

Faecal sludge management in Africa:

Socioeconomic aspects and human
and environmental health implications



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Summary

This publication aims to explore how current trends in faecal sludge management are impacting human and environmental health in Africa (both sub-Saharan and Northern Africa). Faecal sludge comes from on-site sanitation technologies in the form of raw or partially digested slurry or semi-solid material. Its management involves storage, collection, transport, treatment and safe end use or disposal. Some factors that make it difficult to manage sustainably include population growth and urbanization, over-reliance on financial aid for the construction of treatment plants, low revenue generation from users of treatment facilities, poor operation and maintenance, and inefficient institutional arrangements for faecal sludge management.

Poor faecal sludge management poses major health, environmental and socioeconomic differential risks to men, women, boys and girls in Africa. Alongside poor sanitation, it contributes to the 115 deaths per hour from excreta-related diseases in Africa and huge economic losses.

Some good practices along the sanitation value chain that have been reported in a few countries have the potential for replication in several other African countries. Overall, there is a need to invest in sanitation systems and mechanisms to improve faecal sludge management and direct investments to very poor households. In particular, bottlenecks in service delivery pathways require urgent attention.

This publication examines faecal sludge management practices in Africa as a contribution to the joint project by the United Nations Environment Programme (UNEP), the African Development Bank (AfDB) and GRID-Arendal entitled Wastewater Management and Sanitation Provision in Africa: An Opportunity for Private and Public Sector Investment, which aims to promote knowledge on wastewater and sanitation in Africa, with the goal of enhancing these services across the continent.

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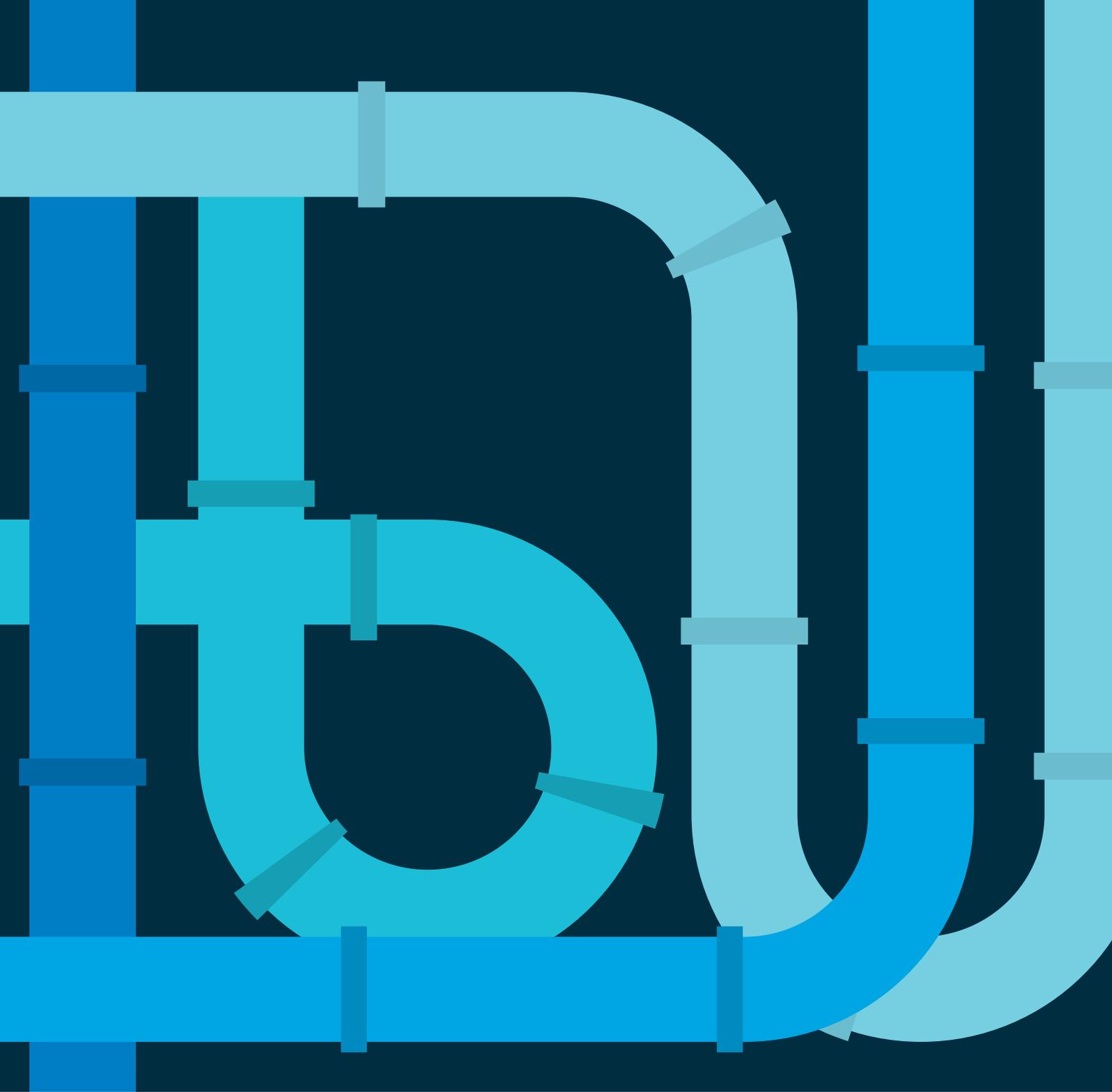
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List of abbreviations

AfDB	African Development Bank
BOD	biochemical oxygen demand
BOD5	five-day biochemical oxygen demand
CFU	coliform forming unit
COD	chemical oxygen demand
COVID-19	Coronavirus Disease 2019
DW	dry weight
FAO	Food and Agriculture Organization of the United Nations
FS	faecal sludge
FSM	faecal sludge management
GDP	gross domestic product
GPA	Global Programme of Action
GW²I	Global Wastewater Initiative
INSD	Institut National de la Statistique et de la Démographie [National Institute of Statistics and Demography]
IWA	International Water Association
IWMI	International Water Management Institute
JMP	Joint Monitoring Programme
KCCA	Kampala Capital City Authority
NGO	non-governmental organization
ONEA	Office National de l'Eau et de l'Assainissement [National Water and Sanitation Office]
PPP	public private partnership
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SDG	Sustainable Development Goal
TSS	total suspended solids
UASB	up-flow anaerobic sludge blanket
UBOS	Uganda Bureau of Statistics
UKZN	University of KwaZulu-Natal
UNEP	United Nations Environment Programme
UNFPA	United Nations Population Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization
WLE	Research Program on Water, Land and Ecosystems
WSP	Water and Sanitation Program
WUP	World Urbanization Prospects
WSUP	Water & Sanitation for the Urban Poor
WWTP	wastewater treatment plant



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