



agriculture & rural development

Department:
agriculture
& rural development
PROVINCE OF KWAZULU-NATAL

KZN Department of Agriculture & Rural Development
Private Bag X9059, Pietermaritzburg, 3200

Enquiries: Nalini Naidoo

Tel: 0832340475

Fax: 033-343 8255

Toll-Free: 0800 000 996

Email: Nalini.Dickson@kzndard.gov.za

SPEECH READ OUT ON BEHALF OF KZN MEC FOR AGRICULTURE AND RURAL DEVELOPMENT, CYRIL XABA AT THE ANNUAL RESEARCH TECHNOLOGY TRANSFER SYMPOSIUM ON 18 FEBRUARY 2015 AT THE CEDARA CENTENARY COMPLEX

Visiting Scientists

Staff of the Research and Technology Directorate

Extension Officers

All visitors present

Gathered before me today are the unsung heroes, not only of my Department but of South Africa as a whole. As scientists, your research has helped farmers improve their crop yields, keep diseases and pests at bay and find new and efficient ways of farming. Your work has been the backbone of agriculture, ensuring that our farms remain productive and our people have food.

Allan Savory, a scientist who initially developed the system of holistic agriculture, an approach to managing resources for reversing desertification once said: "Agriculture is not crop production as popular belief holds – it's the production of food and fibre from the world's land and waters. Without agriculture, it is not possible to have a city, stock market, banks university, church or army. Agriculture is the foundation of civilization and any stable economy."

Science writer Carl Sagan said that scientific advances in medicine and agriculture have saved vastly more lives than have been lost in all the wars in history.

This is why since my appointment as MEC in this Department, I have emphasised two messages that agriculture is science and that agriculture is business. In my first budget speech, I said that I wished to see greater integration between researchers, extension officers and economist. That position still stands and has been crafted into my New Strategy for Agrarian Transformation in KwaZulu-Natal.

The foundation of this strategy and the basis on which all else rests is scientific research, technology development and Extension. The next layers are to use a commodity approach firm business models and to incorporate agro-processing as part of the strategy. This base will hold up and support four pillars that will be key to transforming the agricultural sector into growing the province's economy and creating jobs; enhancing rural development and ensuring food security.

These pillars are the re-capitalisation and post settlement support of land reform farms, the establishment of agri villages, river valley farming enterprises and communal agricultural estates.

As inquiring researchers, you are probably thinking at this point that it all sounds good in theory but how will it work in practise. I found at least one example from a story in the Farmers Weekly last year about Thabang Tshephe who was a finalist in Grain SA's Developing Grain Farmer of the Year competition. In the interview, Thabang explains how he goes about growing his maize in two different farms where the soil profiles are very different. Some of his methods have their beginnings in research projects here at Cedara and the article shows that his success is through a balance of being enterprising and applying precise farming technologies that he has learnt.

Thabang describes what he plants and said, "I grow Pioneer's Phb 3442, Phb32D95 Br and Phd31D46Bk maize hybrid for my commercial yellow grain and for my maize silage. I choose these hybrids for their grain production characteristics, not for Silage."

He goes on to say that he follows conventional tillage practises excluding ploughing in his cropping. He talked about what he did to correct soil compaction and how he prepared his seedbeds with 90 cm inter-row spacing and planting depths ranging from 2 to 5cm. The writer comments that these figures are based on Thabang's intimate knowledge of the production capacity of his two farms.

The article said that every second year, Thabang sends soil samples from his farms for analysis to the Cedara Agricultural Research Centre to determine what fertilisers are required. He said he carried out liming his soil when needed and that this was carried out after any shallow ripping and at least 90 days before planting. The article concludes by saying that this enterprising young farmer does not currently employ crop rotation, but that he hopes to one day alternate the maize rotating with soya beans in summer for the nitrogen-fixing benefits of this crop. Many of you will recall that from 2001, rotational farming with maize and soya beans was researched by Guy Thibaud and Tony Matchett here at Cedara. Thabang also said that he discs in maize crop residue to help improve the organic matter content of the soils on his farm.

