, basic health and demographic information is used to create a children's roster and a women's roster for each village. These rosters are kept and used by the FTs; by end-of-project they are to be kept and used by VHCs. Children's rosters contain data on age, immunization, growth monitoring, and diarrheal episodes; children are grouped by family in the rosters, so FTs can predict parents' likelihood of prompt immunization and rehydration of infants from past performance with older children. Women's rosters contain information on pregnancy (including consultations), Tt vaccination, and on women's participation in ORT and other trainings.

Demographic and health information will be updated on an ongoing basis through home visits assisted by VHCs. The HIS is used to ensure that each child and woman of the community receives appropriate health services. Data are also used for planning and decision making.

E.3. HIS DATA is to be collected primarily by the VHCs. With FT assistance, VHCs record births, deaths, in-migrations and out-migrations in a special notebook; individuals' participation in specific events such as vaccinations, weighings, and trainings are noted in the rosters as the event takes place. FTs monitor the quality and inclusiveness of the data gathered by the VHCs and consolidate the figures in the 5-7 villages they cover in a report sent to their subdistrict-level SC/M health supervisor. The supervisor in turn summarizes subdistrict data in a monthly report furnished to the project coordinator. At each level data are examined for consistency. The HIS coordinator regularly picks up village rosters to update the computerized HIS, and he has become quite adept at reviewing data for quality, and following up to make sure the data are verified.

E.4. HIS TRAINING Assistant CS Coordinator Souaibou Sacko has received training from CERPOD in EpiInfo and in operations research techniques, and will receive further training in database management. Trainings have varied from one to two weeks. HIS Coordinator Zana Daou will receive further training in health information quality management. All the HIS staff have received training in computer and generator maintenance.

FTs have been extensively trained in the use of the rosters, which have become indispensable tools for vaccination coverage, nutrition targeting, and other interventions. Literate VHC members will receive training in putting together and maintaining simplified versions of the rosters; indeed, this will be the crux of their health literacy training.

SC/M's subdistrict-level health supervisors will receive training in basic demographics and epidemiology (calculating birth and death rates, etc).

E.5. INPUT OF MOH AND COMMUNITY GROUPS INTO BASELINE/CENSUS: The MOH participated in the planning of the Family Enrollment, and has been informed in detail of the results of the baseline and the FE.

The baseline survey interviewed 238 mothers of children under 2 in Kolondieba District, and 63 such mothers in Zantiebouguou. Data was collected in eight teams of three (2 surveyors, usually FTs, and one supervisor) over a period of three days; SC/M's agents were heroic in their pursuit of quality data, despite the onset of the rainy (i.e. muddy) season and

the hundreds of kilometers many of them had to cover on moped. The cost of the survey (which doubled as SC/M's final evaluation), was \$5,921.00.

SECTION F. HUMAN RESOURCES

F.1. ORGANIZATIONAL CHART: Attached as Appendix A. All personnel are locally hired, with the exception of the Field Office Director and the Deputy Director; and all personnel are full-time and salaried staff members, except the Village Health Committees who are volunteers.

F.2. LIAISON WITH COMMUNITY GROUPS: The persons with regular contact with community groups are the Family Trainers and the Nurse-Midwives. There will be 250 Village Health Committees, each of which meets at least once a month.

F.3. COMMUNITY HEALTH WORKERS: The typical Village Health Committee includes five persons: the village chief (male, ex officio), the TBA and the president of the women's association (both women), the MOH-named first aid and hygiene agent (usually male) and the MOH-named birth attendant (the "matronne", a woman). If none of these persons is literate, at least one literate person will be sought to become a member, preferably a woman. Thus 250 VHCs include at least 1,250 members, including at least 750 women. The ratio of VHC members to beneficiaries is 77,002/1,250, or about 60:1. The VHCs will be primarily supervised by 30 FTs (ranging from 40 FTs in Year One to 22 FTs in Year Three), meaning that each FT will be working with about forty VHC members.

All the FTs will be given a special training of trainers (TOT) to enable them to pass on their skills in each intervention to VHCs. They will in turn train 250 VHCs to manage in each of five interventions (EPI, CDD, prenatal care, malaria, and nutrition), training and motivation of mothers in these same areas, recordkeeping, and follow-up. Training of newly-hired FTs will begin by May 1993; the FTs' TOTs will be given starting in the summer of 1993, and FT-led training sessions for VHCs will begin by fall of 1993.

FT training will be evaluated at the midpoint and the end of the project. VHC training results will be continually monitored through VHC sustainability indicators.

F.4&5. TURNOVER: Turnover of trained health volunteers in the project area is historically quite low: most of the VHC members are fairly rooted in their communities, and the emphasis on woman members cuts down on mobility. Literacy skills provided by the program are a considerable incentive to participate. Also important are the status conferred by committee membership, and opportunities for training and study visits.

F.6. MAINTAINING TECHNICAL SKILLS: All interested VHC members will receive basic and advanced literacy training. Each VHC member will also have the opportunity to participate in several refresher trainings each year. Project staff, most already trained in the main aspects of child survival, will also receive refresher trainings, and will particularly receive training on how to transfer their health management skills to community members. Staff training will mainly be carried out by the Project Coordinator, and by the SC/M's Literacy Coordinator.

