



# Sustainable Rural Sanitation



Current practices and problems of faecal sludge

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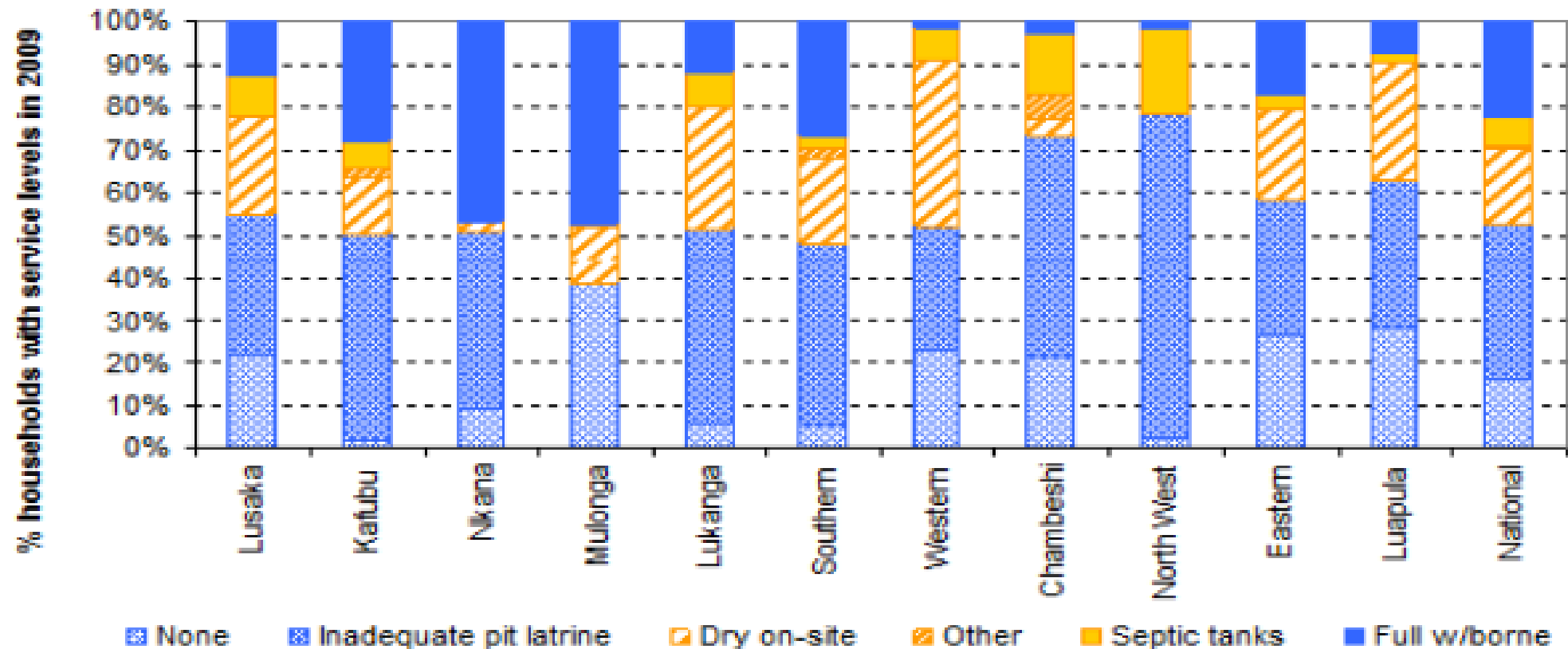
# Background

- ▶ Estimated population; 16,405,229 (July 2018) CSO, 2018
- ▶ One of highest level of urbanization in Africa
- ▶ Pop growth rate 2.91
- ▶ Access to basic sanitation 31% (19% rural and 49% urban) WHO/UNICEF 2017
- ▶ 15% practice OD
- ▶ It has a total surface area of 752,614 square kilometers
- ▶ 10 provinces and 105 districts



# Access to sanitation service levels in 2009 per commercial utility

(Source: Guidelines for Investment Plans for Commercial Utilities and Local Authorities. Phase 2, published 2009)



# Sustainable Sanitation.....

## Past approaches to sanitation

- Before 1964-Empahsis on enforcement
- After 1964-Shift to Government, donor and NGO provision, led to increased coverage in project areas but low usage
- Later-CLTS with zero subsidy use in construction materials, this led to increased sanitation coverage in rural areas
- 1<sup>st</sup> sanitation summit in November 2018-Launch of Zambia Open Defecation Free Strategy 2030 to actualize the country's sanitation and hygiene development aspirations
- Launch of IDP guidelines



