



PROCEEDINGS

of the 74th Plenary Meeting



From Farm to Fabric: The Many Faces of Cotton

Mumbai, India
December 2015



Discover
Natural
Fibres
Initiative

INTERNATIONAL COTTON ADVISORY COMMITTEE

PROCEEDINGS OF THE 74th PLENARY MEETING

“From Farm to Fabric: The Many Faces of Cotton”



ICAC
Washington DC USA

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Price: US\$70.00 (hard copy)
US\$45.00 (electronic version)

FOREWORD

On invitation from the Ministry of Textiles, Government of India, the 74th Plenary Meeting of the International Cotton Advisory Committee (ICAC) took place from December 6-11, 2015 in Mumbai.

The International Cotton Advisory Committee is an association of governments having an interest in the production, export, import and consumption of cotton. It is an organization designed to promote cooperation in the solution of cotton problems, particularly those of international scope and significance.

The functions of the International Cotton Advisory Committee, as defined in the Rules and Regulations, are

- To observe and keep in close touch with developments affecting the world cotton situation.
- To collect and disseminate complete, authentic, and timely statistics on world cotton production, trade, consumption, stocks and prices.
- To suggest, as and when advisable, to the governments represented, any measures the Advisory Committee considers suitable and practicable for the furtherance of international collaboration directed towards developing and maintaining a sound world cotton economy.
- To be the forum of international discussions on matters related to cotton prices.

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<https://www.icac.org/mtgs/Plenary/74th-Meeting/Agenda>

STATEMENT OF THE 70th PLENARY MEETING

"From Farm to Fabric: The Many Faces of Cotton"

1. The International Cotton Advisory Committee (ICAC) met in Mumbai, India, from December 7 to 11, 2015 for its 74th Plenary Meeting since the establishment of the Committee in 1939. The meeting was attended by 398 persons, including representatives from 28 Members, 9 international organizations and 13 nonmember countries.
2. **Cotton production falls below demand.** The Secretariat reported that, after five consecutive seasons of excess supply, overall production had fallen below the estimated consumption in the 2015/16 season. World stocks remain at very high levels. International prices remain weak. Cotton demand continues to expand at a slow rate as a result of sluggish world economic growth and strong competition from synthetic fibers, especially polyester.
3. **Government support measures reach record levels.** In its report on government support to cotton, the Secretariat estimated that assistance reached US\$10.4 billion in 2014/15, the highest level since data began to be compiled in 1997/98. Large stocks accumulated as a result of government intervention from 2011/12 to 2014/15 would remain the key factor in determining the fundamentals of the cotton market for the foreseeable future.
4. **Promotion of demand for cotton requires a multifaceted approach.** In order to improve the prospects for cotton, the Committee endorsed the recommendations received from the Private Sector Advisory Panel, including:
 - Members should ensure that fiber-content labels on textile products be more visible, in order to allow consumers to make informed choices and also promote transparency in the supply chain;
 - The Secretariat should conduct a study on the economic factors underlying the growth of polyester production and demand, thus enabling Members to better understand the dynamics of competition among fibers; and
 - Members should continue to approach the cotton sector in a holistic manner, by implementing measures to encourage an increased diversification of the uses of cotton, including composites and technical textiles, and a wider use of cotton by-products throughout the value chain, to add value to the sector.
5. **Need for measures to facilitate international trade.** The Committee endorsed the recommendation received from the Private Sector Advisory Panel (PSAP) regarding the need to standardize phytosanitary certificates and recommended that the Secretariat work with Members to raise awareness of this issue within the World Trade Organization. The PSAP also noted that requirements for fumigation of cotton varied widely among countries and instructed the Secretariat to obtain further information on possible ways in which to reduce such differences.
6. **Enforcement of arbitration awards must be improved in order to promote the economic sustainability of the world cotton trade.** The Committee was informed that, although contractual disputes had decreased in the last year, improvements are required in the enforcement of arbitration awards. All members of the Committee are signatories of the 1958 Convention on the Recognition and Enforcement of Foreign Arbitral Awards (commonly known as the New York Convention), but claimants are often unable to get their awards enforced. This was having a negative impact on cotton trade and consumption. Members were reminded of their obligations to ensure full compliance with the terms of the New York Convention. Suggestions included ensuring judges are trained in the application of foreign arbitral awards and making sure that duly constituted commercial courts have the necessary expertise for achieving settlement in a timely and efficient manner.
7. **ICAC Members urge progress in negotiations at the World Trade Organization.** A representative of the World Trade Organization presented a summary of the current situation regarding cotton in that body. The ICAC reaffirmed its support for a multilateral trading system under the aegis of the WTO. WTO members had committed themselves to treat cotton "ambitiously, expeditiously and specifically". The 10th Ministerial Conference of the WTO, which will be held in Nairobi in December 2015, constituted a key opportunity to demonstrate concrete progress in the removal of government measures that distort the production and trade of cotton.
8. **Sustainability indicators begin to be tested.** The Committee received a report from its Expert Panel on the Social, Environmental and Economic Performance of Cotton Production (SEEP) that highlighted field testing of the indicators and framework contained in the joint ICAC/FAO publication "Measuring sustainability in cotton farming systems: Towards a guidance framework". The Committee commended this work and recommended that the SEEP Panel continue to coordinate and monitor the testing of the indicators and guidance framework. The framework, however, should remain a tool to be adapted to the reality of each country. The Committee also noted the increasing use of Life Cycle Assessment-based tools to assess the performance of cotton and that of other raw materials (such as man-made fibers and wool) used in the textile and apparel supply chain. A need exists to evaluate how these tools are being used, as well as their potential impact on cotton farmers and on the cotton supply chain.

9. **Sustainability grows in importance for retailers and consumers.** The Committee appreciated a panel discussion on the views on cotton of retailers, which revealed that the fashion and home textile sectors have ambitious goals in terms of sustainable sourcing. Their customers increasingly demand information about the sustainability of the products they purchase. Concerns about sustainability, including transparency and traceability, will become more relevant over time.
10. **Reduction in use of insecticides.** During the Technical Seminar on “Elimination of Insecticides from Cotton Production: Is this Possible?”, the Committee received expert reports. Some experts expressed confidence that cotton can be successfully grown without insecticides; other experts stated that it was not yet possible and noted the importance of Integrated Pest Management (IPM). Encouraging statistics were presented on reduced insecticide use, especially through IPM techniques, in many countries. It was observed that cotton has a much higher yield potential in certain cases than is currently realized. Improved cotton varieties are important, but the interaction between variety and management is vital for realizing optimum yields. While the role of biotechnology approaches will continue to expand in the future, breeding will not lose its significance. Molecular marker-assisted breeding is being adopted and the genetic engineering of photosynthesis has great potential for improving yields on the physiology side. Insecticide use may lead to various consequential results, including: increased use of insecticides due to resistance; reduced reliance on natural biological control; emergence of new pests. A system approach is needed that encourages the use of ecological options. Many non-chemical insect control options, including biological management, are available that are simple and easy to apply, but which must be used on an area-wide basis.
11. **Climate change is affecting cotton production.** Several countries reported that weather patterns are becoming increasingly unstable as a result of climate change, with consequent impacts on cotton production. Members welcomed the news that the Secretariat had commissioned a special study on climate change and cotton production in modern farming systems. It was noted that measures to increase soil organic matter can help maintain long-term soil fertility, while at the same time contributing to climate change adaptation and mitigation. Members further noted that a positive outcome at the Paris Climate Change Conference would be a desirable step to attenuate the ongoing effects of climate change.
12. **Additional research into mechanized harvesters for smallholders is required.** A session on mechanized harvesters for use in small landholdings revealed that commercially viable machines are in advanced stages of development in some countries but not yet widely available. The Committee noted that the decrease in availability of rural labor means that further investigation into practical solutions, such as mechanical harvesting, was required.
13. **Amendments to statutes enable the accession of the European Union.** The Steering Committee approved amendments to the Rules and Regulations of the ICAC that will enable the accession of the European Union as a single member. During the first semester of 2016, the Standing Committee will negotiate transitional arrangements and deal with other outstanding issues with the EU, in order to enable accession of the same at the beginning of the 2016/17 fiscal year. ICAC members expressed their satisfaction with the possibility of EU membership, which would strengthen their organization.
14. **Improved statistics are crucial for better decision-making.** A breakout session on the collection, compilation, analysis and dissemination of cotton statistics generated a wide-ranging discussion of ways in which to improve their reliability and availability. Government and the official data will remain the primary source of data on the overall performance of cotton. Accurate and timely statistics are vital for informed decision-making.
15. Topic of the 2016 Technical Seminar. ICAC members approved the recommendation of the Committee on Cotton Production Research that the 2016 Technical Seminar should be dedicated to the topic of “Emerging Pests in Cotton and their Control”.
16. World Cotton Research Conference. The Committee received a report on preparations for the 6th World Cotton Research Conference (WCRC-6), which will be held in Brazil in the city of Goiânia, Goiás, from May 2 to 6, 2016. Registration and abstract submission are now open and additional information on the Conference is available at www.wcrc-6.com. The WCRC-6 will be organized under the auspices of the International Cotton Researchers Association (ICRA), with major support from the ICAC.
17. Next meetings. The 75th Plenary Meeting will be held in Islamabad, Pakistan, from October 31 to November 4, 2016. The 76th Plenary Meeting will be held in Mozambique.
18. Appreciation for the hospitality of India. The Committee thanked the people, the Organizing Committee and the Government of India for their hospitality in serving as host of the 74th Plenary Meeting. Delegates complimented the hosts on their warm reception and the quality of the venue provided for the Plenary Meeting.

**ICAC****SUPPLY AND DISTRIBUTION OF COTTON****December 9, 2015**

Seasons begin on August 1

	2010/11	2011/12	2012/13	2013/14	2014/15 Est.	2015/16 Proj.
	Million Metric Tons					
BEGINNING STOCKS						
WORLD TOTAL	9.362	10.222	15.258	18.038	20.111	22.02
CHINA	2.688	2.087	6.181	9.607	12.088	12.85
USA	0.642	0.566	0.729	0.903	0.651	0.98
PRODUCTION						
WORLD TOTAL	25.453	27.844	26.718	26.277	26.238	23.15
INDIA	5.865	6.239	6.205	6.770	6.507	6.27
CHINA	6.400	7.400	7.300	6.929	6.480	5.26
USA	3.942	3.391	3.770	2.811	3.553	2.90
PAKISTAN	1.948	2.311	2.002	2.076	2.305	1.90
BRAZIL	1.960	1.877	1.310	1.734	1.551	1.48
UZBEKISTAN	0.910	0.880	1.000	0.940	0.885	0.86
OTHERS	4.429	5.746	5.131	5.018	4.957	4.50
CONSUMPTION						
WORLD TOTAL	24.611	22.782	23.559	23.883	24.224	24.36
CHINA	9.580	8.635	8.290	7.517	7.517	7.33
INDIA	4.472	4.231	4.762	5.186	5.359	5.52
PAKISTAN	2.170	2.121	2.216	2.476	2.497	2.25
EAST ASIA	1.833	1.780	2.139	2.312	2.533	2.74
EUROPE & TURKEY	1.550	1.498	1.565	1.615	1.584	1.65
BRAZIL	0.958	0.897	0.910	0.862	0.797	0.80
USA	0.849	0.718	0.762	0.773	0.778	0.81
CIS	0.577	0.545	0.581	0.614	0.602	0.60
OTHERS	2.621	2.357	2.335	2.528	2.557	2.68
EXPORTS						
WORLD TOTAL	7.690	9.828	9.986	8.991	7.705	7.36
USA	3.130	2.526	2.836	2.293	2.449	2.23
INDIA	1.085	2.159	1.685	2.014	0.914	1.01
AUSTRALIA	0.545	1.010	1.305	1.037	0.521	0.54
BRAZIL	0.435	1.043	0.938	0.485	0.851	0.77
CFA ZONE	0.476	0.597	0.829	0.974	0.885	1.02
UZBEKISTAN	0.600	0.550	0.653	0.650	0.594	0.53
IMPORTS						
WORLD TOTAL	7.749	9.784	9.606	8.670	7.605	7.36
CHINA	2.609	5.342	4.426	3.075	1.804	1.21
EAST ASIA	1.826	1.997	2.355	2.355	2.631	2.79
EUROPE & TURKEY	0.973	0.725	0.833	1.082	1.010	1.01
BANGLADESH	0.843	0.680	0.631	0.967	0.964	1.04
PAKISTAN	0.314	0.190	0.411	0.247	0.198	0.25
TRADE IMBALANCE 1/	0.058	-0.044	-0.380	-0.321	-0.100	0.00
STOCKS ADJUSTMENT 2/	-0.041	0.018	0.001	0.000	0.000	0.00
ENDING STOCKS						
WORLD TOTAL	10.222	15.258	18.038	20.111	22.024	20.81
CHINA	2.087	6.181	9.607	12.088	12.850	11.98
USA	0.566	0.729	0.903	0.651	0.980	0.85
ENDING STOCKS/MILL USE (%)						
WORLD-LESS-CHINA 3/	54	64	55	49	55	52
CHINA 4/	22	72	116	161	171	164
COTLOOK A INDEX 5/	164	100	88	91	71	

1/ The inclusion of linters and waste, changes in weight during transit, differences in reporting periods and measurement error account for differences between world imports and exports.

2/ Difference between calculated stocks and actual; amounts for forward seasons are anticipated.

3/ World-less-China's ending stocks divided by world-less-China's mill use, multiplied by 100.

4/ China's ending stocks divided by China's mill use, multiplied by 100.

5/ U.S. cents per pound.

«От фермы до волокна: многоликость хлопка»

1. В период с 7 по 11 декабря 2015 года в г.Мумбаи, Индия, состоялось 74-е пленарное заседание учреждённого в 1939 г. Международного консультативного комитета по хлопку (МККХ). В заседании приняли участие 398 человек, в том числе представители 28 правительств-членов, 9 международных организаций и 13 правительств-нечленов.

2. Хлопкопроизводство падает ниже спроса. Секретариат сообщил, что после пяти сезонов излишних ресурсов общий объём производства в сезоне 2015-16 г. упал ниже оценочной величины потребления. Мировые запасы по-прежнему находятся на очень высоком уровне, а международные цены остаются слабыми. Спрос на хлопок продолжает расширяться замедленными темпами в результате вялого роста мировой экономики и сильной конкуренции со стороны синтетических волокон, особенно полиэфира.

3. Правительственные меры поддержки достигают рекордных уровней. В своём докладе о правительственной поддержке хлопковому сектору Секретариат оценил, что в сезоне 2014-15 г. помощь достигла 10,4 миллиардов долларов США – самого высокого уровня со дня сбора данных в 1997-98 г. Накопление крупных запасов произошло из-за вмешательства правительств в период с 2011-12 по 2014-15 гг., что будет оставаться ключевым фактором при определении основных показателей хлопкового рынка на ближайшее будущее.

4. Содействие спросу на хлопок требует многостороннего подхода. Для улучшения перспектив хлопковой отрасли Комитет принял указанные ниже рекомендации, полученные от Консультативной группы частного сектора, включая следующее:

- Страны-члены должны обеспечить более ясную видимость этикеток, указывающих на содержание волокон, с тем чтобы позволить потребителям производить информированный выбор и содействовать прозрачности в цепи ресурсов;
- Секретариату надлежит провести исследование экономических факторов, свидетельствующих о росте производства и спроса на полиэфир, что позволит странам-членам лучше понимать динамику конкурентности среди волокон;
- Страны-члены должны по-прежнему подходить к проблемам хлопкового сектора всесторонним образом путём применения мер поощрения повышенного разнообразия методов применения хлопка, включая композиты и технические текстильные изделия, а также более широкого использования побочных хлопковых продуктов по всей цепи стоимости с целью добавления ценности в хлопковый сектор.

5. Необходимость принятия мер по содействию международной торговле. Комитет принял рекомендацию Консультативной группы частного сектора (КГЧС) относительно необходимости стандартизации фитосанитарных сертификатов и посоветовал Секретариату

работать совместно со странами-членами с целью поднять уровень информированности относительно этого вопроса в рамках Мировой торговой организации. КГЧС также отметила, что требования дезинфекции хлопка широко отличаются в различных странах, и поручила Секретариату получить дальнейшую информацию относительно возможных способов сокращения таких различий.

6. Исполнение арбитражных решений должно быть улучшено с целью содействия экономической устойчивости мировой торговли хлопком. Комитету сообщили, что несмотря на прошлогоднее уменьшение договорных споров необходимы улучшения в процессе исполнения арбитражных решений. Все члены Комитета являются подписантами Конвенции о признании и исполнении зарубежных арбитражных решений от 1958 г. (в большинстве случаев известную как Нью-Йоркская конвенция), хотя часто заявители не могут добиться исполнения своих решений. Это оказывало отрицательное воздействие на торговлю и потребление хлопка. Странам-членам напомнили об их обязанностях обеспечить полное соблюдение условий Нью-Йоркской конвенции. Предложения включали пункты о необходимости обучения судей методам исполнения зарубежных арбитражных решений и обеспечения наличия у правомочных коммерческих судов необходимых знаний для достижения соглашения своевременным и эффективным образом.

7. Члены МККХ настаивают на продвижении переговоров в Мировой торговой организации. Представитель Мировой торговой организации представил краткий обзор нынешнего положения хлопка в этом органе. МККХ подтвердил свою поддержку многосторонней торговой системе под эгидой ВТО. Члены ВТО согласились рассматривать хлопок «энергично, эффективно и конкретно». Десятая конференция ВТО на уровне министров, которая пройдёт в Найроби в декабре 2015 года, предоставляет существенную возможность показа конкретного прогресса в деле изыятия правительственных мер, которые искажают производство и торговлю хлопком.

8. Начало испытаний показателей устойчивости. Комитет заслушал доклад Рабочей группы по социальным, экологическим и экономическим характеристикам хлопкопроизводства (СЭЭХ), в котором освещалось полевое испытание показателей и основ, содержащихся в совместной публикации МККХ/ФАО под названием «Измерение устойчивости в системах выращивания хлопка: на пути к основам руководства». Комитет одобрил эту работу и вынес рекомендации о том, чтобы группа СЭЭХ продолжала координировать и следить за испытаниями показателей и основ руководства. Однако такие основы должны оставаться механизмом, который нужно принимать в соответствии с реалиями каждой страны. Комитет также отметил расширение масштабов использования механизмов на основе оценки жизненного цикла для определения характеристик хлопка и других сырьевых материалов (например, искусственные волокна и шерсть), которые используются в ресурсной цепи текстильных изделий и готовой одежды. Существует необходимость оценки того, как используются эти механизмы, а также их потенциального воздействия на хлопкоробов и цепь хлопковых ресурсов.

9. Рост устойчивости важен для предприятий и потребителей розничной торговли. Комитет выразил своё отношение к групповой дискуссии относительно взгляда на хлопок со стороны предприятий розничной торговли, в ходе которой говорилось, что отрасли моды и домашнего текстиля имеют амбиционные цели с точки зрения источника устойчивости. Их

заказчики всё в большей степени требуют информации об устойчивости покупаемой ими продукции. Озабоченности относительно устойчивости, включая прозрачность и отслеживание, с течением времени будут становиться всё более насущными.

10. Сокращение использования инсектицидов. Во время технического семинара по теме «Изъятие инсектицидов из хлопкопроизводства: это возможно?» Комитет заслушал доклады экспертов. Некоторые эксперты выразили уверенность в том, что хлопок можно успешно выращивать без инсектицидов; другие эксперты утверждали, что это пока ещё невозможно и отметили важность комплексной борьбы с вредителями. Были представлены ободряющие статистические данные относительно сокращения использования инсектицидов, особенно путём применения способов комплексной борьбы с вредителями во многих странах. Было отмечено, что в определённых случаях у хлопка есть гораздо более высокий потенциал урожайности по сравнению с нынешними оценками. Улучшение сортов хлопка является важным аспектом, но взаимодействие между сортом и рациональным использованием представляет существенную важность для определения оптимальной урожайности. Хотя роль биотехнологических методов в будущем будет по-прежнему возрастать, селекция не потеряет своей значимости. Принимается молекулярная рыночная селекция, причём генетическая техника фотосинтеза обладает большим потенциалом для повышения урожайности с физиологической точки зрения. Использование инсектицидов может привести к получению различных последовательных результатов, включая следующее: расширение масштабов использования инсектицидов в результате сопротивляемости; уменьшение степени доверия естественному биологическому контролю; появление новых вредителей. Необходимо разработать систематический подход, способствующий использованию экологических вариантов. Имеется множество нехимических вариантов борьбы с вредителями, включая биологическое рациональное использование, которые имеются в наличии и просты в применении, но должны быть использованы на повсеместной основе.

11. Изменение климата уже влияет на хлопкопроизводство. Представители нескольких стран сообщили, что погодные условия становятся всё более нестабильными в результате изменения климата с его последующим воздействием на хлопкопроизводство. Представители стран-членов приветствовали новость о том, что Секретариату поручили провести специальное исследование изменения климата и хлопкопроизводства в современных системах ведения сельскохозяйственных работ. Было отмечено, что меры по увеличению почвенного органического вещества могут помочь в деле сохранения долгосрочного плодородия почвы и в то же время содействовать адаптации и смягчению изменения климата. Помимо этого, представители стран-членов отметили, что положительные результаты Парижской конференции по изменению климата будут представлять собой желательный шаг в процессе ослабления продолжающего влияния изменения климата.

12. Требовались дополнительные исследования относительно механизированных уборочных машин для мелких хозяйств. Во время сессии, посвящённой механизированным уборочным машинам для мелких хозяйств, стало ясно, что коммерчески жизнеспособные машины находятся в продвинутой стадии разработки в некоторых странах, но они всё ещё не применяются в широком масштабе. Комитет отметил, что сокращение имеющихся трудовых ресурсов в сельской местности свидетельствует о необходимости дальнейших исследований таких практических решений, как механическая уборка урожая.

13. Поправки к уставу, позволяющие принятие Европейского Союза.

Подготовительная комиссия утвердила поправки к «Нормам и правилам» МККХ, которые позволят принятие Европейского Союза как единого члена. В ходе первой половины 2016 года Постоянный комитет обсудит договорённости о переходном периоде и рассмотрит совместно с ЕС другие нерешённые вопросы с тем, чтобы позволить его принятие в начале 2016-17 финансового года. Члены МККХ выразили своё удовлетворение относительно возможности членства Европейского Союза, которое усилит их организацию.

14. Улучшение статистических данных является крайне важным для совершенствования процесса принятия решений.

Отдельная сессия о сборе, составлении, анализе и рассылке статистических данных по хлопку вызвала широкомасштабную дискуссию, касающуюся путей улучшения их надёжности и наличности. Правительственные и официальные данные останутся основным источником информации, относящейся к общим характеристикам хлопка. Точные и своевременные статистические данные чрезвычайно важны для информированного принятия решений.

15. Тема технического семинара в 2016 году. Члены МККХ одобрили рекомендации Комитета по исследованиям в области хлопкопроизводства относительно того, что технический семинар в 2016 году будет посвящён теме «Появляющиеся вредители в хлопке и борьба с ними».

16. Всемирная конференция по исследованию хлопка. Комитет заслушал доклад о подготовке к 6-й Всемирной конференции по исследованию хлопка, которая пройдёт с 2 по 6 мая 2016 г. в Бразилии в г. Гояния, шт. Гояс. Сейчас можно заранее зарегистрироваться и представить аннотации докладов, причём дополнительная информация об этой конференции имеется на сайте www.wcrc-6.com. 6-я Всемирная конференция будет организована под эгидой Международной ассоциации исследователей в области хлопка (ИКРА) при существенной поддержке со стороны МККХ.

17. Следующие заседания. 75-е пленарное заседание будет проведено в г.Исламабаде, Пакистан, с 31 октября по 4 ноября 2016 года. 76-е пленарное заседание состоится в Мозамбике.

18. Благодарность за гостеприимство Индии. Комитет поблагодарил народ, Организационный комитет и правительство Индии за проявленное гостеприимство при проведении 74-го пленарного заседания. Делегаты поблагодарили организаторов за их тёплый приём и высокое качество объектов, предоставленных для проведения пленарного заседания.

من الحشرات الضارة. وهناك حاجة إلى منهج في النظام يشجع على استعمال خيارات إيكولوجية. كذلك فإن العديد من خيارات السيطرة على الحشرات بدون الكيماويات بما في ذلك الإدارة البيولوجية متوفرة وهي بسيطة وتطبيقها سهل ولكن يجب استخدامها على أساس كامل المساحة المنزرعة.

11 - التغيرات المناخية تؤثر على إنتاج القطن: ذكرت عدة بلدان أن أنماط الطقس أخذت تصبح غير مستقرة بزيادة نتيجة للتغيرات المناخية الأمر الذي أدى إلى عواقب في إنتاج القطن. ورحّب الأعضاء بالأخبار القائلة أن الأمانة العامة أوصت إجراء دراسة خاصة حول أثر التغيرات المناخية على القطن في أنظمة الزراعة العصرية. كما ذكر أن الإجراءات المتعلقة بزيادة مواد عضوية في التربة يمكنها المساعدة على المحافظة على خصوبة التربة على المدى الطويل بينما تسهم في الوقت نفسه في التكيّف على التغيرات وتخفيض وطأتها.

12 - المطلوب إجراء بحوث إضافية في موضوع توفير الحاصدات الآلية إلى صغار المزارعين: في جلسة خصّصت إلى موضوع / استخدام الحاصدات الآلية في المزارع الصغيرة كُشِف النقاب عن أن تطوير الآلات المُجدية تجارياً للاستخدام في المزارع الصغيرة وصل مراحل متقدمة في بعض البلدان ولكنها غير متوفرة بعد بصورة واسعة. كذلك ذكرت اللجنة أن النقص في وبرة العمال في الأرياف يعني أن المطلوب هو المزيد من التحقيق في حلول عملية مثل الحاصدات الآلية.

13 - تعديل القوانين لتمكين عضوية الاتحاد الأوروبي: وافقت اللجنة التوجيهية على التعديلات التي أدخلت على القواعد والأحكام المعمول به في اللجنة الاستشارية الدولية للقطن (ICAC) لتُمكن انضمام الاتحاد الأوروبي كعضو واحد. وستقوم اللجنة الدائمة في الفصل الأول من سنة 2016 بالتفاوض حول الترتيبات الانتقالية بالإضافة إلى معالجة أية أمور قائمة مع الاتحاد الأوروبي لكي يتمكن الاتحاد من الانضمام في بداية السنة المالية 2016/2017. كذلك أعرب أعضاء اللجنة الاستشارية عن رضاهم بإمكانية عضوية الاتحاد الأوروبي الأمر الذي من شأنه تقوية لجنّتهم.

14 - الإحصائيات المُحسّنة هي أمر حاسم من أجل صنع القرارات بصورة أفضل: في جلسة فرعية تناولت موضوع جمع وتصنيف وتوزيع الإحصائيات المتعلقة بالقطن جرى نقاش حول طرق تحسين دقتها وتوفيرها. إن البيانات الحكومية والرسمية ستبقى المصدر الأولي للبيانات الخاصة بالأداء الكلي للقطن. والإحصاءات الدقيقة والسريعة هي أمر حيوي لصنع القرار العلمي.

