



Making a SPLASH! ***Newsletter 21 – August 2014***

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1. SPLASH Sanitation Research Programme Activities

We had a great final workshop meeting at the Fairview Hotel in Kampala Uganda from the 18th - 21st June 2014. The workshop brought together consortium partners and participants from other organisations to discuss the major findings from the programme and share information.



SPLASH members and invited delegates visit one of the SPLASH technical sites (Photo: Sudhir Pillay)

2. SPLASH Sanitation Research Programme Updates

CLASS-A: Sustainable and resilient sanitation service chains in Maputo province, Mozambique – action research and piloting for the benefit of the urban poor

As part of the final dissemination activities from the Class-A research project, the International Water Association (IWA) and University College London (UCL) organised two training workshops: one as part of the WASH Conference in Brisbane, Australia on 26th - 27th March 2014 in collaboration with the Center for Global Safe Water at Emory University at the Rollins School of Public Health, North Carolina, USA; the other on 12th June 2014 in Harare at the Institute of Water and Sanitation Development which was co-organized with the Chinhoyi University Of Technology in Zimbabwe. The latter feeds into a broader dissemination activity led by UCL of feeding into a university networking initiative funded by the UK's Royal Society, which is aiming for further development and uptake of the

Rapid Participatory Sanitation System Risk Assessment (RPSSRA) methodology.

The training activities were based on a framework for understanding risk in relation to hazardous events, exposure and vulnerability, which can be used as the basis for unpacking the interrelating and compounding factors related to disease transmission. The workshop was designed to enable participants to understand how a process of participatory risk assessment can help stakeholders understand and respond to these health risks and the application of various risk assessment tools that can support this process. Participants learnt about the concept of risk assessment as applied to sanitation systems and were introduced to tools for rapid assessment of health risks associated with poor sanitation with the aim of promoting a better understanding of environmental health risks and how the process of risk assessment can promote better design of sanitation interventions.

The presentations and training materials from these two workshops have been uploaded to IWA's WaterWiki and to the SuSanA website. For further information, please contact Dr. Jonathan Parkinson at jonathan.parkinson@i-san.co.uk.



WASH Conference in Brisbane workshop participants.
(Photo: CLASS-A)

FaME: (Faecal Management Enterprise) Providing Sanitation Solutions through Value Chain Management of Faecal Sludge

In sub-Saharan Africa, industries such as cement or brick production that are pervasive in urban areas have a high demand for fuels to meet their energy requirements, and energy generation capacity is lacking.

At the same time, untreated faecal sludge (FS) collected from onsite sanitation technologies is directly discharged into the urban environment. The FaME project demonstrated that dried FS can be used as an alternative fuel. Drying beds can turn FS into a dried fuel with a calorific value of 17 MJ/kg dried solids, which is comparable to other alternative fuels such as coffee and rice husks.

In Dakar and Kampala, studies in pilot-scale kilns met industries temperature requirements for brick production and waste oil regeneration. Revenues from selling dried FS as fuel can be higher than conventional end-use in agriculture. However, inefficiencies along the faecal sludge management service chain need to be overcome to allow industry-scale implementation. Project outputs are available at www.sandec.ch/fame.



Demonstration of using dried faecal sludge as a fuel for brick production in Kampala, Uganda.
(Photo: Linda Strande)

U-ACT: Urban Affordable Clean Toilets Economic Constraints and Demand-led Solutions for Sustainable Sanitation Services in Poor Urban Settlements

U-ACT has been busy with synthesising and publishing further research results from Kampala. Two academic peer-reviewed papers were published in 2014 in the public health journal "Bio-medical Central". The first entitled "Descending the Sanitation Ladder in urban Uganda" presents sociological baseline information about sanitation in Kampala's slums. The second paper, entitled "Gender Variations in Access, Choice to Use and Cleaning of Shared Latrines" provides in-depth insights to genderized sanitation in Kampala.

