



“Reducing HIV/AIDS Transmission and Improving Related Reproductive Health Practices in southern Sudan: a Pilot Project”

OFDA Cooperative Agreement HAD-A-00-01-00127-00 Final Report
Submitted to the Office of Foreign Disaster Assistance (OFDA)



In Cooperation with Operational Partners:

International Rescue Committee (primary implementing partner), the Women’s Commission for Refugee Women and Children, Columbia University, Johns Snow Inc, Centers for Disease Control and Family Health International



FINAL PROJECT REPORT for:

“Reducing HIV/AIDS Transmission and Improving Related Reproductive Health Practices in southern Sudan: a Pilot Project”

OFDA Cooperative Agreement HAD-A-00-01-00127-00

Report for the Period of October 2002 to October 15, 2003

Submitted to the Office of Foreign Disaster Assistance (OFDA)

January 15, 2003

By

American Refugee Committee (ARC)

ARC would like to acknowledge the contribution of the International Rescue Committee, as an implementing partner, and the other operational partners, the Women's Commission for Refugee Women and Children, Columbia University, John Snow Training and Research Institute Inc, Centers for Disease Control, and Family Health International for their outstanding contribution and dedication to the project. Each organization played a unique and invaluable role in contributing to reducing the transmission of HIV and improving related reproductive health services for the people of Southern Sudan

TABLE OF CONTENTS

Acronyms and Abbreviations

I.	Executive Summary	2
II.	Program Overview	3
	A. Goals and Objectives	3
	B. Geographic Locations of Program Activities	4
	C. Profile of Target Population.....	4
	D. Program Approach and Implementation Process.....	5
III.	Program Performance	11
	A. Key Activities during Design Phase	11
	Objective 1	11
	B. Implementation Strategies for Objectives 2 and 3.....	13
	B1. BCC.....	13
	B2. STI Services	20
	B3. VCT Services	25
	B4. Condom Distribution.....	29
	B5. Capacity Building and Training	31
	B6. Indicator Tables for Final Quarter and LOP	32
	C. Partner Program Performance.....	34
	C1. Columbia University	34
	C2. FHI	35
	C3. JSI.....	35
	C4. University of Minnesota.....	36
	C5. Women’s Commission for Refugee Women and Children	36
	D. Monitoring and Evaluation	38
	E1. M&E System and Forms	38
	E2. CDC Seroprevalence and Behavioral Survey.....	40
	E3. Program Review	46
IV.	Conclusions and Findings	47
	A. Constraints and Challenges.....	47
	B. Lessons Learned.....	49
	B1. BCC.....	49
	B2. STI.....	50
	B3. VCT.....	50
	B4: Condom distribution.....	51
	B5: Partnerships	51

ANNEXES

- 1: Map of Yei and Rumbek Program Areas
- 2: Yei Rapid Assessment Report
- 3: Rumbek Rapid Assessment Report
- 4: Yei Health Facility Assessment Report
- 5: Yei Logistics Assessment Report
- 6: Rumbek Health Facility Assessment Report
- 7: Behavior Change Communications (BCC) Formative Assessment Guide
- 8: Yei Behavior Change Formative Assessment Report
- 9: Rumbek Behavior Change Formative Assessment Report
- 10: HIV, Syphilis and Herpes Simplex-2 Seroprevalence and Behavioral Risk Factor Survey
- 11: Detailed Implementation Plan
- 12: FHI BCC Strategy Development Training Manual
- 13: Key Messages and BCC Matrix
- 14: Peer Educator Selection Criteria
- 15: Peer Educator Training Manual (ARC)
- 16: Peer Educator Training Manual for Uniformed Services (IRC)
- 17: Materials Developed
- 18: List of Videos
- 19: STI Training Manual (**Hard copy only**)
- 20: Logistics Management Training Manual
- 21: STI Commodities Register and Monthly Report Form
- 22: New Sudan National AIDS Policy (**Hard copy only**)
- 23: VCT Guidelines, Forms and Protocols
- 24: CDC/Kenya VCT Counselor Training Manual
- 25: VCT Formative Research Summary
- 26: New Sudan National AIDS Council HIV/AIDS Workshop Report (**Hard copy only**)
- 27: Peer Educator (PE) Monitoring Forms/STI Monthly Tracking Forms
- 28: Behavioral and Seroprevalence Survey Protocol-Yei
- 29: Behavioral and Seroprevalence Survey Protocol-Rumbek
- 30: Program Review Report

ACRONYMS AND ABBREVIATIONS

AAH	Aktion Africa Hilfe
AIC	AIDS Information Center
ANC	Antenatal Care
ARC	American Refugee Committee
BCC	Behavior Change Communication
BCC CMO	Behavior Change Communication Community Mobilization Officers
CBO	Community-Based Organization
CCM	Doctors for Developing Countries
CDC	Centers for Disease Control and Prevention
DIP	Detailed Implementation Plan
FHI	Family Health International
HCP	Health Care Provider
HIS	Health Information System
ICASA	International Conference on AIDS and Sexually Transmitted Infections in Africa
IERHB	International Emergency and Refugee Health Branch
INGO	International Non-Governmental Organization
IRC	International Rescue Committee
JSI	John Snow Incorporated
LMIS	Logistics Management Information System
LOP	Life of Project
MCHW	Maternal and Child Health Worker
MOH	Ministry of Health
MOU	Memorandum of Understanding
NGO	Non-Governmental Organization
NPA	Norwegian People's AID
NSNAC	New Sudan National AIDS Council
OFDA	Office of Foreign Disaster Assistance
OI	Opportunistic Infection
OLS	Operation Lifeline Sudan
PE	Peer Educator
PHCC	Primary Health Care Center
PHCU	Primary Health Care Unit
PLA	Participatory Learning and Action
PLHA	People Living with HIV/AIDS
PVO	Private Voluntary Organization
RH	Reproductive Health
RHRC	Reproductive Health for Refugees Consortium
RPR	Rapid Plasma Reagent
SMC	Sudan Medical Care
SRRC	Sudan Relief and Rehabilitation Commission
STI	Sexually Transmitted Infection
TB	Tuberculosis
TBA	Traditional Birth Attendant
UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
WOM	Way Outreach Ministries

I. EXECUTIVE SUMMARY

Program Location	Southern Sudan -Yei River County, Eastern Equatoria -Rumbek County, Bahr El Ghazal
Problem Statement	Prolonged Civil Conflict causing a complex emergency situation resulting in inadequate primary health care, with no specific infrastructure to adequately address preventative measures for the reduction of HIV/AIDS transmission and the promotion of related Reproductive Health practices
Number of Beneficiaries	205, 000
Program Goal	To develop and implement appropriate strategies for reducing the transmission of HIV and improving related reproductive health services in southern Sudan.
Clarification Statement	Related reproductive health services refers to those services that can be integrated with HIV/AIDS prevention in order to enhance the effectiveness of those services and make service delivery more efficient.
Program Objectives	<p>Objective 1: Project Design-An HIV/AIDS prevention Project is designed, using a participatory approach inclusive of all stakeholders, to produce a Detailed Implementation Plan (DIP) to reduce HIV transmission rates and promote safe sex and appropriate Reproductive Health Practices at selected pilot sites in southern Sudan.</p> <p>Objective 2: To increase a demand for and access to HIV/STI and related reproductive health services and to promote safe sex and appropriate reproductive health practices by the population in the pilot sites in Rumbek and Yei Counties.</p> <p>Objective 3: To improve capacity of Rumbek and Yei River County Health Departments (CHDs) to support delivery of key and quality HIV/STI and related reproductive health services.</p>
Local Partners	New Sudan National Aids Council, Malteser, Action Africa Hilfe (AAH), Diakonie, Doctors for Developing Countries (CCM), Malteser, County Health Departments (CHD) and Sudan Relief and Rehabilitation Commission (SRRC)
Start Date	October 1, 2002
End Date	October 15, 2003
Funding	US \$ 1,785, 545 from Office of Foreign Disaster Assistance
USAID Mission Representative	Nancy Egbert, RN, MPH Emergency Public Health Specialist United States Agency for International Development (USAID)/OFDA
Main Authors of Document	Laura Moch, Reproductive Health Field Officer, ARC Eric Kagame, Reproductive Health Program Manger, ARC Paula Dickey, Country Director, ARC Uganda/Sudan Basilica Keji, Reproductive Health Field Officer, IRC
Contact Person	David Hassell Africa Regional Manager ARC International 430 Oak Grove Street #204 Minneapolis, MN 55403

II. PROGRAM OVERVIEW

Due to the protracted civil war in Sudan, millions of people have been displaced internally and into the neighboring countries. This has led to a general disruption of social structures, norms, and infrastructure for services such as education and health throughout southern Sudan. The ongoing civil war, cross border movements, poor literacy levels, low level of health awareness, poorly developed health systems, lack of resources, and certain cultural practices in southern Sudan have created an environment favorable for the transmission of communicable diseases including HIV/AIDS and other Sexually Transmitted Infections (STIs). In April 2001, recognizing this threat, the Sudanese People's Liberation Movement (SPLM) developed an HIV/AIDS policy to serve as a framework for their response to HIV/AIDS in southern Sudan. Despite this commitment at a higher level there continues to be limited internal capacity in southern Sudan to develop strategies aimed at reducing the transmission of HIV.

With support from the Office of Foreign Disaster Assistance (OFDA), the American Refugee Committee (ARC) and International Rescue Committee (IRC), in collaboration with the Centers for Disease Control and Prevention (CDC), Columbia University, Family Health International (FHI), John Snow Inc. (JSI), University of Minnesota, and the Women's Commission for Refugee Women and Children implemented an HIV/AIDS Pilot Project with the aim of designing and implementing interventions and strategies based upon a series of baseline assessments. The pilot project was initially designed for implementation over a period of 18 months, October 2001 to March 2003 however, due to a number of constraints to completing the objectives of the project, OFDA granted the project a no-cost extension for an additional six months, through October 15, 2003.

A. GOALS AND OBJECTIVES

Program Goal: To develop and implement appropriate strategies for reducing the transmission of HIV and improving related reproductive health services in southern Sudan.

Clarification Statement: Related reproductive health services refers to those services that can be integrated with HIV/AIDS prevention in order to enhance the effectiveness of those services and make service delivery more efficient.

Objectives:

Objective 1: Project Design-An HIV/AIDS prevention Project is designed, using a participatory approach inclusive of all stakeholders, to produce a Detailed Implementation Plan (DIP) to reduce HIV transmission rates and promote safe sex and appropriate Reproductive Health Practices at selected pilot sites in southern Sudan.

Objective 2: To increase demand for and use of key reproductive health services, and adoption of safer sexual practices by the population in the pilot sites in Rumbek and Yei Counties.

Objective 3: To Improve capacity of Rumbek and Yei River County Health Departments (CHDs) to support delivery of key and quality reproductive health services.

B. GEOGRAPHIC LOCATION OF PROGRAM ACTIVITIES

ARC implemented program activities in Yei, Ottogo and Morobo Payams of Yei River County. These Payams are located between Yei Town, administrative capital of the Equatorial Region, and the Uganda/Sudan border within one- to 4-hours driving distance from Yei town. Yei Town is the administrative center of both Yei River Country and the Equatoria Region. Yei County is the main gateway into southern Sudan from the East African countries and some limited traffic from Congo.

IRC implemented program activities in Rumbek Payam, Rumbek County, and Lakes Region of the greater Bahr El Ghazal Region and focused its activities in Rumbek Town and villages within an approximate 10-mile radius, including a military garrison 8 miles from town. Rumbek Town is the administrative capital of Rumbek County and the main political center of southern Sudan. Since the SPLA regained control of Rumbek in 1997, the town has become a hub for relief operations and trade. Rumbek Town is situated on a major transportation artery that runs from the border of Uganda, through Yei, and then northwards to Thiet and Ajip. See **Annex 1** for Map of Yei and Rumbek Program Areas.

C. PROFILE OF TARGET POPULATION

Population size

The target population includes people of reproductive ages between 15-49 years. In Yei River County, the estimated population residing in the pilot areas is 105,000 with an estimated 25,000 women between the ages of 15-49. In Rumbek Payam, population is approximately 100,000.

Population groups

The people of Yei River County are mainly Bari-speaking ethnic Kakwa, Pojulu, Kaliko, Baka, Adio, Avukaya, Mondu, and the Lugwara. There are also Dinka communities who were displaced as a result of the war. Traditionally communities in Yei County are settled in extended families or clan structures in units known as *Boma*, which is also the smallest civil administrative unit. A group of Bomas makes up a Payam; and Payams constitute a county.

The economy of Yei County is based mainly on crop production, including cassava, simsim, sorghum, finger millet, maize, groundnuts, cowpeas, beans, rice, green vegetables, onions, and okra. While the county is food sufficient, productivity in the area is limited by the lack of access to markets as a result of the poor transport infrastructure. Cattle are reared only in Ottogo, Lainya, and Morobo Payams due to livestock disease in the other areas, but sheep and goats are found in all the Payams.

In Rumbek, the local population is comprised primarily of the Dinka Agar tribe. There are also many other southern Sudanese, especially from the Equatoria regions, that have come to Rumbek in search of economic opportunity and jobs with relief agencies, military personnel from various parts of southern Sudan, and expatriate and host country national relief workers. Rumbek is the headquarters of the SRRC and will be the seat of the New Sudan National AIDS Council.

The population of Rumbek Town and villages in the area fluctuate according to the seasons. The local population is primarily agro-pastoralist and moves from their villages during the dry season in search of water and grass for their cattle. During the rainy season, people

return to their villages to cultivate grains and produce. Cattle and livestock trade and home-brewed alcohol are major contributors to the economy. Market trade (household goods, food stuffs, second hand clothes) is also on the rise and there are some small businesses (bicycle repair, furniture making, building rehabilitation and construction).

D. PROGRAM APPROACH AND IMPLEMENTATION PROCESS

The ARC/IRC program used a participatory partnership approach in its design, monitoring, and evaluation activities. ARC, as the main grant holder, collaborated with both external International Non-Governmental Organizations (INGOs) as well as in-county local NGO partners. INGOs provided specific technical assistance to the project in key areas of monitoring and evaluation, seroprevalence and behavioral surveys, qualitative research and behavior change communication strategy development, Logistics Management and capacity building and advocacy support for the New Sudan National AIDS Council (NSNAC).

