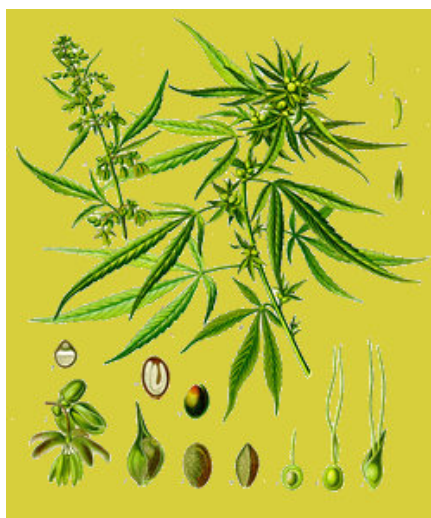


HEMP

**CULTURE
OF THE PAST**



**CULTURE
OF THE FUTURE**

EIHA Conference, Köln, November 28th-29th 2005

Content

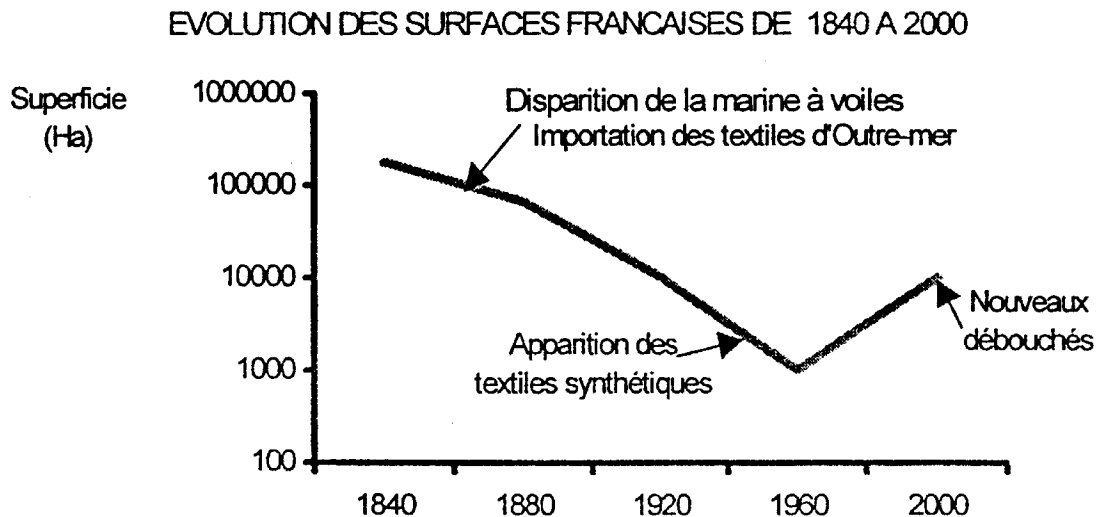
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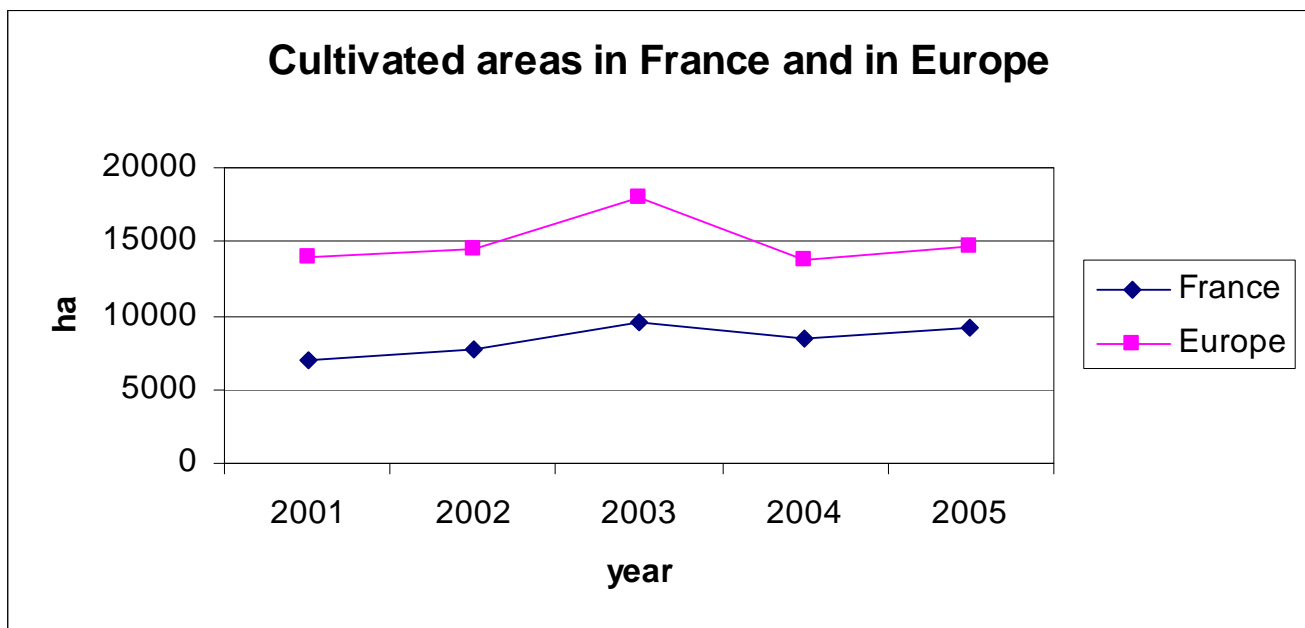
1. Cultivated areas in France

