LA SITUATION DE L’ASSURANCE RECOLTE EN FRANCE
Crops insurances in France

Madrid, novembre / november 2006
• Historique History

• Différents instruments pour différents risques
• Differents risks, different tools

• Le système de protection AVANT les nouvelles assurances récolte multirisques climatiques multiproduits instituées en 2005
• Protection system BEFORE new climatic multiperil and multiproduct crops insurances instituted in 2005
  - Indemnisation publique / Public indemnification
  National guarantee fund for agricultural calamities
  - Assurances récolte pour quelques risques et quelques cultures / Crops insurances in 2002-2004, for few risks and few crops

• Assurances récolte multirisques climatiques multiproduits depuis 2005
• Multiperil and multiproduct crops insurances from 2005
  - Cultures et risques assurés / Guaranteed crops and risks
  - Diffusion, coûts publics / Diffusion, public costs
  - Les deux types de contrats / The 2 types of contracts
  - Perspectives / Outlooks
• XVI° century : law for indemnity to cropers in case of natural disasters (financing by tax system)

• XVII° century : service in charge of indemnification of losses due to fire, hail, frost, flood … (financing by tax system and charity)

• 1850 : first professional fund for indemnification (but bankruptcy)

• From 1900 to 1964 : development of hail insurance, some attempts to create a public indemnities fund, creation of loans with low rates for calamities (1948), local insurances for frost (low development)

• 1964 : « agricultural calamities law » : NGFAC, public indemnities to non insurable losses, and premiums subsidies to crops insurances (hail)

• 2002-2005 : first program of premiums subsidies to new crops insurances for other risks than hail : frost on vineyard or fruits, multiperil (except drought) on major crops (cereals, oilseeds and peas)

• 2005 … : new program of premiums subsidies to climatic multiperil and multiproduct crops insurances.
DIFFERENT RISKS, DIFFERENT TOOLS

« Non insurable » : public indemnities by the « National guarantee fund for agricultural calamities » (NGFAC, from 1964)

« Insurable » : private insurances, with public subsidies to premiums for some insurances : hail on fruits and vegetables

Insurances with incomplete diffusion : frost on fruits and vineyard, multiperil (premium subsidies)

Public indemnities with ad hoc subsidies, exceptional subsidies

Indemnities from private insurances, no public subsidy.

Indemnities from private insurances with public guarantee, for « natural disaster » (non-specific for agriculture)

Damages to crops, perennial plantations, cattle outside, soils...

... due to climatic disasters

Damages to crops, perennial plantation, cattle

... due to deseases

Damages to buildings and contents (cattle, stock...), to equipments...

due to natural disasters or fire
INDEMNIFICATION OF CROPS DAMAGES DUE TO CLIMATIC DISASTERS, BEFORE 2005

Indemnities amounts, long run average

PUBLIC INDEMNITIES : 168 M€ (1)  INSURANCE INDEMNITIES : 176 M€ (2)

(1) About 30% of total loss, if loss > 27% of crop production value (42% for crops with CAP acreage subsidies)
About 100% of loss less deductible
**INSURANCES AND PUBLIC INDEMNIFICATION DAMAGES TO CROPS DUE TO CLIMATIC HAZARDS**

<table>
<thead>
<tr>
<th>Without subsidies to premiums</th>
<th>With subsidies to premiums</th>
<th>With national budget and taxes financing</th>
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</thead>
<tbody>
<tr>
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<td><strong>With subsidies to premiums</strong></td>
<td><strong>With national budget and taxes financing</strong></td>
</tr>
<tr>
<td><strong>• Hail (and wind) insurances, for all crops except</strong></td>
<td><strong>• Hail (and wind) insurances for fruits and vegetables</strong></td>
<td><strong>• Public indemnification system: all crops and farms, except:</strong></td>
</tr>
<tr>
<td><strong>• Multiperil for tobacco (except drought)</strong></td>
<td></td>
<td><strong>- for hail (and wind) for all crops in all farms, insured or not</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>- for risks in insured farms for these risks</strong></td>
</tr>
</tbody>
</table>
Budget of agriculture ministry
30 M€ / year, insurance subsidies (2006)
83 M€ / year, public indemnification

Farmers contributions
(Taxes on insurances of farm buildings & vehicles 11p.c. of premiums)
90 M€ / year

Indemnification of non fully insurable damages
173 M€ / year (average for 25 years)

