

# Alternative Solutions for Challenging Environments: A Look at UNICEF-assisted Ecosan Projects Worldwide



Belinda Abraham (UNICEF Cambodia)

**Guy M. Kakumbi** (UNICEF Rwanda)

**Monirul Alam** (UNICEF Bangladesh)

Elisabeth von Muench (GIZ Germany)

# Presentation Outline

---

1. Objectives
2. Scope of the Study
3. Methodology
4. Findings and Results
5. Opportunities
6. Conclusion



Household UDDT in Rwanda

# 1. Objectives

---

- Share the review outcomes on UNICEF-assisted ecological sanitation (ecosan) projects
- Discuss the challenges to scaling-up of the interventions
- Present potential opportunities

## 2. Scope of the study\*

---

20 UNICEF-assisted ecosan projects in 12 countries:

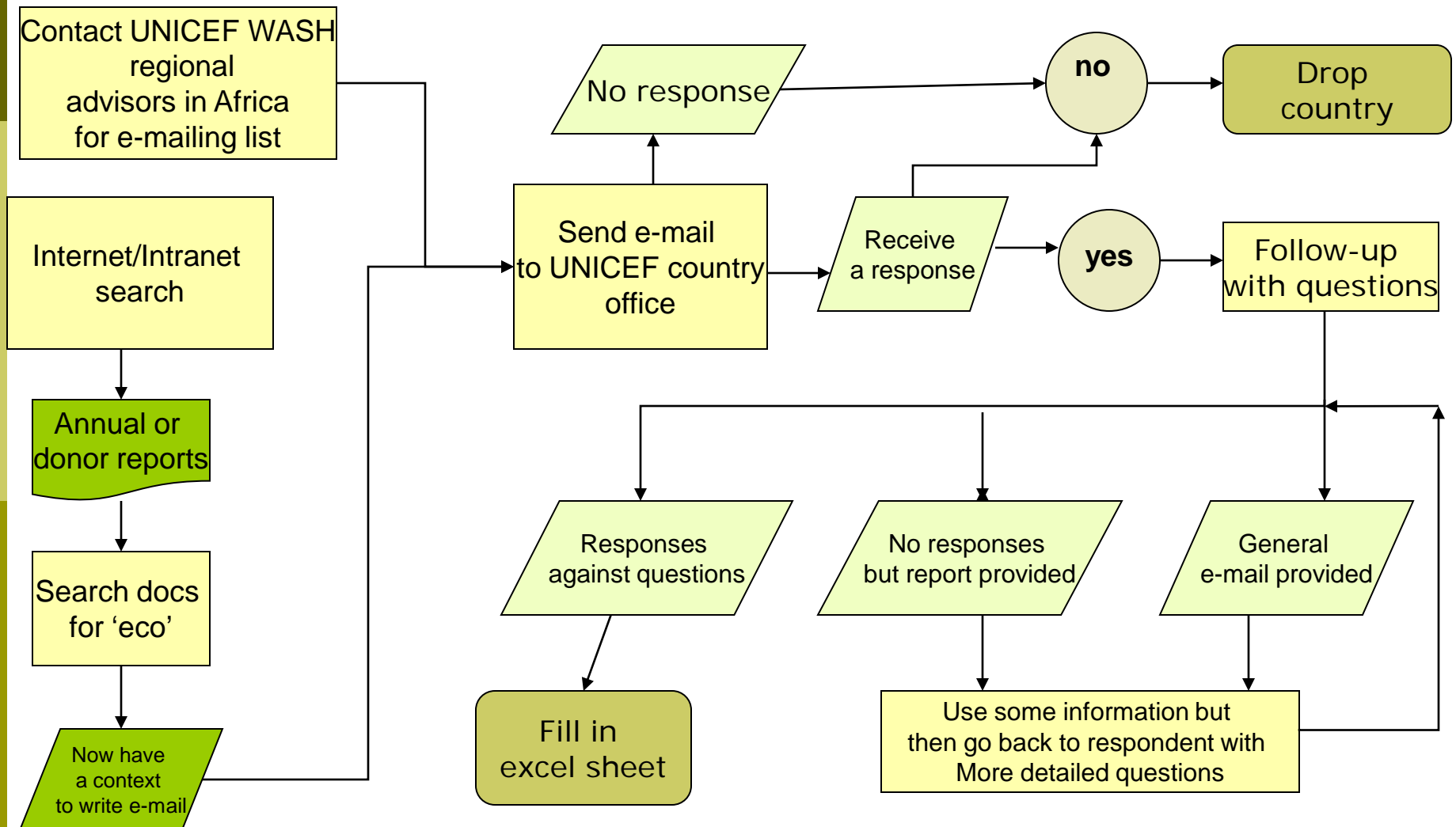
Bangladesh, Bhutan, Bolivia, Congo Brazzaville, Guinea Conakry, India, Malawi, Nigeria, People Democratic Republic of Korea (PDRK), Rwanda, Togo and Zimbabwe.