Originally found in Minor Asia

- 8000 years BC : clothing, food, medicine
- 12th century : arrival in Europe (paper, clothing, ropes)
- 19-20th century : arrival of cotton and synthetic fibres
- 20th century : development of the paper industry and new outlets

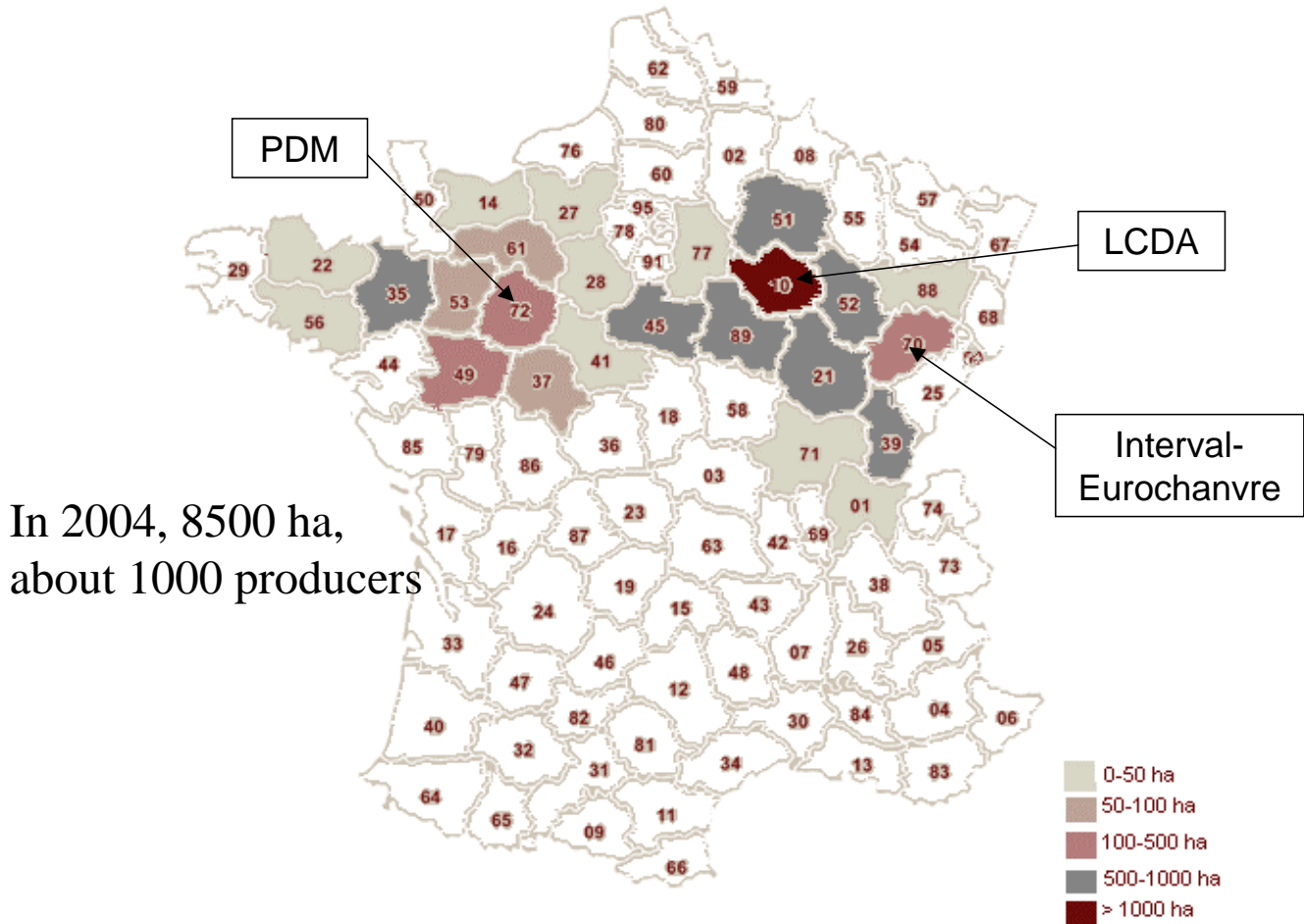


1. Cultivated areas in France



- Constant progression over the years
- Graph for EU, based on FR, DE, GB, NL, I, ES. But also production in Poland, Hungary, Czech Republic, Sweden, Finland...

