



Dr Jacob Mashilo
Photo supplied.

Chasing a dream: Dr Jacob Mashilo to steer research and innovation

The Agricultural Research Council-Small Grain (ARC-SG) has recently welcomed Dr Jacob Mashilo as the Research Team Manager, a man who discovered his calling long before he ever wore a lab coat or led a team of scientists.

Anelisa Gusha
ARC-SMALL GRAIN

In his new role at ARC-SG, he now leads efforts in crop improvement and innovation, transforming childhood passion into a lifelong commitment to ensuring South Africa's food security. The seasoned researcher has published over 100 articles since the start of his career, an impressive body of work dedicated to advancing the agricultural sector.

Dr Mashilo first felt the pull of agriculture as a young boy when he buried his hands in the soil of his family garden. Today, the same scientist from Kgohloane, Limpopo, whose dreams once reached only as far as his backyard, has grown into a man whose work nourishes the country.

"My passion in agriculture runs to my childhood where my grandmothers owned communal farmlands and cultivated various crops such as maize, sorghum, sweet sorghum, cowpeas, Bambara groundnuts, and sweet and non-sweet watermelons.

"As a family, we were involved in farming activities including planting, weed control and harvesting. Although I did not realise it at that time, those experiences sowed the seed for my future passion and career in agricultural science," the passionate researcher said.

According to him, gardening shaped a curious mind, full of questions. "I curiously asked myself many questions such as 'how do plants grow, why do plants wilt even after being watered?'. I did not have much information about career choices in agriculture, but I empowered myself and sought-out information."

Before joining ARC-SG, Dr Mashilo worked for the Department of Agriculture and Rural Development as a researcher.

"As researchers, we have a social responsibility to contribute to the countries' key priorities, of which at the heart of it is

the high unemployment rate. By driving agricultural research and innovation, we can make a significant contribution to the growth of the sector and drive job creation."

But his work goes far beyond research. Over the years, Dr Mashilo has become a beacon of hope and guidance to young scientists. He has supervised and mentored Master's and PhD students at the University of KwaZulu-Natal (UKZN).

He was appointed as an Honorary Research Fellow and also worked as a part-time trainer and lecturer for the UKZN/Benin project in the Republic of Benin.

Throughout his career, he has led and co-led several research projects on the genetic improvement of vegetable, grain, and leguminous crops, focusing on enhancing yield, climate resilience, and nutritional value.

Dr Mashilo's collaborations span both national and international organisations, including ARC, the universities of KwaZulu-Natal, North-West, and Limpopo.

When he is not in the field or the laboratory, he turns to woodcraft, a skill he taught himself. His decision to join the ARC was motivated by admiration.

"I collaborated previously with researchers from the ARC's several campuses and I consistently praised the innovative and impactful research they conducted. Further, I served as an external collaborator to the ARC providing expert editorial guidance on draft manuscripts, data analytics and publications to personal development planning students and post-doctoral fellows.

"One of the exciting things about being a researcher is the constant quest to find solutions. With new challenges emerging in agriculture all the time, there are endless opportunities to innovate and create impact.

His message to young people is one born from experience and heart: "Pursue your passion with all your heart. It is the key to success and fulfilment," he said. ♡