

SUSTAINABLE COTTON PRODUCTION



M. Rafiq Chaudhry
Head

Technical Information Section

Rafiq@icac.org

TECHNICAL INFORMATION SECTION

Objectives:

1. Provide update on cotton production research
2. Provide information pertaining to cotton research programs
3. Develop lines of communications among researchers
4. Supervise Common Fund for Commodities funded projects

TECHNICAL INFORMATION SECTION

1. Provide update on cotton production research:

THE ICAC RECORDER

Quarterly

Published in English, French and Spanish

March 2009

1. Biotech Cotton and the Technology Fee
2. Global Warming and Cotton Production - II
3. Organic Cotton

TECHNICAL INFORMATION SECTION

1. Provide update on cotton production research:

Review articles

Environmental impact of cotton production - 2010

TECHNICAL INFORMATION SECTION

1. Provide update on cotton production research:

Technical Seminar

2008 – Improving Sustainability of Cotton Production in Africa

2009 – Biosafety Regulations, Implementation and
Consumer Acceptance

(Cape Town, South Africa, September 10, 2009)

TECHNICAL INFORMATION SECTION

2. Provide information pertaining to cotton research programs

Current Research Projects in Cotton – 2009

Cotton Production Practices - 2008

Cost of Production of Raw Cotton - 2007

TECHNICAL INFORMATION SECTION

3. Develop lines of communications among researchers

Regional Cooperation

1. Latin American Association for Cotton Research and Development – ALIDA
2. Interregional Cooperative Network on Cotton for the Mediterranean and Middle East Regions
3. Southern Eastern African Cotton Forum
4. Asian Cotton Research and Development Network

TECHNICAL INFORMATION SECTION

3. Develop lines of communications among researchers

World Cotton Research Conferences

- | | |
|----------|---|
| WCRC – 1 | Brisbane, Australia, 1994 |
| WCRC – 2 | Athens, Greece, 1998 |
| WCRC – 3 | Cape Town, South Africa
March 9-13, 2003 |
| WCRC - 4 | September 10-14, 2007
Lubbock, Texas |
| WCRC – 5 | 2011 in India |

TECHNICAL INFORMATION SECTION

4. Supervise Common Fund for Commodities funded projects
ICAC serves as a supervisory body for CFC projects

SUSTAINABLE COTTON PRODUCTION

WHAT IS SUSTAINABLE PRODUCTION?

UN - World Commission on Environment and Development - 1987

“Sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

WHAT IS SUSTAINABLE PRODUCTION?

UN - World Commission on Environment and Development -1987

1. UN Conference on Environment and Development
(Rio de Janeiro, Brazil, June 1992)
2. World Summit on Sustainable Development
(Johannesburg, South Africa, August/Sept 2002)

Result:

Governments recognized the need to direct national and international plans and policies to ensure that all economic decisions took environmental impacts fully into account

ALTERNATE NAMES

Biological production/Organic production
 Low-input production
 Integrated crop management system
 Biodynamic production
 Bio-intensive production
 Conservation tillage
 Zero tillage
 Minimum tillage
 Regenerative production

SUSTAINABILITY IN COTTON

Fundamentals

- Sustainability does not always mean higher yields
- Sustainability does not always mean lower costs
- Sustainability does not always means more income

Sustainability is an integrated approach from production to marketing and processing

