



**International Rescue Committee**

**Final Report to the Office for Foreign Disaster Assistance**  
*1 September 2002 – 31 August 2004*

**Emergency Response  
For Health and Water and Sanitation  
Kono District, Sierra Leone**

Agreement No. HDA-G-00-02-00174-00

December 2004

## **List of Acronyms**

CHC	Community Health Center
CHP	Community Health Post
DHMT	District Health Management Team
EPI	Expanded Program of Immunization
IDP	Internally Displaced Person
MCH (P)	Maternal and Child Health (Post)
MOHS	Ministry of Health & Sanitation
PHC	Peripheral Health Clinic
PHU	Primary Health Unit
ORT	Oral Re-hydration Therapy
TBA	Traditional Birth Attendant
RH	Reproductive Health
STD/STI	Sexually Transmitted Disease/ Infection
VDC	Village Development Committee

## **1. PROJECT DATA**

Location of operation: Kono

Emergency service provision to:

- 1 Community Health Centre (CHC)
- 5 Community Health Posts (CHPs)
- 7 of their associated Maternal and Child Health Posts (MCHPs)

The health units are located in the following towns:

Nimikoro chiefdom: Yengema, Sengekoro, Motema, Masundu, Seidu

Nimiyama chiefdom: Condama

Fiama chiefdom: Yekior

Kamara chiefdom: Samekoidu

Gbense chiefdom: Gbangadu, Quidadu, Koeyor, Ngaiya, and Small Sefadu.

Agreement No.: HDA-G-00-02-00174-00

Amount of contract: Year 1 (phase 1): USD 899,416  
Year 2 (phase 2): USD 644,401

Start-up date of operation: 1 September 2002

Duration of operation: 24 Months (1 September 2002 to 31 Aug 2004)

Period covered by this report: 1 September 2002 to 31 August 2004

Submission date of present report: December, 2004

## **2. OPERATIONAL FRAMEWORK**

### **2.1. Number of direct beneficiaries**

<b>POPULATION SIZE IN AREAS WITH PHUs SUPPORTED BY IRC IN KONO DISTRICT</b>			
	<b>PHU (Village &amp; Chiefdom)</b>	<b>No. of villages served</b>	<b>Total population</b>
1.	Gbangadu CHP (Gbense)	13	1,450
2.	Small Sefadu CHP (Gbense)	5	4,697
3.	Yekior MCHP (Fiama)	10	2,145
4.	Seidu MCHP (Nimikoro)	8	1,391
5.	Yengema CHC (Nimikoro)	7	4,891
6.	Sengikoro CHP (Nimikoro)	16	1,829
7.	Masundu CHP (Nimikoro)	12	1,572
8.	Kwidadu MCHP (Gbense)	20	1,727
9.	Koeyor MCHP (Gbense)	18	4,177
10.	Motema CHP (Nimikoro)	21	12,700
11.	Ngaiya MCHP	5	4,598
12.	Samiquedu (Kamara)	12	2,241
13.	Condama	15	4,754
	<b>Total</b>	<b>162</b>	<b>48,172</b>

### **2.2. Status of beneficiaries (General Local Population and Returnees):**

The beneficiaries comprise the general local population in the five target chiefdoms. Apart from the above number, hundreds of new returnees came back from the refugee camps in Guinea, Liberia and other countries in West Africa. UNHCR estimates that 7,500 people will be

repatriated to Kono from Guinea and Liberia in 2004. This figure does not include spontaneous refugees.

### 2.3. Types of health-related intervention

The primary activities of the program are the construction of Peripheral Health Clinics (PHCs); provision of drugs; training and supervision of health staff; and community-based health education to ensure that residents have access to basic primary health care and understand the importance of disease prevention practices.

## 3. IMPLEMENTATION

*Note: This project was originally proposed to last for one year, but a follow-on proposal was approved, extending the implementation period to two years. The first half of this report addresses objectives and indicators for Year I, while the second half addresses Year II objectives and indicators.*

### Year I: September 2002-August 2003

#### 3.1. Project goal

To reduce mortality and morbidity amongst the returnee population in Kono District due to lack of health care services through the support of 1 Community Health Centre (CHC), 5 Community Health Posts (CHP), and 7 of their associated Maternal and Child Health Posts (MCHP) in Nimikoro, Nimiyama, Fiama, Kamara, and Gbense Chiefdoms.

#### 3.2. Project objectives

##### Objective 1:

**To rehabilitate one CHC, five CHPs, and seven MCHPs, together with their water and sanitation facilities and staff quarters where necessary.**

##### *Activity 1.1-1.2. Clinic construction*

IRC rehabilitated or constructed 13 PHUs and provided all of them with basic furniture. The Yengema CHC, Gbangadu CHP and Kwidadu MCHP were fitted with energy efficient cement roofing tiles. The table below indicates the location and expenditure for each PHU.

Chiefdom	Village	Project	Budget Le	Actual Le	Status
Fiama	Yekior	MCHP	20,000,000	19,929,806	Completed
Gbense	Small Sefadu	CHP	27,000,000	15,000,000	Completed
Gbense	Gbangadu	CHP	27,000,000	27,462,300	Completed
Gbense	Koeyor	MCHP	20,000,000	18,070,005	Completed
Gbense	Quidadu	MCHP	20,000,000	19,360,000	Completed
Nimikoro	Yengema	CHC	50,000,000	49,437,800	Completed
Nimikoro	Masundu	CHP	27,000,000	29,000,000	Completed
Nimikoro	Motema	CHP	27,000,000	28,199,535	Completed
Nimikoro	Sengekoro	CHP	27,000,000	28,753,483	Completed
Nimikoro	Seidu	MCHP	20,000,000	20,000,000	Completed
Nimikoro	Ngaiya	MCHP	20,000,000	15,508,500	Completed

Nimikoro	Samequidu	MCHP	20,000,000	20,000,000	Completed
Nimiyama	Condama	MCHP	20,000,000	19,570,005	Completed

### **Activity 1.3. Water and Sanitation**

Over the course of the implementation period, IRC undertook environmental health interventions at all 13 PHUs, such as construction or installation of rain-fed hand washing posts, medical waste incinerators, hand-dug wells fitted with hand pumps and pit latrines. Well construction at Koeyor's MCHP was delayed due to bad land formation; three attempts were made and failed due to hard, impermeable rock. The well was finally completed in October 2004, located 40 meters from the health post. The table below lists the number of wells and latrines constructed in each village.

Construction of medical waste incinerators was completed in November 2003 at all 13 centers.

In collaboration with the MOHS, IRC trained health post staff and VDC members how to best make use of, maintain and repair the wells and incinerators.

<b>Wells and Latrines Constructed at IRC-supported PHUs</b>						
<b>Serial #</b>	<b>Clinic location</b>	<b>Project</b>	<b>chiefdom</b>	<b># of villages served</b>	<b>Total pop.</b>	<b>Status</b>
1	Motema (CHP)	1 well, latrine	Nimikoro	21	12,700	Constructed 1 well fitted with hand pump. Latrine completed.
2	Small Sefadu (CHP)	1 well, latrine	Gbense	5	4,697	Construction completed but water table is low and well is labeled as SEASONAL, during March and April less water will be available. Latrine completed.
3	Condama (MCHP)	1 well, latrine	Nimiyama	15	4,754	Completed 1 well fitted with hand pump, Latrine completed.
4	Gbangadu (CPH)	1 well, latrine	Gbense	13	1,450	Completed 1 well fitted with hand pump. Latrine completed.
5.	Yengema (CHP)	1 well, latrine	Nimikoro	7	4,891	Completed 1 well fitted with hand pump. Latrine completed
6	Ngaiya (MCHP)	1 well, Latrine	Nimikoro	5	4,598	Completed 1 well fitted with hand pump. Latrine

						completed
7	Yekior (MCHP)	Latrine	Fiama	10	2,145	Latrine completed
8	Koeyor (MCHP)	1 well, Latrine	Gbense	18	4,177	Complete 1 well fitted with hand pump. Latrine completed
9	Masundu (CHP)	Latrine	Nimikoro	12	1,572	Latrines completed
10	Sengekoro (CHP)	1 well, Latrine	Nimokoro	16	1,829	Completed 1 well fitted with hand pump
11	Seidu (MCHP)	Latrine	Nimikoro	8	1,391	Latrine completed
12	Samequidu (MCHP)	1 well, Latrine	Kamara	12	2,241	Completed 1 well fitted with hand pump
13	Kwidadu (MCHP)	1 well, Latrine	Gbense	20	1,727	Complete 1 well fitted with hand pump
<b>TOTALS:</b>				<b>162</b>	<b>48,172</b>	<b>10 wells and 13 latrines</b>

### **Objective 2:**

**To ensure that the population has access to emergency primary health care services, in clinics with adequate provision of essential drugs (c.f. attached list of MOHS approved essential drugs), manned by staff properly trained and supervised.**

#### ***Activity 2.1. Provision of treatment for the most prevalent infectious diseases.***

All 13 target PHUs now provide adequate treatment for the most prevalent diseases. Prior to project implementation, only six of the PHUs were operational, but in July 2003, MOHS assigned newly trained Maternal and Child Health Aides (MCHAs) to the remaining facilities and since then all 13 PHUs are staffed and fully functional.

