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Sudan Program
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**Integrated Life-Supporting Services in Primary Health Care, Water and Sanitation
with attendant Education Programs for Internally Displaced Persons (IDPs) and War-
Affected Population in Darfur, Sudan**

**U.S. Agency for International Development, Office of Foreign Disaster Assistance
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Final Report covering Period May 2005- February 2006

From May 2005- February 2006 ARC continued primary health care and water and sanitation activities in South Darfur with OFDA support. The activities were planned to serve conflict-affected communities in the Nyala-Gereida corridor. Following a security incident at the end of September 2005 involving ARC staff it was decided, in consultation with OFDA, that ARC would shift its activities to the Nyala-Tulus corridor. By December 2005, ARC was firmly established in the Tulus corridor and was also able to resume activities in the Gereida corridor. Security continued to be a challenge to daily operations throughout the project period, but by February 2006 ARC had completed major water works in the Tulus corridor and supported static and mobile primary health clinics in both corridors.

Objective 1: Primary Health Care services strengthened for and good health care practices promoted among the targeted population

ARC's primary health activities were originally planned for communities with a combined total estimated population of 191,100 war-affected people. With the shift in activities to the Tulus corridor and the eventual resumption of activities in the Gereida corridor, the primary health activities were actually implemented in communities with a combined estimated total population of 228,650.

Activities

- 1. Continue to support ARC existing PHCs in Donki Dreissa, Sanam el Naga, El-Wihda (Nyala town) and Ditu with extended PHC services. Supervise and train staff extending capacity as described in the PHC Workshop Khartoum.*

At the end of the project ARC supported 11 primary health clinics (PHCs) and 2 mobile clinics serving an estimated 228,650 IDPs, returnees and other conflict affected persons in communities in South Darfur. Nyala-Gereida corridor:

- Donkey Dreissa – 22,000 residents
- Ditto – 23,000 residents (Activities in this clinic stopped with a security incident in December 2005 that led the majority of the community members to flee. ARC will resume health services when the community members return.)
- Sanamalnaga – 14,650 residents including mostly Dinka IDPs from South Sudan
- Abujabra – 14,000 residents including mostly Dinka IDPs from South Sudan

Nyala Town:

- Nyala- ElWihda community – 53,000 poor and IDP residents

- Nyala- Kerari community and Nyala Women's Prison (mobile clinic) – 20,000 residents
- Nyala- Eldomaya (mobile clinic) – 15,000 residents

Nyala-Tulus corridor:

- Abu Ajura – 17,000 residents
- Bulbul Abjazo – 10,000 residents
- Bulbul Temsco – 15,000 residents
- Safia – 12,000 residents
- Dimso – 5,000 residents
- Eltomat – 8,000 residents

2. *Provide supplemental feedings to area children according to needs. Assess for need for therapeutic feeding and refer to nearest centers in Nyala. Consider blanket feedings and notify pertinent providers assisting with distributions. Educate population on nutrition in 2-3 separate planned focus groups per community.*

By September 2005, 921 beneficiaries had received supplemental feeding, 500 of whom had successfully been rehabilitated and discharged. Villages included Birkatulli, Tokomaya, Donki Dreissa, Fulla Amnuara, Greiga, Algura, Sanam El-Naga and Abu Jabra. Unfortunately, at the end of September a security incident (SLA kidnapping of 16 ARC employees for 5 days) involving ARC stopped all our activities in this corridor for 10 weeks and WFP support for supplementary feeding activities in these sites ended in October 2005.

3. *Support a large PHC in Nyala town and a small dispensary in Gereida but with extended Reproductive Health services in both including 2 workshops for midwives and their assistants and support for complicated intra-partal care.*

Throughout this project ARC supported a large PHC in Nyala town called Elwihda. This clinic operated 24 hours a day at no charge providing primary health care, ambulance service for cases referred to the hospital and extended RH activities including a delivery room with observation area, a short stay room and expanded immunization for children under five, pregnant mothers and women of reproductive age. ARC also employed a Medical Doctor and constructed a theater for treatment of minor obstetric emergencies that will soon be operational. As the humanitarian priorities have shifted to areas outside of Nyala, in January and February 2006 ARC initiated discussions with the MOH and the community about returning this clinic to MOH control. To this end, ARC plans to begin cost-sharing during the first half of 2006. Outside of Nyala, ARC established reproductive health (RH) units alongside every ARC supported clinic as well as and an independent RH unit in Tulus town.¹

Training on complicated intra-partal care was addressed through supervision visits and on-the-job trainings for all ARC midwives. During the final quarter of this project 17 RH supervisory visits were conducted in both corridors and 15 midwives and 1 health visitor received structured on-the-job training.

The security situation in and around Gereida town and the presence of another international NGO health care provider, ICRC, precluded ARC's establishment of activities there. Given the increased needs in that area, however, this will be a priority in the next project period.

4. *Conduct 2 orientation workshops for project specific health workers whenever opening a new PHC.*

¹ ARC's reproductive health activities received complementary funding from Women's Commission and a private donor.

Staff in each new clinic received orientation from the Senior Health Officer and PHC Manager in Nyala. The staff were briefed on ARC and their rights and responsibilities as ARC staff. The staff also received ongoing training, supervision and monitoring in their sites.

- 5. Also conduct 2 sensitization campaigns on PHC priorities in emergency settings for targeted populations when opening new facilities or establishing new points for mobile clinics.*

In each clinic site ARC conducted assessments and worked with the communities to help them prioritize their health needs and acknowledge the roles they need to play in contributing to their own health care. In many communities this meant that the communities took the lead on constructing clinic structures from local materials while ARC provided the clinical services.

