

# **Promoting Excellence in PhD Research Programmes in East Africa 2008-2011**

**Makerere University, Uganda  
Sokoine University of Agriculture, Tanzania  
University of Nairobi, Kenya  
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**PREPARE-PhD  
Evaluation, November 2011**



Complexitet.dk  
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## Summary

Promoting Excellence in PhD Research Programmes in East Africa (Prepare-PhD) is a project between three East African and an European University – Makerere University in Uganda (MAK), University of Nairobi in Kenya (UoN) Sokoine University of Agriculture (SUA) in Tanzania and Copenhagen University in Denmark (UC-LIFE). The project is co-financed by the EDULINK programme under the European Development Fund.

Common features for the three East African Universities are that their PhD programmes suffer from inconsistency and inefficiency at several levels. Prepare PhD focus on the following five challenges:

1. Rules and Regulations
2. Administration
3. Supervision/Examination
4. Preparedness of PhD students
5. Information/Communication

The project is one in a number of initiatives under a long-term Strategic Partnership Agreements (STRAPA) between the four institutions. Prepare-PhD project has been running from 2008 – 2011. This external evaluation is conducted in October/November 2011 where most of the project activities have been completed. Only activities aiming at disseminating results and lessons learnt from the project are still remaining. This external evaluation is intended to feed into the dissemination activities. The evaluation mainly builds on existing documents from the project supplemented by e-mail communication with 21 beneficiaries involved in the project. The evaluation summarizes the project from problem definition to results, including participants' reflections on significant changes in their daily work related to PhD programmes at the universities and it analyses lessons learnt in the project.

In general most of the activities planned from the project start have been initiated and intended outcomes have been realized. At the end of the project:

- Updated rules and regulations are in place at all the three universities and an on-line tracking system for PhD students' progress is developed and installed. It is in use at one of the universities and being tested at the two others.
- In total 258 supervisors have been trained, including trainers who have also developed curriculum for future courses and material for supervision.
- Training manuals for six PhD courses were developed and shared. Each partner developed two courses, some more elaborated than others.
- A total of 245 PhD students were trained in courses developed in the project.

With these results more PhD students and supervisors have been trained than expected. Further more project activities such as comprehensive baseline and end-surveys seem to have reinforced capacity to discuss and find solutions concerning PhD programmes across different departments at each University which was previously not common. According to the Steering Committee and supervisors the project activities have been an

‘eye-opener’ in the sense that it has led to increased awareness that rules and regulations concerning services to PhD students have to be applied if excellence in research shall be achieved.

Although it has been challenging to coordinate a joint process between the three East African institutions with different local procedures, the partner universities also have benefitted from differences. In addition to mutual inspiration, exchange of ideas and experiences the partnership has also led to joint fundraising for research and capacity building. The reinforced cooperation also included exchange of external advisors. Other ideas for possible exchange and cooperation in the future are provided in some of the e-mail contributions summarized in chapter four.

Some of the activities in relation to ‘Preparedness of PhD students’, and ‘Information and Communication’ did not succeed, such as the establishment of students associations and electronic bulletins. This has left the project without a common communication platform where information could be shared among the project partners and to stakeholders inside and outside the three universities. This complicates the process of sharing of information and dissemination of results which is crucial to ensure impact and sustainability of the project. To support the integration of new tools and practices developed in Prepare-PhD project into daily practice at the universities it seems imperative that the material is made available at least at the homepages of the universities.

The evaluation leaves no doubt that Prepare-PhD has indeed contributed to development of more efficient and effective training systems at the three universities and to regional networking among SUA, UoN and MAK. Overall the impact and sustainability of the project seems to be closely linked to the universities capability to continue and develop PhD courses and training of supervisors in more permanent structures, and their ability to establish updated communication platforms addressing the information and communication needs of PhD students as well as supervisors.

The project has elucidated a huge need for improving services of PhD students in the sense of improved information, improved access to facilities, supervision, courses and possibilities for communication with PhD colleagues. The evaluation ends up with a list of questions intended to clarify how this can be done within the existing structures or whether new structures have to be established.

## 1. About the project and the evaluation.

Promoting Excellence in PhD Research Programmes in East Africa (Prepare PhD) is a project between three East African and one European University – Makerere University in Uganda (MAK), University of Nairobi in Kenya (UoN) Sokoine University of Agriculture (SUA) in Tanzania and Copenhagen University in Denmark (LIFE). The project is co-financed by the EDULINK programme under the European Development Fund.

The project is one in a number of initiatives under a long-term Strategic Partnership Agreements (STRAPA) between the four institutions. Prepare PhD project has been running from 2008 – 2011. This external evaluation is conducted in October/November 2011 where most of the project activities have been completed. Only activities aiming at disseminating results and lesson learnt from the project still remain. The evaluation is supposed to feed into these dissemination activities.

The partner universities developed the project proposal in a joint effort. This took place at a workshop followed by e-mail correspondence. According to the Grant Application the background for the project was an increasing demand for PhD graduates in natural resource management, rural development, agriculture, veterinary science, food science, forestry and related areas in these three East African countries. For academic staff to be recruited in HEI (higher education institutions) at a lecturer level, a PhD degree is now required. This means that there are many members of staff who need to be trained to this level and with the expansion of higher education sector the need for high-level training is overwhelming.

Externally the traditional recipient of university graduates being ministries and research institutions in the region are also increasingly demanding higher education of their newly recruited staff. The establishment of many new private universities in the region is requesting PhD graduates to fill their ranks of lectures and professors. Moreover, with positive economic growth in recent years, the private sector has grown and it also demands well-qualified PhD graduates to address its international competitiveness.

These increases in demand for PhD graduates do not only relate to the number of graduates but increasingly also to the quality of the graduates and to the relevance of their research work and professional profile to the wider society. This is giving the existing establishment of HEI in the region a lot of challenges and has created an unprecedented pressure for effective and efficient management of the universities PhD programmes. At present the only ones to supply all these stakeholders with PhD graduates are the old established universities, as the three involved in this proposal.

Common features for those three universities PhD programmes are that they suffer from inconsistency and inefficiency at, at least seven levels:

1. Rules and Regulations
2. Administration,
3. Supervision/Examination,
4. Preparedness of PhD students,
5. Information/Communication,

6. Shortcoming in ICT
7. Research infrastructure.

Actually one additional issue exists which is Remuneration Rates of staff (especially in Uganda) but this is clearly outside the mandate of the project (Application p.4). *Prepare-PhD* focus on the first five challenges.

### **1.1. Project objectives**

According to the Grant Application **the overall or long term perspective** of the project was: *‘To develop competent, relevant high level human resources within agriculture, veterinary science, human nutrition, natural resource management and related field to address socio-economic development needs of societies in Eastern Africa’.*

The operational objective is to set new standards for PhD education in Eastern Africa that are integrated regionally, competitive internationally and that can serve as a platform for securing the next generation of highly qualified human resources in the region. The aim is that the involved universities will become attractive study environments for researchers from the region through Prepare-PhD and other related efforts. The quality assurance initiatives presented here will be coupled with strategic linkages with European and American universities and will make the involved universities so reliable and attractive, that donor-funded PhD scholarships will be placed at the regional universities rather than at universities outside the continent. This will contribute to the reduction of brain drain and stimulate high-level researchers to serve in their own countries.

It is a medium to long term vision of Prepare-PhD that the research output from these institutions will be more profound through a strengthening of the coming generations of researchers. Will be of an international standard with more relevance to the socio-economic development than the academic establishments are today. This will contribute to the reduction of poverty in these countries, through improvements within natural resource management, rural development, agriculture, veterinary science, food science, forestry and related areas (Project Application Page 3)

**The Specific objective** of the Prepare-PhD project was: *‘To create efficient and effective PhD training systems through strengthening local research capacity and regional networking in the participating Higher Education Institutions’.*

The goal is that by the end of the 36 months all three East African Universities in the PREPARE-PhD partnership will have effective and efficient PhD programmes of international standards:

- There will be clear and regionally coordinated rules and regulations in place, backed up by user-friendly and easy accessible guidelines available to all involved parties.
- The administrative systems have been upgraded and streamlined to ensure high traceability and quality control throughout the PhD programme from selection of suitable candidates to final examination and the granting of degrees.

- A significant proportion of the supervisors have been trained in supervision and the implications of the new rules.
- Teams of supervision trainers have been established at each of the universities, that can assure that the remaining supervisors gets training and information during the coming years.
- A compulsory three to four months introductory PhD syllabus with at least six crosscutting courses has been developed regionally, and approved and implemented locally.
- Around PhD 80 students from each participating university will have completed the compulsory course programme.
- The establishment of PhD students associations has been facilitated at each university with regional coordination and annual meetings.
- Communication and exchange of ideas has been promoted by establishing quarterly electronic PhD Bulletins at each university.