D1. External Partners (INGOs)

Partner	Main Role
Centers for Disease Control and Prevention (CDC)	Technical assistance in conducting cross-sectional baseline assessments of the prevalence of HIV and other related diseases, as well as assessments on knowledge, attitudes and behavioral practices regarding HIV transmission in the general population in general household based surveys in both Yei and Rumbek
Columbia University	Technical assistance with programming for monitoring and evaluation
Family Health International (FHI)	Advise in a key area of program implementing strategy, namely Behavior Change Communications
John Snow Inc (JSI)	Technical assistance with design of the systems and processes for procurement and distribution of reproductive health (RH) supplies and material, conduct relevant training of trainers for logistics staff to effectively procure and distribute the supplies and materials
New Sudan National AIDS Council (NSNAC)	Main national counterpart, participate in the design and implementation of the program to ensure incorporation of national priorities
University of Minnesota	Technical assistance with behavioral assessments within the target population, ethical considerations of the project, as well as participate in the ongoing project planning and development
Women’s Commission for Refugee Women and Children	Assist the local authority New Sudan National Aids Council to develop comprehensive, proactive Reproductive Health Policies and Standards and to provide training in RH Advocacy to promote awareness of displaced women, children and adolescents

D2. In-country Partners

At the field level, ARC/IRC partnered with NGOs, formal health service agencies, community groups, health facilities, and training institutions in order to strengthen their ability to provide preventive, curative, community and facility-based HIV/AIDS prevention and care services. Selected reproductive health and HIV/AIDS interventions were integrated as much as possible into the established roles of these partners. The project collaborated with local partners such as the Sudan Rehabilitation and Relief Commission (SRRC), Women's associations, Youth associations, religious institutions, music and drama troupes, and traditional practitioners and other informal care providers and commodity distributors (traditional birth attendants (TBAs) traders, pharmacists, and drug vendors).

Partner	Main Role
Yei	
Aktion Africa Hilfe (AAH)	-Participation of Health Care Providers (HCPs) from Primary Health Care Centers (PHCCs) in training and implementation of STI syndromic management, Logistics Management, and HIV/AIDS sensitization of community leaders -Provision of selected facility-based reproductive health services at PHCCs
Malteser	-Through St. Bakhita's Health Services Outpatient Department -Referring tuberculosis (TB) patients to voluntary counseling and testing (VCT) services for HIV testing -TB screening for HIV positive clients referred from VCT sites -Establishment of HIV sentinel surveillance site through ANC syphilis and STI patient screening -Participation of HCPs in training and implementation of STI syndromic management
Sudan Medical Care (SMC)	-Participation of HCPs from PHCCs in training and implementation of STI syndromic management and Logistics Management
Norwegian People's AID (NPA)	-Provision of space for the establishment of the first VCT service site on the premises of Yei Civil Hospital -Participation of HCPs in training and implementation of STI syndromic management -Provision of laboratory space for ARC and partners during household and seroprevalence survey
Way Outreach Ministries (WOM)	-Participation of HCPs from PHCCs in training and implementation of STI syndromic management -Participation in VCT mobile Services (Kaya)
County Health Department (CHD)	-Participated in training in Logistics Management

Rumbek	
Diakonie Emergency Aid	-Integration of VCT into their Rumbek town PHCC -Participation of HCPs in training and implementation of STI syndromic management in PHCC and Primary Health Care Units (PHCU) -Implementation of routine syphilis screening and partner notification as a part of ANC in target area PHCC and PHCU -Participation of HCPs in Behavior Change Communication (BCC) orientation workshop for HIV/AIDS education
Malteser/Diocese of Rumbek	-TB screening for HIV positive clients referred from VCT sites -Participation of HCPs in training for STI syndromic management -Participation of HCPs in BCC orientation workshop for HIV/AIDS education
Rumbek County Referral Hospital (CCM)	-Participation of HCPs in training for STI syndromic management -Participation of HCPs in BCC orientation workshop for HIV/AIDS education
County Health Department	-IRC provided support in Health Information System (HIS) design and monitoring
United Nations Children's Fund (UNICEF)	-IRC and UNICEF jointly provided support and training to rural entertainment troupes

D3. Approach

The first phase of the project involved project design and development of a detailed implementation plan based on research into the current health services available, the needs of the target population, and to identify target audiences, risk behaviors, and prevalence of HIV and related STIs.

Research and Design Phase

Qualitative and quantitative assessments and surveys were conducted through consultations with community leaders, community members, key stakeholders, civil authorities and target groups in the program areas during the first 7 months of implementation. Major Assessments planned for the initial phase included a Rapid Assessment, Health Facility Assessment, Behavior Change Formative Assessment and Behavioral and Seroprevalence Survey

The rapid assessment was conducted to gain an understanding of current activities in Yei and Rumbek with a focus on reproductive health programs and HIV/AIDS (awareness raising, blood screening, STI management, training, advocacy), communication materials produced, and plans for the future. ARC/IRC interviewed key informants including civil authority leaders from SPLM, SRRC, religious leaders, women's groups, local NGOs, health workers, and various groups known to be at a higher risk of HIV and STIs, e.g. youth, commercial sex workers and their clients, long distance truck drivers, the military, and displaced populations. The methods used were ethnographic research, mapping, and site inventories. See **Annex 2 and 3** for Rapid Assessment reports from Yei and Rumbek Counties.

A health facility assessment was conducted to determine the level and breadth of patient care given to people with STIs at primary health care facilities and private clinics in both Yei and

Rumbek. Specific assessments were made on STI and HIV/AIDS knowledge and training of health care practitioners, use and disposal of needles at facilities, availability of STI drugs and contraceptives, community health promotion, and record keeping. Methods used were interviews of health care practitioners and drug sellers, and a review of monthly reports, facility records and direct observation. See **Annex 4, 5 and 6** for Logistics and Health Facility Assessment reports for Yei and Health Facility Assessment report for Rumbek.

A qualitative Behavioral Formative assessment was conducted with assistance from FHI in order to establish a better understanding of knowledge, attitudes and behaviors in the target population in relation to HIV/AIDS and STDs, to use this information, combined with existing demographic, clinical record and secondary source information to guide a BCC strategy, and to provide information to help guide planning for the HIV and reproductive health program. Methods used were focus group discussions, in-depth interviews, and participatory learning and action (PLA) techniques. See **Annex 7** for the BCC Formative Assessment Guide utilized by the project, and **Annex 8 and 9** for BCC Formative Assessment reports from Yei and Rumbek.

A quantitative Behavioral and Seroprevalence Survey contributed insight into the knowledge, attitudes and practices of the general population and the highest risk groups for HIV infection. The quantitative survey provided seroprevalence data on HIV, Syphilis and Herpes Simplex-2, although the survey had to be implemented later in the Life of Project (LOP) than planned. Populations between ages of 15-49 years were sampled as well as STI patients, women attending Antenatal Care (ANC) and the military. See section E of this report for more details on the survey methodology and **Annex 10** for preliminary results from the Yei and Rumbek studies.

Summary of Findings

Findings from the assessments include high rates of STIs, poor STI symptom-recognition and treatment-seeking behavior, early sexual initiation, widespread practice of traditional rites involving blood exchange, polygamy and widow inheritance. Traditional practitioners are widely utilized. Conflict triggering forced migration, disturbances in community structures/cultural norms, increased gender-based violence, increased sexual mixing within South Sudan and high-prevalence neighboring countries, and decreased accessibility to services. High-risk groups identified as military, youth, traders, women without male protection and women traders, transport, customs and relief workers. Condoms are not regularly used or widely available. HIV/AIDS efforts limited to general population awareness raising. Awareness of HIV/AIDS was higher in Yei, however, in both specific knowledge of transmission/prevention was lacking and misconceptions common. Discriminatory attitudes towards people living with HIV/AIDS (PLHA) were expressed, particularly among military. No standardized STI protocols were in use by health facilities, health personnel had little/no training in STI management, counseling, or universal precautions. Laboratory services were weak or non-existent, drug supplies inconsistent. Syphilis screening for pregnant women, family planning, and VCT services were unavailable. The majority of the population is illiterate and employment opportunities and media resources few. Communities were eager for more information about HIV/AIDS, improved reproductive health and VCT services. The preliminary quantitative results from Yei showed that HIV prevalence in general was 2.7 % in the Yei program area, with a significantly higher prevalence of 4.2% found in Yei town. In Rumbek, results from the preliminary field analysis showed a prevalence of 0.4%. In both Yei and Rumbek, HIV prevalence among women attending ANC was 2.3%.

Development of DIP

The initial assessment phase of the project culminated in a Detailed Implementation Plan (DIP) meeting in Entebbe Uganda, which brought together community leaders, project partners, and key potential collaborating agencies from Rumbek and Yei to contribute to the design of the implementation plan for the remainder of the project. Participants reviewed findings from the assessment phase to develop strategies that focused on BCC with high-risk groups, condom distribution, strengthening STI services, training traditional practitioners in universal precautions, establishing VCT with supporting services, reinforcing health information systems, social mobilization, and advocacy with community leaders. See **Annex 11** for DIP document.

Implementation Phase

After the design and assessment phase was completed, the ARC/IRC program focused on the following key intervention areas of **behavior change communication (BCC), STI service delivery, VCT service delivery, and condom distribution.**

BCC was used to stimulate community dialogue, promote advocacy, increase knowledge, address risk behaviors, reduce stigma and discrimination of people infected with HIV and other STIs, and promote services for prevention, care and support. The project focused on reaching primary audiences (Women traders, Youth in School, Youth out of School and Military) and secondary audiences (religious leaders, community leaders, drug vendors, TBAs, and Maternal Child Health Workers (MCHWs) through a variety of communication channels.

The project improved the quality of and access to selected reproductive health services, primarily STI services, including antenatal syphilis screening and partner notification strategies by working through four health centers and by distributing free condoms through a condom distribution system. The project trained Health Care Providers (HCPs) in Syndromic treatment of STIs and provided drugs to the locations and conducted surveillance for HIV and Syphilis.

The project trained VCT counselors and established two VCT testing centers within the existing health systems, as well as mobile VCT services in Yei County. A condom distribution system was established through peer educators and fixed distribution points which gave out free condoms. Fixed sites included health centers, lodges, bars, restaurants and clubs.

Finally, the project built the capacity of southern Sudanese partners to mitigate the HIV/AIDS epidemic through trainings and workshops and involving them in the design, implementation and supervision of the project activities. Advocacy, training and support for the NSNAC was given. See *Table 1* for a timeline of major activities during the LOP.

Table 1: Timeline for Implementation and Major Tasks Completed

Major Activity	Time Period Completed	INGO/NGO Responsible
Hiring of Staff	October 2001 to January 2002	ARC/IRC
Stakeholders Conference	January 2002	ARC/IRC
Rapid Assessment	February to March 2002	ARC/IRC
Target Audiences Identified	February to July 2002	ARC/IRC
VCT Counselor Training	May 2002	ARC/IRC, AIDS Information Center (AIC)
NSNAC Formed	May 2002	ARC/IRC/Women's Commission
Behavior Change Formative Assessment	May to July 2002	ARC/IRC, FHI
Logistics/Health Facility Assessment	June to July 2002	ARC/IRC, JSI, Columbia University
Detailed Implementation Plan Development	August 2002	ARC/IRC, FHI, CDC, Women's Commission, JSI, Columbia University, NSNAC
NSNAC HIV/AIDS Advocacy Workshop	August 2002	ARC/IRC, Women's Commission
STI Syndromic Management Training	September 2002	ARC/IRC, Makerere University
Behavior Change Strategy Development Workshop	October 2002	ARC/IRC, FHI
VCT Service Establishment	October 2002 (Yei) February 2003 (Rumbek)	ARC/IRC
Behavioral and Sero-prevalence Survey	November 2002 to January 2003 (Yei) March to April 2003 (Rumbek)	ARC/IRC, CDC
BCC Materials Development	November 2002 to April 2003	ARC/IRC, FHI
Training of Peer Educators	December 2002 to July 2003	ARC/IRC
Logistics Management Training	May 2003	ARC, JSI
Program Review	July 2003	ARC/IRC, Columbia University

III. PROGRAM PERFORMANCE

A. OBJECTIVE 1 (PROJECT DESIGN)

Objective 1: An HIV/AIDS prevention Project is designed, using a participatory approach inclusive of all stakeholders, to produce a Detailed Implementation Plan (DIP) to reduce HIV transmission rates and promote safe sex and appropriate Reproductive Health Practices at selected pilot sites in Southern Sudan.

A1. Key Activities for Design Phase

The project design process took place between October 2001 and August 2002. This phase of the project involved completion of assessments, meeting with stakeholders such as the Health Secretariat of the SPLM and NSNAC, and development of Memoranda of Understanding (MOUs) with local partners. This phase culminated in the development of a DIP document that was a product of collaboration with community members, project partners, and collaborating agencies.

Activities	Methodology/Response
1) Coordinate meetings of all stakeholders	<ul style="list-style-type: none"> ▪ Project launching Stakeholders Meeting organized for 60 participants in January 2002 ▪ Introductory meetings held with Civil Authorities and community leaders in Yei and Rumbek in February 2002 ▪ Inclusive e-mail, meeting and correspondence network with regional and international partners throughout design phase developed and maintained. ▪ Visits coordinated for all external partners and international experts involved in the design phase including CDC, FHI, JSI and Columbia University. ▪ Detailed project design meeting organized for 40 key stakeholders, international and local partners, Civil Authorities, donors and counterparts to complete the project design phase in July 2002, outputs collated and disseminated, and DIP completed.
2) Research and Information collection from existing African HIV/AIDS and RH Programs, as well as UNAIDS, USAID, World Health Organization (WHO), CDC and Reproductive Health for Refugees Consortium (RHRC)	<ul style="list-style-type: none"> ▪ Ongoing. All sources contacted and information and research collected. ▪ Numerous web sites, e-mailing networks and Internet sources accessed. ▪ Ongoing program, research and dissemination exchange, particularly with other members of RHRC. ▪ Working program resource base established to inform project elements, methodology and practice. ▪ Operation Lifeline Sudan (OLS) Health Coordination meetings attended and contributions made. ▪ In-depth knowledge gained from southern Sudan specific AIDS programs through intensive communication with NGO networks, including through the Global Fund project development process.
3) Behavioral and Other Assessments for baseline data	<ul style="list-style-type: none"> ▪ Rapid assessments undertaken in Yei and Rumbek, including site inventory, mapping of pilot areas,

<p>within target populations including Military, Commercial Transporters, Sex Workers and Adolescents</p>	<p>behavioral assessment through FGDs, ID interviews with key informants, health service assessments for RH including STI management, antenatal services & identification of potential Non-governmental Organization (NGO)/Community Based Organization (CBO) partnerships in March 2002</p> <ul style="list-style-type: none"> ▪ Health facility assessments undertaken at both locations in June/July 2002 ▪ Logistics assessment conducted in Yei in June/July 2002 ▪ BCC formative Assessments conducted with target populations including primary and secondary audiences in both locations between May and July
<p>4) Sensitize community leaders regarding HIV prevention project at HIV sensitization workshop(s)</p>	<ul style="list-style-type: none"> ▪ Introductory meetings for project familiarization held with Civil Authorities, community leaders, NGOs CBOs, Religious organizations and groups during February and March, prior to and during the RA ▪ Sensitization workshops held with various levels of community groups throughout Program Design Phase ▪ Planning meetings with potential partner organizations at community and E. African HQ levels, to develop project understanding, ownership, goals and activities ▪ Community Leaders Stakeholders Meetings held in Rumbek in July (planned August for Yei) ▪ Strong delegation of, and ownership by, senior Civil Authority and community leaders at 4 day DIP meeting in July 2002.

