

**SCHOOL OF CIVIL &
BUILDING ENGINEERING**

Emergency Urban Sanitation

Research Needs

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Background

WASH cluster meeting held at WEDC in March 2012

Research needs - emergency sanitation in urban settings.

LU student contacted 45 participants to find out more

This is the results of that survey.

The questions

1. What are the main technologies in emergency urban sanitation and what are the main constraints to these technologies?
2. What are the key issues around emergency sanitation delivery?

Feedback

45 people contacted

22 responded

11 confident to provide answers.

Far less than the number who thought emergency urban sanitation needed more research

What were they basing their opinion on??

Results 1 – Technologies & Constraints

Technology	Constraint
Biodegradable bags	Poor connection with hygiene & other sectors e.g. shelter. Not always culturally acceptable Collection and disposal
On-site disposal e.g. pit latrines	Preferred choice Unsuitable for high density areas Emptying and sludge disposal
Communal toilets with tank	Space constraints Emptying and sludge disposal
Portaloo	Reliant on regular emptying Expensive
Ecosan	Minimal experience
Sewerage	Minimal experience

Results 2 – Key issues

- **Lack of space** - pop density, ownership
- **Waste disposal** - expensive, access, de-sludging, transport, equipment, disposal.
- **Ground conditions** – geology, infrastructure
- **Toilet technology** - expensive, inaccessible to users, high water use, low agency technical knowhow.
- **Relief agencies** - under resourced, uncoordinated, poorly plan, unused to urban sensitivities & constraints
- **Inflexible regulation** - restricts options
- **Sphere standards** – difficult to achieve

Conclusions

Experience of emergency urban sanitation is limited

Agencies must be competent in a range of options.

Must improve management and logistical skills

Urban costs a lot more than rural – come to terms with it.

Better leadership of response (not just coordination)

Current technology choices heavily influenced by camp and rural settings.

Rural options still appropriate – especially in peri-urban areas.

Family based systems still the best.

Key research areas - rapid deployment of technologies for:
low footprint toilet blocks de-sludging transport disposal

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Thanks!