## **1.2. Evaluation approach**

According to terms of reference this external evaluation is to:

- 1) Assess the impact and sustainability of the activities implemented through the Prepare PhD project.
- 2) Advise on the future development of activities that will enhance the capacity of the universities' PhD training systems.

To feed into the information and dissemination activities of the project the evaluation is carried out at the same time as the final activities at the end of the projects' year three (2011) i.e. before the final activities of the three year long project period have taken place.

This evaluation mainly builds on existing data from the project supplemented by e-mail communication with beneficiaries involved in the project. Common definitions of 'impact' used in evaluation often refer to the totality of longer-term consequences associated with an intervention on quality-of-life outcomes. Furthermore 'impact evaluation' is often designed to answer how out-comes would have been if the project had *not* taken place. Thereby out-comes which can only be attributed to the project activities are identified. Outcomes can be intended as well as unintended. This method requires a comparison between a group of project beneficiaries and a group of non-beneficiaries (comparison group). Such an approach has not been an option within the timeframe of this evaluation, which has been 15 days. In addition it is not possible to identify longer term consequences already at the end of project in October 2011. So with reference to the timing, the data and time available an assessment of 'impact' and 'sustainability' in this evaluation is dealt with as equivalent to:

- 1) Out-put measured in relation to the specific project objectives mentioned above. Here the evaluation summarizes which activities have been completed as planned and which have not.
- 2) Significant changes in the daily work with PhD programmes as experienced by 21 individuals involved in the project at each university
- 3) Lesson learnt by the participating universities. At this point evaluator summarizes and analyses stakeholders' reflections on gabs in capacity to

manage PhD programmes and progress made in the project period as stated in baseline studies, minutes from meetings, the correspondence mentioned above supplemented by evaluators analysis on these writings. Lesson learnt rely on evaluators' analyses of written data only and as such they are probably far from exhaustive.

As mentioned above four universities are involved in the project. UC-LIFE has been the lead partner and has the legal responsibility towards EU. Additionally, UC-LIFE has also the role as project coordinator and should provide input to the Steering Committee. However it is not a part of the terms of reference to evaluate the role as project coordinator which UC-LIFE has been charged with. Focus is related to activities and result at the three East African Universities. However, it should be mentioned that UC-LIFE decided to split the functions of economic monitoring and project implementation between different persons and departments. According to one of the project coordinators this project structure at UC-LIFE has been fruitful in order to work as equal partners in the daily work.

### **Evaluations data and analysis**

The evaluation is based on the material listed under 'List of Documents'. This mainly includes:

- The Grant Application
- Three baseline-surveys
- Two end-surveys
- Interim narrative reports
- Interview with former project coordinator at UC-LIFE Per Rasmussen and
- 21 e-mail replies to five questions sent to 30 individuals at the three universities. This method is inspired by the participatory monitoring and evaluation tool (MSC) originally developed for organisational learning. Through this approach the objective has been to provide the three universities with some qualitative data, indicating how decision makers, administrators, PhD-coordinators, supervisors trained and PhD students experience impact of the project, and what they suggest is important in the future.

The evaluation will a) briefly summarize the project from problem definition to results b) analyse lesson learnt in the project c) summarize the participants' reflections on significant changes in their daily work related to PhD Programmes d) and finally raise a few questions to future initiatives taken in order to enhance the capacity of the universities PhD training systems.

## 2. Project objectives, results and lesson learnt.

This part of the evaluation summarizes the problems faced at project start, project objectives, activities initiated in order to challenge the problems and the out-put and results at the end of project in October 2011.

### 2.1. Administration and Management

#### 2.1.1. Problem to be faced, expected results and activities planned

According to the project application 'rules and regulations' were at the time of project start neither updated nor sufficiently clear and stringent to cater for increased demand for efficiency and quality. This leads to inconsistencies, delays and frustrations among supervisors and students, and lack of uniformity in the quality of candidates produced.

The universities suffer from inadequate funding (public and private) and from an ad hoc approach to research making it difficult to make long-term planning and with more basic research themes than are necessary to precede and complete the implementation of more applied research. The predominant format for PhD thesis is still long narrative books rather than scientific articles, which seriously limits the dissemination of the information and does not train the PhD graduates in effective scientific writing. (Grant Application p. 4-5)

It was expected that at the end of project:

*There will be clear and regionally coordinated rules and regulations in place, backed up by user-friendly and easy accessible guidelines available to all involved parties.*

*The administrative systems will have been upgraded and streamlined to ensure high traceability and quality control throughout the PhD programme from selection of suitable candidates to final examination and the granting of degrees.*

Eight activities were planned to reach these goals:

- 1.a Establish project office
- 1.b Inception workshop
- 1.c Steering Committee meetings
- 1.d Updating rules and regulations and sending it through senates
- 1.e Streamlining (existing) manual student tracking system
- 1.f Guidelines for implementation of new rules and regulations
- 1.g Develop an on-line student tracking system
- 1.h External audit

#### 2.1.2. Results at the end of project

##### Updated rules and regulations:

- At the end of the project updated rules and regulations are in place at all the three universities. MAK and SUA had their rules and regulations passed through respective Senates at the Universities. At MAK an updating of rules and

regulations was already in progress when the project started, but the Prepare PhD process is reflected in the current PhD regulations at the university as a result of a workshop on the subject involving LIFE and Makerere.

- At UoN the Statutes empower the faculties to issue rules and guidelines for better management of academic programmes, so the Prepare PhD project has at UoN taken place at Faculty level. Updated rules and regulations have been proved by the Faculties of Veterinary Medicine and Faculty of Agriculture. The rules are pegged to the overall rules and regulations at the University.

To implement the updated rules and regulations guidelines will be printed in 200 copies at each university.

#### **Handbooks on the new rules and regulations:**

- At SUA a handbook on the new rules and regulations was published in October 2010 and uploaded on the SUA web site:
- <http://www.SUANet.ac.tz/docs/regulation%20&%20guideline%20for%20higher%20degree%20sept%202010.pdf>
- At UoN the printing process of the faculties' guideline handbook is going through the procurement system which will be completed by the time of internal dissemination in November 2011
- At MAK the comprehensive Graduate students' handbook that includes all rules and regulations for graduate students was launched already in February 2009. A copy of this handbook was circulated to the university academic community including PhD students and a soft copy uploaded on the university website.

#### **On-line student tracking system developed:**

At the end of project an on-line tracking system was developed and in use at one of the universities. The system establishes a student information system that records application, proposal submission, full registration, thesis submission, and examination. The two other universities received the software programme, and need training to be able to utilize the software and development of additional entries such as progress reporting, supervisor meeting, automated alert to dean on failing reporting and allowing for password based entries to the system was identified:

- MAK developed the software for the on-line tracking system and is using the system.
- SUA received the software and tested it, but it is not functioning and there is a need for technicians to get training at Makerere University as agreed on in June 2011.
- UoN received the software but could for a start not make it work. However, the university's central ICT system development group sorted out installation and operational bottlenecks and the software was installed and is running. The ICT departments is now working on similar ideas to expand the PhD component of the university's wide information systems to include additional entries of progress reporting as mentioned above (progress reporting, supervisor meeting, automated alert to dean on failing reporting and allowing for password based entries to the system).

Before the on-line tracking system could be implemented the universities went through a process where they updated the manual tracking system according to lesson learnt on the individual workshops conducted together with LIFE-DK in September 2009.

- For MAK this process included incorporating elements such as graduate process, expectations of the student, supervisors and examiners, and a proposal for establishing PhD administrative systems at unit level (Faculty, Institute, School).
- For SUA this included identifying weaknesses in the current student tracking system.
- For UoN new instruments (forms) for use of the manual student tracking system were completed in November 2009. It concerns for instance use of independent forms for both student and supervisor progress report, and a formalized PhD plan.

The eight planned activities have been carried out with exception of an external audit at LIFE (1.h). Guidelines for implementation (1.f) is available from MAK. At SUA regulations and guidelines are gathered in one comprehensive document also available at the homepage (Please see link above). At UoN guideline and handbooks were developed by end of August 2011 and will be available in a printed version by time of internal dissemination workshop.

At the end of project all three universities has been through a process of upgrading administrative rules and regulation. Where not already accessible it is planned to make the updated rules and regulations and handbooks available on the universities' homepages.

Quotes from evaluation from workshop on enhancing efficiency in research Grants Management:

The best thing about the workshop?

- *The workshop brought administrators, accountant and researchers together and attempted to build teams of partnerships. (...) It created the need for linkages between different cadres of staff in university and outside to write winning proposals...*

The different it will make?

- *I will see administrators as facilitators of research, but need to harmonize our work in a friendly atmosphere in a more informed manner to avoid pitfalls.*

The way forward?