- 6. In collaboration with local health authority and lead UN agencies and NGOs, 2-3 new PHCs and 1 more mobile clinic service will be initiated as security and response to needs evolves, to continue to increase accessibility to primary health care services in under-served areas of the Nyala – Gereida corridor.*

ARC greatly expanded the PHC coverage in both the Nyala-Gereida and Nyala-Tulus corridors during this project. ARC identified target communities based on needs, determined by the presence of large numbers of IDPs, returnees and/or other conflict affected persons and a lack of service provision from other sources. In the Nyala-Gereida corridor ARC coordinated with the other NGO healthcare agency on this side, Merlin, to avoid duplication of services in the target areas. ARC is the only NGO healthcare provider in the Nyala-Tulus corridor.

- 7. In coordination with other health providers in the service area, conduct EWARN, morbidity and mortality surveillance, and implement management and control activities to prevent outbreaks*

Throughout this project, ARC submitted weekly EWARN reports. Biweekly visits were conducted to all clinic sites to gather data on communicable diseases. ARC also attended outbreak meetings and weekly SMOH sector coordination meetings. The only potential problem in ARC's target areas during this project were some cases of Acute Jaundice syndrome which were promptly investigated and controlled by ARC health and water teams in collaboration with WHO/MOH.

In order to improve collection and validity of morbidity and mortality surveillance data in the target areas, ARC began to identify and train community health volunteers (CHVs) in December 2005. With ongoing training, the CHVs will become valuable assets to ARC programs and their communities as they are able to disseminate reproductive and public health messages effectively as well as collect data on births, deaths and illnesses that are not reported to the clinics.

- 8. Provide vaccination coverage (cholera, measles, etc.) as directed by the health coordinating agency (UNICEF/MoH/WHO) participating in National Immunization Days as in previous 6 months.*

ARC established vaccination centers in Donkey Dreissa, Ditto, Sanamalnaga, Abu Ajura and Bulbul Temsco. ARC planned to install a vaccination station in all ARC clinics, however, there are few available vaccinators, MOH did not provide enough cold chain material for keeping vaccines and MOH also resists repairing the machines when they break down.

Instability in the Nyala Gereida corridor hampered monitoring of vaccination activities, but the areas of Abuajura, Safia, Bulbul Tembsco, Bulbul Abjazo, Sane Deleba, Dimo and other small villages in the Nyala-Tulus corridor are vaccinated on a monthly basis by the EPI Technician from Bulbul Tembsco. Areas around Tulus are well-covered by a MOH technician from Tulus Town

ARC also provided logistical support for the national Polio Immunization Campaign from February 20-22.

During this project a total of 44,681 children in ARC's target areas were vaccinated through ARC health clinics and immunization campaigns. Between May and July 2005, 15,555 children received EPI vaccinations and 1,172 children received measles vaccinations. An additional 27,954 children were vaccinated between July and December 2005.

9. *Provide supervision, technical training and medicine / material support for MCH services (including ANC/RH) for 2 PHCCs in the targeted areas, according to UNICEF approved guidelines. These clinics will also provide health education for all clients, both on an individualized basis and for larger groups.*

All of the ARC supported clinics were supplied with UNICEF primary health kits. The kits are generally sufficient for two months of activities with some supplementary supplies and drugs added as needed. Each ARC clinic houses a fully stocked RH unit. The RH units are staffed with trained midwives who are responsible for pre- and post-natal consultations and deliveries. The midwives also distribute clean delivery kits to visibly pregnant women in the communities. 2,145 clean delivery kits were distributed to over 16 sites during this project.

Reproductive health education sessions were conducted monthly with various target audiences throughout ARC's AOR. During the final quarter of this project 580 women, men, girls and boys participating RH education sessions:

- 23 women at Nyala Women's Prison on December 1
- 90 women at Elwihda PHCC on January 2
- 120 people (80 women, 10 men, 20 girls, 10 boys) in El Tomat on January 23
- 270 people (90 women, 20 men, 40 girls, 120 boys) in Dimso on January 24
- 50 women in Tulus on January 25
- 27 new Community Health Volunteers (17 men, 7 women, 1 youth male, 2 youth females) during community education training of trainers on February 21

10. *Continue to provide supervision, and on-the-job / refresher training in Antenatal and Postnatal Care, Safe Motherhood, Family Planning, Breast Feeding, Growth Monitoring and Nutrition, Oral Rehydration Therapy (ORT), for the MCH Units at the PHCCs.*

Supervision and on-the-job training are built into the program and are always ongoing. During the final quarter of this project 17 RH supervisory visits were conducted in both corridors and 15 midwives and 1 health visitor received structure on the job training.

11. *Provide on-the-job training on nursing procedures to health workers at ARC-supported health facilities. Conduct weekly checks on health workers to make sure training has been absorbed.*

On the job training and follow up after trainings was conducted for all clinic staff during the regular supervisory visits to all clinics. Primary health and reproductive health management staff made weekly visits to the clinics as security and other contextual issues allowed.

12. *Plan and implement a community mobilization program on GBV prevention, in PHCCs and mobile clinics.*

To prevent and respond successfully to GBV requires the commitment and participation of entire communities. When addressing such sensitive issues, it is essential that accurate and objective information be disseminated as widely as possible through reliable sources. To this end ARC established a total of 8 GBV focal points, each composed of 8 key community members (community leaders, police, local singers, midwives, medical providers), to be responsible for raising awareness and coordinating the community response to GBV cases. The existing focal points are located in Ditto, Gereida, Donkey Dreisa, El Tomat, El Nakhara, Tulus, Abu Ajura, and Safya.

In addition, 54 community health volunteers (24 men, 7 women, 13 boys, 10 girls) from the communities (Elwihda, Donkey Dreisa, Ditto, Abojebura, Sanam Elnaga, Tucumaya, Ghiriga, Birkatulli, Tabaldiat, Safya, Abu Ajura, Burbul Tembsko) were trained in GBV and community education techniques, to support their local GBV focal points in mobilizing their communities on GBV prevention.

27 more community health volunteers (17 men, 7 women, 1 boy, 2 girls) were selected to assist the GBV focal points in the Tulus area (from Tulus, El Tomat, and Dimso). They were trained in community education techniques and GBV awareness on January 20-22.