# Practices and Challenges

Manual emptying and non formalized faecal sludge management emptying services



# Lack of set standards for toilet structures



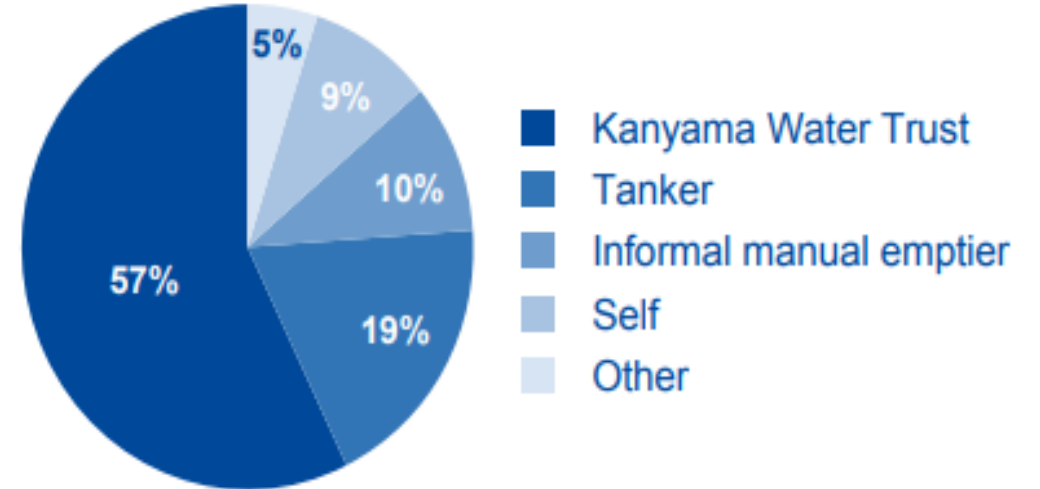


# Practices and Challenges

First attempt at FSM (BORDA, WASAZA, WSUP)



Figure 8: Toilet emptiers operating in Kanyama



Source: Kanyama Toilet Census Questionnaire, mWater. LWSC.

# Practices and Challenges

Poor state of toilets in per-urban areas



Image: A Water Trust team in Kanyama assess a pit latrine.

Re-use sludge



Image: Re-use of treated sludge produced by Kanyama Water Trust. Credit: Gareth Bentley



## Inadequate fecal sludge treatment facilities- Kanyama and Chazanga FSM transfer stations



# Practices and Challenges Continued

- ▶ Abandoned pits (rural areas)
- ▶ Presence of solid waste in faecal sludge
- ▶ Unemptiable pit latrines led- no access to the pit latrine, collapsing walls
- ▶ Limited access by vacuum tankers to the pit latrines in unplanned settlements
- ▶ Lack of standards on construction of toilets in informal settlements
- ▶ Pollution of ground water which is used for drinking water through shallow wells
- ▶ Limited space to build new pits in peri-urban areas



High water table and  
flooding



Difficulty to dig pits in rocky areas





## Challenges Continued-Disease outbreaks

- Cholera outbreaks- In 2009, 2010, 2012, 2016, 2017 and 2018 with 7,200; 7,300; 350; 1,348; 103 and 5,775 cases reported, respectively.
- 21 years of cholera outbreaks since 1991
- Diarrhoea cases-At 17.9 percent, the prevalence of diarrhoea is higher among children under five living in urban areas, as compared to 15.1 percent among children in rural areas
- Child stunting - Reduction rate of stunting prevalence among children under five years of age is less than one percentage point per year (from 45 percent in 2007 to 40 percent in 2014).

# Other bottlenecks

- ▶ Lack of effective management of Information systems
- ▶ Inadequate financing
- ▶ Inadequate policies and guidelines
- ▶ Lack of enforcement in rural areas
- ▶ Low hygiene and waste reuse communication
- ▶ Lack of site specific sanitation solutions
- ▶ Slow implementation of decentraslisation policy

