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# A 'Trojan Horse' approach to change: The case of GO4IT1

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### **Background**

Agricultural Research for Development (AR4D) can potentially contribute to poverty reduction through the innovative application of new and existing knowledge and practices, thus creating new knowledge for development and social transformation.

Capacity development approaches for agricultural development have concentrated on building the stock of human and scientific capital through technical training. Experience in the region indicates that this has perpetuated a narrow interpretation of agricultural capacity building (Davis *et al.*, 2007; IAASTD, 2008). Formal degree training in agricultural sciences in sub-Saharan African universities is largely discipline-based and focused on the development of research skills and discipline-specific

Approaches (Rivera, 2006). A focus on skills and expertise has contributed to this technical focus which is primarily reliant on formal and inflexible public sector organizations and programmes, and is only weakly engaged with farmers and with other economic sectors and knowledge sources (Davis *et al.*, 2007).

There is an urgent need for universities to take up new approaches in order to provide the technologies and expertise as well as the required institutional innovation.

Agricultural innovation systems present a broad, inclusive and holistic means to strengthening capacity for the creation, diffusion and application of knowledge. However, capacity for institutional innovation is still very limited among organizations in sub-Saharan Africa (Davis *et al.*, 2007). There has been limited attention in the past to cultivating such skills and attitudes within the agricultural departments of African universities, leading to a significant capacity gap for problem solving and rural development. This gap is further exacerbated by the lack of institutional acknowledgement of the importance of such skills. AR4D professionals require specific capacities (knowledge, skills and attitudes) to facilitate, enable and incorporate innovation within tertiary education institutes.

<sup>&</sup>lt;sup>1</sup> The book Ochola, W., Heemskerk, W. and Wongtschowski, M. (Eds). 2013. Changing Agricultural Education from within: Lessons and challenges from the GO4IT programme brings a full account of the project implementation, challenges, lessons and opportunities for lasting changes in University lead training, research and development from the points of view of both course participants and teachers. This case study draws heavily on that publication

Graduate Opportunities for Innovation and Transformation (or GO4IT – see Table 1) aimed at building these capacities in three African Universities. This paper describes the challenges and achievements of this project, building on a comprehensive documentation process that took place in 2013 (Ochola, Heemskerk and Wongtschowski, 2013).

Table 1. Fact sheet of this project.

Country/Region	Africa: Malawi, Uganda, Kenya
Tertiary educational organisation	Malawi: Lilongwe University of Agriculture and Natural Resources (LUANAR – previously Bunda College). Departments of Natural resources, and Agricultural Education and Development Communication Kenya: Egerton University. Faculties of Agriculture, Education and community studies, Health Sciences, and Environment and Resource Development. Uganda: Makerere University, college of Agricultural and Environmental Sciences. Department of Agricultural Extension and Innovation Studies
Time Frame	2009-2012
Funding sources	ACP-S&T programme (EU), own contribution of all partners and DGIS
Other partners involved in implementation	The Regional Universities Forum for Capacity Building in Agriculture -RUFORUM (lead), KITAssociated partners: CTA, ASARECA, FARA, SADC
Main stakeholders	Universities' staff, postgraduate students mid-career

### **Case introduction**

Go4IT was based on the realisation that universities in Africa could improve their student training programmes, to bring change to these countries' rural realities. To do this, the universities needed to improve the quality and content of their agricultural educational programmes, to better respond to the latest trends in development, local needs and demands. This would be possible by undergoing a process of organisational transformation. The project was initiated by the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM), the Royal Tropical Institute (KIT) and three universities (Makerere in Uganda, Egerton in Kenya and LUANAR in Malawi).

As a partner and service provider to RUFORUM and the three universities, KIT played a key role in bringing the main concepts and strategy for this change process on board. KIT also, together with RUFORUM, led the joint analysis of the project and supported university staff to make the institutional changes they achieved clearer to them and their organisations.

### Changes envisaged by the project

The transformation envisaged entailed institutional change at the university level – a change in systems, policies, attitudes, behaviour, and way of relating to other stakeholders.

**Aiming high.** Specifically, the project implementation team expected universities to be better prepared to train students to be open to other stakeholder ideas, to be good facilitators; and better professionals in general. For this to happen, universities needed to:

- a. Build stronger linkages with other (innovation system) stakeholders, among which, farmers and potential future employers of their students;
- b. See these linkages as 'two-way learning avenues'. This means that teachers and students bring what has been learned to the classroom and take classroom learning points back to the field:
- c. Establish and support internal university policies that encourage such linkages;
- d. Establish mechanisms to ensure better fit between stakeholder needs and curriculum offer:
- e. Promote teaching methods which are more practise-oriented; and
- f. Work across departments/faculties, create an environment in which such cross-fertilisation was possible and supported.