B. IMPLEMENTATION STRATEGIES FOR OBJECTIVES 2 AND 3

Objective 2: To increase demand for and use of key reproductive health services, and adoption of safer sexual practices by the population in the pilot sites in Rumbek and Yei Counties.

Objective 3: To Improve capacity of Rumbek and Yei River County Health Departments (CHDs) to support delivery of key and quality reproductive health services.

Objective 2 and 3 relate to the implementation phase of the project that focused on creating demand for and use of RH services and increasing the capacity of the CHD to support delivery of key and quality RH services. The main interventions implemented during this phase included Behavior Change Communication (BCC), STI Service Delivery, VCT Service Delivery, and Condom Distribution. Capacity of the CHD was built as an integral part of these four interventions through workshops and trainings and participation of HCPs in project activities. This section will detail strategies used as part of each main intervention and achievements that contributed to key indicators for both objectives, during the final quarter of the project (July 1 to October 15, 2003) as well as the Life of Project (LOP).

B1. Behavior Change Communication

Objective 2, Key Indicators:

- Number of peer counseling sessions and attendance
- Number of peer educators trained

Objective 3, Key Indicators:

- Peer counseling available through trained peer educators
- Number of condoms distributed through peer educators

Behavior Change Communication's main role in the project was to stimulate community dialogue, promote advocacy, increase knowledge, reduce stigma and discrimination, and promote services for prevention, care and support. Use of BCC was based on FHI's guidelines for developing BCC strategies. Data on the current knowledge, attitudes and behaviors of the population was limited and therefore research was undertaken during the design phase to identify risk behaviors, target groups, and key behaviors to change. A BCC Strategy was formulated based on this data and input from community stakeholders and members of the target audiences. Primary target audiences were identified as Youth both in and out of school, women traders, and the military. Secondary target audiences were identified as community leaders, religious leaders, teachers, parents, and healthcare providers (including traditional healers).

B1.1 BCC Strategy Development

With technical assistance from FHI, ARC/IRC conducted BCC Strategy Development workshops in both Yei and Rumbek in October 2002. The purpose of the workshops was to review findings from the BCC formative assessment research with the target audiences and stakeholders, identify a theme for the BCC campaign, key channels of communication, and key behaviors to change. See **Annex 12** for FHI's BCC Strategy Development Training Manual. "New Weapons for a New Enemy" was the theme selected for the campaign, with

the “weapons” being: abstinence, faithfulness to one uninfected partner, correct and consistent condom use, early treatment for STIs, and VCT.

Participants identified interpersonal media (peer education) as a main channel of communication due to the lack of media and barriers of multiple languages and low-literacy. Print media (posters, brochures, flyers), mobile video shows and community events (special events, dramas, musical performances) linked with the Peer Educator activities.

Each target audience identified key messages and behaviors to change that were later utilized to develop t-shirts and posters. See **Annex 13** for Key Messages and BCC Matrix developed as a result of the workshop. The BCC strategy linked with the service delivery aspect of the project through peer educators, who created demand for services through education, referrals of peers to STI and VCT services, and condom distribution. Posters, brochures and flyers were also utilized to create demand for condoms, VCT and family planning services.

B1.2 BCC Approaches for Primary Audiences

Peer Education

Selection criteria for peer educators were developed and meetings held with community leaders to elicit feedback on the selection criteria and to nominate peer educators from the four target audiences between October 2002 and February 2003. See **Annex 14** for selection criteria. Although volunteerism is not a new concept in southern Sudan, several meetings and consultations were needed to clarify the roles of PEs within the community and within ARC/IRC. Peer educators were required to be part of the target audience, respected in the community, willing to devote at least 8 hours per week to peer education, and to have basic literacy and math skills.

Twenty-Three Peer Educators were trained during the final quarter in Yei from four target groups, which brought the total number PEs trained to 41 in six Bomas of Three Payams. Fifty peer educators were re-trained in Rumbek in the final quarter on STIs and communication skills. Participants discussed problems encountered and reviewed data collection. Throughout the life of the project, 91 Peer Educators from the four target audiences were trained (41 in Yei County and 50 in Rumbek). See *Table 2* for details. Two training manuals were developed and utilized by ARC (general training manual) and IRC (Military training manual). Project staff facilitated the trainings. See **Annex 15 and 16** for training manuals.

Table 2. Number of Peer Educators by location and target group, Life of Project

Target Group	YEI	RUMBEK
	Number Trained	
Women Traders/Women on their Own	10	14
Youth in School	8	12
Youth out of School	11	5
Military/Police	12	19
Total	41	50

Training was originally planned by target audience but this was not possible in either location, due to lack of specific curricula for each target audience. Efforts were made to account for this by conducting audience-specific refresher trainings at each location. At the

end of the training, PEs signed a volunteer service agreement and were provided with t-shirts, hats, bicycles, bags, calculators, stationary, dictionaries, soap and flipcharts to assist in educating their target groups. The incentives were meant to motivate them for their voluntary community work.

BCC Community Mobilization Officers (BCC CMOs), Payam and Boma Administrators and Military Commanders supervised the peer educators. In order to keep the PEs committed to their work, the Boma Administrators and Military commanders worked closely with them to monitor their activities and review their monthly reports. ARC/IRC staff also met with the peer educators on a monthly basis to review their monthly report forms, discuss problems, provide technical assistance, and assist them with their workplans.

During the final quarter, 50,591 contacts were made by PEs in Yei and 7,460 in Rumbek, 3392 peers were referred to services, and 84,559 condoms were distributed. During the life of the project, PEs made 142,049 contacts, referred 5,930 peers to services and distributed 140,144 condoms. See *Tables 3, 4 and 5* for more details. In addition to educating peers on topics such as HIV transmission and prevention, STIs and VCT, peer educators demonstrated and distributed condoms and referred peers to health services. Peer Educators played an important role in Yei County in creating demand for VCT, as many of the clients reported being referred to the service by PEs.

Table 3: Peer Education Contacts* by Target Group and Location, July 1 to September 30, 2003

TARGET GROUP	YEI				RUMBEEK
	Individual	Group	Special Event	TOTAL	TOTAL
WOMEN	3213	7105	5057	15375	2196
YOUTH IN SCHOOL †	1106	2595	1845	5546	1359
YOUTHOUT of SCHOOL	3584	7175	4921	15680	
MILITARY‡	3318	4388	6284	13990	3905
TOTAL	11221	21263	18107	50591	7460

*Data reflects number of contacts but one individual may have had multiple contacts with a peer educator.

† In Rumbek, Youth was considered one target group.

‡ Data from Military includes Police group

Table 4: Peer Education Contacts by Target Group and Location, LOP

TARGET GROUP	YEI				RUMBEK
	Individual	Group	Special Event	TOTAL	TOTAL
WOMEN	4705	11491	6952	23148	7711
YOUTH IN SCHOOL	1523	3096	2726	7345	16512
YOUTH OUT of SCHOOL	6175	17477	8281	31933	
MILITARY	4979	9201	8070	22250	33150
TOTAL	17382	41265	26029	84676	57373

Table 5: Peer Education Referrals and Condom distribution by Location and Target Group

TARGET GROUP	YEI				RUMBEK			
	Number of Referrals for health services		Number of Condoms Distributed		Number of Referrals for health services		Number of Condoms Distributed	
	Quarter	LOP	Quarter	LOP	Quarter	LOP	Quarter	LOP
WOMEN	748	1331	17183	31295	29	38	2407	7069
YOUTH IN SCHOOL	316	396	7596	12060	18	61	2005	5541
YOUTH OUT of SCHOOL	953	1596	25923	50477				
MILITARY	1300	2450	26412	38232	28	58	3033	9473
TOTAL	3317	5773	77114	132064	75	157	7445	22,083

Mass and Traditional Media Materials Development and Distribution

Mass Media products were developed to reinforce the work of peer educators, VCT counselors and STI service providers. Media include fact sheets, flyers, brochures, posters, hats and t-shirts that used messages that were generated from the target audiences during the BCC strategy development workshop. Pre-testing with audiences during focus group discussions in March 2003 further refined messages.

Final versions of posters and t-shirts were drafted and pre-tested with target audiences in May/June 2003. ARC produced four posters for the four target audiences in the final quarter, with messages in English, Bari and local Arabic. Five different t-shirts were developed with the themes “New Weapons for a New Enemy”, “Protect yourself, Protect Your Nation”, and “Protect Yourself, Protect your Family.” Two of the five t-shirts were developed during the final quarter of the project, with messages focusing on military use of condoms to prevent HIV and the ABC’s of HIV prevention. See **Annex 17** for samples of the materials

developed. The project also distributed mass media materials through program staff, at special events, and through peer educators, utilizing media developed by the project and by other NGOs such as ACROSS and Straight Talk Foundation, Uganda. The majority of the materials developed and utilized were in English, but the posters, fact sheets, and flyers were translated into English, Sudanese Arabic, and Bari. In Rumbek, leaflets on STIs and HIV/AIDS in English and Dinka are distributed. A total of 15,497 print materials were distributed throughout the life of the project. See *Table 6* for details.

Traditional media such as folkloric groups, drama, local entertainment troupes and music groups were used during special events. In Yei, local music groups composed songs on HIV/AIDS and condoms. Target audiences and peer educators composed poems on HIV/AIDS and STIs that were performed during special events. UNICE trained folkloric groups on HIV/AIDS. The folkloric groups are comprised of 25 men and women from Rumbek and Akot counties, who create and perform songs, drama and other activities in Dinka languages based on the information they received during the training. Five members of the folkloric group were trained by IRC and they worked to sensitize the community prior to the CDC survey. They were given refresher on HIV/AIDS information regarding the survey as well as how to answer possible questions from the community.

Table 6: BCC Materials Distribution

MATERIAL	NUMBER DISTRIBUTED			
	YEI		RUMBEK	
	<i>Final Quarter</i>	<i>LOP</i>	<i>Final Quarter</i>	<i>LOP</i>
HIV/AIDS Awareness Booklet (ACROSS) (English, Bari, Dinka)	197	308	200	500
HIV/AIDS Fact Sheet	408	630	1000	1000
HIV/AIDS Brochure (from Kenya)	0	0	500	1000
VCT Brochure (English)	47	212	0	0
VCT Newspaper	0	0	10	10
VCT Flyer (English, Arabic and Bari)	465	677	0	0
HIV/AIDS Posters (English, Arabic and Bari)	2328	2328	0	0
Straight Talk Newspapers (English)	3228	5993	0	0
Young Talk Newspapers (English)	1087	2242	0	0
HIV/AIDS T-shirts	5	406		
HIV/AIDS Caps	29	47	60	60
Family Planning Posters	5	0	0	0
HIV/AIDS Flipcharts (Family Care International)	27	41	0	0
HIV/AIDS Flipcharts (Norwegian Church Aid)	0	3	0	0
HIV/AIDS Safety Signs	0	0	50	50
TOTAL	7860	12887	1820	2610

Mobile Video Van

A mobile video van operated in Yei County, showing videos to members of target audiences and to the general population. Most video shows were facilitated by peer educators during their group discussions and special events, although sometimes video shows were requested by specific groups within the community such as schools, churches, youth associations, women's association and military groups. The community showed overwhelming demand for video shows, at some times over 800 people attended one video show. The staff and PEs translated the video dialogue during the presentation and answered questions about the content after the video. They also distributed condoms and other educational materials and made referrals to STI and VCT services during these events. See **Annex 18** for a list of videos used.

In Rumbek, on a weekly basis, the youth peer educators show videos on HIV/AIDS to their peers in the Rumbek youth center and have an average attendance of 40. The peer educators have suggested that there should be a mobile van for them to do HIV/AIDS video shows in the villages nearby as well. The videos shown to the youth are silent epidemic, Yellow Card, Time to care, No need to blame, Stepping out, Changes, Brave response, and Born in Africa.

Community Events

Community events included use of local music troupes, dramas, games and special events that created interest in HIV/STI and condom use among the population. Peer Educators participated in the organization and drama presentations at special events.

Three Payam-wide special events were organized in Yei County over the life of the project. In Yei Payam, the event focused on creating demand for VCT and included drama, poems and demonstration of the VCT counseling session, in which over 700 people and 20 community leaders attended. In Ottogo Payam a special event was held that focused on HIV prevention, with 20 community leaders and 670 participants attending. In the final quarter, a special event was organized in Kaya, Kimba Boma that focused on promoting Condoms using drama, games and giveaways. Condoms were demonstrated and Peer Educators distributed educational materials. Approximately 200 people and four community leaders attended the event.

A local music group in Yei County, "Malembe", composed several songs on HIV, STIs and condoms and performed at two of the special events. T-shirts, posters, brochures, flyers and fact sheets were distributed during community events.

In Rumbek, peer educators mainly organized special events during community events such as traditional dances, churches and courts. IRC organized a special function in collaboration with CHD, UNICEF and other NGOs to celebrate World AIDS Day (December 2002). Activities included a 10km walk around town in which the folkloric group performed dances and sang HIV-related messages. Peer educators represented the three target audiences and gave lectures on HIV and handed out leaflets at each stop of the walk. Other peer educators visited churches to educate on HIV/AIDS.