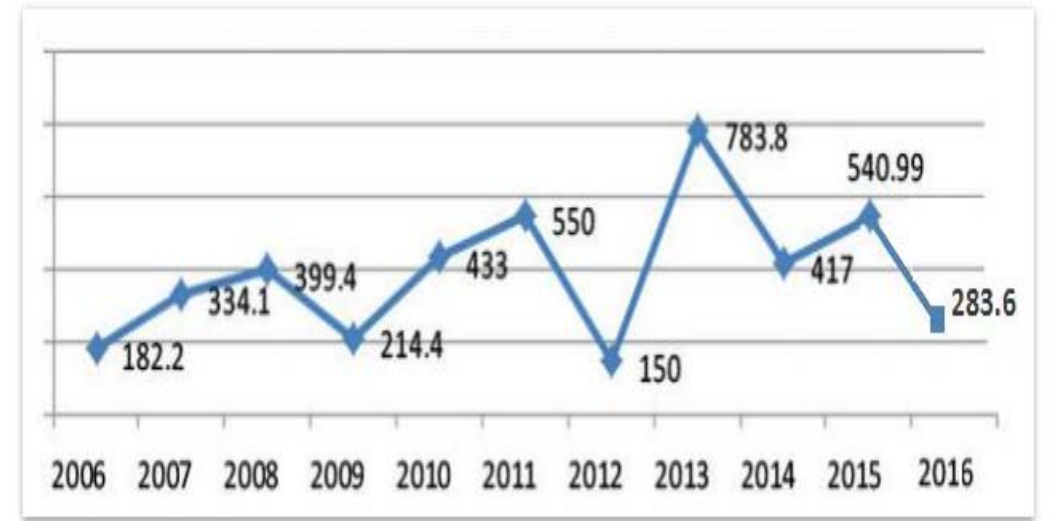
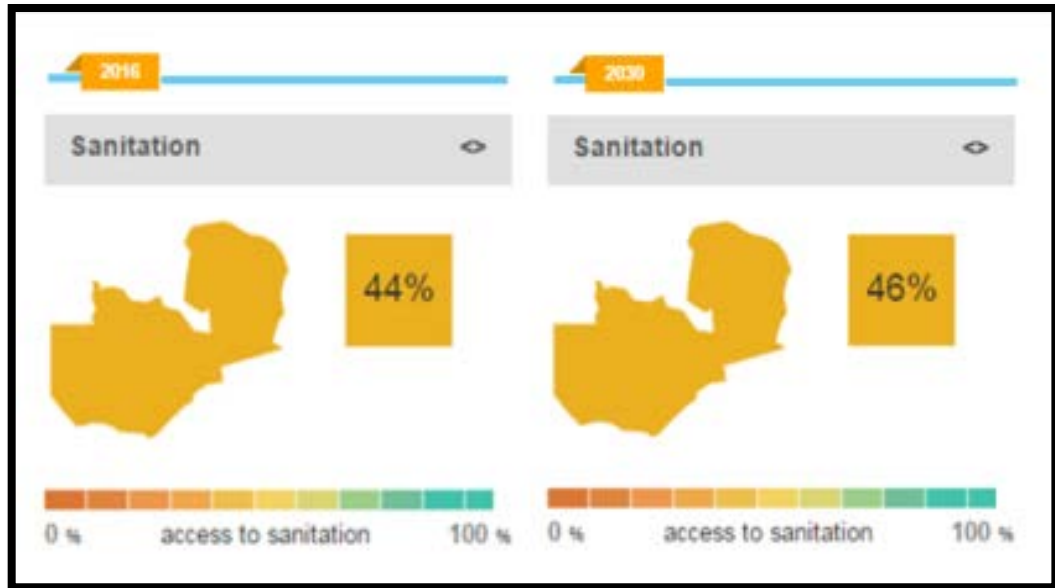


Fig. 12.b: Zambia planned government spending in WASH from 2006 - 2016 (in million K)

# Way Forward-The Systems Approach

By 2030, to end open defecation for ALL paying special attention to the needs of women and girls and those in vulnerable situations by creating a sustained **Social Norm of Open Defecation FREE environment** at household level, in learning institutions, health care facilities and public spaces fostering public health and nutrition.

STRENGTHENING ENABLING ENVIRONMENT AND NATIONAL SYSTEM		PARTICIPATORY DEMAND CREATION		SUSTAINING DEMAND	ACHIEVING SAFELY MANAGED SANITATION
<b>Good Governance</b> Institutional Framework, Planning & Financing, Sector Coordination, Legal Enforcement, Monitoring & Regulation, and Traditional Leadership	<b>Knowledge Management &amp; Accountability,</b> Communication, & Advocacy, Formative Research, Capacity Development	<b>Community Approaches to Sanitation &amp; Hygiene</b> Sanitation, Hygiene Promotion and Safe Water in Communities, including Hand Washing and MHM, Water Safety Planning, Targeted Subsidies	<b>School Health and Nutrition</b> Sanitation, Hygiene and Safe Water in Learning Institutions including Group Handwashing and MHM, Inclusion, School Health & Nutrition, O&M	<b>Sanitation Marketing</b> Supply Chain Development and Markets, Affordable Sanitation Products, Sustainable Business Model, Low Cost Financing Options, PPP/PPPP	<b>Environmental Protection</b> Faecal Sludge and Solid Waste Management, Drainage, Water Quality Monitoring