15 - موضوع الندوة الفنية لسنة 2016: وافق أعضاء اللجنة الاستشارية الدولية للقطن على توصية من اللجنة المعنية بأبحاث إنتاج القطن بأن تُكرّس الندوة الفنية لسنة 2016 إلى موضوع "الحشرات الضارة الناشئة في القطن والسيطرة عليها".

16 - مؤتمر أبحاث القطن العالمي: تلقت اللجنة تقريراً حول التحضيرات للمؤتمر السادس لأبحاث القطن العالمي الذي سيعقد في مدينة جيوناي بولاية غوياس في البرازيل في الفترة بين الثاني والسادس من شهر مايو/ أيار سنة 2016. باب التسجيل و تقديم الخلاصات مفتوح الآن ويمكن الحصول على معلومات إضافية عن المؤتمر بالرجوع إلى الموقع الإلكتروني www.wcr6.com وسيجري تنظيم هذا المؤتمر السادس حول أبحاث القطن العالمي تحت رعاية رابطة باحثي القطن الدولية (ICRA) وبدعم كبير من اللجنة الاستشارية الدولية للقطن (ICAC).

17 - اجتماعات الجمعية العمومية القادمة: سوف تُعقد الاجتماعات العامة الخامسة والسبعين في مدينة إسلاماباد بالباكستان في الفترة بين الحادي والثلاثين من شهر أكتوبر/ تشرين الأول إلى الرابع من شهر نوفمبر/ تشرين الثاني. أما الاجتماعات العامة السادسة والسبعين فسوف تُعقد في موزمبيق.

18 - تقدير لحسن ضيافة الهند: تقدمت اللجنة الاستشارية الدولية للقطن (ICAC) بشكرها إلى الشعب الهندي واللجنة المنظمة وحكومة الهند لحسن الضيافة التي أبدوها لدى استضافتهم اجتماعات الجمعية العمومية الرابعة والسبعين. كذلك أثنى الوفود على دفى الاستقبال وجودة المكان الذي تم توفيره لاجتماعات الجمعية العمومية.

القطن تطبق بشكل مختلف من دولة إلى أخرى وأعطت تعليمات إلى الأمانة العامة من أجل الحصول على معلومات حول الطرق الممكنة التي من شأنها تقليل تلك الاختلافات.

6 - تنفيذ قرارات التحكيم الخاصة بالتعويضات من أجل تشجيع الاستدامة الاقتصادية لتجارة القطن العالمية: أبلغت اللجنة أنه بالرغم من أن المنازعات حول العقود انخفضت في السنة الماضية. إلا أن المطلوب هو تحسين تنفيذ قرارات التعويض الصادرة عن التحكيم. إن كل الدول الأعضاء في اللجنة هي دول موقعة على ميثاق سنة 1958 الخاص بالاعتراف بقرارات التحكيم الأجنبية وإنفاذها والمعروفة عامة بميثاق نيويورك غير أن الممثلين غالبا ما لا يقدروا على إنفاذ قرارات التعويضات الصادرة لصالحهم. لقد كان لذلك آثار سلبية على تجارة القطن واستهلاكه. لذلك جرى تذكير الأعضاء بالتزاماتهم لضمان التقيد الكامل بأحكام ميثاق نيويورك. وشملت الاقتراحات أيضا ضمان وجود قضاة مدربين على تطبيق قرارات التعويض الأجنبية والتأكيد على أن تتوفر الخبرات الضرورية للمحاكم التجارية المختصة للبت في إجراءات التسوية بطريقة سريعة وفعالة.

7 - البلدان الأعضاء في الهيئة الاستشارية الدولية للقطن تحتّ على التقدم في المفاوضات في منظمة التجارة الدولية: قدّم ممثل عن منظمة التجارة الدولية خلاصة عن الظروف الحالية المتعلقة بالقطن في المنظمة. أما الهيئة الاستشارية الدولية للقطن فأعادت التأكيد على دعمها لنظام متجارة متعدد الأطراف برعاية منظمة التجارة الدولية التي التزم أعضاؤها بمعاملة القطن بصورة طموحة وسريعة وخاصة أثناء المؤتمر الوزاري العاشر التابع لمنظمة التجارة الدولية المنوي انعقاده في نيروبي في شهر ديسمبر/ كانون الأول سنة 2015، الأمر الذي شكّل فرصة رئيسية لبيان التقدم الثابت في مجال إزالة الإجراءات الحكومية التي تشوّه إنتاج القطن والاتجار به.

8 - مؤشرات الاستدامة يجب اختبارها: تلقت اللجنة تقريراً من الهيئة المعنية بالأداء الاجتماعي والبيئي والاقتصادي لإنتاج القطن (SEEP) أبرز الاختبار الميدان لمؤشرات وإطار موجود في النشرة المشتركة التي صدرت عن الهيئة الاستشارية الدولية للقطن (ICAC) ومنظمة الزراعة والأغذية الدولية (FAO) تحت عنوان "قياس الاستدامة في نظم زراعة القطن: نحو إطار إرشادي". لقد أشادت اللجنة الاستشارية بهذا العمل وأوصت بأن تستمر هيئة (SEEP) في تنسيق ورصد نتائج اختيار تلك المؤشرات والإطار الإرشادي. غير أن الإطار يجب أن يبقى أداة تتكيف مع واقع كل بلد على حدة. كذلك ألمحت اللجنة الاستشارية إلى الاستخدام المتزايد للتقييم لدورة الحياة القائم على أساس تقييم أداء زراعة القطن والمواد الأخرى (مثل الألياف المصنعة والصوف) المستخدمة في سلسلة إمداد صناعة الملابس لأن هناك حاجة لتقييم استعمال تلك الأدوات المستخدمة وأثرها المحتمل على مزارعي القطن وسلسلة إمداده.

9 - أهمية الاستدامة تتنامى بين تجار التجزئة والمستهلكين: أعربت اللجنة الاستشارية عن تقديرها لنقاش أجرته مجموعة من المتحدثين حول آراء تجار التجزئة الخاصة بالقطن الأمر الذي كشف أن قطاعي الأزياء والأقمشة المنزلية ليهما أهداف طموحة تتعلق باستدامة المصدر بسبب ازدياد طلب زبائنهما للحصول على معلومات عن استدامة المنتجات التي يشترونها. ويذكر أن القلق بشأن الاستدامة بما في ذلك الشفافية والقدرة على التتبع سوف تصبح ذات صلة أكثر على مرّ الزمن.

10 - تقليل استخدام مبيدات الحشرات: في أثناء الندوة الفنية التي تناولت موضوع "التخلص من استخدام مبيدات الحشرات في إنتاج القطن: هذا ممكن؟" تلقت اللجنة تقارير من خبراء يعبرون في البعض منها عن الثقة بأنه يمكن زراعة القطن بنجاح بدون استخدام مبيدات الحشرات بينما ذكر خبراء آخرون أن ذلك غير ممكن بعد و ألمحوا إلى أهمية الإدارة المتكاملة للحشرات الضارة. ولقد تم تقديم إحصائيات مشجعة عن تقليل استخدام تلك المبيدات في ظروف معينة خاصة عن طريق أساليب الإدارة المتكاملة للحشرات الضارة في كثير من البلدان. وأشار أيضا إلى أن القطن يُعطى غلة في بعض الحالات أعلى بكثير مما يتحقق حاليا. إن تحسين أصناف القطن والإدارة هما أمران مهمان ولكن التفاعل بين الأصناف والإدارة هما أمران حيويان أيضا لتحقيق الغلات الأمثل. وفيما سيستمر دور البيوتكنولوجيا أو التكنولوجيا الحيوية في التوسع في المستقبل فإن التوليد أو التفريخ لن يفقد أهميته. فالتوليد بالاستعانة بالعلامات الجزيئية يجري اعتماده والهندسة الجينية للتركيبية الضوئية تتحلّى بإمكانية كبير لتحسين الغلات من الجانب الفيزيولوجي. إن النتائج المترتبة على استعمال مبيدات الحشرات لها عواقب مختلفة تشمل: ازدياد استخدام المبيدات الحشرية بسبب المقاومة، وانخفاض الاعتماد على الضوابط البيولوجية الطبيعية، وظهور أنواع جديدة

البيان الختامي

للجنة العمومية الرابعة والسبعين

"من المزرعة إلى الأقمشة: الأوجه العديدة للقطن"

- 1 - اجتمعت اللجنة الاستشارية الدولية للقطن (ICAC) في مدينة مومباي في الهند في الفترة بين السابع والحادي عشر من شهر ديسمبر / كانون الأول في جلستها العمومية الرابعة والسبعين منذ إنشاء اللجنة في سنة 1939. وقد اشترك في الاجتماعات 398 شخصا من بينهم ممثلون من 28 بلد من الأعضاء و 9 منظمات دولية و 13 بلد ليست أعضاء.
- 2 - إنتاج القطن ينخفض دون مستوى الطلب: ذكرت الأمانة العامة أنه بعد خمسة مواسم متتالية من العرض الفائض هبط الإنتاج الكلي دون كمية الاستهلاك المتوقعة في الموسم 2015/2016، وظل المخزون العالمي على مستويات عالية جدا والأسعار العالمية ظلت ضعيفة، فيما الطلب على القطن يستمر في التوسع بنسبة بطيئة نتيجة للتباطؤ في النمو الاقتصادي العالمي واستمرار المنافسة القوية من الألياف الاصطناعية خاصة البوليستر.
- 3 - الدعم الحكومي يصل إلى مستويات قياسية: قدّرت الأمانة العامة في تقريرها عن دعم الحكومات للقطن أن قيمة المساعدات وصلت إلى مبلغ 10,4 مليار دولار أمريكي في سنة 2014/2015 محققة بذلك أعلى مستوى منذ البدء في جمع البيانات في السنة 1997/98. ونتيجة لتدخل الحكومات تراكمت كميات كبيرة من المخزون من سنة 2011/12 إلى سنة 2014/15 إذ تظل بذلك العامل الرئيسي الذي تتقرر بموجبه الأساسيات الخاصة بسوق القطن على مدى المستقبل المنظور.
- 4 - الترويج للطلب على القطن يستوجب منهجا متعدد الأوجه: اعتمدت اللجنة توصيات تلقتها من هيئة القطاع الخاص الاستشارية (PSAP) من أجل تحسين التوقعات من القطن. وتشمل هذه التوصيات:
 - ينبغي على الأعضاء أن يضمنوا أن تكون العلامات الخاصة بمحتويات الألياف على منتجات الأقمشة مرئية بصورة أوضح، وذلك لكي يستطيع المستهلكون أن يتخذوا الخيارات العلمية، إضافة إلى تشجيع الشفافية في سلسلة الإمداد.
 - يتوجب على الأمانة العامة أن تجري دراسة حول جميع العوامل الاقتصادية وراء نمو الإنتاج والطلب على البوليستر ممكنة بذلك الأعضاء من تفهم المنافسة بين الألياف المتنافسة بصورة أفضل، وأخيرا:
 - على الأعضاء أن يواصلوا التعامل مع قطاع القطن بطريقة شاملة وذلك بواسطة تنفيذ الإجراءات التي من شأنها تشجيع ازدياد تنوع استخدامات القطن مما يشمل المركبات القطنية والأقمشة الفنية مع استخدام أوسع للمشتقات القطنية في كل مناحي سلسلة القيمة وذلك بغية إضافة القيمة في القطاع.
- 5 - الحاجة إلى تدابير من شأنها تيسير التجارة العالمية: اعتمدت اللجنة توصية تلقتها من هيئة القطاع الخاص الاستشارية (PSAP) بخصوص الحاجة إلى توحيد مقاييس شهادات الصحة النباتية وأوصت الأمانة العامة أن تعمل مع الدول الأعضاء لرفع مستوى الوعي في أروقة منظمة التجارة العالمية. كما أشارت هيئة القطاع الخاص الاستشارية إلى أن ضروريات تعقيم

Inaugural Session

9:00 hr. Monday, December 7, 2015

Mr. Sanjay Kumar Panda, Secretary (Textiles), Government of India in the Chair

The session started with the introduction of the dignitaries and lighting of the Traditional Indian Lamp.

Dr. Kavita Gupta, Textile Commissioner of India and chairperson of the organizing committee presented a welcome address and opening remarks. Dr. Gupta welcomed all distinguished participants to India, a country with a rich culture and heritage, as well as being the world's largest producer of cotton with a very long history of cotton cultivation. She referred to the history of the ICAC since its foundation in 1939 and listed the major functions fulfilled by the organization in benefit of member countries, including India, and ICAC's role in promoting a healthy global cotton economy. Dr. Gupta described the importance of cotton for Indian agriculture and economy and for the livelihood of millions of the country's rural population. She welcomed the Chief Guest of the function H.E. Santosh Kumar Gangwar, Union Minister of State for Textiles, who had supported the planning of this meeting. Dr. Gupta also welcomed Dr. Sanjay Kumar Panda, Secretary to the Ministry of Textiles and Chair of the Inaugural session, who has done extensive work in the field of textiles. She also welcomed Ms. Wei-jiun Liao, the Chairperson of the Standing Committee and Ms. Anu Garg, Joint Secretary (Cotton) of the Ministry of Textiles, and also colleagues from the Ministry of Agriculture and from the Ministry of Commerce. Dr. Gupta welcomed Mr. José Sette, the Executive Director of ICAC and the entire Secretariat. She welcomed the participants, delegates, observers, researchers and specifically Dr. Greg Constable, the ICAC Researcher of the Year. Dr. Gupta welcomed individually delegates of every member country, as well as observers from non-member countries and media representatives. She referred to the recent buildup in world cotton stocks presenting a challenge to the industry and making necessary to diversify the use of cotton, which would be discussed among other important topics at this Plenary Meeting. Dr. Gupta hoped delegates would have an enjoyable stay and take time to experience the exceptional beauty and rich spiritual heritage of India.

Recognition of the ICAC Researcher of the Year, Dr. Greg Constable of Australia.

The Secretary General said that it was his pleasure to present the ICAC Researcher of the Year for 2015, Dr. Greg Constable of Australia. Dr. Greg Constable has 46 years career in cotton research with a focus on the application of agricultural science in the field. During most of this time, Dr. Constable was employed by the Commonwealth

Scientific and Industrial Research Organisation, the federal government agency responsible for scientific research in Australia. Dr. Constable's research interests include cotton breeding, physiology and crop management systems. His knowledge of cotton physiology and ability to link physiology with cotton varietal development have led to significant breakthroughs in varieties with high commercial impact in Australia. These varieties now dominate markets in some other producing countries. Cotton yields in Australia are the highest in the world and almost three times the world average. Dr. Constable has certainly played an important role in this achievement.

At the international level, Dr. Greg Constable has many credits to his portfolio. He was the Inaugural Chair of the first World Cotton Research Conference, which was held in Brisbane in 1994. Dr. Constable was instrumental in organizing the first meeting of breeders and molecular biologists in Australia, which subsequently became the International Cotton Genome Initiative. He is the current and first Chairman of the International Cotton Researchers Association (ICRA). ICRA is less than four years old and, under his leadership, is well on the way to becoming a voice for cotton researchers in the world.

The Executive Director congratulated Dr. Constable personally, on behalf of the ICAC staff and ICAC member governments for his selection as ICAC Researcher of Year 2015, a program of which the ICAC is extremely proud.

Dr. Constable said that it was a great honor to receive this prestigious award acknowledging his research. He showed his appreciation for the recognition of research in cotton worldwide.

The CHAIR introduced Mrs. Wei-jiun Liao of Taiwan, Chair of the Standing Committee, to present her report.

Mrs. Wei-jiun Liao reported that the most important task facing the Standing Committee since the 72nd Plenary Meeting in Cartagena had been the consideration of the terms of entry of the European Union (EU) in the ICAC. In view of the complexity of the issues involved and the time required to discuss them thoroughly, the Standing Committee decided to create a specific body for analysis of the necessary changes to the Rules and Regulations. Accordingly, a decision was taken to establish a Task Force on European Union Membership (TFEU). During its meetings, ICAC members had stressed the importance of the EU in the world cotton economy and their conviction that the membership of the EU was desirable and would strengthen the ICAC. She reported that significant progress had been made during the past year, to the point that a Drafting Group had been constituted to prepare a

draft of amended Rules and Regulations for discussion during this Plenary. She looked forward to seeing the EU seated among ICAC members.

With respect to budgetary matters, Ms. Liao reported that the Standing Committee has repeatedly stressed its concern with late payment of assessments by some ICAC member countries. Earlier this year four members with persistent arrears had been suspended. She noted that this action had a positive effect: three of the members suspended had made partial payments of their arrears and two had been reinstated. She stressed that the prompt payment of assessments is a precondition for the efficient administration of the ICAC and urged all member Governments to comply with their statutory obligations in a timely manner.

Mrs. Wei-jiun Liao reported that the Standing Committee had received the annual report of the Secretariat on government support measures in cotton and that this document was instructive: government support reached a record level, exceeding US\$10 billion in 2014/15. She noted that the information on government measures compiled by the Secretariat is an important reference and highly valued by ICAC members.

Ms. Liao reported that Standing Committee members also welcomed the inputs provided by the various advisory bodies of the ICAC, including the Expert Panel on Social, Environmental and Economic Performance of Cotton Production (SEEP), the Task Force on Commercial Standardization of Instrument Testing of Cotton (CSITC), and the Private Sector Advisory Panel (PSAP).

She reported that the Standing Committee had unanimously endorsed the nominations of Mr. Tomasz Sowa, Secretary, Embassy of Poland Trade & Investment Section, as Chair, Ms. Renat Sandhu, Minister, Embassy of India, as First Vice Chair, and Ms. Claudia Fontana Tobiasen, First Secretary (Trade and Commercial Affairs), Embassy of Switzerland, as Second Vice Chair of the Standing Committee for the next year. She noted that all three nominees had demonstrated their interest in the work of the ICAC through frequent participation in the work of the Standing Committee and these nominations had been submitted for final approval during this Plenary Meeting.

Ms. Liao expressed her sincere appreciation to all fellow Standing Committee members in Washington for their hard work, professionalism and dedication to the ICAC during the past year. She expressed appreciation to the ICAC staff for their excellent work. Ms. Liao said that she will remember her experience at the ICAC with the fondest memories as it had been a great pleasure to work with such a diverse and talented group

of people, while enjoying the friendship and the sense of belonging in the big warm ICAC family.

Ms. Liao expressed her profound gratitude to the Government of India and the Organizing Committee for the excellent arrangements made for the 74th Plenary Meeting. The Report of the Chair of the Standing Committee is a statement of the meeting.

The CHAIR introduced Mr. José Sette to give his report as Executive Director.

The Executive Director said that the world cotton sector has entered a time of transition, bringing with it many changes in the way all participants in the value chain operate. He noted that after five years of supply exceeding demand, production had fallen and was approximately in line with consumption. However, cotton still faced many challenges, the most important of which would be discussed in this Plenary.

The Executive Director reported that falling prices had led to increased support to their cotton sectors by governments and that ICAC's annual report on "Government Support to the Cotton Sector" showed that government assistance had surpassed US\$10 billion, the highest level since the organization first started to collect data on this subject.

The Executive Director reported that falling cotton prices during the past two seasons made cotton much more competitive in comparison with competing fibers, which was leading to a rather timid recovery in demand. However, promotional efforts that build a positive image of cotton among consumers must continue and expand. He noted that ICAC will carry on working closely with the International Forum for Cotton Promotion (IFCP) and that the program of the 74th Plenary included a section dedicated to the views of retailers, during which leading retail chains from all over the world will present insights into the most important factors taken into consideration when buying cotton articles.

The Executive Director noted that a substantial part of this year's Plenary Meeting program will be devoted to a variety of factors that affect production, and that this year's Technical Seminar will focus on ways to reduce or even eliminate the use of insecticides in cotton production, thereby lowering costs and improving sustainability. He said that sessions will also explore other important issues, such as the use of cotton by-products, mechanical picking, climate change and the international exchange of cotton germplasm. The Executive Director described the ICAC activities in supporting cotton research and disseminating information on research, including the Research Associates Program, the Researcher of the Year Award, support for regional research groupings, the International Cotton Researchers Association (ICRA), and the World Cotton Research Conference.

The Executive Director noted the growing awareness of the need for sustainable practices throughout agricultural value chains and described activities of the Expert Panel on the Social Environmental and Economic Performance of Cotton Production (SEEP). The primary objective of this body was to collect and review independent, science-based information on the negative and positive social, environmental and economic aspects of global cotton production, as well as to make recommendations for further action as appropriate to improve the performance of the cotton sector. He noted that this year the SEEP released its report on "Measuring sustainability in cotton farming systems: Towards a Guidance Framework", which provides an overview of sustainability issues in cotton and proposes a set of indicators for use in measuring sustainability. He said that the next step is to test the indicator framework in selected countries in order to establish its practical viability and usefulness and challenges associated with the implementation of sustainability indicators in the field will be discussed in an interactive "World Café" session during the Plenary. He noted that one of the functions of SEEP will be to serve as a central coordinator and clearinghouse of information on tests of the indicators in different contexts.

The Executive Director highlighted the importance of integrating the private sector in the work of the ICAC, and described activities of the Private Sector Advisory Panel (PSAP) especially in issues linked to the reduction of "trade friction", i.e. improving the efficiency of the cotton trade. He said that the PSAP indicated that documentation for cotton shipments tends to be highly complex in comparison with other commodity industries and efforts to streamline procedures through standardization of requirements would help to improve the efficiency of cotton trading. He reported that the ICAC is renewing its efforts within the scope of the World Trade Organization and the Food and Agriculture Organization of the United Nations to simplify and standardize these important documents.

He also described the activities of the Task Force on Commercial Standardization of Instrument Testing of Cotton (CSITC), which was tasked with developing mechanisms to standardize High Volume Instrument (HVI) results on an international basis, so as to create a level playing field and increase the confidence of the cotton industry in the reliability of test results. He said that standard definitions and a common methodology to measure laboratory performance in testing cotton samples have been established. He reported that the CSITC seeks to improve cotton testing around the globe by conducting four Round Trials per year, with participating laboratories receiving detailed diagnostic reports, and his program has been extremely successful, with more than one hundred laboratories now participating on a regular basis.

The Executive Director described the importance of the ICAC mission in serving as a forum for the development of policies and solutions to strengthen commodity value chains; enhancing the transparency of the market and enabling economic decisions to be taken on the basis of accurate and timely data; encouraging the development and dissemination of knowledge; and promoting sustainability. He said that during its first decades of existence, the ICAC emphasized its roles as a forum for exchange of ideas among members and as a clearinghouse for statistics while more recently, the Secretariat had diversified its output publishing more analytical and prospective studies. He noted that knowledge dissemination has been accorded a higher priority, as demonstrated by the establishment of a Technical Information Section, which publishes technical studies and organizes the World Cotton Research Conference and regional meetings of cotton researchers. He said that more recently, the ICAC continued its process of renovation by taking an active role in the discussion of issues related to the sustainability of cotton: by trying to reduce "trade friction" through support for standardized High Volume Instrument (HVI) testing and other measures; by compiling information on sustainability initiatives; and by evaluating practical and effective ways to measure sustainability through the SEEP. He noted that EU membership is welcomed by all ICAC members and will surely strengthen the organization even more by incorporating the world's largest economic bloc in its work.

The Executive Director expressed his gratitude to all the delegates to the Standing Committee, who always gave him their unstinting support and provided valuable inputs. He urged member governments to include them in their delegations to the Plenary, so that Standing Committee delegates can see with their own eyes the results of their hard work and also provide the benefit of their experience. He extended a special vote of thanks to the Chair of the Standing Committee, Ms. Wei-jun Liao of Taiwan, who had been a pillar of strength throughout the year, providing helpful suggestions, insightful criticisms and going out of her way to engage with all Standing Committee delegates in order to build consensus and wished her all the best in her new.

The Executive Director said that it was a privilege to work with the highly qualified members of the ICAC Secretariat, who gave him all their support. They were dedicated and talented professionals who are committed to furthering the organization's objectives. He expressed his confidence that staff members will continue to provide the excellent services and innovative thinking that members have come to expect from the Secretariat.

He concluded that this 74th Plenary Meeting of the ICAC will examine many subjects of relevance to cotton. The Secretariat hopes that the presentations and ensuing debates will give

members the background information and tools to implement concrete measures for the benefit of the world cotton sector. He also expressed a hope that the numerous observers who honor ICAC with their participation would absorb useful knowledge that will persuade authorities of the benefits of membership in the ICAC, as he is confident that ICAC membership is a worthwhile and effective way to integrate countries into the world cotton sector. The Report of the Executive Director is a statement of the meeting.

The CHAIR introduced Mr. Antonios Siarkos, Vice Chair of the Private Sector Advisory Panel (PSAP), to present a report on the Panel's 34th meeting. Mr. Siarkos reported that the PSAP emphasized the need for the ICAC to give the highest priority to increasing the competitiveness of cotton in relation to competing fibers, with special attention to polyester. PSAP members recommended that ICAC members: take steps to make fiber content labels on textile products more visible, in order to allow consumers to make informed choices; encourage the use of the results of instrument testing in the trading of cotton; take into greater consideration the environmental and social impacts of polyester; introduce measures to promote the use of cotton by consumers; and approach the cotton sector in a holistic manner, by implementing measures to encourage an increased diversification of the uses of cotton and a wider use of cotton by-products throughout the value chain. He indicated that the PSAP had recommended that the ICAC Secretariat undertake a study on the economic factors underlying the growth of polyester production and demand.

Mr. Siarkos said that the PSAP noted the need to reduce "trade friction" by harmonizing the documentation involved in the trade of cotton. In particular, the PSAP urged the ICAC to raise awareness within the World Trade Organization of the need for the standardization of phytosanitary certificates. He reported that the PSAP also noted that requirements for fumigation of cotton varied widely among countries and requested the Secretariat to obtain further information on possible ways in which to reduce these differences.

Mr. Siarkos said that the PSAP expressed its satisfaction with the progress being made to permit the accession of the European Union to

the ICAC, and once this process was concluded, the ICAC should make further efforts to expand membership, especially in Asian countries that were becoming increasingly important in the spinning and weaving of cotton. PSAP members had expressed their willingness to support a drive to attract more members through their contacts with private sector associations in countries that were possible candidates for membership and by contacting directly the governments of potential members. He reported that the PSAP members noted that the eventual accession of the European Union might require changes in the terms of reference of the Panel, which would be the responsibility of the Standing Committee. If such changes were to be implemented, PSAP members recommended that every effort should be made to preserve the diversity of viewpoints that currently existed within the Panel. In order to reduce bureaucracy, they were also recommended that the terms of PSAP members should be made unlimited and extend until notice to the contrary be received from the nominating Member. The Report of the PSAP is a statement of the meeting.

Approval of the Agenda of the 74th Plenary Meeting

The Secretary General called for any comments on the agenda. There were no comments. The agenda was approved.

