

Reviewed Paper

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SUSTAINABLE DEVELOPMENT OF WATER RESOURCES, WATER SUPPLY AND ENVIRONMENTAL SANITATION

Emergency Sanitation solutions for war IDPs in West Darfur State, Sudan*Stanslaus Tombe Bönda, Sudan*

Darfur is a remote marginalized area in western Sudan that has numerous problems such as lack of basic services, insecurity, access, etc.. To respond to the emergency challenges of providing sanitation services to the thousands of Internally Displaced Persons (IDPs) in West Darfur, appropriate realistic fast solutions had to be adopted in order to overcome numerous obstacles at levels of the emergency sanitation interventions and alleviate the suffering of the IDPs. The most important solution for success was better coordination among NGOs themselves. The needs of the host community who in Darfur are in most cases no much better off than the IDPs had to be taken into consideration to avoid conflicts between the two groups or between the host community and NGOs.

Introduction

The conflict in Greater *Darfur* region since February 2003 has driven 3 million people from their homes and led to the death of about 180,000. While over 200,000 of the affected people fled to neighboring Chad, the majority of them live as IDPs in various camps numbering over 100 mostly near the main towns in the region. This sudden influx of people in huge numbers increased the demand for basic services such as water and sanitation which were unavailable or insufficient anyway prior to the coming of the IDPs to their new refugee areas.

The Adventist Development and Relief Agency (ADRA), is an INGO that has been working in various parts of Sudan for the last 27 years in the fields of relief and development. ADRA's first intervention in west *Darfur* State was in 2004 in *Kirinding* IDPs camp with a sanitation and hygiene promotion project in which 1,000 household pit latrines were constructed from June-October. *Kirinding* is one of the eight (8) IDPs camps around Gineina the capital of West *Darfur* state and is located 2 km south of the town. It had a total population of 23,000 in August 2004 but this has since increased.

Obstacles to the intervention

There were numerous problems faced by ADRA and other NGOs that were among the first ones to intervene in west *Darfur* State but the main ones were:

1. Lack of qualified local manpower and implementation partners.
2. Poor infrastructure and communication (air transport costly, poor roads -transport by roads takes 3 to 4 weeks but could be even months during the rainy seasons when some roads and streams become impassable).

3. Insecurity caused by the warring factions and banditry.
4. Poor coordination of activities by the state authorities who were understaffed, inexperienced and over stretched by the intervention.
5. Exorbitant prices (3-4 times higher than in Khartoum).
6. Delay in obtaining permission to intervene and permits for expatriate staff due to very long Humanitarian Aid Commission (HAC)² bureaucracy as government policy of restricting foreigners from entering the region.

Solutions for the emergency sanitation intervention in Kirinding camp

Slabs made of Poly Vinyl Chloride (PVC) material were introduced as an emergency sanitation solution for the IDPs in West *Darfur* by UNICEF at the beginning of the intervention but they were too fragile and could not withstand excessive handling and transportation.

In addition to the slabs problem were others such as loose formation, insufficiency and therefore expensiveness of latrine construction materials such as cement and reinforcement iron rods in the local market. To be efficient and to also minimize costs, the following solutions had to be adopted for the emergency sanitation intervention in *Kirinding* camp. They were decided upon by ADRA in collaboration with the Water and Environmental Sanitation (WES) unit of West *Darfur* State Water Corporation (SWC) which has the expertise in sanitation problems of the area:

1. A circular shaped pit with a diameter of about 0.5 m was used to give strength to the walls and avoid collapse of the loose sandy formation since pits were not lined.
2. Pick axe replaced by specially designed but simple and cheap tool for pit digging. The tool was a one meter long metal rod of 3cm size sharpened at one or both ends.