SUSTAINABILITY IN COTTON

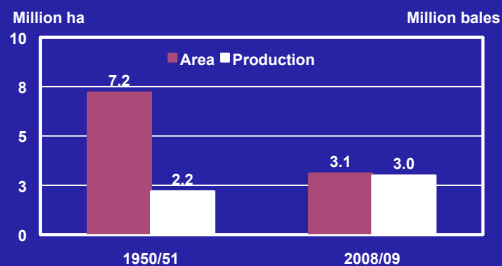
Fundamentals

- Environmental
- Economical
- Social

LAND USE BY COTTON - WORLD

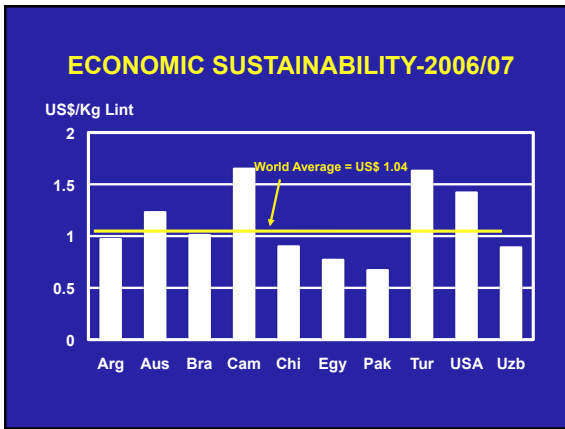
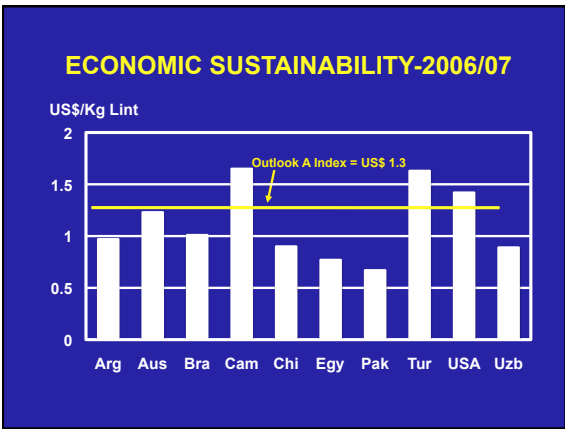
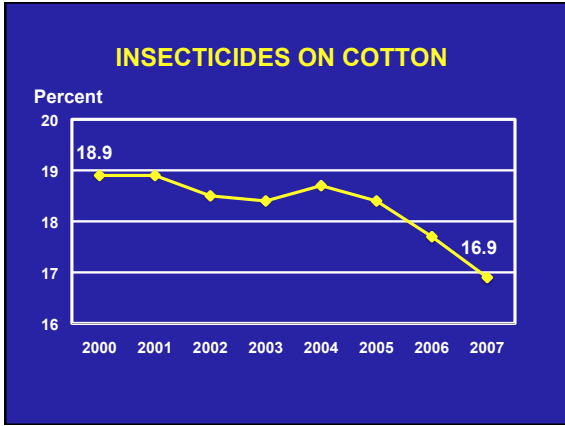
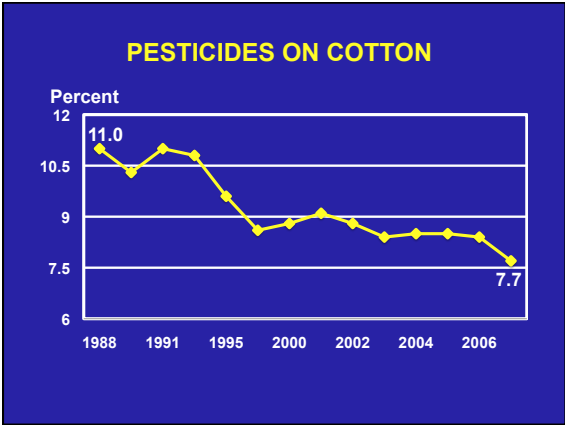
Year	Area (Million ha)	Production (Million Tons)	Yield (Kg/Ha)
1951/52	36.0	8.4	234
1961/92	33.1	9.8	296
1971/72	33.1	12.9	392
1981/82	34.0	15.0	442
1991/92	34.7	20.7	596
2001/02	33.5	21.7	647

LAND USE IN THE USA



PP CHEMICALS USED ON COTTON - 2007

Pesticides 7.7%
 Insecticides 17.1%



SUSTAINABILITY AND WATER USE

Australia	227 kg lint/mega liter
Egypt	136 kg lint/mega liter
Pakistan	50 kg lint/mega liter

INSECT RESISTANT BIOTECH COTTON & SUSTAINABILITY

Environmental sustainability	-	Yes and No
Economic sustainability	-	Yes and No
Social sustainability	-	Yes and No
Technological sustainability	-	Yes

ORGANIC COTTON & SUSTAINABILITY

- Reducing input costs drives many producer decisions.
- Conventional and organic production can co-exist.
Profitability will drive decisions in the global supply chain.
- We must correctly understand *sustainability* and keep that at center of any discussion.

ORGANIC COTTON & SUSTAINABILITY

- Organic is NOT equivalent to sustainable.
- Sustainable is NOT equivalent to subsistence farming.
- Sustainability is equivalent to

FUTURE and LONG TERM PROFITABILITY