**By starting small.** The project partners jointly decided to take what was dubbed as a 'Trojan horse approach' to the envisaged transformation process. The basic idea behind it was that – in order to change the way universities work – we need to start small, with a concrete project that seemed confined to its activities; but that slowly influences the way people act and the organisation "thinks".

The project's main activity was the establishment of mid-career short courses (for extensionists, researchers, NGO staff, etc) on how to bring stakeholders together to facilitate innovation. It was the belief of the partners in this project that this was important in making professionals better prepared to act as brokers in their own work – being more effective at bringing about change in the rural areas.

Demand analysis and skills gaps studies were conducted in all the three countries, to establish gaps between university curricula and stakeholder demands. The findings were used to design the mid-career course and to engage with non-university actors in addressing demands of, and participation in the mid-career course.

The partners in the project led by KIT, developed, peer-reviewed, and tested, a set of training modules organised around four blocks. Through training of trainers, a core group of lecturers was prepared to conduct the mid-career course, and train other lecturers and postgraduate students within the three universities. This initial core group of lecturers was envisaged to include only 3-4 teachers per university, but - mostly due to the enthusiasm the themes generated – it ended up being composed of 10-15 teachers per university. These

lecturers acted as "champions" within their university, removing barriers where needed and engaging others so that the project could be successfully implemented.

In the first mid-career professionals' training course, a total cohort of 71 professionals from government ministries, the private sector, civil society and universities were trained. Although there were variations in the timing and duration of the course, it was guided by an action-learning framework that contained practical assignments – that took place during two-month 'learning intervals' – in between one-week theoretical training blocks.

A second cohort was trained in Uganda, and, in addition, MSc and PhD students were trained in Uganda and Kenya using the same curriculum.

The mid-career course was used as a "tool" to introduce new practices into universities through participating mid-career professionals and their employers. It also served as a tool to bring university staff into 'real life' situations, through the supervision of course participants, who would be involved in concrete assignments in their working environment during "learning intervals".

## Changes achieved in the project

The project's mid-career courses led to a large number of changes, including:

- (i) Changes at the individual university staff level. These related to competencies acquired to work together with students and employers in a more practise-based, student-centred manner. The fact that the teachers supervised the mid-career trainees on the ground played a key role in this process. It brought the teachers both to see 'with their own eyes' the realities in which their students work, and to directly engage with employers.
- (ii) Changes at the level of course participants and their organisations. These included the way the trainees work with other stakeholders (research, extension, farmers, local traders, etc.), and the way they define their role as local brokers/facilitators. The most significant change at this level is a change in attitude of these mid-career professionals. Instead of considering themselves as 'those who bring about change' (for example, by bringing a new seed or technology to farmers), most of them now see the importance of understanding the ambitions, needs and interests of different stakeholders. Many course participants say that they started listening more carefully to farmers, for example.

At the level of institutional change, some concrete examples are given below:

**Partnership with employers.** In the three universities, the strengthened relationship with employers meant that the latter could be called upon to be guest lecturers – bringing reality a step closer to students in the classroom.

The experience of Egerton University provides a good example (see Box 1) of a clear (intended) change taking place at the institutional level as a result of GO4IT; that is, change

in how the university deals with its external partners, and in being recognised for its role in building the capacity of students who are directly supporting employers in the field.

#### Box 1: Institutional change at Egerton University, Kenya

Since the GO4IT project started with a stakeholder needs assessment, relations were built with a large variety of graduate employers. Lecturers were convinced of the importance of the new mid-career course, and took the initiative to market it. Their enthusiasm impressed the Ministry of Agriculture, Livestock and Fisheries Development, which then recommended the nine-month course to its staff, even before the first course had been completed. Egerton staff invested heavily in relations with employers. They organised feedback sessions with the mid-career course participants and their employers, to share results of the work done by the former. Formalising the partnerships with employers is yet to take place, but these informal partnerships can still be considered as an outcome of the project. The field work was supervised by university staff, together with the employer. These working relationships have also led to a series of possible internship options.

**Increased cross-disciplinary activities.** The implementation of the GO4IT project involved various individuals and departments from across different disciplines. For example, at LUANAR, the implementing team comprised staff from the Departments of Agriculture Education and Development Communication, and Natural Resources. In Egerton, departments involved included Agricultural Education and Extension, and Human Nutrition. By contrast, the team at Makerere University came from a single department (DEIS), but with diverse expertise, including sociological and innovation approaches, and with staff who also taught courses outside social sciences and agriculture.

