Oxfam in Goma — a public-health learning experience
by Shona McKenzie and Renée de la Haye

An evaluation of Oxfam's public health programme in Goma was welcomed as an opportunity for objective feedback and practical recommendations. Were the findings what fieldworkers expected? And what are the future plans?

OXFAM HAS BEEN working in Goma, Zaire for over 10 years. Following the arrival of over one million refugees from neighbouring Rwanda in July 1994, Oxfam launched a public health programme which today provides water services in the five refugee camps that house the 750 000 refugees who remain, and sanitation services in one of those camps.

The evaluation

In early 1996, Oxfam invited a public-health engineer and public-health nurse to Goma to facilitate an interim evaluation of the programme. Between March and April, and after some initial training in information-gathering, local staff and on-site refugee teams carried out the survey work, giving them a welcome opportunity to evaluate their own performance as well as the effectiveness of the programme. The surveys took in two camps, Mugunga and Kahindo, and incorporated random household surveys using structured questionnaires, discussion groups, water-user counts, random water sampling, and observation.

Water

The evaluation looked at several aspects of the water programme: coverage, access, quantity, quality, storage, uses, and infrastructure. The programme was found to be well-established — 98 per cent of the families were within 500m of the nearest tap. Table 1 details statistics for each camp.

The findings proved what fieldworkers and health professionals had known for a long time: households whose water containers stored less than 15 litres were more likely to use less than 10 lpd, and were more susceptible to scabies. In this group, the role of principal water user was equally likely to fall to a man as a woman. The subject of water use, however, threw up some surprises. When users were asked to identify the most important use of water, 64 per cent preferred ‘cooking’, 15 per cent said ‘showering’, and only 12 per cent chose ‘drinking’.

Interestingly, children questioned in discussion groups prioritized drinking as the most important use of water. When questioned about these results, adults explained that it was Rwandan custom to drink beer, and that they were not in the habit of drinking plain water.

Clothes-washing also featured as a priority. Oxfam had built washing facilities at some of the water-distribution points but, in discussions, people remarked that these were inadequate: too few, and poorly designed. In particular, pregnant women, the infirm, and children found the sinks too high and difficult to reach.

Although drainage through the volcanic rock was not a serious problem, the public health team suggested that it could be improved by siting rubbish bins and constructing grease traps around some of the distribution points, thus preventing blockages; while further recommendations were made by everyone. Also, as a result of the surveys, the evaluators were able to make further recommendations on both improving system design, and modifying the Oxfam kit, focusing on equipment design and what the standard contents should be.

![The clothes-washing sinks in Mugunga were not really suitable for getting blankets clean.](image)

Latrines

The two camps adopted different approaches to latrine provision: in Mugunga, public latrines were built

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<table>
<thead>
<tr>
<th>Water statistics in Goma's refugee camps¹</th>
<th>Mugunga/Lac Vert</th>
<th>Kibumba</th>
<th>Kahindo</th>
<th>Katale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water available (litres/person/day)</td>
<td>18.5</td>
<td>9.2²</td>
<td>20.4</td>
<td>18.5</td>
</tr>
<tr>
<td>System storage capacity (lpd)</td>
<td>9.6/11.8</td>
<td>8.6</td>
<td>10.8</td>
<td>8.4</td>
</tr>
<tr>
<td>Average water consumption (lpd)</td>
<td>13.0</td>
<td>7.4</td>
<td>12.8</td>
<td>11.2</td>
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1. Water-consumption figures for week ending 31 March 1996 (during rainy season). the evaluation considered both weekly monitored programme indicators (from all camps) and findings from surveys which were made in two camps.
2. The tankering operation which delivers water to Kibumba restricts availability.

Table 1: Water statistics in Goma's refugee camps
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while, in Kahindo — where there is a little more space — most latrines were family-owned. The evaluators used coverage, distance, use, and technical design as their indicators to compare the two approaches. The space available for latrine construction was surveyed separately, but concurrently:

• **Distance.** See Figure 1 below.

• **Use.** Of the 87 per cent of users questioned in Mugunga and 3 per cent in Kahindo that chose to use a public latrine regularly during the day, only 4 per cent and 1 per cent, respectively, said they used a family latrine at night. Women were unwilling to risk being attacked. Many Muslim and widowed women in Mugunga stated that they preferred to use night potties, and everyone stated that it was very difficult to locate the drophole in the dark.

Of those questioned, 61 per cent in Kahindo and only 39 per cent in Mugunga thought that children under six years old were likely to use a latrine, while the older children stated that they would prefer to use a family latrine. There had been no attempt in either camp to adapt latrines for people with disabilities.