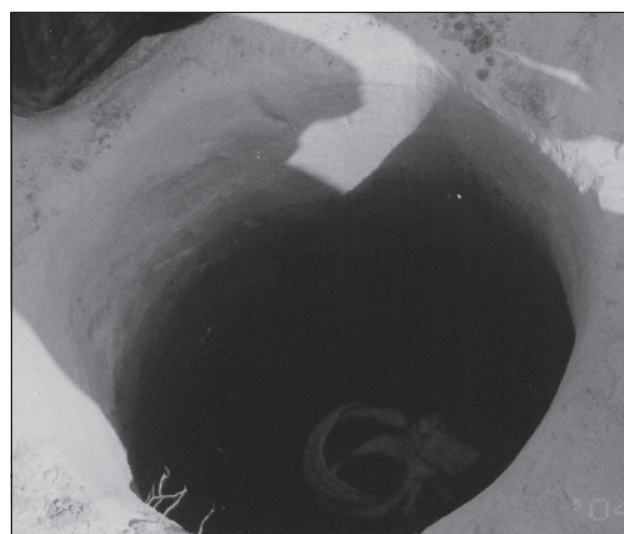
3. Asan plat slab design measuring 60m x 60m was adopted instead of the 75mx75m size normally used. This reduced quantity and consequently cost of latrine construction materials such as cement and iron rods which in West *Darfur* cost 3-4 times the price in Khartoum. Another advantage of the reduction of the slab size was that its weight was reduced which in turn reduced the burden it exerted on the placement wooden poles.
 4. Sacks filled with sand-an abundant commodity in the area obtained free of charge were used to cover the rest of the pit not covered by san plat slab.
 5. Only 6-7 wooden poles used for placement of slabs.
 6. Superstructure made of grass mats (locally available) or plastic sheet.
 7. Pits depths limited to about 3m due to loose formation and also shallow water table.
5. Threats of attack from host community because they were not included in the project: *Kirinding* sanitation project like most other NGOs' interventions in *Darfur* at the beginning of the conflict targeted IDPs. The host communities, some of whom lived adjacent to the IDPs, saw this as discrimination by NGOs against them since they too lacked basic services that were being provided to IDPs. They therefore, threatened NGOs and IDPs alike with attacks if they were not provided with basic services too. A community of *Janjaweed* living south of the camp threatened to disrupt our activities on several occasions if we didn't include them in the project.

Household latrines construction procedure

The first step began with siting of the pit latrines and registration of families by the Sanitation Supervisor. The Supervisor also monitored pits digging with assistance from the CHPs to make sure they were dug to the right dimensions. Due to the emergency nature of the project, ADRA paid the households as an incentive, SD'500 per meter dug and SD500 for each superstructure erected. As their contribution, the community had to transport the latrine construction materials from the slabs production site to their households. They also filled the sacks with sand and placed them near ready pits. ADRA was responsible for providing digging tools, san plat slabs, wooden poles, bamboos, sacks, grass mats and plastic sheet (obtained from UNICEF) to the community. ADRA was also responsible for placement of slabs and pits covering.

Challenges to the intervention in Kirinding IDPs camp

1. Circular pit more difficult to dig due to limited maneuverability than rectangular or square shaped one.
2. Pits digging tool not as fast as pick-axe. The sharpened end of the tool was smaller than that of a pick axe therefore removing very little soil at a time. So the process of pit digging was slower.
3. Lack of space for erecting household latrines: For fear of attacks from the *Janjaweed* (a government militia), most of the IDPs were forced into very small crowded camps in "safe areas" though their populations were big. In *Kirinding*, there were 23,000 IDPs living in an area of about 2 km² in size. The IDPs faced difficulties even with construction of shelters for their residence due to this limit in land. Availability of space for construction of pit latrines was therefore even much more limited.
4. Some members of the community were unwilling to use pit latrines: In their villages of origin, prior to their displacement, the IDPs didn't have/use pit latrines. They helped themselves in the bushes. So the culture of using pit latrines was an entirely new one for the majority of them and they couldn't understand its benefits.



