COMMERCIAL STANDARDISATION OF INSTRUMENT TESTING OF COTTON FOR THE COTTON PRODUCING DEVELOPING COUNTRIES IN AFRICA

Project Information
The International Cotton Advisory Committee (ICAC) submitted a draft project proposal for consideration with its recommendation for financing by the Common Fund for Commodities (CFC).

Project Title
Commercial Standardisation of Instrument Testing of Cotton for Cotton Producing Developing Countries in Africa

Status
Proposal, submitted to the Common Fund for Commodities in November 2005

Duration
4 years

Location
West Africa (including Central Africa) – represented by Mali/Burkina Faso;
East Africa (including Southern Africa) – represented by Tanzania;
Germany
France

Estimated total cost
USD 7,788,000

Amount to be funded
USD 5,035,000

Submitting institution
International Cotton Advisory Committee (ICAC)

Project Executing Agency
Faserinstitut Bremen e.V. (FIBRE), Germany

Additional Participating Agencies
CIRAD, France
Tanzania Bureau of Standards (TBS), Tanzania
Tanzania Cotton Board (TCB), Tanzania
CERFITEX, Mali
SOFITEX, Burkina Faso

Supervisory Body
ICAC

Duration
4 years

Estimated Start Date
July 2006

Major external partners:
- United States Department of Agriculture - Agricultural Marketing Service – USDA-AMS, USA
- Bremer Baumwollbörse (Bremen Cotton Exchange), Germany
**Brief project description**

**Project Background**

The industry demands for objective and reliable cotton fibre test results are increasing rapidly, and major cotton importing countries are integrating instrument based data in trade. Cotton with insufficient verification of its quality will result in price discounts for the producers or exclusion from the market. Only a worldwide harmonised control and testing system can favour a frictionless business for all participants in the whole commercial chain.

Developed cotton growing countries, like the USA, have already built up their national cotton quality assessment systems and instrumental classification has resulted in a competitive advantage for the USA in global marketing. It is obvious that the establishment of an adequate instrumental cotton testing system based on high volume instruments for the cotton producing countries in Africa and elsewhere would facilitate the access of their cotton to diverse global markets. But, up to now, there is no adequate international verification over the world of other test laboratories and of their results. The availability of high volume cotton testing instruments solely is not satisfactory to produce reliable test values - examples from all over the world show that, without certified testing procedures, the results will be disregarded and therefore are worthless. The results have to be reliable and at an internationally agreed level. Cotton producing developing countries will be disadvantaged in their market position, if they do not manage to participate in an international quality assessment system.

For the purpose of achieving reliable instrumental test results for the global cotton trade, the ICAC-CSITC Task Force (Commercial Standardisation of Instrument Testing of Cotton) brought together representatives of spinning mills, traders, cotton producers and research. The objective of this CFC project (which is based on the recommendations and conclusions of the ICAC CSITC meeting in Mumbai on November 28th, 2004) is to assist the cotton producing countries, especially the developing countries and Least Developed Countries (LDCs), to meet the emerging quality assessment demands of the global cotton market so as to strengthen or at least maintain their competitive position in the world market by keeping up with modern developments from the end-markets. Therefore, it is essential to enable these countries to supply their cotton with objective and reliable instrument-based quality information, based on internationally accepted test rules and procedures.

**Project Objectives and Content**

The aim of the project is to improve the integrity of worldwide cotton trade by establishing a reliable system of instrumental cotton characterisation, adoptable by all cotton producing countries, especially developing countries. Therefore, the following measures have to be achieved:

- Introduction of a worldwide acceptable, adoptable and reliable instrument based cotton quality assessment having defined test rules and based on a worldwide cotton testing laboratory certification system.
- Support to African laboratories, so that they will be able to fulfil the international requirements for reliable instrument testing of cotton. This will be done mainly by the establishment of Regional Technical Centres (RTCs) for providing the necessary assistance for the application of instrument testing in cotton testing laboratories. Especially education and expertise will be essential for a successful setting-up of a network of well harmonised laboratories to satisfy the cotton testing demands.