Health education activities were conducted for a total of 1,812 people in the two corridors during this project. Role plays, dramatizations, and talks included information on GBV, HIV, and Human Rights.

13. Integrate GBV services into MCH services at PHCC levels, and through workshops, OTJ training, other training/discussion sessions and sensitization campaigns as indicated above.

In addition to the community education activities described above, ARC also trained clinic staff and other community members in GBV issues, identification and treatment. The following trainings were conducted during the final quarter of this project:

- 2 ARC health educators attended a training of trainers on Sexual Exploitation and Abuse in December 2005
- 12 ARC medical assistants were trained in post-rape kit use and STI treatment in a 3-day workshop conducted by ARC in January 2006. This training was designed to strengthen the PHCC response to cases of GBV, to complement the referral system from the community level.
- 31 CHVs and 23 youth from 12 communities were trained in GBV in January 2006 to support the GBV sensitization campaign on a community level.
- 27 community health volunteers were trained on GBV and the related services available at PHCC levels in February
- 27 more CHVs were selected and given an orientation on February 20-22; a GBV training is planned for them in the next project period.

ARC also produced 1,500 posters on the 72 hour window for emergency contraceptive pills. These posters were distributed in ARC clinics, in communities through CHVs, and through other NGOs.

14. Implement referral service (standardized medical response) for GBV survivors in coordination with focal health agencies and Nyala-based GBV Working Group.

GBV in Darfur includes rape, domestic violence, female genital mutilation and early marriage. An effective referral process requires standardized medical response, community awareness and support. Therefore, ARC conducted awareness raising activities on GBV through health education sessions conducted by ARC staff in the communities. ARC also launched a longer-term strategy of community education with the Community Health Volunteers, who are being trained to provide both health education and support for the referral system on a community level.

As awareness increase, incident reporting and referrals are expected to increase as well. ARC established 8 GBV focal points, each composed of 8 key community members (community leaders, police, local singers, midwives, medical providers), to be responsible for coordinating the community response to GBV cases. The existing focal points are located in Ditto, Gereida, Donkey Dreisa, El Tomat, El Nakhara, Tulus, Abu Ajura and Safya. ARC provided training and materials for the GBV focal points to use in community awareness activities.

ARC PHCCs must also be prepared to respond to referral cases. 12 medical assistants (11 men, 1 woman) from the ARC clinics were re-trained in rape response, post-rape kit use, STI kit use, and psychosocial aspects of the medical response in January 2006. 11 nurses (10 men, 1 woman) from the ARC clinics were also re-trained in these topics, in March 2006. This training also included discussion on the referral service for GBV survivors in coordination with focal health agencies and the Nyala-based GBV working group.

15. Continue to implement MISP as appropriate, consistent with Sphere standards and in coordination with health agencies in new and previous areas of operation.

In the final quarter of this project, ARC's RH team resumed implementation of MISP activities in the Gereida corridor (after the two month hiatus following the security incident in September) and initiated MISP in the Nyala-Tulus corridor. Activities in the last quarter included:

- Participated in regular coordination meetings with local and international NGOs and UN agencies (UNFPA, UNMIS, UNDP, IRC, Darfur Net, Amel Center, Ahlam, Charitable Organization for the Koran, and others).
- Facilitated 12 GBV trainings for a total of 2,077 participants:
 - 2 ARC health educators in Nyala (December 5-7)
 - 150 male prisoners at Nyala Prison (December 8)
 - 32 female prisoners at Nyala Prison (December 8)
 - 1,300 community members in Domaya (December 11)
 - 30 community members in Tulus (December 24-26)
 - 12 ARC medical assistants from 11 communities (in Nyala January 16-18)
 - 31 CHVs and 23 youth from 12 communities (in Nyala January 16-18)
 - 120 community members and leaders in El Tomat (January 23)
 - 270 community members and leaders in Dimso (January 24)
 - 50 women in Tulus (January 25)
 - 30 GBV focal point members and community leaders from Abu Ajura and Safya (January 30-31).
 - 27 CHVs from 3 communities (in Tulus February 21)
- Facilitated 9 HIV/AIDS trainings for a total of 2,033 participants:
 - 150 male prisoners at Nyala Prison (December 8)
 - 32 female prisoners at Nyala Prison (December 8)
 - 1,300 community members in Domaya (December 11)
 - 30 community members in Tulus (December 24-26)
 - 31 CHVs and 23 youth from 12 communities (in Nyala January 16-18)
 - 120 community members and leaders in El Tomat (January 23)
 - 270 community members and leaders in Dimso (January 24)
 - 50 women in Tulus (January 25)
 - 27 CHVs from 3 communities (in Tulus February 21)
- Distributed 1,000 clean delivery kits: 50 to El Nakhara, 100 to El Tomat, 50 to Bulbul Tembsko, 50 to Ditto, 100 to Elwihda, 200 to Abu Ajura, 100 to Safya, 100 to Donkey Dreisa, 100 to Abojebra, 100 to Sanam El Naga, 50 to Dimso

- Provided 22 boxes of condoms to ARC RH units.)
- Collected community data from 32 community health volunteers (from the Nyala-Gereida corridor, Safya, Abu Ajura, and Burbul Tembsko).

16. Monitor and report cases of GBV to health services, protection and security officers, in conjunction with the Nyala GBV working group

GBV incident reporting in the rural areas is generally low. Community members and leaders in ARC areas have indicated that GBV does exist in their communities but maintain that one reason for low reporting is low awareness. During this project ARC awareness activities aimed to change community attitudes and perceptions of domestic violence, early marriage, FGM and rape, in order to create over time a supportive environment for GBV survivors. Community health volunteers played a key role; 81 CHVs from 13 communities and 23 youth from 11 communities received training on GBV, HIV/AIDS, and community education techniques during this project period. CHVs were utilized as a link to community members, to supplement ARC activity through clinics.

