

Hand Drilling Cluster Group

Linking stakeholders and sharing experiences on hand drilling approaches and technologies in sub-Saharan Africa and beyond.

Welcome

Welcome to the third RWSN Hand Drilling Cluster Group newsletter, which gives an update on activities which continue to spill over from Latin America and grow in Africa.

For those of you new to this topic, hand, or manual drilling refers to drilling techniques which rely primarily on human energy. Methods include hand augering, hand percussion, hand sludging, rota-sludge, pounder drilling, baptist and EMAS drilling as well as wash-boring or jetting. One of the advantages of hand drilling is that it can be undertaken by small and local enterprises.



Pump in San Juan De La Cruz, Bolivia March 2007 (Photo: Courtesy of Water for All)

Spotlight on Water for All

The international activities of Water for All (www.waterforallinternational.org) are expanding and now include four distinct programs plus ongoing research and development. The latter includes

very low cost pump designs. Manual wells have now been drilled in 9 countries: Bolivia, México, Nicaragua, Argentina, Sri Lanka, Kenya, Ethiopia, with the most recent in Malawi and Uganda. All together over 2,000 wells have been drilled with WFA's "Baptist" well drilling technology. See http://en.wikipedia.org/wiki/Baptist_well_drilling for technical information.

Akvo

Akvo (www.akvo.org) is a new internet project to improve the way the world's knowledge about water and sanitation is organized and used. Inspired by projects such as Wikipedia and Ebay, founder Thomas Bjelkeman has created an internet foundation to collate knowledge and spark new capabilities and connections. Akvo is now on target to raise its first million Euros to build the system, with commitments from UN Habitat.

"All these organizations realize that you have to scale up small projects, with better information about what can be done, in what situations and with simpler reporting tools that avoid every project, in each village, becoming an admin hurdle. Our backers see us as a way of scaling up investment, without scaling up the administration," adds Bjelkeman.

Editor

This newsletter is produced by the Rural Water Supply Network (RWSN). For more information visit <http://www.rwsn.ch> or contact the editor, Kerstin Danert on kerstin@danert.com. The next newsletter will be published in January 2008. Contributions are very welcome

Across Africa

Manual drilling continues to widen its reach to new places across the African continent with particular expansion out of Bolivia. Experience in Tanzania and Madagascar is growing and programs continue in Ethiopia.

SHIPO in Tanzania

Over the last three years, the Tanzanian organization SHIPO has drilled over 160 boreholes in Njombe using manual drilling techniques. All boreholes are equipped with rope pumps. The boreholes are between 25 and 43 meters deep and are drilled using the so called Rota sludge method. It costs about US\$600 to drill and install these wells.



New tests are going on with the Baptist method (left). Drilling teams and a local workshop were trained with support from the Dutch organization Connect International (www.Connectinternational.org) and Practica Foundation (<http://www.practicafoundation.nl/>).

Connect International also work in Zambia and Mozambique where organisations including DAPP and ADPP have been trained in these technologies.

Comparing Rota Sludge and Baptist Drilling in Tanzania

Madagascar activities grow

Besides well jetting, Bushproof (<http://bushproof.biosandfilter.org/>) have adapted and improved a hand drilling method from the EMAS technique, and have used it to drill about 50 boreholes in the highlands of Madagascar. In November, Bushproof are sending a team to East Congo in order to train a local NGO in the same technique. They are also continuing to provide training in well jetting, in Turkana (Kenya) for Oxfam.

Ethiopia

Water for All (www.waterforallinternational.org) are undertaking training and trials for SELAM Business



Group in Awasa, who have subsequently started a for profit well drilling group installing rope pumps and have drilled several dozen wells. Trials of manual drilling techniques have also been undertaken in western Ethiopia with the Blair Foundation. Meanwhile Water for All's long term program to empower rural families to manually drill their own wells is also being established. This uses a "water club" methodology where families come together and assist each other to drill a cluster of very low cost family, or compound wells. In Ethiopia these 15 to 20m wells currently cost around US\$100 each.

"Water Club" drilling in a family compound in Ethiopia