- *Ask members in attendance to form teams and prepare proposals in consultation with each other.*

### **2.1.3. Lesson learnt concerning Administration and Management**

A two days workshop concerning rules & regulations at each university and production of baseline surveys seem to have been valuable activities to reaching the expected output concerning PhD Administration and Management. At the two-days workshop at each university the project coordinator and a PhD Coordinator from UC-LIFE exchanged experiences, identified priorities and made an action plan for the coming development of the PhD administration/rules and regulations at each University. Point of departure was a draft proposal on relevant themes related to the PhD 'Cycle' produced at LIFE. The baseline studies at the three universities which will be presented later in this chapter (2.4. Information and dissemination) provided valuable information for the updating of rules and regulations.

Updating of rules and regulation is a process which needs longer time than estimated at project start, and a process which is so closely linked to internal procedures concerning approval at each university that it can be difficult to synchronize a process between three universities in three different countries. In order to include new information from the baseline surveys and in order to get the updated version approved by official channels (by Senats at two of the University and at faculty level at one university) the process lasted most of the project period at one of the Universities, while it was almost finalised at project start at one of the other partner Universities. In spite of this difference all three Universities seem to have obtained new information for the on-going up-dating of PhD administration by being part of a joint project.

The development of an on-line student tracking system was out-sourced. When software for on-line student tracking system (or other systems) is developed at one University there is a need for common planning and conducting of training of the staff responsible for admission and monitoring the students when the soft-ware is handed over. Budget for technical support in testing and implementing the system has to be included in the project which was not the case in Prepare PhD

From this activity the project learnt that when development of soft-ware is out-sourced to one among several partners in a project an agreement on copyright, hand-over procedures to partners and access to the system for other Universities in the region has to be clearly specified in Terms of Reference developed for this specific activity in the project.

#### **Lesson learnt concerning PhD Administration and Management in brief:**

- Workshops focusing specifically at R & R at each University have supported the process at all Universities.
- The baseline studies have provided valuable information for the updating of rules and regulations at all three niversities but also delayed the process.
- Copy rights and handover procedures must be agreed on in details from start of project.
- Training of administrative staff and technical support for testing of new systems

should always be part of projects introducing new technology or new pedagogical methods.

- Changing administration procedures in practice from problem identification, development of tools and procedures, approval in relevant establishment/structures is a time-consuming process taking longer time than planned from project start.

## **2.2. Supervision in PhD programmes**

### **2.2.1. Problem to be faced, expected results and activities planned**

According to the project application supervisors are one of the primary target groups, as they are very instrumental to the process of improving the quality and quantity of PhD graduates. At the time of project start unclear rules and regulations and lack of formal training in supervision meant that:

- Supervisors never knew if they spend too much or too little time and resources on supervision. Overall they spend too little.
- Lack of capacity among supervisors to review and to give feed back
- Examiners tended to postpone reviewing of PhD's for other more pressing assignments because they did not benefit from this work other than honor. (Grant Application page 9)

It was expected that at the end of project:

*Eighty supervisors from each involved university have been trained in supervision (total 240). Supervisors also function as examiners and through the training they are more aware of their role and responsibilities.*

*Teams of supervision trainers (five at each university) will be to assure that the remaining supervisors get training and information in the coming years. In total 255 supervisors will have been trained in supervision and the implications of the new rules and regulations.*

Four activities were planned to reach these goals:

2. a Study tour to LIFE and UC
2. b Regional supervisor TOT course
2. c Development course curriculum and material for supervision of supervisors
2. d Training of supervisors in supervision

### **2.2.2. Results at the end of project**

#### **Course curriculum and material for supervision developed**

A TOT curriculum and course plan was developed by UC-LIFE and sent to partners in August 2009.

- On return from TOT September 2009 the team at MAK developed supervision materials in form of notes, presentation activities, group work and discussions which has been used at the preceding training sessions at MAK
- On return from TOT the team at SUA developed a draft training manual on PhD supervision.
- On return from TOT the team at UoN developed training materials in form of notes, presentations, activities and group work and discussions. Furthermore pre-training and post-training tests and a course evaluation tests were developed. The material developed and used during the training was compiled into a draft supervisor training manual which should have been printed by October 2010.

### **258 supervisors trained**

A team of five supervisors from each university were trained in 2009 and 2010. Since then a total of

- 90 (ninety) supervisors were trained and awarded certificates at MAK
- 85 (eighty five) academic staff were trained at UoN and 79 were awarded certificates. Furthermore, a training initiative concerning administration of research grants in general and PhD research grant in particular were conducted specially for academic supervisors, finance managers and research grant administrators.
- 68 (sixty eight) PhD supervisors were trained at SUA. The target is still 80 to be trained within this project.

At the end of project in total 258 supervisors (243 +15 training of trainers) have been trained as part of the project which is more than the expected 255 individuals.

All four activities planned to reach the goals have been implemented. In addition to inspiring development of rules and regulations, the study tour reports by partners also confirmed the usefulness and success of this activity in relation to roles and expectations of supervisors and the structured training of PhD students through PhD courses.

Quotes from evaluation on PhD Supervision Training workshop, UoN July 2011:

What, if any, was the best thing about the workshop?

- *Things on supervision that I thought I knew but actually I didn't know were made manifest. For some things, I had taken for granted.*

What differences, if any, is likely to make to you the way you approach supervision in the future?

- *It is a complete turn-around with approaching supervision from a highly informed point of view.*

Do you have any other suggestions for future improvement of such training?

- *Regular forums to help institutionalize desired familiarization and adherence*
- *Conducting training together with students.*

### **2.2.3. Lesson learnt concerning courses in supervision**

Attention to the imperative role of supervision in developing efficient PhD Training Systems seems to be one of the main lesson learned in the Prepare Phd Programme. As said in one of the e-mail replies: *The quality of PhD training and research depends on the quality of supervision offered.*

The strategy to train five supervisors from each university to undertake training of their colleagues has been an effective and sustainable approach to up-skill and up-scale supervision..

According to the UC-LIFE project coordinator jointly planning and conducting of the two Training of Trainer courses (TOT) has also strengthened the professional network among the three East African partners. The success of this activity indicates that pedagogical and institutional capacity building might be valuable themes for networking activities among the three universities in the future.

Presentations and exercises developed for the TOT have afterwards been developed at each university for further training. However, in this process the materials seem to have been ‘privatized’ to the individual universities and new ideas or findings have not been shared. A lesson learnt could be that a common communication platform is needed in order to facilitate on-going exchange of material and ideas.

At those universities where senior management participated in training sessions for supervisors upgrading of supervisors will now be a mainstream activity extended to the rest of the university. Although the modalities through which this will be implemented are not completed this is an effect indicating that the project may have a great impact in the longer run. A lesson learnt could be that involving senior management (or other important stakeholders) into specific training activities is important to ensure ownership and sustainability of new successful practices developed in a project.

#### **Lesson learnt concerning courses in supervision in brief:**

- The strategy of a qualifying an internal team of trainers to run courses for their colleagues has a significant impact.
- Continuous sharing of ideas, materials, curriculum development, lesson learnt etc. implies a common communication platform such as an electronic newsletter, a homepage or an electronic conference system.
- Cooperating on specific activities important for the involved universities, such as training of supervisors, made the network bloom.
- Dissemination from project-level to University scale seems to be enhanced when senior management (or other important stakeholders) gets the opportunity to participate in core activities.

## **2.3. PhD Courses and PhD Associations**

### **2.3.1. Problem to be faced, expected results and activities planned.**

In the project application it is stated that for many PhD students there are years of non-academic employment between M.Sc and PhD studies. From being mainly passive recipients of information in their school and most of their university years they have to become proactive problem solvers and knowledge creators, which is no small transformation. The current PhD programmes do not cater for students deficiencies for instance by offering compulsory courses. Therefore supervisors have spend a lot of effort and valuable supervising time teaching students the basics of proposal writing, budgeting and the like. Some PhD students got delayed because they were unable to write a research proposal for their PhD project. The predominant format for PhD studies is still long narrative books rather than scientific articles which seriously limit the dissemination of the research and does not train the PhD graduates in effective scientific writing (Grant Application page 5)

The problem to be faced is elaborated in the three baseline studies produced by the universities as part of the project. The baseline studies showed that traditional PhD training has been without any courses at the three universities and almost none of the PhD students interviewed had been offered any courses during their studies. Many of the students and supervisors interviewed felt that in order to promote efficiency and effective PhD studies there was a huge need for many students to get access to course activities. Therefore the non-existence of PhD courses was a problem to be faced.

PhD students are often not considered fully-fledged members of academic staff and at the same time it is the experience at the three universities that they do not really feel being represented by students' organisations either because they are dominated by M.Sc. Students. This 'in-between' position can be difficult to handle. Furthermore the PhD students are admitted all year round and do not receive any joint introduction. Therefore being a PhD student is often an isolated and lonely endeavour with no forum available to meet and discuss matters of concern with peers and without clear representatives in the universities committees and boards. This makes the PhD students vulnerable. Therefore, the Prepare PhD project application also stresses the need to form independent PhD Associations at each involved university and with a regional network component in order to strengthen the PhD students' position. The three baseline surveys elaborate on this huge need.

