**3rd DRY TOILET INTERNATIONAL CONFERENCE**
Tampere Finland 12th to 15th August 2009

**SESSION 3: Implementing ecological sanitation in emergencies**

**Title:**
Sanitation in refugee and IDP camps and sites (as well as possible areas of return) in Chad: current and future challenges

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**Groupe URD** is a non-profit research institute which works on evaluations, methodology and training with the aim of improving practices within humanitarian action in favour of crisis-affected people. It functions in the same way as a scientific interest group and counts amongst its members French international aid organisations, European partners and universities. It has been working on Quality in humanitarian action since 1999 and developed the Quality COMPAS (www.compasqualite.org), a Quality Assurance method specially designed for humanitarian actors. Groupe URD publishes two newsletters, “Aiming for Quality” and “Humanitarian Aid on the Move”, both of which are available in French, English and Spanish, and which can be downloaded from its website: www.urd.org.

**Abstract**

Groupe URD has established a permanent presence in Chad since March 2009 to help and support Aid agencies present in Eastern Chad in the transition from an emergency to a ‘protracted’ crisis mode and to encourage agencies to share their experiences in using innovative practices. The results below are from a research-evaluation mission which took place in May 2009 as part of the “Observatory of Humanitarian Aid Practices” project funded by ECHO. In this context, where population density is high, appropriate technical solutions need to be found for issues of sanitation and hygiene. Classic ‘pit latrines’ have reached their limits, both in terms of the space needed and the sanitary risks that they present. There is an urgent need to conceive and implement sustainable alternatives which take the specific context of each camp and each region into consideration. The main barriers
to sustainable or ecological solutions (emptying pits, re-using waste for agriculture) are sociocultural: on the whole, Muslim communities are ‘fecophobic’. And yet, there are a few examples of emptiable deep single pit latrines being used, notably by a Chadian NGO. Other agencies would like to use sustainable sanitation systems, but are unable to either for financial reasons or due to resistance from local people.

Keywords:
East Chad – ECHO - ecological sanitation - Groupe URD- IDPs - refugee camps

Main text

Introduction

Context:
Approximately 260 000 Sudanese refugees have fled the socio-political conflict in Darfur for Eastern Chad since 2003. Since 2005 ethnic conflict within Chad and intrusions by Sudanese armed groups have led to a large number of Chadian IDPs. 170 000 people still live in IDP sites. Since 2007 displaced communities have begun to return to their villages of origin such as Koukou, Kerfi, Am Timan, etc.

The current aid situation in Eastern Chad is characterised by the following factors:

- **Permanent instability.** Chadian rebel groups who are based in Sudan make regular forays into Eastern Chad. Their objective is to destabilise Idriss Déby Itno’s regime by attacking N’Djamena There is increasing lawlessness in zones with crisis-affected communities and humanitarian actors and both are affected by the insecurity that results. Vehicles have been held up, humanitarian bases have been attacked and violence has been directed at civilians.

- **The juxtaposition of several different types of context.** Several types of context which call for different types of humanitarian response are present at the same time in Chad. Care and maintenance operations are necessary for refugees and certain displaced person sites which are globally moving towards self-reliance. Rehabilitation and development activities are needed for returnees and local populations. And, finally, new emergency situations call for an emergency response.

- **Coordination** of humanitarian action. There are currently two systems in place to coordinate humanitarian action in Eastern Chad, that of the HCR, mainly for operations involving refugees, and that of OCHA, which is based on Clusters with several levels of coordination (N’Djamena, Abéché, Goz Beida, etc.) mainly for operations involving IDPs and returnees. The existence of two systems increases the number of meetings that are necessary on the same topic. This is of concern in an environment where human resources are limited. There is not yet a great deal of coordination between development and humanitarian agencies.

- **Initiatives to promote self-reliance** which involve varying levels of difficulty depending on the type of population. Many of the humanitarian agencies present in Eastern Chad agree that there is a need to promote self-reliance amongst the affected

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1 The unstable situation in Eastern Chad and neighbouring Darfur means that new population displacements or the arrival of new refugees are very likely.
population. However, depending on the sector and the type of population, the objectives and the means needed to reach them (in relation to land available for cultivation and social, economic, climatic and legal conditions) are not always very clearly defined and communicated.

- **Unsustainable water and sanitation systems** set up by humanitarian agencies. Excreta management systems are an obvious example of these.

Humanitarian agencies are therefore confronted with a complex, protracted crisis: certain camps have been in use for more than five years. Due to the nature of the crisis, it is very likely that they will be in use for a number of years to come. However, the methods being used to respond to the crisis are not very well adapted to the situation.
Objectives of the project:
On the strength of its previous experience, Groupe URD has opened an office in Chad in order to implement an innovative collective learning programme for aid agencies, the Observatory of Aid Practices in Chad (OPAT). The first phase of the Observatory, funded by ECHO, will last 8 months (from March to October 2009).