The CHAIR, Dr. Sanjay Kumar Panda, Secretary to the Ministry of Textiles welcomed guests to India and highlighted the importance of the cotton and clothing for human mankind. He noted that the theme of the Plenary Meeting is very appropriate with the key issue of sustainable cotton production focusing on social, environmental and economic aspects as major aspects of sustainable fiber production. He indicated that, in order to face major challenges in cotton production and its competition with man-made fibers, a need existed to improve practices, quality, develop new efficient cotton varieties and improve cotton processing into yarn. He welcomed participants to India and proposed to work together in order achieve prosperity.

The CHAIR invited the Chief Guest, H.E. Santosh Kumar Gangwar, Union Minister of State for Textiles to present the keynote address. The

Minister expressed his happiness in participating in the ICAC 74th Plenary Meeting, which was taking place eleven years after the 2004 Plenary held in India in 2004. He was grateful to the ICAC for the opportunity to host and organize this ICAC meeting and thanked all the participants for attending. He noted that cotton is an ancient commodity in the history of India, and is at least 7,000 years old. He noted that cotton is a holy flower, a bright fiber in the Indian history and that India has been a pioneer in cotton production and consumption. Since gaining independence India had to develop cotton production in order to supply spinning mills. The country achieved self-sufficiency in cotton production by 2003 and had become one of the largest producers, consumers and exporters of cotton. The Minister noted that in 2014/15 India initiated minimum support price operations, directly procuring cotton in order to support producers. He praised ICAC for its efficiency and indicated that India supports its activities and plays an important role in the world cotton sector, since it is one of the largest exporters of cotton and textiles. He congratulated ICAC and the Ministry of Textiles for organizing the Plenary Meeting and urged participants to make substantial and beneficial deliberations that would take cotton, the vital fiber, to new horizons. He thanked the delegates for their input into the success of the ICAC Plenary Meeting.

The CHAIR introduced Ms. Anu Garg, Joint Secretary (Cotton) of the Ministry of Textiles. She thanked the Minister of Textiles and the Union Textile Secretary Dr. Sanjay Kumar Panda for inspirational speeches and expressed her gratitude to the ICAC for the opportunity to organize and host this Plenary Meeting. She also thanked the Executive Director and the Secretariat for their efforts in organizing the event, while expressing gratitude to participants and observers. She hoped that all would have excellent and substantive discussions. She thanked the organizing committee and its members, including the chairperson Dr. Kavita Gupta, the Cotton Corporation of India (CCI), the Cotton Association of India, the Confederation of Indian Textile Industry and members of media for all the arrangements made and wished all the very best.

First Plenary Session

Statements

14:15 hr. Monday, December 7, 2015
Dr. Kavita Gupta, Textile Commissioner,
Government of India, in the Chair

The delegate of PAKISTAN stated that Pakistan is the fourth largest producer and third largest consumer of cotton, as well as being second largest exporter of cotton yarn in the world. Cotton contributes about 1.4% to its GDP and is 6.9% of total value addition in agriculture. About 1.3 million farmers grow cotton on around 3.1 million hectares. In 2014/15 Pakistan produced 13.98 million 170-kg bales and in 2015/16, 15.4 million 170-kg bales, which is consumed largely in the domestic market by 521 textile mills with up to one million bales exported annually. Currently no restrictions exist on importing or exporting cotton. The delegate explained that the prevalence of viral disease, particularly the cotton leaf curl virus, and sucking pests causes damage to Pakistan's cotton crop and has the potential to spread to neighboring countries. The delegate noted that the Pakistan Central Cotton Committee released new Bt varieties and has aided the cotton sector and its stakeholders by disseminating data, documenting cotton trade, price and policies, and providing technical support for planning national cotton policy. The planning and coordination of cotton research and development programs are being strengthened in order to improve yield, develop new varieties of cotton seed that are more disease-resistant, and promote cultivation of biotech cotton. Pakistan's future cotton policy takes into account a number of strategies, such as germplasm improvements, development of hybrid cotton and cultivation of organic cotton, particularly in the fertile and pest-free lands of Baluchistan. The government is encouraging multinational and national technology providers to introduce the latest effective insect protection technology. Pakistan's country report is a statement of the meeting.

The delegate of BURKINA FASO stated that, among the many discussions to take place during this plenary meeting, the challenge with regard to suitable technological changes for improving competitiveness along the entire cotton value chain should be highlighted. The cotton sector is an important source of income and employment for Burkina Faso's rural population, but it also ensures food security and is a source of income for the national budget. Like other countries in West and Central Africa, Burkina Faso's cotton sector is fragile due to exchange rate fluctuations and frequent exogenous shocks from policies that distort trade. The delegate explained that, in addition to domestic reforms that cotton stakeholders are carrying out to improve its competitiveness, the sector is also benefiting from support from its government and development partners.

The delegate noted that its country report containing details of the performance of its cotton sector and the challenges it faces. The delegate also noted that the current plenary is taking place during a period of two other important international events that are important to the cotton value chain, the 21st conference of the parties on climate change in Paris and the 10th ministerial conference of the WTO during which progress will hopefully be made.

The delegate of UZBEKISTAN stated that agriculture's share of domestic GDP has declined from 30% in 2000 to 17%, which indicates the structural changes as the country transitions from an agrarian economy to an industrial one. Uzbekistan's current policy for the cotton sector is focused on creating a competitive trade environment and maintaining current cotton output of around one million tons from 98 ginneries, which cover the needs of the domestic textile industry as well as some exports. The delegate noted that, since 2001, all bales are tested for quality by Sifat, an independent center for certification and quality control of cotton fiber, in labs equipped with HVI machines. The delegate stated that new irrigation infrastructure, better farm management, the development by its research institute of new high-yielding and early-maturing varieties and the modernization of its ginneries all contribute to the high quality of Uzbek cotton. The delegate brought attention to one new upland variety, "Porlock", which is characterized by high yields and fiber strength.

International and domestic shipment of cotton goes through 21 specialized terminals, including 5 custom warehouses that are "free customs warehouses", and transport corridors that ensure timely delivery to all consumers. In order to promote foreign investment and greater efficiency, the country's cotton sector has transitioned from an administrative-command management to corporate management, which is represented by the holding company Uzbek cotton industry export, comprising four joint-stock companies. The main tasks of these companies in the near future will be to improve the system for releasing high demand cotton varieties to the world market, increase the share of machine-harvested cotton to 80 percent, decrease contamination by improving processing systems, add new presses to factories, promote the gradual modernization of Sifat, and create a centralized electronic database that would track the production and movement of cotton in order to ensure timely selection and acceptance of cotton lots. The delegate invited all attendees of the Plenary Meeting to the Tashkent fair in October 2016. Uzbekistan's country report is a statement of the meeting.

The delegate of the UNITED STATES noted that production in 2015/16 is 13.3 million 480-lb bales, which is lower than in 2014/15 and than its 5-year average production. The yield in 2015/16 is lower than the 5-year average and harvest area is 13 percent below the previous year due to the higher prices of competing crops. Favorable weather conditions in Texas reduced abandonment this year.

Mill use is projected to increase to 3.7 million bales, marking the fourth consecutive year of growth after declining in almost every season since 1997/98. Exports in 2015/16 may reach 10.2 million bales, which is the lowest level since 2000/01. In 2015 cotton policy had shifted to the Stacked Income Protection Plan, which is a new plan specific to upland cotton and addresses its obligations under the WTO cotton case brought by Brazil. This new program provides revenue insurance that pairs with traditional crop insurance and provides intra-seasonal risk coverage, but does not protect against declines in prices between seasons. The 2014 Agricultural Act had eliminated direct and counter-cyclical payment programs and the average crop revenue election program for all major commodities. The delegate further explained that the 2014 Act continues the upland cotton marketing assistance loan program, though the base rate is no longer fixed at 52 cts/lb but ranges from 45 to 52 cts/lb with 52 cts/lb announced as the base loan rate for 2015. USA's country report is a statement of the meeting.

The delegate of TAIWAN stated that his country depends on cotton imports for all of its needs, importing 249,000 tons of cotton lint in 2013 at a value of US\$441 million and 208,000 tons in 2014 at a value of US\$364 million. The main suppliers of cotton to Taiwan were the USA, which accounted for 40% of the total value of cotton imports in 2014, followed by Brazil with 19% and India with 12%. In 2014, the cotton yarn exports of Taiwan decreased by 6.2% to 128,000 tons. The government has greatly assisted the textile sector over the years to realize the sector's vision of becoming a global R&D and production base for functional and technical textiles, in addition to being a fashion design center for the Asia-Pacific region. Another objective was to shift from a made-in-Taiwan model to one based on designed-in or branded-in Taiwan concepts. The delegate noted that the Taiwan Textile Federation and ICAC have jointly organized five seminars in Taipei since 2005, including one this year that coincided with the Taipei Innovative Textile Application Show. Taiwan is keen to share its development experiences with members of the ICAC. Taiwan's country report is a statement of the meeting.

The delegate of SUDAN stated that his country has recently adopted several policies for its agricultural and cotton sectors, including dedicating financial support to the sectors, exempting all export-oriented agricultural products from tax, rationalizing water usage to lower production costs, encouraging banks to provide financing to the cotton sector for purchasing inputs and expanding scale of production, protecting producers and exporters from unfair practices. The five-year economic reform program puts great emphasis on improving cotton production and follows the three-year program from 2012-2014 that aimed to diversify Sudan's economy as the share of oil production declined in 2011. The delegate explained that cotton yields in Sudan have varied greatly, but from 2012 through 2015 had increased from around 450 kg/ha to 950 kg/ha using biotech cotton seeds from China. Sudan will be producing two GE Indian hybrids commercially next year with the hope of increasing production to 882,000 tons on over 1 million hectares by 2019. Sudan's country report is a statement of the meeting.

The delegate of COTE D'IVOIRE stated that his country produced 450,000 tons of seed cotton in 2014/15, which was an all-time high, even though the country remains a relatively small producer on a global scale. The delegate noted that around 23,500 tons of cotton lint was exported to Asia. Cote d'Ivoire would like to keep improving and steadily increasing the volume and quality of production and to increase the income of its farmers. The delegate noted that cotton seed production and procurement of inputs remain challenges for its industry, in conjunction with productivity, which averages around 1000 kg of seed cotton per hectare. The delegate remarked that producer income should be an encouragement that would lead to greater involvement by producers. Around 60 percent of the CIF price must be given to the farmers, which is determined by Intercoton, although the government may also increase that price in order to promote production. As production has increased over time, quality has fallen since each cotton company has its own standards and this fall in quality has affected the international reputation of Cote d'Ivoire's cotton. In order to improve the quality of cotton, all cotton classing will be done at one facility starting in 2015/16. Cote d'Ivoire's country report is a statement of the meeting.

The delegate of AUSTRALIA stated that, while it is not a large cotton producer on a global scale, her country is the fourth largest exporter due to the fact it exports around 99% of its production, with around 98% exported to Asia. As an exporter, Australia operates in intense global competition and must continually improve its productivity, efficiency, quality of its product and environmental sustainability. Research and development were critical for achieving these goals and the Cotton Research and Develop-

ment Corporation was the main investor in cotton research, development and extension. The CRDC receives contributions from both industry and government and has partnered in over 200 domestic and international research projects. Australia was involved in two initiatives promoting responsible cotton, namely BCI and Cotton LEADS. The delegate explained that Cotton LEADS currently has just two members, Australia and the United States, which have strong legislative and regulatory frameworks for most cotton production. This assures consumers that they are purchasing responsibility-produced cotton and provide underlying data to support claims. The delegate cautioned that the emerging textile supply standards that are intended to support continuous improvement in the responsible production and use of cotton run the risk of being non-tariff trade barriers or inherently biased in favor of man-made fibers. Australia's country report is a statement of the meeting.

The delegate of EGYPT noted that there are many challenges to the cotton sector, such as synthetic fibers and low cotton prices both domestically and internationally. In 2014/15, production increased to 110,000 tons with around 50,000 tons exported while the rest was consumed locally. In 2015/16, planted area decreased to around 105,000 hectares due to low producer prices causing losses. Research centers are producing new higher-yielding varieties and two new varieties were added this season, although delays in planting due to late harvests of winter crops had lowered yield. There is a strong push by the government to maintain cotton production from farm to the textile industry, enhance the trademark of Egyptian cotton, and provide protection to workers in the entire cotton sector. Egypt encourages traders, spinners, and foreign investors to look to Egypt as a source of quality cotton and of skilled, trained labor. Egypt's country report is a statement of the meeting.

The delegate of MALI noted that in the current season his country expects to produce around 230,000 tons of cotton lint. Based on national statistics, cotton contributes about 12% to its GDP and is thus a strategic crop for the country. Cotton from Mali had recently been qualified as one of the best-produced cottons, but the country will need to maintain this high standard. Around 99% of production was exported due to the fact that very little cotton is processed locally. As a result, the global cotton market is important for Mali's cotton sector. The delegate noted that the initiative of the world cotton contract which responds to the need for more equity in cotton trade, but was unsure of the conditions for these contracts. The delegate expressed Mali's desire for a better understanding of the conditions of the world cotton contract, which includes five African countries, in order to better assess whether such a contract is beneficial or if Mali will need to fight for greater equity in the international market.

The Secretary General noted that a report on the World Cotton Contract was scheduled to be included in either the upcoming issue of Cotton: Review of the World Situation or in the first issue of 2016.

The delegate of MOZAMBIQUE stated that his country has grown cotton for decades, with record production achieved in 2011/12. Cotton has been and will remain an important production for Mozambique's economy as it remains the 7th largest export commodity in general and 3rd largest among traditional export commodities. The cotton sector ensures rural livelihoods and development through cash incomes for over one million citizens and provides food security. Mozambique's cotton sector is regulated by national policies to protect farmers through a regional concession system that awards private companies exclusive rights to cotton grown in their assigned region in return for promoting cotton production, providing inputs on credit and purchasing seed cotton. The cotton sector is influenced by many factors, such as weather patterns and international market dynamics, which can cause seasonal variations in output that ranges from 25,000 to 35,000 tons in recent seasons and is well-below record production. Production in the current season is forecast at 20,000 tons, well-below initial estimates due to insufficient rains, market inefficiencies, and changes to the exchange rate. A reduction in price volatility would ensure the long-term sustainability of cotton and Mozambique is planning to introduce a price-setting and stabilization mechanism in 2016/17. The delegate remarked that it would like to host the 76th Plenary Meeting of ICAC in 2017, but due to the decline in cotton production is unable to cover the costs without sponsorship. Mozambique's country report is a statement of the meeting.

The delegate of SOUTH AFRICA stated that production of cotton lint in the 2015/16 marketing year is around 18,000 tons, which is a 89 percent increase from the previous season due to policies implemented under its Sustainable Cotton Cluster, which included the introduction of a cheaper cotton stripper technology that increased dryland plantings by 129%. Production was likely to increase in the upcoming season despite drought conditions. In 2014/15 mill use in South Africa and Swaziland decreased by 7% to 20,774 tons due to low-priced imports of textiles and apparel from Asia. The delegate noted that local spinners met about 87% of their demand through cotton lint imports, nearly all from Zambia, Zimbabwe and Malawi. There are three interventions under its Sustainable Cotton Cluster that will positively influence the future of its cotton sector: a cotton stripper harvester that reduces costs; a retail pilot project involving the retailer, Mr. Price, that used 1,000 tons of cotton at a predetermined price to manufacture cotton products for the local market; and earmarks by the government to procure local cotton for

the manufacture of uniforms and other cotton products for government and semi-government departments. South Africa's country report is a statement of the meeting.

The delegate of POLAND noted that many of the topics during this plenary coincide with economic, environmental, and social sustainability of cotton along the entire value chain. The delegate stated that for Poland it is important to be able to procure cotton that is socially, environmentally and economically sustainable, especially to improve its competitiveness against man-made fibers. The delegate asserted that this should not just be focused on this week, but throughout the year. The delegate also noted that ICAC was at an important juncture due to the possible accession of the EU to ICAC and affirmed Poland's strong commitment to work of ICAC. Poland's country report is a statement of the meeting.

The delegate of ZAMBIA stated that cotton production in his country is mainly done by small-scale farmers under out-grower schemes run by ginneries and that production increased by 15% to 48,000 tons in the 2014/15 marketing year, despite unfavorable growing conditions due to an increase in area and yield. Cotton production is mainly affected by international cotton prices and weather and the sector has resolved to improve production with government playing a key role. Several stakeholders, such as the Zambia Cotton Association, have responded to the government's call to increase value-added activities in the cotton sector through spinning and hand looms. There is renewed interest in cotton due to better earnings as a result of currency depreciation, but production is decreasing because cotton still competes with other crops, such as maize, it has low productivity and farmers follow poor agricultural practices. The delegate stated that due to the collapse of the textile industry domestic consumption of cotton remains very small, less than 5% of production, and thus the majority is exported, with Asia and Mauritius being important markets. Research stations continue to look into improving cotton yield and fiber qualities and that Zambia is active in several African cotton organizations: ACTIF, SEACF, and MOZAZIMA. The delegate stated that Zambia is working on a marketing system through the central bank and ways to disseminate information on best agricultural practices to farmers in a systematic way. The delegate offered thanks to the FAO for supporting implementation of cotton production sustainability through the SEEP framework. Zambia's country report is a statement of the meeting.

The delegate of NIGERIA explained that his country installed a new government this past May and that the new government was interested in many of themes of this plenary meeting. Nigeria is looking at the social impact of the cotton sector, since it must diversify its economy from relying on just the oil industry, particularly due

to the recent low prices, and considers cotton as an advantageous cash crop to bring people out of poverty. Nigeria will continue its technical exchange with India, which will help improve its cotton, and plans to recover from a significant reduction in its ginneries. Nigeria's country report is a statement of the meeting.

The delegate from TURKEY stated that the appreciation of the U.S. dollar and the drop in oil prices which lowers polyester prices are challenges to the world cotton sector that persist, as shown by production and consumption remaining below the volume observed before the world economic crisis. During the last decade, cotton has become very important to Turkey's textile sector and the increased demand by textile sector has made Turkey one of the largest importers of cotton, which makes all developments in the world cotton trade vitally important to Turkey. Man-made fiber dominates global fiber and cotton's share of fiber usage has been falling. It is important to increase public awareness of the high quality of cotton, the competitiveness of cotton, and the use of technical textiles to combat cotton's loss of market share among world fibers. Regional integration needs to ensure inclusiveness and, if proponents of regional integration are sincere about increasing global trade, then regional integration needs to lift all barriers to trade, including invisible ones. The upcoming WTO meeting would be a litmus test. Turkey's country report is a statement of the meeting.

The delegate of KENYA noted that the themes of this plenary resonates well with all stakeholders and addresses the important subject of the sustainability of the cotton sector. Kenya's agricultural sector is a backbone to its economy and accounts for around 65 percent of export earnings. The agricultural sector contributes to the livelihood of nearly 80% of the Kenyan population and to its food security. In its Agricultural Sector Development Strategy for the period 2009 to 2020, cotton is considered one of the most significant industries in which to implement the long term Arid and Semi-Arid Land Development initiatives and industrialization strategies that aim to position the agricultural sector as a key driver for achieving 10% economic growth. The government provides planting seeds, advisory services, and rehabilitation of irrigation schemes to support its many small-scale farmers. To support the ginning sector, the government enacted a 0% rate duty for importing ginning equipment and has also developed an HVI classing facility that paves way for branding Kenyan cotton. In 2009 the Kenyan government approved a framework for planting biotech cotton, but a ban on all GMO materials was instituted in 2012. The government has reversed its ban and momentum has returned to fast-track introduction of transgenic cotton. Kenya has the potential to grow cotton on 350,000 hectares suitable for rain-fed production and 35,000 hectares for irrigated production that

should be able to produce around 200,000 tons of seed cotton. This potential has not yet been achieved due to inefficiencies and inadequate irrigation. The government has implemented several measures to improve production and exports, including partnerships with organizations for the purpose of seed bulking with two conventional and four hybrid varieties to be commercialized next year and created export processing zones where over 80% of apparel is produced and over 40,000 Kenyans are employed. Kenya's country report is a statement of the meeting.

The delegate for COLOMBIA noted that cotton area in 2014/15 was the lowest since cotton became a cash crop in the 1970's and the government has implemented a minimum price guarantee policy to avoid the complete disappearance of cotton in Colombia. Local production provides very little cotton to domestic mills, which is reflected in the trade balance as imported cotton is preferred. The loss in cotton production is not due to low productivity, since the average yield in Colombia is good, but instead due to the lack of competitiveness because of high production costs. The delegate noted that cotton cultivation is conducted by smallholder farmers who work on rented lands that are often under one-year contracts and this contributes to the cost of production. The development of national seed varieties is one of main challenges for Colombia and government support has not been as available in recent years. However, Colombia's advantages are the ability to reap two harvests a year and its high quality. The devaluation of its currency is the sole reason that earnings have improved recently. The from 2015-2020, production may continue to decrease gradually, but attention will be focused on improving competitiveness. Colombia's country report is a statement of the meeting.

The delegate of GERMANY noted that being an importer of cotton lint and textiles, it approaches the cotton sector from the viewpoint of a consumer. This did not mean that Germany's cotton sector is not concerned with the rest of chain, since end consumers are increasingly concerned with all aspects of the cotton value chain. She expressed appreciation on behalf of Germany's cotton sector for the work of SEEP toward a shared definition and framework for producing socially, environmentally and economically sustainable cotton, noting this work is in line with ICAC's work to promote transparency in the global cotton sector. This plenary would be the last meeting for Germany as a member country, since the EU is expected to join ICAC as a member in mid-2016 at the start of the new ICAC fiscal year. Germany hoped the Steering Committee meeting would approve the changes to ICAC's Rules and Regulations since EU membership would strengthen the organization. Germany's country report is a statement of the meeting.

The delegate of UGANDA stated that cotton is important for alleviating poverty and bringing change to Uganda's economy. Due to the fact that cotton in Uganda is grown by small-scale farmers on rainfed plots, the crop is greatly affected by climate changes, such as the current drought stemming from an El Niño event. The cotton production increased from 2013/14 to 2014/15 due to better mobilization of farmers and greater usage of yield-enhancing inputs. Export earnings decreased from US\$24.5 million to US\$21 million due to lower prices, which also affects producer prices. Domestic consumption increased due to the opening of one additional spinning mill in December 2014. The quality of cotton continues to improve due to training farmers and gins to reduce contamination, better ginning practices that increase staple length and strength, and maintaining membership in the Bremen Cotton Exchange and the International Cotton Association. Uganda's cotton sector benefited from an India technical assistance program providing training sessions on modern cotton production and post-harvesting practices and established a bio-pesticide laboratory. Uganda was open to increasing investment in domestic value addition of cotton lint to help bolster employment opportunities and yields and to contribute to import substitution. Uganda's country report is a statement of the meeting.

The delegate of BRAZIL noted that his country's cotton sector is going through a difficult phase at this time due to the 40% devaluation of its currency against the US dollar. Although helpful for cotton exports, this has caused significant inflation domestically and hurt cotton consumption along the value chain. Changes in traditional weather patterns had affected cotton production, though it was too early to assess the full impact. Brazil will have a centralized HVI classing system and will check and verify all labs next year to ensure accurate HVI data for all cotton exports from Brazil. Brazil is the largest producer of BCI cotton and nearly 64% of its exported cotton is covered by BCI. The country plans to have 100% of its cotton exports be BCI cotton in the near future.

The delegate of ZIMBABWE stated that cotton is a strategic crop grown by over 200,000 small-holder farmers and contributes to rural employment and income, as well being the third largest export crop in terms of earnings after tobacco and sugar. Over 90% of farmers grow cotton by entering into contracts with ginners, who provide seed and fertilizer in return for cotton is sold to a gin regulated by the agricultural authority. Cotton production has been slightly above 100,000 tons of seedcotton over the last 3 years, which is just below its peak in 2011/12. Climate change, limited knowledge of best agronomic practices and availability of financing for inputs are major challenges for the cotton sector in Zimbabwe. Since smallholders are unable to finance cotton production under the contract-financing model,

the government plans to provide free inputs to farmers over the next three seasons in order to increase area to 250,000 hectares and seedcotton production to 500,000 tons. The delegate noted that prices have been very poor, which discourages production. Mitigating measures are detailed in its country report. Zimbabwe's country report is a statement of the meeting.

The delegate from CHAD presented a report on the cotton situation in this country. Cotton has been grown for over the past six decades, is an important socio-economic crop and has contributed significantly to the export earnings of Chad. Since restructuring the cotton sector, in particular COTONTCHAD new company (SN), in January 2012, production has steadily increased from 34,000 tons in 2014, to 57,000 tons in 2015. The goal is to produce 80,000 tons in 2016. The increase in production is the result of an ambitious business plan with the goal of producing 120,000 tons by 2018. The majority of the production is exported, the main destinations being Bangladesh, India, Indonesia, China, Italy, Portugal, and Germany. The delegate noted the need for further discussions on volatility of cotton prices in order to find appropriate solutions to this problem, which have significant consequences for all sectors in the cotton value chain. Chad's country report is a statement of the meeting.

The delegate of INDIA stated that the textile industry in her country is predominately cotton-based and contributes 12% to India's total industrial production and 4% to its GDP. India emerged as the world's largest producer in 2015/16 with a volume of 6.2 million tons and the majority of cotton production comes from nine states, the production details of which are provided in its country statement. India has the largest area globally planted with cotton, reaching 11.76 million hectares in 2015/16, of which 38% is irrigated and 92% is sown with biotech cotton. India's total supply of cotton (production, beginning stocks, and imports) in 2015/16 was equal to 7.3 million tons, compared with 7.2 million tons in the previous season, and mill use is likely to increase to 5.49 million tons in 2015/16. India maintained that cotton lint was a freely exportable commodity and exports in 2015/16 may reach 1.16 million tons, with Bangladesh and Indonesia as the largest buyers this season, though China had been in this position in recent seasons. In the same way as exports, cotton imports are also freely traded and India's main sources of cotton are Mali, the United States, Australia, Cameroon, Côte d'Ivoire and Egypt. Improving the quality of cotton, ginning, and marketing infrastructure are the areas of concerns for India. While India's national average yield increased from around 300 kg/ha to 570 kg/ha, yields remain below the world average and India hopes to improve this through high density planting. The Indian government implements minimum support price mechanisms in such a

way as to reduce distortion, with money going directly to farmers' accounts. India's country report is a statement of the meeting.

The delegate from the World Trade Organization (WTO) thanked the government of India for hosting the 74th Plenary Meeting and expressed her organization's appreciation to ICAC for the invitation to participate in this event. The delegate noted that the WTO secretariat has established a productive and mutually beneficial collaboration with ICAC for over a decade, and mentioned that WTO members highly appreciate ICAC's presentations on cotton production and trade trends at meetings of the Director-General's Consultative Framework Mechanism on Cotton and at the Dedicated Discussion on the Trade Aspects of Cotton. The delegate also noted that cotton is an integral part of the Doha Development Agenda (DDA), and a priority of the Cotton Four (C-4) as well as several other WTO members. Progress was expected at the 10th WTO Ministerial Conference, due to be held next week in Nairobi, Kenya, during which issues related to cotton would be an integral part of discussions on the future of international trade negotiations.

