12th Sanitation Community of Practice (SanCoP)

Sanitation Safety Planning and Risk Assessment

Friday 19th April 2013 - University College London

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About the SPLASH research programme

European Water Initiative ERA-NET (SPLASH)
Transnational Research on Sustainable Sanitation Service Chains

The SPLASH Sanitation Programme aims to address urban sanitation challenges at scale in sub-Saharan Africa by developing solutions that focus on the entire sanitation service delivery chain.

funded by the:

- Austrian Development Cooperation (ADC)
- Department for International Development (DFID)
- Ministère des Affaires Étrangères et Européennes (MAEE)
- Swedish International Development Cooperation Agency (SIDA)
- Swiss Agency for Development and Cooperation (SDC)
- Bill & Melinda Gates Foundation.
Other SPLASH funded projects

**3K-SAN** - Catalysing self-sustaining sanitation chains in informal settlements. Working in Kigali (Rwanda), Kisumu (Kenya) and Kampala (Uganda) to assess the mechanisms to promote sustainable sanitation.

**U-ACT** - Economic Constraints and Demand-led Solutions for Sustainable Sanitations Services in Poor Urban Settlements. Working in Kampala (Uganda), the U-ACT research focus on an in-depth investigation of the economic incentives that stimulate demand for sanitation.

**FaME** - Faecal Management Enterprises Working in Senegal, Ghana and Uganda, the FaME project will evaluate innovative FS-management solutions that lead to technically robust, and financially viable sanitation service chains.

**MAFADY** - Maîtrise de la filière assainissement dans un écosystème côtier à Douala et les quartier populaires de Yaoundé au Cameroun. The project aims to determine actions to improve hygiene and sanitation in in Yaoundé and Douala through a systematic sanitation planning process.
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Project aims and objectives

Sustainable and resilient sanitation service chains in Maputo province, Mozambique

Action research and piloting for the benefit of the urban poor

Purpose: Contribute towards the development of long-term strategies to mitigate environmental health risks related to sanitation and promote the development of sustainable sanitation service delivery.

Aim: The project aims to develop a methodology to reduce vulnerability for urban populations from sanitation related hazards via the:

- development and application of risk-based systems analysis;
- identification of resilient sanitation technologies and development of strategies for their implementation;
- capacity development of stakeholders at all levels to collectively enhance sustainability of sanitation services.
Sources of public health hazards related to sanitation
WHO Guidelines (3rd Edition)

Objective:
• To Maximize the protection of human health and the beneficial use of human waste.

Guidelines provide an integrated preventive management framework for public health and environmental benefits of waste use.

Target Audience:
Policy makers, regulators, public health scientists, educators, researchers and engineers
WHO Sanitation Safety Planning Process

Task 1 - Define the system boundaries and assemble the SSP team

Task 2 - Describe sanitation system within the boundary (the sanitation chain)

Task 3 - Identify hazards, hazardous events, and assess exposure risk along the sanitation chain

Task 4 - Develop and implement an incremental improvement plan

Task 5 - Monitor the plan and check that controls are working

Task 6 - Document, review the plan and develop supporting processes
Areas for discussion

1. Risk assessment framework and indicators

2. Perceived benefits of the methodology in relation to other participatory planning approaches

3. Application of the methodology

4. Development of the methodology to assess of “citywide” sanitation risks
Areas for discussion - 1

1. Risk assessment framework and indicators

Do you consider the conceptual framework for sanitation system risk assessment sufficiently robust to be widely applicable in a range of situations?

Do you consider the indicators for risk assessment (sanitation systems, exacerbating factors, vulnerability) to be fit for purpose?

What other sources of data could be used to reinforce the methodology?
Areas for discussion - 2

2. Perceived benefits of the methodology in relation to other participatory planning approaches

What other participatory planning approaches / methodologies are you aware of that you consider to be similar? How is this approach different?

What are the perceived benefits / weakness of the approach in comparison with existing approaches?

Do you have any suggestions to improve the methodology to improve enhances these benefits?
3. Application of the methodology

How do you perceive the benefits to local residents/stakeholders being involved in this process?

What information does the methodology provide to those working with communities to improve urban sanitation services?

How do you envisage the methodology being used to support city sanitation planning processes?
Areas for discussion - 4

4. Development of the methodology to assess of “citywide” sanitation risks

To apply the risk framework to other parts of the sanitation service delivery chain, what parameters/indicators would you propose to be used for:

a) Collection and transportation of fecal sludge/wastewater
b) Wastewater treatment facilities
c) Disposal and reuse

How would you develop the risk framework? Who would you involve in the assessment? What changes to the methodology would you propose?