F.7. NATIONAL STAFF ROLE: The only non-national staff members associated with the project are the SC/M Field Office Director and the Deputy Director. All staff based in the project area are national, and they will be directly responsible for managing the project. Senior project staff will receive guidance in planning, budgeting, and financial management from the FO senior staff. Computer training will be given in Lotus, EpiInfo, and dBaseIII+, partially in the project zone and partially in the capital city.

F.8. PVO HQ POINT PERSON: Dr. Ahmed Zayan, Acting Director of SC/US's Health Unit, will be responsible for technical backstopping of this project at SC/US headquarters. He will make at least one visit to the project each year, of at least ten days' duration. The purposes of his visits will include program planning, monitoring, and evaluation, HIS troubleshooting, and contacts with project partners (MOH and others).

SECTION G. MANAGEMENT AND LOGISTICS

G.1. TRANSPORT: VHC members will cover their villages on foot. FTs will use Camico mopeds to cover 5-7 villages. Health supervisors and nurses, who cover entire subdistricts (30-70 villages), will use Yamaha 80's or 100's. These mopeds and motorcycles will be gradually sold to staff through a hire/purchase scheme, and each staff member will be responsible for a percentage of repair and maintenance costs for his/her motorcycle. Each staff member will also receive a monthly fuel allocation, calculated on the basis of a monthly work plan.

A Toyota double cabin pickup truck will be acquired in Year Two for complementary transport needs. At this time, only the official driver and the project manager to drive the vehicle. The pickup truck will only be used in cases where the use of motorcycles or mopeds is inefficient or impossible.

The costs of the motorcycles and pickup truck are reflected in the budget under equipment procurement and under other direct costs.

G.2. SUPPLIES AND EQUIPMENT: Six mopeds have been obtained so far in Year One; ten more mopeds, one motorcycle, and two gas fridges still need to be obtained--these have been ordered. Next year, sixteen mopeds, a vehicle, and a computer and peripherals will be obtained.

Consumable supplies that are ordered and used on a continual basis HIS forms, office supplies, condoms and spermicides, and fuel for project mopeds and motorcycles.

TABLE B: COUNTRY PROJECT SCHEDULE OF ACTIVITIES

(Check box to specify Quarter and Year)

PVO: Save the Children Country: MALI	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
1. Personnel in Position												
a. Project Manager	X	X	X	X	X	X	X	X	X	X	X	X
b. Technical Coordinator	X	X	X	X	X	X	X	X	X	X	X	X
c. Health Information System Manager	X	X	X	X	X	X	X	X	X	X	X	X
d. Community/Village health workers	X	X	X	X	X	X	X	X	X	X	X	X
e. Other Support	X	X	X	X	X	X	X	X	X	X	X	X
2. Detailed Implementation Plan												
a. Design/Planning		X										
b. Preparation of D: P		X										
3. Health Information System												
a. Baseline Survey												
- Design/preparation	X											
- Data collection and analysis		X										
- Dissemination and feedback to community and project management		X										
b. Consultants/Contract to design HIS												
c. Develop and test HIS												
- Implementation	X	X	X	X	X	X	X	X	X	X	X	X
- Development and feedback to community and project management	X	X	X	X	X	X	X	X	X	X	X	X
4. Training												
a. Design	X		X	X				X				
b. Training of trainers	X		X	X				X				
c. Training sessions	X		X	X				X				
d. Evaluation of knowledge and skills	X						X					X
5. Procurement of Supplies		X	X				X				X	
6. Service Delivery to be initiated												
a. Area 1: Kolondieba												
- ORT	X	X	X	X	X	X	X	X	X	X	X	X
- Immunization	X	X	X	X	X	X	X	X	X	X	X	X
- Nutrition												
Breastfeeding			X	X	X	X	X	X	X	X	X	X
Maternal Nutrition					X	X	X	X	X	X	X	X
Vitamin A												
Growth Monitoring/Promotion	X	X	X	X	X	X	X	X	X	X	X	X
- ALRI/Pneumonia												
- Family Planning/Maternal Care	X	X	X	X	X	X	X	X	X	X	X	X
- Other: Malaria control/Literacy			X	X	X	X	X	X	X	X	X	X
b. Area 2: Bougouni												
- ORT					X	X	X	X	X	X	X	X
- Immunization					X	X	X	X	X	X	X	X
- Nutrition												
Breastfeeding					X	X	X	X	X	X	X	X
Maternal Nutrition					X	X	X	X	X	X	X	X
Vitamin A												
Growth Monitoring/Promotion					X	X	X	X	X	X	X	X
- ALRI/Pneumonia												
- Family Planning/Maternal Care					X	X	X	X	X	X	X	X
- Other: Malaria control/Literacy					X	X	X	X	X	X	X	X
7. Technical Assistance												
a. HQ/HO/Regional office visits	X	X			X		X			X		X
b. Local Consultants		X		X			X					
c. External technical assistance	X	X					X					X
8. Progress report												
a. Annual project reviews			X				X				X	
b. Annual reports				X				X				X
c. Mid-term evaluation							X					
d. Final evaluation												X

