

agency news

In this issue we give over much of 'Agency News' to two first-hand accounts of working on Oxfam's emergency water programmes. The writers were sent to Sudan and Macedonia, respectively, by Red R.

Drilling with the Dinka

Since last May, Oxfam in collaboration with the SRRA (Sudanese Relief and Rehabilitation Association, the humanitarian wing of the Sudan People's Liberation Army) has been drilling boreholes in response to the latest chapter in the country's long-running conflict. Priority sites have been feeding centres and drop-zones where, with local Sudanese teams, we have been drilling boreholes with small, portable, direct-circulation rotary rigs, small enough to be flown between different locations.

There is a massive shortage of potable water sources in South Sudan. Many people drink from surfacewater sources contaminated with guineaworm. During the dry season these sources dry up, putting increased pressure on working wells and boreholes. In addition to drilling new boreholes, we also fixed and rehabilitated existing ones. Drainage is often abysmal, with huge stagnant pools collecting around boreholes and no adherence to minimum standards. We found an elegant solution to the stagnant pool so often seen around handpumps. Harvesting some old drainage pipe from a local school we laid a pipeline to the base of a termite mound. The subterranean labyrinth of the termite kingdom absorbed the runoff perfectly.

Early to bed ...

It's vital the team have everything it needs to finish the borehole. This means local labourers digging the mud-circulation pits in advance of the rig arriving and drivers who tirelessly collect water in a pick-up — rotary drilling needs a few thousand litres of water to start drilling and, if we get circulation loss, even more. Sand for apron construction may have to be collected from a dry riverbed several kilometres away. This means long days on the track. Once the hole is done, the casing and

screen are installed with some gravel pack, and a handpump fitted. The day ends with barbecued goat and an early night.

Unlike a bag of maize or sorghum it's much harder to fight over a borehole fitted with a handpump. The fresh boreholes mean there's enough water for the displaced and malnourished. The SRRA have local water teams trained by UNICEF in pump repair and maintenance. Our borehole programme's impact was further enhanced by the distribution of thousands of Oxfam buckets with a ration of soap and guineaworm-filter cloth.

The work was demanding fun and we did make a real difference. On one occasion, the local chief left a cow tethered outside our compound as a welcoming gesture. Knowing that cattle are central to Dinka culture and food

World Bank

A World Bank report says that combined running water, electricity and sanitation services in Peru not only help with basic household needs but can also reduce poverty. Access to clean water and the improved health benefits from reliable sanitation services free-up time for working (women) and education (children). The report also highlights the disparities in social developments, with economic growth benefiting urban areas more than rural areas.

**World Bank (1999).
Poverty and Social
Developments in Peru,
1994-97.**

security, we postponed the slaughter and barbecue until after the borehole was finished. By that stage an advance party was already digging another mud pit for the next borehole at the next food-distribution site.

Adrian Denyer

Box of technical tricks

I went into Skopje on Good Friday on the first aid flight; full to the roof with water-kit. My role as Technical Team Leader was to establish the technical side of Oxfam's response to the looming crisis. At the time there were tens of thousands of refugees crowded at the border with Kosovo but no one was being let in to Macedonia. After a few extremely frustrating days it all suddenly happened.

Within a week 35 000 people were crammed into two tiny sites. The main thrust of the Oxfam technical programme was the provision and distribution of water — trucking for one location, and flocculation and chlorination from a small stream at the other; the construction of suitable places for body and clothes washing; and the distribution of family hygiene packs along with a hygiene promotion campaign.

After five weeks, and the arrival of another five planes and nine engineers, water was being provided to 90 000 people in four locations and the programme had moved into some quite unexpected areas. During discussions with the Institute for Public Health Protection we had learned that, due to reasons directly related to the crisis, there was only a few weeks' supply of chlorine gas and aluminium sulphate left to treat water for the whole of Macedonia. Through RedR, a specialist was recruited to draw up an agreement with the national water companies for three months' emergency stocks. A specialist in sewage treatment, again recruited through RedR, put forward designs and ideas to the Ministry of Environment and the Government-appointed civil contractor on dealing with the sewage.

An exhausting assignment, and by far the toughest situation I've been involved with; but one that will provide us all with food for thought, from a technical point of view, for some time to come. There

are definitely tools missing from the box of tricks we use in such situations; the two most obvious being the rapid construction of large numbers of good-quality latrines, and appropriate methods of handling and treating large quantities of highly concentrated sewage.

Tim Hayward

There are tools missing from the box of tricks we use in such situations... rapid construction of large numbers of good-quality latrines, and appropriate methods of handling and treating large quantities of highly concentrated sewage.

International Water Resources Association (IWRA)

A global water crisis will be averted only if the United States and other countries make substantial investments in desalination, according to a group of experts assembled by Southern Illinois University's Public Policy Institute and IWRA. The group called for countries to commit 5 per cent of what they spend on weapons research and/or 1 per cent of what they allocate for defence towards desalination. Since 97 per cent of the world's water is seawater, and almost 70 per cent of the world's population lives within 80km of the ocean, development of low-cost desalination should be 'an urgent priority'.

contributions

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