The process of monitoring and reporting GBV is evolving to include sources from the community level in addition to sources at the clinic level. The new CHVs have access to community information that might not otherwise be reported via other data sources, and the number of monthly reported GBV cases has increased since the introduction of CHV data collection. 2 cases of GBV were reported by CHVs in December (1 case of rape in Birkatulli which was referred to Nyala, and 1 case of domestic violence in Donkey Dreisa which was reported to the police and treated at the ARC PHCC). 7 cases were reported in January (the nature of these cases remained confidential.). 57 cases were reported in February (50 in Abojebra and 7 in Sanam El Naga). (The cause for the spike in reporting in Abujabra is unknown. It could be that the CHVs are gaining trust in the communities and are therefore receiving more reports or it could be inaccurate data collection. The reports will be investigated in the future.)

During this project 8 GBV focal point groups were established in Ditto, Donkey Dreisa, Gereida, Tulus, El Nakhara, El Tomat, Abu Ajura, and Safya. The purpose of these focal points is to involve community leaders, midwives and medical providers, local singers, women's leaders, and police in creating a supportive community network to assist GBV survivors medically, legally, and psychosocially. During the last quarter of this project GBV focal point groups intervened and stopped 2 cases of FGM in El Tomat), intervened and stopped 1 early marriage and 3 cases of FGM in Tulus.

17. Establish Hospital Transition Unit at Nyala Hospital to facilitate treatment of referred patients from different parts of Darfur at the hospital.

Following ARC's submission of a thorough and well studied proposed management of the referral system to WHO, ARC did not receive any feedback despite frequent follow-ups. The only alternative the hospital authorities supported was for ARC to assign a staff person to facilitate referrals in the Nyala Teaching Hospital. The role of the referral focal point was to facilitate care for referred patients. This arrangement, although insufficient, did notably improve service provision, and therefore outcomes, for patients referred from other locations. For example, a case of incomplete abortion in the community of Safia was referred to our health staff. With ARC assistance, the woman received care and evacuation the same evening that she was referred. Prior to the assignment of the ARC focal point, such a woman likely would have died waiting for care. All NGOs who refer patients to the Nyala Teaching Hospital employ focal points to assist their referrals.

Nyala Teaching Hospital remains in a deplorable state. For example, due to insufficient supplies, referred patients are sent to the local pharmacies to buy their drugs. WHO claims responsibility for improving the hospital, but more support is clearly needed.

18. *Provide Health Education Programs in selected schools in the ARC Area of Operation.*

Health Education on personal hygiene, good health habits and prevention of diseases was ongoing in ARC supported schools in the Gereida corridor (Donkey Dreissa, Ditto, Tokomaya, Birkatulle and El Mowarow) until the end of September 2005. As with ARC's other programming sectors, the education activities had to shift to the Tulus corridor. ARC identified 8 schools for support in this corridor in Tulus, Abu Ajura, Safya and Dimo. Regular health education activities resumed in these schools in December 2005. Two health education sessions were also held at the Elwihda Area Preschool for Women in February 2006 for a total of 195 women.

19. *Access to priority PHC services with qualified staff person responsible to monitor and enhance access leading to 100% of service areas having protocols, communication, and pre-arranged transportation to referral points or services as needed.*

- During this project period ARC was the only health service provider in the identified communities. In the Nyala-Tulus corridor ARC was the only international NGO supporting the health sector. ARC staffs with clinics with a mix of ARC and MOH personnel.

Maintaining a full staff was difficult throughout this project because of resistance from MOH, general concerns about security outside of Nyala and ethnic/tribal differences that made communities and staff difficult to match. The best way to address this problem is to hire staff from the target community, but it is difficult to find trained staff in the rural areas and in some cases being from the community compromised staff neutrality.

The average consultation rate in ARC clinics in February 2006 was 75 patients/clinician.

For the duration of this project ARC supported an ambulance at Elwihda in Nyala. Effective and sustainable emergency referral strategies for the rural areas are difficult to establish.

Achievements

Indicator	May- July 2005	May- September 2005	May- February 2006
# of PHC service per population Baseline: Stationary PHCs with mobile clinics servicing our gap areas	At the end of the project ARC supported 11 PHCs and 2 mobile clinics in South Darfur: <ul style="list-style-type: none"> o Donkey Dreissa – 22,000 o Ditto – 23,000 o Sanamalnaga – 14,650 o Abujabra – 14,000 o Nyala- ElWihda o Nyala- Kerari community and Nyala Women's Prison (mobile clinic) – 20,000 o Nyala- Eldomaya (mobile clinic) – 15,000 o Abu Ajura – 17,000 o Bulbul Abjazo – 10,000 o Bulbul Temsco – 15,000 o Safia – 12,000 o Dimso – 5,000 o Eltomat – 8,000 		
# service providers per site	The targeted staffing structure for each site is: <ul style="list-style-type: none"> • One MA or Physician • Two trained nurses • One vaccinator • Two CHW/Registrations 		