School UDDT in Rwanda (Courtesy of UN-Habitat)

\* The study was financed by GIZ; the projects were financed by UNICEF and partners

# 3. Methodology (Feb.- July 2010)



# 4. Results: Implementation partners by type

---

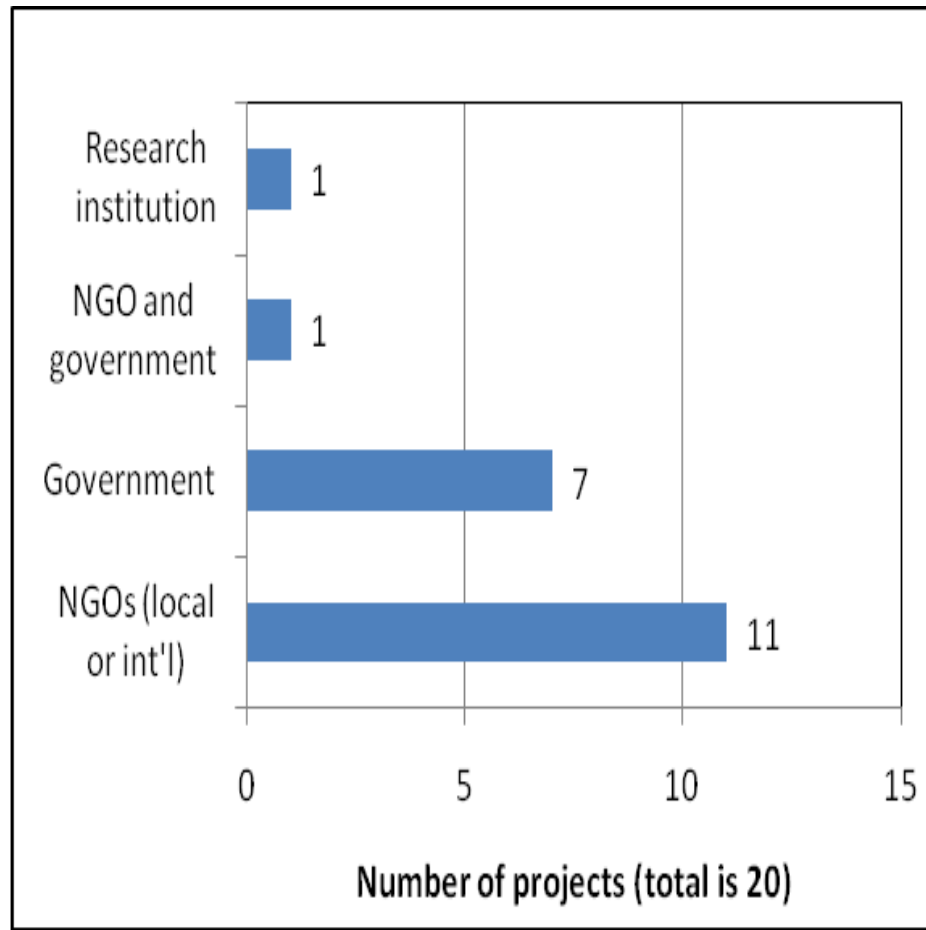


