

MM 5.2 : Cotton Information and Documentation

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Target and Achievement

Target	Achievement
Development of Cotton Cultivars CD	Information system on cotton cultivars CD Developed
Development of Cotton Photo Library	Digital Photo library on cotton CD developed
Development of Beta version of the Cotton Information retrieval system	Developed Beta version of the Cotton Information retrieval system with the available dataset
Preparation of cotton Atlas using GIS	Relevant Datasets were identified for Cotton Atlas
Maintaining CICR web site	Nearly 50 new web pages were added along with Image gallery and updated six times
Collection of New Data sets	Eleven such new data sets were collected and digitised
Collection of gap filling data sets	Eight gap filling data sets were collected and digitised
Collection of Information from the CICR HQ regarding publications research achievements across the projects for updating web site	Collected publication and other research highlights from CICR HQ
Collection of INM/IPM/IRM recommendation	Collected of INM/IPM/IRM recommendation of CICR for different cotton growing zones
Digitization of all the collected Data	Digitized all the collected data from cooperating centres

Progress of Work

- ❖ Two Interactive CDs were developed- Information system on cotton cultivars and Digital Photo library on cotton.
- ❖ Beta version of the Information retrieval system were developed and demonstrated at the DGs meeting at New Delhi, November 2004.
- ❖ Attempt was made to convert the developed Beta version of the cotton information retrieval system using Visual Basic.NET in to ASP.NET for online access to the database by the web users. Necessary logistics, hardware and software need to be procured to accomplish this task.
- ❖ Data sets were identified for the preparation of cotton Atlas using GIS. The preparation Cotton Atlas requires uniformity in the data set and continuity in time

series data for projection which are the constraints for the preparation of Cotton Atlas. Efforts are made to correct the lacuna.

- ❖ Another major activity of this project is designing and maintaining CICR web site. Web site has been developed and hosted in the National Informatics Center (NIC) server with the following URL address: www.cicr.nic.in. This web site has been cohesively developed with attractive graphical tools, such as Flash Macromedia, Adobe Photoshop, etc., which is easily handled by the user with out much difficulty in search of information. Last year we have added many new pages and updating of existing pages. The web contents were periodically updated with new information collected from all the centres. This year we are planning to introduce multi-lingual cotton information which will be useful for farming community. We are also planning to introduce (multi-lingual) audio files to benefit our illiterate farming community, but most of the web service available in rural areas of India is dial up connection. With the dial up connection downloading audio files is time consuming process and some times it is impossible to download.

CICR web sites were updated six times last year. The following information was incorporated :

- AICCIP Research highlights and Project Coordinators' Report for the year 2004-05
- Details of the Staff and their research activities were updated
- Area , production, productivity database updated
- Database on popular cotton varieties predominantly cultivated in India were added
- List of all the Cotton Pest with scientific name, order and family added
- Latest important news items on cotton were added which has been collected from leading news papers.
- Image gallery were added, around 500 images on various aspect of cotton with small description on each of the images
- Important link page were added which included ministry site, research organizations and other cotton related organizations sites
- Research progress of TMC projects for the year 2003-04 were added
- Institute publication (scientists' publication in reputed journals) from 1992 were added
- ❖ **The following new data sets were collected and digitized**
 - Statewise Fertiliser consumption per unit of crop area

- Statewise number and area of operational holdings - 1976,1980,1985, 1990, 1995 and 2000
- District wise fertilizer consumption for both rabi and kharif season for the years 1988 and 1997 were collected
- Collected Rainfall data for important cotton growing districts for 40 years
- Fiber quality parameter of 220 *G herbaceum* germ plasm lines maintained at CICR Nagpur were digitized
- Fiber quality parameter of 670 *G hirsutum* germ plasm lines maintained at CICR Nagpur were digitized
- Collected Chemical fibre apparel production import, export data for the years 2000-04
- Collected Textile and apparel of all fibre import and export value data for the years 2000-04
- Details of Information on various models of lab gins, variable speed gins, modified double roller gin were collected
- Details of Technology developed by CIRCOT were collected
- Collected data on availability of cotton stalk state wise and district wise
- Prepared directory of Ginning and pressing industry allover India
- ❖ **The following gap filling data sets were collected and digitized**
 - Collected of district wise Area, Production and yield of cotton for the years 1969-71, 1986-87, 1991-97
 - District wise area, production, yield data for Tamil Nadu 2001-04
 - District wise area, production productivity data for Karnataka 2001-03
 - Collected Yarn production, import, export data for the years 2000-04
 - Collected Cotton Fabrics production, import, export data for the years 2000-04
 - Collected Cotton apparel production, import, export data for the years 2000-04
 - Collected Chemical fibre yarn production, import, export for the years 2000-04
 - Collected Chemical fibre fabrics production, import, export data for the years 2000-04
- ❖ Prepared around 175 Frequently Asked Questions (FAQs) with reference to cotton production system for interactive website.
- ❖ Growth of textile Industry in different states were collected which included the following details :

COTTON /MAN-MADE FIBRE TEXTILE MILLS : Spinning mills (NonSSI); Composite mills (Non-SSI); Spinning mills (SSI); Exclusive weaving mills (Non-SSI); 100% Export Oriented Units (EOUs); Powerloom units; Man-made fibre units; Man-made filament yarn units; No.of power processing units

CAPACITY INSTALLED : Spindles (Non-SSI + SSI); Rotors (Non-SSI + SSI); Looms (Composite & Exclusive weaving units); No.of powerlooms; Man-made fibre (TPA); Man-made filament (TPA)

WORKERS ON ROLL : Spinning mills & Composite mills (Non-SSI); Spinning mills (SSI); Exclusive weaving mills (Non-SSI); EOUs