B1.3 Approaches for Secondary Audiences

Workshops/Trainings

Secondary audiences received training in HIV/AIDS/STI through workshops. Topics of the HIV/AIDS workshop included basic facts about HIV/AIDS, disease progression, modes of transmission, prevention, condoms, STIs, Care and Support for PLHA, and VCT. Sensitization workshops were held with community leaders (administrators, chiefs, sub-chiefs, military leaders and religious leaders). Other groups trained include traditional healers, drug vendors, MCHWs and TBAs, and folkloric groups.

Three key workshops were held in Yei during the final quarter. Two STI/HIV/AIDS awareness workshops were held in July and August for four secondary audiences, Traditional Healers/Drug Vendors, and MCHWs/TBAs, respectively. Twenty-five participants attended each workshop. BCC Community Mobilization Officers (BCC CMOs attended a five-day HIV/AIDS Pilot project training for Humanitarian Workers August 2003 in Nairobi, Kenya.

B2. STI SERVICES

Objective 2, Key Indicator:

- Number of episodes of STI treated throughout all facilities

Objective 3, Key Indicators:

- Number of trained health care providers in HIV prevention/reproductive health skills
- Provision of STI services
- STI management available through HCP trained in syndromic management

Findings from the baseline assessments showed that reproductive health care services provided through health facilities were limited to promotion of prenatal care and safe deliveries, symptomatic treatment of STIs, and limited HIV/AIDS awareness activities. Family planning services were not available, and few commercial outlets or health centers supplied condoms. Only one of the hospitals at each site (Yei Civil Hospital run by NPA and Malteser clinic in Rumbek) had the laboratory capacity to conduct routine screening for syphilis for pregnant women or suspected cases. All agencies operating the health services at both sites reported that none of their staff had received training in syndromic management of STIs. Records of St. Bakhita Health Services center in Yei showed that STIs and reproductive tract infections are the fourth highest reason for care seeking at the facility, and essential STI drugs were frequently reported stocked out.

STI services were implemented in Yei and Rumbek with the intent of improving access and increasing the capacity of local health services to appropriately treat people for STIs. Research and training supported these activities by determining the disease burden and improving the capacity of health care providers to offer quality STI care. Logistics management training was conducted and STI drugs were provided at select locations. STI clinics and PHCCs distributed condoms.

B2.1 Research

The Centers for Disease Control and Prevention was tasked with conducting a behavioral and seroprevalence survey in order to describe demographic and behavioral risk factors, knowledge, attitudes and practices regarding HIV/STI transmission among persons 15-49 years in Yei County, the Rumbek program area, and with a convenience sample of pregnant women at antenatal clinics and Military in both Yei and Rumbek.

The purpose of the research was to:

- Determine HIV prevalence rates in Yei County and Rumbek program area
- Determine syphilis and HSV-2 prevalence rates in Yei County
- Assess correlations between HIV and the following: syphilis, HSV-2 and demographic and behavioral risk factors
- Disseminate results for program planning, monitoring and evaluation and advocacy
- Provide training and capacity building for health personnel in southern Sudan including procedures for HIV/STI testing and epidemiological studies

The survey was conducted from November to January 2002 in Yei and March to April 2003 in Rumbek. (See section E2 and Annex 10 for a further description of the study).

B2.2 Establishment of Sentinel Surveillance Site for Monitoring HIV/STI

ARC provided equipment to St. Bakhita PHCC and Yei Civil Hospital in Yei Town, including a centrifuge and Kerosene/Electric Fridge to support field-based testing during the CDC survey and for establishment of a sentinel surveillance site. Six laboratory technicians were trained from St. Bakhita and Yei Civil Hospital in parallel testing algorithms for HIV and Syphilis using rapid test kits and rapid plasma reagin (RPR) for Syphilis. The first round of Sentinel surveillance took place as part of the CDC survey in January 2003.

In Rumbek, IRC started routine screening of pregnant women for syphilis in Diakonie health center in January 2002. The screening and management started well. In April the pregnant women were screened as part of the seroprevalence survey and in the subsequent months the number dropped, partly due to the fact that many women were screened in April and partly because the MCH workers failed to send all the pregnant women who went for ANC for first visits.

B2.3 Syndromic Management Training, Service Delivery and Supervision

The project trained health care providers at NPA, Malteser, AAH, Way Out Ministries (WOM), SMC, Diakonie, and CCM in order to integrate STI management into existing services. The STI component of the project focused mostly on syndromic management of STIs, with limited aetiologic diagnosis at St. Bakhita's Health Services Center in Yei, Yei Civil Hospital, and Diakonie PHCC in Rumbek. The syndromic management approach increases the potential coverage of care in the absence of facilities and human resources. Syndromic management required a significant investment in training for nurses and other health care providers from PHCU's, PHCC's, Hospitals, private clinics and drug shops.

Training of HCPs was completed in September 2002 through technical assistance from Makerere University's STI Unit, with trainers who have been in the field of STI Control Programs in Uganda. The planned training was conducted using a trainer's manual developed by the M.O.H. of Uganda, STI Unit of STI/AIDS Control Program, 1995 and revised July 2002. The training included appropriate assessment, classification of STI and their treatment, and individual health education and counseling on disease prevention as well as partner notification to improve the quality of STI care in the program area. See **Annex 19** for STI training manual.

A total of 48 HCPs were trained in Syndromic STI Management throughout the life of the project. 18 HCPs were trained in Yei, and 30 in Rumbek. Participants included Health Officers, drug vendors, market drug sellers and MCHWs from health facilities and local drug shops in both locations.

While HCPs were trained from a variety of locations, the project established six STI sites within existing health facilities at Malteser St. Bakhita Health Services -Yei, Morobo PHCC, Ombasi PHCC, Diakonie PHCC in Rumbek, Rumbek Regional Hospital (CCM) and Malteser mission hospital in Rumbek. Twenty-three HIV positive clients and partners were provided with co-trimoxazole prophylaxis to prevent OI at Yei Civil hospital and Syphilis rapid testing was implemented during the final month of the project. (Note: although Rumbek Regional Hospital (CCM) and Malteser mission hospital in Rumbek staff members participated in the Syndromic Management training, data on drug consumption and syndromes was not collected until August 2003).

1670 Clients were treated for STIs or screened for Syphilis within the six project locations this quarter. During the life of the project, 2920 people were treated for STIs or screened for Syphilis in both project locations. *Table 7* summarizes the number of cases seen by Syndrome and facility.

Program staff from ARC/IRC supervised HCPs in each location, although this task will pass to the CHD after the project ends. Challenges in service delivery were encountered due to over-diagnosis of certain conditions and trouble with filling forms. Refresher trainings and supervisory visits helped to improve these problems.

Ms. Sara Casey made supervisory visits to the STI sites during the program review. Sam Mugoya from Mulago Hospital at Makerere University visited Yei and Rumbek during the final quarter to provide service quality control and supervision and refresher training to six HCPs in Yei and 12 HCPs and 14 market drug sellers in Rumbek in Syndromic Management of STIs. He visited two STI sites in Yei and one in Rumbek and met with CHWs to review forms and STI treatment protocols, as well as evaluate their performance, although he was not able to directly observe them treating an STI client in Yei.

Table 7: Summary of Cases of STI Treated by Facility and by Syndrome Treated

SYNDROME TREATED	YEI						RUMBEEK						TOTAL (Yei and Rumbek)	
	Malteser St. Bakhita Health Services		Morobo PHCC		Ombasi PHCC		Diakonie Health Services		Malteser Mission Hospital		Rumbek Regional Hospital (CCM)			
	Q	LOP	Q	LOP	Q	LOP	Q	LOP	Q	LOP	Q	LOP	Q	LOP
Urethral Discharge	64	72	9	16	4	6	33	135	32	32	36	36	178	297
Genital Ulcer Disease	33	37	44	58	67	81	60	331	42	42	69	69	346	618
Inguinal Bubo	18	19	6	8	1	1	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	25	28
Painful Scrotal Swelling	21	23	1	2	19	21	17	61	27	27	1	1	86	135
Abnormal Vaginal Discharge	64	70	4	11	2	6	61	233	56	56	64	64	251	440
Pelvic Inflammatory Disease (PID)/ Lower Abdominal Pain	60	71	20	25	22	27	169	511	55	55	76	76	402	765
Pregnancy Vaginal Discharge	53	66	11	11	0	0	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	64	77
Syphilis Screening (RPR)	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	<i>na</i>	318	560	0	0	0	0	318	560
TOTAL	313	358	95	131	115	142	376	1382	338	338	201	201	1670	2920

B2.4 Logistics Management Training

Results from the logistics assessment conducted by JSI showed that most health facility sites did not use stock cards or inventory control forms, nor collect and utilize data to make logistics management decisions. HCPs from the three STI sites in Yei county, as well as staff from the CHD and SMC received training in Logistics Management from JSI in May 2003 in order to improve logistics management systems for increased availability of STI treatment drugs at health facilities and to manage their commodities and build their capacity in tracking consumption of drugs and syndromes treated. Each health facility submitted monthly reports on syndromes treated and commodities used to ARC/IRC, and made requests for commodities based on consumption. See **Annex 20** for the Logistics Workshop Curriculum and **Annex 21** for STI Commodities Register and Monthly Reporting Form.

B2.5 Condom Distribution

Condoms were distributed through the STI sites at each location and HCPs were provided with penis models for demonstrations. Providers were encouraged to offer condoms to all clients regardless of the treatment sought.

B2.6 Link with BCC

HCPs and PEs promoted better health care-seeking behavior for STIs in the population and increased access to STI services through outreach. BCC linked with the STI services through referrals for services by PEs and participation of HCPs during special events and community meetings.

B3. VCT SERVICES

Objective 2, Key Indicator:

- Number of health care provider/client contacts for VCT services

Objective 3, Key Indicator:

- Provision of VCT services

VCT is an important area of HIV prevention and care programming as it has been shown to have a role in HIV prevention, and for those who are infected, as an entry point for care. The New Sudan HIV/AIDS Policy describes VCT services as one of the tools for raising awareness of the public and combating the spread of the virus. The formulation of the New Sudan HIV/AIDS Policy is an important step towards making VCT services available, which was followed up through the development of strategies for its implementation, guidelines to standardize the delivery of the services at the service outlets, and protocols to assure quality and confidentiality. See **Annex 22** for New Sudan HIV/AIDS Policy.

B3.1 VCT Service Establishment

During the implementation phase, ARC/IRC pilot project established two VCT centers at Yei Civil Hospital (October 2002) in Yei town and at Diakonie PHCC (February 2003) in Rumbek town. Clients could learn of and accept their HIV sero-status in a confidential environment that included pre-test and post-test counseling and referral for ongoing emotional support and medical care. During the final quarter of the project, VCT services were extended in Yei County to two locations (WOM Clinic, Kaya, Kimba Boma and Bazi Clinic, Bazi, Gulumbi Boma). The project planned to extend services to Morobo PHCC and Ombasi PHCC but was unable to during the current pilot phase, although a VCT tukul was constructed in Ombasi. VCT counselors traveled to these “mobile sites” to offer VCT counseling and testing for five to 10 day periods. Peer Educators helped to announce the services and create demand.

A total of 523 clients were tested and 23 clients received co-trimoxazole prophylaxis for opportunistic infections (OIs), during the final quarter of the project. A total of 1084 clients were tested for HIV during the life of the project; of these, 75 were positive (7.4%) Please see *Table 8* for further details.

Although the project intended to establish a post-test club, this was not achieved due to lack of demand for the club.

Table 8: Summary of VCT Service Delivery, Quarter and LOP

Test Result	Yei					Rumbek		TOTAL	
	Yei Civil Hosp and Mobile					Diakonie PHCC*		Quarter	LOP
	Quarter		LOP			Quarter	LOP		
	M	F	M	F	Missing				
Negative Result	267	207	489	351	24	28	145	502	1009
Positive Result**	11	12	22	34	0	8	19	31	75
TOTAL	278	219	511	385	24	36	164	533	1084

*Includes ANC Screening

B3.2 General Guidelines for VCT Services

The ARC/IRC pilot project collaborated with the NSNAC, CDC Kenya, and a consultant from Kenyatta National Hospital in Nairobi to develop VCT strategies, guidelines for delivery of VCT services and protocols. See **Annex 23** for VCT protocols and related forms.

Management of VCT Sites: VCT sites located within a health facility were managed by the health facility, with support from ARC/IRC. Staff involved in the provision of services, including directors of facilities, counselors, laboratory technicians, receptionists, peer educators, and community leaders met on a monthly basis to consult on various issues related to the provision of VCT services.

Registration: all patients and VCT clients seeking service at the site were registered at the registration desk; given information on the procedure and how long it is going to take. Educational materials about VCT and HIV, such as posters and brochures were made available in the waiting area. Clients were given a registration card with a number and center code.

Counseling and Testing process: Within the pre-test counseling session, counselors explained the procedure to all clients, and made sure that the client was requesting VCT without any coercion. A VCT counseling client data form was filled in during the process and signature or thumbprint obtained for consent to draw blood. When anonymous testing was used, such as in the case of sentinel surveillance sites for HIV through prenatal and STI clinics, clients were not be required to sign their names to an informed consent document.

ARC/IRC used rapid test kits that provided results within 15 minutes. Rapid testing was performed using Determine HIV, Unigold HIV and Hemastrap HIV rapid test kits that require only a finger-stick for blood. A parallel testing algorithm was utilized, with Determine and Unigold used in parallel, and Hemastrap used as a tie-breaker. After results were given, the counselor delivered post-test counseling and verbal referrals to ANC, TB treatment, Family Planning Services, and other health services.

Confidentiality: Measures were put in place to assure confidentiality. No client names were used, only the mother's maiden name. Results were never released to others and certificates were not given for results. Code numbers were used at routine VCT services. If a client returned for a re-test, a new code was given and a new form filled out. Initially, VCT services were located within the existing hospital and health center facilities and were not readily identified to the public or other patients using the facility. In Yei, a sign was posted on the door of the VCT center after clients complained of not being able to find the site. Client records were stored securely, and only VCT counselors, doctors responsible for client's medical conditions and the project manager/field officer has access to the records for treatment and data analysis purposes.