	<ul style="list-style-type: none"> • One Midwife/one village Midwife • Drug Dispensary • Two guards (12 hour shifts) • Two cleaners • A Health Worker for health education and promotion in the catchments areas 		
<p># of diseases described and managed by protocols</p> <p>Baseline: All major causes of mortality and morbidity will have treatment protocols that have been recommended by MOH WHO or other authority medical sources.</p>	<p>All diseases were managed by recommended MOH, WHO or other authority medical sources. The MAs also receive on job training by MDs to keep their practice current. More continuous training is necessary to improve the MAs diagnostic skills. General capacity building of the clinic staff should be prioritized for the duration of this project.</p> <p>ARI, dysentery, malaria, measles, UTI, PID, OTITIS and Tonsillitis were the common diseases treated in this quarter.</p>	<ul style="list-style-type: none"> ○ ARI: 1,268 cases, 13.8% ○ Malaria: 1,289 cases, 14.0% ○ Injuries: 505 cases, 5.5% ○ Unexplained fever: 405 cases, 4.4% ○ Acute jaundice: 39 cases, 0.4% ○ Severe malnutrition: 12 cases, 0.1% ○ Bloody diarrhea: 248 cases, 2.7% ○ Others: 5,387 cases, 58.8% <p>July and August were the height of the rainy season. ARC trained the staff on malaria treatment and while high levels of malaria morbidity were seen during this time, mortalities were low.</p> <p>The category "Others" included those diseases not included in the early warning system, such as common infections and conditions which are no immediate threat to life.</p> <p>Facility use rate decreased during this period from 60% to 50% possibly due to prompt and effective case management.</p>	<p>In January 2006 < 5 consultation = 929 > 5 consultation = 1,763</p> <p>In February 2006 < 5 consultation = 4,160 > 5 consultation = 2,070</p> <p>Main reasons for consultation were ARI, malaria and injuries</p> <p>Total consultations from July 2005- February 2006 were 44,163.</p>
# of trainings related to case management per month	During this project 10 case management trainings were carried out at different PHC sites in this quarter.		
# and type of UNICEF PHC Kit essential drugs consumed/site	The UNICEF PHC Kits are distributed as needed. The kits are generally sufficient for two months of care per site, and replacement drugs and supplies are provided when needed in the interim.		
<p>Mortality per 10,000 of population</p> <p>Baseline: CMR for under fives maintained at below 0.75 deaths per 10,000/day, and adults below 0.25</p>	The mortality rate registered at the PHC service sites during this project averaged 0.2 per 10,000. However there were deaths that occurred out of ARC facilities that were unrecorded.		

deaths/10,000/day			
The major causes of mortality and morbidity are monitored, documented.	Weekly reports on morbidity and mortality were submitted as EWARN to the MOH and WHO epidemiological department. Throughout this project the major causes of morbidity were acute respiratory infections, malaria and injuries		
# of children vaccinated per site for measles and EPI	A total of 44,681 children were vaccinated in ARC's areas during this project.		
Malnutrition rates each site and # receiving supplemental feeding in each site Baseline: Rapid Nutrition Survey indicates a Current GAM malnutrition rate is 46.7%, inclusive of a 2.37 Severe rate.	823 children received supplementary feeding to date	921 children received supplementary feeding to date. WFP stopped providing food for the supplementary feeding activities in October 2005.	ARC conducted a nutrition survey at the beginning of February in the Tulus locality. The result showed a Global Acute Malnutrition (GAM) rate of 13.2% (95% CI 11.0 – 15.7%), Sever Acute Malnutrition (SAM) rate of 1.2% (95% CI 0.6 – 2.3%), Crude mortality rate (CMR) of 0.89/10,000/day and under 5 mortality rate (U5MR) of 1.9/10,000/day.
# of women receiving MCH services including: <ul style="list-style-type: none"> • Antenatal visits • Births assisted • Post partum visits • Vaccination to pregnant • Family planning visits • Referrals for secondary • Other RH visits Baseline: Kits provided dependent on UNFPA guidelines per population figures.	908 pregnant women vaccinated against TT	# 1st ANC visits = 480 Repeat ANC Visits = 753 Post Natal Visits = 79 # deliveries in clinics = 144 Maternal death = 1 Still birth = 1 Low birth weight = 0 Referrals to Hospital = 2 (The figures do not include the last five weeks of the reporting period as insecurity hampered data collection.)	December 2005- February 2006 - 1,781 antenatal visits - 200 deliveries at RH units (no Jan data) - 72 post partum visits (no Jan data) - 367 women vaccinated for TT
Track crude infant maternal mortality rates	Data collection through CHVs began in December 2005 so the validity of the data collected so far is not assured. It is expected that data collection will improve as CHVs gain experience and further training. December 2005 = 220 per 10,000 (these numbers are attributed to the inexperience of the CHVs in data collection) January 2006 = 1.3 per 10,000 per day February 2006 = 0.7 per 10,000 per day		
# of trainings for midwives at all levels, TBA type, trained midwives, medical staff r/t RH, SGBV issues Baseline: Monthly trainings for all providers on varied topics	Two trainings in awareness and prevention of GBV in Gareida, Donki Dreissa and Ditto were carried out targeting medical assistants, midwives, nurses and community leaders (Imams, police, women leaders and a singer) A total of 4 RH trainings were carried out in El Deain, Kass, Nyala midwifery school and Tulus.	A cumulative total of 22 health education sessions were held in the midwifery school, the Prison and in Nyala -Gareida and Tulus Corridors. A cumulative total of 900 delivery kits were distributed	7 on-the-job trainings for 15 midwives 17 supervision visits for 26 midwives

	A total of 400 Clean Delivery Kits were prepared and distributed to pregnant mothers at all ARC sites. The Clean Delivery kits were prepared by a local Voluntary Organization (Ayya) with support from ARC		
# Visits for SGBV related incidents: <ul style="list-style-type: none"> o Rape o FGM related o Other sexual violence o Referrals for psycho social o Referrals for legal assistance <p>Baseline: Active planning with coordination within community of SGBV</p>	A case of rape was heard about in May and was referred to Ahlam, a well-regarded local NGO, for psychosocial support. Three cases of FGM were reported in Ditto area. More trainings and social mobilization were stepped up using posters and focal point discussions.		<ul style="list-style-type: none"> o December 2005: 1 rape (Birkatulli) and 1 case of domestic violence (Donkey Dreisa) reported o January 2006: 6 cases (Burbul Tembsko) and 1 case (Safya) reported o February 2006: 57 cases reported (50 in Abujabra, 7 in Sanam El Naga).
# and description of monthly SGBV sensitization and prevention activities Baseline: Monthly sessions ongoing all sites	<p>GBV trainings for communities: 3 GBV trainings from May to October, 2005 (for 60 men and 42 women) in Ditto, Gereida, and Donkey Dreisa. 1 training in November 2005 (for 60 men and 42 women) in Nyala. 3 trainings in December 2005 (for 450 men, 432 women, 300 boys, 300 girls) in Nyala Men's Prison, Nyala Women's Prison, and Domaya. 4 health education sessions (for 30 men, 310 women, 130 boys, 60 girls) and 1 GBV training for CHVs and youth (24 men, 7 women, 13 boys, 10 girls) from 12 communities in January.</p> <p>GBV focal points: 8 (Ditto, Gereida, Donkey Dreisa, El Tomat, El Nakhara, Tulus, Abu Ajura, Safya).</p> <p>GBV trainings for ARC staff: 2 in November 2005 (for 15 men, 35 women). 1 in January 2006 (for 11 men, 1 woman).</p>		