Regional Technical Centres will be installed in two different cotton producing areas of Africa, based on existing organisations in the countries. The Regional Technical Centres will be:

- **West Africa**: CERFTEX textile school, in Segou, Mali, in cooperation with SOFITEX classing office
in Bobo Dioulasso, Burkina Faso, to support directly West African laboratories and indirectly Central African laboratories

- **East/Southern Africa**: Tanzania Bureau of Standards (TBS), in cooperation with the Tanzania Cotton Board (TCB), both in Dar es Salaam, Tanzania, to support directly Eastern and Southern African laboratories and indirectly North-East African laboratories.

The Regional Technical Centres will be based on the specific regards and questions of all countries in the covered regions. For this purpose, a board of members representing cotton laboratories, cotton stakeholders and governmental interests in the Region will be created to plan and to check the activities of the RTCs on a regular basis.

In more details, the project is designed as follows:

- The first components of the project will be the establishment of an international system to check laboratory reliability. Besides the necessary basic international configuration of this kind of check system, the main focus is the installation of a CSITC Round Trial. By participating in this Round Trial, laboratories can prove to produce reliable results thanks to the certification process.

- The core of the project will be to enable the cotton producing developing countries in Africa to adopt and implement the international cotton quality assessment in their countries and for the benefit of their cotton business. Therefore it is important:
  - ... to pay regard to the specific problems in developing countries during the development of a cotton testing laboratory certification system
  - ... to establish the capabilities required for African Regional Technical Centres (RTCs) – to provide a support to regional laboratories
    - setting up African Regional Technical Centres (RTCs)
    - international training of experts for the RTCs
    - international reference and guidance for the RTCs
  - ... to support laboratories in Africa directly, so that they will be able to fulfil the requirements for reliable testing
    - expertise and monetary support for the necessary modifications in the equipment (conditioning, equipment)
    - training of the regional laboratories by the Regional Technical Centres
    - reference measurements for the laboratories (including fixed percentage of re-tests and regular international and regional round trials)
  - ... to support laboratories and regions in Africa that cannot be fully supported by the two planned RTCs, by the involved international partners.

The routine work that is to be done by the Regional Technical Centres for the region covers mainly two activities:

1. **Reference activities** to prove the reliability of test results
   - reference measurements for cotton fibres (regional reference laboratory)
     - re-tests of samples tested in the laboratories
     - regional round trials with regional cottons
   - support for the participation of the cotton testing laboratories in the international certification.

2. **Provision of information** to run cotton testing laboratories with SITC instruments and to fulfil quality requirements
   - training
     - for cotton testing laboratories according to instrument testing and additional visual classing
for staff in the cotton chain to realize the complexity of quality, its dependencies and its influences on the subsequent steps
  - experience and expertise for the laboratories for special questions
    - contact person for any testing related questions
    - detailed expertise for special topics
  - collection and dissemination of technical information (prepared in data bases)
  - support the cooperation between the concerned partners in the different countries of the region.

Both RTCs will be equipped with an SITC1 instrument (as Uster HVI or Premier ART) and with the necessary equipment to form an exemplary laboratory. The RTC laboratory will fulfill the following tasks:
  - Exemplary laboratory for training, expertise and information of the regional laboratories
  - Reference laboratory for re-tests and round trials
  - Performing laboratory instrumental testing of the regional cotton production.

The participating international partners will support and ensure all regional activities.

Global summary

The envisaged output of the ICAC CSITC Task Force, which is addressed by this project, is a global cotton quality assessment/grading system for objective and reliable test results, based on instrument testing and acceptable to all parties in the worldwide trade. This objective will be attained by measures as a global CSITC specific round trial for the evaluation of testing laboratory performance.

The second and core aim is to facilitate the full participation of the African producers in such global, commercial and competitive environment. This African specific objective will be possible thanks to the establishment of two Regional Technical Centers (RTCs), which will be in charge of transferring knowledge from the international level to the African laboratories and of checking and therefore assuring laboratory test results.

After the end of the project, the RTCs should be financially sustainable in order to continue their regional activity in serving African laboratories.

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1 The abbreviation SITC – Standardised Instrument for Testing of Cotton - was chosen, as HVI is a brandmark from Uster Technologies, Knoxville, TN