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DIP TABLE C: COUNTRY PROJECT BUDGET

BUDGET: (Field + HQ)

Place dollar amounts in shaded areas only

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PVO/COUNTRY: Save the Children/Mali	Year 1		Year 2		Year 3		TOTAL – Years 1–3		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	TOTAL
I. PROCUREMENT									
A. Office Equipment (specify)									
1. Office	0	13,800	0	49,800	0	0	0	63,600	63,600
2. EPI	0	3,000	0	0	0	0	0	3,000	3,000
3. ORT	0	0	0	0	0	0	0	0	0
4. Other	0	0	0	0	0	0	0	0	0
Subtotal	0	16,800	0	49,800	0	0	0	66,600	66,600
B. Supplies									
1. Office	5,000	0	5,000	0	5,000	0	15,000	0	15,000
2. EPI	0	0	0	0	0	0	0	0	0
3. ORT	0	0	0	0	0	0	0	0	0
4. Other	0	0	0	0	0	0	0	0	0
Subtotal	5,000	0	5,000	0	5,000	0	15,000	0	15,000
C. Consultants (exclude evaluation costs)									
1. Local	0	0	0	0	0	0	0	0	0
2. External	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0
D. Services (exclude evaluation costs)									
1. Manpower Services	0	0	0	0	0	0	0	0	0
2. Lectures/Talent Fees	0	0	0	0	0	0	0	0	0
3. General Contractual Services	0	0	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0	0	0
PROCUREMENT SUBTOTAL	5,000	16,800	5,000	49,800	5,000	0	15,000	66,600	81,600

DIP TABLE C: COUNTRY PROJECT BUDGET

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BUDGET: (Field + HQ)

Place dollar amounts in shaded areas only

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PVO/COUNTRY: Save the Children/Mali	Year 1		Year 2		Year 3		TOTAL - Years 1-3		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	TOTAL
II. EVALUATION (specify)									
A. Baseline Survey									
1. Consultant/Contract	5,000	0	0	0	0	0	5,000	0	5,000
2. Staff Support	0	0	0	0	0	0	0	0	0
3. Other (+ Travel)	1,000	0	0	0	0	0	1,000	0	1,000
Subtotal	6,000	0	0	0	0	0	6,000	0	6,000
B. Mid-term									
1. Consultant/Contract	0	0	5,000	0	0	0	5,000	0	5,000
2. Staff Support	0	0	0	0	0	0	0	0	0
3. Other (+ Travel)	0	0	1,000	0	0	0	1,000	0	1,000
Subtotal	0	0	6,000	0	0	0	6,000	0	6,000
C. Final Evaluation									
1. Consultant/Contract	0	0	0	0	5,000	0	5,000	0	5,000
2. Staff Support	0	0	0	0	0	0	0	0	0
3. Other (+ Travel)	0	0	0	0	1,000	0	1,000	0	1,000
Subtotal	0	0	0	0	6,000	0	6,000	0	6,000
EVALUATION SUBTOTAL	6,000	0	6,000	0	6,000	0	18,000	0	18,000
III. PERSONNEL									
A. Technical	137,699	13,997	150,749	15,047	132,787	16,173	421,235	45,217	466,452
B. Administration	0	36,658	0	39,407	0	42,362	0	118,427	118,427
C. Clerical	6,132	0	6,592	0	7,086	0	19,810	0	19,810
D. Temporary	0						0	0	0
PERSONNEL SUBTOTAL	143,831	50,655	157,341	54,454	139,873	58,535	441,045	163,644	604,689

