



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

Resource-Oriented Sanitation Concepts for Peri-Urban Areas in Africa (ROSA)

EU Project within 6th framework programme –
Priority 6: Sustainable development, global
change and ecosystems

Duration: October 2006 – September 2009

aww

Institute of Wastewater Management
and Water Protection

TUHH

Technische Universität Hamburg-Harburg

Aim of the Project

- Promote **resource-oriented** sanitation concepts as a **route to sustainable and ecologically sound sanitation** in order to meet **MDGs**
- Apply these concepts to **four cities** in Eastern Africa:
 - » Arbaminch (Ethiopia)
 - » Nakuru (Kenya)
 - » Arusha (Tanzania)
 - » Kitgum (Uganda)



- In Eastern Africa
 - » 2 partners from every country:
1 university & 1 municipality/water utility (= end-user)
- In Europe
 - » BOKU, Vienna
 - » TUHH, Hamburg
 - » EcosanClub, Austria
 - » WASTE, The Netherlands
 - » London School of Hygiene & Tropical Medicine

Tasks and Activities of the Project - 1

- Researching the gaps for the implementation of Ecosan technologies in peri-urban areas, like
 - Development of O&M strategies
 - Improvement of resource-oriented sanitation technologies, e.g. greywater treatment in constructed wetlands, integration into local settlement structures
 - Development of local structures for financing of sanitation
 - Implementation studies of revised WHO guidelines

Tasks and Activities of the Project - 2

- Implementation of resource-oriented sanitation technologies in the 4 cities including the following activities:
 - Baseline studies
 - Development of strategic sanitation & waste plans
 - Selection of technologies
 - Implementation
 - Operation & Maintenance
- Budget: 50.000€/city

Tasks and Activities of the Project - 3

- Dissemination activities, e.g.
 - Capacity building
 - Connection to other international activities (World Bank, UN Habitat Lake Victoria Initiative, ISSUE etc.)
 - Development of information, education and communication (IEC) material



Establishment of a local East African network



Examples to build on in Ethiopia

Introduction of Ecological Sanitation for Large Scale Housing Programs in Ethiopia

» A Public-Private-Partnership Project supported by GTZ



168 units in Sodo in low-cost houses

Demonstration units in Addis Ababa

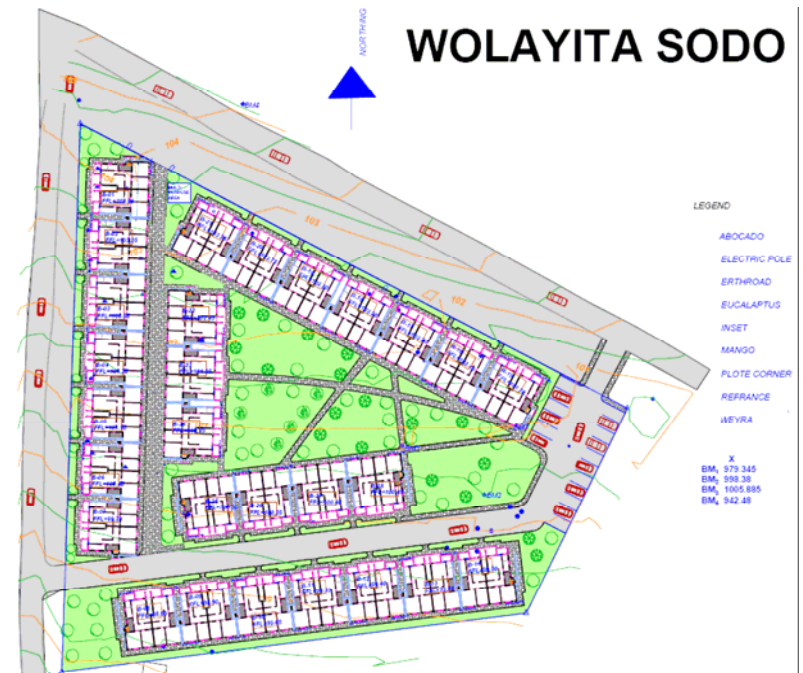
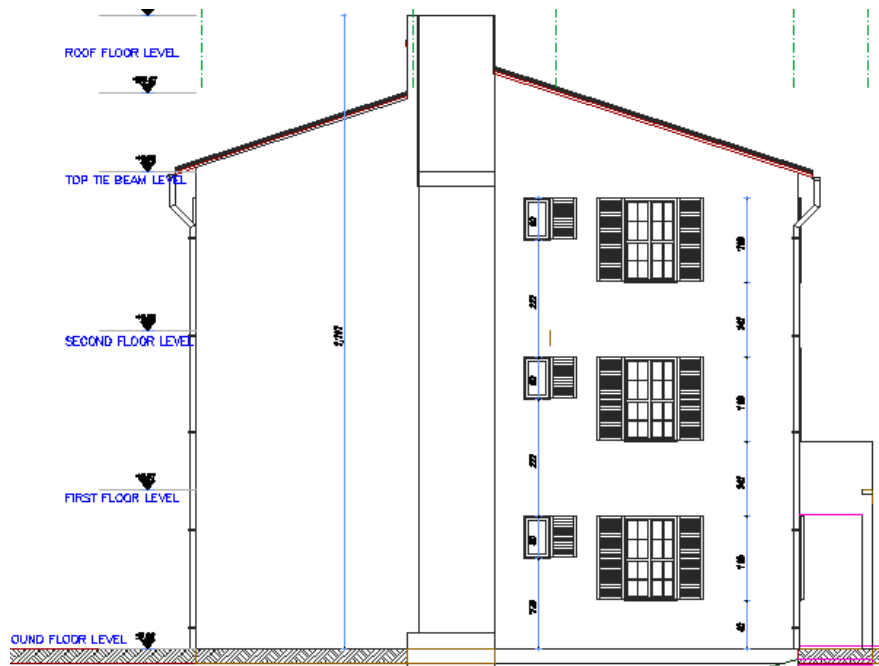
Demonstration units in Arba Minch



