



**Ministère de l'agriculture et de la pêche**  
***Direction des affaires financières et de la logistique***

# **LA SITUATION DE L'ASSURANCE RECOLTE EN FRANCE**

## **Crops insurances in France**

**Philippe Boyer**

**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***

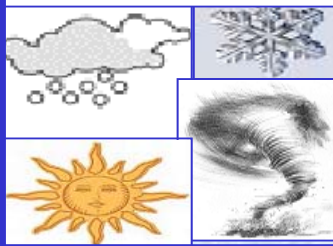
- **XVI° century** : law for indemnity to croppers in case of natural disasters ( financing by tax system)
- **XVII° century** : service in charge of indemnification of losses due to fire, hail, frost, flood ... (financing by tax system and charity)
- **1850** : first professional fund for indemnification (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.<sup>3</sup>

# DIFFERENT RISKS, DIFFERENT TOOLS

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



... due to climatic disasters



« 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)

Damages to crops, perennial plantation, cattle



... due to diseases



Public indemnities with *ad hoc* subsidies, exceptional subsidies

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



due to natural disasters or fire



Indemnities from private insurances, no public subsidy.

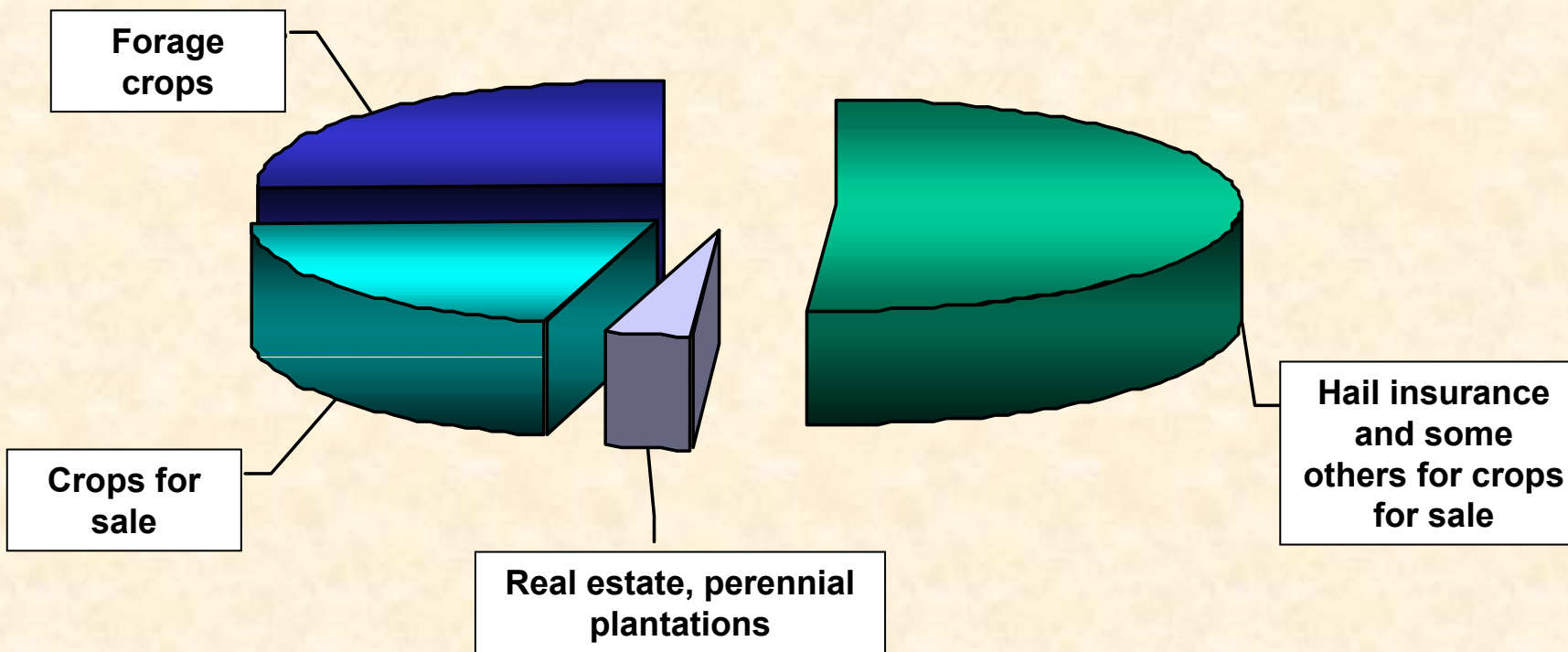
Indemnities from private insurances with public guarantee, for « natural disaster » (non-specific for agriculture)