DIP TABLE C: COUNTRY PROJECT BUDGET

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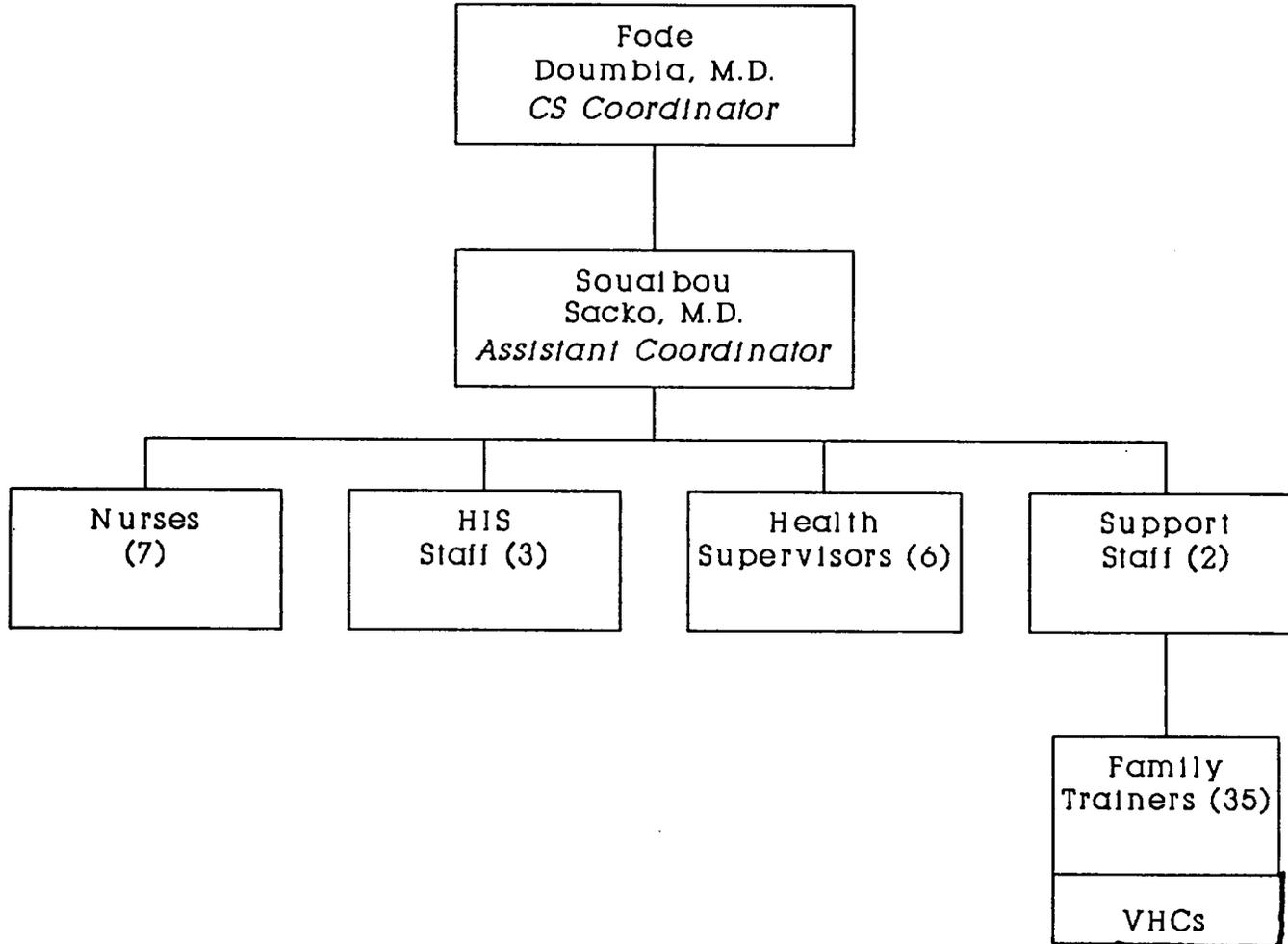
BUDGET: (Field + HQ)

Place dollar amounts in shaded areas only

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PVO/COUNTRY: Save the Children/Mali	Year 1		Year 2		Year 3		TOTAL - Years 1-3		
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	TOTAL
IV. TRAVEL/PER DIEM									
A. Domestic	3,000	1,000	3,000	1,500	3,000	0	9,000	2,500	11,500
B. International	3,000	0	3,000	0	3,000	0	9,000	0	9,000
TRAVEL/PER DIEM SUBTOTAL	6,000	1,000	6,000	1,500	6,000	0	18,000	2,500	20,500
V. COMMUNICATIONS									
A. Printing/Reproduction	10,000	0	5,000	0	5,000	0	20,000	0	20,000
B. Postage/Delivery system	1,500	0	1,500	0	1,500	0	4,500	0	4,500
C. Telephone	1,000	0	1,000	0	1,000	0	3,000	0	3,000
D.FAX/Telex	1,500	0	1,500	0	1,500	0	4,500	0	4,500
COMMUNICATIONS SUBTOTAL	14,000	0	9,000	0	9,000	0	32,000	0	32,000
VI. FACILITIES									
A. Equipment Rentals	0	0	0	0	0	0	0	0	0
B. Facilities Rentals	1,500	0	1,500	0	1,500	0	4,500	0	4,500
C. Other	0	0	0	0	0	0	0	0	0
FACILITIES SUBTOTAL	1,500	0	1,500	0	1,500	0	4,500	0	4,500
VII. OTHER DIRECT COSTS									
A. Other Direct Costs	18,642	1,000	19,970	1,000	20,000	1,000	58,612	3,000	61,612
OTHER DIRECT COSTS SUBTOTAL	18,642	1,000	19,970	1,000	20,000	1,000	58,612	3,000	61,612
VIII. INDIRECT COSTS									
A. Overhead/Administration	39,579	0	41,577	0	38,037	0	119,193	0	119,193
B. Other									
INDIRECT COSTS SUBTOTAL	39,579	0	41,577	0	38,037	0	119,193	0	119,193
TOTAL PROJECT COST	234,552	69,455	246,388	106,754	225,410	59,535	706,350	235,744	942,094

Mali Field Office Organization Chart



INDICATORS OF VILLAGE-LEVEL
SELF-MANAGEMENT FOR HEALTH

GENERAL SELF-MANAGEMENT FOR HEALTH

- Number and percentage of VHCs having received training
- Number and percentage of VHCs active (meeting at least monthly)
- Number of independently planned and financed EPI campaigns, or number of locally-engaged EPI nurses
- Number of health initiatives taken by VHCs (source: minutes of VHC meetings)
- Number of entirely self-financing health initiatives (pharmacies, contraceptive sales, growth cards)
- Capacity of VHC to mobilize community for health events (demonstrated through immunization rates, training attendance, etc).
- Number and percentage of literate VHC members, and of literate women VHC members

LITERACY FOR HEALTH

Basic Health Information

- VHC maintains a register of all births and deaths in the village. With each birth the VHC discusses with the mother a calendar of weighings and vaccinations.