It was expected that at the end of project:

*A compulsory three to four month introductory PhD syllabus with at least six crosscutting courses regionally developed has been developed, locally approved and implemented.*

*Around 120 PhD students (40 from each involved university) will have completed the compulsory course programme.*

*PhD Student Associations have been established and function with annual national assemblies and regional board meetings*

Five activities were planned to reach these goals:

3.a Development of 6 compulsory crosscutting PhD Courses

3.b Facilitate establishment of PhD Students Associations

3.c Regional PhD Course in Proposal writing at UON

3.d Running of 'compulsory' PhD courses

3.e Develop and publish a PhD Student Handbook

### **2.3.2. Results at the end of project:**

#### **6 compulsory PhD courses**

At the end of the project 6 compulsory PhD courses are developed as follows:

- Proposal Writing (SUA) – four days
- Research Methodology (SUA) – four days
- Scholarly Writing and Communication (MAK) – 2 weeks
- Information Competence and Management (MAK)
- Statistic and Computer Application in Research (UoN)
- Qualitative Data Collection and Analysis (UoN)

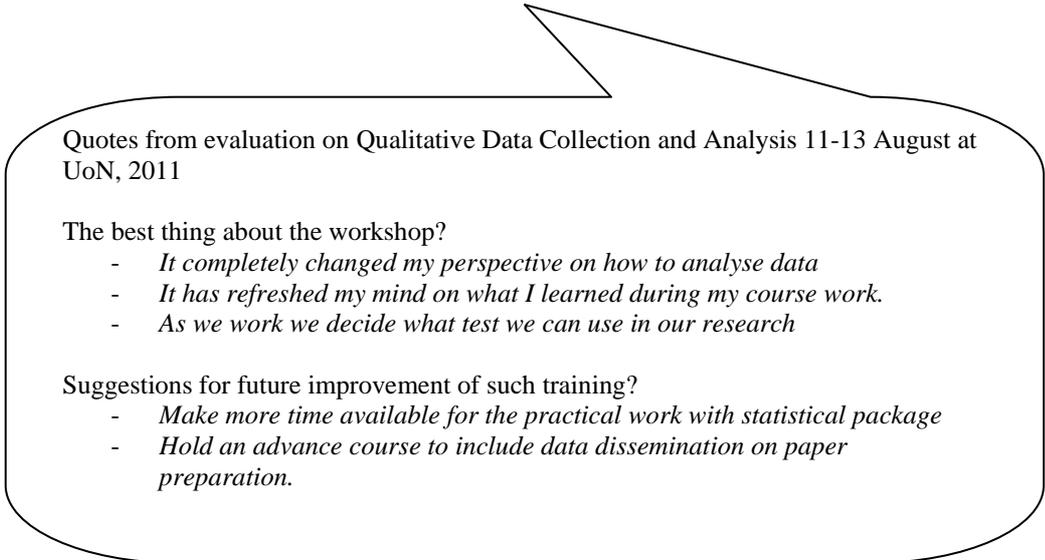
At SUA and UoN training manuals for the courses were developed and shared with the partners. The courses developed by MAK were presented to the partners in a very sketchy form. MAK explained that the people who prepared the course material were not ready to give details because of intellectual property right issues. MAK agreed that the copy right should be incorporated in the final compendium. The original plan was to coordinate the development of courses to avoid overlap in the six syllabuses. At the end of project this plan was dropped. At the Steering Committee meeting in June 2011 it was agreed that each university should print compendia for the courses developed and circulate it among the partner Universities by August. The compendia should be numbered as a package Vol. 1-6.

At the end of project the courses have been approved by the projects Steering Committee but not yet by the Senates at the three universities, because the current university rules require that the courses should be a part of a particular PhD programme.

#### **Regional PhD Course in Proposal writing and running 'compulsory' PhD courses**

In total 245 PhD students were trained in some of the courses developed within the project. The courses lasted from four to ten days.

- A joint pilot course on proposal writing with approximately 10 (30 in all) students from each university was conducted at UON in August 2010.
- At MAK a total of 130 students participated in two weeks courses in Scholarly Writing and Communication and in Information Competence and Management
- At SUA a total of 49 students participated in courses on proposal writing and research methodology.
- At UoN a total of 36 students participated in Proposal Writing and Statistics and Computer Application in Research.



Quotes from evaluation on Qualitative Data Collection and Analysis 11-13 August at UoN, 2011

The best thing about the workshop?

- *It completely changed my perspective on how to analyse data*
- *It has refreshed my mind on what I learned during my course work.*
- *As we work we decide what test we can use in our research*

Suggestions for future improvement of such training?

- *Make more time available for the practical work with statistical package*
- *Hold an advance course to include data dissemination on paper preparation.*

### **PhD student handbook**

The development and publishing of a PhD student handbook as supplement to the guidelines and the rules and regulations were done at MAK already in 2009. At SUA a draft version of a handbook is produced and at UoN a draft handbook, separate from Rules and regulations has been prepared and planned to be printed in August 2011. There seem to have been no cooperation concerning this activity.

All together four of the five activities were partly or fully implemented at the three Universities. The fifth activity 'Facilitating of establishment of PhD Student Associations' was also initiated, but did not succeed at all three universities to the same extend as the other activities.

- At MAK an interim committee of 5 persons worked on a constitution which was completed and now in operation. The PhD Student Assembly was held in December 2010 with 79 participants. The organization is supposed to conduct meetings regularly (monthly or every second month) where PhD students make presentations on their concepts, proposals and draft thesis for discussion with their colleagues.
- All though the baseline study at UoN indicated an overwhelming desire to have a PhD student association/network and students have been nominated to take action there are no on-going activities to form one at the end of the project.
- At SUA the PhD students have prepared a draft to the constitution for the association and efforts are still going on to establish PhD association.

Because of the many obstacles in establishing a PhD students' organization at the universities it has obviously also been difficult to network among students across borders. To overcome this shortcoming in the project the Steering Committee in June 2011 decided to invite the students responsible for setting up students associations to the dissemination workshop, if resources for their participation could be found in the project budget.

### **2.2.3. Lesson learnt concerning PhD Courses and Associations**

Concerning the PhD courses lessons seem to be learnt at various levels. At project level it would have been an advantage if more joint discussions on expectations for out-put of this activity and development of a common framework specifying the content of a course manual had occurred before each university started developing their own two courses. Also questions about copyright should have been clarified at this stage. Preferable those professionals involved in course development should have met for workshops during the production of the course material to present and discuss content as well as pedagogical approaches. This would make it easier to adapt courses developed at the partner universities in practice, and the final training manual/syllabus would probably have been of an even higher quality.

At institutional level there seems to some extent to be a similar lack of organizational framework in which the developed PhD courses can be integrated. As such there might be a risk that the new courses become ‘satellites’ which are not rooted in the organization just like the PhD students they are supposed to help.

The baseline-surveys stressed the need for development of an association or network for PhD students as planned from project start. The lack of information to and communication among PhD students seems to be alarming. At UoN one of the challenges in starting PhD Students Association seems to be the fact that PhD students seldom meet at the University. There are no formal dates for admission for PhD students into University, there are no compulsory courses where they meet, and as they are rarely at campus it is hard to network and get-to-know each other. The project activity was so to speak hampered by the same problem it was suppose to challenge. At SUA another obstacle seems to be resistance among existing students’ organizations and management to set up competing organizations.

A lesson learnt in relation to setting up students’ organizations seems to be that if PhD students are not employed at the University it is difficult for PhD students to organize meetings, develop procedures on communication etc. Therefore the success of such initiatives seems to depend on whether the initiative can be supported by resources at the university. It could be in terms of administrative support for a certain number of hours per month or it could be support in terms of establishing a working group including 3-5 students, a PhD coordinator and an administrative support person. When the organizational structure is in place the coordinator could withdraw, but the administrative support should still be available.

From the experiences at MAK it seems to be a fruitful model to start up with activities supporting the PhD students by presenting their thesis, ideas or first results for each other. Then the more social and political needs as a group at the Universities might grow from these meetings.

## **Lessons learned concerning PhD course development and establishment of PhD associations in brief:**

- When PhD courses are not developed as an integrated part of a PhD Programme it is difficult to implement them in the existing university structure.
- When course material is developed across universities emphasis should be put on establishing a common working process. This could be in terms of workshops presenting, discussing and improving the course content during the production process. This would make it easier to utilize material produced at the partner universities.
- When PhD student associations or networks are based on students need to discuss and develop their thesis there seems to be motivation to meet.
- Due to the current peripheral position experienced by PhD students not employed at the Universities there seems to be an urgent need to raise funding in order to establish PhD students associations (network or hubs) successfully.

## **2.4. Information and dissemination**

### **2.4.1. Problem to be faced, expected results and activities planned**

Access to reliable and updated information is crucial to manage and implement a PhD programme efficiently. At project start the flow of information was insufficient, from the users to the managers and from the managers back to the users.