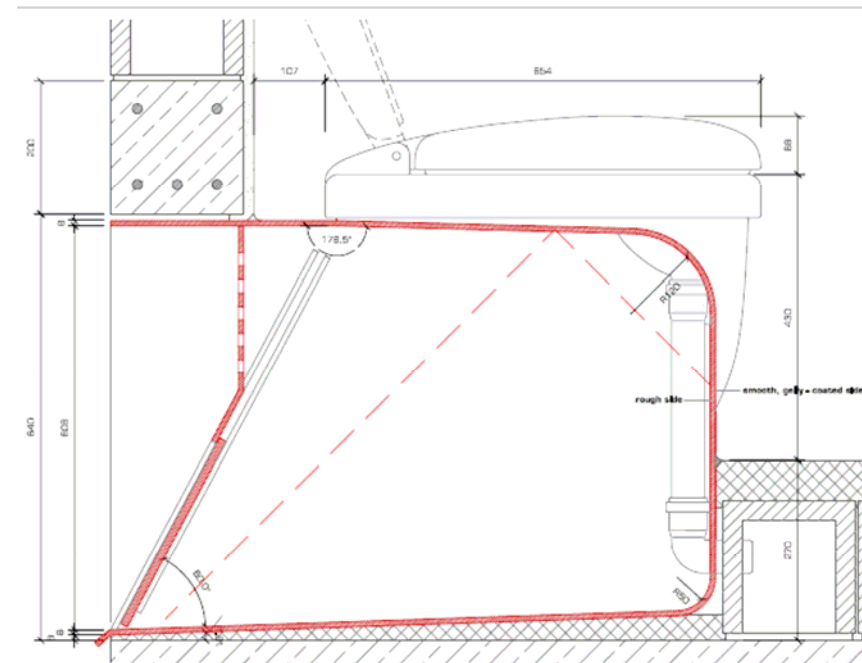
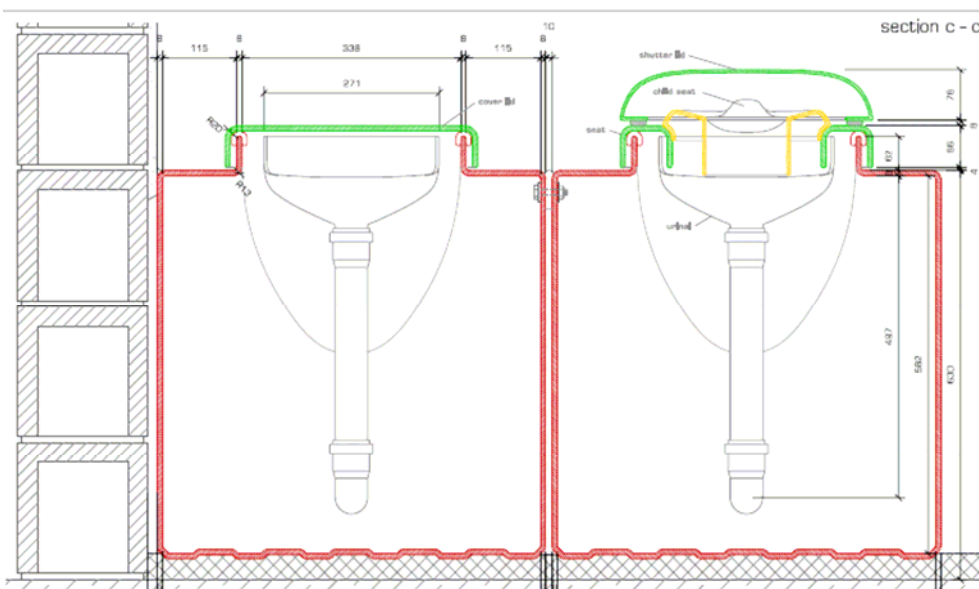
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Low-Cost Houses in Sodo

- First phase: 28 houses with 6 units respectively, 840 inhabitants, G+2
- Start of construction: as soon as possible



Toilets in multi-storey houses



Demonstration Units at Construction Site in Arbaminch



- Labour-intensive construction
- Max. 150 workers at a time
- Men & women as workers
-> 2 units

Demonstration Unit in Arbaminch



Crop trials with urine at Arbaminch University



Thank you!



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