• **Technical design.** Users identified problems, allowing health workers to list recommendations to improve the latrine’s standards of hygiene and usability.

• **Participation in construction** was examined as one way of determining the progress of the family-latrine programme in Kahindo. In Mugunga, 17 per cent of users questioned had access to a private family latrine (one built without any financial, technical or material aid from an NGO), while a survey of latrines in Kahindo identified that 19 per cent of all family latrines had been privately built. Users in each camp were asked why they had not built their own latrine. It is interesting that, although 98 per cent of Kahindo camp respondents regularly used a family latrine, 40 per cent said they had not participated in the construction of any latrine.

Information sharing

The public health professionals’ evaluation identified a widespread lack of understanding of the principles of the latrine programme as one of the main constraints to Oxfam’s family programme effectiveness — from implementing engineers, right through to latrine monitors, hygiene promoters, and the refugees; it was also clear that the good latrine ideas being implemented by some families were not being shared throughout the camp.

The situation should improve if latrine-monitoring teams receive better training, and people are encouraged to share information more widely. Specific suggestions included:

• construct demonstration latrine areas which show good pit construction and the variety of superstructure, slab, and disinfection materials available;

• display poster-sized photographs of good and bad latrine construction;

• prepare technical leaflets explaining salient points of latrine construction; and

• hold a ‘family latrine’ promotional week, possibly involving various sectors of the population in constructing and opening the demonstration latrine areas; establishing Oxfam noticeboards at waterpoints, distributing technical leaflets, and running a concerted information campaign on programme principles.

In Mugunga, only 17 per cent of users had participated in the construction of a latrine — engineers, promoters, and refugees must understand the principles of the programme.

Hygiene promotion

The information gathered by the evaluation was intended to be used as baseline information rather than an assessment of the current hygiene-promotion activities.

Three main diseases were used as an indication of public health in the camps: diarrhoea, malaria, and skin infections. Crude mortality rates were low; 0.15/10 000/day (children under five — 0.41/10 000/day) for the week ending 9 March 1996, and had been stable since early 1995. This should be compared with a typical developing-country crude mortality rate for all ages of 0.5/10 000/day.

The evaluators felt that further investigation was needed into assessing rats’ attraction to waste-bins, organic household waste left to decompose on garden, and dirty latrine slabs.

They also suggested that traps be made more freely available, and their safe disposal promoted.

<table>
<thead>
<tr>
<th>% of households</th>
<th>0-40m</th>
<th>50-100m</th>
<th>100m+</th>
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<tbody>
<tr>
<td>Mugunga (n=230)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Kahindo (n=200)</td>
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Figure 1. Latrines in Kahindo were closer than those in Mugunga.

Rats

The refugees identified rats as a major nuisance; recognizing them as flea carriers as well as scavengers of food spillage in the home and at tapstands.

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Despite the seriousness of the subject matter, a solemn approach to promoting better hygiene is not obligatory.

link between illness and dirty water. In Kahindo, 62 per cent of the population questioned, compared to only 2 per cent in Mugunga, mentioned latrine use as a means of avoiding diarrhoea — one of the principal messages promoted by the family latrine programme. But the importance of drinking-water in relation to the transmission of malaria was not understood well. People saw lack of soap, clothes, and sanitary wear for women as the main hindrances to effective personal hygiene. This contributed to significant levels of fleas (71 per cent) and scabies (12 per cent) in the households sampled. The inhabitants of both camps were fully aware of the importance of washing their hands after visiting the latrine, although 56 per cent of households admitted that they did not always have soap.

A large part of the Oxfam hygiene promoters' work was seen as encouraging the refugee community to take responsibility for looking after their public health systems. This work was to be carried out together with elected committees who would ensure popular participation. Little documentation has been made of this interaction, and further study was recommended to identify and replicate successes.

Materials
Several resources were being used very successfully to communicate better practice in the camps: songs, drama, puppets, guitars and drums, and both large and small pictures. It was suggested that more colour could be used in pictures, that drawings be made larger if designed for use in front of big audiences, and that drawing on cloth would make pictures more durable.

It was hoped that much more material could be produced, targeted at the various sectors of the population identified in the evaluation, and towards specific campaigns, such as photographs reflecting the actual situation, as well as banners, leaflets, and more cloth pictures.

The extent to which Oxfam's public health programme meets the needs of such a large number of refugees is remarkable. The evaluation reinforces, however, the need for such an extensive programme to be flexible, with sufficient time allocated to early consultation with, and feedback from, the refugees; plus better reporting and monitoring, if it is to react more quickly to successes and restraints.

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