Disclosure of VCT Results: HIV test results were only disclosed to the client orally. Clients requesting testing for official reasons, or a certificate were referred to a laboratory for this type of service; however, these clients were encouraged to first learn their sero-status at the VCT site, with the understanding that they will need to be tested

Minimum age: anyone 18 years of age and above requesting VCT was considered able to give full, informed consent. Young people under the age of 18 who are married, pregnant,

parents, engaged in behavior that put them at risk were considered ‘mature minors’ who could give consent for VCT, and counselors made an independent assessment of the minor’s maturity to receive VCT services.

Partner notification: All VCT clients, regardless of their HIV status, were encouraged to inform their sexual partners of their test results. Counselors encouraged clients to bring their partner or partners for couple counseling and testing.

Family Planning Services: Basic family planning information was incorporated into VCT counseling sessions, for both HIV-positive and HIV-negative clients. Especially for HIV-positive clients, the risks of mother-to-child transmission will be explained along with the benefits of family planning. Dual protection in the use of condoms for HIV and STI prevention and prevention of pregnancy, or the use of a condom and hormonal contraceptives was discussed during sessions.

Screening for and Treatment of STIs: STI screening was not provided to VCT clients in Yei due to lack of Determine Syphilis test kits. Clients were referred to existing STI services at Malteser St. Bakhita health services. Diakonie PHCC provides Syphilis screening which began in January 2003.

Tuberculosis screening and referral: VCT sites in the pilot sites maintained links with existing TB control program run by Malteser, at both locations. All HIV-positive persons received counseling and health education about the risk of TB, and were referred for immediate screening at St. Bakhita’s Health Services or the Malteser clinic in Rumbek.

Preventing Opportunistic Infections: ARC/IRC also worked with CDC to introduce the use of co-trimoxazole to prevent opportunistic infections like malaria, diarrhea, and pneumonia among HIV-positive people. HIV positive clients were referred to a doctor on location who would determine whether they should be put on the drug or not. If the clients showed signs of immune suppression they were provided with co-trimoxazole tabs (400 mg per day) free of charge through the VCT sites. In Rumbek, the use of co-trimoxazole for opportunistic infections is still controversial and so IRC has not yet introduced it.. It will be done as soon as the best practice is established.

B3.3 Training and Supervision

Eight Counselors from Yei and four from Rumbek were trained by AIDS Information Center (AIC) in Arua, Uganda in May 2002. Participants included health workers (nurses and clinical officers) from St. Bakhita’s Health Services, Yei Civil Hospital, a health educator from Diakonie, and community members who had either previous training in counseling in refugee camps in Uganda or expressed interest in working in community counseling. All were from the local communities of the respective pilot sites and they received two weeks of classroom instruction and one-week practical instruction at Maracha Hospital in Uganda.

Refresher training for 10 returning counselors (Yei and Rumbek) and 6 new counselors (ARC and UNICEF/Yambio) was conducted in February 2003 with support from a VCT counselor trainer from Kenyatta National Hospital in Kenya. A 5-day training was held in both Yei and Rumbek. Full-time VCT counselors in Yei received a follow-up supervisory visit and refresher training in September 2003. The consultant assessed the performance of three full-time VCT counselors at Yei Civil Hospital through direct observation of counseling sessions,

reviewing forms and reviewing group counseling protocols. Recommendations from partners and consultants highlight the need for training of a VCT center supervisor at each location. The consultant was not able to travel to Rumbek due to the abrupt termination of the IRC field-based consultant, leaving no staff in the field in Rumbek. Please see **Annex 24** for the CDC/Kenya VCT training manual that was used for the refresher training and adapted for Southern Sudan.

B3.4 Link with BCC

VCT counselors attended Peer Education training workshops to facilitate sessions on VCT. Counselors and Peer Educators were known to each other and PEs were encouraged to visit the VCT site to familiarize themselves with the location and services. PEs made verbal referrals to peers for VCT and promoted the service. PEs were given capillary tubes to demonstrate to peers the amount of blood drawn during the test. Posters encouraged people to attend VCT and announce the location of services. Flyers and brochures informed clients and the general public about the services. VCT service availability and the counseling and testing process were discussed at churches and through special events and group discussions in the community. VCT counselors conducted limited outreach in the community.

B3.5 Research

Formative Research was conducted in Yei related to knowledge, attitudes and behaviors of the Yei population regarding VCT services. Focus group discussions were held in April 2003 with members of the four target audiences. The research helped to determine possible causes for low attendance at the service site. Seven focus groups were conducted with the four target audiences, women, youth in school, youth out of school, and military. The results showed that many people were not attending VCT because they did not know the service existed or were unsure about the VCT process (i.e. How much blood was taken, what would happen if they tested positive). The results also offered insights into the barriers to attendance by women and disclosure of status to partners. See **Annex 25** for summary of VCT research.

B4. CONDOM DISTRIBUTION

Objective 3, Key Indicators:

- Number of facilities and other sites distributing condoms
- Number of condoms distributed through facilities and peer educators

ARC/IRC's strategy for creating demand and increasing the use of condoms included: 1) targeted BCC to promote a better and accurate understanding among target audiences regarding condoms' and their use through peer education that includes demonstrations on use; 2) improving risk perception and assessment; 3) improving access through increased number of distribution sites and modes of distribution; 4) and mobilizing community support to promote consistent use of condoms.

ARC received free condoms from the Uganda Ministry of Health and United Nations High Commission for Refugees (UNHCR) for Yei County. Condoms were distributed free of charge to the population in the pilot sites through peer educators, health facilities, and non-traditional sources such as market stalls, bars, dancing places, tea stalls, brewing houses, lodges, restaurants, and youth clubs. In Yei County, condoms were distributed from a total of 18 fixed sites and through peer educators. One contact person was identified from each

distribution point and trained how to use condoms. The sites were provided with instructions for condom use, signs to announce the free condoms in Bari, Arabic and English, and a wooden penis model for demonstrations. BCC CMOs collected monthly data from each distribution point and distributed condoms from the ARC store in Yei.

IRC received condoms from ARC, Kenya Ministry of Health (MOH) and Uganda MOH. The main method of distributing condoms in Rumbek was through peer educators, although four fixed sites (two bars, one brewing house and one restaurant run by women peer educators) also distributed condoms.

Throughout the LOP, a total of 396,235 condoms were distributed at the two sites. A total of 356,529 condoms were distributed in Yei County including 100,000 condoms distributed during the CDC household survey. 39,706 condoms were distributed in Rumbek including 12,000 distributed during the CDC survey. Of the total condoms distributed, 124,465 were distributed through fixed sites and 132,064 through peer educators in Yei, and 5,603 through fixed sites and 22,083 through peer educators in Rumbek.

In the final quarter, two new distribution points were added in Yei County in Bazi, Gulumbi Boma, a major truck stop on the route between Uganda and southern Sudan. A total of 84,559 condoms were distributed during the final quarter, demonstrating the outstanding demand that has been created by the project. 74,506 condoms were distributed through facilities and 69,377 through peer educators during the final quarter in Yei County. 7,445 condoms were distributed by PEs in Rumbek during the final quarter.

B5. CAPACITY BUILDING/TRAINING

Capacity Building and Training was a major component under Objective 3, which helped to build capacity of the local personnel to improve delivery of health services. *Table 9* summarizes the trainings held and the number of people trained in each workshop for the life of the project.

Table 9: Summary of Workshops and Trainings, October 2001 to September 30, 2003*

WORKSHOP	NUMBER TRAINED	
	YEI	RUMBEK
Voluntary Counseling and Testing Counselor Training	8	4
Voluntary Counseling and Testing Counselor Refresher Training	13	3
Syndromic Management of STIs for HCPs	15	30
Syndromic Management of STIs Refresher	8	12
Behavior Change Communication Strategy Development Workshop	34	35
HIV/AIDS Peer Education Training	41	50
HIV/AIDS Peer Education Refresher Training	19	50
HIV/AIDS Sensitization for Community Leaders Workshop	77	15
Logistics Management Workshop	15	--
HIV/AIDS Awareness for Traditional Healers/Drug Vendors Workshop	25	20
HIV/AIDS Awareness for Maternal and Child Health Workers (MCHWs) and Traditional Birth Attendants (TBAs) Workshop	25	--
TOTAL	280	219

*Note some participants may have attended more than one training.

B6. OBJECTIVES 2 AND 3 INDICATOR TABLES FOR JULY 1 TO SEPTEMBER 30, 2003 AND LOP

Table 10. Quarterly and Life of Project Accomplishments towards Objective 2

OBJECTIVE 2: To increase demand for and access to HIV/STI and related reproductive health services and to promote safe sex and appropriate reproductive health practices by the population in the pilot sites in Rumbek and Yei Counties.				
KEY INDICATOR/OUTPUT	YEI		RUMBEK	
	<i>Quarter</i>	<i>LOP</i>	<i>Quarter</i>	<i>LOP</i>
<i>Behavior Change Communication</i>				
Number of peer counseling sessions and attendance (group, individual and special events) measured by peer educator (PE) contacts	50591	84676	7460	57373
Number of persons reached per PE	124	2065	150	1145
Number of Payam-wide special events	3	3	--	2
Number of people reached through Payam-wide special events	--	1570	--	1500
Number of Community leaders actively supporting HIV prevention project	4	124	--	30
Number of Peer Educators Trained	23	41	0	50
Number of Peer Educators Re-trained (Refresher)	0	19	50	50
Number of Posters developed	4	4	--	--
Number of T-shirts developed	2	5	--	--
Number of Curricula developed/adapted	--	1	--	1
Number of community leaders trained in HIV/AIDS	0	111	--	15
Number of workshop for secondary audiences (community leaders, drug vendors, traditional healers, TBAs, MCHWs)	2	6	--	4
Number of secondary audience members trained	50	161	--	80
<i>Sexually Transmitted Infection Services</i>				
Number of episodes of STI treated throughout all facilities	523	31	798	1729
<i>Voluntary Counseling and Testing Services</i>				
Number of Health Care Provider/client contacts for VCT services	497	920	36	164
Number of HIV positive clients who received prophylaxis for OIs	23	23	--	--

Table 11. Quarterly and Life of Project Accomplishments towards Objective 3

OBJECTIVE 3: To improve capacity of Rumbek and Yei River County Health Departments to support delivery of key and quality HIV/STI and related reproductive health services.				
KEY INDICATOR/OUTPUT	YEI		RUMBEK	
	<i>Quarter</i>	<i>LOP</i>	<i>Quarter</i>	<i>LOP</i>
<i>Behavior Change Communication</i>				
Peer Counseling Available through trained peer educators	Available	Available	Available	Available
<i>Sexually Transmitted Infections</i>				
Number of health facilities supported by ARC/IRC with drugs for STI treatment	--	4	--	3
Number of trained health care providers in HIV prevention/reproductive health skills, provision of VCT Services, provision of STI services, and peer education	--	69	--	81
STI management available through HCP trained in Syndromic Management	Available	Available	Available	Available
<i>Voluntary Counseling and Testing Services</i>				
Number of VCT centers supported by ARC/IRC	1	1	0	1
Number of VCT counselors trained	0	13	0	4
Number of VCT counselors receiving refresher training	3	8	2	3
<i>Condom Distribution</i>				
Number of facilities and other sites distributing condoms	2	18	--	4
Number of condoms distributed through facilities (<i>includes VCT, STI and other sites and CDC Survey</i>)	74,506	224,465	--	17633
Number of condoms distributed through peer educators	77,114	132,064	7,445	22,083
Number of condoms distributed per 1000 people	739	1739	74	397

C. PARTNER'S PROGRAM PERFORMANCE

C1. COLUMBIA UNIVERSITY

A. Columbia University Goal and Objectives

Goal: To collaborate with all partners to ensure that data collection and analysis are appropriate to the needs of the population and the project, and that results are used by all partners to improve services; and to facilitate the dissemination of results to broader relief and reproductive health audiences.

Objectives:

1. To provide technical assistance in the development/ modification and application of the ongoing project monitoring system.
2. To consult with other partners on the technical aspects of the assessment activities.
3. To participate in stakeholders meetings and other partner consultations.

July 1 to October 15 2003

Sarah Casey, Columbia University Consultant, and Susan Purdin provided input to the Terms of Reference (TOR) of the Program Review, which took place in Yei and Rumbek in early July 2003. Ms. Casey conducted the program review and facilitated a stakeholder's conference in Nairobi, Kenya in mid-July 2003 to share findings from the review and discuss lessons learned with the project partners.

Outcomes for Life of Project

1. Provide technical assistance in the development/ modification and application of the ongoing project monitoring system.
 - Review and modification of the project monitoring system.
 - Site visit to Yei to assess the monitoring system in place in the Yei County public health service and to suggest modifications that will meet the data collection needs of the project.
 - Placement of Mahua Mandal, MPH Candidate as an intern with the project, who assisted with a rapid assessment of the health information system in Yei County and made recommendations for improvement of the routine monitoring system; documented the process and lessons learnt, and made recommendations for further development of the system. She visited Rumbek County for 7 days during which she visited 4 health facilities to check on reporting systems, trained 3 VCT counselors in use of reporting forms, and prepared forms for VCT and STI site management.
2. Consult with other partners on the technical aspects of the assessment activities.
 - Ongoing dialogue with the technical partners, notably CDC, FHI and JSI, by providing comments and feedback on the proposed data collection instruments. In addition, Columbia faculty and student intern conducted assessments of health facilities in conjunction with JSI staff's assessment of logistics.
3. Participate in stakeholders meetings and other partner consultations.

- Columbia University faculty and student intern participated in the field along with other partners, notably ARC, FHI and JSI to undertake assessment and project planning activities.
- Susan Purdin and Mahua Mandal participated in Detailed Implementation Plan meeting in Entebbe, Uganda.
- Assist with preparation of Global Fund submission and with efforts to obtain continuation funding to extend the project beyond the initial pilot phase.
- Assist with implementation of monitoring and evaluation plan.
- Assist with dissemination of assessment findings through publication and/or conference presentation.

C2. FHI

July 1 to October 15, 2003

No technical assistance provided during the final quarter.