# 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)**

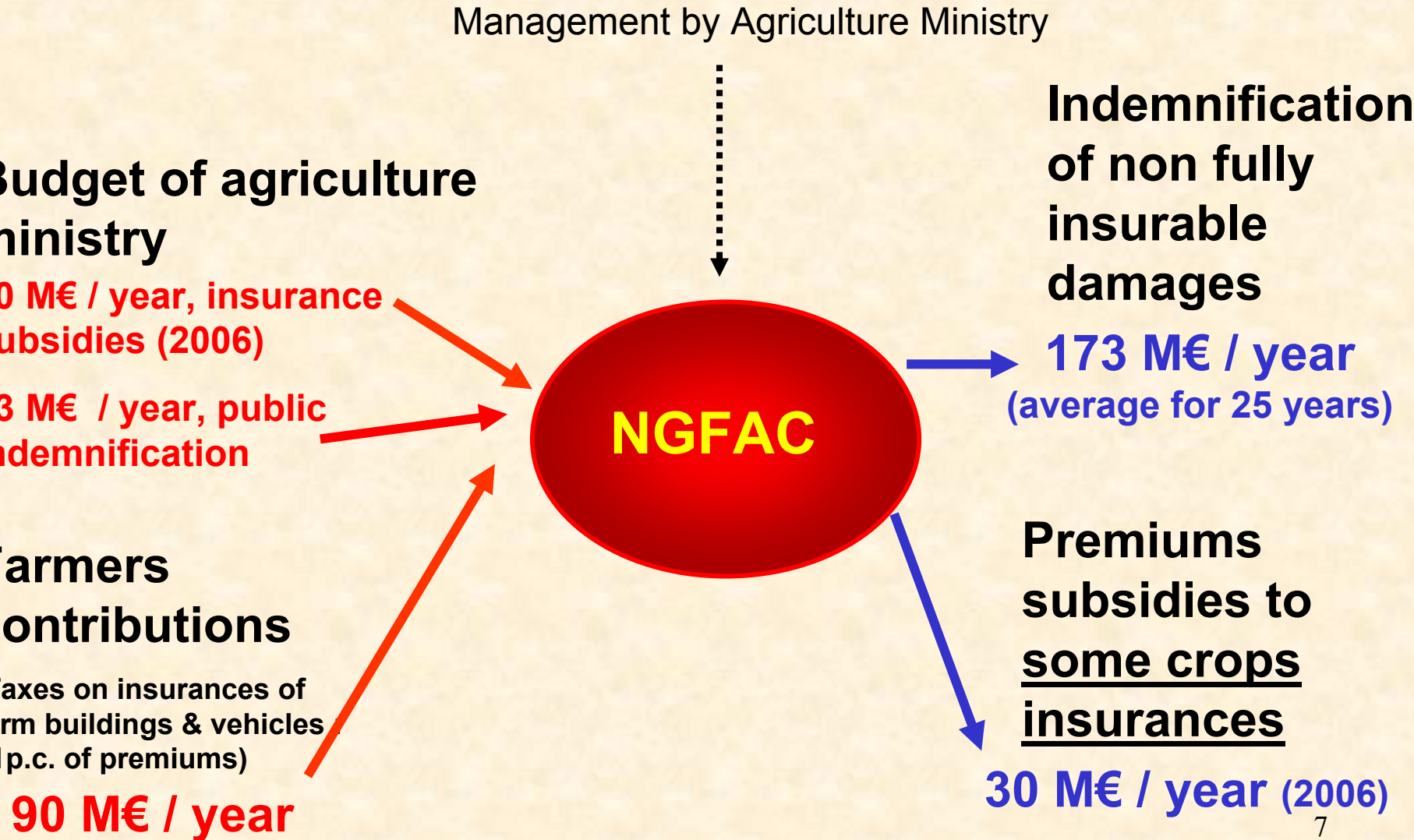


(1) About 30% of total loss, if loss > 27% of crop production value (42% for crops with CAP acreage subsidies)  
About 100% of loss less deductible

# INSURANCES AND PUBLIC INDEMNIFICATION DAMAGES TO CROPS DUE TO CLIMATIC HAZARDS

<p><b>Without subsidies to premiums</b></p>	<ul style="list-style-type: none"> <li>• Hail (and wind) insurances, <i>for all crops <u>except</u></i></li> <li>• Multiperil for tobacco (<i>except drought</i>)</li> </ul>	
<p><b>With subsidies to premiums</b></p>	<p><i>from 1990 to 2005</i></p>	<ul style="list-style-type: none"> <li>• Hail (and wind) insurances for <u>fruits and vegetables</u></li> </ul>
	<p><i>from 2002 to 2005</i></p>	<ul style="list-style-type: none"> <li>• Hail and frost insurance for fruits</li> <li>• Hail and frost insurance for vine</li> <li>• Climatic multiperil (except drought) insurance for cereals, oilseeds and peas</li> </ul>
