Why innovation is the answer to guaranteeing food security in Africa

The global food security challenge is simple: by 2050, the world must feed 9 billion people. The demand for food will be 60% greater than it is today, most notably in sub-Saharan Africa. In Zambia alone, the population is expected to triple by 2050. Solving this immense problem is no easy task, but it undeniably starts with agriculture, and an attitude open to change.

Food security needs to be considered in both the short and the long term. On the one hand a number of external factors, from climate change to crop parasites, immediately threaten the security of our food and the potential for agricultural producers to sustain a rapidly growing global population. However at a broader level, the challenge of food security is a long term project, where we must work towards guaranteeing reliable production and stable yields where all citizens have enough food for an active, healthy life. Our outlook must encompass short term threats along with long term stability.

As group chairman and director of MBI Group, a privately-owned group of companies rooted in Zambia, I have witnessed first-hand the challenges of food security. Neria’s Investments, a business central to MBI Group, has supplied fertilizer to the Zambian market since 2015. At our point of entry, Southern Africa was facing severe food shortages due to the El Nino weather phenomenon. In part due to Neria’s Investments efficient supply of fertilizer, Zambia was able to produce a food surplus and export vital produce to neighbouring countries facing a food shortage crisis.

From our experience, the key to solving many of the challenges faced in sub-Saharan Africa is innovation. If food security is to be guaranteed long term, both farming techniques and the attitudes towards them must be open to change. In particular, the region must fully embrace sophisticated irrigation methods and the regular use of fertilizer to increase yields. This is vital – without a revolution in production Africa will fail to feed its ever-growing population. We must also adapt to changing external threats. As parasites evolve and the weather patterns fluctuate, our approaches to them must adapt, particularly if we are to create stability. When it comes to addressing the scourge of armyworms and other crop parasites, the cause of horrific damage across sub-Saharan Africa recently, introducing effective and innovative soil management techniques are key. These include thorough crop rotation and soil tillage to terminate or disrupt pest life.

The positive is that sub-Saharan Africa has enormous capacity for food production. We know that barely a third of the irrigation potential provided by the continent’s main rivers is harnessed, while the use of fertilizer and pesticides lags behind every other region in the world. Utilising new technology, adopting high yield seeds, the implementation of IT, and the selection and use of the correct nutrient rich fertilizers, will all play a vital role in increasing agricultural output. Innovation lies at the heart of all these necessary changes, because in order to bring about lasting change, farmers and suppliers will have to bring in new ideas and be open to change. The major challenge to all this is the fact that more education and training is required. It is easy enough to suggest new practices and claim that they would make all the difference but implementing them is far harder. The majority of farmers in sub-Saharan Africa are small scale farmers who may be reluctant to adopt modern techniques amid the risks of change. Farmers need to not only be made aware of the modern technology available, but also convinced of the advantages of adopting them.

This is where Europe comes in. The content has unrivalled expertise in delivering the highest yields per hectare. So much time is spent working on EU-Africa partnerships, and thankfully last year agriculture was a major focus in a new framework for EU-Africa relations. Part of the plan included enhancing vocational training and education, and this is exactly what we need more of. Read more