

# Sharing science to improve agricultural productivity

AS MEC for Agriculture and Rural Development, I recently spent an enjoyable afternoon with a group of farmers who had completed a course in agro-meteorology.

Many of these small-scale farmers, who had little formal education, enthusiastically engaged with the science that looks at the effects of weather and atmospheric conditions on agriculture.

They spoke easily on issues of climate change and what they had learnt.

The course was run by the South African Weather Service and the New Partnership for Africa's Development (Nepad) and was piloted in the Free State and in KwaZulu-Natal.

I was reminded of this initiative, as the World Forestry Congress got under way in Durban last week.

Discussions on climate change, forests, food security and the future sustainability of our planet took centre stage. It was good to know that South Africa had not been caught napping. Work is being done

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ANALYSIS

to train small-scale farmers on how to use weather and climate information to develop adaptation and mitigation strategies in their farming practices.

To many of us, the weather service is associated with the men and women who tell us whether to expect rain or sunshine and what temperatures to expect for the day.

It is worth reminding ourselves that the weather service has a much broader sweep. The chief executive of the South African Weather Service, Dr Linda Makuleni, said that agro-meteorological services in developing countries such as South Africa had to bear greater responsibility owing to changing agricultural practices, climate change, popula-



Small-scale farmers are hungry for knowledge to grow their enterprises.  
PICTURE: AFRICA GREEN MEDIA

tion pressure and demand for food security.

The workshops are part of a broader project to share agro-meteorological information to enhance agricultural productivity.

For me, the workshops affirmed the KZN Department of Agriculture and Rural Development's Strategy for Agrarian Transformation is on the right track.

We make bold statements with

the strategy. We say that we aim to unleash the potential of small-scale farmers. We also say that the basis of the strategy is the fundamental recognition that farming is both a scientific and business enterprise.

The agro-meteorology workshops demonstrated that farmers operating in the informal economy are open to the science, are willing to learn and bring their indigenous knowledge to issues of climate change.

Faced with drought, one solution is to look at drought-tolerant crops.

However, there is also a need for the wise management of fertilisers, care of the soil, timing of cultivation and crop rotation.

In other words, proper bio-resource management.

The KZN Department of Agriculture and Rural Development has such a programme and this is another initiative aimed at skilling small-scale farmers to help ensure the sustainability of their farming enterprises.

The department's extension offi-

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cers also attended the agro-meteorology workshops and going forward, their work will be to continue to pass on the information to other farmers.

The department has been beefing up its extension services so that we have scientifically trained extension officers who will help teach farmers about new farming practices and keep them informed on advances in agriculture.

The International Forestry Con-

gress, being attended by a large number of delegates from the scientific community, offers insight into the powerful tools that are now being used in forestry and agriculture.

There is geospatial mapping, predictive modelling, remote-sensing, the developments in the field of climate change and mobile technologies, to name a few.

The challenge is to ensure that this knowledge does not remain in the domain of conference halls and academic journals – but is passed on to enhance the technical expertise of small-scale farmers.

To unleash the potential of our small-scale farmers, the science of agriculture has to be made accessible. As we found out with the agro-meteorology workshop, there are farmers who are as hungry for this knowledge as they are determined to grow their farming enterprises.

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