At MAK and UoN only a small part of the university is involved in 'Prepare PhD'. To make sure that the whole university is well informed about the programmes for wider adoption dissemination activities to disseminate results and experiences have to take place as part of the project. If the vision of the programme about setting new standards for PhD programmes in the whole region are to be realized information and sharing of experiences with other Higher education institutions also have to take place as part of the programme (Grant Application page 11)

It was expected that at the end of project:

*Eleven quarterly electronic bulletins for PhD programmes were published by each involved university in order to promote communication and exchange of ideas.*

*20-25 relevant higher education institutions from the region were informed about the experience and results from the project (regional dissemination workshop).*

Six activities were planned to reach the results:

- 4.a Baseline survey
- 4.b Quarterly electronic bulletin for PhD Programmes
- 4.c End survey
- 4.d External evaluation
- 4.e Internal dissemination workshop
- 4.f Regional dissemination workshop

## 2.4.2. Results at the end of project

The baseline-surveys have been conducted and finalized at all three Universities in 2009 and in the start of 2010. The baseline surveys have informed the management at the three Universities with facts on students, supervisors, administrators and managers perceptions on strengths and weaknesses in the current PhD programme and their proposals for improvements. The baseline surveys have been circulated to partners in the project.

Many of the findings in the baseline studies were new, and at MAK, as a result of the baseline survey, a workshop for university leaders on improvement of graduate training was conducted.

Quote from minutes from Steering Committee meeting; September 2009:

Achievement for year one of the project:

- Increased networking and exchange of ideas between regional partners.
- Conducting first East African baseline studies on challenges in PhD administration and supervision
- Review of the project plan and budget
- Conducting Phd supervisor TOT workshop.

At the time of external evaluation the end-surveys have been conducted at MAK and UoN. The report from UoN is a draft report which will be refined and presented at the internal dissemination workshop and the regional dissemination workshop in November 2011. The end-survey at UoN also stresses that the volume of data collected for the end survey is enormous and will be subject of much analysis in the time to come. The end survey from SUA has not be available for the final evaluation

At MAK the end-survey mainly identified:

- A decline in satisfaction with Rules and Regulations and administration of PhD programme including a decline in satisfaction with examination procedures.
- The knowledge of supervision procedures and programme has improved, but there is still a serious concern about supervision
- Preparedness of students understood as orientation programme and cross cutting courses still leaves a lot to be desired.

The end survey includes several recommendations for actions such as:

- Making rules and regulations more accessible
- Problems with rules and regulations have more to do with implementation than lack of knowledge (or ignorance)

- Continuous work on strategies to educate the university community about the administrative mechanisms of PhD programmes.

Outside the orbit of Prepare-PhD there are shortcomings in research facilities, lack of funding, lack of time for research because of heavy work load among academic staff, lack of transparency in management of research projects and a lack of coordinating mechanism for research at the university.

At UoN the following conclusions were made from the end-survey:

- Prepare-PhD has had some positive influences in shaping attitudes and practices in PhD training
- Time for completing the registration process has been shortened to less than one year
- There has been an increase on 10 and 20 % in knowledge and use of rules and regulations.
- Desire for PhD courses has been shaped by the courses that were offered during the project. These are the compulsory courses on “PhD Research Proposal Writing”, “Statistics and Computer Applications use in Research” and Qualitative Data Collections”
- The greatest improvement in perceptions and performance has been in the area of supervision.
- Training of administrative staff on streamlining procedures for greater training efficiency was very well received. Tracking mechanisms have been put in place and now the students have been sensitized on need to complete the degree on time. In addition to input from the project, the University has institutionalized monetary penalties on students who ask for extension of study period being unable to complete on the allocated time.
- Staff and students are now open to training that can enhance their capacity to train.
- Neither was a stable PhD association set-up nor a regular PhD bulletin established. However foundation was laid and consultations among students are ongoing to establish both.

In total 151 individuals at the three Universities were involved in the baseline surveys and 327 individuals in the two end-surveys which were made available for the end-evaluation. The baseline and end-surveys seem to have been valuable activities in the sense that they may influence on the development of Phd programmes in the longer run, and as such have more impact than expected in the planning of the project.

At the end of project the quarterly bulletins were cancelled, and the information of 20-25 HIE at the regional dissemination workshop is still in the planning process.

Overall three activities (4.a, 4c and 4d) out of the scheduled six activities are almost completed and two (4e and 4d) are in the planning process to be carried out in November 2011. As mentioned, the last activity, the quarterly electronic bulletin for PhD Programmes, has not been developed. At an early stage in the process (August 2009), the Steering Committee decided that this activity should be ‘one of the forming activities’ in starting up students PhD Associations. The argument was that the PhD

student associations needed to have specific activities, in order to motivate the students to become organized. The result has been that neither the PhD Students Associations nor the electronic bulletins left the ground.

### **2.4.3. Lesson learnt concerning information and dissemination**

#### **Baseline and end surveys**

The character and objective of the baseline surveys seem somehow to have swelled during the process. According to the project document the study anticipated was a kind of SWOT analysis with the objective to establish a clear picture of strength and weaknesses in the current systems at the three Universities. In total the survey was estimated to require two months work. The activity was scheduled to start in November 2008 and the baseline studies to be finalized in May 2009. At the end of 2009 and the start of 2010 the three baseline studies were finalized. From the narrative project documentation it is not possible to identify how much manpower was spent on baseline and end surveys, but it is obviously much more than scheduled in the project proposal. One lesson learnt, therefore seems to be that conducting such baseline – and end surveys is very time consuming and considerations always have to be made whether the chosen method fits the kind and amount of data needed. Lessons learnt from this process could be elaborated at the internal dissemination workshop by asking: Would the team recommend the same approach to be adapted if starting all over? Or would there be a less time consuming method making the same information available for action?

Another lesson learned seems to be that the **process** of initiating such a data collection and presenting results for stakeholders contributes to the institutionalization of the project in several ways. Involving people in interviews seems to have created a focus on the need for developing more quality in PhD studies across the whole organization. In one of the baseline studies the team refers to the process as an ‘eye opener’. All though the problems faced in PhD programmes were known to those who took the initiative to ‘Prepare-Phd’ the baseline studies have provided in depth information and awareness across the organizations. This is a prerequisite for action and changing of procedures in the future.

Finally, a lesson learned could be that by establishing a local team conducting the baseline survey (conducting interviews, processing data, analysing and reporting) capacity to monitor the quality of PhD programmes in the future has been strengthened in the organizations.

As presented above the baseline surveys produced ended up as three comprehensive reports presenting a huge and valuable collection of data concerning knowledge, awareness and attitudes of PhD students and university staff to current practice concerning PhD studies. A huge amount of data and information is now ready to be transformed into questions and proposals for different actors. For instance the finding in MAKs end-survey shows that satisfaction with rules and regulation has decreased since the baseline-survey. Does this indicate that changes introduced have in fact not improved rules and regulations? Or does it reflect an increased awareness on

shortcomings or a general dissatisfaction with the accessibility of rules and regulations and therefore addressing problems concerning dissemination and communication?

Some of the obvious questions to be raised in line with the surveys could be related to identification of quality indicators or specifications of standards for future PhD programmes at the three universities such as:

- What kind of introduction programme is, as a minimum, offered to all new students in the future?
- Which structures have to be in place to include new students in the university environment?
- What course work (if any) should be compulsory?
- What's the minimum amount of supervision required?
- What's the procedure for allocation of supervisor(s)?
- What structures (seminars, workshops or other continual events) does the University offer in the future in order to facilitate contact between students and external stakeholders (industries, consumers)
- ... to be continued.

### **Electronic bulletins**

In the project document the electronic bulletins were described as a medium where management, supervisors, students and other relevant stakeholders could share information and discuss issues of relevance. The bulletins were supposed to help University management to monitor the attitude among PhD system users on the status and progress of the system. Being electronic it could also be accessed by potential students from the region and by already enrolled students from other universities.

The baseline studies all underlined the need for such a fora. At SUA 87,1 percent of the respondent felt that that bulletins seemed to be a good idea and issues to be covered by such a bulletin were suggested (funding possibilities, information on PhD programmes available at the University, abstracts of published papers/articles from Phd projects). Also at MAK and UoN the majority agreed that a doctoral programme bulletin should be produced. The fact that the bulletin, as an important communication platform was not set up as intended lead to important lessons learnt:

The idea of making the electronic bulletin/newsletter a core activity of the students association to stimulate the process was born by the Steering Committee. This meant that the objective of the bulletin/newsletter was changed from developing a common communication platform on Phd programmes across each university into mainly a students' communication channel. Whether it be a bulletin or another media the project seem to have suffered from such a lack of communication platform where activities from the process of making the Phd programme more effective and efficient could be communicated among students, administrators, supervisors, management, and other universities and stakeholders. The baseline surveys include several proposals to subjects that would be relevant to focus on in such a bulletin/electronic newsletter. These newsletters could also have facilitated information and sharing of experiences across the three universities. For instance on results and links to updated rules and regulations, supervisors training manual, students handbook, etc. It could have served as a window to present steps on the road to excellence.