The objective of the project is to improve the quality of response provided by aid agencies to the people in Eastern Chad. The aim of this initial phase is to promote new operational approaches linked to LRRD, Quality assurance and the environment in humanitarian programmes.

Methods

An innovative approach
Groupe URD will support learning among humanitarian organisations by establishing a monitoring and evaluation mechanism and encouraging dialogue about evaluation results. The Observatory will provide independent analysis and will provide a space to explore different points of view, debate fundamental issues and build a sector memory of humanitarian practices. The aim is not so much to evaluate a number of projects by NGOs, but rather to provide a cross-sector analysis of the main issues facing aid such as displaced and non-displaced populations, the link between emergency aid and restoring livelihood activities and natural disaster prevention and preparedness. The projects to be evaluated and the terms of reference of the Iterative Evaluations with Mini Seminars (IEMS) should be collectively decided depending on actors’ priorities.

Humanitarian agencies already have a certain amount of experience of the difficulties that can be encountered in the field as well as possible improvements that can be made. Groupe URD will encourage the sharing of such experience.

This process of evaluation and debate will lead to the production of information bulletins, summaries of results and critical analysis of difficulties encountered. These will then be communicated to humanitarian agencies (operators and donors) using existing coordination mechanisms.

The proposed approach, based on independent evaluation but fundamentally committed to improving practices will help to strengthen trust between operators (international and national) and donors.

Groupe URD’s Observatory of Aid Practices in Chad is different from classic evaluations and research which produce recommendations and then leave it to the agencies to find concrete solutions. OPAT will provide agencies with a collective learning mechanism and ongoing support on issues raised during the cross-sector evaluations.

Water and Sanitation is one of the sectors the OPAT will focus on.

Collection and analysis of information – May 2009:
- Literature collected and analysed: NGO annual reports, project documents, etc.
- Meetings and interviews with agencies present in Eastern Chad:
  o Heads of Country from NGOs (Solidarités, IRC, ACTED, CARE, Oxfam GB, Oxfam Intermon, Africare, Islamic Relief, CRF, SeCaDev) and United

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2 Afghanistan
3 United Nations coordination system and the Comité de Coordination des ONG (CCO)
4 Mainly from operational agencies
Nations agencies (UNICEF…), Head of Water and Environment for Chad in N’Djamena from 1st to 10th May  
  o Heads of WASH, NGO and UN agency technical teams (UNICEF…), in Abéché from 11th to 13th May  
  o WASH and field teams who work with people in crisis situations on a daily basis in several locations in the East between Abéché and the border with Darfur, from 14th to 23rd May.

- Site visits, field observations from 11th to 26th May: around Abéché, Iriba, Farchana, Gaga, Goz Beida and Adé
- Discussions with crisis-affected people, individually and in groups, in Touloum, Iridimi, Farchana, Gaga and Djabal refugee camps and the displaced persons sites of Koloma, Kerfit and Adé.
- Mini feedback seminars (in Abéché on 25/05 and in N’Djamena on 27/05), in order to discuss and validate results and decide how to proceed
- Communication of initial observations and establishment of links between agencies during interviews and collective workshops.
- Identification of innovative techniques, analysis of these with the other actors and production of technical files adapted to the Chadian context

**Results and discussion**

The following results only concern sanitation. Though ‘sanitation’ is part of many programmes, it is not dealt with in an ambitious way (compared to the water sector). It is not considered of primary importance and is not discussed a great deal in coordination or sector meetings. Encouraging family rather than community latrines is a step in the right direction. Space is not as limited for digging latrines as it was during the ‘community latrines’ period, but it is still an issue with regard to family concessions and would be a problem if the camps continued to be used for a long time.

The risk of contamination of the water table or surface water is not the same everywhere. There appears to be a major risk around Koukou, due to the high water table. Particular care should also be taken concerning the flow range of *wadis* during the rainy season.

In terms of sustainable solutions which are adapted to a protracted crisis situation, **rudimentary pit latrines are not the only possibility.** Ecological dry toilets (dehydration, compost or urine diversion) are technically adapted to the context in Eastern Chad. However, in the majority of cases these systems have met with cultural resistance. Indeed, it is culturally unacceptable to handle faeces even once it has been composted.

However, experiments with emptiable latrines are currently being carried out by SeCaDev (a Chadian NGO) and it might be possible to find a compromise between classical and ecological latrines.

For example, in the camps at Touloum and Iridimi where CARE is running programmes, there are collective latrines with urine diversion, which have been put in place to extend the lifespan of the latrines rather than to recuperate the urine. CARE is not convinced that handling urine would be possible in the cultural context. What is more, the refugees have very little, if any, access to agricultural land. CARE therefore feels that the use of urine as a

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5 These are selected on the basis of the following criteria – they are innovative, adapted to the context and will increase self-reliance amongst local people.
fertiliser is not really appropriate in the context. However, an awareness-raising programme might help to change attitudes.

Touloum refugee camp: collective latrines with liquid diversion; exterior and interior

The ‘Arborloo’ technique, which consists of planting a fruit tree in a pit once it is full is technically viable in Eastern Chad, but local people do not seem to be very enthusiastic (for example in Dogdoré).