Going forward, this is what we need research and extension officers to empower farmers in scientific methods of farming so that we grow our numbers of black farmers and have more Thabangs in the agricultural sector.

We face further challenges in the development of small holder farms and our research must be directed to helping emerging farmers in knowing the right crops to grow on their land, the cultivars they should use and incorporating existing indigenous knowledge in conservation farming practises. I am pleased to see that we are making headway in this direction and that there are currently 69 registered research trials underway. These range from studies on soil fertility, the control of diseases and weed control. For small-farmer development, there is some exciting work being done on the production of essential oil crops.

The Isikhowe Juncao Mushroom Centre at Cedara also aims to develop and adapt technology to increase mushroom cultivation in the province to promote the use of mushrooms as an alternative protein source thereby alleviating food insecurity and creating jobs.

Livestock production forms a major portion of the gross agricultural product of KwaZulu-Natal. Between 70 to 80 percent of the province is only suited to grazing as a sustainable land use option. Consequently, research and technology development into the sustainable use of the livestock and the resource base is critical. The indigenous breeds of the Province are important to the people of KZN and offer animals potentially better adapted to climate change. It is imperative that work must continue in ensuring that breeds indigenous to KZN are actively conserved and characterised.

Sweet Potato is a crop that could make a significant impact towards alleviating hunger and nutrient deficiency in the Province. I therefore urge the Research & Technology Development Directorate to continue to investigate the potential of sweet potatoes for our Province – such as the emphasis on selecting high beta-carotene genotypes. I want you to continue to focus on evaluating potato, maize, soya and dry bean cultivars to ensure that we recommend cultivars that are not only adapted to specific production areas, but are also economically important to producers. The production of agronomic and horticultural crops remains one of the most effective means of alleviating poverty and raising the levels of household food security. It is also good to know that a significant number of trials are being conducted in rural areas. For example, there are 12 potato production demonstrations throughout the Province, in collaboration with Potato South Africa, with the objective of promoting potato production amongst emerging commercial rural farmers in rural districts.

Africa's population will reach close on 60 million by the year 2050. As a result, the country will have to provide for an additional 20% volume in food requirements for its expanded population while facing the challenges of diminishing productive agricultural land, the scarcity of water resources and climate change.

The country will be looking to its research community to help solve these problems and find both short and long-term solutions to improve productivity and the nutritional quality of agricultural products. We will be relying on our scientists to:

- enhance the resilience of agriculture against natural disasters and climate change;
- find updated technologies to improve the efficiency of water use and soil resources;
- decrease relative production costs and post-harvest losses;
- develop safer and more effective disease and pathogen controls and to identify and improve climate-resilient crop varieties and livestock breeds.

Without research to inform actions, it will be impossible to drive the implementation of a technology-led path for agriculture development or to equip farmers with the best cultivation and husbandry methods to ensure continued growth and attainment of national agriculture goals.

This is why the very foundation of our strategy for agrarian transformation in KwaZulu-Natal is scientific research, technology development and extension services. To guide the process a research policy is presently being drafted for implementation by the Department.

We recognise that for our efforts to succeed, we need to work with the broader agricultural scientific community. This is what is exciting about science - it is a discipline based on collaborative effort, where research is also built on earlier work. Therefore I want to take this opportunity to thank institutions such as the Agricultural Research Council, Universities, the private sector, NGO's and commodity organizations for the research work they do in the province.

Together we can do more in growing the economy of agriculture, improving rural livelihoods, preserving our indigenous knowledge while at the same time sustaining our natural resources. This is our strategy and the work carried out by you the scientists, technicians and extension officers will underpin all our efforts going forward

I wish you an enjoyable and successful symposium filled with robust debate. Please continue knowing that your work is highly valued and deeply appreciated.