Case Study 20

'Tarpaulin'-lined Tank from Southern Uganda - ACORD from 1997

This 6000 litre tank is made by lining a 3m x 2m x 1m deep hole with a standard UNHCR blue tarpaulin (5m x 4m rip-stop plastic with eyelets near the edge). The tarpaulin is held up with string from nails down to these eyelets. A simple wall (wattle and mud, 600mm high) is built around the tank and roofed with slightly sloping corrugated iron sheets. The wall is lined with plastic sacking to prevent mud falling into the water. The wall-roof joint is sealed with mud. Water enters via a hole in the roof sheeting (covered by a filter cloth and fed by a sloping metal downpipe). Water is extracted by dipping with a modified (cut-away)10 litre jerrycan via a small wooden door in one wall - water is always within arm's reach. Some work has been done on developing a low-cost handpump to extract water.

There is normally no overflow and the householder is expected to move aside the downpipe feeding the store when the water level approaches the top of the tarpaulin lining.

Click to view picture of tank - inside the housing

Click to view picture of tank - showing housing

Click to view picture of the tank opening

Cost in 2000 include the 5m x 4m tarpaulin (about $\$_{US}$ 20 equivalent on the open market as East Africa is full of such refugee relief items - price direct from manufacturer is similar). There is about $\$_{US}$ 20 worth of iron roofing sheets. Other construction items (esp mud walling) and labour are provided by the householder, the latter probably does not exceed 2 day's work. Agency = ACORD (Oruchinga Water Devt Prog, Mbarara District), Kampala HQ: plot 1272, block 15 Nsambya, POB 280 Kampala, Uganda, email =

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Some detail of the construction of such a tank is shown in <u>Technical Release</u> <u>TR-RWH 05</u>

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