

BASELINE NARRATIVE REPORTING FOR EGERTON UNIVERSITY, KENYA

In lieu of the full baseline data collection exercise taking place, please complete the following reporting document. One overarching document for the whole consortium is preferred. However, if it is easier, we are happy to also accept one form per consortium partner.

While the document predominately uses a narrative reporting format, we have also included space for inclusion of any quantitative data that may be available. Please try to include as much quantitative data as possible.

In addition, the final part of the form requests publication and grants data relating to co-applicants (named personnel within the original bid document). These are vital for successful review of the progress of the African Institutions Initiative and we request that you provide as much data here as possible.

Any queries regarding the forms should be sent to: r.e.hanlin@open.ac.uk

Please endeavour to return the completed form(s) to us by **30th November 2010**.

PART A: Capacity baseline

1. What was the situation with respect to scientific/ research related human resources capacity (research active staff, post-grads) within your relevant field of activity in your African partner institutions at baseline (September 2009)?

Narrative report:

The university encourages academic staff to do research and has entrenched this requirement in individual performance contract and in promotion.

However the number of research active staff is very low due to inadequate/lack of research funds, poor research facilities e.g. laboratories, library and lack of appropriate equipment. Heavy teaching workload by staff is also a main hindrance to engage in research due to lack of time.

Civil & Environmental Engineering Department has ongoing research on water, sanitation, wastewater/grey water treatment and management and on Ecological sanitation.

There are 2 PhD students in the faculty of engineering and technology, one undertaking research on sanitation and public health and the other on treatment of greywater using wetlands. In addition, there are 6 MSc students in the faculty undertaking MSc in integrated water management and in water resources.

The department of civil and environmental engineering is in the process of developing specific MSc courses on Water and Environmental Engineering and Public Health Engineering. The main challenge however is lack of research facilities and inadequate PhD staff in this field.

Any additional supporting quantitative data:

2. What relevant training courses/ programmes (for post-graduate teaching in particular, but also professional development) were available within the partner institutions at baseline (September 2009)? Please distinguish between courses/ programmes available in Northern institutions and African institutions if possible.

Narrative report:

As at 2009, The department was only training BSc in Water and Environmental Engineering. An MSc course is being developed to absorb the above graduates.

However there were 2 MSc programmes in the faculty namely: MSc in Integrated Water management and MSc in Water resources.

The department of Biological Sciences was offering an MSc course on Aquatic Ecology which was relevant to SNOWS and an MSc course in Environmental science was offered in the department of Environmental Science.

The division of Research and Extension runs short course for staff professional development on Proposal writing for research funding, Academic Scientific writing and publishing, and Research Methodology.

Any additional supporting quantitative data:

3. What was the situation with respect to research management, governance and administration structures within your relevant field of activity in your African partner institutions at baseline (September 2009)?

Narrative report:

Research Management

The University has a Division of Research and Extension that was established in 1987 and is headed by the Deputy Vice Chancellor (Research & Extension). The division's mandate is to manage, co-ordinate, promote and facilitate research and extension. Its other functions include managing research funds, consultancy services, vocational training, documentation, publication, and production of educational materials, seminars, workshops, conferences and symposia. It is through these activities that new knowledge is generated, packaged and disseminated to a wide variety of end-users in fulfillment of the primary objective of the University.

Research administration structure

The Deputy Vice-Chancellor (R & E) is assisted by a Director (R & E) who handles the research activities with the help of a Senior Assistant Registrar and two Administrative Assistants. The University Industry Liaison Officer handles the extension, linkages, and collaboration. The Research

Account section headed by a senior accountant is in charge of research funds in the Division.

Financial management of research funds

All research funds are administered by the Deputy Vice Chancellor (Research and Extension) DVC(R&E) in collaboration with the Principal Investigators. The administration and management of the funds follow the University's financial procurement procedures except where the donor has specified otherwise. The research funds are only disbursed for the activities of the project, with the approval of the Principal Investigator and the DVC (R&E), and no funds are disbursed if the researcher has not surrendered the previous imprest related to that particular project. In addition, the externally funded research is administered in conformity with the approved proposal, work plan, and budget and in accordance with the funder's approved procedure.

Postgraduate programmes

The Director, graduate school, is in charge of all post graduate programmes. The graduate school is managed by a Board of postgraduate studies (BPGS) which is composed of 2 administrators and 15 members representing faculties, senate and other key stakeholders within the University as follows:

- Director BPGS
- Academic Registrar - Secretary
- 4 senate representatives
- Faculty representatives
- Ph.D Student Representative
- Master Students Representative
- Deputy Registrar, BPGS
- Assistant Registrar, BPGS

Any additional supporting quantitative data:

4. What was the situation with respect to physical and ICT infrastructure within your relevant field of activity in your African partner institutions at baseline (September 2009)? Where any additional facilities based within Northern partner institutions regularly used by African partner institutions at baseline?