Premiums subsidies to some crops insurances
30 M€ / year (2006)

Management by Agriculture Ministry
NATIONAL GUARANTEE FUND FOR AGRICULTURAL CALAMITIES
Loss on the damaged crop > 27 p. cent normal yield (47 p. cent for major crops with former CAP acreage subsidies)

and

Losses on all damaged crops > 14 p. cent of farm normal product value

Indemnity rate: about 30%
CROPS DAMAGES PUBLIC INDEMNITIES ACCORDING TO TYPE OF DISASTER

Per cent of total long run average amount

- Drought: 60%
- Frost: 18%
- Rain, flood: 13%
- Others (storm, snow...): 9%
- NGFAC
CROPS DAMAGES PUBLIC INDEMNITIES
BY YEAR OF OCCURRENCE

From 1980 to 2006, actual constant M€

Indemnification M€

2003: drought
Forecast
Average
Taxes paid by farmers

0
100
200
300
400
500
600
700
800
CUMULATIVE DISTRIBUTION OF ANNUAL COSTS FOR CROPS DAMAGES PUBLIC INDEMNITIES

1980-2005

Tax from farmers, annual amount 90 M€

2003: drought
Indemnities from 1980 to 2005
M€ actual value

- 147 to 184
- 110 to 147
- 74 to 110
- 37 to 74
- 0 to 37

Major crops
Indoor breeding: porks, poultry
Drought in grass breeding areas
Mediterranean climatic hazards on vine, fruits
AVERAGE WEIGHT OF INDEMNITIES IN THE NET INCOME
YEAR 2004

Insurance and public indemnities / net income (branch average). FADN

Insurance indemnities  
Public indemnities

Mainly frost
Mainly hail
Mainly drought

0% 2% 4% 6% 8% 10% 12% 14% 16% 18%
### MAIN CROPS INSURANCES 2002-2004

<table>
<thead>
<tr>
<th>HAIL</th>
<th>HAIL &amp; FROST</th>
<th>RAIN</th>
<th>FLOOD</th>
<th>STORM</th>
<th>DROUGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hail insurances, all crops.</strong></td>
<td><strong>Restricted experiment (subsidies in 2002-2005) : climatic multiperil (except drought) insurance for cereals, oilseeds and peas</strong></td>
<td></td>
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<tr>
<td><strong>Subsidies for fruits and vegetable until 2005</strong></td>
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</tr>
</tbody>
</table>

- Some regions hail & frost insurances for vine and fruits.
- Subsidies 2002-2005

**Tobacco multiperil insurance**
SUBSIDIZED CROPS INSURANCES IN 2005: OLD PROGRAM

Weight of insured different crops in national acreage, product value, in total subsidized premiums

![Graph showing the weight of insured different crops in national acreage, product value, in total subsidized premiums.](image-url)
MAIN CROPS INSURANCES IN 2005

- **HAIL**: Hail insurances, all crops.
- **HAIL & FROST**: Subsidies for fruits and vegetables until 2005.
- **RAIN**: Some regions hail & frost insurances for vine and fruits.
- **FLOOD**: Subsidies 2002-2005.
- **STORM**: Restricted experiment (subsidies in 2002-2005): climatic multiperil (except drought) insurance for cereals, oilseeds and peas.
- **DROUGHT**: New multiperil multiproduct crops insurances, from 2005:
  - 60 000 contracts, 20 p.c. of « professional » farms.

**Tobacco multiperil insurance**
NEW CLIMATIC MULTIPERIL MULTIPRODUCT CROPS INSURANCES SUBSIDIZED IN 2005

Weight of different insured crops in national acreage and product value

![Graph showing percentage of acreage and production for different crops]

- Fruits
- Vegetables
- Vine
- Major crops
- ALL

Acreage
Production
**PREMIUMS SUBSIDIES RATES IN 2005**  
per cent of premiums

<table>
<thead>
<tr>
<th></th>
<th>General case</th>
<th>Young farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>« OLD » PROGRAM :</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hail on fruits and vegetables</td>
<td>7,5%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2002-2005 PROGRAM :</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hail and frost on fruits</td>
<td>25%</td>
<td>34%</td>
</tr>
<tr>
<td>Hail and frost on vine</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td>Climatic multiperil on cereals, oilseeds and peas</td>
<td>10%</td>
<td>14%</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td><strong>« NEW » PROGRAM (2005 – 2…) :</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Climatic multiperil on all crops except forage</td>
<td>35%</td>
<td>40%</td>
</tr>
</tbody>
</table>
**PREMIUMS SUBSIDIES ALLOCATION IN 2005**