The delegate from the French Agricultural Research Centre for International Development (CIRAD), a French international research organization, stated that the organization has a mandate to assist the development of sustainable agricultural production in tropical and subtropical areas, and mentioned that the organization supports the theme adopted for the Plenary Meeting, since it contributes directly to the study of several faces of cotton. Four important facets of cotton should be considered by all member and non-member countries. These facets are related to: (1) cotton as major component of cropping systems integrating food crops; (2) cotton as varietal response which provides for coping with the changes in environmental constraints; (3) cotton as an industrial, textile and food plant; and (4) promoting exchanges in production techniques with a view of sustainability and competitiveness in cotton-based cropping systems. The delegate concluded his intervention by stating that it is paramount to invest in skills, functioning and the transfer of knowledge in research in the South, in order to help in dealing with the current and future challenges and stakes of the cotton supply chains. CIRAD's report is a statement of the meeting.

The representative of the International Cotton Association (ICA) noted that, since the spike in prices in 2010/11, the number of contractual disputes continued to fall with a number of applications for arbitrations down for the record highs of 242 in 2011 and 247 in 2012 to a record low this year of just 38 applications. However, in the last five years there have been 560 arbitration awards issued, with a value of \$713 million dollars. Of these, 334 or 60% have been defaulted on. There was a bigger problem affecting

everyone involved in the cotton sector, namely the enforcement of arbitration awards. The ICA representative explained the implications of the 1958 Convention on the recognition and enforcement of foreign arbitral awards (otherwise known as the New York Convention), and gave some examples of how legally valid ICA arbitration awards have been dismissed against the principles of the New York Convention. Member states could implement three different strategies to ensure that they fulfill the terms of the New York Convention: (1) ensuring judges are properly trained in the enforcement of foreign arbitral awards; (2) presenting foreign arbitration awards to properly constituted commercial courts with the proper expertise to handle them; and (3) ensuring that there are enough properly trained judges to hear cases so that they can be dealt with in a timely and efficient manner.

The representative of the Food and Agricultural Organization of the United Nations (FAO) noted that the FAO has three main goals: the eradication of hunger, food insecurity and malnutrition; the elimination of poverty and the driving forward of economic and social progress for all; and, the sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations. The supports

the strengthening of cotton sectors through the implementation of regional and national projects in West Africa and in the MERCOSUR countries of Latin America respectively. The primary focus of these programs is to increase the profitability and sustainability of smallholder cotton production by focusing on three major areas of work: the development and adoption of innovative, agro-ecological practices, family farming and social inclusiveness, and partnerships and South-South cooperation. The FAO and ICAC and other development organizations have joined forces to promote a global dialogue on the environmental, economic and social sustainability of the cotton industry. The FAO representative also touched upon the long-standing collaboration between the Trade and Markets Division of FAO and ICAC, and the OECD-FAO Agricultural Outlook publication.

The delegate of the African Cotton Association (ACA) provided a briefly report on the activities developed by the organization during 2015. The delegate also thanked all donor partners for their contribution to maintaining the competitiveness of the African cotton production. ACA's report is a statement of the meeting.

The delegate of ACTIF described his organization's vision for an integrated African textile

industry that can compete on the world market. The recent extension of the US African Growth and Opportunity Act and the conclusion of the European partnership agreement represented opportunities to strengthen the textile and apparel sector in Africa. Since the last plenary meeting in 2014, ACTIF has been engaged with one project that has supported each segment of the value chain from farmer to the final product being marketed for export to the European markets with products that are fully traceable and verified under Cotton Made in Africa. The Cotton Made in Africa initiative has grown to include over 770,000 farmers and production within several African countries such as Ethiopia, Mozambique, Zambia, Zimbabwe, and Burkina Faso. ACTIF has continued to witness a growth in the textile sector of East Africa, which has implemented a large project assisted by an idea center that supports technology transference and capacity-building between India and several countries in eastern Africa in order to expand trade between these countries. The delegate noted that its conference, Origin Africa, was held in October 2015 in Ethiopia and was the largest pan-African cotton, textile & apparel event in the region and helped raise awareness of Africa both as a place for investment and as a sourcing destination.

First Open Session

Towards a More Sustainable Agriculture: Learning from Other Commodities

11:00 hr. Monday, December 7, 2015

Dr. C. D. Mayee, Indian Society for Cotton Improvement in the Chair

Presentations:

- "Sustainability Challenges for the Cocoa Sector" Lars Brogaard (Danish Standards Foundation) and Jack Steijn (European Standards Committee on Sustainable and Traceable Cocoa)
- "Sustainability: Global Best Practices that Apply to Cotton" Daniele Giovannucci (Committee on Sustainability Assessment)
- "Developing a Sustainable Coffee Economy" Dr. Denis Seudieu (International Coffee Organization)
- Report of the Expert Panel on the Social, Environmental and Economic Performance of Cotton, Chair of the SEEP, Allan Williams

The CHAIR opened the session by stating that this was a unique session where cotton is trying to learn from other commodities.

He introduced both speakers of a shared presentation on "Sustainable challenges for the cocoa sector". The first part presented by Mr. Jack Steijn described the need ISO standards for

sustainable production of cocoa and the process for their development. He stated that the critical issues in cocoa production are to avoid child labor, arrest decreasing production and tackle climate consequences that could have a huge impact on cocoa production in the world. It is important to understand what is sustainable cocoa, make sure that sustainable production becomes mainstream, ensure profitability for producers and establish a transparent system to designate production as sustainable. Mr. Steijn assured that on-going initiatives, such as Fairtrade, will be admissible under ISO standards. He said that the criteria for sustainability have to be based on impact and not on use of inputs. Mr. Lars Brogaard of the Danish Standards Foundation focused his part of the presentation on the development of ISO standards. The ISO makes sure that the development of standards includes consensus among stakeholders, consensus among expert groups and a complete coherence between countries and liaison organizations. Giving an example of a liaison organization, he stated that International Cocoa Organization would be involved if a standard is being developed on cocoa. He described that the current stage of cocoa standards. The entire process takes about 2 to 4 years arrive at a publicly usable standard.

After the process description Mr. Steijn again took over again and said that cocoa production and consumption sectors are equally involved in their inputs for developing any guidelines, which have to be sustainability management, performance-based, traceable and ultimately reach the certification scheme. He optimistically stated that there is already a demand for sustainably produced cocoa as some consumers have plans to demand for sustainably produced cocoa. Mr. Brogaard and Mr. Steijn's presentation is a statement of the meeting.

Mr. Daniele Giovannucci of the Committee on Sustainability Assessment (COSA) made a presentation on "Sustainability: Global best practices that apply to cotton". He described COSA is a global consortium of partners dedicated to accelerating agricultural sustainability through robust monitoring and evaluation. He said that common frame and benchmark in sustainability issues have to be such that farming communities could pursue the dual objective of viable production and good livelihood. He hoped that in about ten years sustainability would be well defined and understood. Mr. Giovannucci said that the five lessons learnt are that: standards matter; compliance checks are outdated; local requirements are critical; multidimensional

views offer better understanding; and institutions like cooperatives and association are extremely important. He cited an example of how irrelevant questions can lead to misleading conclusions. The solution lies in vetted indicators and metrics, performance monitoring, impact assessment, reach out to producer organizations and make sure that policy and strategy are properly integrated. Mr. Giovannuccio's presentation is a statement of the meeting.

Dr. Denis Seudieu of the International Coffee Organization explained the coffee production scenario and stated that coffee is produced in almost all non-arid countries in the tropics. With minimal exceptions, coffee is produced in developing countries, including a significant number of least developed countries. Africa has about 12 million small producers, accounting for more than half of coffee growers. Dr. Seudieu defined sustainable development as a system of production and trade that is more equitable in terms of social, economic and environment targets. Some of the challenges (social, economic and environmental) of a sustainable coffee sector include: improved income for coffee farmers, transparency in marketing, diversified income generating activities, gender equality in farming, better farm working conditions, effective farmer organizations, adoption of good agricultural practices, non-harmful soil fertility management, integrated pest control, saving water use and waste management. Dr. Seudieu said that climate impact on coffee could be huge, affecting crop physiology and thus impacting

yields all over the world. It is also feared that the impact on flowering and fruit filling stages coupled with outbreak of coffee pests and diseases could be very harmful. A majority of the coffee-producing countries are among the most vulnerable to the effects of climate change and smallholder farmers, who are already vulnerable, will become even more at risk. Dr. Seudieu discussed a number of initiatives that the International Coffee Organization has undertaken to face the above-mentioned challenges. The International Coffee Organization is promoting coffee development projects that encourage sustainable development and poverty reduction in producing countries through projects, which have as their principal beneficiaries the coffee-producing countries of Africa, Asia & Oceania and Latin America. The Organization has established a Consultative Forum on Coffee Sector Finance with a particular emphasis on the needs of small- and medium-scale producers and local communities in coffee producing areas. However, Dr. Seudieu in his conclusions observed that the variation of weather patterns due to climate change would exacerbate chronic environmental threats that could derail progress toward sustainable development. Dr. Seudieu's presentation is a statement of the meeting.

Mr. Allan Williams, Chairman of the Expert Panel on Social, Environmental and Economic Performance of Cotton (SEEP) in his report presented an update on pilot testing of guidance framework and the importance of metrics to the textile supply chain. Pilot testing of the 68

sustainability indicators of the SEEP is being undertaken in Australia, Latin America, West and Central Africa, USA and Zambia. He provided brief details on each of these testing conditions and observed that based on the current experience a number of lessons have been learnt. The framework proved to be a very useful resource for all activities. The framework provided a focal point for discussions on sustainability in cotton production. The testing experience encouragingly showed that data on many of the indicators is already being collected. The testing also indicated that there might be a need to develop indicators that are more specific to rain-fed production conditions. Mr. Williams also observed that because of many reasons the economic indicators are sensitive to measure. He stated that SEEP plans to publish a summary of results once the pilot testing studies are completed in the countries under study at this time. He elaborately explained that how the textile supply chain could benefit from the metrics. Mr. Williams recognized the support from the GIZ, Germany, and acknowledged the immensely valuable contributions made by Dr. Michel Fok of CIRAD to the work of the SEEP.

The delegate of INDIA commented that the positive attitude and use of appropriate technology always lead to positive results. He was impressed by the inter-commodity approach to learning from each other. The CHAIR thanked the delegate and concluded the meeting at 1:10 p.m. with his concerns about global warming and its negative impacts on production across commodities.

Second Open Session

World Cotton Market Report

9:00 hr. Tuesday, December 8, 2015

Mr. Dhiren Sheth, President of the Cotton Association of India in the Chair

Presentations:

- "India Market Report" Manek Gupta (Glencore Grain India Pvt. Ltd., India)
- "Cotton Supply and Use, Part 1" Rebecca Pandolph (ICAC)
- "Cotton Supply and Use, Part 2" Lorena Ruiz (ICAC)
- "Government Support to the Cotton Industry" Andrei Guitchounts (ICAC)

The CHAIR invited Mr. Manek Gupta, cotton trader from Glencore Grain, to present a Market Report on India. The first half of Mr. Gupta's presentation focused on production. The main conclusions included: the improvement in yields seen after the introduction of biotech cotton has tapered off in recent years; pest resistance is increasing; little scope exists for expanding production in the North and Central zones, while

the Southern zone is less saturated and cotton can expand if competitive with other crops; the priority of the Indian government is on food crops, not cash commodities; and increases in yields will depend on interlocking factors (high density planting; high efficiency irrigation; and mechanization of picking). Unless dramatic changes occur, future production will range from 5.8 to 7.4 million tons. The second part of Mr. Gupta's presentation focused on the trade and industrial use of cotton in India. Some important conclusions were: the yarn industry is becoming increasingly dependent on exports, especially to China; India needs to develop a value added sector to enable import substitution of greige and processed fabric for domestic use; norms for small- and medium-size enterprises in the knits sector must be relaxed in order to achieve economies of scale; and neighbors of India have significant competitive advantages because of access to cheap Indian raw material and benefit of duty free access to Europe/US for finished goods. Mr. Gupta's presentation is a statement of the meeting.

The CHAIR invited the ICAC Secretariat to present on cotton supply and use. Ms. Rebecca Pandolph, the ICAC Statistician, noted that a very strong historical correlation exists between prices prevailing during a given season and the planted area for the next season. In 2014/15, one of the most notable events that happened in the cotton sector was the significant drop in world cotton prices from 91 cents per pound to around 71 cents per pound. As a result, world cotton area is estimated to fall to a level just above 30 million hectares. In addition, farmers also take into consideration the prices of competing crops and cotton was not as attractive as competing crops in 2014/15, contributing to the decrease in world area. Ms. Pandolph pointed out that world cotton yields have been stable over the last ten years, averaging around 780 kg of lint per hectare, and there is no indication that yields will increase in the near future. World cotton production is forecast to fall by 12% to 23.1 million tons, and decreases are expected in all five top producing countries. India's production

may decrease by 4% to 6.3 million tons due to reduced plantings and pest problems. China is in its fourth consecutive season of declining production, and its volume in 2015/16 is projected to fall by 19% to 5.3 million tons. As a result of a lower production and an increase on mill use, world-ending stocks are expected to fall by 6% to 20.7 million tons, which represents about 85% of the volume needed for world mill use in 2015/16. Ms. Pandolph stated that stocks in China are projected to be just under 12 million tons at the end of 2015/16, while stocks outside of China are forecast to decline by 4% to 8.7 million tons.

Ms. Lorena Ruiz, the ICAC Economist, presented a report on cotton imports, mill use, textile fibers consumption and prices. Ms. Ruiz pointed out that in 2015/16, world imports are projected to decline for the third consecutive year to 7.4 million tons, with imports from China falling 33% to 1.2 million tons, the lowest level

since 2002/03, due to a reduction in the cotton import quota in 2015 and the end of the Chinese stockpiling policy implemented until 2013/14. Imports by other countries increased by 31% in the last four seasons, rising from 4.4 million tons in 2011/12 to 5.8 million tons in 2014/15. Cotton imports outside China will continue to grow by 6% in 2015/16. However, this increase will not offset the 33% decrease in China's imports. As a result, world cotton imports may drop by 3% to 7.4 million tons. Ms. Ruiz stated that world cotton imports are dominated by a few countries and concentration has been further intensified over the past two decades. In 2014/15, seven countries accounted for 76% of global imports. She also noted that world cotton consumption increased for the third consecutive year and reached 24.2 million tons in 2014/15. However, demand for cotton still remains sluggish and it is projected to increase by only 0.5% to 24.4 million tons in 2015/16. Since the steep decline in demand

for textile goods in 2008, textile consumption has increased 31%, from around 66 million tons to an estimated 87 million tons in 2014. Although textile demand continues to expand, the slowdown in world economic activity has affected the growth rate of textile consumption, decreasing from 5% in 2013 to 3.8% in 2014. World cotton consumption per capita has been almost constant since 1960, while non-cotton fiber consumption per capita has increased from 1.6 kg to around 8.7 kg in the same period. As a result, world non-cotton fiber consumption per capita is currently 2.6 times greater than the corresponding level of cotton consumption. The Secretariat's long-term projections foresee that total cotton consumption will continue to grow, but the market share of cotton among all textile fibers will continue to decline, possibly to 24% by 2025. Ms. Ruiz also mentioned that world production of chemical fiber yarn increased for the sixth consecutive year and reached 61.6 million tons in 2014.

Third Open Session

Demand for Cotton: The Views of Retailers

11:00 hr. Tuesday, December 8, 2015

Mr. Andrew MacDonald (Brazil) in the Chair

The CHAIR introduced panelists: Mr. Pascal Brun of H&M, Mr. Pramod Singh of IKEA and Mr. Prem Malik, past president of Confederation of Indian Textile Industry, and initiated a panel discussion on the views of retailers on demand for cotton, quality issues, consumer behavior and negative press on cotton.

Mr. Brun observed that cotton remains a major product at H&M, although consumers are becoming conscious about the sustainability of cotton production, especially environmentally friendly pesticide use and water management. Mr. Singh and Mr. Malik supported this view, and indicated that polyester gained share especially in industrial and home furnishing textiles, while consumers are generally aware of cotton's advantages in products that come into close contact with the skin. They prefer sustainable product at a reasonable price. They indicated that the scope of consumers' interest in sustainability is growing, especially among the urban population.

Mr. Brun commented that major factors affecting consumer decisions include price, quality, comfort, easy-care and then sustainability. Mr. Singh noted that, while easy-care helps to attract customers, price and functionality remain critically important in maintaining the market share, while touch and feel becomes very important in linens and towels. Mr. Malik confirmed that price remains the major factor, but quality, functionality and brand of the product are also important.

With regard to the effect of negative press on

cotton, Mr. Brun commented that it has an impact on customers, but cotton industry should promote good stories about cotton and there are a good number of those. Mr. Singh agreed that there is a need to transmit to consumers' positive information about cotton and improvements in sustainability achieved by the industry. Mr. Malik stressed that the industry, retailers and researchers should work together to promote customers' awareness about the benefits of cotton and environmental improvements in production practices.

On the issue of government role in raising consumer awareness, Mr. Brun supported efforts on improving labeling laws. Mr. Singh said that it is important to inform consumers fully on the content of fabrics. Mr. Malik agreed that it is important to inform consumers on fiber content, as well as sustainability initiatives in cotton production, such as BCI, CMiA, etc., while improving traceability. Mr. Brun pointed to two important aspects of labeling: traceability and transparency.

On the use of organic cotton, Mr. Singh commented that IKEA has no specific targets for organic cotton, but rather aims to use sustainable cotton. Mr. Brun said the share of organic cotton in H&M's products is growing, in conjunction with BCI and recycled cotton. Mr. Malik noted that farmers needed to be paid a fair price in order for the organic cotton share to grow. Mr. Brun observed that sustainability has a cost, but also a return on investment, and retailers have a role to play and are ready to share the cost. Mr. Singh agreed that retailers are ready to pay extra for sustainability in an indirect manner, through

sustainability initiatives such as BCI.

On the issue recycled and disposable cotton garments Mr. Brun indicated that H&M has a garment-collecting program for recycling and it is growing. Mr. Singh noted non-woven materials are a big part of home furnishing recycled products, but cotton is not a big part in it. Mr. Malik noted that non-woven materials are incapable of meeting the needs of the fashion industry for the foreseeable future.

Mr. Brun observed that there is a big gap between promotional campaigns for man-made fibers and cotton. Man-made fibers promote innovation more actively. He said that there is a need to improve cotton promotion, labeling, transparency and traceability systems. Mr. Singh suggested that it is important for governments to support sustainability standards. Mr. Malik noted that cotton production will continue to grow, but in order to maintain its market share it is important to promote innovation in the cotton industry.

On the future consumption of cotton, Mr. Brun suggested that cotton will continue to be important in the fashion industry, although there will be new substitutes, and recycled products. Mr. Malik suggested that cotton consumption in India could double by 2025, as there are three areas for potential growth: house furnishing, hospital-ity industry and health care. Mr. Singh suggested that cotton consumption would continue to grow, while improving the sustainability factor.

A delegate of PAKISTAN commented that there are two types of consumers, those who are concerned about quality are not concerned about a price and the other way around. He asked

Mr. Singh to comment on engaging customer concern about sustainability. Mr. Singh replied that customers' major concerns are price, quality and functionality.

A delegate of India asked what cotton industry is doing to promote sustainability. Mr. Brun gave an example of BCI in India, China and many other countries.

A representative of Cotton Council International observed that a major factor in online shopping is price, rather than touch and feel factor. Mr. Singh said that to compensate for the lack of touch and feel factor in online shopping retailers

have a return policy. Mr. Brun noted that often customers check the product in stores and then buy it online.

The delegate of AUSTRALIA commented that Australia uses not only BCI, but also the Cotton Leads Program in partnership with USA in order to showcase responsible growers.

A delegate of Egypt asked about a background of CMiA in IKEA. Mr. Singh said replied CMiA is in partnership agreement with IKEA and BCI. A representative of CMiA noted that the initiative is active in 12 African countries, is similar to BCI and both recognize each other.

A delegate of USA asked if consumers have concerns about sustainability of man-made fibers. Mr. Brun said that consumers have a general concern about all products, but cotton is a major target among raw materials, mostly because there are 30 million garment workers in comparison with 300 million cotton farmers. Mr. Malik noted that this is because cotton is grown by smallholders, unlike man-made farmers, which are produced by large industrial plants. He said that this is a case of big against small. Mr. Singh suggested that people in this room could make a difference addressing the negative press in partnership with retailers.

Fourth Open Session

Mechanical Picking of Cotton

13:45 hr. Tuesday, December 8, 2015

J. Thulasidaran, (Vice-Chairman, Confederation of Indian Textile Industry) in the Chair

Presentations:

- "Cotton Harvester for small farms: Make in India initiative" Dr. Gautam Majumdar (Central Institute for Cotton Research, India)
- "Uzbek Cotton Production, Consumption and Competitive Advantages" Rinat Gulyaev (Uzbektaexport Joint-Stock Company, Uzbekistan)
- "Mechanical Picking of Cotton" Gusvinder Singh (Bayer, India)

Dr. Gautam Majumdar explained that there are around 24 million hectares under cotton around the world that are yet to be harvested mechanically, which is equivalent to around 75% of the total cotton area. He noted that machine harvesting can help to reduce the costs of harvesting by replacing labor, which has become increasingly expensive, accounting for around 30% of total productions costs, and more difficult to find. In the future, a point may be reached where leaving cotton in the field would be more profitable than hiring labor. Dr. Majumdar explained that there are several reasons why mechanical harvesting is not more prevalent, including: a trend towards decreasing size of farms; the high costs of currently available machines; the size of current machines not being very suitable for small plots; and the difficulties in operating and maintaining machines. He then discussed a case study in India, where almost half of the world area of handpicked cotton is located (around 12 million hectares), with over 6.4 million farms that are fully handpicked, of which 50% are less than one hectare. With this in mind, a suitable machine for India would need to be low cost, simple to operate and maintain and keep contaminants (trash) within acceptable limits. He described the advantages of the Central Institute

for Cotton Research's machine that he has been testing as cutting down on the time it takes to harvest cotton and reducing the cost of labor from \$151.51 per hectare for manual picking to \$112.2 per hectare for machine-picked cotton that has also been cleaned of trash. He then made a comparison between the CICR machine and a one-row combine picker with a higher cost. This showed that CICR's machine had lower initial costs, was simpler to operate and maintain, took slightly more time and had a higher trash content. He noted, however, that 70-80% of the trash content consisted of burs and sticks, which are much easier to remove than other types of trash. He observed that handheld machines that did single-boll picking were found to be less efficient than handpicking when tested. Dr. Majumdar concluded his presentation by showing archival images from the US of a horse-drawn machine for harvesting cotton, raising the question of why more research couldn't be done on this type of solution. Dr. Majumdar's presentation is a statement of the meeting.

Mr. Rinat Gulyaev explained that Uzbekistan is currently passing through a period of macroeconomic stability as shown through the national budget surplus in recent years, the reduction in the minimal personal tax rate, inexistent internal debt and inflation that has not surpassed 7% due to its recent economic reforms. He noted that exports in terms of value for many products, including complex fertilizers and yarn have increased substantially since 1990 and Uzbekistan has remained a significant producer and exporter of cotton. He stated that seedcotton production in the last year was around 3 million tons with harvesting be done mostly by hand, though the government is working to increase the volume of machine-harvested cotton. He noted that around 20% of the crop is currently machine-picked but that government plans to increase that share to around 80% in the near future, using domestically-designed machines that are made in

a Tashkent facility. Mr. Gulyaev explained that the government recently started to modernize its ginning facilities, which include new bale presses that use plastic bagging. The new bags are widely accepted under most international standards and help to improve the marketability of Uzbek cotton fiber. Mr. Gulyaev's presentation is a statement of the meeting.

Mr. Gusvinder Singh presented a cotton mechanization project in India that is the result of collaboration between John Deere, Bayer and Bajaj Steel. He referenced the first presentation that discussed why machine-picked cotton might advantageous and added that machine-picking can also increase productivity, as well as addressing issues related to contamination and child labor. The project had started in 2009 with the importation of two machines from Turkey. These were two-row pickers but did not work well since they were too large for the average size of farms in India. He explained that over the next few years, with the support of the government of Punjab and the Ministry of Agriculture, the machine was fine-tuned. In addition, new seed varieties were developed that would produce cotton that was more suitable for machine-picking. The machine was introduced commercially in 2013 at a commercial level with 22 farmers and 150 hectares, which was increased to 2,650 hectares in 2015. Mr. Singh reported that the farmers using the machine saw their average yield and earnings increase. He stated that, given the history of other countries, larger-scale implementation of machine-picking in India may take many years. He asserted that the right agronomic practices, supportive government policies and an urgent need to reduce labor costs need to be present before machine-harvesting cotton becomes adopted. He suggested that around 2-3% of cotton in India may be machine-picked in the next ten years.

The delegate from INDIA noted that the ses-

sion's Chair was involved with the development of a larger-scale machine, asked for more details and whether the machine was still in research. The Chair stated that the machine was successful and users experienced a 50% savings in labor cost. The machine was already available commercially with sales in Punjab and several other locations.

An audience member associated with the Central Institute for Cotton Research noted that, in the presentation by the representative of Bayer, several factors (the use of high density planting, certain agricultural chemicals and machine harvesting) seemed to work together to achieve an increase in yield. How much did each component contribute to improved yield? Mr. Singh agreed that all the factors mentioned contributed to the higher yield, but a significant part of this came from the increase in the number of cotton plants sown per plot when following such a method.

The same audience member asked that if there enough time after monsoon to ensure timely planting of cotton using the machine. The representative from John Deere noted that 80% of cotton in India was sown under dryland conditions. As a result, John Deere had come out with a precision planter suitable for these conditions, which could be used within a few days of the end of monsoon weather without any special preparation of the field.

The audience member from Egypt's Cotton Research Center asked whether the machine worked well for longer staple cotton. Mr. Singh replied the Indian cotton has an advantage in that it had few neps when handpicked, but that the cost of labor made handpicking prohibitive. This overshadowed any issue with neps, but machine-picking did not affect fiber length.

The delegate from COTE D'IVOIRE noted that while it seems that mechanization of the harvesting can result in higher quality cotton, in Africa cotton is handpicked in many countries. A move to machine-picking could affect the reputation of African cotton in the international market and asked whether there were machines suitable for the very small-scale farming that occurred in Africa. Mr. Singh replied that machine-harvested cotton tends to have lower contamination since it requires less handling. This characteristic may possibly be beneficial to African countries and also helps with sustainability by reducing costs. Mr. Singh noted that there were a number of machines suitable for small-scale farms.

The delegate from MALI maintained that the it was not certain that handpicked cotton would be more contaminated than machine-picked cotton since this did not often occur in Mali. There, cotton is harvested by hand on plots of just 2 to 3 hectares and the quality of handpicked cotton in Mali is very high. At the current time, any savings in labor cost were not enough to offset

the potential loss in quality. Mr. Singh stated that the conditions in Mali may be very different from those that prevail in India, where cotton is often picked several times during the season and stored in an area subject to contamination between harvests. Therefore, contamination is a significant issue in India for handpicked cotton.

