



Editorial

The June 2019 volume of the ICAC RECORDER contains the final set of articles to complete the year-long, four-volume special series on 'This Time for Africa'. I enjoyed every bit of my time working on the articles, because they reflect hope. This edition has four articles. Prof. Serunjogi and his colleagues make an incisive analysis on almost all interacting effects in the cotton production system to lay down a road map to boost yields in Africa. Their article is a comprehensive synthesis of thoughts on plant breeding, production practices, pest management, agronomy principles, and policy factors that can pave the way for high yields of superior fibre with sustainable practices. The article concludes by reiterating the need for an international cotton research institute under the Consultative Group on International Agricultural Research (CGIAR) system.

Mr. Kris Terauds describes the UNCTAD project initiatives on 'Promoting cotton by-products in Eastern and Southern Africa.' The project enhances resource capacities in Africa and pursues new opportunities for adding value to cotton by-products such as seeds and cotton stalks with the objective of increasing income opportunities for farmers and entrepreneurs, especially in rural areas for an overall resilient cotton sector. Mr. Terauds concludes that *"there is potential to establish profitable processing businesses in Africa for selected cotton by-products, such as absorbent cotton wool and biomass briquettes and pellets ... Generating additional income in the cotton value chain can help increase seed cotton prices paid to farmers and revive their incentives to grow more cotton."* Ms. Daniela Jann and Mr. Tobias Bidlingmaier outline the results of a mega-project under the Competitive African Cotton Initiative (COMPACI), which was operational in 12 countries from 2009-2016, into two phases with the overall objective of promoting sustainable cotton cultivation and the improvement of living conditions of smallholder farmers in Africa. The collaborating partner-companies of COMPACI trained almost one million smallholder farmers in sustainable agricultural techniques in sub-Saharan Africa, reaching out to 25-30% of the cotton farmers. The project succeeded in influencing 80% of COMPACI farmers to apply good agricultural practices. Dr. Zerihun Desalegn describes the pilot interventions for sustainable cotton production, made in a project titled 'sustainable cotton initiative Ethiopia (SCIE)' that established a business case for production of good quality cotton through sustainable means to increase profitability.

The four articles in this volume and all the articles in the previous three volumes are analytical and express ideas with promise for cotton in Africa. In these articles, researchers examined the challenges and problems, and articulated their views on the possible strategies for a positive change. The majority of the articles surmised that low yields and underutilisation of cotton and its by-products are the biggest challenges in Africa.

About 88.0% of raw cotton is exported from Africa. Rather than export lint, if the fibres are processed locally, African cotton has the potential to provide additional employment to 5.5 million people and generate export revenues worth US\$30 billion to US\$90 billion. The underutilised cotton by-products have a potential to generate revenues worth about US\$400 million and generate additional employment. Unfortunately, Africa has neither exploited cotton fibres nor the cotton by-products for value addition, employment or trade revenues. It is not as if there were no attempts made. There have been many projects and several great initiatives to improve the livelihood of cotton farmers and the African cotton sector. The fact remains that despite all efforts, the yields in Africa remain the lowest in the world and have been stagnant over the past 40 years.

Are the yields destined to be low forever? The answer depends on whether Africa is willing to experiment and try. An African researcher once remarked to me that *'cotton yields can be increased only with hi-fi technologies and Africa cannot afford them'*. Interestingly, yields across the world have increased by simply improving the 'harvest index', which hinges on 'source-sink' relationship of water and nutrients.

Improving the harvest index involves simple changes in varietal breeding and suitable agronomy to ensure good sunlight and efficient use of water and nutrients by the fruiting parts of the plant and less waste in unproductive biomass. These concepts have been reinforced in the arguments made in several of the articles in the four volumes.

These ideas are expected to provide a background for African researchers to experiment and try for a change — a change for the better. Indeed, where there is a will, there is a way. Africa needs the scientific will and an enabling political environment for a breakthrough to happen.