

African cotton has tremendous scope to produce high yields in a sustainable manner with low input costs and fewer inputs of water and agrochemicals. Effective farm welfare policies, good agricultural research, efficient transfer of technologies to farms, fair market practices, and establishment of textile value chains will eventually determine the future of African cotton. Following a July 2018 network meeting in Harare, Zimbabwe, three consecutive special volumes of the ICAC RECORDER on the theme 'This time for Africa' were planned. This volume is the third in the special series on Africa. I realise that there is still more that remains to be said on the efforts made so far, and some new efforts that need to be initiated. Therefore, the June 2019 ICAC RECORDER will carry the final set of articles to complete the four-volume special series on 'This Time for Africa'.

This volume has three articles that address some core issues. At the ICAC Plenary Meeting held in Abidjan, Côte d'Ivoire, in December 2018, Dr. Joe Kabissa made an impressive and impactful presentation on 'Insecticide Management: Progress and Prospects in Africa'. His article in this volume documents his views. Dr. Kabissa examines the issues related to insecticide management in Africa and emphasises the need for stakeholders to have a clear understanding of the implications related to the externalities associated with insecticide use, and how they should be minimised in the interest of sustainable cotton production. In their lucidly written article 'Extension Methods Relevant to Africa', Dr. Usha Rani and Dr. Prakash describe the state-of-the-art extension technologies that could be suitable for small-scale production systems in remote regions of Africa. The third article, by ICAC Economist Ms. Lorena Ruiz and myself, explores the employment potential in the textile-apparel industry in sub-Saharan Africa, which could be a game-changer for the continent.

The articles in the three Africa-focussed volumes of the ICAC RECORDER create confidence that Africa could easily double its cotton yields in the next few years. Needless to say, 'Where there is a will, there will be a way'. With great natural resources of sunlight, adequate heat, good soils and good rains, African cotton has all the factors required for good growth and high yields. Global scientific research has shown that for high yields, the natural resource energies — sunlight, water, heat and nutrients — must be used more for the production of economically important fruiting parts rather than for the production of low-value plant biomass. These principles of 'source to sink' for a higher 'harvest index' have been applied in Australia, Brazil, China, Mexico, Turkey and the USA, and the result is that these countries harvest 1,000 to 2,500 kg lint per hectare (kg/ha), compared to 160-450 kg/ha in African countries.

One of the arguments has been that cotton is grown in Africa under rainfed conditions, and therefore yields will not increase. But the cotton yields in Brazil are high — more than 1500 kg/ha, despite being completely rainfed. The lessons learnt from the six countries mentioned above show that high yields are not necessarily due to irrigation, high agrochemical inputs, and complex management practices. A combination of plant architecture, planting geometry, canopy management, and synchronization of the crop's water, nutrient and light requirements, helped many countries achieve high yields with or without biotech cotton and costly inputs. These simple technologies could help Africa go a long way toward achieving high yields and enhancing profitability.

Africa needs self-confidence. It needs good, local cotton scientists who understand the domestic terrain and challenges — and whose research can knit together simple strategies that are tailored to fit the local African context and suit the local agricultural socio-economic dynamics of small-scale producers. With the existing large network of mobile phones and apps, technology transfer is no longer the nightmare that it used to be — as it was in prior years. With a combination of good research, good agri-extension services, and a good value chain, Africa will be poised for a breakthrough in yields, profitability and sustainability. To surmise, it would not be wrong to state that Africa has all the natural resources and talent; but Africa is a giant in slumber. The time has now arrived to arise, wake up, and show Africa's mettle to the world.