Figure 1: Implementation partners for UNICEF-assisted ecosan projects

# 4. Results: Number of users in the projects

---

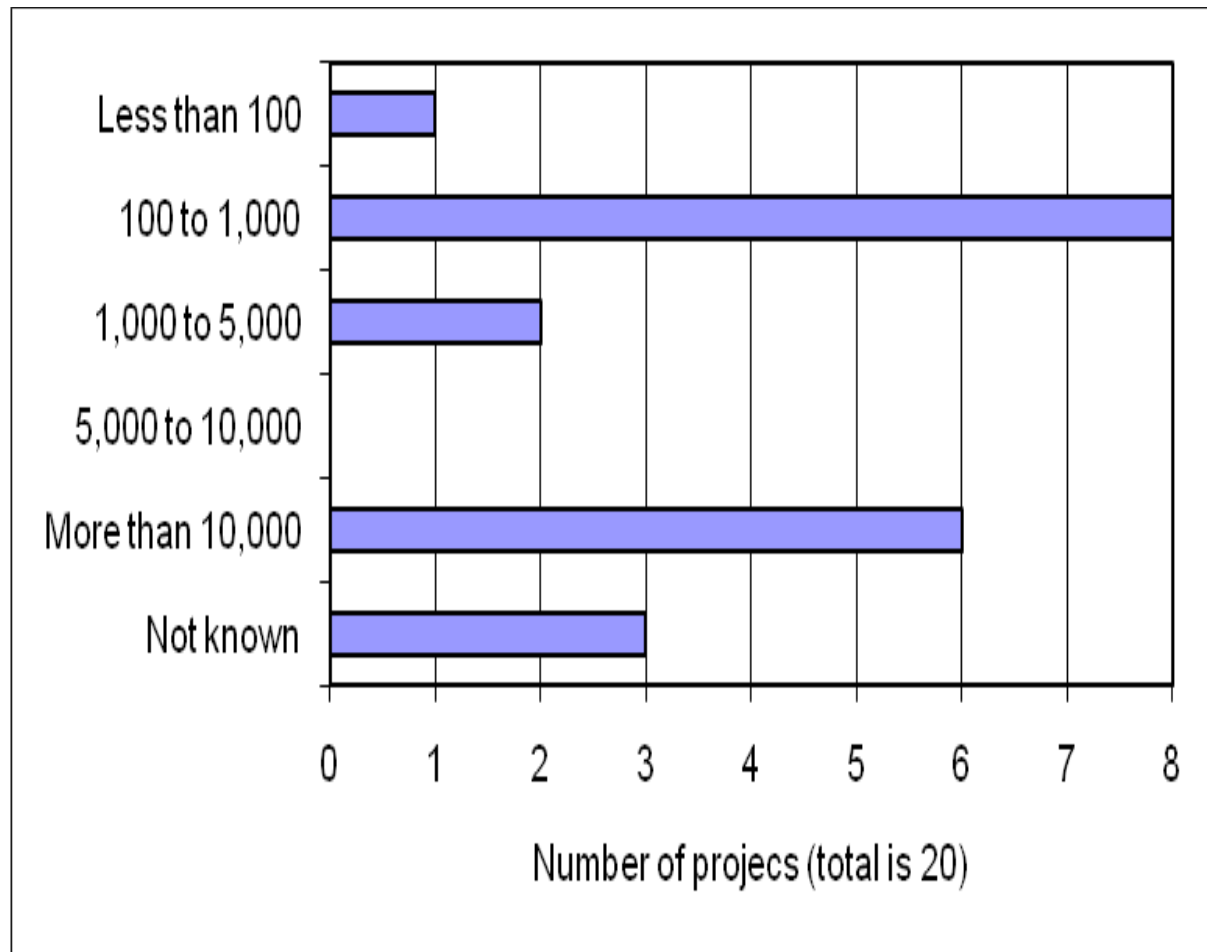
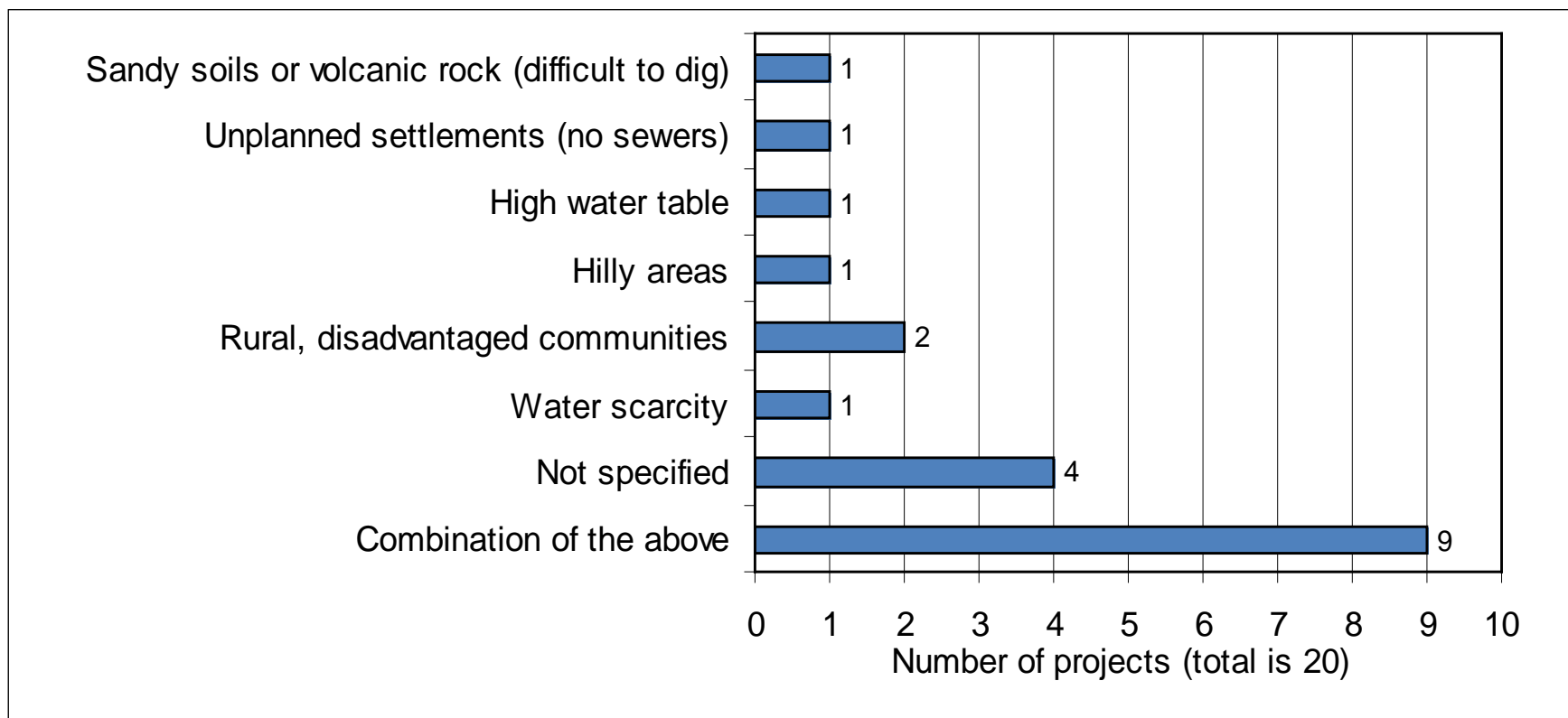


Figure 2: Number of users in 20 UNICEF-assisted ecosan projects worldwide

## 4. Results: Motivation

Main reasons were that target areas were difficult or challenging geologically, where the conventional pit latrines would fail to delivery satisfactory solutions