#### *Clinic Attendance:*

The tables below shows number of patients treated at each PHU. Over the course of the project period, the number of clients increased by almost 60%, from 2405 in the first quarter to 3787 in the last quarter. Attendance decreased in the 2<sup>nd</sup> quarter due to the initiation of the cost-recovery system which requires patients to pay a registration fee every time they visit the clinic. Initially patients were reluctant to pay the fee, but judging from the increase in attendance in the 3<sup>rd</sup> and 4<sup>th</sup> quarter, people have come to accept the new system.

<b>Clinic visits over the course of the implementation period</b>					
<b>Reporting period</b>	<b>New Cases</b>	<b>Return Visits</b>	<b>Follow Up Visits</b>	<b>Referrals</b>	<b>Total</b>
1 <sup>st</sup> (Sep-Dec 02)					<b>2,405</b>
2 <sup>nd</sup> (Jan-Mar 03)	1,139	95	306	19	<b>1,559</b>

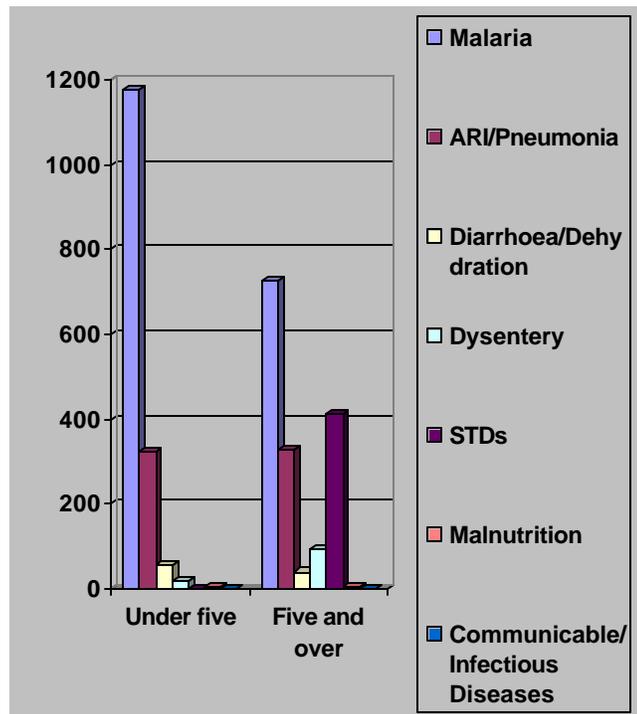
3 <sup>rd</sup> (Apr-Jun 03)	2,916	377	425	14	<b>3,732</b>
4 <sup>th</sup> (Jul-Sep 03)	3,119	441	224	3	<b>3,787</b>
<b>GRAND TOTAL:</b>					<b>11,483</b>

Community mobilization through sensitization and health education campaigns have helped to increase clinic attendance; community members can now identify common signs and symptoms of most of the prevalent diseases and are more likely to refer cases to the PHUs.

*Commonly Reported Ailments:*

The graph and table below indicate the number of leading reported ailments during the 4<sup>th</sup> quarter of project implementation. Ranking of leading elements stayed relatively constant throughout the implementation period. Malaria is the most commonly reported disease in the area, followed by ARI in under fives and by STDs in persons over five years of age.

<b>Leading Reported Ailments, July-September 2003</b>		
<b>Diagnosis</b>	<b>Under five</b>	<b>Five and over</b>
<i>Malaria</i>	1,176	728
<i>ARI/Pneumonia</i>	323	327
<i>Diarrhea/Dehydration</i>	58	40
<i>Dysentery</i>	21	92
<i>STDs</i>	1	412
<i>Malnutrition</i>	3	6
<b>Total</b>	<b>1,582</b>	<b>1,605</b>



*Correct Treatment:*

The percentage of cases of common diseases correctly treated has increased significantly over the course of the implementation period. The tables below show the percentage of correctly treated incidents of malaria, ARI, STIs and diarrhea for the first reporting period and the last reporting period.

<b>MALARIA, ARI, DIARRHOEA, AND STI CASES PROPERLY TREATED 1<sup>st</sup> QUARTER</b>				
<b>Clinic</b>	<b>% of Malaria Properly treated</b>	<b>% of ARI Properly Treated</b>	<b>% of Diarrhoea Properly treated</b>	<b>% of STIs treated</b>
<b>Yengema CHC</b>	273(81.7%)	75 (7.2%)	6 (66.7%)	14 (73.7%)
<b>Small Sefadu CH</b>	82 (33.5%)	81 (73.6%)	12 (50%)	21 (73.7%)
<b>Motema CHP</b>	56 (43.7%)	68 (79%)	28 (54%)	5 (57%)
<b>Masundu CHP</b>	120 (71%)	10 (62.5%)	7 (53.8%)	11 (52.3%)
<b>Gbangadu CHP</b>	78 (61.4%)	26 (65%)	11 (40%)	2 (50%)

<b>MALARIA, ARI, DIARRHOEA, AND STI CASES PROPERLY TREATED 4<sup>th</sup> QUARTER</b>				
<b>Clinic</b>	<b>Malaria (Total/ percent properly treated)</b>	<b>ARI (Total/ percent properly treated)</b>	<b>Diarrhea (Total/ percent properly treated)</b>	<b>STIs (Total/ percent properly treated)</b>
<b>Yengema CHC</b>	458/90%	93/96%	8/98%	88/86.6%
<b>Small Sefadu CHP</b>	445/89%	161/85%	21/91%	127/83%
<b>Motema CHP</b>	136/84%	85/91%	5/89%	8/92%
<b>Masundu CHP</b>	135/73%	57/69%	28/65%	37/62%
<b>Gbangadu CHP</b>	87/77%	15/84%	5/68%	19/76%
<b>Yekior</b>	113/57%	53/69%	3/100%	17/85%
<b>Koeyor</b>	141/83%	24/73%	4/4%	20/65%
<b>Seidu</b>	147/45%	75/66%	3/50%	29/71%
<b>Sengikoro*</b>	0	0	0	1/100%
<b>Ngaiya</b>	77/75%	17/86%	3/72%	28/86%
<b>Condoma</b>	47/85%	25/63%	2/75%	4/75%
<b>Quidadu</b>	67/85%	41/ 74%	8/74%	21/86%
<b>Samiquidu</b>	51/65%	4/70%	8/76%	14/53%
<b>TOTAL</b>	1904/75%	650/77%	98/71%	413/78%

\* *The nurse in Sengekoro was attending trainings in Koidu for much of the 4<sup>th</sup> quarter and was therefore not attending to the clinic.*

*Prescription of Antibiotics:*

Successful training on the appropriate use of antibiotics had led to a reduction in antibiotics prescribed from about 50% of all prescriptions in the second quarter, to 29% in the third quarter. However, antibiotic use during the 4<sup>th</sup> quarter is slightly higher than the 3<sup>rd</sup> quarter due to the inexperience of the newly trained MCH Aides assigned to health facilities during that period.

<b>ANTIBIOTIC USE IN THE 2<sup>nd</sup>, 3<sup>rd</sup> AND 4<sup>th</sup> QUARTERS</b>			
	<b>2<sup>nd</sup> quarter</b>	<b>3<sup>rd</sup> quarter</b>	<b>4<sup>th</sup> quarter</b>
<b>Total Prescriptions</b>	<b>1,690</b>	<b>3,326</b>	<b>4,139</b>
<b>Prescriptions with Antibiotics</b>	<b>890</b>	<b>964</b>	<b>1,448</b>
<b>Antibiotics as % of all prescriptions</b>	<b>53%</b>	<b>29%</b>	<b>35%</b>

***Activity 2.2. Provision of rehydration therapy to patients suffering from diarrhea and dehydration.***

IRC experienced some difficulty obtaining oral rehydration salts (ORS) from the International Dispensary Association (IDA) and had to procure ORS packages from Merlin instead, which delayed ORS distribution. However, patients were taught to prepare simple salt and sugar solutions, an effective remedy for diarrhea.

