

4th Annual Virtual Menstrual Hygiene Management in
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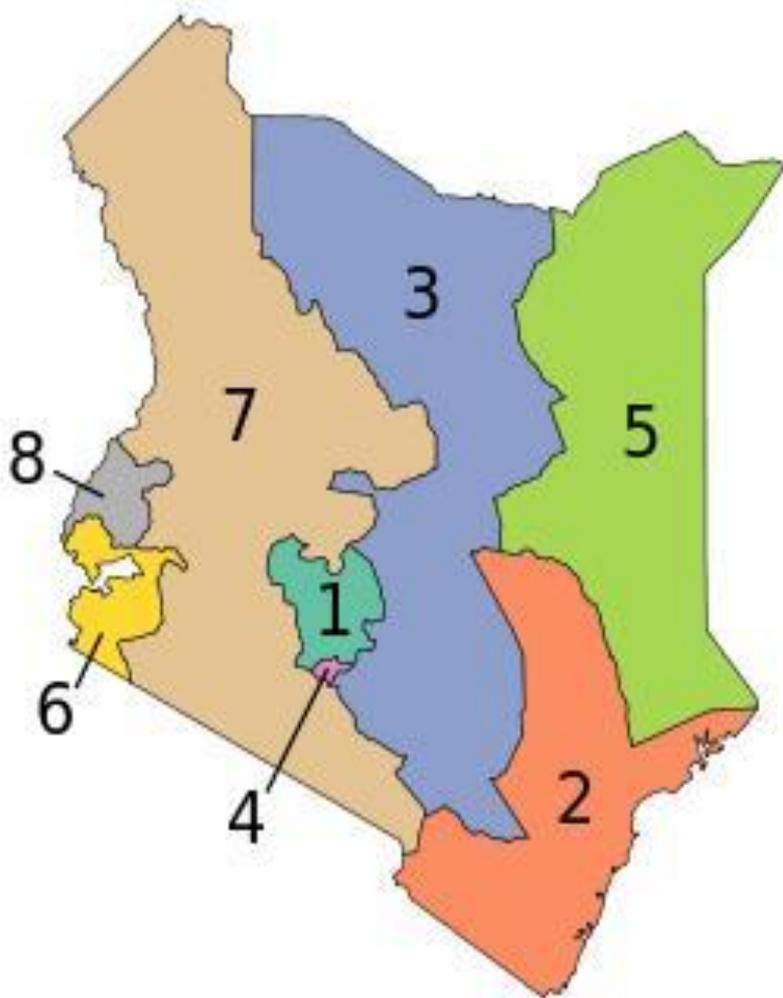
**PROMISING APPROACHES TO MENSTRUAL WASTE
DISPOSAL IN SCHOOLS**

BY:

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Background & Context - Kenya

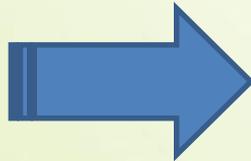


- In 2015, Kenya's population is estimated at 47.8 million (World Population Review Report, 2015)
- The 2010 census report by Kenya National Bureau of Statistics (KNBS) indicates the country had a population of 38.6 million, about 50.1% female and 49.9% male
- There are 42 different ethnic communities (KNBS, 2010)
- Approximately 2,967,440 girls in government secondary schools



Background Information

- 52% of the global female population are in reproductive phase and have monthly menstruation
- In Kenyan schools, the major issue has changed from access to pads to proper disposal and management
- Rural public schools use pit latrines for disposal, leading to filling up and blockage



300 pound of
sanitary waste
in a lifetime



The Problem

Free Primary Education policy in Kenya significantly resulted in increased enrollment in the 3,028 public schools with an average of 980 girls per school (according to MOE, 2011). This means:

- 2,967,440 girls menstruating in schools per month (MOE, Kenya 2011)
- Approximately 400 to 550 grams of pads and applicators used per month (MOE, Kenya 2011)
- Approximately 9,495,680 to 13,056,560 kilograms of waste generated per academic year (MOE, Kenya 2011)

Menstrual waste management generally remains a big problem in Kenyan public schools consequently impacting negatively on the environment and lives of learners and other people



