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# A newly-completed Water Research Commission (WRC) short-term project and report has sought to improve knowledge dissemination on irrigation management to the country's extension advisors.

### Background

For many farmers, but especially smallholder farmers, extension advisors play a pivotal role in building capacity through programmed learning and access to information. The WRC identified the need for training of extension advisors in particularly irrigation management as this would give

smallholder farmers a better chance of being successfully integrated into the food value chain.

#### Motivation for WRC project

Despite playing such a critical role in especially smallholder agriculture, studies have shown that the extension link has deteriorated in recent years and become less effective. A previous WRC project has illustrated that many educational programmes and curricula offered by tertiary education and training organisations in South Africa are inappropriate and not aligned to the skills and knowledge required by extension advisors to do their work properly.

In many cases this results in a lack of confidence and self-esteem among extension advisors, decline in credibility and therefore withdrawal from the community which they must serve. An urgent need was therefore identified to restore the self-esteem of these individuals and to improve the service delivery of the extension profession.

A first step in rectifying the situation was to define the 'knowledge profile' for training of extension advisors, or the basic knowledge required to advise farmers effective on irrigation management.

This conceptual knowledge profile of the irrigation extensionist (see Figure) does not imply that extensionists should become subject matter experts in each of these identified technical learning areas, but rather that adequate technical knowledge and competence in each of these learning areas is a prerequisite for credible extension service delivery to irrigation farmers.

Already in 2006 the WRC, through a project led by the University of Pretoria, developed learning material (93 modules) for the eight learning areas identified to form the knowledge profile of the extension advisor. The discussions with stakeholders have resulted in the following key messages, opportunities and challenges for shifting the discourse within the educational and training sphere to include irrigation water management learning material in existing curricula offered at agricultural colleges and university of technology.



## Figure – Conceptual framework of the 'knowledge profile' of an irrigation extension advisor

This latest project involved disseminating the research output to agricultural colleges; universities of technology; AgriSETA accredited training colleges; FET colleges; commodity organisations involved in irrigated agriculture development; provincial Departments of Agriculture; and international irrigator advisors and professionals.

The report emanating from the project reflects activities and discussions held with various stakeholders involved in agriculture education and training to raise awareness of the training material, but also to encourage and catalyse the possible inclusion into existing curricula and use in short courses for practical training of irrigation farmers at irrigation scheme level. Capacity building is not a once-off event but must rather be seen as a ladder where information access, facilitation and empowerment, technological development, mentorship role of consultation/ extension advisors and programmed learning and important pillars for increasing of capacity.

The reflections and insight of a strong set of knowledgeable individuals involved in training and extension provide a nuanced image of challenges and shortcomings that are critical to address training and education in irrigation water management. It helped to better understand the underlying challenges at training organisations for the uptake of the learning material.

### **Further reading:**

To obtain the report, *Knowledge brokering and dissemination of irrigation management guidelines for training of extension advisors* (WRC Report No. KV 356/16), contact Publications at Tel: (012) 330-0340; Fax: (012) 331-2565; Email: orders@wrc.org.za or Visit: www.wrc.org.za to download a free copy.

### Main message

Extension is a process of capacity building through engagement of individuals, groups and communities so that farmers are more able to deal with various issues affecting them and opportunities open to them. Extension therefore comprises several activities that may provide: a framework for learning, a specific learning event; a process for developing or modifying specific management practices or technologies; individual mentoring and an on-going access to needed knowledge and information.