

Research into Use Summary

- 1. Research Project:** *An investigation of the strengths and weaknesses of ecological sanitation in Malawi: opportunities to improve the system*
- 2. Lead researcher:** *Richard Chunga, WaterAid*
- 3. SHARE Partners:** *WaterAid, ICDDR,B, LSHTM*
- 4. Research budget:** *£30,239*
- 5. Location:** *Malawi*

Research description:

This research will investigate the strengths and weaknesses of ecological sanitation (ecosan) in urban and rural areas in Malawi. Various criteria will be assessed, including the motivating and demotivating factors for ecological sanitation, the characteristics of households that have adopted ecological sanitation, the use and marketing of human compost, and financial gains from sales of human compost. This research will also examine the levels of excreta-related pathogens in human compost. The results of this research are intended to be used as the basis for scaling-up ecological sanitation in urban and rural areas and for developing standards and guidelines for the safe management of human compost.

What is the relevance of the research to national and/or global sector challenges?

Between 2010 and 2030, Malawi's urban population is expected to double, with growth occurring mainly in the low income urban areas. Urban households struggle to find space and resources for building new latrines once old ones fill up. Ecological sanitation, a technology more permanent than the common traditional pit latrines, could be more appropriate in urban areas. However, ecological sanitation motivating and demotivating factors have not been systematically assessed and the strengths and weaknesses of ecological sanitation in urban areas in Malawi have not been well documented. Considering that the use of human compost is limited in urban areas due to lack of space for agriculture, it is vital that urban households be followed up to document motivating and demotivating factors, assess the marketing of human compost and the financial gains from sales of human compost.

Who are the intended users of this research?

The results of this research are intended to be used to understand the use of human compost and to develop guidelines for the safe use of human compost in agriculture and schools. From this work, appropriate promotional messages and marketing strategies for ecological sanitation will be developed. The economical assessment will use Net Present Value to assess the financial costs and benefits of investing in ecological sanitation. Guidelines for reducing risks associated with human compost will be produced. A summary of the research findings will be made publicly available on the SHARE website and will be disseminated within the SHARE consortium and to a broad range of users.

