Research and Innovation critical in supporting farming

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29 July 2021

Agriculture Ministers from across the globe gathered - physically and virtually - in Rome this week for the Pre-Summit of the United Nations' Food Systems Summit. The theme of the Pre-Summit was "Transforming Food Systems for Achieving the Sustainable Development Goals: Rising to the Challenge". The inputs ranged from a need to improve the resilience of the global food systems amid the shocks of the current Covid-19 pandemic to the need for increased investment in innovation and research to cope with climate change and combat hunger. South Africa's Agriculture, Land Reform and Rural Development Minister, Ms Thoko Didiza, elevated the latter point in her remarks. She noted that "research and innovation are critical in supporting smallholder and commercial framers, especially in responding to new challenges of climate change. Both governments and the private sector should increase investments in research."

With poverty having risen during the pandemic, the discussion by the Agriculture Ministers on how the sector could help reduce poverty is appropriate. For the Sub-Saharan Africa region, reducing hunger through agriculture development involves addressing numerous factors that have constrained the continent's agriculture growth over the past decade. This includes the commonly cited aspect of poor infrastructure and a much less talked about low levels of agricultural productivity or low yield per hectare. South Africa is an exception from the African continent, with notable improvement in productivity over the past two decades. Private sector investments in higher-yielding seed cultivars and adoption of agricultural machinery are among the factors that enhanced agricultural productivity.

In the rest of Sub-Saharan Africa, there are several reasons for lagging productivity in agriculture. One prominent reason is low levels of investment in research and development (R&D), a point that Minister Didiza raised at the United Nations session. Sub-Saharan Africa's agricultural R&D spending is equivalent to 0,38% of agricultural Gross Domestic Product.

Understanding the reasons behind these low levels of government's spending on agricultural research in the rest of Sub-Saharan Africa is a complex exercise. Still, primarily it is the fiscal constraints within countries, as the available national budgets have to prioritize pressing needs such as health, education, etc. Another important consideration is the political economy reality of R&D. Its funding cannot be easily stolen and is not largely suitable for cadre deployment and theft through patronage networks. In addition, the returns are only visible after 20 -30 years which is far beyond the immediate returns within politician's terms in political office. This could be in part why the Sub-Saharan African governments have failed to allocate enough funding for technological Innovation and research.

South Africa's exception has been made possible primarily by the private sector role-players across the agricultural value chain. The agricultural market liberalization in the early 1990s facilitated private-sector market participation in South Africa, resulting in productivity gains.

In essence, Minister Didiza's message about the need for an increase in investment in innovation and research is appropriate for South Africa. We have a dualistic agriculture sector – commercial and smallholder farmers - and strive to use technology to improve productivity amongst smallholder farmers. But the message is even more urgent and appropriate for Sub-Saharan Agriculture Ministers that attended the Pre-Summit. One way of attracting private sector investment in their countries will mean reviewing a range of policies that made private sector investors reluctant to participate thus far. These include a need to relax regulations that hinder the adoption of improved seed varieties crucial for productivity enhancement, and improvement in the land governance through the strengthening of land rights.

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