Dr. Majumdar noted that a significant trade-off can exist, so the cost and lack of availability of labor provides a bigger impetus to use machine-picking, even though trash can also increase.

The CHAIR observed that, although spinners may prefer to buy handpicked cotton, the high cost of labor made machine-picking a better option for producers.

Mr. Jens Soth, from the Swiss delegation, stated that comments made in the earlier session on cotton by-products were pertinent to this session given the discussion on "trash" in machine-harvested cotton in comparison with hand-picked cotton. This "trash" can be transformed to a value-added product, since it is a raw material and biomass that has value. The terminology used needed to be changed to reflect the value of these by-products.

The CHAIR concluded the session by noting that high-labor cost countries are turning toward higher usage of machine-picking but, given the complexity of large machines and their high cost, smaller machines for small-scale farms are more advantageous.

Fifth Open Session (World Café)

Implementing the SEEP Guidance Framework on Measurement of Sustainability

15:45 hr. Tuesday, December 8, 2015

Facilitators:

- Allam Williams, Cotton Research and Development Corporation, Australia
- Francesca Mancini, FAO
- Soren Moller, FAO

The Fifth Open Session involved over 100 participants. Utilizing the world café format, groups discussed aspects of the SEEP Guidance Framework as a means to enhance the sustainability performance of the cotton sector. The session featured lively discussions and was characterized by a high degree of participation and interaction. Some of the prominent themes are listed below in response to each focus question.

Who should be involved in developing and monitoring sustainability indicators?

- It was widely agreed that all stakeholders and actors in the cotton supply chain should be involved in developing and monitoring sustainability indicators (from farm to fabric).
- The specific institutions to be included and their role depend on the structure of the cotton sector in a given country.
- If it does not yet exist, a multi-stakeholder platform/taskforce could be created. Ideally, it should involve:
 - Producers and their representations (co-operatives, associations);
 - Cotton companies (public/private);
 - Government (ministries and cotton boards/associations);
 - Researchers and extension services (especially because some indicators are very technical);
 - Civil society, NGOs, international organizations can contribute specific expertise;
 - Financial organizations (their exact role needs to be defined)
 - Brands that operate there especially retailers
 - Transparency Organizations
- Including all stakeholders is important to increase acceptance and ownership of a framework of indicators.
- Farmers and cotton companies should be placed at the centre of the process.
- Farmers may need support to keep accurate records. Examples were cited where provision of extension services, training on best practices and collection of data have been successfully combined.
- Certain indicators are scale dependent – this will impact the level, and most appropriate actor to collect them.
- There is a need for an institution (e.g. steering committee/clearing house) to play a role in coordination, compilation, evaluation and dissemination of the data that is collected.
- There were different opinions on the role and responsibility of governments – some participants suggested a larger role while others emphasized the shared responsibility among all stakeholders.

- A public-private partnership model was proposed to share the cost burden but also to promote a joint ownership of the process.

What are the potential benefits for different stakeholders?

- All stakeholders can benefit from a framework of indicators to support sustainability efforts:
 - Cotton companies can produce more, with better quality, while ensuring continuity of raw materials;
 - Farmers can improve their livelihoods/conditions of living. Increasing resource-use efficiency can reduce costs of production providing an economic incentive;
 - Spinners are able to meet supply chain/retailer demands (e.g. no child labour or prohibited chemicals);
 - Retailers face pressure from consumers – they need “a story to tell”. They can gain a market advantage by proving their sustainability credentials;
 - Countries maintain the competitiveness of their sectors, diagnose potential threats to sustainability, promote social development, reduced need to subsidise production;
 - Societies and future generations benefit from decreased burden on the environment;
 - Other shared benefits include increased investment in cotton sector and textile industries and creation of new jobs. Potential increase in demand for cotton, especially from young customers;
- Some of the benefits of enhancing sustainability require a long-term perspective.
- Harmonization will avoid costly duplication of efforts and reduce confusion.

What do countries require to implement a framework of sustainability indicators at the national level?

- National/regional adaptation of indicators is an essential step (balanced with harmonization).
- The objectives, expectations and outputs of a system need to be defined in a transpar-

ent and participatory process. Inclusion of partners (especially farmers) in the decision-making process is important for acceptance/ownership and ultimately impact. Stakeholders need to agree upon and make visible minimum commitments. There should be a definition of responsibilities.

- An initial analysis is important to take stock of the data that is already collected; map the institutional structure; gain a common understanding of key issues and potential benefits; prioritize indicators to that are most relevant.
- Use data that already exists if it can be demonstrated to be accurate and neutral.
- Pilot scale projects can test the framework (e.g. based on an agro-ecological zone).
- Implementation will require investment in the form of financial and human resources.
- Farmers may need training/support and incentives to participate (need to make the business case).
- There needs to be political will and commitment to support the process.
- Need for sensitization or education about sustainability and its importance.
- Necessary to ensure accountability, plausibility, transparency and accuracy of data.

What are the key challenges for implementation?

- Sharing information with confidence – farmers may be concerned about the motives behind requests for data (especially for economic indicators); countries may be worried about comparison of their results versus other countries.
- Careful not to add more demands on farmers.
- Who pays the costs of collecting/analysing/verifying data? Burden cannot only be on farmers.
- Positive impacts for farmers/societies may take time to materialize.
- Motivating stakeholders, communicating the potential benefits can be difficult.
- “Collecting data for a few indicators is already difficult, getting to 68 seems far away.”

- A lot of data are already collected – they need to be consolidated/coordinated/rationalized. This involves many actors and may require significant work (e.g. over a series of workshops).

- Ensuring the transparency/credibility of indicators is a critical challenge.
- How can other crops in rotation be integrated – monitoring should try to assess the full system.
- The way in which existing sustainability initiatives can be integrated with the SEEP Framework needs to be defined.

What are the opportunities?

- Tools such as the Guidance Framework can assist actors in the supply chain to cooperate – by improving sustainability performance and demonstrating progress to consumers, the cotton sector as a whole can become more competitive (focus on competitiveness).
- A common methodology and reference point increases harmonization between indicators. This can allow for benchmarking and impact assessment on different sustainability issues. Joint solutions can be found to highlighted threats. Countries can learn from one another.
- Possibility of better managing risks at various levels.
- In cases where the supply chain is well organized/integrated, from producers to national inter-professional bodies, this provides an advantage in implementing a framework of sustainability indicators.
- Sustainability is only growing in importance and it is better for all stakeholders to be involved in ‘setting the rules’ rather than joining later and not having the opportunity to shape the process.
- Identifying sustainability challenges and measures that can be taken to address these at the ‘village level’ can foster local ownership and empowerment.
- Consider instituting “Sustainability Awards” to drive forward the process (this has worked well in other sectors).

Sixth Open Session (Technical Seminar)

Elimination of Insecticides from Cotton Production: Is this Possible?

Report of the Committee on Cotton Production Research of the ICAC

8:30 hr. Wednesday, December 9, 2015

Mr. Samir Kishore Shah, Bhaidas Cursonadas & Co., India in the Chair

Presentations:

- “Reducing insecticide risk in cotton”, Dr. Francesca Mancini, Food and Agriculture Organization of the United Nations, • Dr. Greg Constable, Commonwealth Scientific and Industrial Research Organization, Australia, “Cotton breeding and physiology research in Australia”
- “Is cotton possible without insecticides?”, Dr. Keshav Kranthi, Central Institute for Cotton Research, India
- “Cotton: key trends and insect pest management”, Dr. Srinath Bala, Bayer Crop Science, India.

Dr. Francesca Mancini of the FAO stated that the compound annual growth rate in market pesticide sales for the seven years since 2007 is from 5% to 8% per annum, which is mostly due to increases in herbicide referred to herbicide tolerant biotech crops. Insecticide use on cotton in general has gone down significantly from the peak values of the nineties, although increases related to outbreaks of secondary pests have been recently registered in some countries. The strategic components of a pesticide risk reduction approach are to reduce overall use of agrochemicals, select less highly hazardous pesticide products and, lastly, ensure proper use by adopting life cycle management and behavior change practices for farmers. These three steps are consequential; addressing proper use alone has proven to be challenging and counterproductive. Efforts should be made to eliminate the use of Highly Hazardous Pesticides (HHPs). HHPs are clearly defined by eight criteria established by the WHO/FAO Meeting on Pesticide Management and are those ingredients and formulations that can cause severe or irreversible adverse effects on human health and the environment. In the short term, the elimination of HHPs from cotton production would contribute enormously to reduce environmental and social negative impacts. The major success factors for reduction in use of insecticides are: an agro ecological approach to pest management; an area-wide IPM management to maximize efficiency; greater availability of alternative pest controls; enhanc-

ing farmers' knowledge and skills to manage crops; and supportive policies. Dr. Mancini concluded that much progress has already been made toward reduction of insecticide use and promotion of good agricultural practices. However, there are threats to this achievement, for instance the recent re-introduction of subsidies for pesticides in some cotton producing countries risks to lead to overuse of agrochemicals again. Dr. Mancini's presentation is a statement of the meeting.

Dr. Greg Constable, ICAC Researcher of the Year 2015, presented his thoughts focused on the role of breeding and physiology for improving yields and quality. The Australian experience has shown that cotton has a theoretical potential to produce 5,034 kg lint/ha. Based on the increases in yields in Australia, breeding alone contributed to almost half of the improvement in yields. Breeding is limited by genetic diversity, while management practices may not be duplicable under different production conditions. While the role of biotechnology approaches will continue to increase, breeding will not lose its significance. Breeding must target multidisciplinary coordinated efforts in order to bring efficient improvements. On the fiber quality aspect, Dr. Constable emphasized the need to improve fiber strength, which must be rewarded in price. Molecular marker breeding is complicated due to the complex nature of inheritance of most valuable characteristics in cotton. It will, however, ultimately be adopted. On the physiology side, genetic engineering of photosynthesis must be used as a molecular tool for yield improvement. Biochemical resistance and special characters as a natural source of insect control were discussed, although Dr. Constable stated that special characters like high gossypol, frego bract, etc. are capable of controlling low insect pressures. Less leaf hairiness is preferred in Australia to avoid contamination of seedcotton. Dr. Constable also stated that he has not observed any relationship between nutrient uptake and pest attack, although vegetative plant foliage encourages insect survival. There is no straightforward answer to the question of why fiber strength has not been shown comparable improvements to those observed in fiber length, fineness and other fiber quality parameters. Dr. Constable's presentation is a statement of the meeting

Dr. Keshav Kranthi started his presentation entitled ‘Is cotton possible without insecticides?’ with a resounding ‘yes’. He stated that insect problems are man-made and that nature controls insects. Insecticides have contributed to the

spread of insects rather than to their control. So-called man-made ‘interesting’ solutions include: plants that scare aphids; plants that invite natural enemies; plants that starve insects; gene silencing that starves bollworms; male-sterile insects; and fungus inside plants kills insects. Each sector has many options. However, conserving ecosystems holds the key to the Integrated Pest Management (IPM), on which he focused by presenting examples for various pests in India. Relevant management techniques include: use of short duration varieties; early sowing; judicious employment of fertilizers; insecticide intelligence; conservation of natural controls; intercropping for IPM; and intelligent use of IPM tools. Dr. Kranthi's presentation is a statement of the meeting

The presentation of Dr. Srinath Bala focused on the advancement of technology of cotton in India with emphasis on historical perspective, while informing that usage of crop protection chemicals in India is rising after 13 years of insect resistant biotech cotton. The pressure from sucking insects is increasing, which is probably due to the fact that the donor variety for biotech gene was susceptible to whitefly, jassids and thrips. Bollworms are returning to biotech cotton due to resistance. At the same time, minor pests, such as like mirids and mealy bugs, which damage squares and flowers, have been able to survive and multiply on cotton mostly because of the reduction in use of insecticides. Mr. Bala advocated safer and judicious use of insecticides. He stated that the pesticide industry is always looking for ways to be more sustainable and that the pesticide industry is not evil. He agreed that integrated approach is the best way to manage pests & enhance productivity.

In response to a question, Mr. Bala replied that he does not think that insecticide can be eliminated in the next 8 to 10 years. In reaction to this statement, the ICAC Secretariat commented that insecticides can certainly be eliminated if the correct choices are made and that ICAC is working to correct the impression that cotton cannot be grown successfully without insecticides. Dr. Bala's presentation is a statement of the meeting.

The Sixth World Cotton Research Conference (WCRC-6) will take place in Goiania-GO, Brazil during the period of May 2 to 6, 2016. For the first time, it will be organized under the auspices of the International Cotton Research Association (ICRA) and will happen jointly with biannual meeting of the International Cotton Genome Initiative. The Cotton Growers Association of the

State of Goiás (Agopa), under the scientific coordination of the Brazilian Agricultural Research Corporation (Embrapa) and the support of the Brazilian Cotton Growers Association (Abrapa) and the Brazilian Cotton Institute (IBA) will

host the Conference. Brazilian cotton research is coordinated by Embrapa Cotton and employs over 100 researchers from the federal and state governments, universities and the private sector. Some 400 participants from around the world

are expected to participate. There will be two keynote speakers, eight plenary speakers and nine concurrent sessions covering all disciplines related to cotton production. Online registration is available at www.wcrc-6.com.

Seventh Open Session

Climate Change and Cotton

9:00 hr. Thursday, December 10, 2015

P.D Patodia, Chairman of the Standing Committee of Cotton, Confederation of Indian Textile and Industry (CDRA) in the Chair

Presentations:

- “Impact of Climate Change on Cotton Production in Maharashtra”, Dr. B. Venkateswarlu (Vice-Chancellor, Vasant Rao Naik Marathwada Krishi Vidyapeeth, Parbhani, India)
- “Cotton and climate change”, Jens Soth (Helvetas Swiss Intercooperation, Switzerland)

The CHAIR opened the session by stating that climate change has been changing the global economy by impacting commodities; and in cotton, climate change has affected not only cotton quality but quantity.

Dr. B. Venkateswarlu made a presentation titled “Climate change impacts on Indian agriculture with special reference to cotton”. He started his presentation noting that 60% of the cultivable area in India still depends on rainfall, and 80% of the farmers are small producers (1.5 to 2 hectares). He also noted that climate change has manifested in terms of: change in rainfall patterns, temperature increases, rise in sea levels, glacier melt, and extreme weather events. He emphasized that climate change has brought negative impacts in India, such as, rise

in sea surface temperatures, leading to changes in breeding seasons and distribution zones in marine fisheries; changes in flowering, pest and diseases on horticulture; significant negative impact on commercial poultry due to heat stress; reduction on milk yield in livestock; changes in the growth, puberty and maturity of crossbreed of cows and buffaloes; and reduction in fish caught in water bodies due to movement of fish into the deeper layers, among others. Dr. Venkateswarlu stated that climate impacts on cotton could be seen in four different categories: phenology, water demand, pests and diseases and yields. He also mentioned that simulation studies indicate marginal changes on cotton production. Simulation studies indicated marginal impact on cotton production due to climate change, but climate variability is already showing a marked impact. Comprehensive adaptation strategies can minimize impacts to a large extent, while efficient use of water was a key for future sustainability. Dr. Venkateswarlu's presentation is a statement of the meeting.

Mr. Jens Soth, Senior Adviser to Helvetas Swiss Intercooperation, made a presentation on cotton and climate change. He commented that the topic has been covered several times by ICAC in its plenary meetings, and made a summary of the different tools, studies, and models available for the adaptation and mitigation of climate change in the cotton industry. He stated that soil organic

matter is key and that any measures to increase soil organic matter can be seen as a climate change adaptation and mitigation measure. He also mentioned that the avoidance of inefficient irrigation and fertilization practices reduces nitrous oxide emissions. Mr. Soth presented several examples on projects being implemented in different countries, in particular a project implemented in Colombia where the use of soil fertility in cotton production led to the creation of habitats for beneficial insects and weeds regulated by mechanical means. Mr. Soth concluded his presentation by stating that any measures that help to increase soil organic matter can help maintain long-term soil fertility, as well as foster climate change adaption and mitigation. He also mentioned that an isolated view on carbon foot printing or climate change serves neither farmers nor the textile sector and that a broad range of sustainability criteria should be taken into account. Mr. Seth's presentation is a statement of the meeting.

The Executive Director of ICAC stated that the Secretariat had commissioned a special study on climate change and cotton production in modern farming systems. The study would be made in conjunction with CABI (Centre for Agriculture and Biosciences International), and will include recommendations for mitigation and adaptation to confront the impacts of climate change.

Eighth Open Session

International Exchange of Cotton Germplasm

11:00 hr. Thursday, December 10, 2015

Dr. K.C. Bansal, Director of ICAR, India in the Chair

Presentations:

- “Conservation of Cotton Germplasm & International Exchange: An Indian Scenario” Dr. R.R. Hanchinal (Chairman, Protection of Plant Varieties and Farmers' Rights Authority, India)
- “World Cotton Germplasm Resources: its Utilization in Cotton Improvement” Dr. Ibrokhim Abdurakhmonov (Uzbekistan)

- “Valorization of Cotton Germplasm Collections, Securing and Developing Exchanges in Compliance with International Agreements” Dr. Bruno Bachelier (CIRAD, France)

The CHAIR introduced Dr. Hanchinal, Chairman of Protection of Plant Varieties and Farmers' Rights Authority, India, to present a report on Conservation of Cotton Germplasm & International Exchange: An Indian Scenario.

Dr. Hanchinal reported that Green Revolution became possible due to the exchange of Plant Genetic Resources (PGR). Green Revolution

meant national self-sufficiency in food, food security and improved economy. It was enabled by international exchange of germplasm, and high-yielding varieties are the result of hybridizing varieties from different countries. Classification of PGR includes primitive ancient forms, improved cultivars, wild weedy and useful species and species with potential use. Two of the allotetraploid species, *hirsutum* and *barbadense* were independently domesticated about 4,000 years ago. There are eight major cotton germplasm collections in the world, the largest of which is located in Uzbekistan. India is the ancient home of the cultivated Asiatic

species *Gossypium arboreum* and several of the *hirsutum* and *barbadense* genotypes were introduced by the British East India Company. The Indian genebank contains 11,168 species. Private breeders and farmers are very active in India in breeding new varieties. Global collaboration on conservation and utilization of PGR are very important, as are the free exchange of germplasm and information technology. Major concerns about PGR include improvements in exploration and exchange, conservation and regeneration, characterization and data collection, data storage and accessibility. It is necessary to promote, conserve and protect PGR. A number of international treaties regulate germplasm exchange, to make sure that germplasm is exchanged legally and not misused. An appropriate material transfer agreement must be used for every transfer of germplasm. Public sector programs should take the lead in genetic enhancement of germplasm, which should be available to private sector. Dr. Hanchinal's presentation is a statement of the meeting.

The CHAIR introduced Dr. Ibrokhim Abdurakhmonov, Center of Genomics and Bioinformatics, Uzbekistan, to present a report on world cotton germplasm.

Dr. Abdurakhmonov described world cotton germplasm resources and collections totaling 53,665 species, including 16,260 in Uzbekistan. Over 80% of the total is accounted for by upland cotton and the rest by ELS cotton. Major challenges in cotton germplasm resources include redundancy within and among collections, maintenance and storage, seed renewal periods, characterization, evaluation, systematization, cataloguing and data basing, as well as sharing, enrichment and exchange. Exchange is easier within a country, while there are many roadblocks in the exchange between countries. It is important to use molecular markers, genotyping by sequencing methods and marker-assisted selection approaches. There is a huge cotton germplasm collection in 5 institutes in Uzbekistan and over 1,300 germplasms were exchanged with the USDA. He described gene-pyramiding efforts with marker-assisted selection for fiber quality, as well as cotton transgenomics. A collaborative effort between USDA/USA and Uzbekistan enabled the transfer of BT RNAi seeds from Uzbekistan to USA. Evaluation and exchange of germplasm are important, as well as continued enrichment of collections, application of germplasms for cotton improvement, sharing of knowledge and wider international collaboration, faster adoption of new technologies and more training. It is necessary to evaluate core

sets of cotton germplasm using DNA technologies for molecular diversity assessment, to establish international consortium of sequencing "1002" cotton genotypes, including "priority" samples from each country, to apply "personalized" approach to cotton breeding/farming (i.e., chemical genomics). Dr. Abdurakhmonov's presentation is a statement of the meeting.

The CHAIR introduced Dr. Bruno Bachelier, of CIRAD, France to present a report on Valorization of Cotton Germplasm Collections, Securing and Developing Exchange.

Dr. Bachelier described regulatory context for transfer of cotton genetic resources starting with 1961, when UPOV was created and then in 1992 the Convention on Biological Diversity (CBD) was signed by 195 states and the European Union. Two supplementary protocols were later signed, the Cartagena Biosafety Protocol (2000) and in the Nagoya Protocol on Access to Genetic Resources (2010). Another very important international treaty, the International Treaty on Plant Genetic Resources for Food and Agriculture was adopted in 2001. 69 countries ratified the Nagoya Protocol and 39 countries implemented legislative measures. The important regulations arising from the treaties are that agreements between parties exchanging genetic resources are under the control of national regulations, and there is an obligation to share the benefits resulting from the use of these genetic resources, including the associated traditional knowledge. The natural germplasm resources of cotton are extensive, dispersed globally across five continents, but are not present in all cotton-producing countries. Some germplasms of diploid species have been used as sources of useful genes. There is a complex status of cotton germplasm and genetic resources. There are cultivated and wild species. Natural populations and traditional varieties, or landraces could be the most useful gene reserves, while some of these germplasm resources could be considered at high risk. Very useful donor germplasms have been identified for many traits, including resistance to abiotic stress, such as drought, as well as biotic stresses, and even fiber quality has found contributors in the wild germplasm. To enhance the use of genetic resources in varietal improvement new genes are needed, but difficulties in obtaining them include costs and complexity of access to germplasms. There is a need to associate small countries to research projects. We need to make sure that natural population of cotton plants and traditional varieties are characterized and collected for gene banks, while financial returns to collections are of utmost importance. It is

necessary to work collectively on the definitions of common plant descriptors for use in cotton collections, including evaluation of useful traits. There is also a need for agreements on common sets of DNA markers in order to genotype systematically the collections. Germplasm databases will help to associate specific DNA data with traits of interest, while a worldwide linkage of databases would permit more efficiency. He described CIRAD and its activities. Dr. Bachelier's presentation is a statement of the meeting.

The delegate of UGANDA asked Dr. Hanchinal how farmers in India were able to become owners of several varieties bred by them. Dr. Hanchinal said Indian farmers are unique and cultivated and maintained some varieties for a very long time. Farmer communities are actively encouraged to registered varieties that they have developed and maintained.

The delegate of AUSTRALIA thanked the speakers and noted that the existing international arrangements, which govern, plant variety rights and the growth in global seed companies servicing the cotton sector. Collaboration in the development of cotton varieties is a matter for negotiation between commercial and public research organizations. The most important limiting factor to the increase of world yields is crop management, rather than the available germplasm.

A delegate of INDIA noted that man-made fibers are in major competition with cotton, which is losing market share. What can be done to increase cotton fiber strength and improve cotton position in this competition for market share? Dr. Abdurakhmonov said that this is not an easy task since fiber strength is correlated with yield and maturity and more analyses on a molecular level are needed. It is possible that biotechnology will allow the achievement of longer and stronger cotton fibers. Dr. Hanchinal confirmed that researchers in India conduct similar analyses.

A delegate of EGYPT asked if there is an international agreement on chromosome mapping exchange to assist international breeders. Dr. Abdurakhmonov replied that there is no international agreement on the issue of genomic mapping, however researches work in collaboration under research association umbrellas and exchange information.

The CHAIR thanked the speakers for excellent presentations and summarized major observations made by them. He urged participants to use all the resources and tools available, improve data exchange and germplasm management.

Meeting of the Steering Committee

8:30 hr. Friday, December 11, 2015

Ms. Wei-jun Liao, Chair of Standing Committee, in the Chair

The CHAIR called the Steering Committee Meeting to order and asked if there were comments or suggestions to the preliminary agenda of the meeting. Seeing none, the CHAIR found that the agenda was approved.

Election of the Standing Committee Officers, Working Paper I

The CHAIR introduced Working Paper I, which contained the recommendations of the Nominating Committee for nominations of officers to the Standing Committee.

The Rules and Regulations specify that, when practicable, the First Vice Chair will be nominated to succeed the outgoing Chair and the Second Vice Chair nominated to succeed the First Vice Chair. The current First Vice Chair, Mr. Tomasz Sowa, of Poland, and Second Vice Chair, Ms. Reenat Sandhu, of India, are available to serve as Chair and Vice Chair, respectively, during 2015/16. Accordingly, the Nominating Committee nominated a Second Vice Chair during its meeting. Based on geographical rotation, representation of importing and exporting countries, ability, interest and participation in the work of the Committee and timely payment of assessments, the Nominating Committee put forward the name of Ms. Claudia Fontana Tobiassen, First Secretary (Trade and Commercial Affairs), Embassy of Switzerland, to serve as Second Vice Chair. The Standing Committee endorsed the three nominations during its 534th Meeting.

The CHAIR asked if there were comments on the report of the Nominating Committee and the endorsement of the Standing Committee, and seeing none she found that Mr. Sowa, Ms. Sandhu and Ms. Fontana Tobiassen were confirmed as Chair, First Vice Chair and Second Vice Chair of the Standing Committee, respectively, for the period from the end of the 74th Plenary Meeting to the end of the 75th Plenary Meeting. The delegate of POLAND thanked the Steering Committee for the trust placed in his colleague from the Embassy in Washington. All delegates congratulated the incoming officers. Working Paper I is attached.

European Union Membership in the ICAC, Working Paper III

The CHAIR introduced Working Paper III, which contained proposed amendments to the Rules and Regulations of the ICAC that would enable the membership of the European Union. She observed that this was the most important item on the agenda of this meeting and that the

proposal had been the subject of much hard work by the Standing Committee and working groups during prior months. She was glad to report that the Standing Committee had been able to put forward a proposal for amendments to the Rules and Regulations for the consideration of the Steering Committee.

Before the Steering Committee considered this matter, the CHAIR offered the floor to the representative of the European Union, Ms. Francesca Renzi, Attaché for Cooperation, Delegation of the EU to India.

Ms. Renzi emphasized the importance attached by the EU to membership in the ICAC. The approval of amendments to the Rules and Regulations marked significant progress towards this end. She informed that the European Commission has received authorization to constructively negotiate the EU accession. The EC was very committed to carefully consider all the outstanding issues in order to reach a successful conclusion before the beginning of ICAC's 2016/17 fiscal year, on 1 July 2016. The Commission would make sure all the key issues are covered and would provide creative inputs to help resolving the discussions.

With regard to the outstanding question of transitional arrangements, a certain room for flexibility existed on the part of the EU, as long as the terms were reasonable. A right balance between cost control and results was required, in order to achieve the best value for money.

The EC affirmed its understanding that it should be considered as a fair assumption that meetings of this Advisory Committee could be held in any of the countries of the EU and that staff might also be drawn from any of the EU nations.

The EC considered the private sector as a key partner and give the highest priority to ICAC's Private Sector Advisory Panel. The EU considered that participation of all ICAC members should be extended to more than one representative per Member, as was the case in other international organizations, in order to foster communication with the private sector and all the facets of the cotton economy.