Conclusions:

During this project period, the health program saw successes and challenges. Following the September security incident ARC managed to shift resources to the Tulus corridor, a government controlled area, which allowed continued service provision in areas in need of health care while also improving ARC's image of neutrality. (The Gereida corridor is rebel-held.) The resumption of activities in the Gereida corridor in November, 2005 resulted in ARC supporting health activities throughout a very large geographical area. This stretched staff capacity for supervisory and training visits to the field sites. This also constrained the agency's ability to respond to emergency situations, e.g. Tiwal and Gereida, with the desired speed. Now that the primary health facilities are established, in the future, ARC can focus on improving the current level of service provision with an emphasis on focusing support in areas of most critical need and building staff capacity in other areas to implement activities without ARC support.

Objective 2: Access to potable Water sources improved and good Hygiene and Sanitation practices strengthened among the targeted population

For the water and sanitation component of this project, ARC intended to reach approximately 138,100 beneficiaries. Actual beneficiaries for this project period were 138,785.

Activities

1. Set up water bladders and taps at targeted IDP sites in Nyala, and in Gareida corridor, as needed.

2 water bladders and one water purification unit were fixed in Abu Ajura in July 2005 and 880 persons had access to clean water each getting 15L/day. The bladders and purification unit were removed when no longer needed in October 2005.

2. Carry out geophysical surveys, drill, test and install up to 10 new boreholes complete with hand pumps and platform / genset with submersible pumps depending on the yield and the needs for the specific site. (Under the expanded UNICEF strategy or suitable contractors)

During this project period ARC and partners drilled 7 new boreholes for 3 deep wells and 4 shallow wells.

ARC and UNICEF signed a Watsan PCA at the end of July 2005 in which ARC agreed to provide technical support to facilitate the government's drilling of 6 shallow wells. ARC completed 8 geophysical surveys in the Nyala Tulus corridor (Tono, Karam, Delebaia, Abugatati, Rahad Doda, Rahad Elgubba, Eldumbaloia, Elgarada) and together with UNICEF and the government water agency, WES, identified 6 sites for drilling. UNICEF provided the funds for the drilling to WES. WES contracted this to private drillers. At the end of this project, 6 shallow wells were drilled out of which 4 were successful (Tono, Abugatati, Delibat and Karam) and 2 were unsuccessful, i.e. did not reach water. WES is supposed to install hand pumps on the 4 successful drilled shallow wells but at the writing of this report this has not yet been done. Nevertheless, ARC conducted bacteriological and chemical tests on these wells in preparation.

For the ARC/OFDA activities, a contract was signed with Elgadier drilling company in November 2005 to drill 5 new deep boreholes in the Nyala Tulus corridor, 2 in Buram, 1 in Tulus, 1 in Edd Elfursan and 1 in Rehid Elbirdi localities. Drilling was completed in Gibebish and Wadajam in Buram Locality and Akrop in Tulus Locality. These wells ended up being significantly deeper than originally planned so to cover the additional drilling costs the other two wells were cancelled. What ARC did to “compensate” for the decreased number of planned deep boreholes was to double the number of wateryards constructed or rehabilitated (please see #4 below).

3. Rehabilitate and support the repairs of 20 hand pumps

A total of 45 hand pumps were repaired during this project in both corridors. The repair involved replacing parts such as upper valves, check valves, head cover, chain, bolts, apron, axles and rubber seals. 25 repairs were conducted in the Nyala-Gereida corridor (2 in Mayrno, 8 in Ghereiga, 7 in Tokomaya, 2 in Fulla Abukaka, 2 in Birkatulle, 2 in Tabaldiat, 1 in Bny Husein, 1 in Bukhsa) and 20 in the Nyala-Tulus corridor (2 in Amar Jadeed, 10 in Sanya Deleiba, 4 in Karam, 1 in Deleibat, 2 in Tono, 1 in Abugatati).

4. Construct / rehabilitate 4 water yards (public stand pipes, water tanks, stand pipes for trucks and donkey carts and livestock troughs)

8 water yards were rehabilitated during this project with OFDA and UNICEF support: 1 in Tiwal, 1 in Eltomat, 1 in Dimso, 1 in Abusalala and 4 in Tulus.

The rehabilitations involved the following works in each water yard:

- Construction of walls to separate human and livestock water consumption areas
- Construction of 30 public tap stands
- Rehabilitation of elevated steel tank
- Construction/rehabilitation of 4 animal troughs
- Construction of 1 donkey cart stand pipe
- Construction of fence with 2 gates
- Construction of drainage canal from public tap stand to a manhole outside the fence

5. Supply and install 6 sets of generators and submersible pumps.

6 generators were purchased, 3 were completely installed with their submersible pumps in Birkatulli and Dito in the Nyala-Gereida corridor and Eltomat in the Tulus corridor. 3 are in the process of installation in Tiwal, Abu salala and Gebebish in the Nyala-Tulus corridor.

6. Conduct routine water quality monitoring and subsequent treatment 10 new water points and other sources which are found to be contaminated.