U-ACT's research results were also published in the development journal Development and Cooperation, 55(5) and can be downloaded here:

<http://www.dandc.eu/en/article/how-improve-sanitation-situation-slum-settlements>

For more information go to:

http://www.nadel.ethz.ch/forschung/u-act_EN

MAFADY: Maîtrise de la filière assainissement dans un écosystème côtier à Douala et les quartier populaires de Yaoundé au Cameroun

MAFADY's project includes a total of seven work-packages, with five of scientific interest and two for development support. There are 22 sub-activities with 12 related to management and coordination and the total study area covers 4949 hectares with about 185, 000 inhabitants.

After three years of research, the main results obtained from the different activities in the MAFADY project are:

- implementation of a concerted strategy for sanitation
- creation of a local monitoring group to implement the results from the project in collaboration with Douala and Yaounde city councils
- organization of an international workshop on sanitation and water in Yaounde

- realization of 24 latrines designed for use in flood prone areas with performance evaluation on track
- design of sensitization tools for hygiene and sanitation
- increased knowledge on the quantity and quality of management chains and treatment technologies for faecal sludge
- publication of four scientific papers and the elaboration of pollution vulnerability maps.

For further information see:

http://www.splash-era.net/srp_mafady.php



Model of a latrine built for a household during MAFADY's activities. (Photo: Syriaque Talom)

3K-SAN: Catalysing self-sustaining sanitation chains in informal settlements

Customary land tenure creates a significant barrier to the introduction of improved sanitation.

In depth analysis of the legal and regularity frameworks that exist in Kenya has shown how the legacy of customary land tenure is acting as a barrier to the supply of locally licenced or permitted sanitation. The constitution of Kenya, 2010, guarantees the right of every citizen to reasonable standards of housing and sanitation and gives authority to the state to regulate the use of land in the national interest. The constitution also grants the county government the mandate to carry out works and services that include storm water management and water and sanitation. However, this mandate only extends to leasehold tenures.

Kisumu city in the West of Kenya, one of the case-study sites of the project, has grown from a small town a few decades ago to a city with a population of close to 700,000. Approximately 60% of the population live in unplanned informal settlements characterised by haphazard housing developments. Much of the land covered by these settlements is held under customary tenure and is subject to cultural practices of subdivision between the male descendants of the owner. Transfers of land under customary tenure are outside the formal practices of land transfer involving the local authorities, and ultimately give rise to unplanned, uncontrolled developments.

Outside of the regulatory authority of local government, the construction quality and maintenance of sanitation facilities in these areas is often poor and in breach of local bye-laws. Customary tenure and high density housing was also found to be a barrier to the construction of much needed sewerage and drainage services.

Under the constitution of Kenya, 2010, customary tenure will be phased out when the adjudication process is completed, transferring these areas into leasehold tenure and bringing them under the control of the local authorities. This should allow for better planning controls and the development of improved levels of sanitation provision.

3K-SAN has shown that for sanitation to be adequate in Kisumu, the backlog of uncontrolled land uses must be addressed. Through this change the local authority can determine the suitability of sanitation infrastructure in the area, release public land for the installation of sanitation infrastructures and access roads, and allow supervision and enforcement of construction of sanitation facilities according to public health standards.

For more information go to: <http://www.3ksan.org/>



*Disorganised housing constructions in Obunga, Kisumu City
(Photo: Jane Adogo)*

3. Future plans for the SPLASH Sanitation Research Programme

The next step is to translate the main contributions from the SPLASH programme into synthesis outputs that reflect how the overall findings fit into the current landscape of the sector and to see where the remaining knowledge gaps are in order to inform future programmes.

SPLASH programme partners will be presenting papers and running a side event at the forthcoming WEDC International Conference in Hanoi, Vietnam from the 15-19th September. The theme this year is *Sustainable Water and Sanitation Services for All in a Fast Changing World*. Details about the conference can be found at <http://www.wedcconference.co.uk>

We will also hopefully be participating in AfricaSan later in the year.

For more information:

Contact SPLASH: splash@lboro.ac.uk

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