

## **Acknowledgements**

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## Abstract

The global burden of disease from inadequate water, sanitation, and hygiene (WSH) remains unacceptably high, despite longstanding knowledge of prevention methods. In resource-constrained settings, non-governmental organisations (NGOs) are important players in WSH; however, the targets are usually set as technical (often misrepresentative) quantitative indicators. Health impact assessment (HIA) is a potentially valuable tool for tailoring the interventions to the communities. This research (to the author's knowledge the first of its kind) analysed the impacts of a British NGO's rural WSH programme on proxy indicators of health in two southern Malawian communities, more than two years post-completion. The objective was to extract and assess community-specific health indicators, identify local coping mechanisms, and develop HIA methods that can be integrated into similar programmes in the future.

Participatory data collection was conducted from August-November 2006 using focus group discussions, discussions with key informants, outpatient register information, and a knowledge, attitudes, and practice survey. Programme-specific information was obtained from the NGO. From January 2006 through June 2008, two projects (improved water supply and an income-generating project) were implemented in the communities.

Knowledge of WSH-related health and risk factors is high, yet there are significant gaps in applying this knowledge. The greatest motivators for improving WSH situation stem from social, rather than health, factors. Major financial/logistical obstacles are consistently present, with little recourse to external support. Despite meeting population:borehole targets, both communities face problems with *true* access; e.g. nearby communities also use their boreholes.

The HIA approaches used can be replicated to extract customised health-related indicators. Similar programmes can augment their impact by a) triangulating proxy health data in the planning phases, b) varying improved water source types to increase *true* access, c) integrating IGA's within/alongside WSH programmes, and d) increasing focus on social marketing approaches to affect behaviour changes in sanitation and hygiene.

## **List of Abbreviations**

AIDS- acquired immunodeficiency syndrome  
APOC- African Programme for Onchocerciasis Control  
EIA- environmental impact assessment  
HIV- human immunodeficiency virus  
HIA- health impact assessment  
HMIS- health management & information system  
HSA- health surveillance assistant  
IA- impact assessment  
IGA- income-generating activity  
KAP- knowledge, attitudes & practice  
LRI- lower respiratory tract infection  
MHP- Ministry of Health & Population (Malawi)  
MWD- Ministry of Water Development (Malawi)  
NGO- non-governmental organisation  
OPD- outpatient register  
RTI- respiratory tract infection  
SAFE- surgery, antibiotics, facial cleanliness, and environmental hygiene  
(strategy for prevention of trachoma and associated blindness)  
T/A- Traditional Authority  
UNICEF- United Nations Children's Fund  
VHWC- village health & water committee  
WHO- World Health Organisation  
WSH- water, sanitation & hygiene  
WSS- water supply & sanitation

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