Outcomes for Life of Project

Family Health International provided overall technical assistance to the project, particularly in the area of Behavior Change Communication. Jessica Price, FHI Consultant participated in the formation of the project Detailed Implementation Plan. Dr. Philip Sedlak, FHI BCC Technical Advisor, led the Behavioral Formative Assessments in both Yei and Rumbek, facilitated the BCC Strategy Development workshops in both Yei and Rumbek, and provided guidance on message selection and materials development (T-shirts, Posters, PE Training manuals.) FHI's Guidelines for conducting Behavioral Formative Assessments as well as BCC Strategy Development training manual were utilized to guide the BCC activities.

C3. JSI

A. JSI Goal and Objectives

Goal: To ensure the continuous availability of commodities at sites within the project.

Objectives:

1. To assess current logistics capacity within the project sites.
2. To design a logistics system that works within the project parameters.
3. To create materials sufficient to the operation of a functional logistics system.
4. To train staff to implement the logistics system.

July to October 15, 2003

No technical assistance provided during the final quarter.

Outcomes for Life of Project

JSI conducted a "Logistic Assessment of Health Facilities in Yei River County" results of which are available in Annex 6. JSI staff participated in the DIP meeting held in July 2003. JSI developed an LMIS system for the project. JSI provided guidance on organization of the ARC/IRC drug warehouses, as well as input on monthly report forms and commodities registers that were part of the project's LMIS system. Gideon Nzoka, JSI/Kenya Deputy Director, facilitated a Logistics workshop in May 2003 in order to train STI HCPs in LMIS system and drug commodity store management.

C4. UNIV. OF MINNESOTA

Dr. Steve Miles, ARC board member and Consultant from the University of Minnesota School of Medicine, contributed to the project by assisting with behavioral assessments within the target population, ethical considerations of the studies, as well as participating in the ongoing project planning and development by attending the DIP conference.

C5. WOMEN'S COMMISSION FOR REFUGEE WOMEN AND CHILDREN

Goal: The Women's Commission will conduct internal and external advocacy and education with the New Sudan National AIDS Council (NSNAC), project stakeholders, congressional representatives, donors and others to promulgate HIV/AIDS prevention and care in southern Sudan.

Objectives:

- To collaborate with the NSNAC to support the HIV/AIDS policy.
- To increase awareness and promote NSNAC HIV/AIDS policy among organizations at the community level to prevent and respond to HIV/AIDS.
- To increase local capacity to advocate and promote the NSNAC HIV/AIDS policy.
- To advocate externally for long-term support of this HIV/AIDS pilot intervention in southern Sudan.

July 1 to October 15 2003

The activities of the Women's Commission in the past quarter focused on hosting a HIV/AIDS training in Nairobi from August 25-29 for nongovernmental (NGO) staff working in the Kenya refugee camps and with displaced populations in southern Sudan. There were twenty-one participants representing ARC South Sudan; CARE South Sudan/Somalia, with local partner Sudan Medical Care; IRC Kenya; IRC South Sudan; GTZ; MSI Kenya; and the New Sudan National AIDS Council (NSNAC).

The 5-day training covered the following topics:

- Day 1: Basic facts; determinants of the epidemic.
- Day 2: Interventions model; behavior change communication.
- Day 3: Sexually transmitted infections; voluntary counseling and testing; condoms.
- Day 4: Universal precautions; parent to child transmission; stigma.
- Day 5: Care of people living with HIV/AIDS.

The presence of a number of senior staff members from NSNAC provided valuable perspectives on interventions at policy level and helped to emphasize the importance of leadership and political commitment in the fight against HIV/AIDS. As part of the closing ceremony, Dr. Michael Mabor, NSNAC Executive Director, provided an overview of the current HIV/AIDS situation in South Sudan.

The Women's Commission met with NSNAC representatives to discuss the Council's next steps. Essentially, NSNAC is most interested in continuing the training and advocacy work they have already initiated. Funding is a concern and they are awaiting word from the HIV/AIDS Global Fund on a submitted proposal and are also looking to USAID for funding that would support its advocacy efforts to address HIV/AIDS in the New South Sudan.

Outcomes for Life of Project:

- Participated in project stakeholders meeting with decision by Chief Health Officer, southern Sudan to prioritize training for the recently identified positions of the New Sudan National AIDS Council (NSNAC) on the new south Sudan HIV/AIDS Policy and strategies to promulgate the policy. A working group comprised of representatives from the ARC, IRC, Norwegian Peoples Aid, NSNAC and the Women's Commission was established and a meeting was held following the Stakeholders meeting to begin plans for an HIV/AIDS workshop for the new members of the NSNAC.
- In collaboration with representatives of the member agencies of the working group, developed a curriculum for training and hosted a four and a half day workshop for 17 participants including eight members of the NSNAC and the NSNAC Focal Point. The workshop included an invited speaker from the Future's Group who gave an excellent presentation on the Kenya HIV/AIDS Council's Plan of Action for promulgating Kenyan HIV/AIDS Policy. Disseminated electronic and hard copies of workshop curriculum and report to all project Stakeholders. See **Annex 26** for NSNAC HIV/AIDS Workshop Report.
- Provided consultation at NSNAC meeting on the Council's functions and operations.
- Published article *Eradicating HIV/AIDS Amid Civil War in southern Sudan* in the Global Health Council publication, Global Health Link, in May 2002.
- Published article *Reproductive Health for Refugees* in THE LANCET Supplement |Vol 360 | December 2002 that contained highlights of the project.
- Facilitated and submitted pre-formed panel on the project to the Global Health Council for their annual meeting.
- Reviewed and reported on the NSNAC plan of action to promulgate the NSNAC HIV/AIDS Policy.
- Hosted a five-day HIV/AIDS training in Nairobi inviting members of the NSNAC who did not participate in the initial workshop and training.

D. MONITORING AND EVALUATION

D1. MONITORING AND EVALUATION SYSTEM AND FORMS

The M&E Plan was developed concurrently with the project work plan in a series of consultative stakeholder meetings at both the central and field levels.

The M&E Plan was designed to facilitate the ongoing assessment of progress in achieving program goals and objectives as well as to measure end-of-project effectiveness. Data gathered through M&E activities was intended to inform key stakeholders and program implementers to enable appropriate course correction that will contribute to intended results.

The purpose of the M&E plan was to measure certain indicators to assess project progress towards achieving goals and objectives. Due to the nature of the pilot project, it was not expected that significant changes could be measured in the short time frame of implementation. Some of the questions that will be answered and measured during the follow-on to the pilot phase of the project are:

- Change in prevalence of STI among the population of Yei and Rumbek counties
- Change in incidence of HIV transmission in the project areas
- Changes in risk behaviors among target populations? (E.g., Condom use during last act with non-regular partner, proportion of young women <18 years having sex with men over 30 last month)
- Changes in care-seeking behavior (for sexually transmitted infections) among the target population
- Changes in knowledge of HIV/STI transmission among target populations? (Percent with correct information, percent with any incorrect\ information)
- Quality of STI care in the health system (proportion of STI clients receiving proper diagnosis and treatment)
- Proportion of the estimated number of cases of STI that are treated at health facilities in a given period of time
- Percent of clients attending STI clinic are referred through partner notification
- Number of target audience members reached through peer educators, media campaigns, and radio announcements
- Percent of target groups reached by peer educators, media campaigns, and radio announcements
- How well trained and prepared are the peer educators (knowledge, communication skills, attitudes)?
- How well trained are health care providers in Syndromic Case Management (knowledge, communication skills, attitudes, diagnosis and treatment)?

D1.1 Methodology

Monitoring Activities

Under four main program intervention areas (BCC, STI, VCT, and condom distribution), peer educators, health care providers, VCT counselors and condom distributors were required to collect monthly data and submit it to ARC/IRC for compilation and analysis. Monthly information includes data on use of health services (STI and VCT), delivery of behavior

change messages and use of commodities (STI drugs, condoms). STI commodities registers and monthly reporting forms can be found in **Annex 21**. See **Annex 27** for STI Syndrome Tracking form and PE Monthly report form. To an extent, the project staff made efforts to meet with the service providers and peer educators to build their capacity to correctly fill in the forms and make decisions based on the information collected.

D1.2 Evaluation Activities

Formative Evaluation

Qualitative methods focus groups and in-depth interviews were used to gather data prior to the design of the project. The assessments covered the knowledge, attitudes, practices and beliefs of members of the target groups and key informants on such issues as HIV transmission, STI symptoms and treatment, risk behaviors, knowledge of MTCT, acceptance of VCT services, and perceptions of stigma and discrimination. In addition, an assessment was conducted of the capacity of the current primary health care system to conduct STI treatment, care and follow-up. A third component of the rapid assessment was to examine the current levels of effort and capacities of the NGOs and private voluntary organizations (PVOs) working in southern Sudan to partner in the pilot project. Additional qualitative focus group discussions were held on VCT in Yei to determine knowledge of the services and barriers that prevented people from attending. (See Annex 25 for a summary of the VCT research).

Baseline Quantitative Assessment

Statistically significant assessment of STI/HIV seroprevalence and general population knowledge, attitudes and practices was planned for the project start-up in order to determine baseline information. Unfortunately due to logistical constraints this assessment did not take place until mid-project. ARC/IRC intends that a similar study be conducted in the follow-on phase of the project, as it was unrealistic to expect significant changes in general population characteristics during the pilot phase.

Process Evaluation (inputs and outputs)

A mapping activity was conducted during the rapid assessment phase of the program to provide data on the estimated size for each target group, identify access points, data on sexual partnerships, identify places target groups go to meet potential sexual partners and locations where they engage in potentially risky behaviors. Initially ARC/IRC planned to repeat the mapping activity to reflect seasonal changes but this was not possible during the pilot phase due to lack of Human Resources and project constraints.

A health facility assessment was conducted in order to determine what services the service providers are providing, which protocols and guidelines they followed, partner treatment and referral, and interactions between providers and clients. Clinic records were periodically reviewed to measure the number and types of patients being seen, monitor drug and other supplies, and to ensure that patients with STI symptoms are treated appropriately.

To a certain extent, the project was successful in monitoring the effectiveness of the trainings that took place. The quality of Peer Educators performance was assessed after their initial training and through direct observation of group discussions in the community. Due to the late start of the Peer Educator component of the project, a formal assessment of their performance was not possible after a 6-month period in Yei or Rumbek as was originally planned.

A similar procedure was followed for HCPs who were trained in STI Syndromic Case Management through pre and post training assessments followed by periodic observations.

Impact Evaluation

Baseline data on the knowledge, attitudes and behaviors of the target population was collected through a detailed quantitative behavioral survey implemented along with a biologic study to assess the current level of HIV and of reactive syphilis serology within the target population. In order to assess the pilot project's impact on the knowledge, attitudes and behaviors of the population, a follow-up survey will be conducted during the follow-on phase of the project (at least one year later). It is recommended that the quantitative survey be repeated every 18 months and that biologic surveillance should also be carried out in ANC clinics on an ongoing basis every 6 months. The ANC data provides a surrogate measure of prevalence within the general population and will be monitored for trends. Unfortunately ANC surveillance was not carried out at 6 month intervals during the pilot phase due to lack of Human Resources capacity at the field level.

Documentation and Dissemination Plan

Data from relevant health services was shared with the county health department. Regular reports of project activities were shared within the SRRC and with OLS.

ARC/IRC staff represented the project at southern Sudan Health coordination meetings in Nairobi, Kenya to share successes and lessons learned with other NGOs operating in the region. Project findings were presented at the Global Health Council Meeting (Basilica Keji, IRC Poster Presentation on the Project) in Washington, DC, May 2003, International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA) Conference (Tekleab Kedamo, ARC Presentation of Project and CDC Survey) in Nairobi, Kenya September 2003 and the Reproductive Health for Refugees Consortium Meeting (Laura Moch, ARC Roundtable Presentation on the BCC Strategy) in Brussels Belgium, October 2003. Family Health International highlighted their collaboration with the project in their newsletter.

Due to constraints in human resources available for the project, the team was not able to write a journal article.

D2. CDC SEROPREVALENCE AND BEHAVIORAL SURVEY

Background

An estimated 2 million people, nearly 8% of Sudan's population, have died from war-related events, including fighting, famine, and disease since 1983. The impact of the conflict on HIV/AIDS in Sudan is not known. Risk factors for HIV transmission in complex emergencies include disruption of societal structures and mores, family units, and sexual networks; sexual interaction between displaced civilians and military personnel; economic vulnerability of women and unaccompanied minors; a rise in commercial sex work; sexual violence and coercive sex; psychological trauma; and the increased use of illicit drugs. Due to the long civil conflict, significant segments of the population are likely to have shifted towards a higher vulnerability for HIV/AIDS.

Sudan borders countries that had HIV prevalence rates between 5% and 14% in 1999 (Democratic Republic of Congo, 5.1%; Uganda, 8.3%; Ethiopia, 10.6%; Central African

Republic, 13.8%; Kenya, 14.0%). In 1996, a small sample among women attending antenatal clinics in South Sudan showed an HIV prevalence of 5%. Among 43 blood donors screened in Yei Hospital in 1999, 18.6% were HIV positive. Randomized population-based surveys in 3 counties in South Sudan have shown HIV prevalence rates of 1.6% (Tambura 1998), 2% (Ezo 1999) and 7.2% (Yambio 2000) (Ann Moore, CDC, personal communication). South Sudan's HIV seroprevalence is estimated to be in the range of 5-7% among the general population; data from high-risk groups, or from routine sentinel surveillance in antenatal clinics are not available. Prior to the pilot project, HIV prevention activities by NGOs included education, syndromic STI management, and screening of pregnant women and donated blood.

ARC/IRC partnered with the International Emergency and Refugee Health Branch (IERHB) at the CDC, in collaboration with the Global AIDS Program and the human immunodeficiency virus (HIV)/sexually transmitted infections (STI) in emergencies working group to conduct a survey of the prevalence of HIV, syphilis, herpes simplex virus 2 (HSV-2) and knowledge, attitudes and behavioral practices regarding HIV transmission in Yei, Western Equatoria, and Rumbek, Bar-el-Ghazal, Southern Sudan. The objective of the surveys was to provide baseline data for program planning, monitoring and evaluation, and advocacy to the NSNAC, ARC and IRC, and other organizations that support, plan or implement HIV/STI services in Southern Sudan. The surveys were planned for May 2002 but due to several constraints were postponed until November 2002 in Yei and April 2003 in Rumbek. See **Annex 28** for the Yei Study Protocol, **Annex 29** for the Rumbek Study Protocol, and **Annex 10** for the Preliminary results from Yei and Rumbek.