Narrative report:

The university has a ICT centre whose mandate is to provide technical advice on ICT matters relating to hardware, software and networks. The centre also provides IT and communication services in support of teaching and research. However, the centre is not able to meet the demand and only a few departments are accessible to these facilities-when they are working. Department of civil engineering is yet to be connected to the ICT network.

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| Any additional supporting quantitative data: |
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PART B: Publication and grants situation

Please provide the following as additional annexes to this report:

A list of co-applicants' publications (for the last 10 years). Data should relate to both African and Northern institutions.

1. **Muchiri E.W.**, Muellegger E, Mutua B.M. (2010) Private sector involvement in operating urine diverting dry toilets in Nakuru, Sustainable sanitation practice Vol.2
<http://www.ecosan.at/ssp/issue-2-operation-maintenance/article-4/view>
2. **Muchiri E.W.**, Mutua B.M. (2010) Pilot UDD toilets at a church and nursery school in Nakuru, Kenya. Sustainable Sanitation alliance (SUSANA)
http://www.susana.org/docs_ccbk/susana_download/2-127-en-cs-rosa-uddt-churchandnurseryschoolsusana.pdf
3. **Muchiri E.W.**, Raude J.M, Mutua B.M. (2010) Pilot UDD toilets and grey water treatment systems at Crater view secondary school in Nakuru, Kenya.
http://www.susana.org/docs_ccbk/susana_download/2-125-en-cs-rosa-uddt-craterviewsecondaryschool-susana.pdf
4. **Muchiri E.W.**, Mutua B.M. (2010) Pilot UDD toilets at a residential plot in Nakuru, Kenya. Sustainable Sanitation alliance (SUSANA)
http://www.susana.org/docs_ccbk/susana_download/2-115-en-cs-rosa-uddt-residentialsusana.pdf
5. **Muchiri E.W.**, Muellegger E (2009) Operation and maintenance strategies for resource-oriented sanitation systems in Nakuru, Kenya, 34th WEDC International conference, Addis Ababa, Ethiopia, 2009
6. Kimani, V.N., **S. O. Oduor**, J. Aguyo and W. O. Moturi (2009). Assessment of wastewater quality for use in crop production: Case studies of Egerton University and Nakuru wastewater stabilization ponds. A paper presented and published by the WEDC e-journals during *The 34th WEDC Conference in Addis Ababa Ethiopia*
7. Schagerl, M. & **S. O. Oduor**, (2008). Phytoplankton community relationship to environmental variables in three Kenyan Rift Valley saline-alkaline lakes. *Marine and Freshwater Research 59*: 125-136.

8. **Oduor, S. O.** & M. Schagerl,(2007). Phytoplankton photosynthetic characteristics in three Kenyan Rift Valley saline-alkaline lakes. *J. Plankton Research* **29**, 1041-1050.
9. **Oduor, S. O.** & Schagerl, M. (2007): Temporal Trends of Ion contents and Nutrients in three Kenyan Rift Valley Saline-Alkaline Lakes and their influence on Phytoplankton biomass. *Hydrobiologia* 584:59–68

A list of co-applicants' grants (if possible for the last 10 years, minimum requirement is 5 years). Data should relate to both African and Northern institutions.

| PROJECT | ROLE | AWARD | FUNDER | DURATION |
|--|---|-------------------|------------------|-----------|
| ROSA Research on Resource orientated Sanitation concepts for peri urban areas in Africa | Partner in a consortium of 13 institutions Assistant Work Package leader, Egerton, Kenya | 2.9 million Euros | European Union | 2006-2009 |
| SESP Development of a Strategic Environmental Sanitation Plan for Municipal Council of Nakuru, Kenya | Lead Consultant | Kes.300,000/= | Practical Action | 2009-2010 |
| ECOSAN Ecological Sanitation systems in Nakuru, Kenya | Lead Consultant | Kes. 250,000/= | Practical Action | 2010-2010 |
| SNOWS Is a consortium of 9 institutions seeking to build research capacity in water supply, sanitation and environmental health. The consortium hopes to achieve this by carrying out a needs assessment and organizing training for staff involved in research and provision of fellowships for PhD and Masters students to carry out research. It is a Welcome Trust funded project. The Institutions are London School of Hygiene, University of Copenhagen, East Anglia, Tshwane and Venda in South Africa, University of Egerton in Kenya, Mbarara in Uganda and KNUST in Ghana | Coordinator, Egerton University, Kenya | GBP 1,000,000 | Welcome Trust | 2009-2014 |
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