Immunization

- VHC knows the schedule necessary to ensure continuing complete vaccination of its children; it communicates with local health authorities to ensure that this schedule is respected, and with village households to ensure highest possible attendance at vaccination sessions.
- VHC maintains a register of child vaccinations: the literate VHC member can explain any child's vaccination status and indicate which children need to receive vaccinations.
- VHC maintains a register of women's Tt vaccinations. A literate VHC member can explain any woman's Tt vaccination status and which women need to receive vaccinations;
- The literate VHC member sends a brief note to the FT whenever a case of measles, tetanus, or whooping cough occurs in the village, or when a case of diphtheria, polio, or tuberculosis is suspected.

Growth Monitoring

- A literate VHC member can properly fill out the GM card, both placing the dot for the child's weight and filling in the blanks in the card.
- Any VHC member can properly interpret any child's growth chart.
- A literate VHC member records information from each weighing in the children's roster, listing date, child's weight, and (using arrows) whether weight increased, decreased, or stayed stable.

Pre- and Post-Natal Consultations

- Literate woman member of VHC visits mother-to-be before delivery, verifies from prenatal card that mother is not at risk, discusses and sells vaccination card and growth card, and sets schedule of weighings and vaccinations.

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AUTRES VACCINATIONS

DATE	VACCINS

REPUBLIQUE DU MALI
 MINISTRE DE LA SANTE PUBLIQUE
 ET DES AFFAIRES SOCIALES

CARTE DE  VACCINATION

NUMERO

668/90

NOM: Souare

Prénom: Issa

Age: 29-19-89 Sexe: f

Père: Hamad Mère: Dada

Région: Dof de Cercle: Bho

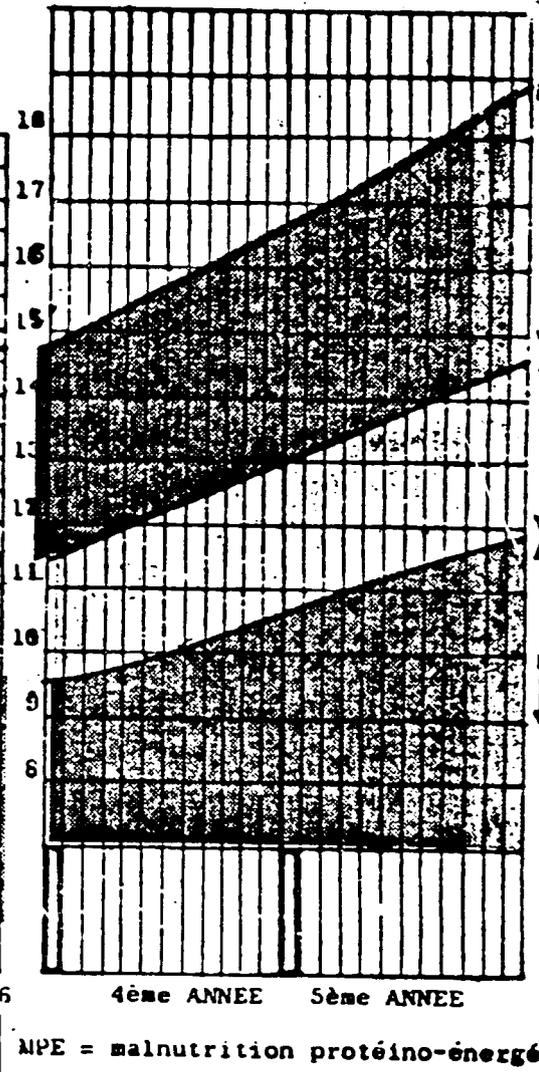
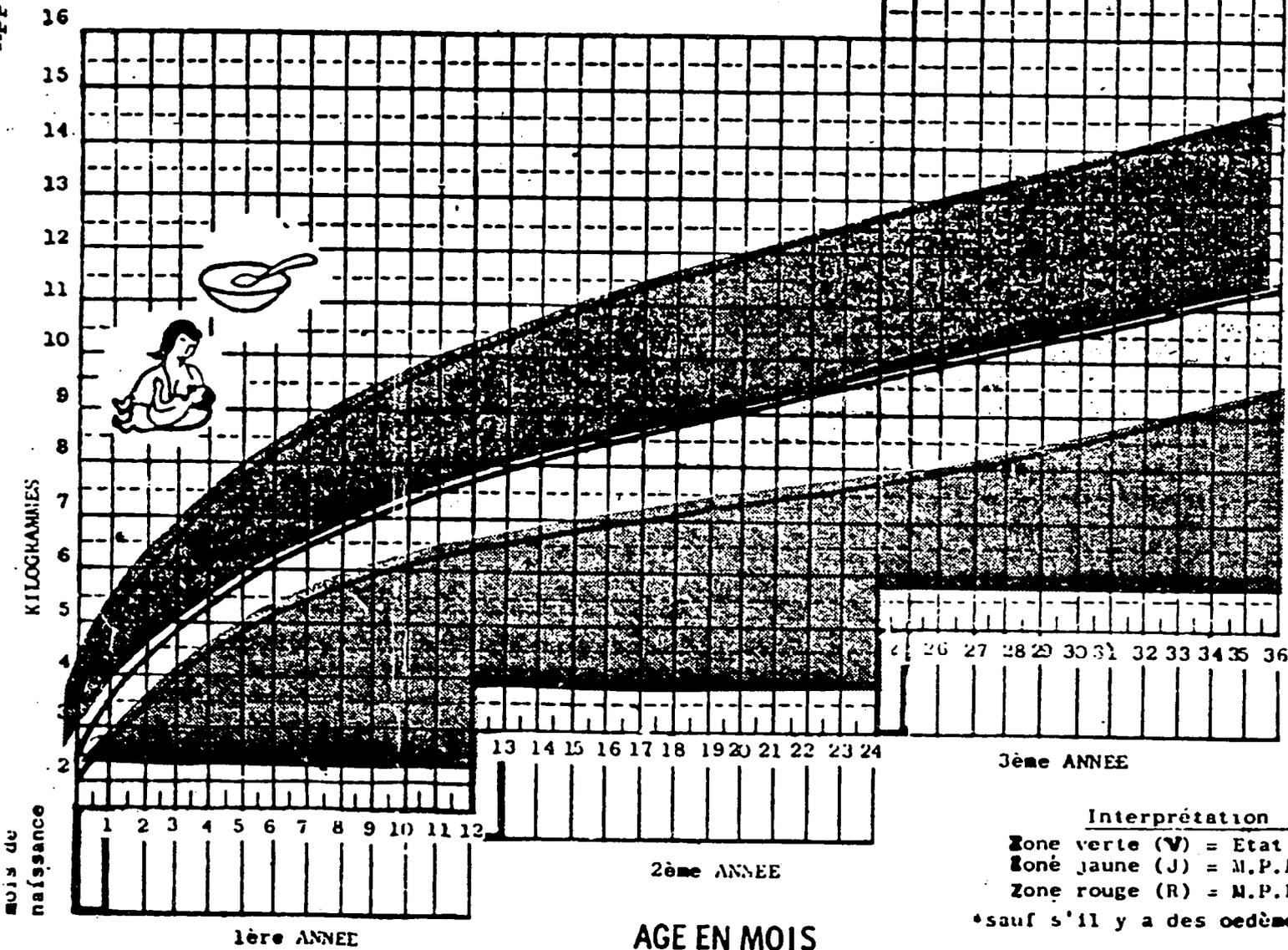
Centre d. CASP

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APPRECIATION DE L'ETAT NUTRITIONNEL DE L'ENFANT

POIDS (Indiquez le poids par . ou)

Appendix E



Interprétation

- Zone verte (V) = Etat nutritionnel normal*
 - Zone jaune (J) = M.P.E. modérée
 - Zone rouge (R) = M.P.E. grave (marasme)
- *sauf s'il y a des oedèmes ou d'autres signes carentiels

CARTE DE VISITE A DOMICILE DES FEMMES ENCEINTES

SCF / USA. MALI

Cercle : Kolondiéba

Arrondissement BenthaNom de l'infirmière Marie Berthé Année 1992Sect. Blaca Vill Zango Cour 18 Men 1 Pers 14Nom et Prénom de la femme Minata Koné Age 18 ansChef du Ménage Issa Koné

Date (J / Mois)	Description de la Visite
3-9-92	VAT1 = 26-11-91 - VAT2 = 21-1-92
	Primipart.
	Poids = 49 kg anémie (+)
	TA = 11/6 HU = 16 cm
	aménorrhée de 4 mois 1/2
	<u>grossesse à risque à faire</u>
	Suivre au Centre de Santé de
	Kolondiéba.