Provisional amount : 21 M€

<table>
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<th></th>
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</tr>
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<tbody>
<tr>
<td>Hail</td>
<td>Fruits and vegetables</td>
<td>Hail + frost fruits and vine</td>
<td>Multiperil Cereals, oilseeds, peas</td>
<td>Multiperil All crops except forage</td>
</tr>
<tr>
<td>Fruits</td>
<td>9%</td>
<td>2%</td>
<td>4%</td>
<td>15%</td>
</tr>
<tr>
<td>Vegetables</td>
<td>1%</td>
<td>ε</td>
<td>ε</td>
<td>1%</td>
</tr>
<tr>
<td>Vine</td>
<td></td>
<td>5%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>Major crops</td>
<td></td>
<td></td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>ALL</td>
<td>10%</td>
<td>8%</td>
<td>82%</td>
<td>100%</td>
</tr>
</tbody>
</table>
### THE 2 TYPES OF MULTIPERIL CONTRACTS

**Example**

<table>
<thead>
<tr>
<th>CONTRACT « by crop »</th>
<th>Crop 1</th>
<th>Crop 2</th>
<th>All farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Insured production value*</td>
<td>1 000 €</td>
<td>3 000 €</td>
<td>4 000 €</td>
</tr>
<tr>
<td>(b) Deductible 25%</td>
<td>250 €</td>
<td>750 €</td>
<td>1 000 €</td>
</tr>
<tr>
<td>(c) Saved production</td>
<td>700 €</td>
<td>3 500 €</td>
<td>4 200 €</td>
</tr>
<tr>
<td>(d = c - a) Loss (-) or gains (+)</td>
<td>- 300</td>
<td>+ 500 €</td>
<td>200 €</td>
</tr>
<tr>
<td>Max (-d-b ; 0) Indemnity</td>
<td>50 €</td>
<td>0 €</td>
<td>50 €</td>
</tr>
</tbody>
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<td>-</td>
<td>-</td>
<td>0 €</td>
</tr>
</tbody>
</table>

* : based on individual average yield of the last 3 or 5 years
• Public expenditure development
  – … depends on premium subsidies rates
  – … depends on insurance diffusion:
    • Only on crops for sale
    • Expansion on forage crops

• Insurance system coexistence with public indemnification system
  – Public indemnification for non-insured damages during ascent phase of insurance development
  – Reduction of public indemnity rates

• Reinsurance problem (private or private + public)

• Premiums subsidies modulation
## PREMIUMS SUBSIDIES COSTS FORECAST

<table>
<thead>
<tr>
<th>CROPS FOR SALE</th>
<th>Insured value = National production value 2005</th>
<th>Average premium rate Premium / insured value (estimate)</th>
<th>Premiums amount</th>
<th>Subsidies rate ~35% Full diffusion</th>
<th>Subsidies rate ~35% 70 p.c. diffusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits</td>
<td>2 290</td>
<td>8%</td>
<td>183</td>
<td>64</td>
<td>45</td>
</tr>
<tr>
<td>Vegetables, flowers</td>
<td>5 625</td>
<td>3%</td>
<td>169</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>Vine</td>
<td>7 846</td>
<td>2%</td>
<td>157</td>
<td>55</td>
<td>38</td>
</tr>
<tr>
<td>Major crops</td>
<td>9 277</td>
<td>2%</td>
<td>186</td>
<td>65</td>
<td>45</td>
</tr>
<tr>
<td>Total crops for sale</td>
<td>25 038</td>
<td></td>
<td>684</td>
<td>243</td>
<td>170</td>
</tr>
<tr>
<td>FORAGES</td>
<td>5 800</td>
<td>2.24%</td>
<td>130</td>
<td>46</td>
<td>32</td>
</tr>
</tbody>
</table>
• 2005 : change in the design of crops insurances: from « one climatic risk - one crop » insurances to climatic « multiperil multiproduct » crops insurances

• Questions about crops insurance development:
  – Public indemnification decrease management
  – Permanent or temporary subsidies?
  – Expansion on forages
  – Reininsurance
  – Budgetary constraints and choices
  – European cofinancing outlooks