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## **Statement of the 78<sup>th</sup> Plenary Meeting**

*‘Global Leadership: Pushing Cotton’s Boundaries’*

1. The International Cotton Advisory Committee (ICAC) met in Brisbane, Australia between 2 – 5 December 2019 for its 78<sup>th</sup> plenary meeting since the establishment of the committee in 1939. The meeting was attended by 307 persons including representatives from 23 Member governments, 5 international organizations and 5 non-member countries.

**2. Country Reports:** A new methodology to allow for discussion on the individual written Country Statements was introduced. Advance statements had been provided by 14 countries and two international organisations, based on which delegates were able to ask informed questions of each other on specific areas of interest from the Statements. The session achieved increased interactivity among delegates and the Secretariat will continue to examine this methodology at the next Plenary, but with further modifications to improve participation.

**3. Global Megatrends for Cotton:** Seven megatrends were identified as important to the future of the cotton industry. Change and constant innovation will be needed to address these trends shaping agriculture, especially climate change, geopolitical realities and consumer choices. The challenges should be seen as opportunities requiring intensive research, as well as consumer understanding and engagement.

**4. Technical Seminar: Cotton Traceability Technologies:** Presenters highlighted that consumers are increasingly demanding information on the origin and history of the products, putting pressure on retailers to provide transparency. Traceability technologies are expected to establish authenticity of fibre quality, establish fibre origins, quantify fibre purity and track the processing path from fibre to fabric. While some technologies can trace origins and enable quantification of the fibres in a blend, others add markers to fibres and claim authentic tracking of the marker along the value chain. Implementing traceability technologies carries a cost for businesses. The Plenary discussed whether Governments should have a role in regulating traceability and noted that biosecurity and accurately informing the customers remain important.

**5. Report from SEEP:** SEEP has reviewed a draft core set of farm-level, outcome/impact indicators (16) to measure and report progress towards the Sustainable Development Goals (SDGs) in the cotton and coffee sectors and it has endorsed the indicator testing planned to take place in 2020. The draft core set was developed as part of the Delta Project and largely builds on the ICAC/FAO framework on ‘Measuring Sustainability in

cotton farming systems' published in 2015. Orientating sustainability measures towards the priorities endorsed and established by the SDGs will enhance the opportunities to adopt a language and a purpose that is shared across the public and private sectors and to forge new partnerships to achieve the common goal of sustainable agriculture. The indicators will be re-evaluated for their performance after a field test in 2020.

**6. Reports from the Secretariat:** Consumption drives demand and little growth in cotton consumption is expected in 2019/20 as global economic growth is slowing. Trade barriers and trade disputes have weakened import and export growth and have positioned the global economy into a synchronized economic slowdown that has reduced the pace of manufacturing and investment. Trade disputes create uncertainty for businesses and lower investment activity and trade deals. Quick resolutions are therefore needed to return confidence to the market.

**7. ICAC's report on government assistance to the cotton sector in 2018/19:** Based on the ICAC report featuring information from 10 countries, assistance to the cotton sector has been estimated at \$5.4 billion in 2018/19, which is a moderate decline from \$5.5 billion in 2017/18. In 2018/19, assistance averaged 16 cents per pound, down from 17 cents per pound.

**8. Cost of Production:** The cost of production remains a major challenge and the introduction of small-scale machinery and Integrated Pest Management can reduce cultivation costs. The costs and returns of introducing GM seeds should also be carefully examined. To increase yields, major steps should be made to optimise high density planting and canopy management. Governments are encouraged to promote the use of de-linted seeds in suitable climatic regions.

**9. Disruptive Technologies:** The Committee was informed of studies on fabric microfibre release during laundering, which show that natural-based fabrics released more fibres than polyester. However, cellulose-based materials like cotton biodegrade very rapidly in aerobic aquatic environments when compared to microfibres released by polyester which biodegrade only over many years and eventually may enter the food chain.

On the circular economy, delegates learnt that even though the circular economy is an economic system aimed at eliminating waste and the continual use of resources, virgin fibres are essential for the system to work, as virgin fibres assist in maintaining the strength and the quality of the final product.

On soil health, the Committee was informed about the importance of maintaining soil physical properties; any decline will take considerable time and cost to correct. Healthy soils are the basis of healthy crops and biodiversity enhancement.

