

Remote monitoring of handpumps, an update from a WCWC Bursary student

Patrick Thomson was a WCWC Bursary student at Oxford University in 2010 and has remained in close contact with Company ever since. His MSc dissertation topic ***GSM-enabled remote monitoring of rural handpumps: a proof-of-concept study*** was based on initial research in Zambia which then progressed to Kenya.

Minimising the downtime of handpumps in rural communities contributes enormously to the welfare of families. Waiting for diagnosis and maintenance can exceed 30 days, by which time households may have to use alternative distant and dirty sources: this can result in illness, lost school days for children and vegetables dying. The pilot used the mobile phone network to transmit real time information about handpumps to a central maintenance team that had the capacity to schedule and prioritise repairs.

Things move very positively, but also very slowly in transforming the successful pilot scheme into practice. So, the University is launching a crowdfunding campaign to raise funds for the implementation of the Smart Handpumps work. Crowdfunding is something the University does every six months, taking one of its best projects and raising money to push it beyond research. The crowdfunding campaign started on 1 June 2019 and runs for a month

The short film on <https://oxreach.hubbub.net/p/Smartpumps/> is worth a look.

Patrick is anxious to get the appeal talked about and, hopefully, supported. It will enable him to rebuild the research database into something more robust and suitable for operations. He adds that every pound donated will be matched by the Global Challenges Research Fund. So, he only has to raise £25k to reach his £50k target.

Peter Hall



Patrick in Kenya (left) and with Tim Foster, also a previous Bursary student, in Zambia (right)