The EC stressed that both it and ICAC had a similar overall objective: that cotton is a commodity that deserves all our attention "because it represents so much for so many producers and the more we can do for it the more all our citizens consumers will benefit."

The CHAIR thanked the representative of the EC for her statement. She then requested Mr. James Johnson, co-chair of the Drafting Group, to explain the rationale underlying the proposed amendments.

Mr. Johnson provided a summary of the work done by the Standing Committee and two work-

ing groups: the Task Force on European Union Membership and the Drafting Group. In preparing the proposals for amendments to the Rules and Regulations, the Standing Committee sought to minimize changes to the existing statutes. The vast majority of amendments arose as a result of the need to change wording to accommodate membership by an intergovernmental organization. To that end, words such as "country" and "government" had been replaced by "Member". The few changes of substance were discussed in the Working Paper.

Mr. Johnson further noted that, as provided for in the Rules and Regulations, the negotiation of transitional arrangements and other outstanding issues could be handled by the Standing Committee, thus enabling EU accession before the beginning of the next ICAC fiscal year on July 1st, 2016.

The CHAIR opened the subject to discussion.

The delegate of INDIA declared that the Steering Committee, as the supreme body of the ICAC, was faced with an important decision. The accession of the EU would be a positive step, although the financial impact on smaller members would be substantial. The discussion of amendments to the Rules and Regulations could not be dissociated from other outstanding issues, three of which were of paramount importance: transitional payment arrangements; payment of arrears of EU members that had withdrawn from ICAC leaving unpaid assessments; and unpaid assessments of EU member states that are currently Members of ICAC. These issues were important and needed to be addressed at the Steering Committee level.

Mr. Johnson replied that the Standing Committee was empowered to handle these questions, under the provisions of Section II (b) of Article II of the Rules and Regulations. He further noted that the Standing Committee was aware of the outstanding issues raised by the delegate of India and would address them with a view to defending the interests of ICAC Members. He added that common ground would also need to be found regarding the terms of reference of the Private Sector Advisory Panel.

The delegate of INDIA stressed the need for greater clarity on the part of the EU. The delegates of EGYPT, PAKISTAN, SUDAN and UGANDA agreed with India on the importance of the questions still outstanding, especially uncollected assessments. They emphasized the principle of non-forgiveness of outstanding arrears.

The CHAIR stated that the Standing Committee would bear in mind the concerns expressed by these Members, which were shared by many delegates around the table. In order to assure that

their voices would be heard, all Members should instruct their representatives in Washington to attend meetings and participate in the decision-making process.

The CHAIR thanked delegates for their contributions to the discussion and noted the need to close this agenda item. She asked if there were any further questions or comments regarding the proposed amendments to the Rules and Regulations contained in Working Paper III, and seeing none found that they were approved. Working Paper III is attached.

Topic of the 2016 Technical Seminar, Working Paper II

The CHAIR introduced Working Paper II, which contained three proposals from the Committee on Cotton Production Research as to possible subjects of the Technical Seminar to be held during the 75th Plenary Meeting in 2016. During its meeting after the Technical Seminar, the Committee on Cotton Production Research had recommended the topic “New Opportunities and Methods for Technology Transfer”.

The delegate of PAKISTAN requested that the Steering Committee not endorse the recommendation of the Committee on Cotton Production Research and instead opt for one of the other proposed topics, namely “Emerging Pests in Cotton and their Control.” This topic was of great importance to his country, which would serve as host. The proposal of Pakistan received the support of the delegate of INDIA.

The CHAIR asked if there were any objections to the proposal of Pakistan, and seeing none she declared approved the topic of “Emerging Pests in Cotton and their Control”. Working Paper II is attached.

Uncollected Assessments of Member Governments of the ICAC, Working Paper IV

The CHAIR introduced Working Paper IV, which presented the current status of uncollected assessments of ICAC members. After reminding Members of the importance of prompt payment of assessments, she requested the Executive Director to brief delegates on this issue.

The Executive Director presented comments on the table of uncollected assessments of current members as of December 5, 2015, contained in Attachment 1. Since the circulation of the document, confirmation of payment in full of outstanding obligations had been received from France and South Africa.

The delegate of SPAIN informed that administrative steps had been taken to arrange payment of its outstanding assessment, which would be received by ICAC in the near future.

The Executive Director then turned to Attachment II, which contained information on suspended members. He recalled that, during the 73rd Plenary Meeting, the Steering Committee

had instructed the Secretariat to enforce strictly the provisions of paragraph (f) of Section 4 of the Rules and Regulations, which call for the suspension of members that are more than two years behind in their contributions to the ICAC.

The Executive Director reported that four Members, namely Iran, Nigeria, Peru and Sudan, had been suspended on April 1, 2015. The situation of each suspended Member was presented in detail in Attachment II of Working Paper IV. He noted that three of the four suspended members had made payments on their arrears during the first months of 2015/16. In the case of Iran, the amount received had been insufficient to enable reinstatement. Members were aware of the difficulties faced by Iran in making international financial transactions. Therefore, the payment should be considered a symbol of the high value attached by Iran to membership in the ICAC. In the case of Nigeria, the ICAC had received payment of an amount sufficient to reactivate membership under the provisions of Section 4 of Article II of the Rules and Regulations. On December 5, the last working day before the beginning of the Plenary, the Secretariat received a communication from the Coordinating Agency in Nigeria formally requesting reinstatement. Nigeria was accordingly reinstated and, as soon as possible after the return of the Secretariat to Washington, a document would be circulated to Members containing a schedule for payment by Nigeria of the outstanding arrears. In the case of Peru, no official communications had been received by the Secretariat. In the case of Sudan, a partial payment had been received and a repayment schedule drawn up. Sudan had, however, failed to meet the deadline for payment of its pro-rata contribution to the 2015/16 budget. In its 537th meeting, the Standing Committee decided not to suspend Sudan at that moment and instead referred the matter to the Steering Committee.

The delegate of NIGERIA expressed his country's commitment to membership in the ICAC. His country was trying to reduce dependency on the petroleum industry and the cultivation of cotton was an important component in this strategy. He thanked Members for their understanding with regard to the situation of his country and affirmed that Nigeria would meet the financial obligations arising from reinstatement.

The delegate of SUDAN thanked the Standing Committee for the understanding shown to his country in its 537th Meeting. His country respected the Rules and Regulations, including provisions for payment of assessments. Sudan, however, faced technical difficulties in transferring funds abroad, as was well known to Members. These issues had created obstacles in payments to Sudan's own embassy to the USA, as well as those to international organizations based in that country. Talks were being held with the State Department to try to resolve the issue. He requested an extension of the deadline

for payment of the contribution to the 2015/16 budget until March 31, 2016. His country was also committed to ICAC membership.

The CHAIR enquired if there were any objections to the request for extension made by Sudan, and seeing none she declared the request approved.

The CHAIR thanked both Nigeria and Sudan for their statements, which showed their support for the ICAC. She was glad to see both Members back.

The delegate of INDIA requested that the Secretariat send reminder letters to all countries that had withdrawn from the ICAC while in arrears in compliance with their financial obligations to the organization. Working Paper IV is attached.

Seeing no other comments on the issue of uncollected assessments, the CHAIR asked if there were other business, and seeing none declared the Steering Committee Meeting adjourned at 11:30 hrs.

ATTACHMENTS

Working Paper I

Election of Standing Committee Officers

Recommendation from the Standing Committee

A nominating committee met in the office of the Secretariat on May 21, 2015 to propose a slate of officers for the Standing Committee for the coming year. Delegates from Germany, Greece, India, South Africa, Switzerland, Taiwan and the USA were present. The Executive Director attended the meeting and Mr. James Johnson of the United States served as Chair.

The Rules and Regulations specify that, when practicable, the First Vice Chair will be nominated to succeed the outgoing Chair and the Second Vice Chair nominated to succeed the First Vice Chair. Both, the First Vice Chair, Mr. Tomasz Sowa, and the Second Vice Chair, Ms. Reenat Sandhu, indicated they would be available to serve in Washington during 2015/16. Accordingly, there was a consensus to nominate both Mr. Tomasz Sowa, Secretary, Embassy of Poland Trade & Investment Section (currently First Vice Chair), to serve as Chair, and Ms. Reenat Sandhu, Minister, Embassy of India, to serve as First Vice Chair.

In addition, the Nominating Committee felt obliged to nominate a Second Vice Chair during its meeting.

The Rules and Regulations say that the election of officers should take into account:

- Rotation on as broad a geographical basis as possible,

- Adequate representation to importing and exporting countries,
- Ability, interest and participation in the work of the Committee,
- Timely payment of assessments.

After consideration of these factors, the Nominating Committee agreed that Ms. Claudia Fontana Tobiassen, First Secretary (Trade and Commercial Affairs), Embassy of Switzerland, should be nominated to serve as Second Vice Chair. Ms. Fontana Tobiassen has demonstrated interest in the work of the ICAC through frequent participation in meetings. Officers representing Poland, India and Switzerland will provide broad geographical representation, to both developed and developing countries, and representation to both importing and exporting countries. The governments of Poland, India and Switzerland are all current in the payment of assessments to the Secretariat.

The nominations received provisional approval from the Standing Committee during its 534th Meeting, held on June 4, 2015.

Accordingly, the Standing Committee proposes the following slate of officers to the plenary meeting for the period from the end of the 74th Plenary Meeting in 2015 to the end of the 75th Plenary Meeting in 2016

- Mr. Tomasz Sowa, Poland, Chair
- Ms. Reenat Sandhu, India, First Vice Chair
- Ms. Claudia Fontana Tobiassen, Switzerland, Second Vice Chair

Working Paper II

Topic of the 2016 Technical Seminar

Proposals from the Secretariat to the Committee on Cotton Production Research

The following themes are suggested as possible topics for the 2016 Technical Seminar:

New Opportunities and Methods for Technology Transfer

Cotton research has progressed at a much faster pace than the methods used to transfer new technologies to growers. The technology packages recommended for adoption are no longer limited exclusively to material issues, such as newer varieties, fertilizer use, etc. Newer methods of mass communication must be developed and tested. Methods must be developed to reach as many growers as possible. Technology transfer, as such, has lacked innovation. On the receiving end, farmers are receptive, but reaching each and every one of them remains a challenge. Growers have to be motivated to come out and look for new technologies, instead of waiting to see when

a technology transfer agent gets around to transmitting the message. The philosophy of technology transfer also needs to be changed. Messages must be cost-effective and the focus must shift to resultant interactions among the materials before a new materials-based technology can be developed and commercialized. Optimum utilization must also take into account aspects related to the sustainability of materials. The new economic and scientific context requires a new and more complex model for transferring technology. The development of electronic media, both for access to online information and for personal outreach via mobile phones, is revealing new challenges and opportunities. Further technology development demands a review and restructuring of existing cotton technology transfer systems.

Emerging Pests in Cotton and Their Control

Since the adoption of biotech cotton, the pest complex in cotton has changed. The target bollworms that previously caused most damage and were hard to be controlled have been suppressed with less chemical use and minimum use of mixtures. However, sucking pests that used to be controlled with sprays against bollworms have increased pressure on cotton. Other pests that used to have only a minor impact on cotton are increasing due to the absence of insecticide sprays. Consequently, insecticide applications against sucking pests and emerging pests have increased after the introduction of biotech cotton. While dealing with cotton sucking pests that used to be present in higher populations is a challenge in itself, controlling previously minor but now emerging major pests requires studying their behavior and finding control measures that do not involve increased use of insecticides. Papers will be invited to find reasons for the emergence of pests and their control measures.

Reducing the Contamination of Cotton

The spinning and textile industries have become more sensitive to contamination with foreign matter. The inclusion of plant material from the field is unavoidable, although specific measures can be implemented to minimize trash pick-up from the field. Hand-picked cotton has less plant material but is prone to higher contamination after picking. Cotton quality is reduced by a variety of contaminants added to cotton during the process of harvesting, shifting seedcotton to gins, ginning and handling of lint. Some contaminants can be removed during pre- and post-cleaning operations in the gin, while others are difficult to eliminate. Among the most important contaminants are seed coat fragments. These are portions of cotton seeds, broken from mature as well as immature seeds, which are usually difficult to remove. Seed coat fragments entangle with fibers and result in lower cleaning efficiency, higher breakage during spinning and uneven yarn, in addition to having undesirable effects on fabric appearance. Contamination with synthetic materials is highly dangerous

and more difficult to eliminate. Papers will be invited on methods to minimize contamination, including effective detection and elimination of seed coat fragments, as well as handling of contaminants in the spinning and textile industries.

Working Paper III

Proposals for Amendments to the Rules and Regulations

European Membership in the ICAC

Background

1. In September 2013, the European Union presented a proposal to accede to the ICAC. Since the existing Rules and Regulations (R&R) did not contemplate the possibility of membership by an intergovernmental organization such as the EU, the Standing Committee was tasked with conducting an in-depth analysis of possible alternative arrangements. Among the items discussed were: the impact on the finances of the ICAC; treatment of arrears owed to the ICAC by member states of the EU; and representation on ICAC advisory bodies.
2. In order to evaluate the issues involved the Standing Committee proceeded to form a Task Force on European Union Membership (TFEU), which met seven times in 2014 and 2015. The findings of the TFEU were debated during the 535th meeting of the Standing Committee. At that time, the decision was taken to concentrate on an approach that preserved the existing "one member, one vote" formula that has been used in ICAC since its founding and to form a Drafting Group to prepare a draft of amended R&R. The Drafting Group met three times in October 2015 to evaluate proposed amendments to the R&R, as well as to consider all other issues related to the accession of the EU to ICAC.
3. The Drafting Group presented its final report (DG-012) at the 537th Standing Committee Meeting, held on 5 November 2015. In their deliberations on this matter, members of the Drafting Group acted under the principle that amendments should be kept to a minimum. The amendments could be divided into two types: (1) items related to clarification of wording, mainly replacement of references to "country" and "government" by "Member", and other changes of a similar nature, including use of gender-neutral language; and (2) issues of substance. Substantive changes are highlighted in yellow in Attachment 2.
4. The rationales underlying the substantive changes proposed are:

- Article II, Section 2, para. (d)

New wording is proposed to make this paragraph symmetrical with paragraph (c) of the same Section, in order to clarify the process for approval of applications for membership.

- Article II, Section 3, para. (a)

The inclusion of the phrase “which shall be at least 30 days after receipt of the notice by the Executive Director” is proposed to address the issue that occurred when Belgium and Italy withdrew from membership after the budget and assessments for the next fiscal year had been approved, but before the beginning of the following fiscal year. Under the current R&R, these Members were not obligated to pay the assessment, thus leaving expected revenue below that anticipated when the budget and assessments were determined.

- Article II, Section 4, para. (e) & (g)

Language is proposed to clarify that financial situation of suspended Members is the same as for those Members that withdraw.

- Article IV, Section 2

The deletion of the second sentence is proposed since it duplicates wording contained in paragraph 2 of Article III.

- The draft of the proposal for amended Rules and Regulations was approved, with minor changes, during the 537th Standing Committee Meeting. This final draft is included in this document in a “clean” version (Attachment 1) and in “track changes” mode (Attachment 2).
- The Standing Committee noted that the amendment of the R&R did not exhaust the issues raised by EU membership in the ICAC. During the deliberations of the Drafting Group, information was received that the EU intends to apply for membership only at the beginning of the 2016/17 fiscal year. This would allow time for the consideration of other aspects of EU membership, which do not involve changes in the statutes of the ICAC, to be taken up by the Standing Committee, under the terms of Section 2a and 2b of Article II of the R&R, during the first semester of 2016.

Action

- The Steering Committee is requested to consider the proposed amended Rules and Regulations.

(SEE NEXT PAGE FOR THE APPROVED VERSION OF THE RULES AND REGULATIONS)

Working Paper IV

Uncollected Assessments of Member Governments of the ICAC

Background

- This document contains information on the status of uncollected assessments of current

(Attachment 1) and suspended (Attachment 2) Members.

- Revision 1 of this document contains new information in Attachment 2 regarding the status of Nigeria.

Action

- The Steering Committee is requested to consider this document.

ATTACHMENT 1:

Uncollected Assessments of Member Governments of ICAC As of 3/December/15

Country	Current year 2015-16	Prior year 2014-2015	Prior year 2013-2014	Prior years	TOTAL
BELGIUM*	20,600				20,600
BRAZIL	93,700	98,600			192,300
BURKINA FASO	38,100				38,100
COLOMBIA	22,300				22,300
FRANCE	20,700				20,700
GREECE	40,600	40,300			80,900
ITALY*	24,300				24,300
KOREA, REP.	7,894				7,894
MALI	33,000				33,000
MOZAMBIQUE	21,575				21,575
PAKISTAN	64,704				64,704
PARAGUAY	19,800	19,400	18,500	2,492	60,192
SOUTH AFRICA	19,800				19,800
SPAIN	22,900				22,900
SUDAN**	15,075				15,075
TANZANIA	23,200				23,200
USA	140,300				140,300
UZBEKISTAN	74,300				74,300
ZAMBIA	23,800	19,600			43,400
TOTAL	726,648	177,900	18,500	2,492	925,540
TOTAL	726,648	177,900	18,500	2,492	925,540
Outstanding July 1, 2015	1,606,004	463,918	43,490	2,492	2,115,904
Received Jul/15-now	879,356	286,018	24,990	0	1,190,364
Forecast (budget)	1,300,000	360,000	40,000	0	1,700,000
Difference	420,644	73,982	15,010	0	509,636

*Withdraw from membership of the ICAC with effect 30/June/2015.

**Membership reinstated in July 2015.

ATTACHMENT 2: Status of Uncollected Assessments of Suspended Members

Four members (Iran, Nigeria, Peru and Sudan) were suspended on April 1, 2015, due to persistent arrears.

Iran

At time of suspension, the uncollected assessments of Iran amounted to \$123,976.00.

The Secretariat received \$9,603.98 from Iran on August 25, 2015. This amount is less than one-fifth of the outstanding total, so Iran does not qualify for reinstatement under the terms of Section 4 of Article II of the Rules and Regulations. The current balance of uncollected assessments of Iran is \$114,372.02.

Nigeria

At time of suspension, the uncollected assessments of Nigeria amounted to \$86,800.00.

The Secretariat received \$22,011.00 from Nigeria on June 19, 2015. This amount is more than one-fifth of the outstanding total, so Nigeria qualifies for reinstatement under the terms of Section 4 of Article II of the Rules and Regulations. At that time, a communication was received from Nigeria informing that reinstatement should be postponed to allow for an internal review. On December 5, 2015, a new communication was received from Nigeria requesting its reinstatement under the terms of Article II. The Secretariat will circulate a document with details regarding payments of Nigeria's outstanding arrears immediately following the Plenary Meeting. The current balance of uncollected assess-

ments of Nigeria is \$64,589.00.

Peru

At time of suspension, the uncollected assessments of Peru amounted to \$132,424.00.

No official communication from Peru has been received since then.

Sudan

At time of suspension, the uncollected assessments of Sudan amounted to \$84,225.00.

The Secretariat received \$23,425.00 from Sudan on July 6, 2015. Since the amount received was more than the one-fifth of the outstanding total, Sudan was readmitted with immediate effect to membership of the ICAC in accordance with Section 4 of Article II of the Rules and Regulations. Under the terms of Section 4, Sudan committed itself to pay the balance of arrears, amounting to \$60,300, in four annual installments of \$15,200, as well as a pro-rata assessment of \$15,075 for the 2015/16 fiscal year (see SC-535-004/15).

The pro-rata assessment of \$15,075 came due on October 5, 2015. No payment has been received by the Secretariat. The Standing Committee reviewed this matter during its 537th Meeting, which was held on November 5, 2015, and recommended that Sudan not be suspended at that time, so as to permit an official manifestation by the Member during the meeting of the Steering Committee in Mumbai.

RULES AND REGULATIONS

of the

INTERNATIONAL COTTON ADVISORY COMMITTEE

As adopted by the 31st Plenary Meeting - June 16, 1972
(With amendments through December 11, 2015 at the 74th Plenary Meeting)

ARTICLE I - TERMS OF REFERENCE

The functions of the International Cotton Advisory Committee (hereinafter referred to as ICAC) are:

- a. To observe and keep in close touch with developments affecting the world cotton situation.
- b. To collect, disseminate, and keep complete, authentic and timely statistics and other information relating to world production, trade, consumption, stocks and prices of cotton; and other textile fibers, or of textiles, insofar as they affect the cotton economy and do not duplicate assignments that Members have given to other international bodies.
- c. To suggest to Members of the ICAC, as and when advisable, any measures the ICAC considers suitable and practicable for the furtherance of international collaboration directed towards developing and maintaining a sound world cotton economy.
- d. To be the forum for international discussions on matters related to cotton prices, without, however, prejudicing discussions currently being carried on elsewhere, for example, in the UNCTAD. Such discussions should take place regularly both in the Standing Committee and at annual Plenary Meetings.

ARTICLE II - MEMBERSHIP

Section 1 - Eligibility for Membership

- a. Membership in the ICAC is open to all members of the United Nations or of the Food and Agriculture Organization of the United Nations, expressing an interest in cotton.
- b. Any other government expressing an interest in cotton shall be eligible to apply for membership.

Section 2 - Accession to Membership: Commitments of Acceding Members

Accession to the ICAC shall be governed by the following procedures:

- a. An applicant shall address a communication to the Executive Director stating:
 - (1) It has an interest in cotton;
 - (2) It is prepared to fulfill the obligations of membership with respect to:
 - (a) The acceptance of the Rules and Regulations of the ICAC in effect at that time,

(b) The submission of information concerning the cotton situation and related matters in accordance with the prescribed requirements of the ICAC and any work programs that may be approved from time to time, and

(c) The payment of its assessments.

b. The Standing Committee or the Advisory Committee, as applicable, shall thereupon consider the communication of the applicant

c. Normally the accession of an applicant qualifying for membership under the provisions of Section 1 a. of this article shall be confirmed at the next meeting of the Standing Committee. However, should the matter of accession be raised at a Plenary Meeting the Advisory Committee shall confirm the accession.

d. Application for membership under the provisions of Section 1 b. of this article shall be considered by the Advisory Committee.

e. Whenever it confirms or approves the admission of an applicant to membership in the ICAC, the Standing Committee or Advisory Committee shall, at the same time, confirm the amount of the financial contribution assessed to such Member in the year of its accession in accordance with the provisions of Section 4 c. of this article.

f. The Executive Director shall notify the applicant concerned in writing of the action taken.

Section 3 - Withdrawal from Membership

The withdrawal of any Member in the ICAC shall be governed by the following procedure:

a. Any Member desiring to withdraw shall address a communication to the Executive Director to that effect, stating the date on which it is desired to make the withdrawal effective, which shall be at least 30 days after receipt of the notice by the Executive Director.

b. The Executive Director shall inform the Advisory Committee or the Standing Committee, as applicable, of any withdrawal and, in acknowledging the withdrawal, shall notify the Member concerned of its financial status with the ICAC.

Section 4 - Financial Obligations of Members

a. The assessment of each Member shall be the sum rounded to the nearest \$100 of:

(1) A basic contribution: 40 percent of the total assessments shall be shared equally between Members, and

(2) A pro rata contribution: the total of the pro rata contributions shall equal budgetary demands less the sum of the equal contributions. The pro rata contribution shall be assessed on the basis of average trade in raw cotton (exports plus imports) in the four most recent cotton years (August-July) ended prior to the ICAC fiscal year to which contributions are applicable.

b. Assessments shall be due on July 1 each year and payable during the following three months of the ICAC's fiscal year. Each payment received from a Member shall be applied against the longest outstanding debt due the ICAC from that Member.

c. The initial assessment of a Member in the ICAC shall be calculated as provided in Section 4 a. of this article. Such initial assessment shall be prorated according to the number of full quarters remaining in the ICAC's fiscal year. The pro rata contribution shall be determined by the relationship of the average trade that was used in determining the pro rata contributions last assessed for existing Members.

d. The initial assessment of a Member shall be due on the date on which its accession becomes effective and payable during the following three months.

e. On withdrawal or suspension of a Member, no remission or refund shall be made of any part of its assessment for the ICAC's fiscal year during which the withdrawal takes place. Any unpaid assessment for that year shall become payable on the date when the Executive Director receives the communication referred to in Section 3 a. of this article.

f. If the assessment of a Member is in arrears for twelve months, except for a minimal amount, not to exceed 15 percent of its current annual assessment, the Executive Director shall notify the Member concerned that, unless payment is received within six months after the date of notification, the provision of documents and other services will be discontinued thereafter. If payment is still not received after a further six months, the membership of that Member shall be suspended.

g. A Member that has withdrawn under the provisions of Section 3 of this article or whose membership has been suspended under Section 4 f., shall not be readmitted to membership until at least one-fifth of all debts due the ICAC from that Member have been paid. Its membership shall continue only if no additional arrears accumulate while its debt to the Committee is being repaid in full, and only if the Member continues to pay its debt to the Committee in installments of not less than one-fourth of the remainder per year.

ARTICLE III - ADVISORY COMMITTEE

Section 1 - Definition

In these Rules and Regulations the words "Advisory Committee" mean ICAC meeting in plenary session.

Section 2 - Frequency and Location of Meetings

Meetings of the Advisory Committee shall be held at the invitation of Members. Normally, regular meetings shall be held at least once per calendar year. Additional meetings may be called by the Standing Committee. Invitations to host plenary meetings cannot be accepted from Members that are more than one year in arrears in the payment of assessments to the ICAC.

Meetings of the Advisory Committee shall alternate as much as possible between cotton exporting and cotton importing Members. As the seat of the organization is in the United States of America, meetings should be held more frequently there than in other Members and generally at intervals of not more than five years.

Section 3 - Attendance at Meetings

An invitation from a Member to the ICAC offering to host a meeting of the Advisory Committee shall be extended with the understanding that delegations from all Members are entitled to attend and participate in the meeting, if they so desire. The Committee itself may issue the invitations to the Members.

Section 4 - Procedure at Meetings

a. At each meeting of the Advisory Committee, the Conference Chair shall be designated by the host Member. The Chair of the Standing Committee will serve as First Vice Chair. The host Member may designate one or more other vice chairs. The Conference Chair shall normally preside at meetings of the Steering Committee and Plenary Sessions. Other Committees shall designate their own Chair and Vice Chairs.

b. The Executive Director of the ICAC shall serve as Secretary General and may appoint one or more Associate Secretaries General. Should the Executive Director be unavailable, the host Member shall designate the Secretary General.

c. Each Member shall notify the Executive Director as soon as possible of the names of its representatives, alternates, and advisors and such other information, including the designation of a head of delegation, as may be required for registration.

d. During the discussions on any matter, any Member may raise a point of order and may move the closure or adjournment of the debate. In each case, the presiding officer shall immediately state his or her ruling, which shall stand unless overruled by the meeting.

Section 5 - Terms of Reference

- a. To appoint an Executive Director and to determine his or her basic contract and emoluments.
- b. To consider and act on any other matter within the terms of reference of the ICAC.