1. Cultivated areas in France



2. Hemp production chain in France : Who's who ?

SEEDS and SELECTION :

Genetics, plant selection :

FNPC (Fédération Nationale des Producteurs de Chanvre)

72000 LE MANS

Seed production :

CCPSC (Coopérative Centrale des Producteurs de Semences de Chanvre)

49250 BEAUFORT EN VALLEE

2. Hemp production chain in France : Who's who ?

1st PROCESSORS :



AUBE

La Chanvrière De l'Aube (LCDA)

Cultivated areas : 5 100 ha in 2004,

4 980 ha in 2005



2. Hemp production chain in France : Who's who ?

1st PROCESSORS :



HAUTE SAONE

Interval - Eurochanvre

Cultivated areas : 1300 ha in 2004

2 200 ha in 2005



2. Hemp production chain in France : Who's who ?

1st PROCESSORS :



SARTHE

Papeterie de Mauduit (PDM Industries)

Cultivated areas : 1900 ha in 2004

1 950 ha in 2005

And some others, like Cannabreizh and Chanvrière du Belon

2. Hemp production chain in France : Who's who ?

2nd PROCESSORS :

AFT Plasturgie



Plastic composites and mats

Other structures involved in Hemp :

(not exhaustive list)

- Building : Association « Construire en Chanvre »
- Fundamental or Applied Research : INRA, ADEME, ENTPE
- ...

3. Context of the ITC creation

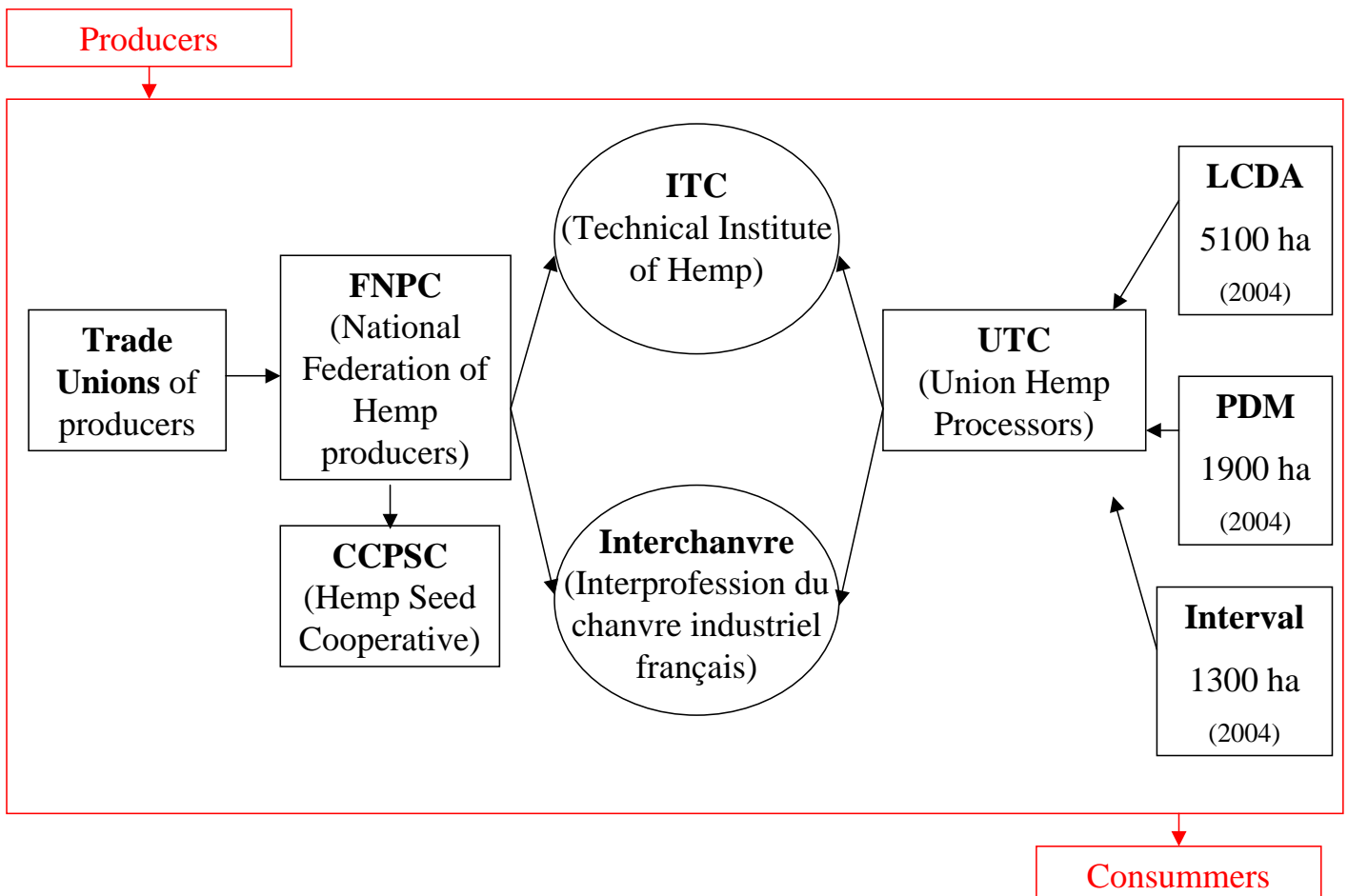
Until 2003, lots of work was realized, BUT :

