



71st Plenary Meeting of the INTERNATIONAL COTTON ADVISORY COMMITTEE

REPORT

SIXTH OPEN SESSION / TECHNICAL SEMINAR (Meeting of the Committee on Cotton Production Research) “Intellectual Property Rights and the Role of Private Breeders”

9:00 hr. Wednesday, October 10, 2012

Mr. Jens Soth, Helvetas, Switzerland, in the Chair

Dr. Yusuf Zafar, ICAC Researcher of the Year 2012, presented a paper on ‘Intellectual Property Rights: Need for Overhaul.’ Dr. Zafar stated that the spread of biotechnology applications is hampered by complex biosafety regulations and intellectual property rights. This is why, despite the revolutionary nature of the technology to create new products like that of biotech cotton, biotechnology applications are limited to a few countries, a few crops and a few traits. Unlike the ‘Green Revolution,’ the spread of biotechnology is restricted because this revolutionary technology is exclusively driven by multinationals in the private sector. Trade Related Intellectual Property Rights (TRIPS) has made it even more difficult to close the gap between the developing and developed countries. The net outcome of implementation of WTO regimes has not only impeded access to useful materials by developing countries but has also allowed the monopoly players to set directions in research. There is a need to overhaul the system of intellectual property rights and re-design the development oriented intellectual property regimes.

Dr. Ghorban Ali Roshani of the Cotton Research Institute, Iran, presented a paper on the relationship between breeding and seed production. Iran has a very conducive environment for enhancing cotton production. In order to encourage farmers to grow cotton, the government has approved a set of incentives such as guaranteed purchasing price, financial assistance for land preparation, intensive extension program, technical assistance and a new irrigation system to reduce water consumption, etc. Mechanized harvesting has been started as a major step to reduce production costs. The Breeding Department at the Institute is responsible for developing varieties and seed production. There is a need to engage with the private sector to solve problems. In Iran, the public and private sectors have jointly released varieties for commercial use. The private sector is also involved in seed production.

Dr. Mohamed Abdel Hakeem Ali Naguib of Egypt presented a paper on Breeders Rights in Egypt. In Egypt, the Cotton Research Institute is the only institution developing new varieties of cotton. There are no restrictions that prevent other institutions/individuals from developing varieties, but no other organization in Egypt has the infrastructure and capabilities equivalent to the Institute. All varieties must be registered with the Agricultural Research Center, and the import and export of seeds in or out of Egypt is prohibited. The planting seed production system is in the hands of government institutions that strive to maintain varietal purity and produce uniform high quality lint. The Central Administration for Seed Certification conducts Distinctness, Uniformity and Stability (DUS) tests on regular basis. The Cotton Research Institute is responsible for producing Breeder seed and Foundation seed, while the Central Administration for Seed Production produces Registered and Certified seed by contracting with growers. Additional steps that are taken to maintain isolation and purity include, among others, one-variety zones, one-variety gins, field inspections and cotton seed certification.

Dr. Ibadulla Umbetayev, Director, Kazakh Scientific Research Institute of Cotton explained the seed production system in Uzbekistan that provides for competitive opportunities for the public and private sectors. In the last decade, the public sector released 12 varieties, and the private sector released five varieties. Due to the lack of funding, facilities and expertise, the private sector varieties could not capture significant area. The public sector varieties currently occupy 85-90% of the cotton area. Seed production of Elite I, II and III

stages takes place at private farms that have all the necessary requirements as guided by Kazakh agricultural experts and the research institute. Lately, the government is giving a strong emphasis to the development of the private sector. The Committee on Intellectual Property Rights and the State Commission usually complete the variety patent award process in 18-20 months. The patent could be in the name of an individual or a group. A new law, 'Protection of New Varieties of Plants,' will encourage the private sector to step up their efforts to compete against the public sector.

According to Mr. Mohammed Iya of Cameroon, the seed production system aims at varietal purity and multiplying/supplying seed to farmers. Planting seed production in most West and Central African countries is diversified, but the national research institutes have a common responsibility to produce basic seed (G1 to G3). The national systems assure that supplies of sufficient quantities of seed are provided to growers, that breeding programs are successful in making good varieties available, and the systems provide for good collaboration between national research institutes and the cotton companies. However, only a few new varieties have been released in the last 20 years, and the genetic purity of varieties is declining. Seed storage facilities are lacking, and seed delinting facilities are not satisfactory. Talking about Cameroon, Mr. Iya stated that the Institute of Agricultural Research for Development is responsible for producing pre-basic seed (referred to as G0, G1 and G2), while SODECOTON is responsible for producing basic seed, G3, and certified R1 and R2 generations. The system definitely needs improvement in order to ensure self-sufficiency in quality seed production.

Dr. Anju Gupta of Monsanto made a presentation on the topic of, "Intellectual Property Rights and the Role of Private Breeders in Global Cotton Breeding." She defined intellectual property (IP) rights and observed that it is a bargain between inventor and the public for the sake of publishing and enabling the best use of an invention. The inventor is granted the rights for exclusive use (20 years in the USA). According to the International Seed Federation, '*Strong and effective Intellectual Property protection encourages breeding and research required to meet increasing food, feed, fiber and fuel needs whilst preserving the planet.*' Proper IP rights encourage investments and provide access to information that helps users as well as other inventors. Dr. Gupta said that Monsanto invests in seed and traits research more than any other company in the field. Monsanto is working with farmers to double the yields of corn, soybeans, cotton and canola between 2000 and 2030, reduce resource use intensity by 33% by 2030, and increase the incomes of at least 5 million additional resource-poor farmers by 2020.

It was observed that countries use different quality standards and grades to describe planting seed, and that there is not a standardized nomenclature for quality standards. The Committee on Cotton Production Research (CCPR) of the ICAC decided to undertake a study on the nomenclature of planting seed production in various countries. The CCPR will propose a uniform nomenclature for adoption by all countries at the next Plenary Meeting.

It was observed that the regulatory and approval process of biotech products is complex, lengthy and expensive, which not only delays adoption but also makes commercialization difficult. A number of presenters repeated that there is a need to strengthen public sector research in biotechnology. Acquiring material from the International Centre for Genetic Engineering and Biotechnology was proposed as one solution.

Limits on germplasm exchange among countries were found to be a major limitation for developing better varieties. Researchers said that there are limitations on meeting biotech needs based on local needs that cannot be satisfied through conventional approaches. Researchers agreed that local germplasm utilization and domestic intellectual property rights are important for technology adopters, as well as technology providers.

One of the recommendations from the World Cotton Research Conference-5 was the formation of the International Cotton Researchers Association (ICRA). ICRA was formed and incorporated in April 2012. Bylaws and an Executive Committee have been formed, and additional legal formalities are being completed for the Association to formally initiate activities.

The Committee on Cotton Production Research voted to hold the 2013 Technical Seminar on the topic of 'Overcoming the Period of No Growth in Yields.' Papers on modern insights on how to maintain and improve soil fertility will also be invited within the overall theme of the Technical Seminar.