ARTICLE IV - STANDING COMMITTEE

Section 1 - Relationship to Advisory Committee

- a. Between Plenary Meetings, the Advisory Committee shall be represented at Washington D.C by a Standing Committee, which shall be subordinate to it.
- b. The Advisory Committee may delegate authority on specific matters to the Standing Committee. The Advisory Committee may modify or withdraw any such delegation of authority.
- c. All actions taken by the Standing Committee may be reviewed by the Advisory Committee.
- d. The Chair of the Standing Committee shall report at each meeting of the Advisory Committee on the activities of the Standing Committee since the last meeting.

Section 2 - Membership

All Members of the ICAC are eligible to serve on the Standing Committee.

Section 3 - Competence, Duties, and Responsibilities

- a. Substantive
 - (1) To constitute a medium for exchange of views in regard to current and prospective developments in the international cotton situation.
 - (2) To give practicable effect to all directions, decisions, and recommendations of the Advisory Committee.
 - (3) To prepare work programs.
 - (4) To see that the work programs are carried out insofar as the finances of the ICAC will permit. This responsibility shall involve, but not necessarily be limited to:
 - (a) Determination of the number, nature and distribution of reports and publications to be issued.
 - (b) Assignments to the Secretariat or to the appropriate subcommittee of those items in the approved work program that it does not wish to reserve for itself.
 - (c) Improvement of statistics.
 - (d) Public relations.

(5) To prepare an agenda and timetable for the Advisory Committee and to make recommendations for consideration by that Committee. The agenda should include the date and place of the next meeting of the Advisory Committee.

(6) To establish practicable cooperation with the United Nations, the Food and Agriculture Organization of the United Nations, the International Institute for Cotton, and other international organizations concerned with matters of interest to the ICAC.

b. Financial

To oversee the finances of the ICAC. This responsibility shall include, but not necessarily be limited to, adoption of a budget of expenditures and a scale of assessments from Members for the ICAC's next fiscal year.

c. Administrative

(1) To create and maintain at Washington D.C a Secretariat, which shall comprise an Executive Director and his or her staff. (See Article VII.)

(2) To employ such staff as it may deem necessary for the purpose, having in mind the desirability of drawing qualified personnel as broadly as possible from participating Members.

(3) To appoint a new Executive Director and determine the terms of his or her employment in the event of a need in the interim period between meetings of the Advisory Committee.

(4) To define, as it finds necessary for the efficient conduct of business, the duties and responsibilities of any of its officers or of the Secretariat.

(5) To recommend amendments to these Rules and Regulations.

Section 4 - Assignment of Work

The Standing Committee may assign work to any subcommittee on matters coming within the competence of that subcommittee.

Section 5 - Procedures of the Standing Committee

a. General

(1) Meetings shall be held at the call of the Chair or the Executive Director, at the request of any Member, or by decision of the Standing Committee.

(2) Notice of at least 10 days shall normally be given.

(3) Meetings shall be held in private unless the Standing Committee decides otherwise.

b. Quorum

(1) Presence of delegates from one third of the Members shall constitute a quorum.

(2) In the absence of a quorum the meeting shall proceed if at least eight Members are represented. However, the minutes shall identify which decisions, if any, were adopted in the absence of a quorum and which Member, if any, abstained in their adoption.

(3) Any such decisions shall normally become binding. However, Members who were either absent or reserved their position may express their opposition within a period of ten days from the date of the provisional minutes and if the number of those opposing the decision is greater than those who

supported the decision at the meeting, the decision will be overturned, which fact shall be reported in the final minutes.

c. Agenda

(1) Adoption of an agenda shall be the first order of business at all meetings.

(2) A provisional agenda shall be prepared by the Executive Director and shall be transmitted to all Members with the notice of the meeting. An item can be placed on the provisional agenda by any Member by notifying the Executive Director at least one week prior to the meeting.

(3) An item can be added to the agenda during a meeting unless opposed by a majority of those Members present. However, any action taken on this item shall require unanimity for its adoption at that meeting.

(4) Any proposal newly introduced during a meeting shall require unanimity for its adoption at that meeting.

d. Minutes

(1) Provisional minutes of meetings shall be prepared in summary form. A verbatim record shall be prepared only when requested by the Executive Director, an officer, or a Member.

(2) Anyone present at a meeting shall have the right to revise material concerning or attributed to him. Any changes shall be notified to the Secretariat within 10 days of the meeting.

(3) Thereafter the final minutes shall be distributed to all Members.

ARTICLE V - OFFICERS OF THE STANDING COMMITTEE

Section 1

a. The officers of the Standing Committee shall be Chair, First Vice Chair, and Second Vice Chair.

b. The officers of the Standing Committee shall be elected at each regular Meeting of the Advisory Committee. They shall hold office until the election of their successors.

c. In the election of the officers of the Standing Committee, the Advisory Committee shall take into account:

- (i) rotation on as broad a geographical basis as possible;
- (ii) giving adequate representation both to cotton importing and cotton exporting Members;
- (iii) ability, interest, and participation in the work of the Committee.

d. Officers shall serve without compensation from the ICAC. No expenses of the officers shall be paid by the ICAC, unless the Standing Committee decides otherwise for particular and specific assignments involving travel costs.

Section 2 - Term of Office

Officers of the Standing Committee shall be elected for one year. In exceptional circumstances, they may be re-elected for one additional term. When practicable, the First Vice Chair will be nominated to succeed the outgoing Chair and the Second Vice Chair nominated to succeed the First Vice Chair.

Section 3 - Procedures Relating to Elections

A nominating committee, open to all Members, shall be convened no later than four months prior to the Plenary Meeting. The nominating committee will elect its own Chair. The nominating committee shall report to the Standing Committee which will then make appropriate recommendations to the Advisory Committee. Delegates to the Standing Committee representing Members that are more than one year in arrears in the payment of assessments to the ICAC at the time of the meeting of the nominating committee shall not be eligible for nomination as Standing Committee officers.

Section 4 – The Chair

- a. The Chair shall be the principal presiding officer and ex-officio a member of all subcommittees and working groups.
- b. If for any reason the Chair cannot complete his or her term of office, the First Vice Chair shall become Chair ad interim for the period until a new Chair is elected.

Section 5 - Vice Chairs

- a. The First Vice Chair shall preside over meetings of the Standing Committee in the absence of, or at request of, the Chair.
- b. The Second Vice Chair shall preside over meetings of the Standing Committee in absence of, or at request of, the Chair and/or First Vice Chair.
- c. If for any reason the First Vice Chair cannot complete his or her term of office, or if the position is vacated by reason of his or her having become Chair ad interim in accordance with Section 4 b. of this article, the Second Vice Chair shall automatically become First Vice Chair ad interim for the period until a new Vice Chair is elected.

ARTICLE VI - SUBCOMMITTEES OF THE STANDING COMMITTEE

Section 1 - The Standing Committee

The Standing Committee may establish subcommittees or working groups, prescribe their terms of reference, and terminate or discharge them.

Section 2 - Subcommittees

Membership in any subcommittee or working group shall be open to all Members of the Standing Committee.

Section 3 - Competence, Duties, and Responsibilities of the Subcommittees

- a. Each subcommittee:
 - (1) Shall be responsible to the Standing Committee for work assigned to it by the Advisory Committee or by the Standing Committee.
 - (2) May bring any other matter within its competence to the attention of the Standing Committee.
 - (3) Shall elect its own Chair and Vice Chair. If, for any reason, the Chair of any subcommittee is unable to continue in this capacity, the Vice Chair of that subcommittee shall become chair and the subcommittee shall elect a new Vice Chair.
 - (4) May prescribe its own rules of procedure, formal or informal.

ARTICLE VII - SECRETARIAT

Section 1

The Secretariat shall be headed by an Executive Director who shall be a full time paid employee and shall hold office during the period of his or her contract of employment.

a. It shall be a condition of his or her employment that he shall not hold any substantial financial interest that would prejudice the conduct of the affairs of the ICAC and that he or she shall not seek or receive instructions from any authority outside the ICAC.

b. The Executive Director shall receive equal treatment with other members of the Secretariat in all matters, except for determination and implementation of cost of living adjustments to salaries and contributions to retirement benefits which will in the case of the Executive Director be determined by the UN system.

c. The Executive Director

(1) Shall be:

- (a) Treasurer of the ICAC, but without personal financial liability in the normal discharge of such duties;
- (b) Secretary General of the Advisory Committee;
- (c) Secretary of the Standing Committee and its subordinate bodies, unless he or she delegates responsibilities to a member of the staff;
- (d) Custodian of all records of the ICAC;
- (e) In charge of the staff of the Secretariat.

(2) Shall have:

- (a) Full responsibility for the work program assigned to the Secretariat;
- (b) Responsibility for the preparation of agenda; timetables; technical documents; proceedings, notices and minutes of meetings;
- (c) Responsibility for matters of protocol and for communication with Members, other international bodies, and with national bodies interested in the work of the ICAC.

(3) Shall:

- (a) Represent the Standing Committee in arrangements with the host Members for meetings of the Advisory Committee;
- (b) Assign technical assistance to committees at meetings of the Advisory Committee in consultation with the host Members;
- (c) Prepare for the consideration of the Standing Committee an annual detailed budget to include the following headings: Salaries; pension contributions; travel and subsistence; office equipment; rent and rates, providing an indication of the staff resources to be devoted to administrative, technical and other activities.
- (d) Prepare for the consideration of the Standing Committee a proposed scale of assessments.
- (e) Provide on a quarterly basis details of expenditure to date against the approved budget.

(4) Shall be responsible for such other duties or responsibilities as are assigned to him or her from time to time by the Advisory Committee or by the Standing Committee.

Section 2

It shall be the responsibility of the Secretariat:

- a. To request from Members the information detailed in Article IX as well as such special information as may be requested by the Advisory Committee or by the Standing Committee.
- b. To develop and maintain arrangements for the exchange of information relative to the work of the ICAC with non-member governments, other international organizations, and private bodies.
- c. To prepare, publish, and distribute a Quarterly Statistical Bulletin [the frequency of this publication was changed to twice a year by action at the 43rd Plenary Meeting], a Monthly Review of the World Situation [the frequency of this publication was changed to every other month by action at the 43rd Plenary Meeting], and a Press Release based thereon, in accordance with rules prescribed by the Advisory Committee or by the Standing Committee.
- d. To prepare such other reports and analyses as may be requested by the Advisory Committee, the Standing Committee, the subcommittees, or working groups established pursuant to Article VI, Section 1.
- e. To notify Members of meetings of the Advisory Committee, the Standing Committee and the subcommittees. The Executive Director shall decide whom to notify of other meetings.

Section 3

- a. Press releases or other documents purporting to express the views or opinions of the ICAC may be issued only with the approval of the Advisory Committee or of the Standing Committee, as appropriate.
- b. Statements or articles published by the Secretariat on its own initiative shall bear a disclaimer of any responsibility on the part of the ICAC.

Section 4

It shall be the responsibility of Members to designate a coordinating agency which shall serve as principal point of contact with the Secretariat.

ARTICLE VIII - FISCAL PROCEDURES

Section 1

The ICAC fiscal year shall begin July 1st.

Section 2

For each fiscal year a budget of expenditures and a scale of assessments of Members shall be submitted by the Executive Director to the Standing Committee, which shall be entitled to amend them in whole or in part and whose action thereon shall be final unless modified by the Advisory Committee.

Section 3 - Accounts

- a. Expenditures shall be debited to the accounts of the fiscal year in which payments are actually made.
- b. Receipts shall be credited to the accounts of the fiscal year in which funds are actually received.
- c. The Secretariat shall prepare and submit to the Standing Committee quarterly statements of the current financial position of the ICAC as of September 30, December 31, March 31 and June 30.

Section 4 - Audits

- a. The Standing Committee shall retain an auditor of recognized standing and cause the accounts of the ICAC to be audited at least once a year.
- b. Upon any change in incumbency in the office of the Executive Director, the Standing Committee may cause a special audit to be made.
- c. Each auditor's report shall be submitted to the Standing Committee and Coordinating Agencies for approval at the next meeting of the Standing Committee following receipt of the report by the Secretariat.

Section 5 - Funds

- a. Unless otherwise directed by the Standing Committee, all funds received by the ICAC shall go into a Working Fund. The Standing Committee shall determine from time to time a threshold dollar amount for checks written on the Working Fund by the Secretariat, at or above which written approval from the Chair of the Standing Committee is required. No individual, including the Executive Director, may sign a check drawn on any of the Committee's accounts to him or herself.
- b. A Reserve Fund is authorized in the amount to be fixed from time to time by the Standing Committee. Withdrawals from the Reserve Fund may be authorized by the Standing Committee, but only when the monies available in the Working Fund are inadequate to cover commitments or liabilities of the ICAC. Each withdrawal from the Reserve Fund must be authorized in specific amount and timing.

Section 6 - Investment

Funds in excess of current requirements may be invested in prime short-term income-bearing dollar securities or may be deposited in federally-insured interest-bearing accounts, as directed by the Standing Committee.

Section 7 - Disposal of Assets

- a. Office furnishings and equipment no longer required by the ICAC may be disposed of in accordance with procedures approved by the Standing Committee.
- b. If at any time dissolution of the ICAC appears imminent, the Standing Committee shall decide how best to meet the outstanding financial obligations of the ICAC and to dispose of any remaining assets.
- c. Any assets remaining, after all financial obligations have been met shall be prorated to Members whose assessments are fully paid in proportion to the amount actually contributed by each during the current and preceding three fiscal years.

Section 8 - Retirement Plan

- a. The Standing Committee is authorized to establish a retirement plan for full time members of the Secretariat.
- b. If such a plan is established,
 - (1) The ICAC shall make annual contributions to the plan at least equal to, but no more than double, the annual contributions of participating employees.
 - (2) The plan may be modified or discontinued by the Standing Committee. In case the plan is discontinued or the ICAC is dissolved, each participating employee shall receive a refund, both of the employee's contributions and ICAC's contributions on the employee's behalf with interest accrued thereon.

ARTICLE IX - PROVISION OF INFORMATION

Section 1

Members, through their coordinating agencies, shall supply such available information as may be required to carry out the work program. Such information shall be sent directly to the Secretariat by the most expeditious means as soon as it becomes available.

Section 2

The following information shall be furnished each month unless otherwise indicated, except that data on regulations shall be sent only when a change is made or when specifically requested by the Secretariat.

a. Quantities of lint cotton in local units including, where feasible, a breakdown into the following staple lengths: under 3/4", 3/4" to 1-3/8", 1-3/8" and over, or their metric equivalents.

- (1) Stocks classified by country of growth, at the end of each month:
 - (a) in mills and other consuming establishments,
 - (b) in public and private warehouses, in transit, and at all other locations.
- (2) Ginnings (or pressings),
- (3) Imports, classified by country of growth or, if not available, by country of origin,
- (4) Consumption, classified by country of growth, when feasible:
 - (a) in spinning mills and other factories,
 - (b) in households (annual estimate).
- (5) Burned or otherwise destroyed (annual estimate),
- (6) Exports, classified by country of destination, and where possible by variety,
- (7) Re-exports, classified by country of destination.

b. Indications of anticipated production such as area of cotton to be planted, fertilizer sales, planting seed distribution, intentions of farmers to plant cotton, governmental area controls and goals.

c. Forecasts and estimates of areas planted and harvested, yields, and production by varieties, as soon as available, and at least once at time of plantings and once when crop matures. Crop information should preferably be in terms of lint cotton but where only seed cotton data are available some indication of lint outturn should be supplied.

d. Monthly, quarterly, or yearly statistics, whichever is more convenient, on production, imports by country of origin and exports by country of destination, preferably in quantity units, of cotton yarn and piece goods.

e. Coordinating agencies are asked to report promptly, exclusive of the regular monthly report, all changes in Members' regulations which affect cotton.

Section 3

Members shall cooperate with the Secretariat in supplying available information where made necessary by the work program on production, imports, exports and prices of man-made cellulosic and non-cellulosic fibers and piece goods.

ARTICLE X - LANGUAGES

Section 1

The official and working languages of the ICAC shall be English, French, Spanish, Russian and Arabic.

Section 2

For meetings of the Advisory Committee:

- a. The Standing Committee shall decide what interpreting facilities the ICAC will provide. The ICAC shall not incur unbudgeted expenses in connection with these facilities.
- b. Formal statements by Members shall be submitted in at least one official language.

Section 3

For practical purposes only, the English language normally will be used in meetings of the Standing Committee and subordinate bodies.

Section 4

- a. The following shall be published in English, French and Spanish:
 - Summary records of discussions in meetings of the Advisory Committee
 - Monthly Review of the World Cotton Situation [the frequency of this publication was changed to every other month by action at the 43rd Plenary Meeting]
 - Minutes of the Standing Committee [translation into French and Spanish was suspended by action at the 43rd Plenary Meeting]
- b. The following shall be published in all official languages:
 - Annual Review of the World Cotton Situation
 - Report of the Chair of the Standing Committee
 - Report of the Executive Director
 - Final statement of the Plenary Meeting
- c. The Standing Committee shall determine what other documents of a substantive nature are to be printed in the various languages considering their usefulness to Members and budget implications.

ARTICLE XI - VOTING

Section 1

- a. In their decision making the Advisory Committee and the Standing Committee shall strive for unanimity.
- b. In the event that a consensus cannot be achieved in the Standing Committee, the matter under consideration may be referred to the Advisory Committee, unless it is specified in these or other ICAC regulations, that the matter shall be put to a vote in the Standing Committee. The Advisory Committee shall proceed by consensus. In the event of a consensus not being achieved in the Advisory Committee, the matter shall be put to a vote at the request of any Member, in which case the adoption of any recommendation or proposal shall require the approval of a two-thirds majority of Members present and voting.

- c. Each Member shall be entitled to one vote.
- d. An abstention shall not be considered as a vote.
- e. Voting normally shall be by a show of hands unless the majority of Members present and voting request roll call. A secret ballot shall be taken when requested by any Member.

ARTICLE XII - COOPERATION WITH OTHER ORGANIZATIONS

Section 1

- a. The ICAC shall cooperate with other organizations, public or private, national or international. The Standing Committee shall determine the organizations and the nature and extent of such cooperation.
- b. These organizations, as well as non-member governments and the public, may, with the approval of the host Member, be invited to attend sessions of the Advisory Committee. Participation in the meetings shall be on such terms as the Advisory Committee or the Standing Committee may prescribe.

ARTICLE XIII - AMENDMENTS

These Rules and Regulations may only be amended by the Advisory Committee unless specifically referred for amendment to the Standing Committee.

ARTICLE XIV - SUPERSESSION

These Rules and Regulations adopted June 16, 1972 supersede any prior act, resolution, or Rules and Regulations inconsistent with their provisions.

Closing Session

12:00 hrs, Friday, December 11, 2015
Dr. Kavita Gupta Textile Commissioner,
Government of India in the Chair

Reading of the Final Statement of the 74th Plenary Meeting

The CHAIR called the Closing Plenary Session to order and began the meeting by asking the Executive Director to read the Final Statement of the 74th Plenary Meeting, which is an integral part of these Proceedings. The delegate of BRAZIL took the floor to propose that, in the interests of time, the Statement should be considered as read. Seeing no objection, the CHAIR took the Final statement as read.

Invitation from Pakistan, host of the 75th Plenary Meeting

The delegate of PAKISTAN thanked Members for their selection of his country as host of the 75th Plenary Meeting. On behalf of the government of Pakistan, he invited all ICAC Members to participate in this special event, which will be held in the beautiful capital of Islamabad, from October 31 to November 4, 2016.

Closing Comments by Other Delegates

The delegate of INDIA thanked all participants in the event. He noted that a significant step forward had been taken by the amendment of the Rules and Regulations to enable the membership of the European Union. Nevertheless, the

Standing Committee still faced the hard task of negotiating transitional arrangements and other issues involved in the accession of the EU to the ICAC.

The delegate of TURKEY thanked the hosts for their warm welcome and excellent organization. She said that the Plenary had been a fruitful opportunity to discuss topic that are relevant to all countries with an interest in cotton. She sent her best wishes to Pakistan as host of the next Plenary and expressed the desire of her country to strengthen even more the collaboration with other ICAC Members.

The delegate of TAIWAN expressed his appreciation to the Secretariat for putting together a successful program. He congratulated India for the excellent arrangements made for the Plenary. Finally, he stated that Taiwan is considering hosting a Plenary Meeting in the future.

Closing Comments by the Executive Director

The Executive Director thanked all Members for their active participation, which greatly contributed to the success of the event. Since his arrival at the ICAC, all those that were part of the “cotton family” had gone out of their way to make him feel welcome. He was particularly grateful to the government and private sector of India, who had supported him from the outset and had now organized this enormously successful meeting. He extended his personal thanks to

Dr. Kavita Gupta, Textile Commissioner and head of the Organizing Committee. Although she had only been appointed to her new post two months ago, she had worked tirelessly in the interim to assure the success of the Plenary.

Closing Comments by the Chair

The CHAIR began her closing remarks by stating that guests are considered as divinities in the Indian culture. She was glad to have had the wonderful experience of interacting with all participants in all their diversity. She considered that the sessions had been rewarding and covered a wide range of issues relevant to the cotton sector in today’s changing world. She was grateful to ICAC staff members for their assistance in the organization of the Plenary.

The CHAIR noted that the organization of the event had been an interesting experience in Public-Private Partnership. She thanked the Cotton Corporation of India, the Confederation of Indian Textile Industry and the Cotton Association of India for their support of the event. She expressed her particular gratitude to the Minister of Textiles, H.E. Santosh Kumar Gangwar, and the Secretary of Textiles, Sanjay Kumar Panda, as well as to all those in the Ministry of Textiles and the Textile Commissioner’s Office who had helped make the event such a success. She hoped that participants would return to India and invest in the country’s vibrant textile value chain.

First Breakout Session

Innovations in High-Input Cultivation Systems

14:00 hrs, Monday December 7, 2015
Chair: Mr. Sharad Kumar Saraf, Chairman,
Technocraft Industries, India

Speakers:

- Mr. Luis Renato Zapparoli, AGOPA, Brazil, “Intensive Farming: A Grower’s Point of View.”
- Mr. Allan Williams, Cotton Research and Development Corporation, Australia, “Innovations in High Yielding Cotton Cultivation: Success Factors in the Australian Production System.”
- Mr. M.V. Venogupolan, Central Institute for Cotton Research, India, “High Density Production System in Cotton – R&D Initiatives in India.”

The world cotton yield is approximately 800 kilograms of lint per hectare, but some countries, and some individual farms within countries,

achieve much higher levels of productivity. Brazil achieves the highest rain fed yield in the world, with a national average of approximately 1,500 kilograms per hectare, and Australia, where 90% of production is irrigated, achieves the highest national yield in the world of approximately 2,500 kilograms per hectare. The national yield in India is less than 600 kilograms per hectare, even though about half of all cotton area is irrigated. However, research fields in India utilizing High Density Production System (HDPS) technology achieve yields of more than 1,000 kilograms.

Double Cropping: A Key to Profitability in Brazil

Mr. Zapparoli, who is himself a farmer in the state of Goias, Brazil, reported that agriculture in Brazil was transformed by the founding in 1973 of EMBRAPA, the national agricultural research organization, combined with the advent of double cropping and expansion into

the Cerrado region, in the late 1970s. By the 1980s, EMBRAPA was releasing new varieties, and in the 1990s, the national government brought economic stability to Brazil with policies to end inflation. Mr. Zapparoli noted that the boll weevil arrived in Brazil in 1983, and a rust disease affecting soybeans was identified in 2000. However, farmers learned to manage these difficulties, and with the release of biotech cotton, maize and soybean varieties in 2000, agricultural production continued to climb. The national yield for cotton climbed from 370 kilograms of lint per hectare in 1990/91 to 1,500 kilograms currently.

Mr. Zapparoli reported that double cropping (harvesting two crops from the same field each year), with cotton as a second crop following soybeans, was a key factor underlying the rise in cotton production and yields. Double cropping soybeans and cotton results in higher soybean yields because of cotton’s tap root, and cotton

is intrinsically more valuable than maize, giving cotton an advantage in double cropping systems.

He said that double cropping reduces input use per kilogram of lint production through more efficient nutrient utilization, reduces soil erosion by limiting the number of days each year that land lays bare, improves machinery utilization and allows the amortization of fixed costs over two crops instead of just one. However, double cropping also increases management intensity and results in greater crop sensitivity to rainfall deficits.

He also noted that average farm size in Brazil had increased dramatically since the 1990s, from about 5 hectares per household to several thousand hectares per household, and that cotton production had migrated from states in the Southeast of Brazil to states in the center and north, and these developments contributed substantially to the rise in yields.

He observed that challenges for the future include reducing energy, fertilizer, and pesticide use per kilogram of production, learning to control disease and insects without sacrificing yields or increasing input use, and developing varieties specifically bred for double cropping systems with intensive farming techniques. EMBRAPA is working on new biotech events that will impart resistance to sucking pests. Mr. Zapparoli's presentation is a statement of the meeting.

Experimentation and Technology Adoption are the Keys to Australian Cotton Success

Mr. Allan Williams observed that the key to success in Australia has been the willingness

of farmers to experiment and innovate while incorporating new technologies on a whole-farming-system basis. Australian cotton yields rose from 700 kilograms of lint per hectare to 2,500 kilograms per hectare between 1960 and the present, and about half of the yield increase was due to the development of new varieties with greater disease resistance and higher ginning ratios of up to 45%, about one-fourth of the increase came from better soil, water and pest control management, and about one-fourth came from the interaction of better varieties and better management.

As an example, Mr. Williams noted that the use of biotech cotton resistant to certain insects, combined with better water management to reduce plant stress, resulted in greater retention of 1st-position bolls, helping to raise yields. Further, he asserted that 1) expanded use of crop rotations, 2) reductions in the use of heavy machinery and elimination of production practices that resulted in soil compaction, 3) the installation of global positioning system (GPS) devices on machinery to enable precision input applications and 4) to enable field mapping so as to optimize input applications, 5) better water management through the use of field leveling machinery to eliminate low spots in rows being irrigated and through better recapture, 6) the elimination of the practice of stubble burning, and 7) the automation of agronomic practices so as to ensure timely performance, such as irrigation and pesticide applications, also contributed to cost minimization and yield enhancements.

Mr. Williams indicated that sub-surface drip irrigation is little used in Australia because of

installation costs. He reported that the use of round-bale cotton harvesting machines reduce equipment and labor requirements during harvesting but result in more soil compaction than lighter machines. However, he cautioned that the use of round-bale harvesters enabled farmers to harvest cotton with more than 8% moisture, threatening quality deductions. Mr. Williams' presentation is a statement of the meeting.

High Density Production System (HDPS) Holds Promise in India

M.V. Venugopalan acknowledged that yields in India are below the world average, and he attributed this to long-duration cultivars that expose cotton plants to moisture, nutrient, insect and disease stress, and the use of hybrid varieties that are not well suited to certain regional situations.