Objectives

1. Describe demographic and behavioral risk factors, knowledge, and attitudes regarding HIV/STI transmission among persons aged 15-49 years in Yei County and Rumbek Town, South Sudan, and a convenience sample of pregnant women and STI patients at local clinics and in a sample of soldiers in barracks in Yei and Rumbek Counties.
2. Determine HIV prevalence rates in Yei and Rumbek Town
3. Determine syphilis rates in Yei County and Rumbek Town and HSV-2 prevalence rates in Yei County
4. Assess correlations between HIV and the following: syphilis, HSV-2 and demographic and behavioral risk factors
5. Disseminate results for program planning, monitoring and evaluation, and advocacy to ARC, IRC, the HIV/AIDS Commission of South Sudan and other organizations that support, plan or implement HIV/STI services in South Sudan
6. Provide training and capacity building for health personnel in South Sudan, including HIV/STI testing and epidemiological studies.

Methodology

The CDC collected data on HIV, syphilis, Herpes simplex 2 (HSV-2) and HIV/STI knowledge, attitudes, and behavioral practices (KAP) in the general population aged 15-49 years in Yei town and surrounding villages (population approximately 100,000) and in Rumbek town (population approximately 25,000) by conducting a 2-stage household cluster survey at each location. Interviewers administered a standardized KAP questionnaire to individuals and collected blood specimens for HIV and syphilis testing. HIV testing was performed locally using two rapid HIV tests (Determine™ and Unigold™) in parallel with the rapid test (Hemastrip™), as a tiebreaker. A Rapid Plasma Reagin (RPR) test was used as a

screening assay and the Determine Syphilis TP rapid test as a confirmatory assay for syphilis. Quality assurance retesting was performed at the CDC laboratory in Entebbe, Uganda, and Kisumu, Kenya, using HIV EIA tests in parallel with western blot where necessary, and quantitative RPR testing for syphilis. In addition to the population-based household sample, the CDC surveyed sequential samples of pregnant women and STI patients (Yei only) at local clinics and soldiers in barracks close to Yei and Rumbek town.

Results

Among 2164 eligible persons aged 15-49 years in 658 households in Yei, 1325 (61.2%) completed a standardized questionnaire and 1034 (47.8%) had a blood sample taken. In Rumbek, 307 households participated consisting of 1539 eligible individuals; 1102 (71.6%) individual interviews and 962 (62.5%) blood specimens were obtained. In Yei and Rumbek, more women than men participated (60.5% and 64.4%, respectively), because men were more likely than women to be permanently absent as soldiers or temporarily absent on the day of the survey. Thirty-four percent of women and 17.6% of men in Yei, and 45.7% of women and 22.6% of men in Rumbek reported polygamous marriage. Literacy was low: 22.9% of women and 56.3% of men in Yei, and 16.6% of women and 58.6% of men in Rumbek were able to read.

HIV

Validation of HIV results from Rumbek is in progress; thus, results from Rumbek are based on field test results only. HIV prevalence rates appeared to be lower than in neighboring Uganda and DRC. HIV prevalence was 2.7% (28/1034; 95% confidence interval [CI] 1.4%-4.0%) in the Yei survey area; the rate was significantly higher in Yei town (25/601=4.2%, 95%CI 2.4%-5.9%) than in rural areas outside of Yei town (3/433=0.7%, 95%CI 0%-1.8%) and in Rumbek town (4/962=0.4%, 95%CI 0%-0.8%). HIV prevalence was 2.3% among pregnant women both in Yei (5/221; 95%CI 0.3%-4.2%) and in Rumbek (9/385; 95%CI 0.8%-3.8%). The highest HIV prevalence was found in a sample of STI patients in Yei (8/148=5.8%, 95%CI 1.9%-9.8%). HIV prevalence among soldiers was 2.9% (2/70; 95%CI 0%-6.8%) in Yei and 0.8% (3/392; 95%CI 0%-1.6%) in Rumbek.

Syphilis and HSV-2

Validation of syphilis results from Rumbek is in progress; results from Rumbek are based on field test results only. Syphilis prevalence in all samples was lower in Yei than in Rumbek. In the household sample, the rate was 0.7% (7/1034, 95%CI 0-1.3%) in the Yei survey area and 1.0% in Yei town (6/601, 95%CI 0-2.0%), compared to 2.5% in Rumbek town (24/962, 95%CI 1.4%-3.6%). Among pregnant women, syphilis rates were 0.9% in Yei (2/221, 95%CI 0-2.2%) and 2.5% in Rumbek (9/385, 95%CI 0.8-3.8%). The highest syphilis prevalence was found in soldiers (Yei: 2/70=2.9%, 95%CI 0%-6.8%; Rumbek: 14/392=3.6%, 95%CI 1.7%-5.4%). Further tests are in progress to help interpret these results. HSV-2 tests from Yei have not been finalized.

Behavioral Indicators

Among the surveyed population in Rumbek town, 20% had been displaced within Southern Sudan after 1986 because of the war and more than half of respondents in Rumbek town reported having moved there since 1986 (55%), mainly for economic or other reasons (80%). More respondents in Yei town than in Rumbek town reported displacement and refugee status (after 1986) (45% and 29%, respectively). One third of respondents (33%) had moved to Yei since 1989; of those, 55% came for economic or other reasons. Among respondents in Yei who had been refugees, 32.5% reported that they still have a residence in Uganda, and

4.2% reported that they still have a residence in DR Congo (DRC), which may contribute to increase risk in HIV/AIDS by continued movements for trading or travel between residences.

Most respondents reported that they had heard about HIV/AIDS; however, much less had knowledge about HIV/AIDS prevention (ranging from 32% in areas outside Yei to 40% in Rumbek town), no incorrect beliefs about HIV/AIDS (ranging from 9% in Rumbek town to 27% in Yei town) and accepting attitudes towards people living with HIV/AIDS (ranging from 2% in Rumbek town to 13% in Yei town) when standardized indicators were applied. Half or less of respondents (ranging from 20% in Rumbek town to 50% in Yei town) reported knowing what a condom is. Twenty, 42% and 38% of respondents in Rumbek town, Yei town and areas outside Yei town, respectively, knew that condoms can prevent HIV/AIDS and other STIs, and 8%, 25% and 19%, respectively, knew where condoms could be obtained. The proportion of respondents with accepting attitudes regarding HIV/AIDS was low (2% in Rumbek town, 13% in Yei town, 10% in areas outside Yei town), indicating a climate of stigmatization and discrimination toward people living with HIV/AIDS.

Thirty-one percent of respondents in Rumbek town, 30% in Yei town, and 16% in areas outside Yei town reported sex with a non-regular partner in the last 12 months, but of those only 2%, 25% and 22%, respectively, used a condom. Use of a condom during last sex with anyone was reported by 2% in Rumbek town, 9% in Yei town, and 4% in areas outside Yei town. Self-reported STI symptoms were less frequently reported in Rumbek town than in Yei town and areas outside Yei town. Among women, genital ulcers in the last 12 months were reported by 7% in Rumbek town, 16% in Yei town, and 11% in areas outside Yei town. Among men, genital ulcers in the last 12 months were reported by 4% in Rumbek town, 13% in Yei town, and 7% in areas outside Yei town. Urethral discharge in men was reported by 6% in Rumbek town, 13% in Yei town, and 7% in areas outside Yei town. In Rumbek town, 46% of respondents reported seeking treatment for STI symptoms in a hospital, health care center, primary health care unit, or with a community/village health care worker, compared with 62% in Yei town and 48% in areas outside Yei town. There is a discrepancy between high rates of self-reported genital ulcer and low syphilis rates that requires further investigation. No additional data were collected about STI syndromes diagnosed in the facilities. Most respondents reported seeking treatment at a hospital or health care center, which are limited to Yei town and Rumbek town. Quality and resources of those services are in question.

More respondents in Rumbek (11%) reported that they ever had an HIV test than in Yei town and areas outside Yei town (5% each). Most respondents would get an HIV test if available (Rumbek town 87%, Yei town 81%, areas outside Yei town 72%). In Rumbek town, health workers were named as the main source of information about HIV/AIDS (19%), followed by religious leader (18%), government leader (16%), radio (9%) and community-based service provider (5%). In Yei town, religious leader were named as the main source of information about HIV/AIDS (18%), followed by health worker (13%), community-based service provider (6%), radio (6%) and government leader (5%). Gender-based violence appeared to be common in the population. Eleven percent of women in Rumbek town, 16% in Yei town and 12% in areas outside Yei town reported having been beaten by a husband or regular partner in last 12 months; 0.1%, 6% and 2%, respectively reported having been forced by a husband or regular partner to have sex when they did not want it in last 12 months; and 0.3%, 2% and 0.3%, respectively, reported having been forced by a man other than a regular partner to have sex when they did not want it in last 12 months. In Rumbek, women were asked

whether partners had used ‘physical force’ to have sex with them because key informants had reported that forcing women without physical force was normal.

Alcohol consumption may have been underreported. Two third of respondents in Yei reported that they had drinks containing alcohol less than once a week or never. The question was not asked in Rumbek. Cutting, teeth extraction, ear piercing and scarification are practiced in the community and may be potential ways to transmit HIV/AIDS.

Recommendations

- Transfer the pilot project into a long-term HIV/AIDS/STI program and extend to other areas in Southern Sudan, prioritizing areas along the Uganda/DRC border and the main roads from Uganda/DRC into Southern Sudan, including Rumbek town, which showed lower HIV prevalence rates than in Yei town, but at the same time less HIV knowledge, accepting attitudes towards people with AIDS, condom use and access to condoms in the surveyed population.
- Within the HIV/AIDS policy and control strategy of the National HIV/AIDS Council, establish guidelines for key technical areas such as HIV testing and counseling, STI management, and blood safety.
- Increase efforts for basic HIV/AIDS education, awareness building and stigma reduction. In collaboration with NGOs active in HIV/AIDS/STI prevention and care, develop consistent information, education and communication, and behavioral change communication messages and training materials. Train more peer educators. Target especially youth in school, youth clubs and other out-of-school venues; as well as high-risk groups such as soldiers; families with an increased economic burden because of absence of men or care taking of members with war injuries, children who lost one or both parents, or people living with HIV/AIDS; and truck drivers or other groups that frequently travel between neighboring countries and Southern Sudan. Reinforce universal precautions for medical procedures (e.g., injections) and other potential nonsexual ways of HIV/AIDS transmission. Consider testing people who are younger or older than the reproductive age group.
- Provide community forums for planning, education, information sharing, and stigma reduction efforts. Invite community leaders, health care providers and people living with HIV/AIDS to help reducing stigma and correcting misconceptions. Develop a strategy to educate religious and government leaders about HIV/AIDS. Engage local theatre groups to participate in education activities. Consider establishing a radio station that can be used as a major education medium. Provide communities with radio sets.
- Expand VCT services, possibly including mobile units that allow people in remote villages to use them. The expansion should be accompanied by a strong sensitization campaign to increase attendance. Establish a system of VCT supervision and follow up by an external agency (e.g., in collaboration with neighboring Uganda or Kenya), including ongoing training activities to increase local capacity. Hire and train a VCT supervisor for each region. Ensure client confidentiality during HIV testing procedures.

- Expand other support services for effective behavior change, including STI Syndromic management services and condom availability. Evaluate the conditions for providing social marketing of condoms. As for VCT services, implement a strong sensitization campaign to improve condom use and STI treatment seeking behavior, especially in the rural areas. Provide further trainings in STI care. Establish a system of STI services supervision and follow up by an external agency (e.g., in collaboration with neighboring Uganda or Kenya), including ongoing training activities to increase local capacity. Further investigate causes of STI in general and specifically high rates of self-reported genital ulcer.
- Implement a program for management of gender-based violence consequences. Assess unspecific psychiatric morbidity, stress disorders and social functioning in the population and plan appropriate interventions. Provide and sustain health-care services for people with psychiatric disorders, amputations, or other impairments, and for children who lost one or both parents. Provide special attention, including health and economic programs, to persons who are still displaced. Determine whether orphans live with relatives, in an orphanage, or on the street, and if needed establish specific social programs for them.
- Implement a HIV sentinel surveillance system based on routine HIV and syphilis testing of pregnant women at antenatal clinics.
- Conduct intermittent behavioral and HIV/STI prevalence surveys in probable high-risk subpopulations, such as soldiers, commercial sex workers, truck drivers and TB patients. Surveys should collect more data on STI prevalence and syndromes to further investigate the discrepancy between relatively low syphilis and high reported genital ulcer rates.
- In collaboration with the Yei medical assistant school, strengthen laboratory infrastructure and quality assurance procedures, including continuing education, supervision and evaluation of laboratory personnel.
- Develop protocols for care of people living with HIV/AIDS through home based care, prophylaxis and treatment of opportunistic infections, and antiretrovirals adapted for the local context.

D3. PROGRAM REVIEW

ARC/IRC conducted a program review from June 29-July 16, 2003 with assistance from a consultant (Ms. Sara Casey) from Columbia University.

The overall purposes of conducting a program review was to inform planning of HIV/AIDS prevention, care and support strategies in southern Sudan, to assist in designing HIV/AIDS programming in complex emergency settings and to document lessons learned from the project. The review measured the achievement of the overall goal and objectives of the project as measured by the achievement of established indicators and targets.

The review provided an overall assessment of the achievements of the pilot program, including strategies developed for reducing the transmission of HIV and STIs and improving related reproductive health practices among the population, identification of elements of the pilot program that might be adopted by the national AIDS control program in southern Sudan and review and documentation of lessons learned in prevention of HIV/AIDS in complex emergencies.

Overall, the Pilot Project was considered a success. Despite the many difficulties, ARC/IRC succeeded in implementing improved Syndromic management of STIs, VCT centers and BCC activities in both locations. The project's use of participatory methods to enter the community and develop and implement the BCC strategy ensured that the beneficiaries became invested in the project and could claim ownership. Nearly all of the community leaders, peer educators and members of the target audiences interviewed insisted that the project continue, and be extended to cover all of Yei and Rumbek counties, and even the whole of South Sudan. Please see **Annex 30** for full Program Review report.