Photograph 1. Circular shaped pit



Photograph 2. San plat slabs

Solution to the challenges

1. Pit shape and digging: As a solution to challenges 1 and 2 above, we asked people and they agreed to work in groups of mainly 2-3 persons to speed up pits digging process. As a result, most pits were completed in only 2 days compared to 4 or more days when dug by an individual.
2. Lack of space for latrine construction: Through the *Sheikhs*³ who are influential among their respective

communities, we initiated negotiations with neighboring families to come up with appropriate and acceptable solutions to them. This sometimes meant 1 or 2 families shifting the location of their residential shelter to make space for a pit latrine for their neighbor; in some cases 2 neighbors agreed to dig and share one pit latrine.

3. Unwillingness of some members of the community to use pit latrines: The project had a hygiene promotion component and ten Community Hygiene Promoters (CHPs) supervised by one Social Mobilizer were employed for this role. They sensitized the community on better hygiene practices, among them the importance of using latrines. They did this through household visits and public awareness campaigns-using drama, and songs; this made people unwilling to use latrines aware of their importance. Sheikhs who are listened to by their people were specifically targeted so that they could influence the behavioral changes needed in their communities. A month from commencement of the project, there was a positive response from the community and even pits digging speeded up.
4. Threats of attacks from host community: We decided to construct 50 latrines for the neighboring community to avoid conflict with them since like the IDPs, they too lacked basic services such as sanitation facilities. First, we held meetings with their Sheikh and elders and explained our position. They narrated their problems to us and promised never to threaten us or the camp again.



Photograph 3. Superstructure covered with a plastic sheet

Solutions to improve NGOs performance on the ground

1. In the rush to provide basic services for the IDPs in the camps in *Darfur* in the early days of the intervention, there were problems caused by lack of proper coordination

of activities. Some NGOs found that their interventions were exactly the same as those of other NGOs working in the same camp. In *Kirinding* camp, ADRA found out that SCF/US was also executing a sanitation project. This came about due to lack of proper coordination and supervision by the state authorities. There was also the issue of standards with some NGOs using different slab sizes for instance.

To solve these problems it was agreed to:

- Coordinate sanitation and other interventions both at state and national levels. At the state level, WATSAN coordination meetings were held on a weekly basis and UNICEF was assigned the role of the lead agency for this sector. The meetings were chaired by them but later on the chairmanship went to WES. INGOs with WATSAN interventions also had their own coordination meetings separate from the above.
 - Appoint a lead NGO for each IDP camp to avoid duplication of activities. The role of the lead NGO was to assess the camp's needs and report the information at the coordination meetings. NGOs with expertise in the activity concerned would then be requested to intervene in the particular camp.
2. Costs of NGOs operations in *Darfur* were very high for reasons already mentioned at the beginning of the paper. The idea of cost sharing whenever applicable was adopted to minimize costs. In *Kirinding* ADRA and Islamic Relief Worldwide (IRW) shared the cost of constructing pit latrines for a health centre and a school.
 3. Some donor agencies had previously not been contented with the huge costs of NGOs operations budget for *Darfur* and the slow pace of projects implementation. As a solution, the NGOs encouraged them to pay regular visits to the area to see the situation for themselves first hand. This was very important because after the visits the donors had a clear picture of what challenges the implementing NGOs were going through.

Conclusions

1. The involvement of Sheikhs in decision making was a crucial factor for the project. This is because they are listened to by their people and they can influence the behavioral changes needed in their communities.
2. The decision taken to better coordinate sanitation activities by NGOs was one main reason that enhanced their service delivery and lead to maximization of their in puts. It also ensured that there was no duplication of activities.
3. In a complex situation like *Darfur*, taking the host population's basic needs into consideration is vital as was done in *Kirinding* project. Failure to recognize their suffering and find an amicable solution could lead to conflict between them and the NGOs and or IDPs which could jeopardize the project.



Photograph 4. Superstructure made of grass mats

Note/s

- ¹ Sudanese Dinar (US\$1=SD 220)
- ² A government body responsible for regulating and co-ordinating humanitarian aid activities in the country.
- ³ Clan/ tribal leaders.

