

Contradictions between Sanitation and Hygiene Policy and Practice:

A Comparative Study of Productive and Conventional On-site Sanitation in Rwanda

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- Introduction
- Rationale
- Context - Rwanda
- Methodology
- Findings
- Conclusion

Introduction

- Rule, Roles and Resources project
- Rules or Institutions - humanly devised constraints imposed on human interaction.
 - = rules of the game (North, 1990)
 - = formal systems and normative and cognitive frames (Djelic and Quack, 2003).
- Rules not socially shared \neq Institutions e.g. Habits (Amable, 2003)
- Research in Rwanda in collaboration with Kigali Health Institute (KHI).

Rationale

- Institutional multiplicity – Formal and informal; coherent or contradictory
- Contradictions between what is prescribed by policies, specifically in the form of guidelines or standards and what actually prevails.
- Comparatively examine the institutions of two on-site sanitation systems - 'toilet to farm' and 'drop and store'

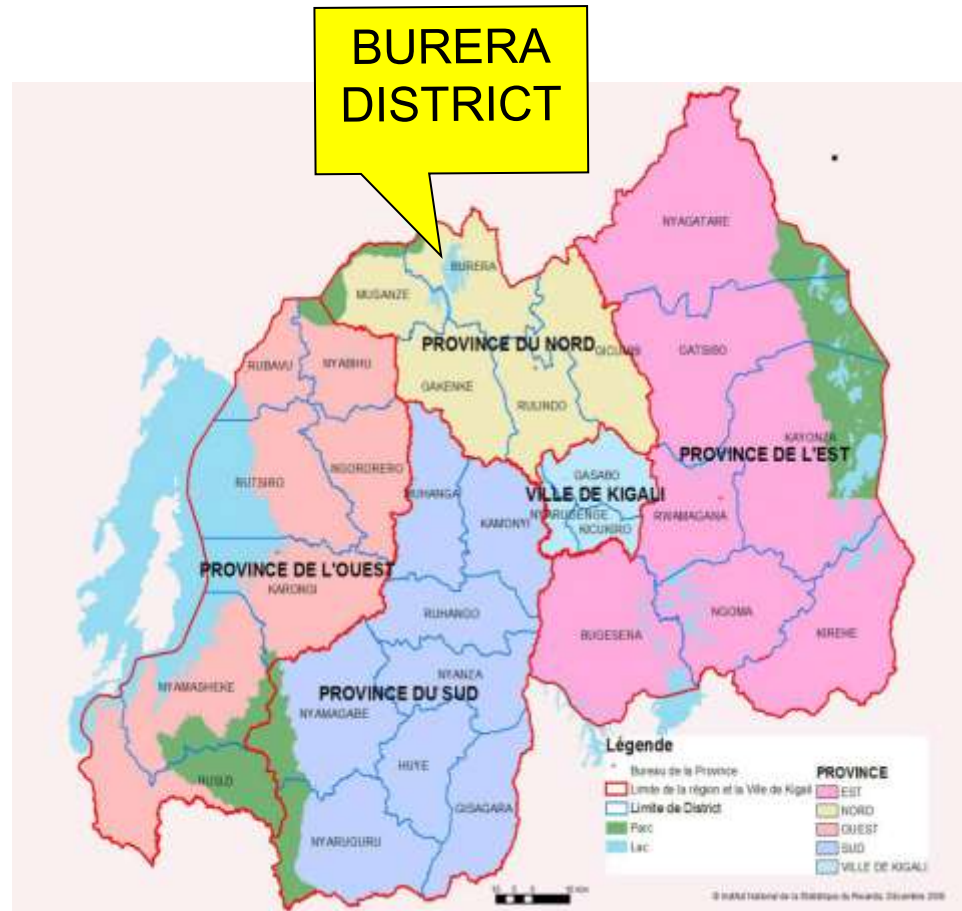
KEY QUESTIONS EXPLORED

- What are the existing institutions (rules, laws, regulations, norms, etc) wrt to sanitation?
- How are these formal/informal institutions followed and enforced?
- What practices actually prevail?
- How do rules at different levels conflict/complement each other, and with actual practice on the ground?

CONTEXT

Rwanda

- Population: 11 million
- % pop. using improved sanitation facilities in 1990 to 55% in 2010 (WHO and UNICEF, 2012)
- Rural: 34% in 1990 to 56% in 2010. Urban: 69% in 1990 to 52% in 2010.
- 94.2% of hhs use pit toilets; 3.1% use VIP, 0.2% use UDDTs; and 4.5% use flush toilets (MININFRA, 2011)
- Burden of disease: 54 million USD per annum (WSP WB, 2011)



CONTEXT

Burera District

- Volcanic area
- >90% of the population is dependent on agriculture
- Annual precipitation: 1200mm to 1500mm
- High prevalence of WATSAN related diseases (KHI)
- WASH project Survey of 62,043 hhs, 36.6% use improved toilets; 14% have no toilets; 90.8% use soap and only 7.5% have handwashing facilities (WASH project, 2011).