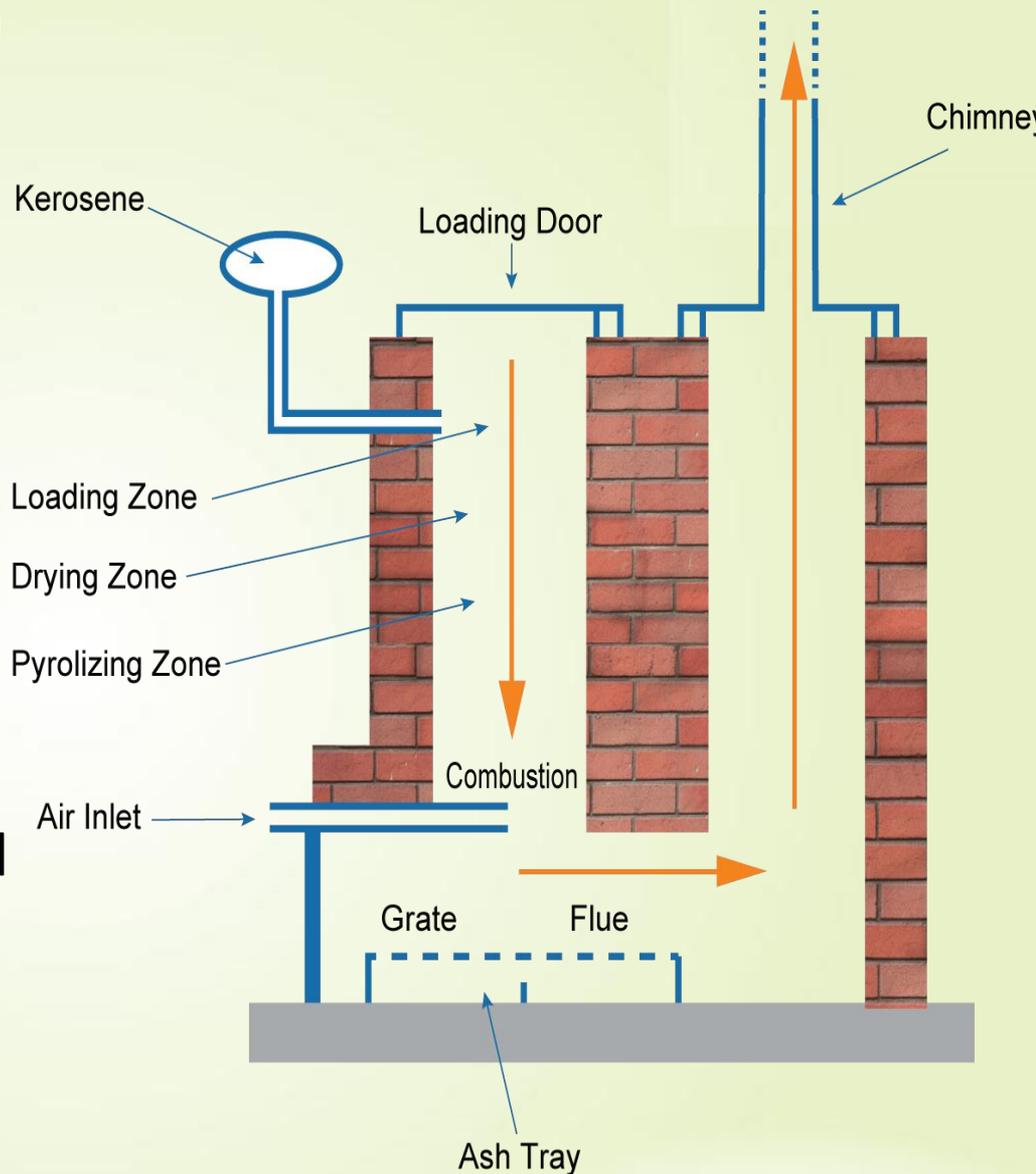
Objectives

1. To investigate approaches that can improve solid waste management in schools
2. To establish relationship between menstrual waste generation rates and design of pit latrines in schools
3. To gain an understanding of the main challenges faced by school girls during their menses
4. To promote safe handling, collection, transportation and disposal of menstrual waste and good hygiene practices
5. To improve hygiene and sanitation services in schools and other learning institutions



Borrowing concepts from South Africa and India, GSAEP has managed to introduce and improve use of incinerators, sanitary bins, solar vents, and biodegradable enzymes in 32 learning institutions

A simple two-chamber natural draught incinerator with inner refractory bricks lining designed to withstand temps of $800^{\circ}C$ or higher, is effective in handling waste in a sustainable manner.



Methodology

- Sample population: Public rural government schools
- Sampling criteria: Systematic approach (national, provincial, district, and divisional schools)
- Focus group discussions with students, teachers, school heads, and interviews with Ministry of Education officials in 2011
- Web based information and actual visits in India & South Africa, personal observations and liaison with organizations ; WHO, Ministry of Health, Environment (NEMA) and Education
- Direct contact with key informants such as DE Montfort incinerators' designer – United Kingdom (UK)



Findings

1. Lack of proper Waste Collection Facilities, evidenced by waste dumped in open pits
2. Use of Pit latrines. Appropriate disposal bins not as common as pit latrines. Girls' pit latrines filled up faster than those of boys as a result of non-biodegradable pads
3. Use of biological enzymes, sanitary bins, solar vents and ash in these schools accelerated breakdown of biodegradable material, effectively also reducing maggots and odour
4. Schools could not sustain the huge costs of rental waste disposal services. This resulted to filling up of latrines, closing them down and reconstructing new ones in a cycle that consumed limited land space.



Findings



This means that 1.06% of all the girls in public government schools can dispose of their menstrual waste in a safe and environmentally sustainable way with room for replication



Use of 32 incinerators in 32 (trained) schools led to safe disposal of approximately 282,240 to 155,232 kg of waste per academic year of 9 months



Achievements

1. Construction of 32 incinerators (De Montfort type) in 32 learning institutions, including training the institutions on operation and maintenance of the incinerators
2. Promotion of good hygiene and sanitation practices in all targeted schools, and mapping /baseline sanitation survey in 42 schools
3. Securing funding and commitment from Kiambu county government for the construction of 8 incinerators in public girls secondary schools to the tune of Ksh 3.6 million (USD 34,286)
4. Successfully piloted and undertook interventions in 6 out the 47 counties in Kenya, with opportunities for scale up
5. Successfully initiated lobbying/advocacy process with Kenya national assembly (Education committee)



Conclusion & Suggestions

1. Use of De Montfort Incinerators appreciated although the \$3500 – \$4,500 cost still remains high for most schools
2. Use of Biological enzymes, sanitary bins, solar vents and ash has made sanitation facilities user friendly
3. Provision of pads by Government is a good move towards attainment of MDG's but there should be more focus on environmental sustainability
4. User participation leads to positive management practices hence there is need to effectively engage users in waste management
5. An interdisciplinary approach that encompasses water, sanitation, and hygiene issues is needed to put all aspects of waste management in proper perspective.



THANK YOU

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