CS-8 STAFF BACKGROUND

- Child Survival Coordinator: Fode Doumbia. Malian, born 1947. MD, School of Medicine, Bamako, 1982. SC/M Child Survival Coordinator, 1988- ; Pediatrician, 1983-88; Pediatric nurse, 1973-76.
- Child Survival Assistant Coordinator: Souaibou Sacko. Malian, born 1961. MD, School of Medicine, Bamako, 1989.
- SC/M Literacy Coordinator: Bakary Keita. Malian, born 1945. Bachelor's degree in Community Development, 1982. Nursing degree, 1964. SC/M Literacy coordinator, 1990- ; Chief, Social Services, Kolondieba District, 1988-90; Deputy Director/Training Director, Rural Women's Development Training Center, 1985-87; Trainer, rural development, 1978-85; Nurse and teacher, 1965-78.
- Nurse/Nutritionist: Ms. Haby Siby. Malian, born 1969. Nursing degree (High School of Health Science), 1989. SC/M Nutrition nurse, Dec 1989- .
- Nurse (Family Planning): Ms. Fatimata Kane. Malian, born 1963. Nursing/midwifery degree, National School of Medicine (Bamako), 1989. SC/M family planning nurse since December 1989.
- Nurse/Midwives (7): Example: Marie Berthé. Malian, born 1936. Nursing diploma, 1961. SC/M nurse-midwife, 1987-
- Program Manager, Kolondieba: Souleymane Kanté. Malian, born 1958. MA in non-formal education, 1986. SC/M Program Manager, 1991- ; Assistant Program Manager, 1989-91; SC/M Literacy Coordinator, 1988-90.
- Field Office Director: Michelle J. Poulton. British/French, born 1948. PhD in Social Anthropology, University of Paris, 1979. SC Mali Field Office Director, 1987- , and SC West Africa Subregional Director, 1990- ; SC Gambia Field Office Deputy Director, 1985-87; SC Gambia Training Director, 1983-85.
- Field Office Deputy Director: Peter Laugharn. American, born 1960. MA in Arab Studies, Georgetown, 1987; BA in American history, Stanford, 1982. SC/M Deputy Director, 1991- ; SC Horn of Africa Program Officer, 1989-91; Peace Corps volunteer, Morocco, 1982-84.

BRIEF DESCRIPTIONS OF KEY POSITIONS

Child Survival Coordinator: (1) Supervise all health staff, manage budget, and plan health activities. Assure that project is fulfilling its objectives. Represent SC/Mali health approach to outsiders.

Assistant Coordinator: (1) Analyze HIS data strategically, and explore action research possibilities. Aid in training and supervision of health staff. Aid in budget management and planning.

Nurse-Midwife: (6) Visit each village in the subdistrict once every quarter, conducting pre- and post-natal consultations, and giving sessions on family planning, maternal nutrition, AIDS, and other themes of interest. Collect statistics on prenatal consultations. Refer high-risk pregnancies to health posts.

Nurse (Family Planning): (1) Train Family Trainers in family planning theory and practice. Train village men and women family planning agents in 12 pilot villages for community-based distribution of contraceptives. Collect statistics on village-level contraceptive sales and new acceptors. Analyze village reactions and trends. Participate in pre- and post-intervention K&P surveys.

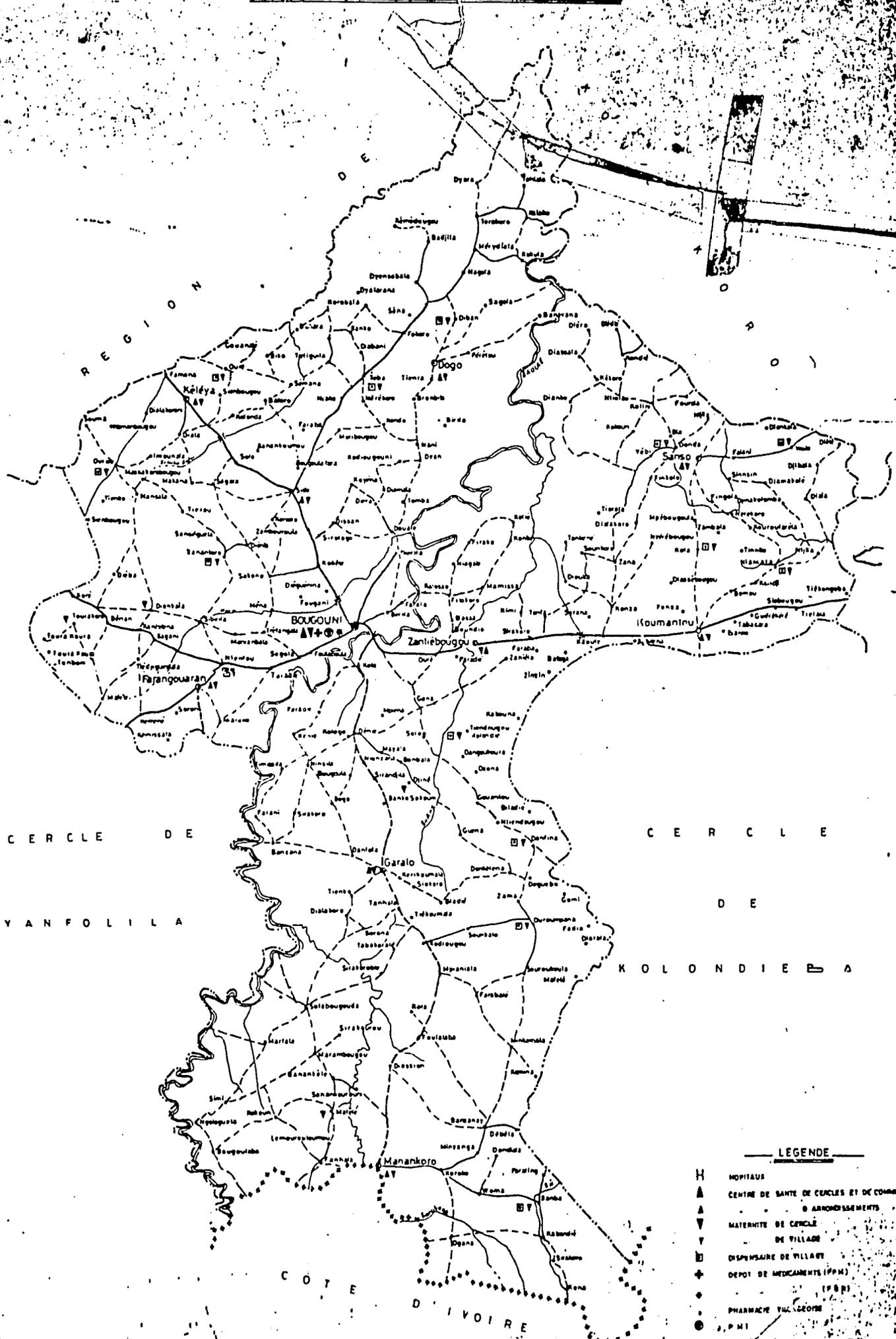
Nurse/Nutritionist: (1) Train Family Trainers in nutrition theory, practice, and demonstrations. Train village women nutrition agents in pilot villages.