PRODUCTION OF FIBRES : Raw Cotton; Man-made fibre

COTTON CONSUMPTION BY MILLS : Non-SSI; SSI

PRODUCTION OF YARN : Cotton yarn; Blended yarn; 100% Non-cotton yarn; Total spun yarn; Man-made filament yarn

FABRIC PRODUCTION (MILL SECTOR): Cotton; Blended; 100% Non-cotton; Total

CLOSURE POSITION (NON-SSI) : Spinning; Composite

AFFECTED DUE TO CLOSURE : Spindles; Rotors; Looms; Workers on roll

- ❖ Collected scientists as well as CICR division wise research materials; forthcoming events in CICR; press releases by CICR for updating website every month.
- ❖ The package of practices recommended by CICR and other SAUs for IPM, INM and IRM from different zones were collected and digitized to publish in the website.
- ❖ Some of the present ITKs and age old technologies in cotton production system were collected.
- ❖ Collected information from cooperating centre were digitized and augmented in to Cotton Information database.
- ❖ Conducted Annual Group meeting for the year 2004-05 and formulated technical programme for all the centres.

CDs Developed

Two Interactive CDs were developed last year, Information system on cotton cultivars and Digital Photo library on cotton.

Information system on Cotton : InsCot (Fig. 5.2.1), which provides information on all the cultivars released so far by different agencies. This user friendly CD ask the user to select the cultivar which are placed in the pull down menu. Once the cultivar is chosen the relevant details with Photograph of the cultivar (wherever available) will

be displayed. Print option also given, the user can take the print out of the details of particular cultivars. This software has been developed using Visual Basic.NET as front end and Microsoft Access as back end for data storage. The information includes, Name, Agency Developed, Year, Notification Number, Area Adopted, Species, Pedigree/parentage, Agro-ecology, Yield, Duration, Ginning out turn, Staple Length, Micronaire Value, Bundle strength, Count, Resistance, Susceptibility and special features.

Digital Photo library on cotton : DigiCot (Fig. 5.2.2) contains image gallery of cotton and its production system. This CD contains around 1000 images on various aspect of cotton with small description of the images on each of the slide. Most of the images were capture with high resolution digital camera. The software has been developed in HTML. Thumbnail view of the all the images of the modules were integrated to have quick view on the contents of the CD. The content of the CD has the following modules: Agronomy & Soil Science, Bio-technology, Cultivars & Crop Improvement, CICR Wild Species Collection, Seed Technology, Entomology, Pathology, Post Harvest, and Miscellaneous.

Deliverable Technology

- ◆ Information retrieval system we are developing may be converted to ASP.NET which is the software through which information base may be floated online so that web users can access the cotton information.
- ◆ Some of the modules developed under this project may also be delivered through CDs like InsCOT and DigiCOT.
- ◆ Interactive modules also may be developed through our website so that farmers can query their problems, those queries routed to subject matter specialist for their guidance and solution for farmers' need.

MM 5.3 : TMC-MMI Coordination and Monitoring Cell (CICR, Nagpur)

TMC Cell with one Scientist In-charge and one Research Associate, one SRF and one Skilled Help works under the direct supervision of Director, CICR, Nagpur who is also the Member Secretary, ICAR Standing Committee for TMC-MMI. The responsibility of the Cell lies in providing all round assistance to the Member Secretary for effective implementation and execution of TMC-MMI programme across all the centres in the country and in maintaining liasion with ICAR, DAC, CAB, other Mini Missions and all organizations involved in betterment of cotton as a crop and as an industry.

During 2004-05, the Cell has performed the following tasks :

- ◆ Annual Review Workshop of all the PIs of TMC-MM1 projects was organized on June 25, 2004 at CICR, Nagpur under the Chairmanship of Dr C. D. Mayee, the Agriculture Commissioner, Govt of India and the Mission Director, Mini Missions I & II to discuss and monitor the progress.
- ◆ Annual Report for 2003-04 was compiled and printed in the Cell and distributed to all concerned.
- ◆ 5th Meeting of ICAR Standing Committee for TMC-MM1 was organized on September 30, 2004 at Directorate of Maize Research New Delhi under the Chairmanship of Dr Mangala Rai, Secretary, DARE and Director General, ICAR for reviewing the progress and to improve the technical programme.
- ◆ As decided in the above meeting, a special Review Workshop of all the PIs was held on November 02, 2004 in NATP Conference Hall, KAB-II, New Delhi under the Chairman and co chairmanship of Dr Mangala Rai, Secretary, DARE & DG, ICAR and Dr G. Kalloo, DDG (CS), ICAR. All the seventeen PIs, Project Coordinator, AICCIP and Dr KC Jain, ADG (CC) and other dignitaries attended the workshop. A compilation of “Targets and achievements” of all the projects was brought out.
- ◆ Fund was distributed to all the cooperating centres as and when remittance was available from ICAR.
- ◆ A Budget Document was made covering project wise, center wise and head wise budget for the Xth plan period 2002-07 and was sent to ICAR for sanction of the Xth Plan EFC memo.
- ◆ Approval and sanction letter of the Council for continuation of the TMC-MM1 programme during Xth Plan was communicated to all cooperating centres along with their detailed budget allocation.
- ◆ All queries from different centres were addressed to.
- ◆ Two documents were prepared by the Cell on “Promising Genotypes for fibre parameters” from AICCIP and TMC-MM1 Breeding Trials for presentation during 2nd and 3rd meetings of CAB Small Committee held in August and September, 2004 under the Chairmanship of Textile Commissioner, Ministry of Textiles, Govt of India.

The budget allocation to different centres under different heads for 2004-05 is annexed herewith.