Farming Sustainability Series Part II: Sustainability in Australian Farming Systems
Professor Kadambot Siddique

Key Points

- While there is some potential for large-scale corporate farming in Sub Saharan Africa, this is not the answer to food sustainability issues on most of the continent. Rather, the focus should be placed on empowering smallhold farmers.

- One of the primary challenges facing the Australian agriculture industry is raising input costs and competition from low cost competitors. The falling profitability of the industry is leading to a brain-drain and succession issues, which are exacerbated by declining research and investment, and declines in the quality of extension services.

- Despite threats to the sustainability of current structures in Australian agriculture, great opportunities exist also. To capitalise on these, Australia must take a much more integrated approach to the management and branding of the industry and to raising public awareness about issues facing farmers.

Summary

In the second feature interview of the farming sustainability series, FDI discusses the sustainability of the Australian farming sector with UWA Institute of Agriculture Director, Professor Kadambot Siddique. After discussing the potential for large-scale farming developments in Sub Saharan Africa, Professor Siddique outlines what he considers to be the major issues undermining the sustainability of current farming practices and agricultural policies in Australia. Sustainability in agriculture is not simply a function of positive or negative environmental impacts but also depends on how the organisation of the sector
affects profitability and the future of rural communities. Siddique goes on to identify some of the key changes he believes are necessary to ensure the longevity of Australian agriculture.

Commentary

FDI: Do you think that there is much role for large-scale farming development in Sub Saharan Africa?

KS: I believe that there is the potential for some large-scale corporate farming. The land is there, but it is a very sensitive issue with the locals. There are pockets of land available and if there were partnerships with the government and farming communities, the possibilities are there. We need to collect relevant information on soil types and land use through GIS. With environmental issues taken into consideration, some pockets can be converted into modern, forward-looking large commercial farms.

But that’s not the solution to Africa’s food sustainability. The focus should be on the smallholders. What needs to happen is to increase food production for local consumption and for targeted export markets. For me, the first and most important aim should be to look after the poor and empower smallholder farmers (especially women) in sub-Saharan Africa and other parts of Africa. We need to focus on employment creation, value adding and food processing. In Africa in particular, better extension services are urgently needed and we require technically sound people for that. Young people are needed to work in the rural areas, preferably Africans who understand the culture and take the best bet technology available for African environments. There are a lot of simple technologies that can be used, for example improved varieties, small planting machineries, micro-dosing of fertilisers and so on. This will help smallholders to produce enough food for them and then at the same time, as the technology is taken up, eventually extra amounts are produced and that generates cash income. Extra income from crops and animal production can build the confidence and resilience of the farming community.

FDI: What are some of the key issues that you consider to be undermining the sustainability of Australian farming?

KS: One of the primary challenges facing the Australian agricultural industry is input cost. Australia is facing a lot of competition from low cost producing emerging countries. There is a great deal of agricultural production happening in Brazil and in parts of the former Soviet Union. Brazil is competing with us in the beef market, Kazakhstan and Uzbekistan in wheat, and then of course, New Zealand (not a low-cost country) is always competing with us on fruits, vegetables, dairy products and meat. The cost of production in Australia has increased and is still increasing. That is the biggest issue. Added to this, the terms of trade and productivity trend are declining.

The next challenge is the inherent variability (frequent droughts, poor soil fertility etc.) in our environment and this is exacerbated by climate change. We had ten years of drought in
Western Australia and are even now going through drought. That is a very big threat for us; it has always been there, but the frequency of such event has increased in recent years.

So we have profitability and competition issues, environmental issues and climate change, and I think we have issues with regards to new generation farmers, researchers and extension specialists coming into agriculture. I’m not too pessimistic – but we need to look at succession planning. Profitability needs to be demonstrated, because if there is no profitability, young people certainly won’t take up farming.

Another thing we need to do is to become faster at adopting technologies. Technology is developing at a rapid rate and we need a younger generation in farming to encourage its uptake. There is GIS, GPS, variable rate technology, GM crops and information technology, all of those things. While technologies have been developing quickly, I think that overall research and development and investment have declined during the last 10 to 15 years. The investment in agricultural research in Australia has been static or declining since the mid-1980s and as a result the research intensity has been declining. Realistically in agriculture, it takes a technology about ten to twenty years to be developed and adopted. So decline in R&D spending will have serious impacts in the coming years.

The extension services in Australia (especially public agencies) are also disorganised and declining. The focus of the agricultural departments has changed, but I believe that the governments still have a role to play. Increasing private investment is also necessary and farmers contribute a great deal to that through Research and Development Corporations. The combination of falling profitability, competition, environmental challenges and insufficient research and development are serious issues that threaten the long term sustainability of the Australian agricultural sector.

FDI: What would you identify as the innovations required to ensure that farming practices in Australia can sustainably meet the nation’s future food needs?

KS: Australia needs to take a much more integrated approach to the management and branding of the agriculture industry. There is a whole lot of division within the industry and we need a united approach in all aspects of agriculture. We should, for example, really be joining forces with New Zealand to create an Australia-New Zealand branded dairy industry. New Zealand has had more success launching their brand on the international market. In dairy, nearly 70 per cent of world trade is dominated by New Zealand- a very small country. Demand from Asia is growing and so far we have not taken a sufficiently proactive approach to capitalising on that demand. We need to target more, particularly to the wealthy part of the market.

There are challenges in this area, but there are opportunities as well. By focusing on markets, selling our brand and moving beyond lip-service to identifying and communicating our selling points we can retain a competitive advantage in the global market. We’ve got the land, the environment and our products are clean, green and safe. To support this we need a much tougher regime to ensure food safety and quality; that is of prime importance. If our products are guaranteed food safe; then the higher end of the market will buy.
It is also necessary to educate our urban population about the importance of farmers and the food production sector. People don’t understand how lucky we are to get the products that we do - fresh fruits, fresh vegetables, grains, diary and meat etc. We need more education in schools about the importance of agriculture and food production systems. Agriculture in Australia has got a future but it has got a lot of challenges. Australia is not going to be a big player in the global market but it has got a good position in the market place especially the higher end of the market. By building the Australian brand name and improving product integration we can translate more of a return to the growers and all involved in the industry.

Foreign investment in agriculture is also important. Capital injection is absolutely essential in agriculture. The Northern agricultural arc needs to be looked at for development. This area needs emphasis so that we can diversify production and produce a broader range of products from than what is produced in southern Australia. In the north we need to look at developing pockets and corridors for farming rather than widespread broad-acre farms. The focus should be on areas of intensive production that use water efficiently and minimise environmental impact. Land capability studies are required to identify optimum areas for water and port access. Then we can develop intensive production systems lined up with markets.

FDI: Professor Siddique, thank you for your insights.

*****

Winthrop Professor Kadambot Siddique is the Hackett Professor of Agriculture Chair at the University of Western Australia and is the Director of The UWA Institute of Agriculture. Professor Siddique is an internationally recognised leader in crop science and agriculture and has been instrumental in the establishment of the Western Australian pulse industry. He has also worked on the development and management of agricultural projects in Southern Asia, the Middle East, North America and Europe.

In 2013, Professor Siddique was nominated as a WA finalist for the Australian of the Year Award for his contribution to agricultural science. He was also involved in organising UWA’s ‘2050 Food’ Lecture Series in 2013 that examined issues surrounding Australian and global food security and production.

*****
Any opinions or views expressed in this paper are those of the individual interviewee, unless stated to be those of Future Directions International.