KEYNOTE ADDRESS BY MEC KEKANA TO COMBINED CONGRESS 2025

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The Ranch Hotel, Polokwane Programme Director, Vice Chancellor and Principal of the University of Limpopo, Professor Mahlo Mokgalong, Distinguished Delegates from the Southern African Society for Crop Production, Southern African Society for Horticultural Sciences, and the Soil Science Society of South Africa, Representatives of the Water Research Commission, Esteemed Researchers, Academics, and Guests,

Ladies and Gentlemen,

It is an honour and a privilege to address this esteemed gathering at the Combined Congress 2025 in our beautiful Limpopo Province. The theme of this congress, "Science for Commercial and Rural Development," resonates profoundly with the socioeconomic imperatives of our nation and the broader global context. This theme reflects not only the importance of research and innovation but also the critical role of science in bridging the gap between two distinctly different economic realities.

Our society, much like the global community, is characterized by a dichotomy of economies: one developed and thriving with commercialization and economic opportunities, and another underdeveloped, marked by persistent poverty and limited access to resources.

While it is vital to continue fostering innovation and growth in the developed economy, the urgent challenge before us is to uplift the underdeveloped segments of our population, particularly in rural areas.

This challenge aligns with the priorities articulated by President Cyril Ramaphosa in the ANC's January 8th Statement delivered in Cape Town, which include driving inclusive growth and job creation, reducing poverty, and building a capable, ethical, and developmental state, while at the same time, strengthening governance at the local sphere of government. These goals must serve as a blueprint for our collective efforts in agricultural development.

The Combined Congress is a unique platform that brings together expertise in crop production, horticultural sciences, soil science, and water research. The diverse knowledge and expertise represented here are integral to addressing the myriad challenges facing the agricultural sector, from increasing food production to mitigating the impacts of climate change. Your role as researchers and academics is pivotal in generating new knowledge, developing innovative technologies, and advancing sustainable agricultural practices. Your contributions have the potential to address food security challenges, promote economic growth, and ensure the sustainability of our natural resources. The importance of agricultural research becomes even more pronounced when we consider the rapid growth of the global population. According to the United Nations, the world's population has grown from 6.1 billion in 2000 to 8.1 billion in 2024, representing a staggering increase of approximately 2 billion people in just over two decades. This population growth is even more pronounced in Africa, where the population has increased by 45% over the same period, from 819 million to 1.49 billion. Such demographic trends underline the urgency of enhancing agricultural productivity to meet the rising demand for food and other agricultural products. This necessitates robust research programs aimed at addressing the challenges that hinder agricultural productivity and sustainability.

One of the most pressing challenges facing the agricultural sector is climate change. As highlighted by the Institute for Security Studies, climate change is one of the defining human and environmental crises of the 21st century. The evidence of climate change is irrefutable, manifesting in rising temperatures, extreme weather events, prolonged droughts, and devastating floods. For Africa, the situation is particularly dire.

Despite contributing minimally to global greenhouse gas emissions, the continent is warming at a faster rate than the global average, as reported by the World Meteorological Organization.

The consequences of this warming include displacement, climate-induced migration, and disruptions to agricultural systems. It is imperative that we deepen our understanding of climate change and develop innovative solutions to mitigate its impacts. This requires a concerted effort from researchers to produce knowledge and technologies that can enhance the resilience of agricultural systems in the face of climate variability and change.

Water scarcity is another critical challenge that demands our attention. Agriculture, particularly irrigated agriculture, is the largest consumer of freshwater resources in South Africa, accounting for approximately 60% of total freshwater use. The water required to produce staple crops such as maize, wheat, and rice is substantial, with estimates ranging from 454 liters for maize to 1,600 liters for rice per kilogram of produce.

The situation becomes even more alarming when considering the water requirements for meat production, which significantly exceed those for grains. These statistics highlight the need for innovative approaches to improve water-use efficiency in agriculture. Research must prioritize the development of technologies and practices that optimize water use, reduce wastage, and ensure the sustainability of this precious resource.

The challenges of climate change and water scarcity underscore the importance of collaborative research and the integration of research findings into policy. Collaboration is essential for maximizing the impact of research efforts and optimizing the use of resources.

It is encouraging to see institutions and organizations engaging in partnerships to advance agricultural research. However, there is a need to strengthen these collaborations further, both nationally and internationally. Partnerships with science councils, universities, and government research units can enhance the efficiency and effectiveness of research programs, ensuring that they address the most pressing challenges facing the agricultural sector.

Equally important is the need to bridge the gap between research and policy. Too often, valuable research findings remain confined to academic journals and conference proceedings, with limited practical application. As policymakers, we rely on the scientific community to provide evidence-based solutions that inform decision-making and guide the development of policies that address the needs of the agricultural sector.

It is essential that researchers actively engage with policymakers and other stakeholders to ensure that their work translates into tangible outcomes that benefit society.

As I conclude, I wish to commend the Council of the Combined Congress for choosing Limpopo Province as the host for this important gathering. Your presence here underscores the strategic importance of our province as a hub for agricultural innovation and development. I encourage all participants to engage actively in the discussions and deliberations over the course of this congress. Your contributions are vital to shaping the future of agriculture and ensuring the sustainable development of our country and continent.

I wish you a productive and impactful congress.

I thank you.