To be perfectly ecological and have a complete cycle, sanitised matter (composted or dehydrated) should be re-used in agriculture. In certain cases, the agricultural land around the wadis are over-exploited (this is the case, for example, in Farchana and in displaced persons sites around Goz Beida). Ecological toilet systems would allow the fertility of the land to be restored.

Major obstacles do exist: cultural norms, the difficulty for refugees and IDPs to gain access to the land and a violent and unstable context which hinders investment in sustainable solutions. The first step would probably be to raise awareness about and encourage the use of animal manure, which is available in great quantities.

Cost is also a major obstacle, but this could be overcome if donors made a firm commitment to supporting these systems where they are socially acceptable.
Focus on emptiable latrines being tested by SECADEV

Faced with limited space to dig latrines (43% of refugees continue to defecate in the open due to the lack of latrines), SECADEV has been testing a form of ecological toilet - emptiable family latrines - in the refugee camps of Farchana, Kounoungo and Mile. The technical solution that has been chosen is that of very deep pits (3m) built with terracotta bricks, which can be cleaned out manually (using spades and carts), with the contents being re-used for agriculture. The latrine is also the place where people wash. The majority of liquids (urine, shower water and water used for anal hygiene) are separated, flowing away due to the shallow incline of the concrete slab. The Sudanese refugees met during the mission already separated liquids before coming to the camps.

It is important to note that a system like this which has underground pits can only be used if the water table is sufficiently low. If it is high, an option would be to construct the system above ground, but this may not be culturally acceptable and would involve building a solid structure which would allow the user to preserve their privacy.

One of the conditions which have made it possible to implement this project is the fact that the refugees are familiar with earth regeneration techniques as these are already used in Sudan.

The advantages of ecological latrines are that they confine and sanitise excreta, they do not take up much space and they are sustainable, which helps to save money in the long run.

The first emptying of the latrines is due to take place in two years’ time. Certain technical issues still need to be clarified such as the management of by-products.

Other technical variations also deserve to be tested, such as:
- the double pit, which would avoid handling of un-sanitised excreta or would allow the latrine to be closed for several weeks,
- the addition of ashes,
- using the diverted liquids (urine and grey water) to water a fruit tree or a small vegetable garden, for example.

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6 In May 2009, there were 56 latrines in Farchana, 16 in Kounoungo and 16 in Mile
The most innovative aspect of this ecological latrine project is the fact that it is being applied in the context of a Sudanese refugee camps. It should be encouraged and technical support should be made available to allow others agencies to implement similar initiatives.

The main issues involved in developing this type of latrine are:
- Social mobilisation, awareness raising and capacity building: for example, training refugees and providing them with support so that they are able to build the latrines from A to Z;
- Being proactive about ensuring that refugees and local farmers understand and are in favour of this form of recycling. It would appear that animal manure is not used despite the training that the NGO has given in compost management.
- Finding land for cultivation should continue to be a priority. This will allow the depth of pits to be reduced and allow them to be emptied more regularly.

Conclusion

During this mission, the main issues facing the water and sanitation sector were analysed. Areas were highlighted which require further investigation or greater investment to adapt the humanitarian response more fully to the situation. Agencies were informed about a number of innovative technical solutions which exist.

Though most operations include a ‘sanitation’ component, the level of innovation that they involve is disappointing. Alternatives to classical pit latrines (emptiable compost, dehydration or urine diversion latrines, arborloo, etc.) should be explored to find sustainable solutions which are adapted to a protracted crisis context, which protect the environment and can contribute to agricultural activities. The emptiable latrines currently being tested in refugee camps around Farchana are of particular interest. Whether or not affected people participate successfully and appropriate the installations will depend on the quality of the dialogue and interaction that will take place with the humanitarian agency. It is extremely important that awareness-raising, social organisation and capacity building activities are given as much importance as infrastructure-building activities.

In partnership with existing coordination structures, Groupe URD will now work with agencies present to discuss how certain technical and strategic solutions highlighted by the study can be implemented.

References

- François Grunewald, Bonaventure G. Sokpoh, Laurent Saillard (July 2008) : Etude stratégique interne: Etude des besoins au Tchad en support aux actions humanitaires existantes et à venir de la DG ECHO
- Bonaventure G. Sokpoh, Florence Gibert, Julie Patinet, Olivia Collins (June 2009) : Programme to support collective learning and improve the quality of the humanitarian response in Eastern Chad, multi-sector mission from 1st to 28th May 2009, summary report
- Caroline Schönning and Thor Axel Stenström (janvier 2004), Guidelines on the Safe Use of Urine and Faeces in Ecological Sanitation Systems, Swedish Institute for Infectious Disease Control & Stockholm Environment Institute, ECOSANRES

7 This could be an opportunity to raise awareness among agencies about different forms of ecological sanitation which exist: arborloo, fossa alterna, etc.