Mr. Venugopalan defined HDPS as a cropping system incorporating plant densities of between 111,000 per hectare (90 centimeters between rows and 10 centimeters between plants in a row) and 222,000 per hectare (45 centimeters between rows and 10 centimeters between plants). He reported that HDPS results in lower damage from sucking pests, higher water nutrient use efficiency, greater uniformity in maturity and faster plant maturity. Because HDPS results in faster plant development, peak flowering tends to occur during the rainiest time of year in India. Consequently, yields tend to rise by 30% or more. In order to reap the greatest benefits, farmers practicing HDPS systems must ensure sowing at proper times, effective weed and insect control and timely fertilizer applications. Mr. Venugopalan's presentation is a statement of the meeting.

Second Breakout Session

Cotton By-Products and Their Uses

09:00 hr. Tuesday, December 8, 2015

Chair: Mr. Suresh Kotak, Kotak & Co. Ltd., India

Speakers:

- Dr. Amal Saber Owis, Former Director, Cotton Research Institute, Egypt, "Recycling of Cotton Stalks to Economic Products."
- Dr. P.G. Patil, Director, Central Institute for Research on Cotton Technology (CIRCOT), India, "Cotton By-Products and their Uses."
- Dr. Greg Holt, Research Leader, Cotton Production and Processing Unit, USDA/ARS, USA, "Cotton By-Products: Possibilities and Potential."

"COTTON" Can Spell "Prosperity"

Cotton fiber represents only about one-seventh of the biomass of the cotton plant by weight, and cotton seed represents about one-fifth. Together,

fiber and seed represent only about one-third of the total biomass production of cotton plants, and yet traditionally only the fiber and seed have been considered to be of economic value. Worldwide, approximately 100 million tons of cotton plant material, consisting of stalks, seed, fiber and material separated from lint and seed in the ginning process, are essentially wasted or under-utilized each year. However, this material has great economic potential if properly utilized and could contribute to the economic impact of cotton production.

Panel members reported on research in Egypt, India and the USA that demonstrates that more than 1,000 industrial products can be manufactured from cotton stalks, cotton seed, and the biomass recovered from the ginning process (often called "gin waste" or "gin trash" and consisting of leaf parts, sticks, carpal and lint). Segregation of biomass between stalks, leaf, sticks, carpal

and lint, is a critical step in developing economically viable applications. Ironically, this material is already segregated during the ginning process but is usually recombined for ease of disposal by ginnery operators. In developing alternative uses of cotton biomass, ginnery operators will need to maintain the segregation of different materials.

Cotton stalks can be used to produce organic fertilizer, animal feed, wood products, various cellulose applications, and as charcoal for fuel and filters. Cotton seed can be used in the production of linters, cooking oil, meal for animal feed, fertilizer and other uses. Cotton seed oil is the third largest vegetable oil in India and can be utilized as cooking oil, salad dressing, soap and cosmetics. The underutilization of cotton seed oil represents a loss in value of approximately US\$1 billion per year in India alone. Biomass recovered from the ginning process can be used to produce animal feed, composite

building and packaging material, and geotextile products. Packaging material produced from cotton gin biomass can be used as a substitute for Styrofoam in applications where single use, biodegradable material is desirable, thus reducing pollution. Geotextile products include mulch used in erosion control and sponges used to absorb oil and other liquid contaminants resulting from spills. There are already thirty factories in India producing particle board from cotton stalks utilizing technology pioneered under a project funded by the Common Fund for Commodities (CFC) and supervised by the ICAC.

There is a broad consensus that the full economic potential of cotton stalks and material produced in the ginning process is not being realized. Cotton producers and researchers must look at the whole plant and its components as economic assets, not just the lint and seed. Cotton by-products are often best used in blends with other natural fiber components to produce products with superior performance characteristics. In considering potential uses of cotton plant biomass, researchers should draw inspiration or try to mimic natural processes and products (bioinspiration or biomimicry), and the world cotton industry needs to consider non-traditional

uses of plant material. The cotton industry must work to sensitize industrialists to the potential uses of cotton plant material, but there is ample evidence that bio-applications of cotton biomass are already needed, wanted and used in the world economy. If fully utilized, cotton fiber, seed, stalks and ginning biomass can contribute to income generation and environmentally responsible industrial products. "Cotton" can spell "Prosperity."

Presentations from Dr. Saber Owis, Dr. Patil and Dr. Holt are statements of the meeting.

Third Breakout Session

Preserving the Heritage of Cotton

8:30 hr. Wednesday, December 9, 2015

Chair: Mr. Nayan Mirani, Vice-President, Cotton Association of India

Speakers:

- Dr. Amarneswar Galla, International Institute of the Inclusive Museum, India, "Curating Cotton in Museums."
- Dr. Mohammed Negm, Cotton Research Institute, Egypt and Mr. Khaled Schuman, Cotton Egypt Association, Egypt, "Preserving the Heritage of Egyptian Cotton by DNA-based Technology."
- Mr. Jean-Marc Derossis, President, International Cotton Association, "175 Years of Knowledge and History Serving the Cotton Industry."

Heritage Comes from Human Experiences

Cotton has been produced for thousands of years, and the modern commercial cotton industry based on trade primarily in saw-ginned upland cotton is approximately 200 years old. India, Egypt and the International Cotton Association have traditions that span much of this heritage, and efforts to preserve their heritage can be instructive for segments and regions of the entire world cotton industry.

Dr. Galla recently visited the headquarters of the Cotton Association of India in the Cotton Exchange building at Marwari Bazar in Mumbai. The Cotton Exchange building offers exciting opportunities for communication of "The Journey of Cotton." However, the building is an animator, it is not the message, and it will be a challenge to capture the many voices of the heritage of cotton. As one walks the corridors of the Cotton Exchange, the voices of traders and the calls of graders, the bedlam of active

trading and the cries of orders being booked, the conversations of friends and the disagreements over quality can be heard in the hallways and side rooms containing the history of the historic building. The dynamic of the cotton industry, and the endogenous sights and sounds that have influenced the development of the world economy, can be captured in the course of preserving the Heritage of Cotton.

Cotton's heritage includes practices, expressions, knowledge and skills, as well as objects and spaces associated with the industry. Domains of the heritage range across stories, practices and knowledge. Key concepts include intergenerational transmission, community perception, and the dynamic heritage of the industry. Museum collections include both moveable and immovable objects, documents, artifacts, memorabilia, equipment from eras past and current, and in particular oral traditions illuminating the people and practices that animate the heritage of cotton. The challenge for the cotton industry is to "get beyond" the Cotton Exchange building to communicate the living history of the industry, and to link cotton's heritage internationally with cotton collections in Liverpool, Bremen, the United States and elsewhere.

Dr. Negm reported on efforts to preserve the brand of Egyptian Cotton by preventing counterfeiting. He noted that it is difficult to find DNA in strands of fibers from woven and finished fabric, but tests can nevertheless be performed to determine whether cotton in textile products is from *barbadense* or *hirsutum* genotypes. He emphasized that Egypt is not seeking to differentiate between types of *barbadense* cottons, such as Egyptian or Pima varieties, but Egypt is trying to prevent invalid content claims by unscrupulous manufacturers and retailers us-

ing upland cotton, or even polyester, in blends labeled as Egyptian cotton.

Mr. Schulman reported on the work of the Cotton Egypt Association to protect the Egyptian cotton logo by ensuring that only licensed users were displaying the logo on products of 100% Egyptian cotton. The Egypt Cotton Association is contacting retailers and brands and monitoring claims of Egyptian cotton content. Dr. Negm and Mr. Schulman's presentation is a statement of the meeting.

Mr. Derossis briefly summarized the 175-year history of the International Cotton Association (ICA). The ICA began as the Liverpool Broker's Association in 1841, was renamed the Liverpool Cotton Association in the 1870s, and then became the International Cotton Association in 2004. Despite the transformation of the association as trading conditions affecting firms in the UK changed, the pillars of the ICA are eternal. The ICA is first and foremost and arbitral body, and the by-laws and rules of the ICA, with the provision for "invoicing back," form the foundation of the organization.

The members and board of the ICA are highly diversified today, and include representatives from all major cotton trading regions. The ICA has had several presidents resident outside the traditional location of Liverpool, and several recent presidents have been representative of industry segments other than the merchant sector. The ICA conducts an annual two-week training program known as "Complete Cotton," a training program that helps to continue the traditions of knowledge, cultural norms, trade practices, and the core value of "Contract Sanctity" that have benefited all cotton sectors since 1841. Mr. Derossis' presentation is a statement of the meeting.

Fourth Breakout Session

Best Practices in Cotton Statistics

10:30 hr. Wednesday, December 9, 2015

Chair: O.M. Prabhakaran, Joint Textile Commissioner (Cotton), Ministry of Textile, India.

Speakers:

- Ms. Rebecca Pandolph, Statistician, ICAC
- Mr. B.K. Mishra, Chairman, Cotton Corporation of India
- Dr. M. Talpur, Director, Marketing and Economic Research, Pakistan Central Cotton Committee.
- Mr. James Johnson, Agricultural Economist, Foreign Agricultural Service, U.S. Department of Agriculture.

Statistics Are the Foundation of Decision Making

The provision of statistics on world cotton production, area, yield, imports, exports, mill use and stocks is the core function of the ICAC Secretariat, and the Secretariat has provided statistics since its formation in 1946. Currently, statistics provided by the ICAC include world cotton supply and use by country and region, exports by destination and imports by origin, cotton yarn and woven cotton fabric production, exports and imports, prices as reported in Cotton Outlook and the International Commodity Exchange, and price premiums, discounts and basis charts, fiber consumption for non-cellulosic, cellulosic and natural fibers, and consumption per capita at the retail level, estimates of spending on government measures that affect cotton production and trade, and forecasts of season averages of the Cotlook A Index based on estimates of cotton ending stocks to use in China, outside China and net trade by China. The Secretariat does not provide statistics on cotton seed or cotton by-products such as oil, seeds and gin material.

Estimates of world cotton supply and use are disciplined by the accounting identity: Ending stocks = Beginning Stocks + Production – Disappearance.

At the country level, Ending Stocks = (Beginning Stocks + Production + Imports) – (Domestic Disappearance + Exports).

If estimates of individual elements in the supply and use equation do not result in an identity, additional research to reconcile competing estimates must be completed and adjustments made.

In any cotton season, World Exports = World

Imports. In reality, small differences between imports and exports develop because of changes in bale weight between ginning and use, differences in reporting periods and errors in statistics.

The ratio of Ending Stocks/Disappearance is an important indicator of the relative tightness of stocks to mill use of cotton. Consequently, the ICAC Secretariat invests much effort in collecting accurate data on stocks as of July 31 each year. If ending stocks are treated as a residual and never reconciled via an actual census of stocks in textile mills and warehouses, cumulative errors can be highly misleading.

International cotton statistics reported by ICAC and USDA are normalized to an August/July cotton season using monthly data on mill use and trade to adjust data from countries using different cotton seasons.

The ICAC relies on coordinating agencies, national organizations, international organizations such as The World Bank, FAO and the UN, trade publications, such as Cotton Outlook, government reports, business contacts and researchers in gathering statistics. While the ICAC Secretariat receives information from government agencies, the Secretariat has a tradition of independence and takes great pride in publishing objective estimates of world cotton supply and use without deference to the political objectives or agency biases of its members. Governments have recognized for decades that the value of statistical estimates from the Secretariat are enhanced by the publication of unbiased estimates, and that requiring the Secretariat to publish only official statistics would result in delay, would institutionalize inaccuracy and would undermine the value of Secretariat analysis.

Information on world and national weather patterns and economic developments are implicitly included in ICAC Secretariat estimates of cotton area, yield and production and consumption and trade, but the ICAC is not a weather or macroeconomic forecasting agency.

Like the ICAC Secretariat, India and Pakistan follow the accounting identity in which Ending Stocks = (Beginning Stocks + Production + Imports) – (Domestic Disappearance + Exports). However, most countries treat estimates of ending stocks as a residual and only reconcile estimates of supply and use when the resulting calculation of ending stocks is highly improbable.

Data on cotton area, yield and production in India are provided by both national and state agencies. Area and production are estimated based on a survey methodology dating back to the colonial period in which thousands of measurements of cotton plants per meter, cotton bolls per plant and grams per boll are collected from a stratified random sample of fields across India four times a year. India is experimenting with remote sensing technology to estimate area and production. Unfortunately, cotton gins in India are not required to report actual cotton production.

Use of cotton in India by organized textile mills, loose mill consumption and non-mill consumption is estimated based on reports provided to the Textile Commissioner's Office, Ministry of Textiles. Import and export data are received from the Ministry of Commerce and Industry.

In Pakistan, trade data are provided by the customs service, and production is estimated from a combination of objective and subjective surveys at the state and village levels. Objective yield surveys are conducted periodically. Consumption is estimated from data on capacity, capacity utilization and extrapolations from estimates of mill use in prior years. As in India, gins are not required to report production, but the Pakistan Central Cotton Committee collects data from farmers about prices received.

Data provided by the U.S. Department of Agriculture are used by almost all actors in the cotton value chain. USDA has a reputation for objective, non-political, official, timely, accurate, published statistics. Estimates of production, consumption and stocks in the United States are reconciled with actual bale counts conducted by the National Agricultural Statistics Service and the Department of Commerce. USDA estimates of international cotton area, yield, production, consumption, trade and stocks are based primarily on reports provided from U.S. embassies around the world based on analysis of national data by embassy personnel, augmented by analysis in Washington by experienced analysts.

Statistics are the foundation on which good decisions are made, and all countries are encouraged to devote sufficient resources to ensure the provision of accurate, timely statistics.

Presentations from Ms. Pandolph, Mr. Mishra, Dr. Talpur and Mr. Johnson are statements of the meeting.

Fifth Breakout Session

Challenges to Boosting African Cotton

09:15 hr. Thursday, December 10, 2015

Chair: Mr. Udayan Thakker, Managing Partner, U.B. Cotton Pvt. Ltd.

Speakers:

- Dr. Milan Sharma, Head – Africa Initiatives, IL&FS Education and Technology Services, “TAPing Africa.”
- Mr. Alex Mungai, Value Addition and Processing Promotion Officer, Fiber Crops Directorate, Government of Kenya, “Promoting Cotton Production in Kenya: Challenges and Opportunities.”
- Mr. Peter Salcedo, Plexus Cotton, “Expanding the Foundation for Cotton Production in Africa.”
- Mr. Oumarou Balarabé, ECCAS, “Challenge to Boosting African Cotton.”

Investor Protection Crucial

Cotton is Africa’s most important agricultural commodity, but production and mill use have not kept pace with growth in the rest of the world. Under the rubric of South-South cooperation within the framework of the World Trade Organization (WTO) Doha Development Agenda (DDA), the Government of India established the IL&FS initiative to promote the cotton sector of Africa. The major activities of the initiative include promotion of trade and investment, technology transfer and loans and grants to

facilitate infrastructure development. The cotton Technology Assistance Program (TAP) provides training in cotton production and textile processing in six countries of Africa, with special emphasis on ginning, textile processing, the use of biopesticides and biotechnology

Challenges for Africa include raising yields to the world average, expanding textile production, and improving cotton marketing. Research and training, input provision, and private sector investment in ginning and textile production are the keys to expanded cotton-textile-apparel value chain activity.

The cotton sector of Kenya nearly collapsed after the national parastatal cotton company was dismantled in the mid-1970s, but the cotton sector is being revitalized. A new industrial revolution is possible in Africa as retailers and brands seek integrated value chains guaranteeing environmental and social sustainability.

The Government of Kenya is focusing on reactivation of the cotton sector in arid and semiarid regions because cotton can produce an economic yield in those regions, while other crops will fail. Challenges include the need for soil fertility testing, proper fertility management, provision of mechanization, timely application of insecticides, improved seed varieties, increases in plant density and proper cultivation to control weeds, clean harvesting without contamination, proper crop rotations, access to credit, strengthening

cooperatives and ensuring demand so as to buttress farmer interest in cotton. In decades past, cooperative societies became highly indebted and failed to provide farmers with necessary services. The Government of Kenya is working to revitalize cooperatives by forgiving debts and providing improved management training. Kenya is not facilitating large-scale cotton farming.

Every African country is different and operates with different policies and programs. It is self evident from statistics that cotton production in West Africa is greater than in East and Southern Africa, and East African cotton production is no higher now than it was in the 1960s. The reason is that West Africa has a higher level of coordination and protection of investments through centralized control. Keys to increasing production include guaranteed prices announced pre-planting, timely provision of inputs, appropriate extension services, and certainty of purchase and payment. In order to meet these requirements, governments must guarantee investor protection by preventing side selling or pirate buying. In many countries, 40% of farmers produce only 5% of seed cotton, and if governments wish to treat cotton as a social crop and require investors to provide inputs to all growers, the government must be willing to cover the costs associated with social services.

Presentations from Dr. Sharma, Mr. Mungai, Mr. Salcedo and Mr. Balarabé are statements of the meeting.

Sixth Breakout Session

Empowering Women in Cotton

11:00 hr. Thursday, December 10, 2015

Chair: Naishadh Parkih, Chairman, Confederation of Indian Textile Industry (CITI)

Speakers:

- Mr. Joseph Nkole, Cotton Association of Zambia, “Empowering Women Cotton Farmers Through Participation in the Cotton Value Chain.”
- Ms. Prabha Nagarajan, Organic and Fair Trade Cotton Secretariat, India, “Women in Cotton.”
- Ms. Adriana Gregolin, Food and Agriculture Organization of the United Nations (FAO), “Study: Gender and the Cotton Value Chain in Mercosur Countries.”

Strong Women, Better Outcomes, More Cotton

Women provide an estimated 80% of the manual labor associated with cotton production, including the tasks of planting, thinning, weeding, and harvesting. However, in many cultures, women are prohibited from owning land and signing contracts. Consequently, women have difficulty gaining access to credit or even receiving information about production technology or market information. In many countries, economic power is monopolized by men, who make decisions about land use, crop selection and production practices.

Besides the obvious inequities of such cultural and legal patterns, the systematic denial of opportunities to women stunts economic growth,

reduces productivity and often results in poor health and educational outcomes for children. Research indicates that women are more likely than men to invest surplus income in farm animals, such as goats and pigs, and agricultural inputs to boost earning power. Therefore, efforts to boost economic opportunities for women can lead to better long term economic outcomes in rural areas. Women also tend to be naturally inclined to save and share planting seeds and to protect biodiversity.

Sensitivity to gender issues can accelerate progress in the adoption of new cotton production technology. The identity cotton programs, such as Cotton Made in Africa (CmiA), certified organic cotton, Fair Trade, BCI, and E3, include women’s empowerment in their production practices.

The Cotton Association of Zambia (CAZ) has formed women's Study Circle Groups, has assisted women to participate in the ownership in a cotton ginnery, is partnering with training organizations to expand knowledge of hand spinning and handloom manufacturing and weaving, and works to ensure that production equipment, such

as backpack sprayers, are appropriate in size and handling for female operation. Approximately 300,000 households are registered with the CAZ, and 78 separate languages are spoken among cotton producing households in Zambia, making cultural change difficult. Therefore, customs involving the status and opportunities for women are changing, but slowly.

All countries face some issues involving female empowerment. In most countries, written laws provide for equality of treatment among men and women, but cultural attitudes do not always follow legal norms.

Presentations from Mr. Nkole and Ms. Nagarajan are statements of the meeting.

Seventh Breakout Session

New Developments in Cotton Infrastructure

14:00 hr. Thursday, December 10, 2015

Chair: Mr. B.K. Patodia, Chairman and Managing Director, GTN Textiles Ltd., India.

Speakers:

- Ms. Marième Fall, Counsellor, World Trade Organization (WTO), "Export Corridors in West Africa: Information from the Aid for Trade Initiative."
- Mr. Ashley Power, Auscott Ltd. Australia, "New Investment in Ginning Facilities in Australia."
- Mr. Lav Bajaj, Bajaj Steel Industries Ltd., India, "New Investments in Cotton Infrastructure."
- Dr. K. Selvaraju, Secretary General, The Southern India Mills' Association (SIMA), "Development of a Hand-Held Cotton Harvesting Machine."

"Without Investment, Nothing Moves"

Facilitating Trade

The underlying role of the World Trade Organization (WTO) is to expand international trade by building capacity, improving infrastructure, and serving as a platform for discussion of trade policies and negotiation of trade issues.

As an example of its efforts to improve trade capacity, the WTO has been addressing problems caused in West Africa by inland border delays, congestion, duties and taxes, inefficient roads and poor dissemination of information. The inland delays are being reduced by the creation of "trade hubs" and "borderless alliances," which include Joint Border Posts.

Trade hubs are one-stop offices where information about trade regulations and requirements

and export or import licenses can be obtained. Borderless Alliances sponsor annual conferences, national committees and information sources to facilitate reductions in trade barriers, harmonize standards and monitor trade protocols so as to reduce unnecessary border requirements. Joint border posts are buildings straddling the borders between West African neighbors in which travelers, including commercial drivers, tourists and business travelers, can stop to obtain visas and conclude immigration and customs formalities for both countries at one time.

Boosting Investments

Investments are key to achieving social, environmental and economic sustainability in the cotton industry. From machinery to efficiently produce certified planting seed, to farm machinery, irrigation facilities, equipment for insect, disease and weed control, harvesting and ginning equipment, machinery for handling lint and cotton seed, monitoring equipment and quality evaluation equipment, and machinery to handle cotton seed and by-products, investments in the cotton value chain probably total close to \$2 billion every year (estimated as 5% of the farm value of cotton and cotton seed.) Additional industry wide investments are need to support demand enhancement. As machine picking and capital intensive agricultural production expands, total investments in the cotton value chain may increase as a percent of the value of production.

Focus on Efficiency

Australian cotton producers receive no subsidies and encounter high transportation costs associated with exports because of their relative isolation from major trade routes. Consequently, the Australian industry must be extraordinarily ef-

ficient. With the development of higher-yielding varieties capable of reaching maturity in shorter time spans, cotton production in Australia has been expanding southward into new regions that have higher rainfall and lower pest pressure than in traditional cotton areas. The Southern expansion requires the construction of new ginneries, and one company has just completed a major construction project. The new gin economizes on labor and power and complies with all environmental and safety requirements, while also achieving great economies of scale. The gin is capable of producing 400 metric tons of lint and 500 tons of cotton seed per day (approximately 80 bales per hour), while employing only 12 people, including personnel in the receiving yard. The gin is built to receive seed cotton in round modules (seed cotton harvested with new in-line module builders). All aspects of the gin have been carefully engineered, including the direction of traffic flow of seed cotton, seed and lint. RFID tags in each module are used to record the origin and location of each module and resulting bale. All information about ownership, field of origin, variety, variety characteristics and HVI lint quality data are recorded for each bale.

At the opposite end of the investment spectrum, the Southern India Mills' Association has sponsored the development of a hand-held cotton plucker operated by battery. The plucker speeds the hand harvesting process by enabling workers to pull tufts of cotton from open locs using the plucker rather than their fingers. The battery lasts about 10 hours and recharges in 4 hours. The battery can be recharged from a solar panel. The machine costs about \$150.

Presentations from Ms. Fall, Mr. Bajaj and Ms. Power are statements of the meeting.

Eighth Breakout Session

Organic, Naturally Colored and Other Specialty Cottons

16:00 hr. Thursday, December 10, 2015

Chair: Mr. K.F. Jhunjhunwala, Past President, Cotton Association of India

Speakers:

- Dr. B.M. Khadi, University of Agricultural Sciences, India, "Colour Cotton: Status and a Road Map for Success."
- Mr. Mani Chinnaswamy, Appachi Eco-Logic Cotton Pvt. Ltd., India, "SUVIN: The Jewel in the Indian Cotton Crown."
- Ms. Anita Chester, C&A Foundation, India, "Organic Cotton Value Chains: Drivers of Innovation."

Naturally Colored Cotton

Archeologists have determined that naturally colored cotton was growing in the Caribbean 5,000 years ago. Today, naturally colored cotton (colored cotton) could form a niche market for fiber that does not need to be dyed. Dark brown, medium brown and cream (light brown) and green colored cottons in about 22 shades are found occurring naturally. The colored cotton industry enjoyed a brief burst of excitement about 20 years ago but then failed because lint quality was too low for spinning. However, newer breeding techniques have been used to produce colored cotton with longer, stronger fiber characteristics suitable for spinning.

Natural colors deepen with washing, and the scouring and mercerization processes applied to yarn and fabric increase strength and deepen colors. New techniques of metabolic engineering and biotechnology may be able to broaden the range of hues produced with naturally colored cottons by transferring color genes from other plants to cotton. Imagine borrowing red or blue hues from flowering plants.

However, segregation of colored cotton from white cotton is necessary in fields, because white will contaminate the naturally colored

cottons. Segregation is also necessary during harvesting and ginning to avoid dilution of colors. Popularization will require the development of a broader range of colors with increased intensity. The Southern India Mills' Association is experimenting with 2,000 hectares of colored cotton in 2016.

SUVIN

As noted in the Open Session with retailers, consumers increasingly want to know the story behind a product. SUVIN cotton, the finest cotton grown in India, and one of the best in the world, has a fantastic story to tell. From its origins as Sea Island Cotton in the Caribbean to its production in Southern India today, SUVIN has a legacy as exciting as any pirate novel, involving wars and smugglers, kings and farmers. Modern SUVIN is derived from Sea Island varieties introduced by the British during the colonial period and improved by Indian breeders following independence. SUVIN fibers exceed 50 mm in length with extraordinary strength of more than 40 grams per tex and fine micronaire between 2.7 and 3.1. SUVIN can be used to produce yarn counts of 240 and greater.

Annual production of SUVIN is approximately 200 metric tons per year, which is about equal to market demand at current prices. Being a barbadense variety, SUVIN requires 7 months to mature. Weed and insect control are difficult over the long growing season, making it an input-intensive crop.

Organic Cotton: A Viable Alternative for Resource Poor Farmers

Organic cotton production offers farmers a healthy and sustainable future with healthy soils and balanced control of weeds and pests. World production of certified organic cotton was less than 120,000 tons in 2014/15, and 80% came from India. Organic production techniques make sense for small holders, especially those

who are resource poor, and advocates hope for growth in production. To scale up production from the current level, price premiums cannot be the focus. Rather, improved profitability through lower input costs and assured markets may offer incentives for more farmers to follow organic practices.

There are four dominant models of organic cotton production:

- Integrated Production - farmer contracting. Under this system, a brand or retailer contracts with farmers to grow organic cotton. Farmers are in essence employees of the buyer and follow organic production practices as instructed.
- Integrated Production - farmer partnerships: Under this system, a brand or retailer agrees to buy all the organic cotton produced at a set price. Farmers are self-employed, but they have a guaranteed market at fixed prices, and they follow all organic production requirements.
- Farmer Cooperatives: Under this system, farmers form cooperatives to learn together, support each other, share duties and market their resulting cotton together, thus achieving economies of scale. This is common in India.
- Farmer-Owned Trading Company: Under this system, organic cotton is grown by individual farmers, but marketing is done cooperatively. This system is used in Texas, USA.

Organic cotton is not in competition with other identity cotton programs, such as BCI or Cotton Made in Africa. The identity cotton programs are working toward the same goals of sustainable, healthy, profitable cotton production.

Presentations from Dr. Khadi, Mr. Chinnaswamy and Ms. Chester are statements of the meeting.