University-level team formation. Each partner university worked with a team of trained GO4IT mid-career course facilitators, who acted as 'champions' within the project. The team members provided peer support, and the social cohesion of these teams became important. In Makerere, the team was composed of people who had already worked together, had had prior exposure to innovation concepts and were keen to make a difference through the project. In Egerton, people were also able to work together very well despite not having worked together before, and by the end of the project had formed a cohesive team. Team members showed personal interest and self-motivation, maintaining momentum as they worked progressively towards a common goal.

**Teaching methods.** The course stimulated university staff to re-think their teaching methods. GO4IT showed lecturers that a more action-oriented, learner-centred, self-discovery approach, and open interaction with students, was possible and desirable. The course exposed teachers to facilitation skills and working methods (such as working on case studies in small groups) that could be – and were – applied to their own teaching situation, often in large groups in an auditorium. The interactive learning contributed to enhanced creativity and critical thinking among students, most of whom were enthusiastic about the new way classes were given.

**Curriculum change at the three universities.** Formally changing universities' curricula is a lengthy process, often requiring (re-) accreditation. Nevertheless, 20-30% of the curricula

contents can be changed without having to go through formal processes. The project partners made creative use of this opportunity, integrating GO4IT course elements into their curricula. In LUANAR, for example, departments integrated innovation issues (e.g. stakeholder mapping, facilitation, innovation systems thinking) in curricula beginning shortly after the commencement of the mid-career course. Makerere University introduced a Bachelor of Agriculture and Rural Innovation; and more innovative practical and interactive sessions (such as stakeholder analysis, partnership and communication) are included in the University Agricultural Research Institute courses. A new post-graduate Diploma programme and a MSc in Rural Agri-enterprise Development have also been launched at Egerton, drawing on lessons from GO4IT and its initial gap analysis.

**Student internships.** Also somewhat unexpectedly, the universities saw a change in the way internships were organised and supervised, as a result of GO4IT courses. Unlike the usual internships, where students only 'observed', students were directly engaged in practice and learned by implementing things themselves. Those in charge of arranging internships within the universities have also learned from the experience.

The change in emphasis in internships also had organisational consequences for the universities, which now need to use different criteria for selecting possible internships and supervising students in the field. Egerton, for example, now engages private partners in assessing students during their internship periods; previously, assessments were only made by lecturers.

# Institutional change process dynamics

Factors facilitating change. Commitment of staff ('champions'): A considerable number of university staff participating in the project were open-minded and eager to learn and change; and able to establish contacts with other stakeholders (employers). At Egerton and Makerere, in particular, staff had already been involved in similar projects (e.g. see SUCAPRI case study) and were familiar with the concepts presented by GO4IT. People worked well in teams, and maintained momentum as they worked progressively towards a common goal. It helped that team members were of the same generation, as they shared similar points of view and understanding.

Support of top university management level: Much effort was taken to invest in dialogue with top management and stakeholders in order to get institutional 'buy in' for the project. Seminars for top management and university staff were conducted in each participating university. Together with bilateral networking, these efforts ensured financial and moral support to the university teams. For example, in LUANAR the management pre-financed the first cycle of training. At Egerton University, the management provided moral support as well as funds for procuring a project vehicle. At Makerere University, the management was fully committed to supporting the lead department of the project. An important factor, to allow this buy-in to happen, was university staff involved had the necessary clout at the university level to convince the university administration. RUFORUM, as a regional network,

also played an important role here by, at times, advocating in favour of the project with university administration.

The time was 'right': At Makerere, the fact that the department involved (DEIS) had just gone through a reorganisation process and was willing to embrace projects that brought staff together in a concrete project, was an important factor.

Exposure of teachers to field activities: The fact that teachers from the three universities were often involved in the implementation of development projects on the ground provided them with good learning material. They not only taught the course participants to work differently, but the teachers also incorporated those teachings in their own work in the field. In addition, the teachers were involved in supervising course participants' work on the ground. Through both, they saw clear results of putting this new way of working into practice.

**Factors constraining change.** University hierarchical structures: These often meant that teachers had to go to great lengths to convince their superiors of the importance of the work being done – and why the university should commit (financial and human) resources to it. Though they finally managed to do so, this process consumed practically one year of the project's implementation time. Most of the project partners (and its donor) function as inefficient bureaucracies. This has caused delays in fund transfer and implementation of the project – besides creating irritation among partners that took considerable time and energy to resolve.