**10. Germplasm Exchange:** Extensive plant breeding efforts and selection for desired traits have resulted in narrowed genetic diversity due to the loss of several traits in the commercial varieties. Therefore, there is a need to explore the diversity of germplasm by investing more in cotton breeding. Germplasm exchange is low due to a lack of information and also a lack of means and capabilities of breeding teams to address and integrate genetic variability into breeding programs, notably in developing countries. ICRA is proposing to set up an international forum for germplasm exchange. It was emphasised that germplasm evaluation and exchange was important and there was a need to enrich collections continuously by applying novel methods for cotton improvement while considering countries' seed breeding policies. Germplasm improvement could greatly benefit from activities such as sharing knowledge and technologies, wider international collaboration, training and education of new generation cotton scientists and increasing investments to expedite the commercialisation of new technologies.

**11. Responding to Climate Change:** Climate change impacts vary around the world and may result in reduced water availability, higher potential water use, increased incidents of extreme weather events and changes to the distribution of pests and diseases. Strategies to adapt to these changes should include international cooperation for increasing yields, improving production efficiencies and adaptive management focused on cotton productivity. To improve yields, the Committee was informed that there needs to be an improvement in crop resilience to stress, efficient water usage and soil health. The Committee therefore urges governments to encourage the development of climate-resilient cultivars with high water- and nutrient-use efficiencies with the potential to adapt and withstand unpredictable drought, changes in heat, waterlogging, increased insect pests and diseases. It also recommends that heat tolerant varieties be developed and that active stress management and optimised growth regulators be used in climate changing conditions. In addition, regionally specific assessments, systems-based approaches and transgenic/digital technologies will be vital. It is recommended that governments evaluate the possibility of introducing an effective and accurate information system for the growers.

**12. Breeding and Producing High-Yielding and High-Quality Cotton Planting Seed:** New cultivars can address production constraints, improve yield and fibre quality, and be targeted for each production region. New cultivars will not solve some major production issues. These need to be addressed by changes in soil and crop management. Successful breeding programs require stringent processes for production and quality assurance to meet the enormous potential. Increased sharing of information from existing germplasm collections around the world are needed to address the challenges and opportunities.

**13. Insect and Weed Resistance Management:** Two key factors in the success of resistance management plans in both weeds and insect management are that plans are supported by science, and second, that stewardship is supported by an industry extension and communication program. Insects in particular do not recognise borders and area-wide management is very important. The Committee received information on a commercial-based trap that can be used to detect and conduct real-time monitoring of fruit flies in a rapid 2-3 day loop. The case studies highlight that innovation in digital technology is removing barriers and new products are being developed that may facilitate long-term suppression of pest populations.

**14. World Café – Technology Transfer Platforms for Small Farm Holders in Developing Countries:** The Committee conducted a World Café conversation on two innovative technology projects: Virtual Reality Cotton Training and a Soil & Plant Health Digital Application (App). Virtual Reality holds great potential for use throughout the cotton supply chain. The Soil & Plant Health App is intended to assist in increasing yields, especially for smallholder farmers with little or no literacy. Delegates shared their opinions on future areas for development, discussed possible organisations as partners, and cotton-focussed technologies that the Secretariat should consider for development. The Committee encourages the future development of innovative projects that benefit small farm holders particularly in Africa and Asia

**15. Steering Committee:** The Mission, Vision and Values proposed by the Standing Committee were approved and adopted by the Committee. The Committee noted the Statement Paper reviewed and approved by the Private Sector Advisory Panel (PSAP).

**16. Topic of 2020 Technical Seminar:** The Committee decided to hold the 2020 Technical Seminar on the topic of, '*Advances and Challenges of Hybrid Cotton Technology*'.

**17. Topic of 2020 PSAP Presentation:** Topic suggested by the PSAP for the 2020 Plenary Meeting is '*Informational Labelling of Textile Products*'.

**18. Future Plenary Meeting:** The Committee has accepted an invitation from the European Union to host the 79<sup>th</sup> Plenary Meeting during the last week of November 2020 in the city of Seville, Spain.

**18. Appreciation to the Host Country:** The Committee thanks the people, the organising committee and the government of Australia for hosting the 78<sup>th</sup> Plenary Meeting. Delegates commented very favourably on the quality of the venue, the efficiency of the preparations, the content of the programme and of course, the warmth of the Australian hospitality.