CONTEXT

Burera District

- UDDTs recommended by MININFRA
- WASH project distributed 1000 UDDT slabs. Jerry cans and pipes for urine collection; and Soil to some hhs
- About 60% practice productive sanitation
- About 40 demonstration farms



CONTEXT

Rugarama Sector

- 22,154 people living in about 4401 hhs (Sector office)
- Average population density is about 599 people per Km² (Sector office)
- About 80 UDDT slabs donated to hhs in the sector



METHODOLOGY

Site selection

- Done in consultation with KHI
- Productive sanitation activities were reported to be apparently well managed and lucrative in Rugarama sector
- Selected two closely situated areas – Gafumba and Karangara Cell (productive sanitation) and Cyahi Cell (pit toilet)

Gafumba Cell
and Karangara
Cell

Cyahi Cell



METHODOLOGY

Data collection methods included a combination of:

- semi-structured interviews;
- Gender balanced focus group discussions;
- direct observation
- Review of literature



FORMAL INSTITUTIONS

Commitment to Accelerate Progress in Sanitation and Hygiene

- Sanitation is at the center of Vision 2020 - 100% hh sanitation and hygiene coverage by 2020.
- Economic Development and Poverty Reduction Strategy (EDPRS) - from 2008 to 2012. Implementation of Vision
- EDPRS assigns roles and responsibilities – MININFRA and MIN. of Health
- WATSAN policy is coherent with the National Environmental Health Policy - human and environmental health issues are both supposed to be addressed.
- Health Sector Strategic Plan II (HSSP II): Promote healthier lifestyles and prevention of diseases.

FORMAL INSTITUTIONS

Commitment to Accelerate Progress in Sanitation and Hygiene

- Hygiene and Sanitation Presidential Initiative (HSPI) – 2010
- Community-Based Environmental Health Promotion Programme (CBEHPP) for domestic sanitation – PHAST
- Community Health Clubs (CHCs) in each village
- Hygiene et Assainissement en Milieu Scolaire (HAMS) in schools
- Guideline for latrine technologies usable in Rwanda, MININFRA, 2011 – recommends simple pit toilet, ventilated improved pits (VIP) toilet, flush toilet and UDTs

FORMAL INSTITUTIONS

Sanitation and hygiene related laws in Rwanda

- First public hygiene law was instituted in 1926
- Order No. 71/18; ERO no 71/106 of 20 July, 1949 – prohibits disposal of excreta roads and public places
- Order No. 74/345; ERO no 700/176 of 14 September, 1959 - All houses, shops, workshops, construction sites or any other establishments shall have clean toilet facilities.
- 2003 Rwandan constitution – right to healthy and satisfying environment

FORMAL INSTITUTIONS

- Organic law No. 04/2005 for environmental protection and conservation – regarding dumping of wastes: Article 81, Part 1; Article 83 and 84; Article 84
- 2009 Rwanda Building Control Regulations: 3.3.2.13; 3.3.2.14; 3.3.2.16; 3.3.2.17

FORMAL INSTITUTIONS

Standards of toilets in MININFRA, 2011 guidelines for toilets usable in Rwanda

Characteristics of sanitary toilet	Minimum quality standards for toilet construction	Components of a sanitary toilet
<p>Should not pollute or contaminate soil</p> <p>Should not pollute or contaminate groundwater</p> <p>Should not pollute or contaminate surface water</p> <p>Should not act as breeding media for vectors</p> <p>Should not require handling of huge amounts of waste and high technology</p> <p>Should not produce odour and unpleasant sight</p>	<p>Should be sealed – pit and ventilation pipe must be covered</p> <p>Should be properly cleaned</p> <p>Should be well maintained</p>	<p>Should have a superstructure made of: four walls and a door; roof (may be constructed with locally available material)</p> <p>Should have an underneath structure consisting of: a pit/tank; a slab/pedestal with a hole; and a lid (may be constructed with locally available material)</p>

FORMAL INSTITUTIONS

Guidelines for pit toilets and UDDTs (MININFRA, 2011)

Pit toilet		
Structure and design	Construction material	Management/ maintenance
Pit should be at least 1000L; at least 3m deep; 1m in diameter; walls of pit should be lined if excreta is to be used; pit should be 30m from homes and water source, pit can be built upwards using concrete rings or block; pit can also be shallow and unlined – arborloo.	Cement, metal sheets, sand, gravel, stones.	Toilet must be covered with lid; water and soap for handwashing should be available.

UDDT		
Structure and design	Construction material	Management/ maintenance
Single or double vault. Vault must be watertight. Vault should be large enough to allow for airflow. Vent is needed for ventilation and fly control. No specification on dimension of vault.	Cement, metallic sheets, sand, gravel, ventilation pipe, urine pipe, container for urine collection.	Toilet must be covered with lid; water and urine should not get into the vault; wastes should not be dumped in vault; water and soap for handwashing should be available; ash, sand or lime should be added to toilet after every visit; shovel, gloves, and mask should be used for emptying vault.

INFORMAL INSTITUTIONS

- Toilet in the Rwandan culture - avoid contamination and improve hygiene
- No specific beliefs associated with human excreta in the Rwandan culture
- Homes and toilets must always be cleaned
- If toilet is shared, the owner of the toilet is responsible for making cleaning arrangements with other users
- Toilets should be constructed away from the house
- Toilets should be placed outside the fence (at the exit of the compound)
- Toilets must be placed away from the kitchen (If there is enough space)

ENFORCEMENT OF FORMAL INSTITUTIONS

- Community health workers visit hhs monthly for general hygiene and sanitation inspection and sensitization
- Cell leaders visit each village once a month
- Hhs without toilets are fined 5000 RWF (8.3 USD)
- Hhs with toilets in poor hygienic conditions are fined 2000 RWF (3.3 USD)
- Rewards for clean toilets – hhs received 10 000 RWF (16.5 USD) each
- Inspection of UDDTs is led by UNICEF - irregularly

FINDINGS

- Marked contradictions
- Toilets are way below standards
- Explained by lack of understanding of prescribed rules (e.g. inadequate capacity to manage productive sanitation system); non-compliance with norms; financial constraints at hh level, and poor prioritization of the toilet by hhs



CONCLUSION

- Do systems safely and conveniently collect, store, treat and dispose/use excreta?
- Has productive sanitation contributed to sustainable livelihoods?



Dusukure
PHAST
Cooperative



THANK YOU