Title: Church, Mission and Gospel: Sustainable Clean Water for the Developing World

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Abstract:

Dear children, let us not love with words or tongue but with actions and in truth.

— 1 John 3:18

The most effective vaccine against child death in Africa is a glass of clean water.


In this paper we describe how the emergence of The Water SCH₂OOL (hereafter TWS) combines important theological reflections on the nature of the Church, the Gospel and its mission with an effective, sustainable and eco-friendly technology (SODIS¹) to meet what may be the most critical, concrete, social need in Africa – clean water² – in a manner that preserves what Leslie Newbigin described as “the indissoluble nexus between deeds and words”³ – which comprises the Christian Gospel.⁴ Fraser Edwards, former director of Compassion Canada, Africa (12 years), and Robert J. Dell, founder of Dell Tech Laboratories Ltd., founded TWS in response to what they perceive as undeniable deficiencies in both the diagnosis of what the Gospel needs in Africa are (which determine what mission activities should be) as well as the approaches to meeting these needs of the African people. Providing clean water in a sustainable and environmentally responsible manner meets a foundational human need (life) and has massive economic ramifications – and therefore contributes to the relief of poverty.⁵

¹ “Solar Disinfection System” www.sodis.ch

² More than two million children die every year as a result of no having access to clean drinking water. Over 40% of them perish in Africa. Besides this toll in human lives, the impact of water borne disease on productivity loses 5% of the annual GDP. “Africa: Global Apartheid Update, 11/24/06,” African Studies Center – University of Pennsylvania, http://www.africa.upenn.edu/afrifocus/afrifocus112406.html


⁴ Cf. Newbigin: “[T]o set word and deed, preaching and action, against each other is absurd. The central reality is neither word nor act, but the total life of a community enabled by the Holy Spirit to live in Christ” (my emphasis). Newbigin, The Gospel in a Pluralistic Society, 137.

⁵ The United Nations Development Programme, in its “Human Development Report” identifies health and access to clean water as an important economic and health indicator, particularly for children under 5 years. See http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_UGA.html.
This paper first describes the basic theological, missiological and social contexts which engender the formation of TWS. We then describe the method and benefits of implementing SODIS technology, and close by outlining the goals and aims of TWS.

There are two primary needs to which the founding of TWS and its implementation of SODIS technology is a response. First there is an obvious physical, social need that Africans and those in developing countries have for clean water. Every day 4,000 – 5,000 children die of dehydration due to diarrhea and every year 2 million children die from water-borne disease. The impact of this is not only measurable in terms of health, but also economic as large portions average household incomes in Uganda are spent on medicines (largely for water-borne disease)\(^6\) and most often the primary care-giver for sick children is also the primary breadwinner for the family. There is thus a double economic impact for Africans and those in developing countries affected by a lack of clean water.\(^7\) Second, while there is a need for action to be taken by the Western Church, there is also the need for the local, indigenous African Church to be self-sustaining and self-theologizing. This means that whatever action is taken by Western mission agencies, it must be such that it *enables* and *empowers* local communities to meet their own needs.

SODIS is an ideal water purification technology to implement in developing countries because of its effectiveness and simplicity. SODIS works 12 months a year, in sunny and cloudy weather, 35 degrees on either side of the equator (which roughly runs tip-to-tip of the African continent) and simply involves a 1 litre clear plastic water bottle exposed to the sun’s UV rays for six hours. Placing the bottles on corrugated tin reflects the sun’s UV rays and speeds up the process. The SODIS concept has been found to be effective in destroying many pathogens including the bacteria E. coli, Salmonella typhi (typhoid), Vibreo Cholerae (Cholera) and the protozoans Cryptsporidium and Giardia. TWS has refined the technology, done case studies, developed educational methodology and done an impact assessment.

Successful introduction of SODIS to the community depends on strong education and follow up. TWS therefore begins with the educated leaders of the community (teachers, doctors, nurses, pastors) who are taught and then practice SODIS water purification technique in their own homes. The program is delivered by these local educators to the children through the schooling


\(^7\) The Council On Foreign Relations, a nonpartisan resource for information and analysis, also lists water stress as one of the significant factors hindering economic growth in developing countries and concludes that “unsafe water is responsible for around 80 percent of diseases and 30 percent of deaths in developing countries throughout the world. In Africa, which accounts for 90 percent of global cases of malaria, water stress plays an indirect role in curing malaria because it impedes the human recovery process.” See [http://www.cfr.org/publication/11240/#7](http://www.cfr.org/publication/11240/#7).
system and to trainers who teach at the community level. SODIS must incorporate a strong health and education component that teaches the nature and causes of water borne disease and its prevention. To this end TWS has partnered with the Anglican Church of Uganda as its primary network and access point to local communities, but also partners with other denominations, professional and governmental organizations, and even other religious faiths.

The foundational goal of TWS is to confront poverty and suffering with the love of God and to enable indigenous churches to serve their communities as those whose lives have been changed by, are centred on, and reenact the Gospel of Jesus Christ. TWS therefore does not own anything and provides only the access to SODIS technology, its method of implementing it, and access to wider resource networks. Our programs begin with an exit strategy. The point is for the initiatives undertaken to be “locally-owned,” so that they are not only perceived as issuing out of a local initiative, but that they actually are community-based initiatives. This is a crucial element of not only a self-theologizing church but a self-sustaining humanitarian program.