



Introduction

Short courses can be an effective capacity building tool for developing countries agricultural practitioners. Well designed short courses build skills based competencies, improve knowledge and deliver measurable development outcomes.

The University of Queensland (UQ) has conducted five courses in dryland farming for African countries since 2011. Each course has included about 15 participants from a total of 27 African countries.

Courses are comprised of 5 weeks delivery in Australia and 2 weeks delivery in Africa. The Australian component involves 3 weeks classroom and practical activities and 2 weeks of field excursion and field activities. The African component involves equal measures of field and classroom activities and is strongly focused on context. Our African partners are research institutions from Tunisia, Ethiopia and Kenya - countries with relevant farming systems and technical capacity.



Delivery of the courses was in English but language support was provided.

Background knowledge was assessed in a pre-course examination. This was implemented for the 3rd course as the initial pre-course on-line assessment of background interest checks proved to be unreliable.

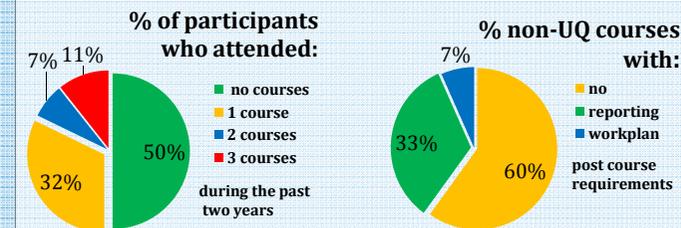
Participants were required to develop a post course Return to Work Plan. Implementation of this plan was evaluated in post-course visit to countries visited by the Lead Trainer, and by e-mail for countries that could not be visited.

End of course competency was assessed in a post-course examination. Final award was based on this examination, participation and engagement during the course and the quality of the Return to Work Plan.

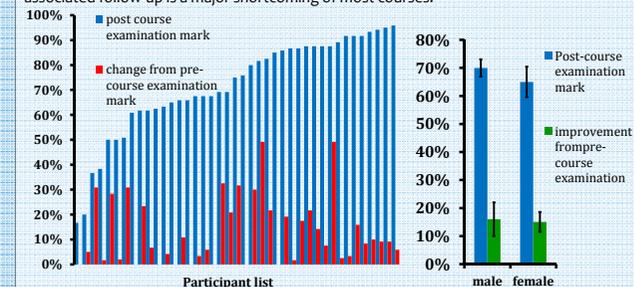
Delivery



Assessment



Half of the participants had previously attended international courses before, but almost none of these courses included a requirement to complete post-course activities. The Return to Work Plan of our courses was therefore an unexpected requirement for most participants. Continuous reinforcement was needed to ensure that participants developed their post course activities. A post-course visit was an integral incentive to accomplish this requirement and to ensure that knowledge gained by participants was passed on within their home environment. Lack of learning dissemination from courses without tangible post-course activities and associated follow-up is a major shortcoming of most courses.



The learning outcome was measured by comparing the pre- and post examination results. The level of background knowledge varied greatly. It was not affected by gender ($p=0.5$) but significantly affected by country ($P=0.004$). Learning outcome was neither affected by gender ($p=0.9$) and country ($p=0.7$). This means that the relative benefit of the course was greater for participants who came from the poorer performing countries. However, the absolute achievement may still be below adequate competence where initial capacity is very low.

Observations and Lessons Learnt

- Selection of suitable candidate underpins the success of the courses. The difficulty is to select those who are willing to learn and avoid professional training courses attendees. – *these courses are not a junket!*
- Effective learning outcome and dissemination of learning is determined by prescribed post-course activities and real follow-up. – *the carrot and stick!*
- Practical in-field activities and observation are needed to link theory with practise. – *seeing is believing*
- An in-Africa training component is needed to link and make the Australian Agro-Ecosystems explicit and relevant to an Africa context. – *advance Africa!*
- Short-courses vs. post-graduate award courses – *who benefits?*
 - Post-graduate course, in particular PhD awards, often lead to rapid promotion into managerial roles were the actual PhD training is not needed.
 - Short courses with a return to work plan ensure that knowledge gain goes beyond the participant and propagates through their workplace.
 - Post-graduate award courses do not have post-program activities. The award is the end-point.
 - Short courses are more cost-effective than post-graduate award courses for capacity building.