One lesson learnt is that a common information platform such as an electronic bulletin/electronic newsletter has to be taken care of by the core member of the project group – at least for at start – to leave the ground. Such an information and communication activity requires sufficient human resources if it has to be developed and implemented. Some resources were earmarked for a webmaster, but were not spend for this purpose, which probably harmed communication within the project and the dissemination of results externally as well.

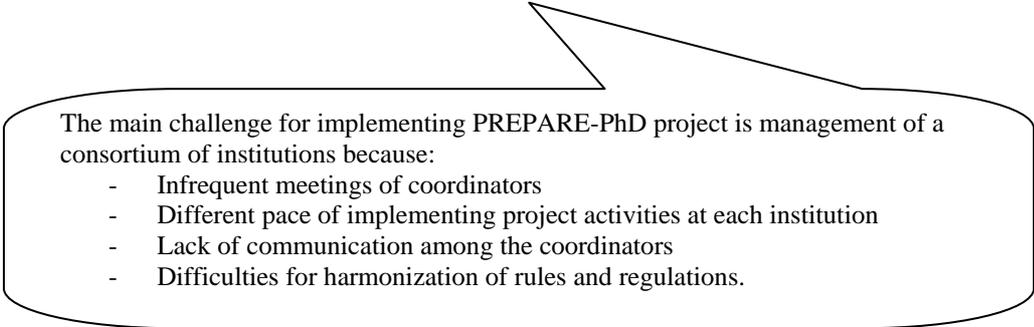
### **Lesson learnt concerning information and dissemination in brief.**

- The baseline surveys produced at each university have provided the partner universities with a huge amount of data and valuable information on students' and staff's perceptions on the current stage of PhD education and proposals for improvement.
- The **process** of data collection by interviewing students and staff at the University might in itself be a valuable exercise as this method brings about a common focus across the organization on the issue of quality of the current PhD education programme.
- Presenting the result of the surveys to stakeholders in relevant fora, seems to be essential if the study should enhance changes.
- Developing a baseline study based on quantitative data is a time consuming method. To be worth the effort the conclusions have to be transformed into proposals which stakeholders can act on.
- A project including students and staff across the university needs a common communication platform or alternatively to be strategically integrated in existing communication platforms at the University. The responsibility for on-going internal information and internal dissemination of results has to placed and defined by coordinators and Steering Committee.
- A project as Prepare PhD needs a platform such as a closed web conference where partners can share internal material (course curriculum, evaluation formats, out-lines for bulletins etc.) ideas and lesson learnt in the process.

## **2.5. Concluding remarks**

Overall most of the activities planned from project start have been conducted, and many of the expected results have been achieved. For instance more than the expected number of PhD students and supervisors has been trained. In addition the project activities seem to have reinforced capacity to discuss and find solutions concerning PhD programmes across different departments at each university which was previously not common. Activities such as establishment of students associations and electronic bulletins did not succeed. This has left the project without any common communication platform where information could be shared among the project partners and to stakeholders inside and outside the three universities.

A concluding remark to lessons learnt in Prepare PhD is dedicated to lesson learnt as a regional network. It seems as if each university have learnt and benefitted from different parts of the activities and cooperation. Overall all partners seem to have learnt a lot from training of supervisors. Especially at UoN and SUA this activity seems to have had an impact while at MAK development of online student tracking system seems to have had a huge impact on practice. Differences between the three universities have both been an obstacle and a resource. It has obviously been an obstacle in those cases where different points of departure or different procedures at the three universities have made it almost impossible to establish a joint process. This has complicated the intended harmonization. For instance MAK had almost finished revision of their rules and regulation in 2009 where the process was supposed to start at UoN and SUA. Similarly, the process discussing draft baseline studies also seems to have been harmed by different timing at the three universities. At a Steering Committee meeting in September 2009 following conclusions were drawn:



The main challenge for implementing PREPARE-PhD project is management of a consortium of institutions because:

- Infrequent meetings of coordinators
- Different pace of implementing project activities at each institution
- Lack of communication among the coordinators
- Difficulties for harmonization of rules and regulations.

However, what is mentioned as differences and difficulties have at the same time been an opportunity for the partners to look into and learn from procedures and practices at the partner institutions. This was for instance reported by participants after the joint study tour for the Steering Committee, and it has been the case when the committee and coordinators met at different universities. At the same time the cooperation is an opportunity to become aware at good practices at ones own institution as it was the case when MAK took the lead in developing a template for an on-line student tracking system as well a questionnaire for the baseline surveys. In addition the partnership has also resulted in increased joint effort to fundraise for research and continuous capacity building. The reinforced cooperation also included exchange of external censors. More ideas on possible exchange and cooperation in the future are provided in some of the e-mail contributions summarized in the next chapter.

Challenges faced by infrequent meeting and lack of communication among the project coordinators were stressed in minutes from September 2009. When excellence is developed in a network or in a consortium of different institutions such as the case has been with Prepare PhD, it is a lesson learnt in the project that a communication strategy including a common communication platform at project/network level is imperative for sharing of information, materials, ideas, lesson learned etc during the process. Such a common platform could have been integrated into or linked to the universities' existing homepages in order to strengthen existing structures and to avoid parallel structures.

In the future implementation of project results at the partner universities many of the challenges will probably be related to the fact that project results are not at the end of the project accessible at one platform. This complicates the process of sharing of information and dissemination of results which is crucial to ensure impact and sustainability.

### 3. Most Significant Changes

In October 2011 the three universities were asked to involve 10 persons at each university in the evaluation by asking them to contribute with their personal experiences on how the project had any impacted on their work at the University. Through this approach the intention was to identify examples of impact. They were by e-mail asked:

2. Looking back over the past eight months (2011) what do you think is the most significant change in the quality of **your work** in relation to the Universities PhD programmes? Please describe in maximum 15 – 20 lines an incident or activity illustrating the change.
3. What do you think is the most important change needed in the future to continue the improvement of PhD education at the university?
4. How can you contribute to make this change happen?
5. Who else need to contribute?
6. Other comments?

The intention of this method has been to provide the partner Universities with some qualitative data, indicating what decision makers, administrators, PhD-coordinators, supervisors trained and PhD students experience as impact of the project, and what in their perspective has to be done in the future.

Evaluator has received in total 21 replies which provide the evaluation with some qualitative information on the projects' impact experienced by PhD students and staff so far. Six replies came from MAK, four from UoN and eleven from SUA. The replies are summarized below.

#### 3.1. Replies from MAK

From MAK evaluator received six replies – four from lecturer/supervisors/professors, one from administrator and one from a PhD student

##### **Significant change in the quality of supervision**

According to these answers the courses in supervision and the doctoral supervision guidelines have led to a significant change in their work. Especially making a supervision contract and a work plan where for instance all meetings between supervisor and PhD student are listed has committed the parties. Also supervision has become easier since the students can be referred to on-line documents. The on-line tracking system is mentioned both by administrator and supervisors as a tool making it easier to disseminate information to students. One supervisor says: *'The situation has improved quite tremendously, also considering that I have aligned my style to suite the different student'*

One supervisor explains how he has employed the skills from the supervisor course concerning active involvement of all the stakeholders for effective PhD training. He mobilized the students on a project to organize a national stakeholders meeting that involved private sector, organic farmers, processors, exporters as well as the cooperatives involved in transporting organic pineapples. This event made it possible for students later on directly to interact with actors in the organic pineapple value chain and obtain feedback on their (research) proposals. The supervisor writes: '*... several reports from internal MAK reviewers also indicate that the students are doing research that will solve national problems.*'

A PhD student stresses how the courses and supervision helped her to get on track at the start of the PhD process. She tells, how she handed in a PhD proposal believing that it was as easy as writing her master proposal. After not hearing anything for a period she contacted her supervisor to find out that '*my proposal was hardly one a PhD student could boast of writing. (...) To put it short, my supervisor and the cross-cutting courses put me back on the right path (...) I have now picked up my project. I have managed to read more literature and organize my work in an orderly manner, projecting the study itself and not filling the sheets with words.*'

### **Proposals on how to continue the improvements**

In order to continue the improvement of PhD education at MAK it is stressed in the e-mail replies that training of supervisors has to be institutionalized so that regular training takes place. On top of training of supervisors, the opportunity to share information regularly should be provided (both supervisors of Masters and PhDs). A mailing list is considered helpful.

Also continuous sensitization of new PhD students on their role and responsibility as well as regular training for PhD students are mentioned as important in order to maintain improvement of PhD education at the University. As a PhD student writes; '*These cross-cutting classes helped me a great deal understanding PhD studies and helped me gain momentum.* When receiving their letter of admission PhD students should also be provided with information on cross-cutting courses and the monthly seminars held in the student organization: PF@Mak (when this organization has been registered). As students are admitted all year round each school should preferably conduct their own introductory classes once in a while. In addition PhD student needs a hub helping them network, and if fully equipped it could support students who do not initially have access to a private lab top.

