

## COTTON PRODUCTION IN CÔTE D'IVOIRE (W. AFRICA)

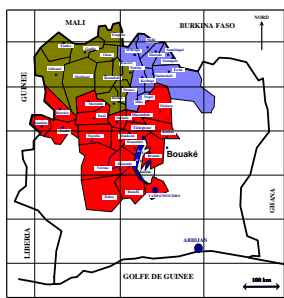


Research Associate Program 2005, ICAC, Washington DC

## MAJOR CASH CROPS IN CÔTE D'IVOIRE

- Cocoa
- Coffee
- Cotton : 3.5% exportation resources

## COTTON GROWING REGION

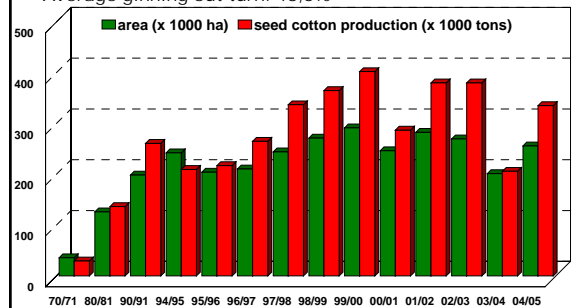


- Important socio-economic role
- Privatization of cotton sector in 1998.
- current societies (extension service, ginneries, marketing)

CIDT  
IVOIRE COTON  
LCCI

## PROFILE OF SEED COTTON PRODUCTION AND AREA

- Average seed cotton yield: 1120 kg/ha (2004)
- Average ginning out turn: 43,5%



## FARMING SYSTEMS

- Number of growers: 137 000
  - Smallholdings (3 ha)
- Manpower:
  - Chief tenant & own family
- Social status:
  - Semiliterate status
- Variety grown:
  - G. hirsutum
- Sowing period:
  - May 20 – July 10

## SOIL PREPARATION AND PLANTING

- Crop rotation:
  - Cotton grown mostly in monocropping system
- Soil preparation:
  - Animal traction
- Seed supply:
  - Local seed (30kg/ha)
- Rainfed varieties
- Fertilizers:
  - NPKSB (15,15,15,6,1): 200 kg/ha
  - Urea (46%): 50 kg/ha

## MAJOR INSECTS & CONTROL METHODS

### ☐ Sucking pests :

- Mite *P. latus*
- Jassids
- Aphids
- Dysdercus
- *B. tabaci*

### ☐ Bollworms:

- *H. armeria*
- *P. gossypiella*
- *C. leucotreta*
- *Earias* spp.
- *D. watersi*

### ☐ Leafworms:

- *S. derogata*
- *A. flava*
- *S. littoralis*

## MAJOR INSECTS & CONTROL METHODS

### ☐ Cultural method:

- Early sowing to avoid *H. armigera* infestation

### ☐ Host plant resistance:

- Selection of hairy varieties against jassids

### ☐ Calendar spraying program

- 6 sprays 45-115 DAS

### ☐ IRM strategies:

- Alternatives to pyrethroids
- Pyrethroids + OPs
- Spray thresholds

### ☐ Application methods:

- Hand operated
- Spining disc sprayer

## WEED CONTROL

### ☐ Most damaging weeds

- *Digitaria horizontalis*
- *Commelina benghalensis*
- *Ageratum conyzoides*
- *Euphorbia heterophylla*
- *Rottboellia cochinchinensis*

### ☐ Control methods

- Pre planting chemical
- Hand weeding



## NATIONAL AGRICULTURAL RESEARCH CENTER

### ☐ Promote sustainable agricultural development

- Research
- Training
- Consultancy
- Advisory services

### ☐ 20 Operational unities

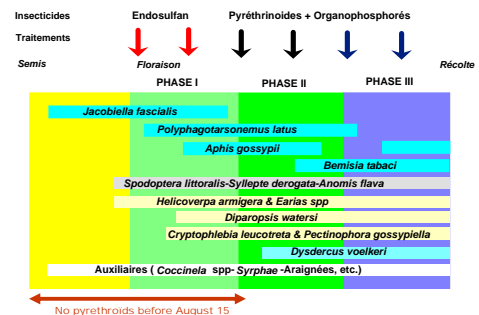
- 13 Research Stations
- 2 Central Laboratories
- 5 Production stations



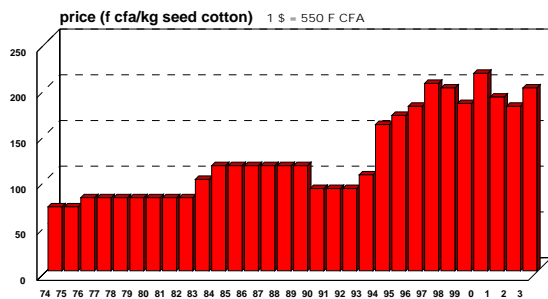
## RESEARCH CONTRIBUTION TO COTTON DEVELOPMENT IN CÔTE D'IVOIRE

- High yield potential varieties  
1 321 kg/ha (1962) → **4 000 kg/ha** (1999)
- Improved ginning yield:  
39% F (1962) → **45% F** (1999)
- Staple length to answer industrial needs.
- Pragmatic pest management strategies.
- Adequate itinary techniques for optimal cotton production.

## RECENT MAJOR CHANGE (1998) : PYRETHROID RESISTANCE MANAGEMENT PROGRAMME



## PROFILE OF SEED COTTON PRICE TO FARMERS



## HIGHER COSTS OF COTTON INPUTS

Inputs	Doses / ha	Unit. Cost (\$ US)	Cost / ha (\$ US)	Subsidies (%)
Seed	30 kg/ha	gratis		100
Fertilizer NPK	200 kg/ha	0.4	80	0
Fertiliser (urea)	59 kg/ha	0.38	19.10	0
Insectides				
Endosulfan/Profenofos	2 l/ha	7.75	7.75	0
Associations Pyr+OP	1 l/ha	7.75	15.51	0
Herbicides (selective)	4 l/ha	12.13	48.54	0
Herbicides (total)	4 l/ha	9.09	36.36	0
Spinning disc sprayer		76		0
Horizontal boom sprayer		133		0
<b>Total</b>			<b>207.26</b>	

## CONCLUSION

- ❑ The country is facing a socio-political crisis since september 19, 2002. General economic activity, particularly cotton sector is affected seriously.
- ❑ Production faillure in 2003/2004, but re-emergence of cotton activities in 2004/2005.
- ❑ Several obstacles still exist:
  - diversion of cotton production to neighbouring countries.
  - pertubation in ginning operation due to lack of monitoring of ginneries.
  - unfair competitiveness of new private ginning societies in marketing seed cotton.
  - low cotton price and delay of paiement to farmers.
  - delay in the paiement of inputs to agrochemical societies
  - low cotton price at the international market : less motivation in farmers, extension services and cotton ginning societies.

HERE, WE ARE ALONG WITH Mr. THOMAS & FAMILY IN HIS FARM

THANK YOU