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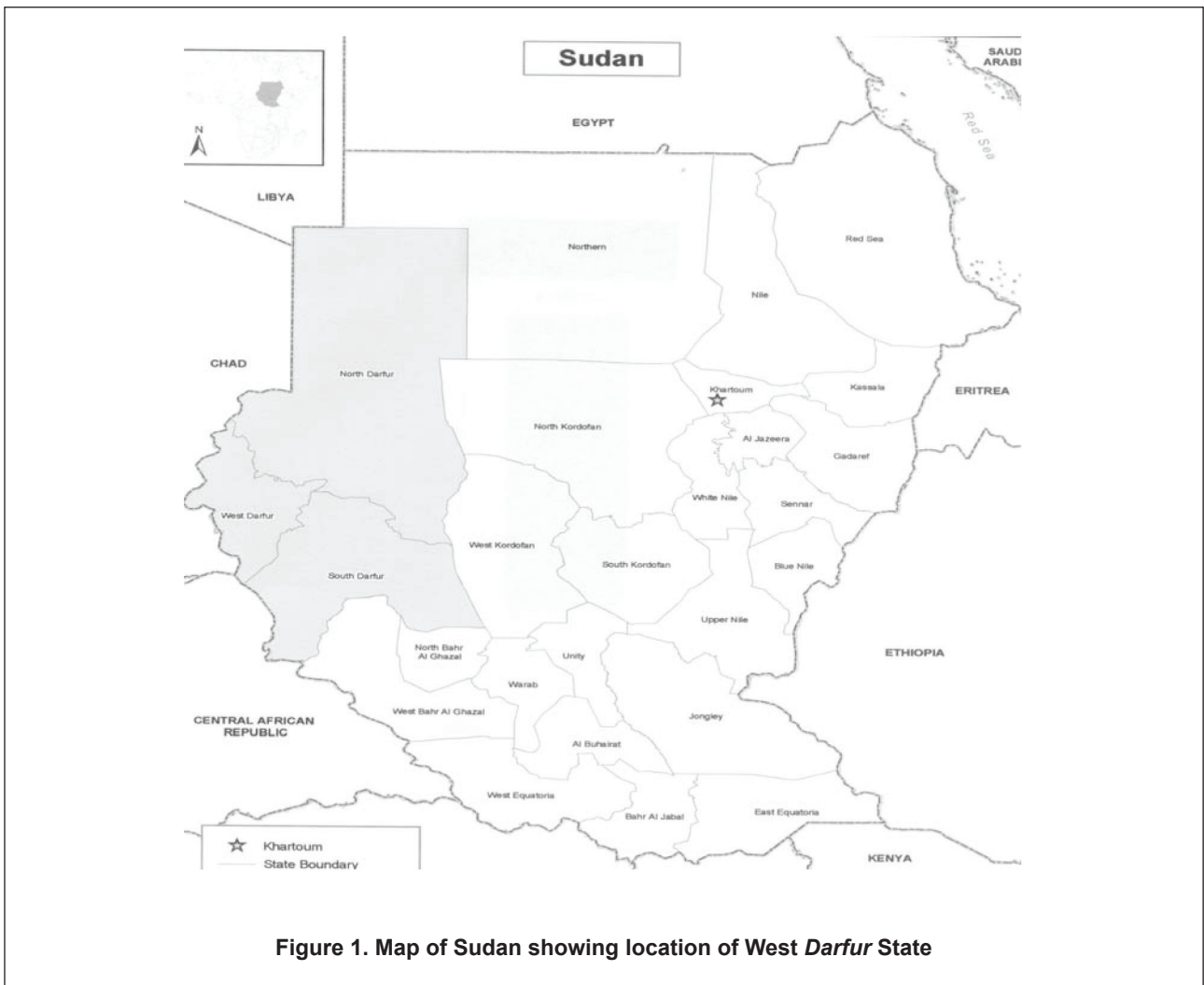


Figure 1. Map of Sudan showing location of West Darfur State