Further more it is proposed that the administrative improvements such as the on-line tracking system should be extended to include both students as supervisors input and commitment, minutes from department and faculty etc. New heads of administration at colleges should be introduced to the tools and procedures developed as part of Prepare PhD in order to secure the sustainability of the project.

Finally it is recommended that the partner Universities should continue working together at several points. They should jointly attract funding with the aim of strengthening the laboratory facilities. Inventory should also be taken in the regional

universities to identify who is strong in which field to enable collective use of available facilities in laboratories for students. Human resources from partner universities should be used in co-supervision of the PhD students including exchange visits of the supervisors, laboratory technicians and students to gain new skills.

### **Contributions to make this happen.**

Facilitating training and mobilization of PhD students and supervisors as well as lobbying to strengthen the administration at college level is stressed as the involved actors own contribution to future development. Also University Management needs to be interested in postgraduate programmes and research and in its visibility and influence on the ranking of the University. One Head of Department says: *I can contribute to this through some form of advocacy*

Another Senior lecturer stresses that *Government and private sector needs to be lobbied*; The Government and global partnerships will in the future have to give priority to development of efficient PhD programmes. Although there is a need for lobbying private sector on the need to generate knowledge and high skilled human resources together with the Universities, the industrialization in Uganda, still at a level which for some time will make global partnership and the government major drivers of research at Universities. It is proposed that one way of ramping up the private industrial sector will be to raise funding emphasizing miniature production lines where science will be directly translated into tangible saleable products to improve the livelihood of communities. Universities should be able to produce a range of animal and human foods and develop incubators for business men to go out there and make money while providing the needed services.

## **3.2. Replies from UoN**

From UoN evaluator received four replies – two from lecturer/supervisors and two from PhD students.

### **Significant change in proposal writing and opener to better supervision**

According to three of the answers the PhD courses on proposal writing have led to significant change in PhD students' capacity to write proposals. One lecturer states: *'(...) the training on writing a project proposal (...) has very much improved on the students capacity to articulate the research problem(s).'* and a student stresses: *'I have learnt how to write a project proposal and basic concepts of data analysis which are vital for my work'*. Also, the supervisor training is highlighted by the supervisors as *'an opener on how effectively to supervise students'* as expressed by one senior lecturer, and *'given an opportunity, the training would impact positively on University PhD programme'* as expressed by another senior lecturer.

### **Proposals on how to continue the improvements**

To continue the improvement of PhD education in the future three main points are accentuated. Firstly, regular training of PhD supervisors and continuous training on proposal writing for students is stressed. A student proposes that in the future the training for supervisors and PhD students should be merged and argues: *'In this way students will note what to expect from supervisors'*. In line with this proposal another

PhD student stresses that *'an effective and efficient communication mechanism is needed to cultivate a conducive environment between students and supervisors'*. It is not elaborated which kind of 'mechanism' would be considered the most appropriate for this purpose.

Secondly, students' access to information is mentioned as important changes needed in the future. This includes updated information on rules and regulations and on on-going PhD studies in the form of a database.

Thirdly, it is proposed by a senior lecturer that the relationship between PhD research and the outside world should be strengthened: *'PhD training is ok, but must remain relevant to the needs and aspirations of the consumers and if possible it should be demand driven'* one senior lecturer writes. It is proposed that industries should participate more actively in financing PhD

### **Contributions to make this happen**

According to the students to make the changes happen both the students themselves, their supervisors, the administration (and especially the IT department) have to contribute to the improvements. The senior lecturers also points at the university management and relevant ministries as actors who need to contribute to the process of strengthening PhD research with relevance for society.

### **3.3. Replies from SUA**

From SUA evaluator received eleven replies – all from lecturers/supervisors.

#### **Significant changes in supervision and perspectives of improved quality of research and publications.**

Their roles as supervisors are stressed in most of the replies from supervisors who have been participating in project activities. Some state that they already experience positive changes as a result of their new approach to supervision; *I note improvement in supervision of students and handling conflicts of interest. The gained skills enabled entering into agreements with my postgraduate students on matters pertaining to their studies. I see a brighter future in supervising the PhD students.* Another supervisor writes: *My interaction with PhD students supervised by me, have prompted me to head more in search of information on specific areas. I have also gained more insight on experimental designs and statistical data processing because while advising students in this area I have been exposed to new challenges, whose solutions had to be worked out.*

All in all new learning approaches to supervision seems to benefit both supervisors and students. According to a director this is the most important change needed in the future: *The most important change needed to improve PhD education at the University in the future is to design programmes that promotes self-directed learning among PhD students.* This will require more time to be allocated for independent study with adequate and quality guidance provided by lecturers/supervisors.

Furthermore, the option of writing thesis on basis of papers/articles rather than the traditional monographs is in more of the replies valued as a significant change which will improve the quality of research and the rate of publications in the future.

### **Proposals on how to continue the improvements**

To continue the improvement of PhD education in the future a number of supervisors stress that training of supervisors has to be institutionalized. It is suggested that for this purpose the number of trainers training supervisors has to be extended. Within the project-period five trainers at each University were trained to become ‘Trainer of trainers’.

Furthermore, several supervisors suggest that much more course work for PhD students is needed and that study facilities have to improve. Space/offices where students can sit and read/write and also laboratory and library facilities have to be developed at the universities. Finally, supervisors should encourage PhD student to write scientific articles. To improve students avenues for publication one supervisors stresses the need for local journals.

### **Contributions to make this happen**

According to the replies many of the contributions to future improvements rely on staffs’ ability to include PhD students and their study facilities and services in future priorities and project applications. In addition supervisors also stress how they themselves have to give priority to activities supporting the changes needed within the existing framework. One supervisor will to encourage PhD students to attend local and international workshops to present these papers. One suggests that he himself could provide services at the editorial boards at local journals. Others are suggesting that they themselves run courses or participate in relevant forums including curriculum review processes.

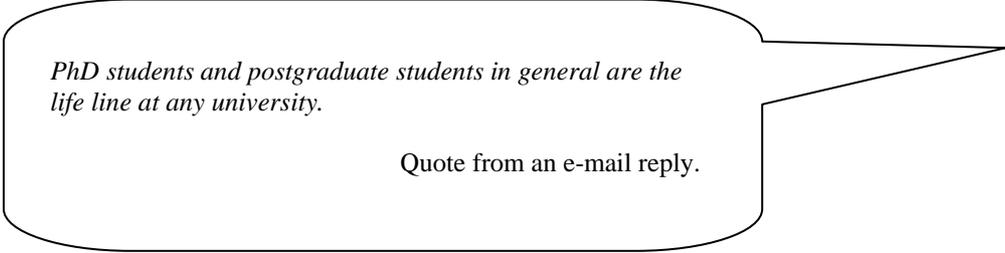
Furthermore, students and stakeholders such as employers need to contribute in making change happened. Employers, industries and relevant ministries are pointed at as important as important actors in order to set up funding mechanism. One supervisor stresses that a prerequisite for students and employers to contribute will be that they are given an opportunity to air their views about PhD education at SUA. Considering the fact that there are no PhD students among the e-mail replies from SUA and only a few from the other Universities this comment needs to be reflected upon.

### **3.4. Concluding remarks on significant changes**

Overall the impact and sustainability of the project seems according to the 21 contributions from the three universities to be closely linked to the universities capability to continue and develop PhD courses and training of supervisors into more permanent structures, and their ability to establish updated communication structures addressing the information and communication needs of PhD students as well as supervisors.

Other proposals on how to continue improvements of PhD also put emphasis to improvement on basic study facilities such as laboratories, libraries and not at least a place to sit for PhD students when at the university. The need for the universities to open up towards the local and international society is also stressed. Students should have the opportunity to attend regional and international conferences and present papers and there should be a closer cooperation with the private sector in the PhD research. An example on such cooperation includes interaction with stakeholders concerning the content of research.

A few replies come from colleagues who have not participated in any of the project activities. They stress that consequently they cannot refer to any significant changes. This is an indication that the institutionalization of project results has not yet taken place, and that emphasis therefore has to be given to internal communication on project results.



*PhD students and postgraduate students in general are the life line at any university.*

Quote from an e-mail reply.

## 4. Questions to future development activities.

This final chapter is devoted to reflections on the findings in chapter 2 and 3 which needs to be addressed by the partners for instance at the dissemination workshops. For this purpose some questions and a figure concerning evaluation of PhD programmes is provided.

### **Results and experiences gained**

The goals of Prepare-PhD were presented in eight bullets in the first part of this report (in the paragraph 1.1. page 4-5), and as shown in chapter 2 and 3 most of the projects goals have been reached. The Prepare PhD project has successfully improved the PhD training systems at the three involved universities. Those activities which have lead to most significant changes seems to be those activities where the project has established new structures for communication among students or supervisors or between those two groups and thereby for learning and action. For instance training of trainers and training of supervisors constitutes new structures where supervisors meet and develop their own practice and maybe identify new problems to be challenged. Another example is baseline- and end surveys, where data collection (interviews) and feedback to stakeholders seems to have produced a space for communication among different members across the organizations. Here the university is provided with valuable information that might deconstruct existing conceptions of running PhD programmes, identify new problems and offer suggestions for solutions to problems faced.