***Activity 2.3. Refresher courses for health staff on diagnosis and prevention of the most prevalent diseases.***

In coordination with the DHMT, IRC organized trainings for health staff on the symptoms and treatments of 20 prevalent diseases (identified by the National Health Guidelines). See Annex 1 for a complete list of all training conducted throughout the project period. In addition, IRC provides regular on-the-job training for all in-charges during supervision visits to the PHUs.

***Activity 2.4. Refresher course to TBAs on safe motherhood***

IRC provided formal trainings for TBAs on safe motherhood, and regular on-the-job training during field supervision visits. Monthly evaluations of TBAs performances show a significant improvement over the course of the project implementation. TBAs have helped to increase the attendance at PHUs, as evidenced by the increase in ANC attendance, TT immunization, number of pregnant women on malaria prophylaxis, number of safe deliveries, condom utilization and post-natal care services.

Community training sessions are being conducted for TBAs, town chiefs, and female group leaders on implementing the referral system and recording the births and deaths in their villages.

***Activity 2.5. Provision of PHU and RH-related supplies to the IRC clinic including contraceptives and STD drugs.***

The following are RH-related materials are being supplied to all target clinics:

- Instrument Sterilizer

- Delivery Beds
- Instrument box
- STD drugs
- Kocher's forceps
- Scissors
- Foetoscopes
- Cord ligature
- Gloves
- Soaps
- Condoms
- Vaginal speculum
- Manual suction apparatus, etc.

**Activity 2.6. Provision of reproductive health clinical care to the estimated 11,000 women of child-bearing age in the form of vaccinations, deliveries by trained Traditional Birthing Attendants (TBAs) and MCH aides, antenatal and postnatal services, as well as STD diagnosis and treatment.**

The PHUs provided significant increases in antenatal, postnatal and family planning services during the fourth quarter. This can be attributed to the increase in number of functional PHUs, sustained community sensitization, and the training of TBAs in the communities who in turn raise awareness within their communities about the availability and importance of these services.

<b>CASES SEEN AT RH CLINICS *</b>			
<b>Details of the cases</b>	<b>2<sup>nd</sup> quarter</b>	<b>3<sup>rd</sup> quarter</b>	<b>4<sup>th</sup> quarter</b>
Antenatal visits	1,388	1,121	1,679
Post natal visits	77	47	101
TT doses	909	1,050	1,472
Malaria prophylaxis	1,013	1,096	1,679
Safe deliveries	153	245	270
Still births	2	5	3
Neonatal deaths	0	0	1
Maternal deaths	0	0	0

\* Data for 1<sup>st</sup> quarter unavailable.

IRC taught health staff to prescribe malaria prophylaxis to all pregnant women.

IRC organized community-based health education and workshops emphasizing the importance of antenatal clinic attendance; increased attendance suggests that the sensitizations were affective.

Mothers are gradually beginning to utilize postnatal services, as evidenced in the rise in postnatal visits from 46 during the 3<sup>rd</sup> quarter to 101 in the 4<sup>th</sup> quarter; more than a 50% increase.

IRC conducts education campaigns and distributes condoms to encourage family planning.

Due to the community sensitizations and trainings for TBAs, the number of deliveries being registered is increasing. Despite the fact that many TBAs were absent from their communities

during the 4<sup>th</sup> quarter due to TBA trainings at the health centers, the number of recorded deliveries nevertheless increased by 25, compared to the previous quarter.

***Activity 2.7. Establishment of a referral system among the supported facilities (from MCHPs to CHC and CHPs), including referrals to Koidu Hospital as necessary.***

IRC held workshops on the referral system and recognition of danger signs for prevalent diseases, for Village Development Committee (VDC) members and TBAs in 163 villages. After the workshops, each community agreed to collectively take on the responsibility of referring all serious cases to the nearest PHU. Cases that need surgical intervention are in turn referred to Koidu government hospital. IRC advocates for the following referral pathway:

Community → MCHP/PHU → CHP → CHC → Koidu Government Hospital

Community members bring the patient to the MCHP or to the nearest PHU. The MCHP or PHU staff refer cases that need care beyond their capacity to the CHP, which in turn refers cases that need further care to the CHC. The most extreme cases are referred to Koidu Government Hospital. During the fourth quarter, six critical obstetric cases were saved by this referral system.

***Activity 2.8. Introduction and installation of universal precaution methods.***

IRC provides regular on-the-job training for clinic staff on universal precaution practices such as use of one needle per patient, safe disposal of needles and syringes, and the use of gloves when conducting any procedure. Spot supervisions are carried out to ascertain adherence of the MOHS staff to these and other universal precautions. All the in-charges were given practical training on the instrument sterilization procedure.

MOHS provides the PHUs with safety boxes while IRC provides other basic supplies such as examination and surgical gloves, disinfectant solutions, single-use needle and syringes, instruments for performing basic procedures (e.g. dressing of wounds, speculum examination, sterile equipment, and appropriate equipment for sterilization).

***Activity 2.9. Provision of health care services for children under five.***

Almost all existing health facilities are now functioning and providing services for children under five such as immunizations, growth monitoring screening and treatment of common childhood diseases. For more information about vaccinations, see Activity 2.12.

***Activity 2.10. Establishment of regular system of supervision through facilitating visits.***

During the first three quarters, IRC made regular supervision visits to the PHUs for on-the-job training, stock checks, or report collection. During the 4<sup>th</sup> quarter, IRC began conducting supervision visits together with the DHMT to simultaneously support the PHUs and build the capacity of the MOHS to take on the responsibility of clinic supervision. The DHMT also conducted independent supervisory visits to PHUs whenever there were any complaints or major problems at the PHUs.

<b>NUMBER OF VISITS BY IRC STAFF TO IRC-SUPPORTED HEALTH FACILITIES 4<sup>th</sup> QUARTER</b>		
<b>Clinic</b>	<b>Number of trained personnel in the clinics</b>	<b>Number of supervisory visits</b>
Gbangadu	2	34
Kwidadu	1	26
Yeakior	2	21
Koeyor	3	19
Motema CHP	3	28
Ngaiya MCHP	2	24
Yengema CHC	3	36
Sengekoro CHP	1	18
Condama MCHP	1	22
Masundu CHP	2	28
Samiquedu MCHP	1	21
Seidu MCHP	1	26
Small Sefadu CHP	2	41
<b>TOTAL</b>	<b>24</b>	<b>344</b>

**Activity 2.11. Facilitation of the re-establishment of EPI.**

Six fixed EPI posts were set up with vaccines and cold chain equipment in Yengema, Motema, Masundu, Small Sefadu, Gbangadu and Yekior, and mobile immunization activities were conducted in Quidadu PHU catchments village.

**Activity 2.12. Review and evaluate the vaccination coverage status of under 1-year-old children.**

The table below shows the number of vaccination doses given at the static and mobile clinics through the Expanded Program of Immunization (EPI) during Jan-Sept 2003. Data for the first reporting period is unavailable.

<b>Expanded Programme of Immunization CHILDHOOD VACCINES ADMINISTERED, JAN-SEPT 2003</b>				
<b>EPI</b>	<b>0-11 Months</b>	<b>12-23 Months</b>	<b>24 months &amp; Above</b>	<b>Total vaccinations administered, by vaccine type</b>
<i>BCG</i>	1,153	105	13	1,271
<i>Polio-0</i>	856	18	0	874
<i>Polio-1</i>	1,108	198	29	1,335
<i>Polio-2</i>	1,099	281	54	1,434
<i>Polio-3</i>	1,045	309	41	1,395
<i>DPT-1</i>	1,113	202	29	1,344
<i>DPT-2</i>	1,102	263	40	1,405
<i>DPT-3</i>	1,046	244	98	1,388
<i>Measles</i>	1,044	779	380	2,203

<i>Yellow Fever</i>	675	1,074	116	1,865
<b>Total vaccinations administered, by age</b>	<b>10,241</b>	<b>3,473</b>	<b>800</b>	<b>14,488</b>
<b>Children fully immunized</b>	<b>1,333</b>	<b>228</b>	<b>153</b>	<b>1,714</b>

IRC provided the MOHS immunization staff with raingear, which helped them to travel to distant villages for outreach services. Payment of 50% of the proceeds of the fee for service to vaccinators, who for the most part are not on government payroll, served as an additional incentive and helped to increase the EPI coverage.