All the new water points were tested following drilling and the water in all the sites was found to be fit for human consumption. Regular water testing in the older sites revealed safe drinking water in those sites as well.

7. Assist in rehabilitation of 2 existing boreholes

ARC provided assistance in maintenance and rehabilitation for four boreholes in this project in Gidad, Sirgeala, Ditto and Eltomat. The maintenance involved replacement of rubber seals, valves, gaskets, chains, foot valves, riser pipes and rods. In Eltomat ARC provided a generator to help the community living there and in the surrounding villages. In Dito ARC provided the community with a generator and submersible pump.

8. Train 20 pump operators and cashiers on repairs., O&M and water management

28 pump operators were trained in operation and maintenance in Tulus town targeting operators of water department and private boreholes and other private works related to water in September 2005. The training was for 7 days and was facilitated by 3 engineers from the GOS Water Department. The training concentrated on basic information in mechanics and electric repairs, safety, operation, basic pump preventive maintenance, basic book keeping, proper way of handling water from the water source and sanitation activities related to water (disease related to water, water borne disease, water source protection).

9. Offer 30 hand pump technicians; on-site refresher courses on hand pump repairs and maintenance.

During this project 26 pump technicians received practical on-site training on hand pump repair and maintenance: 5 in Sanya Deleba area, 1 in Abu Ajura, 10 in Elsafia, 5 in Tono, 5 in Karam area.

10. Construct 1,700 family latrines, and 250 group latrines (including schools and health clinics)

During this project ARC constructed a total of 1,843 family latrines and 26 group latrines. 995 latrines were constructed in the final quarter of this project: 195 in Tono, 295 in Tulus, 100 in Sane Deleba, 150 in Elsafia, 130 in Karam and 125 in Abugatati.

11. Construct 50 institutional latrines (VIP) in schools and health facilities

The security situation impeded implementation of this activity, therefore resources were utilized for construction of household latrines.

12. Conduct 8 health and hygiene education training workshops and sanitation promotion campaigns to the targeted communities. The training to reach 400 direct beneficiaries

Five health and hygiene education workshops were conducted with 166 participants from Dimso (31 participants), Eltomat (34 participants), Elsafia (40 participants), Abuajura (30 participants) and ElNakhara (31 participants).

13. Conduct 3,000 regular household visits to monitor latrine usage (number of latrines being used versus number of latrines available)

A total of 2,231 household visits were done during this project period. In the last quarter 160 visits were done in Tulus, 310 in Sane Delebah, 70 in Safia, 34 in Dimso, 120 in Tono, 210 in Karam and 70 in Abugatati.

14. Train 10 village health committees (VHC) comprising of 10 – 15 persons on health and hygiene education

Four village health committees were formed and trained during this project in Dimso, Eltomat, Abuajura and El Nakhara. The committees are composed of a mix of males and females from the target communities. The VHCs are responsible for organizing and facilitating the work of the Community Health Volunteers (CHVs) in the community. Each committee received training on the following topics:

- Key issues relating to hygiene promotion
- Transmutation routes and methods of prevention
- Water sources: quantity and quality aspects, areas and water pollution aspects
- Hygiene behavior and its impact on health
- Personal and domestic hygiene and areas of focus
- Nutrition and its importance in childhood diseases
- Water related diseases
- Monitoring and evaluation of activities
- Field visits to water sources and homes for checking personal hygiene
- The importance of latrines, their types and the proper use of them
- Back ground about HIV/AIDS

15. Train 300 Community Health Volunteers (CHV) on Health and Hygiene promotion within their communities

A total of 155 CHVs were identified and trained during this project. In the last quarter of the project 20 CHVs were trained in Dimso, 25 in Eltomat, 24 in Elsafia, 12 in Abuajura and 12 in Elnakhara. The CHVs act under the supervision of the village health committees to educate community members through regular household visits and one-on-one and group discussion on the following topics:

- The proper use of latrines
- Personal hygiene

- Cleaning of the house
 - Food hygiene
 - Hygienic carrying and storing of water
 - Disposing of house waste
 - Making cleaning campaigns according to the need
 - Organizing monthly conferences in each sector
 - Monitoring latrine pits digging according to the required measurements
- The CHVs report weekly to ARC and notify the organization when anything unusual, problematic or needing improvement appears related to hygiene activities.

16. Conduct Child Health and Sanitation Training (CHAST) to 5 selected schools in the project areas to at least 200 pupils

During this project 240 students received CHAST training in their schools in Abuajura and Tulus.

Achievements

Indicator	July 2005	September 2005	February 2006
Liters of water available per person per day Baseline: 40 litres per household per day working or an average of 8 liters per person per day	A household of eight (8) persons collected 4 jerry cans of 20 liters per day. This works out to 10 l/p/d which is below the Sphere guideline.	In places where ARC rehabilitated hand pumps and boreholes and set up bladders, household visits showed that on average a household of eight (8) persons collected 7 jerry cans of 20 liters per day. This works out to 18 l/p/d which is above the Sphere minimum guideline.	
Adequate number of water points.	During this project ARC completed the following activities: 240 taps provided 45 hand pumps rehabilitated 3 deep wells drilled 5 wells with hand pumps drilled 2 deep well rehabilitated		
Supply of water from protected or treated water sources Baseline: Protected sources (hand pumps and boreholes) were chlorinated on completion. Open wells and catchments are unprotected and prone to contamination.	During this period most of the water sources in the ARC area of operation were drilled wells equipped with hand pumps or generators. These are completely sealed and provide relatively safe water. However, communities also took water from water catchments and ponds during the rainy season from mid-June to mid-September. ARC encouraged household chlorination in such cases.		Chlorination was organized with village health committees which were trained by ARC hygiene promotion staff. The chlorination involved some aspects related to water borne diseases, water contamination and other issues relating to hygiene promotion.
Safe and adequate household storage of water.	ARC distributed a total of 12,451 jerry cans during this project in both the Nyala-Gereida and Nyala-Tulus corridors. Nyala-Gereida corridor: ○ 2,200 in Gereiga		