IV. CONCLUSIONS AND FINDINGS

A. CONSTRAINTS AND CHALLENGES

The ARC/IRC pilot project had the unique experience of operating in uncharted waters, both politically and culturally in the field of HIV prevention in southern Sudan. Uncertainty concerning the peace process and changing traditional belief systems exacerbated by the effects of the long term violence and human displacement of war, can and frequently do, obstruct a rational approach to addressing fundamental issues. This provides demanding and sometimes exciting challenges to project implementation.

The project was rather over ambitious and at the same time, the situation in southern Sudan included constraints in shortages of trained human resources, poor infrastructure and security, lack of transport and supplies, and lack of employment opportunities for the residents.

A1. Human Resources

Project rapid assessments and health facility assessments revealed a dearth of trained health care personnel in STIs, VCT and HIV/AIDS in general. The project was understaffed at the outset, with only one full time technical staff member based at the field level. The organizational structure of the project did not facilitate clear roles of partners and place one manager in charge of all partners and monitoring project performance and outputs. Staff turnover was high during the life of the project. The ARC Program Manager, IRC Program Manager, IRC Program Coordinator, ARC RH Field Officer and the ARC Grants Manager resigned during the LOP, leading to periods of understaffing while new staff were recruited.

The project was also constrained by a lack of Women's Commission field representation to support an advocacy initiative that would be integrated with ongoing field activities. It was difficult to monitor and determine appropriate points of possible advocacy intervention with the priorities focused on getting the project started, collecting baseline data and initiating the key service delivery interventions. A field representative focused on advocacy would have been best positioned to support project activities.

To address these constraints, training of health personnel was integrated into the DIP. The project hired project assistants and BCC community mobilization officers to assist technical staff at the field level, and program managers spent more than 50% of their designated time at the field level. A field coordinator was hired in Yei to take over finance, administration and compound management from the RH Field Officer. Remaining staff worked long hours to make up for the attrition of their colleagues. In the end, many project activities had to be postponed or cancelled due to the combination of an over-ambitious Workplan and the lack of staff to complete activities.

A2. Poor Infrastructure/Security

Yei is accessed by road via Arua in Northern Uganda. The Lords Resistance Army (LRA) rebels have been active in wreaking havoc in the North for the past decade. Access to Yei was banned from mid-July 2002 to late August 2002 due to LRA movements. Furthermore, staff members were evacuated from Yei in October 2003 for 3 weeks due to a Government of Sudan (GOS) flight ban that coincided with GOS bombings and deserting SPLM soldiers moving through Equatoria region. Rumbek staff members were also affected by the flight ban. ARC staff members were unable to reach Yei for a week in May 2003 due to a conflict

in Northern Uganda between Bari and Dinka tribes. Lack of good roads, lack of flights into Yei from Uganda, and no communication structures (email, phone) necessitated frequent long (14 hours over 2 days) trips to Arua to pick up technical staff and consultants, mail and supplies on a bi-weekly to weekly basis.

The dry season and rainy season also had an effect on when was best to implement certain activities at each location. These above constraints combined to create a dislocation between ARC and IRC work plans and had an impact on the project timeframe. Also the implementation of the CDC-led household, facility-based and seroprevalence survey planned for Rumbek was delayed for many months following the war in Iraq. During the war with Iraq and its aftermath, the USG put a travel ban on US citizen traveling outside the United States, and key CDC technical personnel were not able to travel to Rumbek for the April 2003 survey, placing an increased work load on IRC.

Training of the NSNAC members was constrained by a number of factors. The NSNAC members that were unable to attend the first HIV/AIDS training/workshop were also unable to attend the second HIV/AIDS training due to their involvement in the peace negotiation process. The lack of clear dates for their involvement in the peace negotiation process precluded planning a suitable date for their participation in a training/workshop. Therefore, approximately half of the members have attended the workshop. Security constraints prevented the opportunity to host the workshop in Rumbek the seat of the NSNAC and thus limited the attendance of key community members in the workshop.

A3. Lack of transport/supplies

Each project location had only one vehicle, which was used for all the project activities. BCC activities such as video shows, condom promotion, dissemination of HIV/AIDS messages including poster distribution are normally organized by BCC officers who have to travel to the Payams and carry out these activities. However, these activities are often not done according to plan because of transportation constraints.

Although project money was designated for the purchase of condoms, OFDA funds cannot be used for buying condoms. This became a constraint when ARC/IRC had to rely on free donations from MOH and UNHCR in Uganda and Kenya, which required a lengthy bureaucratic process to organize. Often the condoms were available in smaller amounts. IRC experienced additional constraints due to its logistics system, which requires a large amount of goods to be transported to Rumbek for cost-effectiveness.

The project also experienced some delays in ordering drugs and syphilis test kits for the program due to their unavailability from local distributors. When large orders of supplies were needed (such as condoms, bicycles, fuel etc) the project had to wait long periods due to lack of a vehicle to transport them to Yei, as well as lack of logistics staff to arrange their transport at the main office in Kampala.

Although the NSNAC has identified the need for a five-year strategic plan, there was and continues to be a lack of funds to host a strategic planning meeting. The Chief Health Officer and Focal Point for the Council have participated in proposal submissions to secure funding. NSNAC members also said that project data collection, such as the population-based behavioral and sero-prevalence surveys and other baseline information were necessary priorities to inform a strategic planning process.

A4. Lack of employment opportunities

Due to the poor economic situation for many people in southern Sudan and a precedent set by ARC in paying interviewers during the CDC survey, a majority of peer educators from Yei town viewed their activities as an opportunity for employment and insisted on being paid. Every effort was made to clarify the voluntary aspect of the peer educator's role. By promoting community ownership, clarifying the voluntary nature of peer educators and clarifying the NGO's role, peer education activities might run more smoothly. Project staff members continue to discuss this issue with local authorities and peer educators in an effort find some resolution. This has led to the dismissal of two peer educators. In Rumbek, the economic situation contributed to a majority of people refusing to become peer educators.

The ARC/IRC project is at the cutting edge of qualitative social change, not only in a complex emergency situation, but also in an area of Africa that has been largely ignored by the modern world. The project has had the energetic and uncompromising support of the New Sudan National AIDS Council, as well as committed and active participation of a variety of local organizations. Despite what may appear to be obstacles of daunting magnitude, it is generally felt that it is within our compass to affect a meaningful and quantifiable impact on the existing situation in southern Sudan.

B. LESSONS LEARNED

B1. Behavior Change Communication

Community meetings and workshops should be held on HIV/AIDS and on the goals and interventions of the HIV project just after the assessment phase and prior to commencing activities. The project was limited in some aspects by its ambitious Workplan and the time constraints of its collaborating partners. For example, in Yei, the community sensitization workshop should have been held prior to the CDC survey. Community leaders reported after the workshop (which was held in March 2003) that if they had attended the workshop prior to the survey, they and their community members would not have offered so much resistance. The chiefs and headmen apologized for the level of response during the survey and said they now understood clearly the role of the project and their own role in the fight against HIV.

The concept of peer education is new in these communities. It takes time to make clear the role of the peer educator, community's support, and the role of ARC. In the future, we will need to have more consultative meetings and allow longer time than might be expected elsewhere on any intervention prior to commencement of activities, in order for the community to digest ideas and bring up a response.

As has been the experience with the previous trainings in other area of the program, the training as well as follow on supervision of peer educators will require more intensive support than originally thought. Peer educators in the pilot site will need a more hands-on skills building support in planning their activities, communication strategies with their peer, and collection of data, which will be time consuming.

BCC is important in improving knowledge on HIV/AIDS/STIs, and an intense sensitization effort was needed prior to conducting countywide seroprevalence and behavioral surveys. In Yei, this lesson was learned the hard way, with many community leaders and community members refusing to participate due to inadequate sensitization prior to the survey. In Rumbek, a lot of time and effort was given to sensitize the community and its leaders prior to

the survey based on the lesson learned in Yei, and this was a chance to interact with them and enlighten them about the project. HIV/AIDS/STIs and the seroprevalence survey process.

B2. STI Services

One important lesson learned is that effective Syndromic management of STI is not merely the dispensing of drugs, it needs to be supported by BCC materials on STI in various local languages, effective contact tracing through partner notification, and condom promotion and distribution. HCP performance must be assessed on a periodic basis and it may require time and effort on the part of their supervisor for them to learn to fill forms and become comfortable with a reporting system. HCP capacity in logistics and commodities management was built, but health committee members should also attend the training to ensure that drugs are stored properly and that the health centers have appropriate and timely access to drugs and supplies.

Partner notification cards could be developed and translated into local languages. PHCCs and STI clinics are good outlets for condom distribution to high-risk groups, but HCPs must be clearly sensitized about the usage of condoms and the gender implications of their use. For example, some HCPs believed that male condoms were for men, and female condoms were for women. HCPs also reported that women did not ask for condoms. It is important that women are empowered to be able to access and negotiate the use of condoms.

There is still a struggle to convince the HCPs that syndromic management is the best for dealing with STIs. IRC recommends that the medical team follows up with the HCPs and continue to do on the job trainings with them using the Ugandan training manual. The management protocol has been introduced to southern Sudan by this project and there is need to find out how effective it is. HCPs must continue to attend refresher trainings. There still remains an over diagnosis of some conditions. For genital ulcers the medical assistant includes all RPR reactive cases in that category. The lab screening of blood for Syphilis is not accurate and it is important to have a laboratory technologist consultant come in to give technical assistance.

B3. VCT Services

Training of peer educators is a good strategy for creating demand for VCT services and condoms. After training peer educators in all the Payams of the project area, the demand for these services grew in areas outside of Yei town. As a result, ARC began mobile VCT services. A VCT tukul was constructed in Ombasi, Ottogo Payam. VCT was offered in Kaya, Kimba Boma and Bazi, Gulumbi Boma. At EOP, plans were also underway to offer VCT at Morobo PHCC. Demand for VCT is extremely high in Kaya, which borders Uganda. However, more counselors need to be trained to keep pace with the growing demand for VCT services at the Payam and Boma level. Logistically it is difficult to transport counselors and have them stay away from the main Yei site for weeks at a time, thus counselors should be identified and trained at the Boma level.

The project provided Co-trimoxazole for HIV positive clients for treatment of opportunistic infections. It is advisable to give this treatment to clients who have been assessed for immune suppression by a clinician. Since the VCT counselors are not clinicians, the project recommends that all HIV positive clients be referred to a clinician who will determine whether they need to put on co-trimoxazole based on clinical judgment and not merely on

account of being HIV positive. Unfortunately clinical referral is not possible at mobile VCT locations as there is only one doctor in Yei County. The project thus ran up against an ethical issue of providing prophylaxis to visibly ill HIV positive clients without consultation with a physician. The project should explore the availability and cost of co-trimoxazole in the local markets for clients to purchase.

As demand for VCT availability increases, the number of clients who know their positive sero-status also increases in the community. The follow-on project will need to address care and support issues for PLHA, by working within existing community structures such as religious organizations and health facilities. Home based care counselors may be trained to work with PLHA and their caretakers on issues such as preventative health care and palliative care. An effort should be made to investigate the feasibility of providing support groups as post-test clubs were not established at either location.

The project should also explore providing truly Mobile VCT services, especially in Rumbek due to the mobile population and presence of seasonal cattle camps. Although the project attempted to provide mobile services in Yei County, this was not successful due to the lack of trained VCT counselors and the need for ongoing counseling in the areas in which the services were offered.

B4. Condom Distribution

Condoms were distributed free by the project, which was essential in an area where there is little economy and market. Efforts must be made to bring in Female condoms to meet demand from women who are reluctant to use male condoms. Condom distribution worked well through peer educators and fixed sites such as bars, lodges, clubs and restaurants.

Projects that are aimed at preventing HIV need to ensure that they can purchase condoms with project funds or get them by other means before the demand is created. The project obtained condoms free from the Uganda and Kenya Ministries of Health but large orders were not possible.

B5. Partnerships (external and local)

External

The consortium approach to involve a wide variety of actors was an interesting way to bring to the project technical expertise in specific areas. The RHRC members (ARC, Columbia University, IRC, JSI, and Women's Commission) have a history of collaborating on service delivery projects in conflict settings, which likely contributed to the relatively smooth implementation of the project. In addition, the involvement of a wide range of stakeholders, including community leaders, implementing agencies and donors, created a sense of collective ownership where the operative theme was "what we should be doing." The sense of ownership on the part local partners created a favorable environment for effective implementation. In our favor, we have the energetic and uncompromising support of the New Sudan National AIDS Council, as well as committed and active participation of a variety of local organizations.

On the other hand, involving too many actors became problematic, possibly due to lack of communication among partner agencies rather than a fundamental failure of the partnership.

The distances between implementing sites in Rumbek and Yei and between head offices in Nairobi and Kampala certainly played a role.

One lesson learned is that partners who have the required technical expertise could come in as individual consultants rather than as an agency. The number of agencies involved could be reduced. Secondly, collaborate with NGOs that have experience in conflict settings because working in emergencies is different from working in development. Finally, technical expertise should be sought regionally rather than bring in so many consultants from international NGOs.

Local

Memoranda of Understanding (MOU) were signed between ARC/IRC and local partners, which detailed the contributions of each agency to reach project goals. The project recommends that future MOUs be more specific in the roles of each agency, the detail of supervision of the STI and VCT sites and the role of local personnel, since these sites were located within established clinics and hospitals that have existing staff and supervisory mechanisms. For example, in Rumbek, the former Diakonie Field Coordinator insisted that IRC staff only go to the clinic with one of the medical team members from Diakonie. This was rather difficult to organize since the teams have different schedules, leading to a reduction in IRC's ability to supervise the HCPs performance. ARC/IRC should in the future make more of an effort to share information and data gathered with local partners.

The NSNAC is poised to receive the expertise and technical assistance of organizations that focus on building the capacity of national HIV/AIDS Councils. With limited funds, the Council has worked extremely hard to advocate and educate their new policy among the southern Sudanese and would benefit from both the level of funding and expertise required for promulgating a national HIV/AIDS policy.

One important lesson learned during the project was the potential to collaborate with religious organizations, which unfortunately was not adequately explored during the pilot phase, partly due to time constraints. Participants in the survey and the VCT services reported religious leaders and services as an important source of information on HIV/AIDS. In Yei, VCT services were announced in churches and religious leaders participated in special events and workshops. In Rumbek, HIV/AIDS education was given in churches and religious leaders participated in special events, workshops and the CDC survey. Future projects should explore collaboration with religious institutions in the areas of VCT and care and support for PLHA, as well as advocacy and community sensitization.