At the same time baseline- and end surveys as well as the 21 replies from participants underline that there is a need for more information and better communication among all actors enrolled in PhD programmes. This need might to some extend mirror an overall institutional challenge concerning PhD Programmes but it does for sure mirror those goals in Prepare-Phd which for different reasons are not yet fully reached. This is for instance:

- accessibility of products and tools developed in the project (Updated Rules & Regulation, Doctoral Supervisor Guidelines, handbooks, draft curriculum plans for courses etc.)
- communication and exchange of ideas as planned with the electronic bulletin and establishment of associations
- training activities for staff with daily responsibility for administration of the life cycle of PhD programmes.

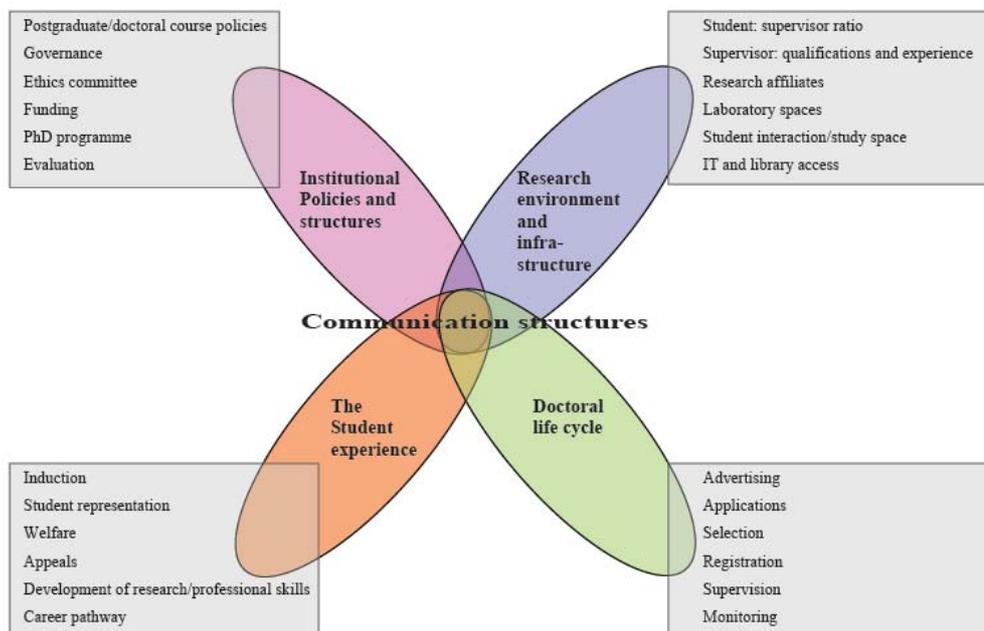
These are all goals which seem to be imperative for impact of the project in the sense that the new tools developed in the project has to be integrated in the daily administration at the universities.

In brief these findings lead to the conclusion/reflection that updated Rules and Regulations and students tracking system etc. are important but information, training and communication on the use of these tools in practice in the daily service to PhD students are imperative if the objective *to create efficient and effective PhD training systems through strengthening local research capacity and regional networking in the participating higher education institutions* should be reached in the near future. More focus on communication (information, induction, room for knowledge sharing and

exchange of experiences) has to be in focus in the future development of PhD programmes.

### An illustration of complexity in doctoral programmes

The project shows that monitoring, evaluating and developing PhD programmes is a complex process including policies, practices and facilities across the universities. The many different elements in development of PhD programmes are illustrated in the figure below. The figure summarizes policies, processes, and facilities needed to run doctoral programmes and is divided into four components: Institutional and political structures, Research environment and infrastructure, The student experience, Doctoral life cycle. The figure is developed by Malaria Capacity Development Consortium (MCDC).



Source: *Assessing and Strengthening African Universities' Capacity for Doctoral Programmes* in PLoS Medicine, September 2011, Vol 8; Issue 9, Bates et. Al 2011; [www.plosmedicine.org](http://www.plosmedicine.org). 'Communication structures' is added at the centre of the flower in this report in order to illustrate that such a crosscutting component must be integrated in all new initiatives concerning PhD programmes at the three universities.

The results in Prepare-PhD illustrate that it makes sense and lead to positive changes even when action is taken to improve practices only within a few of the multiple areas listed in the figure. This will often influence and uncover needs for change in other areas as well. However, the lessons learnt from Prepare-PhD add to the figure a fifth imperative and crosscutting component which can be headed 'Communication structures'. This component includes information and communication channels, communication traditions, information systems, procedures and routines and organizational structures to ensure that 'rooms for communication' is available; For instance where students, supervisors and other professionals meet across the

organization. Lesson learnt from Prepare PhD is that such communication structures seem to be a pre-requisite for sustainability and institutionalization of project activities.

The figure is presented in order to provide a tool that might be helpful to navigate in the future discussions on how to carry on the results and lesson learned in Prepare-PhD. It is recommended to identify at the dissemination workshop or in the near future what initiatives and activities are needed and who will be responsible in order to institutionalize the new well functioning structures such as courses for students and training of supervisors developed in the Prepare-PhD project into the daily practice at each university; And how to continue the regional network activities in future in order to strengthening regional research capacity through efficient PhD training.

### **Question for dissemination of results**

Instead of a list of recommendations this evaluation is concluding with questions which can hopefully contribute to the follow up dissemination process of the Prepare PhD project. Most of the questions have been raised in different project documents or in the e-mail contributions to the evaluation. The questions are mainly referring to 'communication structures' in relation to one or more of the other elements in the figure.

#### ***Research environment and infrastructure***

- How will it be possible for the trainers of supervisors from the three universities to meet in the future in order to upgrade, develop and conduct the training?
- How can experiences from courses for supervisors and from practice be shared among supervisors in the future?
- How may the partner universities in Prepare-PhD benefit from each others' strengths in the development of PhD programmes in the future?
- Will it make sense to collect all presentations, exercises from Training of Trainers in some kind of 'electronic material package' for future training and make the material accessible for other universities?

#### ***The student experience***

- How may it be possible for PhD Students Associations from all three Universities to participate in the dissemination workshop?
- How can PhD students at the three universities get access to all the six courses developed in the project?
- How can PhD students get information concerning induction, students' representation, welfare, courses, meetings for mutual exchange of ideas, abstracts, research proposal etc. in the future?
- How can PhD students and others be provided with an overview of current research activities, themes and projects at the universities?
- How could the universities establish a well-equipped hub for PhD students and meet the need for a place to study, network and communicate which will help to raise the standard of research?

### ***Doctoral life cycle***

- Could administrative staff and supervisors benefit from *regional* organised training in relation to the new on-line student tracking system and courses related to the doctoral life cycle in the project in order to prompt networking?
- How can new heads of administration at colleges and other staff be introduced to tools and procedures developed as part of Prepare PhD in order to secure the sustainability of the project?

### ***Institutional policies and structures***

- How could baseline and end-studies be used in future development, monitoring and evaluation of the PhD training systems?
- How may data from the baseline surveys be transformed into proposals that can be acted upon?
- How do other universities in the region get access to project results such as updated Rules and Regulations, Doctoral Supervision Guidelines, and draft course material? Could it be made available at the homepages of the Universities?
- Which departments and persons at the three universities have the responsibility for follow up on the different results from Prepare PhD in order to transfer the experiences from Prepare PhD into existing structures?

Finally it should be stressed that the evaluation leaves no doubt that Prepare-PhD has indeed contributed to development of more efficient and effective trainings systems at the three universities and to regional networking among SUA, UoN and MAK. In order to develop competent and relevant high level human resources in areas related to fields addressing socio-economic needs of societies in East Africa the Prepare PhD has highlighted that more emphasis should in the future be put on services for the PhD students. This includes courses and supervision, and access to information and communication with one another, supervisors and relevant stakeholders within agriculture, veterinary medicine, natural resources, food sciences, forestry and related areas.

## List of documents

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End of Project Survey Report (Zero Draft), Prof R.G. Wahome, PhD, Project Officer.

Sokoine University of Agriculture, Tanzania: (2009) *Promoting Excellence in PhD Research Programmes in East Africa. ( Preoare-PhD), Baseline Survey Report*, Prepared by PREPARE-PhD Project Implementation team Prof. Susan Nchimi-Msolla, Dr. Sebastian Chenyambuga and Prof. Faustin P. Lekule (Project Leader).

Minutes of the Prepare-PhD Steering Committee meetings:  
October 2008  
September 2009  
January 2010  
August 2010  
November 2010  
June 2011