	<ul style="list-style-type: none"> o 117 in Donkey Dereisa o 1,500 in Dito o 350 in Tokomaya o 450 in Fulla Abukaka o 450 in Baraka Tulli o 2,024 in Sanam Elnaga <p>Nyala-Tulus corridor:</p> <ul style="list-style-type: none"> o 250 in Sanya Deleiba o 510 in Abuajura o 600 in Algura o 900 in Tulus o 700 in Abusalala o 400 in Kuezy o 1,200 in Eltomat o 340 in Um Mashtor o 460 in Rajaj 		
<p># of people per latrines</p> <p>Baseline: Only 20 % have household latrines.</p> <p>No communal latrines.</p>	<p>ARC provided household latrines to IDPs and returnees with IDPs living in their households. Households had about 5 to 10 persons, thus falling within the Sphere guideline range of 20 persons per latrine. The latrines were sited within range of the homesteads, near and accessible.</p> <p>322 household latrines constructed and an estimated 1,700 people benefit from these latrines.</p>	<p>To date 526 household and 26 communal latrines constructed. An estimated 3,700 people benefit from these latrines.</p>	<p>A total of 1,843 household latrines and 26 communal latrines were constructed under this project. An estimated 9,215 people benefit from the household latrines, plus 5 schools and 2 health clinics.</p>
<p>Distance from the dwellings to the latrines</p> <p>Baseline: 10 m (next to the homesteads) where the household have latrines</p>	<p>In accordance with Sphere standards, ARC staff, VHCs, CHVs and latrine construction personnel taught beneficiaries to dig latrines within walking distances greater than 5m and less than 51m. At the end of this project communities showed adherence to the regulations and procedures of digging latrines and it was confirmed by the regular household visits.</p>		
<p>Distance between the water sources and latrines</p> <p>Baseline: The water sources are more than 50 m from the nearest dwellings</p>	<p>ARC sanitation staff members taught the communities to build their dwellings more than 50m from water sources (in accordance with Sphere standards) through the hygiene and promotion training activities. Regular household visits by ARC hygiene promotion trainers, VHCs, and CHVs confirmed that community members were abiding by the Sphere regulations and procedures.</p>		
<p># schools with adequate latrines</p> <p>Baseline: No toilets in schools. Pupils go home, nearby homesteads or bushes</p>	<p>During this project 5 schools were provided with latrines at the target ratio of 1 toilet to 30 girls and 1 toilet to 60 boys</p>		
<p># PHC clinics with adequate latrines</p>	<p>During this project 2 primary health clinics were provided latrines at the target ratio of 1 latrine to</p>		

Baseline: No latrines in PHC clinics	50 out-patients (short-term) and 1 latrine to 20 out-patients (long term).
Adequate cleanliness of latrines, water points, bathing areas, wash areas	This was observed in some of the villages where ARC worked but the positive changes, are not yet adequate .The situation is especially not very good in water yards that have not been rehabilitated. Hygiene education will continue in the next project.
Improved Hygiene practices being used by population	More people in areas where ARC carried out hygiene and sanitation education were observed doing simple hygiene practices like washing hands before eating.
Hygiene behavior change is improved	

In the water section, some trouble was encountered in the drilling of the deep boreholes. The estimated water depths from the geophysical surveys were inaccurate. Therefore the wells needed to be much deeper than budgeted, which required reducing the number drilled. As mentioned above, we doubled the number of wateryards either constructed or rehabilitated in order to make up for this lower level of deep borehole development.

In the sanitation section, VIP latrines were not constructed as planned in the Gereida corridor because of the security situation. With the shift of activities to the Tulus corridor, it was decided to focus on household latrine construction instead.

At the end of this project, improvements in water and sanitation sector are visible in the ARC areas of operation. People have adhered to the regulations and procedures that were taught to them by ARC staff members, VHCs and CHVs in terms of water use and hygiene promotion activities.

Example 1- Water yards:

Before ARC's intervention, villagers were taking water from the same water troughs where their animals drank. After ARC rehabilitated the water yards the people were taught to take water from the water tap stands made specially for them and to lead the animals to drink water from the water consumption areas set aside specially for animals. Annex 1 shows photos of the humans and animals drinking water together before the rehabilitation and behavior following the rehabilitation and hygiene promotion training.

Example 2- Hygiene promotion:

In terms of hygiene promotion and education, people used to go to bushes and forests nearby for defecation and urination without considering the side effects of defecating and urinating outside on the ground. Following the ARC hygiene promotion training about how to dig a latrine, where and for what reason, they realized the importance of using latrines. Household visits following the training witnessed an increased presence of household latrines following ARC trainings. Attached in Annex 1 are some images showing slab making for household latrines and hygiene promotion trainers and trainees.

CHALLENGES

Security was the primary challenge during this project. In September 2005, 16 ARC staff members were abducted for 5 days by SLA militiamen in the Nyala-Gereida corridor. Following this incident, ARC activities in that corridor stopped for several months. Eventually it was agreed, with OFDA, that ARC would shift activities for the time being to the Nyala-Tulus corridor. Starting activities in a new corridor delayed project implementation. Furthermore, at the end of November and into December

2005 ARC began resuming activities in the Nyala-Gereida corridor, but still faced intermittent security problems. Shifting activities into the Nyala-Tulus corridor greatly increased the reach of ARC activities, which was a positive outcome of the September security incident. However, implementation and supervision of program activities in two corridors did prove challenging, especially during the start up phase.

Annex 1: Project Photos



This is the way of humans and animals used to drink water together from the same livestock trough before rehabilitation.



This image shows the area of water stand taps of where people have been getting water after rehabilitation.



This image shows the slab making for the household latrine.



This image shows the ARC lecturers when they were offering lectures on hygiene promotion activities.



This image shows the trainees when they were having lectures on hygiene promotion activities.