### **Objective 3:**

**Greatly improved knowledge amongst the returning population on STI/HIV/AIDS, malaria, and diarrhea prevention.**

#### ***Activity 3.1. Refresher training course for all registered TBAs in the catchment area utilizing the new curriculum developed by the MOHS conducted and kits distributed.***

IRC trained a total of 140 TBAs from the target communities on safe deliveries, the referral system, births and deaths registration in the areas they cover, and the importance of reporting to their respective PHU on a monthly basis. Trainings were conducted according to MOHS guidelines. The first set of trainings were held in March 2003, attended by 50 TBAs, and the second round was held in August, attended by 90 TBAs. Pre and post test scores indicated an increase in knowledge.

#### ***Activity 3.2. Health problems within the community are detected and referred through the network of TBAs.***

TBAs and VDCs have been trained on the appropriate referral system and are taking an active responsibility for the referral of community members in need of medical attention.

#### ***Activity 3.3. Village Development Committee reactivation for community ownership and sustainability.***

*VDC workshops on partial cost recovery:* In May 2003, five representatives from each PHU attended a meeting on fees for service. In an effort to make the health care system sustainable, it was decided that patients should be charged for services. The income generated will help to pay PHU staff salaries and operational costs.

In September a follow-up workshop was held on the partial cost recovery system, attended by four representatives from each of the supported PHUs. MOHS conducted the workshop with support from IRC, Merlin and World Vision.

#### ***Activity 3.4. Workshops for TBAs and VDCs on prevalent disease prevention.***

Over the course of project implementation, IRC regularly conducted sensitizations and workshops for TBAs, VDC members and other community members on topics such as prevention of malaria, diarrhea and STIs including HIV/AIDS, nutrition, reproductive health and family planning. The use of condoms is promoted in these trainings.

In total, the workshops and sensitizations were attended by over 10,000 attendees (actual number of attendees is difficult to determine as the same individuals regularly attended several sessions). See *Annex 1* for a complete list of all trainings conducted and number of attendees. Trainings are listed by quarter.

Community-based health education and trainings were conducted covering various topics. By stationing the IRC health trainer in the communities, the trainer was better able to understand the needs of the communities and tailor trainings to suit their specific situation. The trainings successfully brought together people from many different backgrounds; Muslims, Christians, youths, adults, women, men, educated, uneducated, opinion leaders, and traders came together to discuss health issues.

The sensitizations appear to have had a positive impact; there has been a noted increase in condom use, clinic attendance has improved in the target areas and community members have begun to openly discuss health problems, including STIs, which was previously a taboo. PHUs keep records of the number of condoms distributed; the distributed number increased from 2,242 in the 3<sup>rd</sup> quarter to 4,463 in the 4<sup>th</sup> quarter.

#### ***Activity 3.5. KAP survey***

A KAP survey was conducted in May 2003, but unfortunately, there was no funding available to conduct a follow-up survey in 2004 for comparison. However, the increase in community referrals and clinic attendance indicates that community member's knowledge, attitude and practices towards healthcare have been impacted by IRC's sensitization efforts.

#### **Objective 4:**

**Train, coach and supervise all supported health staff, especially the TBAs, in the proper means of tackling the high infant and maternal mortality rates prevalent in the district.**

#### ***Activity 4.1. Provision of training and coaching for health staff on vital registration, case management, antenatal care, TT immunization, safe motherhood, EPI, etc.***

IRC organized regular trainings for health staff on issues such prevention of common diseases, antenatal care, TT immunizations, safe motherhood, EPI etc. *Annex 1* lists all trainings conducted over the course of the implementation period, however, attendance figures do not indicate whether attendees were health staff or community members.

#### ***Activity 4.2. Provision of essential supplies to TBAs to perform safe deliveries.***

Approximately 130 TBA kits were distributed. Each kit contains:

1. Gloves
2. Chord tie
3. Makintosh
4. Blades.
5. Surgical spirit
6. Cotton wool
7. Gauze pads
8. Hurricane lamp
9. Torch
10. Batteries
11. Pen
12. Book
13. Soap
14. Bag

#### **Objective 5:**

**Increase the capacity of the District Health Management Team on data recording and analysis, so that at the end of January 2003 they are able to enter data, carry out basic**

**statistical analysis and produce technically sound monthly reports for the central MOHS in Freetown.**

***Activity 5.1. Data collection forms regularly supplied by the IRC team to all the functional supported PHUs.***

During the project implementation period IRC distributed reporting forms to all supported PHUs. IRC took time to explain to PHU staff the importance of making use of data collection forms, and taught staff how to fill out the forms appropriately. Towards the end of the implementation period an ink jet was procured for the DHMT so that they could take over the printing of clinic forms.

***Activity 5.2. Train PHU staff in data collection, use of forms, and reporting requirements.***

In total, 23 PHU staff were trained on data collection, the use of reporting forms, and reporting requirements.

Eight DHMT members received training in basic computer skills such as MS-Word and MS-Excel. The computer course was held in the evening hours, so as not to conflict with their daytime responsibilities.

***Activity 5.3. Units producing timely monthly statistic reports.***

All 13 PHU's are producing timely monthly statistical reports.

### **3.3. Implementation Difficulties**

#### ***General:***

Some of the difficulties encountered during the project implementation were:

1. The newly trained MCH Aides assigned to the PHUs by MOHS are fresh from nursing school and lack experience. As result of this inexperience the prescription of antibiotics, which had previously been reduced to 29% of all prescriptions, rose to 35% in the 4<sup>th</sup> quarter. The nurses need more on-the-job training in order to improve the quality of care to beneficiaries.
2. Delayed drug supply by the IDA hindered the implementation of the program and made it difficult to control morbidity due to lack of certain essential treatments.
3. The decision of MOHS to collect 40% of cost of medicines supplied by MOHS from the patient in addition to the registration fee of 1,000 Leones increases the burden on poor patients. It is also very difficult to distinguish between drugs in a PHU supplied by MOHS and drugs supplied by IRC in order to avoid charging the patients for IRC-supplied drugs.
4. Heavy rains during the rainy season created poor road conditions, rendering some roads impassable and thus hindering the implementation of the program.

## **YEAR II: September 2003-August 2004**

- 3.2. **Project goal:** To improve the health status of the Kono population through targeted primary health care and water and sanitation activities.

***Objective 1: Improve service delivery points for common childhood illness, safe motherhood and immunization programs by teaching case management skills and promoting guidelines on integrated management of childhood illness.***

***General indicators (activity-specific indicators are listed with each activity):***

Indicator	Project total
Number of people over 5 years of age treated at PHUs	6,199
Number of children under five years of age treated at PHUs	3,045
Over-5 utilization rate (new cases/pop/yr)	0.15
Under-5 utilization rate (new U5 cases/U5 pop/yr)	0.37
Antenatal attendance—1 <sup>st</sup> visits (% of estimated target) / subsequent visits	1,473(61%)3,426

**Activities 1.1 MOHS staff training to enhance adherence to the standard guidelines on clinical case management on common childhood illness such acute respiratory tract infection, diarrhoeal diseases, malaria, parasitic infestation, etc. at the 13 PHUs.**

Over the course of the implementation period, IRC organized eight workshops for MOHS staff, attended by a total of 419 attendees. See table below for more detail.

Subject	Time	Trainees	Trainers	Length	Pre- and post-test results	
HIV/AIDS and other STIs	Jan 04	13 PHU in charges	DHMT and IRC	2 days	50	91
Meningitis	Feb. 04	13 PHU in charges	DHMT and others	2 days	54	92
Neonatal Tetanus	March 04	13 PHU in charges	DHMT and IRC	2 days	48	83
Safe Motherhood (in-service)	Jan-Mar	132 TBAs	IRC staff	1 day		
Lassa Fever	April 04	13 PHU in-charges	DHMT & IRC	2 days	40	78
TBA Refresher Training	May 04	142 TBAs	District Health Sisters and MCH Aides	10 days	45	81
Syndromic Management of STI	June 04	80 PHU in-charges and MCH aides in Kono District	DHMT & IRC	2 sets of 4 days each.	38	61
Malaria Case Management	April 04	13 PHU in-charges	DHMT & IRC	2 days	55	95

Indicator	Project Average
Percentage of patients treated according to the national protocols	77%
Proportion of all reported deliveries that are conducted by skilled or trained staff	91%

**Activities 1.2 Regular supply of essential drugs to the units.**

Up until December 2003, IRC delivered drugs regularly to each PHU. However, in 2004 drug procurement was cancelled because the OFDA representative recommended that MOHS push forward with its partial cost recovery plan.

