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## Training for Improved Decentralized Service Delivery – A case study from Uganda

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*The introduction of decentralization and decentralized service delivery in Uganda placed an increased demand for qualified personnel at the districts and lower levels. Despite this, there were no efforts in the past to enlighten students and trainers at Makerere University about the existing gaps and opportunities available in districts so that the training could be tuned to the needs of the districts. In the year 2000, the Department of Civil Engineering in Makerere University started a pilot project to attach students to the technical departments of the district local governments to undertake internship training for a period of 8 weeks. The students were supervised by staff from districts and the Department of Civil Engineering, Makerere University. The project was financed by the Rockefeller foundation and the World Bank. Since then, 72 students (11 during the pilot and 61 during the full implementation phase) have undergone internship training in 9 districts in Uganda. Eleven (11) Makerere staff and over 90 district staff were involved in the project. A training manual was developed, relevant research to solve technical problems and assist the districts in improved service delivery was identified, and efforts are under way to evaluate the project and quantify the impact.*

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### Introduction

Since its introduction in the late 1990s, decentralization and decentralized service delivery in Uganda have led to increased demand for qualified personnel at the districts and lower levels. Starting 2000, the Department of Civil Engineering in the Faculty of Technology (FoT) at Makerere University (Mak), under the auspices of the Innovations at Makerere (I@mak) project with funding from the Rockefeller Foundation and The World Bank, decided to address this challenge by reviewing and modifying its internship training program. Every year, the FoT attaches second and third year undergraduate students to various firms for internship training for 10 weeks. For a long time, the majority of the students had been training in and around urban areas, especially in the capital city, Kampala. Upon completion of their studies, they were unwilling to go and offer their services to rural or upcountry areas where most employment opportunities are. Those who attempted did not know what to expect, were ill-prepared for the tasks at the districts and were often unwelcome by the district staff. Additionally, trainers at Makerere University had little or no interaction with the district staff and hardly appreciated the needs at the district (MISR, 2000). Thus, the training at Makerere was not sufficiently addressing the local problems of the districts, a situation that both the I@mak project and the FoT sought to amend.

The FoT's project to improve the linkage between the districts and trainers at Makerere University, and to offer opportunity for students to train in the District Local Governments started in 2000 with a feasibility study carried out

in six districts of Apac, Hoima, Kabale, Kamuli, Wakiso and Mpigi (Figure 1). Findings from the feasibility study showed that all the districts had planned and ongoing civil engineering projects involving building of schools, Teachers' Development Management Systems (TDMS) centers, health units, feeder roads, construction of water supply schemes (gravity flow schemes (GFS), spring protection, shallow wells, rainwater harvesting tanks) etc (DoCE, 2001). Practical training opportunities were therefore available in all the districts. However, due to the diversity and abundance of projects in the many parishes/sub-counties in the districts, it was agreed by the team to concentrate efforts in one pilot district so as to maximize benefits from the first learning phase of the project (DoCE, 2002). The pilot project was implemented in Kabale District in the period between July to September 2001 followed by full implementation between July 2003 to March 2004. This paper describes the activities undertaken during the project full implementation and reporting phase (July 2003 to March 2004).

### Objectives

The overall objective of this initiative was to produce engineering graduates that are better suited to meet the evolving technical needs of the decentralised districts.

#### The specific objectives were:

- To improve the capacity of Civil Engineering graduates to appreciate the need and conditions of operation at the decentralized levels through focused practical training that will improve their innovative and problem solving skills;

- To improve the problem-solving capacity (and research) in the districts through enhanced collaboration between the trainers (from Makerere), the students and district stakeholders;
- To produce a training manual in order to have a structured and focussed internship training in the Local Governments.

## Materials and Methods

### Selection of Districts

This entailed identification of the districts where the selected students were to undertake their training, which done by Makerere staff. The criteria that was used in the selection process was: previous experience from the feasibility and pilot projects, consideration of priority districts as approved by the donors, ongoing activities in the districts that can offer training opportunities to students, geographic location so as to have a reasonable geographical coverage of the districts in the country, willingness to collaborate and the security situation of the districts. A total of nine (9) districts were selected. These were Arua, Busia, Kabale, Kampala, Kamuli, Kapchorwa, Mbale, Mbarara and Tororo.

### Student Selection and Placement

An advertisement was put on various student notice boards within the Faculty of Technology regarding the opportunity to train under this programme. Sixty one (61) applications were received and all were selected to undertake industrial training in nine (9) districts. Upon application, a student indicated the district he/she wanted to train in, but the condition was that the district chosen had to be among the 25 districts considered a priority by the donors with respect to the needs of decentralisation.

#### Selection of District Staff

Prior to the training period, Makerere staff travelled to the districts to hold initial contact discussions with the District Local Governments and other companies/organizations undertaking civil works in the study districts. The discussions entailed the objective of the project (industrial training of engineering students at districts), identification of supervisors from the district staff and proposed dates for an introductory workshop. Over ten (10) staff were chosen from each district. These included among others, the Chief administrative officer and his/her deputy, the district engineer, 2 assistant district engineers (in charge of roads and buildings), the district water officer, the district senior surveyor and the district planner. Others included 2 assistant district water officers (in charge of mobilization and water supply), the district chairperson (Chairman LCV) and the Resident District Commissioner (RDC).

### Orientation Workshops

A total of six (6) orientation workshops were held, one in each of the selected districts: Arua, Kabale, Kampala, Kamuli, Mbale and Mbarara. Workshops were not held in the additional districts of Tororo, Kapchorwa and Busia

since the numbers of students involved were very small (1 student in each district). However, supervision of students by the Makerere staff members was carried out. A generic training rosta that was developed earlier by Makerere staff, discussed and agreed upon in the orientation workshops is shown in Table 1. The objective of the workshop was to introduce I@mak along with its goals, training programme and expected outputs.

