



University of Natural Resources
and Life Sciences, Vienna
Department of
Water, Atmosphere and Environment

Methods and tools for assessing and planning sanitation

Günter Langergraber

Institute of Sanitary Engineering and
Water Pollution Control

Chair of IWA SG on
"Resources Oriented Sanitation"

*3rd IWA Development Congress
14-17 October 2013
Nairobi, Kenya*



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Methods and Tools

Session 1 (14:15-15:45)

The CLARA simplified planning tool

- Introduction to CLARA (Guenter Langergraber, Austria)
- The CLARA Simplified Planning Tool (Markus Lechner, Austria)
- Experiences from Ethiopia (Atekelt Abebe, Ethiopia)
- Experiences from South Africa (Valerie Naidoo, South Africa)
- Discussion



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Methods and Tools

Session 2 (16:15-17:45)

- WASH Technology Applicability Framework (**Jo Smet, the Netherlands**)
- Comparing BORDA DEWATS and Centralised wastewater treatment system using Life Cycle Assessment (**Miria Agunyo, Germany**)
- Launch of the Sanitation 21 planning framework (**Jonathan Parkinson, UK**)
- **Panel discussion** and interaction with participants “*Planning of sanitation in developing countries – What is needed?*”
 - Markus Lechner, Austria
 - Jo Smet, the Netherlands
 - Valerie Naidoo, South Africa

Next SG event

12th IWA Conference on Small Water & Wastewater Systems and
4th IWA Conference on
Resources Oriented Sanitation,
2-4 November 2014, Muscat,
Sultanate of Oman

- Deadline for abstract submission:
28 Feb 2014



First Call

**12th Specialized Conference on
Small Water and Wastewater &
4th Specialized Conference on
Resource Oriented Sanitation**
November 2 – 4, 2014



Jointly Organized by
Caledonian College of Engineering, Muscat, Sultanate of Oman and
National Institute for Agronomic Research – Laboratory for
Environmental Biotechnology (INRA-LBE), France
Supported by French Embassy in Oman



CLARA

Capacity-Linked water supply and sanitation improvement for Africa's peri-urban and Rural Areas

Contract # 265676

a Collaborative Project
within the EU 7th Framework Programme
Theme "Environment (incl. Climate Change)"
(Call FP7.AFRICA.2010)

1.3.2011 – 28.2.2014



Capacity-Linked water and sanitation
for Africa's peri-urban and Rural Areas



<http://clara.boku.ac.at>



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CLARA background



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CLARA has been developed based on the results and experiences from the **ROSA** project and the **NETSSAF** Coordination Action (both FP6)

- CLARA comprises the key partners from ROSA and NETSSAF
- ROSA and NETSSAF were focussed on sanitation issues, CLARA considers also water supply issues targeting to promote resources-oriented concepts.



Resource-Oriented Sanitation concepts
for peri-urban areas in Africa

<http://rosa.boku.ac.at>



<http://www.netssaf.net>

CLARA main outcomes



Capacity-Linked water and sanitation
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<http://clara.boku.ac.at>



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CLARA has two main objectives: we aim to

- develop a simplified planning tool for water supply and sanitation planning under African conditions, and
- encourage technological and non-technological improvements of low-cost water supply and sanitation systems.

CLARA main outcomes



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Simplified CLARA planning tool

- The simplified CLARA planning tool is not a new participatory planning approach but shall assist local planners and consultants to compare different alternative solutions of water supply and sanitation systems based on real costs.
- After developing a draft version of the planning tool, it is tested in the case study sites in five African countries – Ethiopia, Kenya, Morocco, Burkina Faso and South Africa.

CLARA main outcomes



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Field research on technological and non-technological improvements is carried out in Arba Minch, Ethiopia. Three main topics are investigated:

1. operation and maintenance, and financing mechanisms – strengthening the incorporation of businesses in the sanitation service chain;
2. faecal sludge treatment and urine conditioning methods; and
3. solutions for multi-storey condominium houses.



Capacity-Linked water and sanitation
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CLARA consortium

* denotes partners that have been also partners in ROSA and NETSSAF, respectively

1. BOKU University, Austria (Co-ordinator) *
2. ttz Bremerhaven, Germany *
3. EcoSan Club Consulting KG, Austria *
4. BIOAZUL S.L., Spain *
5. Centre of Biotechnology of Sfax, Tunisia

Case studies

6. Egerton University, Kenya *
7. Water Research Commission, South Africa
8. CREPA, Burkina Faso *
9. Office National de l'Eau Potable, Morocco

Arba Minch

10. Arba Minch University, Ethiopia *
11. Arba Minch Water Supply and Sewerage Enterprise, Ethiopia *
12. Arba Minch Town Municipality, Ethiopia
13. 'Engan New Mayet' Compost Production Association, Ethiopia
14. 'Wubet le Arba Minch' Solid Waste Collectors, Ethiopia
15. Arba Minch Health Center, Ethiopia



Where we are now



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Work in the pilot communities in the 5 CLARA countries

- ✓ Decision on pilot community
- ✓ Stakeholder involvement on different levels
- ✓ Collection of baseline data
- ✓ Pre-planning of systems alternatives
- ✓ Testing the CLARA simplified planning tool
- ✓ Providing feedback on using the tool
- Decision on next steps
- Preparation of application documents based on work carried out



Contact

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<http://clara.boku.ac.at/>
<http://rosa.boku.ac.at/>
<http://www.ecosan.at/ssp>



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Sustainable Sanitation
Practice