***Activities 1.3 Establishment of oral rehydration therapy (ORT) corners in each village.***

In collaboration with the District Health Management Team (DHMT), IRC trained 66 volunteers in ORT preparation, administration, and education.

IRC helped with the establishment of ORT corners. All 162 target villages now have ORT corners manned by trained blue flag volunteers. IRC trained one blue flag volunteer per village, meaning that a total of 162 volunteers have been trained to diagnose and treat common forms of diarrhea. The ORT corners have been supplied with furniture and other materials such as ORS, buckets, bowls, teaspoons, mixing spoons and cover cloths.

Indicator	Quarter 1 (baseline)	Cumulative
Proportion of villages with ORT corners (total to date)	46%	100%

***Activities 1.4 De-worming campaigns***

IRC, in collaboration with the DHMT and TBAs conducted deworming campaigns reaching all 162 villages in the five PHU areas.

Indicator	Project Total
Number of villages reached	162

***Activities 1.5 Facilitate the Vitamin A supplement campaign with the district health team along with the routine EPI program.***

In collaboration with the DHMT, IRC conducted Vitamin A distributions. Over the course of the implementation period, a total of 1,500 children under five were given Vitamin A, an estimated 18.3% of all under-fives in the target area.

***Objective 2: Strengthen the training and supervisory capacity of DHMT and CHOs to monitor the supported PHUs.***

***Activities 2.1 Develop and train PHU staff on standardized supervision checklists***

In collaboration with the DHMT, IRC helped to develop standard guidelines and checklists covering requirements for universal precautions, antibiotic prescriptions, and display of clinical statistics among others.

IRC held trainings for clinic staff at all 13 PHUs on the contents of the guidelines and how to best make use of the checklists.

IRC and DHMT also conduct joint supervision visits to the PHUs, both to assess PHU progress and provide on-the-job training to staff, including guidance on proper use of supervision checklists.

***Activities 2.2 Conduct in-service training for mid-level supervisors***

The in-charges of the health units constitute mid level supervisors. A total of 8 training were held for mid level supervisors to develop their skills in supervision, financial and drug management.

***Activities 2.3 Assess the resource needs for all supported PHUs.***

IRC assessed the PHU resource needs and procured the necessary items. The following items were procured and distributed:

1. Bicycles for vaccinators
2. Manual Suction machines to aid in mucus extraction
3. Mucus suckers for new born babies
4. Blood pressure machines for all outreach and antenatal clinics
5. Minor surgical equipments
6. Surgical gowns
7. Rain gears
8. Outreach bags for in charges
9. Kerosene stoves

**Indicators** (*entire project period*)

- Number of PHUs effectively using supervision tools checklist: 13 out of 13
- Number of in-service trainings held for mid-level supervisors: 8
- Number of PHUs that have all the necessary resources for operation: 13 out of 13

***Objective 3: Improve family and community practices on feeding, weaning and prevention of diseases.***

***Activity 3.1 Training PHU staff to implement growth monitoring of under-fives***

Growth monitoring of under-fives is performed routinely at all IRC-supported PHUs. During the first quarter, IRC facilitated a special training on growth monitoring attended by all PHU clinicians. During IRC's regular supervision visits to the PHUs, IRC assessed growth monitoring and recording and provided staff with any necessary on-the-job training.

***Activities 3.2 and 3.3 Breastfeeding and weaning food promotion through food demonstrations and backyard gardening***

IRC trained PHU staff on how to encourage mothers to feed their children nutritious foods. PHU staff then routinely gave breastfeeding and weaning food demonstrations at the supported health facilities. During this reporting period, 262 food demonstration and weaning sessions were conducted. All 13-health facilities had backyard gardens that are used for demonstration, and Each PHU has a food demonstration tray displaying samples of nutritious foods.

***Activity 3.4 Health talks at PHU level on a healthy diet***

IRC trained the PHU staff to give health talks on various topics, including how to maintain a healthy diet. The PHU staff in turn held regular health education sessions on maintaining a healthy diet. IRC also conducted informal sessions during outreach visits to remote villages.

***Activity 3.5 Establishment of backyard gardening in the community***

All the supported PHUs have backyard gardens and IRC regularly gave health talks to community members, discussing backyard gardening. Many communities have started backyard gardening projects and IRC is monitored the progress of these endeavors.

## Indicators

- Number of PHUs where growth monitoring is done regularly: 13 out of 13
- % of pregnant women attending ANC who receive malaria prophylaxis: 100%
- Number of food demonstrations for breastfeeding and weaning: 262
- Number of health talks conducted by PHU staff (disaggregated by topic of discussion) on disease prevention:

<i>Topic</i>	<i>No. of sessions For Project Period</i>
Diarrhoea Prevention	28
Malaria	55
STI/ HIV/AIDS	77
Exclusive Breast Feeding	59
Immunization	48
Balanced Diet	63
Use of treated bed nets	45
Worm infestation	32
Anaemia in Pregnancy	25
Growth monitoring	34
Childhood diseases	346
Total	797

- Number of IEC materials produced and distributed: 450 T-shirts with health messages and approx. 150 health posters.
- Number of participants attending health talks disaggregated by age and sex:

### ATTENDANCE AT HEALTH TALKS

<i>AGE GROUP</i>	<i>Entire Project Period</i>	
	<i>MALE</i>	<i>FEMALE</i>
5-14 years	670	795
15-49 years	1,504	2,551
Above 45years	831	1,757

**Objective 4: Build the capacity of the Village Development Committees (VDCs) in participatory planning activities and sustainable cost recovery schemes**

#### **Activity 4.1 Community sensitization workshops on cost-recovery concepts with the beneficiaries.**

IRC held a total of 19 meetings on cost-recovery concepts with 348 community participants. Approximately one third of the participants were female.

#### **Activity 4.2 Trainings for VDC members**

One Participatory Planning training, conducted over the course of four sessions, was held for VDC members. Two representatives from each of the 162 villages attended the training. Community representatives in turn trained other VDC members, wrote proposals for action plans

and presented them to IRC. A total of 70 Action Plans were written. The training was conducted by a local NGO named Community Action for Rural Development (CARD), which has a sub office in Kono.

***Activity 4.3 Regular meetings and training with the VDCs on proper utilization of cost recovery funds.***

Several trainings were conducted for VDC members on the cost-recovery system and its implications. Trainings were interactive and VDC members were encouraged to take ownership of their own health and health care system, and see well living as a right. A total of 348 members of VDC attended the cost-recovery concepts workshops.

IRC conducted monthly meetings with VDC members and PHU in-charges, during which the cost-recovery system was regularly discussed.

***Activity 4.4 Implementation of community action plans***

Communities successfully developed Action Plans and are being encouraged to implement these plans using their own resources. Identification of a local NGO to conduct the participatory planning trainings took longer than anticipated, thus action plans could not be implemented during the project period, but communities now have a foundation on which to develop and implement their own development plans.

**Indicators**

- Number of participants in community workshops on cost-recovery concepts: 348
- Percentage of VDC members trained in participatory planning: 100%.
- Number of meetings per VDC on cost recovery scheme implementation: 12
- Number of Community Action Plans drafted: 70
- Number of Community Action Plans implemented: None at the close of the project period.

<p><b>Objective 5: Improve access to safe and sufficient water in project villages in a sustainable way to the level of one water point per 500 persons</b></p>
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***Activity 5.1 Detailed village selection, including population survey***

In January 2003, an initial village assessment was conducted using Participatory Rural Appraisal (PRA) methodology, aiming to determine water needs and community willingness to contribute to the project. A final assessment was conducted in October 2003, including a population survey. The following villages were selected: Gbunabu in Gorama Kono Chiefdom and Siakoro, Tormasadu, Bayawandu, Masundu, Tefeya and Waidala in Sandor Chiefdom. Villages were selected based on the following criteria:

1. Need: distance and time required to collect water from existing source ( >30 minutes required)
2. Seasonality: whether existing sources provide the required quantity of water all year round.
3. Community Capacity: availability of required individual labour force (strong men and women, to conduct physically hard job required for wells /latrines construction), existence of a viable, community-based organizations and strong leadership structures.

4. Quality: Presence and intensive use of unprotected water sources, such as traditional wells, swamp, stream etc, with detected unsatisfactory, biological or chemical, water quality.

**Activity 5.2. Community mobilization**

IRC visited each target village at least once a week throughout project implementation phase, and together with the local leadership structures (male, female and youth leaders) worked to mobilize the community around well construction. IRC organized workshops in each village to clearly define the roles and responsibilities of IRC and each participating community, to explain the concept of “self help” and to teach leadership skills.