Diverging views and understanding: Whilst the majority of individuals showed interest in facilitating training, some individuals found it challenging to conceptualize innovation systems or put the thinking into practice in their disciplines (particularly those in 'hard' sciences), and hence lost interest. The need to reduce the number of drop-outs raises the need for other strategies to better engage individuals with a negative mindset towards innovation systems thinking. This may include, for example, asking these individuals to co-supervise students as a way to engage them directly in field work; or to change the 'language' of the training of trainers' material to become more concrete and (hopefully) therefore more appealing to those who are not social scientists.

Unwillingness to openly discuss what went wrong: The difficulty of taking responsibility for things going wrong, and openly discussing the reasons for problems, both within the universities and between project partners have - at times - stood in the path towards improving the project and the mid-career course.

## Lessons learned

1. A combination of both bottom-up (through students and teachers) and topdown (strong support and push by management) efforts is necessary. For innovative projects at tertiary institutes to flourish, champions are needed at both levels (teachers and management).

- 2. Change practice first, and through practice influence the way universities' policies are made and operationalized. It is easier to trigger change in (part of the) curricula and teachers' practices than to start by changing university policy. There is often less resistance, and is a less bureaucratic process.
- 3. Have university staff work together on something practical and preferably in the field, rather than only meeting or having theoretical discussions together. This is key to changing perceptions and attitudes, related to how staff sees the role of universities and how staff members relate to each other.
- 4. Involve a diversity of staff (i.e., from different departments and/or from different disciplines) to achieve a stronger entry point for organizational level change. This project benefited from having encouraged lecturers from a broad group of disciplines to be involved. The future value of the GO4IT course will be greatly enhanced if departments inform their staff about the new modules on innovation. These can then be integrated into their teaching, both in terms of content and methodology.
- 5. Regularly engage with employers (including employers of extension staff, such as ministries and NGOs), in order to gain insights on job demands for university graduates. Egerton is currently the only university (of the three) in which engaging with employers is mandatory for curriculum review. Nevertheless, such engagement is still often restricted to soliciting views on a curriculum already developed by the subject specialists within departments and faculties.
- **6. Strengthen the links between universities**. Promoting greater interaction between participating universities would have, ensured cross-learning and increases the chance that such learning will continue to take place after the project.
- 7. Be sure to use terminology that people on the ground clearly understand. For example, the word 'innovation' remains confusing. Many still refer to innovation as technology, whereas the course was designed to introduce the concept of innovation as a process which may lead to new technologies, but also to new ways of organising work, policies or relations with partners. Using another word or expression to explain the concept (for example, 'change') may help. This shows that KIT and RUFORUM, in particular, were at times eager to press on concepts that are highly abstract, without properly appreciating the 'language' and realities of other partners involved.
- 8. Take time to involve project partners (universities) and stakeholders (e.g. teachers) in the design and adaptation of training materials. They need to feel ownership to be able to change them according to their own needs and realities.
- 9. Do not place too much emphasis on setting up innovation platforms, at the expense of other tools to promote interaction. Bilateral discussions with key actors, joint experimentation, choosing promising ideas and trying them out with one partner, are all means towards the same end: to bring about change. Often, these activities are

more appropriate than creating innovation platforms. Future curricula therefore need to build in flexibility in approaches.

10. Strengthen contact between trainees. GO4IT course participants also observed that joint supervision by the university and employers was appreciated, and led to joint learning. But they also called for interaction between trainees during the practical learning intervals - and after the course - to be improved. Malawi set up a Facebook group to improve that, for example. The three universities are, at the moment, playing with the idea of establishing some sort of alumni organisations.

Accept that change and grasping of new concepts (like 'innovation') takes time. Do not be too ambitious in your expectations of change from a project. Implementing project partners were fairly ambitions when it came to changes we wanted to see. We truly thought we could change the way lecturers and course participants looked at innovation – at change as a process that needs different stakeholders to happen. However, we saw that more often than not, this message is still difficult to grasp on the ground. Instead of clutching this (from our perspective, core, 'revolutionary') message, teachers and course participants learned other things. Teachers made use of the new teaching methods they picked up from the project. Course participants made use of new ideas such as involving other stakeholders, when deciding upon the focus of a project on the ground. These smaller changes (made by course participants) are often not revolutionary or very new from an academic point of view, but already make a huge difference in how these teachers impart their lectures and mid-career professionals carry out their own projects.

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