- Individual initiatives
- No coordination of the trials
- No centralization of the data
- Still insufficient spreading of the results
- Essentially for paper market

The French hemp production chain expressed two strong needs :

- ❶ Treatment and spreading of the existing knowledge
- ❷ coordinated search for technical references adapted to the new stakes which appear for the production chain

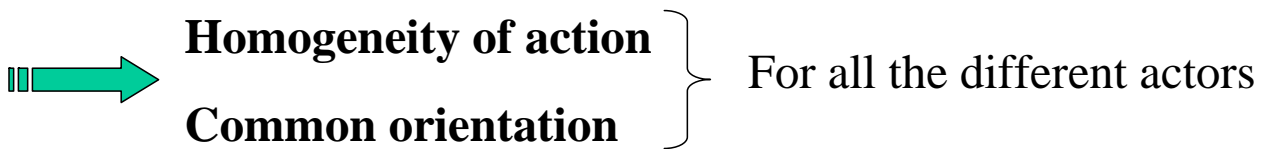
3. Context of the ITC creation



4. Goals of ITC

Purposes :

- **national organization** to reinforce interprofessional hemp sector
- **pole of connection and technical exchange** between all hemp actors
- **interface** between hemp field, research and industries (paper, plastic composite, building...)



4. Goals of ITC

Purposes :

- To work on strategic axis
- To coordinate field trials, adapt cultural techniques to the market demand, communicate on techniques and enhance knowledge...
- To synthesize field results and write documents
- To set up and drive a network of experimentation, work in partnership with French and European scientific operators
- To be the link between all members the French hemp field

4. Goals of ITC

Work Axis :

Axis 1 : Coordination of field trials and communication

- ↪ Looking for partnership and redaction of common protocols (methods)
- ↪ Setting up trials and experiments
- ↪ Spreading results

4. Goals of ITC

Axis 2 : Improvement of agronomic and industrial hemp performances

- ↪ Deepening the knowledge of the plant
- ↪ Optimizing all the cultural steps, especially on establishment and harvesting
- ↪ Improvement of hemp industrial quality (easiness of fibre/core separation, physic-chemical properties of final products)

4. Goals of ITC

Axe 3 : Crop protection and keeping the ecological aspect of it

- ↪ Fight against broomrape
- ↪ Fight against diseases, pathogens, damping off, weeds, animals or other insects which cause damage

5. Focus on one activity : trials

Trials led in 2005 :

- **Varieties**

Place : 3 departments

Varieties : Uso31, F12, F17, F32, S27, E68, F75

Notations : yield for straw, fibres and seeds

- **Sowing density**

Place : 2 departments

Density : 25, 50, 100 kg/ha

Notations : yield for straw, fibres and seeds

5. Focus on one activity : trials

- **Nitrogen**

Place : 1 department

Dose : 3 different doses + “0”

Notations : yield for straw, fibres and seeds

- **Sowing date**

Place : 1 department

Date : 2 dates in May

Notations : yield for straw, fibres and seeds

5. Focus on one activity : trials

- **Broomrape**

Place : 2 department

Treatments : maléic hydrazide, glyphosate, Nirvana,
culture of maize

Mesures : toxicity on hemp, efficiency on broomrape,

6. Expected results of the ITC work

- Better coordination of national experiments ;
- Putting into common means and skills ;
- Acquirement of references ;
- Outlets development (construction, composites, food...) ;
- Stimulation of research by working in partnership ;
- Communication on knowledge ;
- Adaptation of cultural techniques to the market ;

7. Wills for the future

- Setting up contacts and with other hemp structures in Europe
- Exchanging information and data
- Working together, on programmes and trials (e.g. foreign varieties)

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Thank you for your attention !