### Industrial Training Session

District Dept/ Section	Weeks			
	Weeks 1 & 2	Weeks 3 & 4	Weeks 5 & 6	Weeks 7 & 8
Roads	Group 1	Group 2	Group 4	Group 3
Buildings	Group 2	Group 1	Group 3	Group 4
Water Department	Group 3	Group 4	Group 2	Group 1
Planning/ Administration	Group 4	Group 3	Group 1	Group 2
Lands and Surveys	Group 4	Group 3	Group 1	Group 2

All groups spent 1 week in Planning and Administration as well as in the Land and Survey departments

Where the numbers of students were less than 8, they trained in the different departments in one group.

This involved supervision of the students by district and Makerere University staff. These were distributed as shown in Table 2. At least 1 trip was made by each group of supervisors to the districts. During this period the students were engaged in various on-going activities at the districts. At the end of the training period, each student wrote a report in which details of the various activities he/she participated in were presented as well as recommendations for further improvement. The field training lasted 8 weeks from 28th July to 20th September 2003.

District	No. of students deployed	No. of district staff supervising students/no. of district participants involved)	No. of Makerere staff involved
Arua	4	4(9)	2
Busia	1	4 (4)	1
Kabale	9	4 (27)	5
Kampala	10	4 (12)	3
Kamuli	5	4 (18)	3
Kapchorwa	1	4 (4)	1
Mbale	15	4 (10)	3
Mbarara	15	4 (6)	3
Tororo	1	4 (4)	1
Totals	61	36 (94)	- **

-\*\* Makerere staff rotated between districts, so total number of those involved is not additive, but they were 11 in total.

### ***Evaluation Workshop***

A final evaluation workshop was held in the Faculty of Technology in November 2003. The purpose of this was to bring all the players together and learn from experiences arising out of implementation in the different district so as to agree on the way forward with the latter including areas necessitating improvement. In addition, an evaluation of the districts was undertaken by the student trainees to select the best performing districts in terms of availability of activities and district staff commitment in supervising students as well as time keeping. Makerere staff, students, District Engineer and CAO's offices were given certificates in recognition of their participation in the project.

During this workshop, participants recommended that:

- There is need to harmonize the training time since the current timing coincides with the start of the financial year and hence there are limited on-going activities due to lack of funds,
- There is need to have a training manual as a guide for all the participants involved,
- To ease the transportation of students to work sites within the district, transport funds be availed to the district for fuel procurement for the vehicles to be used,
- Understaffed districts should in future employ trainees to build their technical capacity.

### ***Training Manual***

A training manual was compiled by the Department of Civil Engineering in collaboration with the district staff of the nine (9) district local governments involved in the full implementation phase. The manual will be used as a guide to industrial training of all students deployed in district local governments. This document will also guide both district and Makerere staff with respect to industrial training expectations and assessment. It will be subject to regular revision (at least once every five years) so as to reflect changes in University curricula and district activities.

## **Discussion**

### **Highlights of the orientation workshop**

- The project was recognized as a very good opportunity for future research and work at the districts,
- Civil engineering activities in the districts were undertaken by the works and technical services department, constituting of the Roads, buildings, water and/or sanitation, lands and survey sub-departments,
- Student training programme schedule was agreed upon so as to have a manageable number of students in each of the departments during the training period (Table 1).

### **Highlights of the evaluation workshop**

- Acknowledgement of the support from the donors through I@mak for the facilitation,
- Recognition that the project does indeed help to expose Makerere staff and students to the conditions at the districts,

- Student experience was enriched with respect to the various activities they were involved in,
- Evaluation by the students revealed that Arua, Kabale and Kamuli were the best performing districts in that order,
- Research issues were identified in the areas of hydrogeology and influence on choice and construction of sanitation options, land slides/slope stability, labour based road maintenance and appropriate water treatment systems for rural areas.

## **Conclusion**

The project enabled a collaborative effort in the training of engineering students by Makerere University and district staff. With this linkage and the successful development of the training manual, which was one of the major outcomes of the project, it is expected that future training will result in improved graduates since they will follow a more structured internship training. In addition, the research areas that were identified could be undertaken as both undergraduate and postgraduate research projects within the Faculty of Technology. Increasing availability of research funds in the Faculty makes this feasible.

## **Recommendations**

### **Sustainability and student's facilitation**

In order for the project to be sustainable, districts should budget for training activities including transport costs of the trainees. In addition, realistic amounts could be included within the students' fees structure to cater for the training costs. Where possible, the students who work hard could be paid as are other labourers on site.

### **Research**

- Hydrogeology and sanitation option studies – In Arua district, it was found that there was problem of collapsing pit latrines that should be researched into so that new innovations/studies on appropriate solutions are developed for highly affected areas especially those along rivers. This would further be useful in the development of site-specific costs of facilities with respect to "difficult" and "stable" soils;
- In Kabale district, the major research question was landslides and how soil slopes should be engineered to reduce the problem of landslides;
- Other research areas that were cross-cutting between the different districts were: Design of labour based management system model for district road maintenance; and development of appropriate low cost community and/or household water supply/treatment systems including but not limited to rainwater harvesting.

### **Curriculum review**

The findings, taking into consideration student reports as well, will be used to enrich curricula so that it addresses district needs.

### Quality control and follow up

Rigorous operationalization of the developed Training Manual will go a long way in ensuring quality control, and in enabling more uniform and structured industrial training throughout the districts. As a follow up, there is need for Makerere University to establish how many among the fresh graduates trained in the district local governments finally get employed in the districts after their studies. The performance of those students could be compared to those who never had any training in district local governments in order to quantify the impact of the project.

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