# 4. Findings

---

- ❑ Not all were pilot initiatives but part of sanitation improvement projects
- ❑ Focus on addressing 'difficult' situation not always for promoting 'ecosan' technology
- ❑ School-based programs look promising: Togo, and Rwanda



School sanitation and hygiene promotion using UDDT technology in Togo  
Courtesy of Ms. F Salami ( UNICEF)

## 4. Findings: Noted Challenges

---

- ❑ Limited monitoring on use or follow-up
- ❑ Limited documentation shared with outside organizations
- ❑ Information access on ecosan not widely available to poor people
- ❑ Health risk using composted faeces in farming-need further study
- ❑ Inadequate management of infrastructure - an issue across the board
- ❑ Poor replication due to high initial investment
- ❑ Social /cultural barriers - need to create social norms

# 5. Opportunities: linkages

- ❑ Link ecosan with CLTS - viable sanitation solutions will decrease risk that people revert to open defecation.
- ❑ Ecosan can be part of larger strategy to improve child nutrition, health and economic development
- ❑ Bangladesh's consortium model allows for sharing of information
- ❑ Rwanda's possible link to income generation and biogas development activities

Movable drum system using single Ecopan in Bangladesh



Courtesy of Practical Action

# 5. Opportunities: Reuse



Demonstration plots in Bangladesh (above) and Rwanda (below)



# 6. Conclusions

---

## Ecosan:

- Is not only about cheap fertilizer or ground water protection but first about access!
- Offers indeed potential in difficult geographic conditions
- Can be linked to ongoing initiatives for sanitation and health improvements
- Supported by many international networks such as SuSanA, and regional NGOs such as CREPA in West Africa



# 7. Photo gallery: Public and family latrines in Burera and Rusizi districts (Rwanda)

---



# 7. Photo gallery: family latrines in Bangladesh

## Twin Pit Urine Diversion Toilet



Courtesy of Practical Action

# 7. Photos gallery: Innovation (small but beautiful and effective)

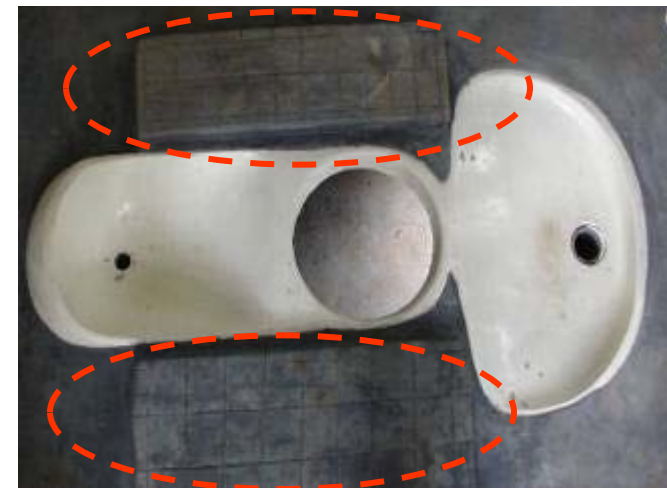
---



Hand rail for people with disabilities and pregnant women



Larger footrest for menstrual hygiene management issue



Courtesy of Practical Action

Structural adjustment in the evaporation bed for menstrual hygiene management issue





# 7. Photos gallery: Innovation (small but beautiful and effective)

---

Hand washing device



Pictorial chart for use & maintenance



Courtesy of Practical Action

# Thank you!

---

## □ Contact details:

- [babraham@unicef.org](mailto:babraham@unicef.org)
- [gmbayokakumbi@unicef.org](mailto:gmbayokakumbi@unicef.org)
- [malam@unicef.org](mailto:malam@unicef.org)
- [Elisabeth.muench@giz.de](mailto:Elisabeth.muench@giz.de)

## □ Further information:

- [ecosan@giz.de](mailto:ecosan@giz.de)
- [www.susana.org](http://www.susana.org)