Health Information System Coordinator: Coordinate data entry for a 137,000-person database, and keep to data entry schedule. Check quality of manual data arriving at project office. Coordinate routine report production, both up to coordinator level and down to FT level. Take proper care of computers and electric generator.

Health Supervisor: (6): Supervise 6-9 Family Trainers, including their effectiveness as trainers and community organizers, and the quality of data reported in their rosters. Summarize vaccination and growth monitoring information at the subdistrict level and submit regular report to district project office.

Family Trainer: (35) Organize VHC in each of 5-7 villages covered; track health data of women of CBA and children <3 in manual registers for each village; train literate VHC members in health information tracking; organize and run health training sessions; coordinate weighing of all children <3; raise public awareness of EPI, organize communities to participate during vaccination team visits, and track non-immunized children; prepare monthly activity reports, and birth, death, and migration reports; report any serious cases to supervisor. For 1993-95, phase over all these activities to VHCs.

CARTE SANITAIRE DU CERCLE DE BOUGOUNI



- LEGENDE**
- H HOPITALS
 - A CENTRE DE SANTE DE CERCLES ET DE COMMUNES
 - o ARRONDISSEMENTS
 - M MATERNITE DE CERCLE
 - v DE VILLAGE
 - D DISPENSARE DE VILLAGE
 - ⊕ DEPOT DE MEDICAMENTS (P.M.)
 - PHARMACIE VILLAGEOISE
 - P.M.I.

LIST OF ABBREVIATIONS

CBA	Child-bearing age
CDD	Control of diarrheal diseases
CERPOD	Center for Research on Population and Development
DPT	Diphtheria-pertussis-tetanus
EPI	Expanded program of immunization
FT	Family Trainer (SC/M paid village health agent)
GRM	Government of the Republic of Mali
HIS	Health information system
MOH	Ministry of Health
NGO	Non-governmental organization
OPV	Oral polio vaccine
ORT	Oral rehydration therapy
SC	Save the Children
SC/M	Save the Children/Mali Field Office
SSS	Sugar-salt solution
TBA	Traditional birth attendant
TOT	Training of trainers
Tt	Tetanus toxoid
VHC	Village health committee

Curriculum for Training for Family Trainers in Control of Diarrheal Disease

- * Definition of diarrhea and dehydration
- * Description of the symptoms of diarrhea
- * Description of the symptoms of dehydration
- * Distinction between two degrees of dehydration
- * Treatment of dehydrations (Dehydration & materialisee by a bag filled with water, pricked/ use of educational materials)
 - Description of Plan A
 - Description of Plan B
- * Practical demonstration of the preparation of sugar-salt solution
- * Practical exercises in a village

Description

DIARRHEA

ORT Session: The Family Trainer organizes a mothers' meeting in the village on the theme: "Diarrhea and its consequences." The FT notes in his/her register the mothers who are present. FT explains to the mothers how to avoid the consequences of diarrhea. FT speaks to them of sugar-salt solution. FT shows them the ingredients of the solution, which are available in all villages: salt, sugar, and potable water. FT demonstrates preparation of the solution and invites a mother to taste the solution, and she tells others of her impression.

The FT underlines the importance of the continuation of breastfeeding and other feeding of the child during episodes of diarrhea. FT tells all mothers that the solution is to feed the diarrheal child with small spoonfuls. FT tells mothers that the solution doesn't cure diarrhea, but rather prevents dehydration. FT notes that all cases of diarrhea that persist longer than two days after administration of the sugar-salt solution should be referred to the nearest health center.

Before ending the session, the FT invites a mother to volunteer to come up and prepare the sugar-salt solution. This motivates the other mothers to participate in making the solution before leaving the session.