**Activity 5.3. Detailed hand pump selection survey to determine the most sustainable hand pump**

IRC undertook a similar survey when choosing pumps for an ECHO-funded project and the findings were used to inform this project. IRC decided to select Kardia hand pumps because of their longevity and low maintenance costs. The Kardia pump is also the pump of choice for two government ministries; it is used by the Ministry of Energy & Power for rural water supply and by the MOHS for public health facilities. Moreover, Kardia pumps are widely used by other International NGOs country wide.

**Activity 5.4. Construction and/or rehabilitation of 15 wells.**

IRC found no existing wells in the target areas that lent themselves to rehabilitation. Fifteen new wells were constructed, serving 6,958 persons. The results are presented in the table below.

No	Village	Chiefdom	Population	Wells Finished
1	Gbunabu	Gorama	1,041	2
2	Bagbwema	Sandor	661	1
3	Tormasadu	Sandor	423	1
4	Bayawandu	Sandor	770	2
5	Masundua	Sandor	1,140	3
6	Waidala	Sandor	1,119	2
7	Tefeya	Sandor	1,804	4
<b>Total</b>	<b>7</b>	<b>2</b>	<b>6,958</b>	<b>15</b>

**Activity 5.5. Train two caretakers per village in repair and maintenance of water Points.**

At the start of the construction activities, each participating community selected two Village Maintenance Caretakers (VMCs) who were to be responsible for future repairs and maintenance of the community water supply systems. In collaboration with government ministries, IRC organized workshops for the VMCs on water supply development techniques. Throughout the construction period, VMCs worked closely with IRC technicians, acquiring on-the-job training the process of building wells and installing pumps.

**Activity 5.6. Train one Village Water Committee (VWC) administrator per village in bookkeeping and record keeping.**

Village Water Committees (VWCs) were formed and trained in collaboration with National Commission for Social Action (NaCSA) and the MOHS. Each committee includes a Chairman, Vice chairman, Treasurer, Financial secretary, General Secretary, Well Caretaker, Latrine

Caretaker and Hygiene Promoter. VWC members partook in a three-day workshop covering the following topics:

- 1) Role of community leadership.
- 2) Finance and funds rising.
- 3) Community Mobilization techniques and.
- 4) Concept of ‘self help’, waterborne diseases, domestic and personal hygiene and environmental sanitation.

The workshop helped to emphasize the importance of maintaining proper environmental health facilities and hygiene practices.

***Activity 5.7 Raise community awareness regarding regular payment of fees for operation and maintenance.***

During the VWC workshops, members were taught about financing and fundraising strategies to ensure sustainability of the new wells and pumps. Operation and maintenance funds are generated differently in different communities; some communities raise money by levying fines on those that violate the bye-laws, others depend on community donations or occasional contributions.

***Activity 5.8 identify a spare parts distributor in Koidu and facilitate contact between the supplier, distributor and community caretakers.***

It was unfortunately not possible to identify a formal spare parts distributor. IRC contacted the country distributor and merchants in Kono, but none of the local merchants were interested in stocking items that may not be needed for years to come. However, three suppliers in Kono agreed to take the contact details of the importers and to contact them when spare parts are needed. MOHS and the local VWCs have been provided with the names of the suppliers that have agreed to act as middle men and will communicate with them when spare parts are needed.

***Activity 5.9 Assist the spare parts distributor in the set-up or change of his/her business.***

Since no spare part distributor agreed to keep Kardia pump parts in stock, no assistance with set-up could be given. However, three suppliers in Kono have the contact information of the supplier of spare parts and have agreed to order spare parts from Freetown on a case by case basis.

**Indicators:**

- 5.1 Communities selected using participatory methods: 7
- 5.2 Number of Village Water Committees established: 15
- 5.3 Number of VWC members trained: 150 (approx. 10 per village)
- 5.4 Number of wells rehabilitated: None.
- 5.5 Number of wells constructed: 15
- 5.6 Number of project sites to be serviced by the spare parts distributor: 7

**Objective 6: Improve the availability of latrines in the project villages to have at least one latrine for every 30 persons and to enable future replication of this intervention by the villagers themselves.**

***Activity 6.1. Construction of 350 pit latrines by the community and by providing durable and moveable latrine slabs.***

From within the 16 target communities, IRC identified cluster households in need of latrines, aiming to ensure at least one latrine for every 30 people. In collaboration with MOHS, IRC distributed the necessary material for the construction of 350 latrines and assisted the communities with latrine pit excavation and casting of concrete slabs. While all of the 350 latrine

slabs were cast and foundation work completed, some of the latrine superstructures, such as walls and roofing, had yet to be completed. In total 254 latrines are entirely completed, while the owners of the remaining 73 latrines have been provided with roofing sheets and nails and are in the process of finalizing the superstructures.

Village Hygiene Promoters and MOHS health inspectors held trainings for the latrine owners on the importance of making proper use of latrines.

Some of the latrines are allocated to villages funded by ECHO in Sandor chiefdom. This was explained in a letter sent on December 15, 2003 to the OFDA representative in Freetown. The table below details the allocation as well as the status:

*Final latrine construction status report*

No	Village	Chiefdom	Population	Latrines	Dug	Slab	Foundation	Walls	Finish
1	Gbunabu	Gorama	1,041	30	30	30	30	30	30
2	Bagbwema	Sandor	661	20	20	20	20	20	20
3	Tormasadu	Sandor	423	10	10	10	10	10	10
4	Bayawandu	Sandor	770	20	20	20	20	20	12
5	Masundua	Sandor	1,140	40	40	40	40	5	Nil
6	Waidala	Sandor	1,119	30	30	30	30	27	27
7	Tefeya	Sandor	1,804	50	50	50	50	25	20
8	Seidu	Sandor	545	20	20	20	20	10	5
9	Fensedu	Sandor	429	20	20	20	20	20	20
10	Kondeya	Sandor	396	20	20	20	20	20	20
11	Foemangadu	Sandor	557	20	20	20	20	20	20
12	Sormoya	Sandor	302	10	10	10	10	10	10
13	Fekiah	Sandor	965	20	20	20	20	20	20
14	Fandaa	Sandor	348	15	15	15	15	15	15
15	Dunamao	Sandor	355	15	15	15	15	15	15
16	Siakoro	Sandor	396	10	10	10	10	10	10
	<b>Total</b>		<b>10,590</b>	<b>350</b>	<b>350</b>	<b>350</b>	<b>350</b>	<b>277</b>	<b>254</b>

**Activity 6.2. Donate tools to the community.**

In previous experience, IRC found that tools for construction and maintenance of latrines did not last as long as anticipated. Therefore IRC lent tools to the communities for pit clearance and excavation. Once the construction was completed communities were provided with new kits, including tools such as shovels, pickaxes and matches, that can be used for future maintenance or construction of additional latrines.

**Indicators:**

6.1 Number of pit latrines constructed: 254 fully completed; 350 foundations laid and slabs cast.

6.2 Number of latrine maintenance toolkits distributed to recipient communities: 88 sets

**Objective 7: Improve the hygienic behavior of at least 70% of the population in the target villagers.**

**Activity 7.1 Train community members on hygiene promotion.**

In collaboration with MOHS and NaCSA, IRC organized workshops for the community based Environmental Health Committees. The main topics covered were hygiene promotion and the

importance of proper hygiene practices. The table below details workshop date, location, number of participants and percentages of male and female attendees.

Date	Community	Number of participants		% Attendance	
		Men	Women	Men	Women
10-12/12/04	Gbunabu	7	3	70	30
17-19/09/04	Tefeya	6	4	60	40
17-19/02/04	Weidala	6	3	66	34
24 -26/02/04	Fensedu	8	2	80	20
24 -26/02/04	Masunduwa	8	2	80	20
16 -18/02/04	Thomosidu	6	4	60	40
16-18 /02/04	Bayawadu	4	6	40	60
10-12/12/04	Siakoro	7	3	70	30
17-19/9/04	Dunamao	5	5	50	50
24-26/02/04	Faanda	5	5	50	50
24-26/02/04	Feikia	5	5	50	50
16-18/02/04	Somoya	7	3	70	30
16-18/02/04	Foemangadu	6	4	60	40
25-27/-2/-04	Kondeya	7	3	70	30
35-27/02/04	Seidu	6	4	60	40
<b>Totals</b>	<b>15</b>	<b>93</b>	<b>56</b>	<b>62.4</b>	<b>37.5</b>

***Activity 7.2 Develop hygiene promotion materials in conjunction with the IRC health staff, District Health Officer, and local health infrastructure.***

In collaboration with the DHMT and other health development bodies IRC produced hygiene promotion materials featuring simple drawings and diagrams depicting:

1. Sanitation at well sites
2. Common defects on hand pumps (above ground )
3. Common defects on hand pumps ( down-the-hole)
4. Operation and maintenance of hand pumps
5. Well site selection in relation to latrines, compost fences and hog pens
6. Use and maintenance on pit latrines
7. Preparation of ORS ( Oral Rehydration Salt)
8. Protection of water sources
9. Construction and use of plate racks, compost fences and clothes lines
10. Types of latrines suitable in the village setting

***Activity 7.3 Conduct participatory hygiene promotion sessions with different target groups in the communities.***

IRC hygiene promoters conducted different kinds of hygiene promotion sessions such as focus group discussions, school health talks and house to house sessions and making use of teaching methods such as postals, flip charts, story telling and role play. The sessions attracted people from many different walks of life; the school health talks targeted students and teachers, while sessions held in churches and mosques reached practicing Muslims and Christians. IRC found that the religious leaders (Imams and Pastors) were very interested and supportive of the project.

***Activity 7.4 Compare PRA survey with baseline survey to measure impact.***

Prior to hygiene promotion activities IRC conducted a KAP survey in order to measure the impact of the interventions. The survey covered topics such as ORS preparation, causes, prevention and control of diarrhoeal diseases and domestic and personal hygiene practices.

Another survey was conducted in July, 2004. The results showed significant increase in safe hygiene practices. *Annex 2* details the results of the survey.

**Indicator:**

7.1 Number of community members trained in hygiene promotion: 150

<b>Overall Performance of the Project</b>
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Overall the project was successful. Access to primary health care was improved by the construction of 13 Peripheral health units and the supply of drugs and medical consumables and equipments. Communities actively participated in the construction and management of the health centers, contributing to community ownership and sustainability of the health centers.

When the program began, there were no immunization activities in the supported communities and pregnant women would walk for miles to reach centers where immunizations were conducted. In collaboration with the MoHS, IRC trained community vaccinators and started the Expanded Program of Immunization which helped to vaccinate children throughout the region.

IRC also successfully established Oral Rehydration Therapy (ORT) corners in 162 villages. At these centers, blue flag volunteers from the communities help to diagnose and treat diarrhea using simple remedies such as Oral Rehydration Salts (ORS).

A total of 130 TBAs were trained and equipped with TBA kits and now safely conduct more than 55% of all the deliveries in the operational area.

To improve access to clean water and sanitation facilities, IRC undertook the construction of 15 wells and 350 latrines. Community members were trained to monitor and maintain the new structures, and IRC helped the VDCs to setup fund raising schemes to cover the maintenance costs.

The project promoted partnership and the concept of 'self help' thereby encouraging the beneficiaries to learn about identifying community health needs and plan to address those needs in a constructive and participatory manner.

Annex 1: Trainings conducted during Year I

QUARTER I							
DATE	PHU	GROUP	TOPIC	ATTENDANCE		TEST SCORES	
				VDC	TBA	PRE	POST
<b>HIV/AIDS and STI SENSITIZATIONS</b>							
9/12/2002	YEIKIOR	Students	STI	M=15 F=10	—	30	75
16/12/02	MASUNDU	Comm.Adults	„	40	10	41	72
8/1/2003	YENGEMA	Students	„	M=20 F=10	—	30	80
9/1/2003	MOTEMA	„	„	M=35 F=15	—	45	70
10/1/2003	KOEYOR	„	„	M=12 F=10	—	20	85
13/1/03	SAMIQUIDU	Comm.Adults	„	25	10	25	60
<b>REPRODUCTIVE HEALTH TRAININGS</b>							
10/12/2002	Yengema	Adults	Family Planning	10	18	30	80
16/12/02	Yeikior	Adult		8	12	45	80
„	Small Sefadu	Community Adults	„	10	10	40	80
17/12/02	Gbangadu	„	„	23	12	54	90
18/12/02	Small Sefadu	youths	„	20	—	60	90
„	Yengema	„	„	18	—	20	65
19/12/02	„	Community Adults	Community role in safe	2	14	48	80
„	Small Sefadu	„	„	15	10	50	90
20/12/02	Motema	„	„	12	8	35	72
	Koeyor	„	„	30	15	40	75
6/1/2003	Condama	„		20	10	45	80
7/1/2003	Yeikior	„	„	10	15	30	75
8/1/2003	Masundu	Adults	Anemia in pregnancy	20	10	35	80
9/1/2003	Ngarya	„	„	30	5	30	65
10/1/2003	Quidadu	Youth	„	32	—	45	85
13/1/03	Samiquidu	Adults	„	10	12	30	70
14/1/03	Sengekor	Youths	„	25	—	35	75
15/1/03	Small Sefadu	„	„	35	—	45	80
16/1/03	Gbangadu	Adults	Immunization in pregnancy	25	10	80	45
16/1/03	Seidu		„	10	5	40	70
<b>HEALTH TRAININGS</b>							
26.11	Gbangadu		Diarrhoea	32		70	86
			Malaria			60	75

20.12			Functions of the health committee.	11		55	70
			Importance of EPI			70	90
25.11	Yekior		Diarrhoea	50		49	72
			Malaria			60	61
16.12			Functions of the health committee	16		60	75
			Importance of EPI			70	90
27.11	Small safedu		Diarrhoea	32		70	90
			Malaria			60	90
17.12			Functions of the health committee.	20		70	95
			Importance of EPI			80	97
18.11	Masundu		Diarrhoea	39		68	90
			Malaria			60	85
17.12			Functions of the health committee.	13		65	90
			Importance of EPI			70	95
21.11	Yengema		Diarrhoea	19		70	90
			Malaria	19		60	90
17.12			Functions of the health committee.	12		70	95
			Importance of EPI	12		80	97
21.11	Ngaiya		Diarrhoea	13		65	90
			Malaria			60	85
18.12			Functions of the health committee.	13		65	85
			Importance of EPI			70	90
25.11	Motema		Diarrhoea	13		60	85
			Malaria			65	90
18.12			Functions of the health committee.	15		65	85
			Importance of EPI			70	95
28.11	Quidadu		Diarrhoea	34		60	90
			Malaria			58	85

18.12			Functions of the health committee.	17		60	85
			Importance of EPI			65	90
25.11	Koeyor		Diarrhoea	23		60	90
			Malaria			65	85
19.12			Functions of the health committee.	23		65	95
			Importance of EPI			70	95
27.11	Samiquidu		Diarrhoea	29		60	90
			Malaria			53	85
13.12			Functions of the health committee.	23		65	90
			Importance of EPI			80	95
18.11	Seidu		Diarrhoea	20		60	90
			Malaria			56	90
19.12			Functions of the health committee.	22		75	95
			Importance of EPI			70	95
19.11	Condoma		Diarrhoea	41		60	90
			Malaria			60	85
16.12			Functions of the health committee.	17		65	85
			Importance of EPI			70	95
19.11	Sengikoro		Diarrhoea	25		60	90
			Malaria			65	90
20.12			Functions of the health committee.	25		70	95
			Importance of EPI			75	97

## QUARTER II

**NUMBER OF ATTENDEES AT HEALTH EDUCATION TRAININGS IN THE PHUs  
broken down by male/female participants**

	Feeding and weaning		STD/HIV		Disease Prevention	
	M	F	M	F	M	F
<i>Community</i>						
<i>Masundu</i>	9	40	17	33	81	57
<i>Ngaiya</i>	8	34	24	24	57	35
<i>Yeakior</i>	14	29	1	13	72	56
<i>Sengekoro</i>	13	40	42	44	81	52
<i>Condama</i>	12	38	15	44	58	38
<i>Quidadu</i>	0	29	16	27	44	51
<i>Seidu</i>	18	34	14	30	46	11
<i>Yengema</i>	14	39	28	54	60	82
<i>Motema</i>	8	23	43	38	61	75
<i>Gbangadu</i>	11	27	13	28	61	45
<i>Samiequedu</i>	27	39	47	37	69	58
<i>Small Sefadu</i>	15	36	14	72	58	68
<i>Koeyor</i>	7	35	27	37	56	35
<b>Total</b>	156	443	301	481	804	688

### QUARTER III

**NUMBER OF ATTENDEES AT HEALTH EDUCATION TRAININGS IN THE PHUs  
broken down by male/female participants**

	Feeding and weaning		STD/HIV		Disease Prevention	
	M	F	M	F	M	F
<b>Community</b>						
<i>Masundu</i>	12	44	12	27	75	47
<i>Ngaiya</i>	20	50	12	27	38	34
<i>Yeakior</i>	16	40	9	38	57	19
<i>Sengekoro</i>	5	22	3	27	85	59
<i>Condama</i>	5	27	6	32	39	40
<i>Quidadu</i>	5	14	10	28	44	59
<i>Seidu</i>	8	34	1	31	18	6
<i>Yengema</i>	11	22	5	25	42	58
<i>Motema</i>	12	63	7	72	43	35
<i>Gbangadu</i>	9	32	12	27	43	44
<i>Samiequedu</i>	5	19	9	16	42	40
<i>Small Sefadu</i>	5	13	16	38	53	69
<i>Koeyor</i>	3	33	3	37	57	45
<b>Total</b>	<b>116</b>	<b>413</b>	<b>105</b>	<b>425</b>	<b>636</b>	<b>555</b>

Community	Antenatal care		Fee for service		Other topics	
	Male	Female	Male	Female	Male	Female
Masundu	7	29	6	4	5	23
Ngaiya	14	34	4	4	6	22
Yeakior	7	28	6	4	0	7
Condama	4	40	4	4	1	23
Quidadu	10	26	4	4	4	7
Seidu	1	23	4	4	2	31
Yengema	11	22	6	6	0	18
Motema	7	72	6	4	0	12
Gbangadu	7	33	6	4	3	22
Samiequedu	11	35	6	4	5	14
Small Sefadu	6	25	6	4	3	20
Koeyor	3	44	4	4	0	29
<b>Total</b>	<b>88</b>	<b>411</b>	<b>62</b>	<b>50</b>	<b>29</b>	<b>228</b>

#### QUARTER IV

##### NUMBER OF ATTENDEES AT HEALTH EDUCATION TRAININGS IN THE PHUs broken down by male/female participants

Community	Feeding and weaning		STD/HIV		Disease Prevention	
	M	F	M	F	M	F
Masundu	16	17	27	30	39	30
Ngaiya	2	18	37	46	12	19
Yeakior	10	20	18	19	16	17
Sengekoro	23	34	22	26	37	31
Condama	21	49	25	47	14	12
Quidadu	12	23	42	52	37	44
Seidu	14	11	45	23	16	11
Yengema	2	2	34	43	35	51
Motema	14	47	34	71	75	86
Gbangadu	8	41	43	57	170	140
Samiequedu	14	38	52	25	19	26
Small Sefadu	10	44	23	55	19	21
Koeyor	13	23	22	38	33	129
<b>Total</b>	<b>159</b>	<b>367</b>	<b>424</b>	<b>532</b>	<b>522</b>	<b>617</b>

Community	Antenatal care		Cost Recovery		Other topics	
	Male	Female	Male	Female	Male	Female
Masundu	11	11	3	1	0	0
Ngaiya	19	44	2	2	0	0
Yeakior	5	0	2	2	0	0

<i>Condama</i>	12	75	2	2	0	0
<i>Quidadu</i>	16	29	3	1	0	0
<i>Seidu</i>	22	59	2	2	0	0
<i>Yengema</i>	12	27	0	0	0	0
<i>Motema</i>	4	33	2	2	0	0
<i>Gbangadu</i>	12	47	2	2	0	0
<i>Samiquidu</i>	8	41	2	2	0	0
<i>Small Sefadu</i>	22	85	2	2	0	0
<i>Koeyor</i>	6	26	3	1	0	0
<b>Total</b>	<b>149</b>	<b>477</b>	<b>25</b>	<b>19</b>	<b>0</b>	<b>0</b>

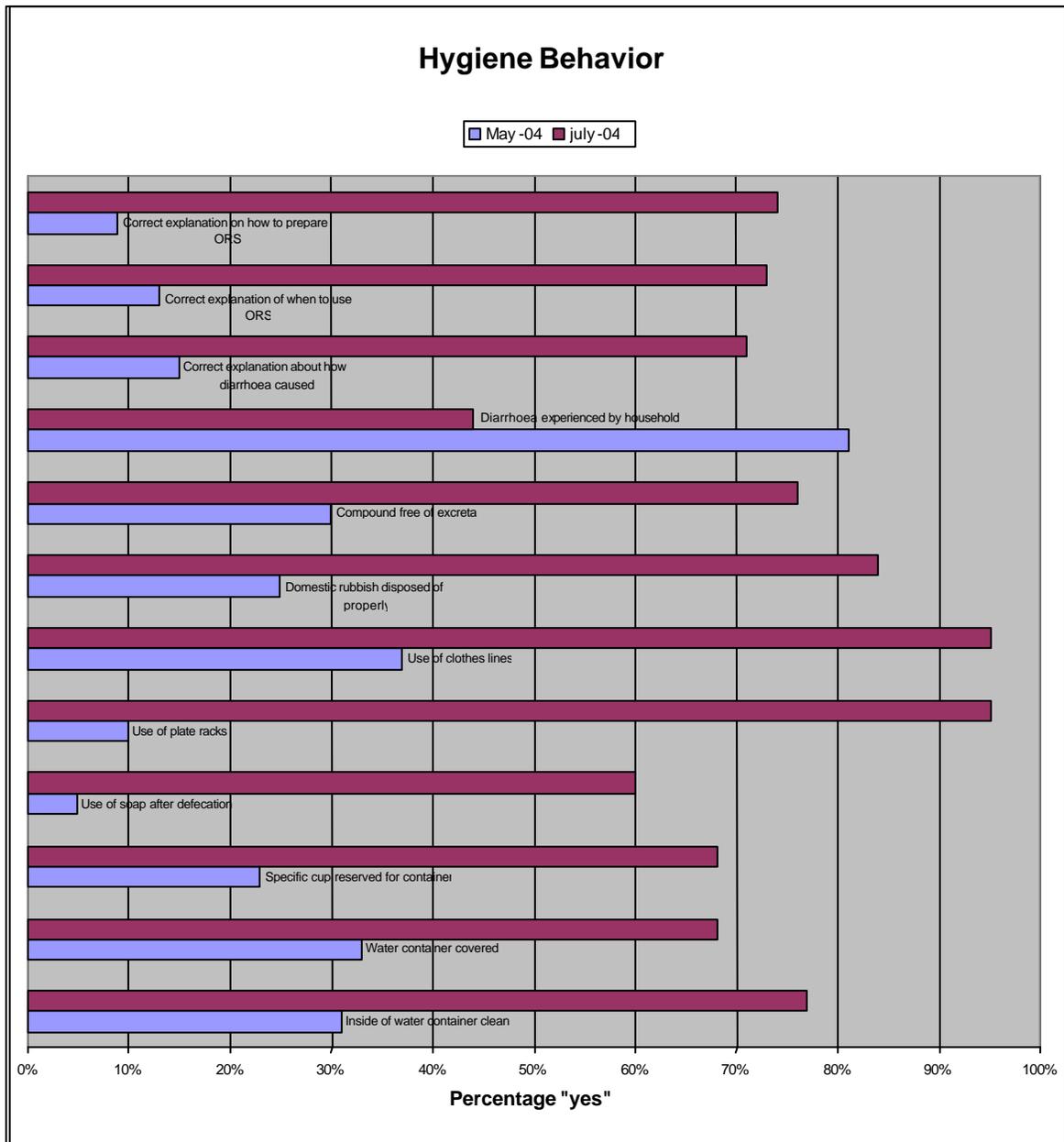
**Annex 2a: Results of 2 Participatory Rural Appraisal (PRA) surveys on Hygiene Behavior**

The surveys were undertaken in May and July 2004, each covering over 304 households in 16 villages.

<b>Behavior</b>	<b>May “Yes” Response</b>	<b>July “Yes” Response</b>
Inside of water container clean	31%	77%
Water container covered	33%	68%
Specific cup reserved for container	23%	68%
Use of soap after defecation	5%	60%
Use of plate racks	10%	95%
Use of clothes lines	37%	95%
Domestic rubbish disposed of properly	25%	84%
Compound free of excreta	30%	76%
Diarrhoea experienced by household	81%	44%
Correct explanation about how diarrhoea caused	15%	71%
Correct explanation of when to use ORS	13%	73%
Correct explanation on how to prepare ORS	9%	74%

Note: May is prior or at commencement of wet season, while July is in middle of wet season, people during wet season collect a lot more rain water.

**Annex 2b: Bar Graph of 2 Participatory Rural Appraisal (PRA) surveys on Hygiene Behavior**



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