	<p><b>NEW, since 2005</b></p>	<ul style="list-style-type: none"> <li>• Climatic multiperil insurance for all crops except forages</li> </ul>
<p><b>With national budget and taxes financing</b></p>	<p><i>from 1990 to 2005</i></p>	<ul style="list-style-type: none"> <li>• <b>Public indemnification system : all crops and farms, <u>except</u> :</b></li> <li>-for <u>hail</u> (and wind) for all crops in all farms, insured or not</li> <li>-for risks in <u>insured farms</u> for these risks</li> </ul>

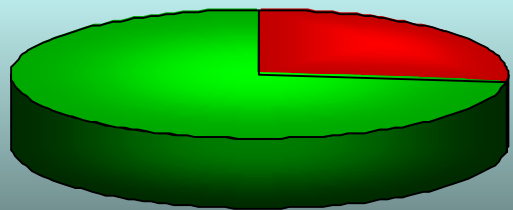
# NATIONAL GUARANTEE FUND FOR AGRICULTURAL CALAMITIES



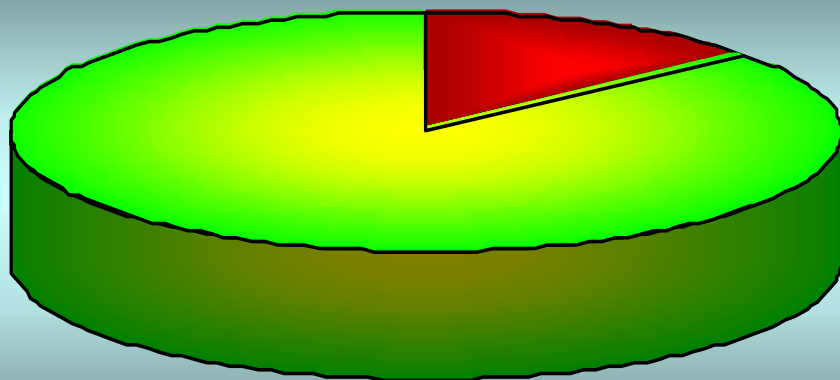
## ACCES TO PUBLIC INDEMNITIES

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

Loss on the damaged  
crop > **27 p. cent**  
normal yield (**47 p.cent for**  
**major crops with former CAP**  
**acreage subsidies**)



and

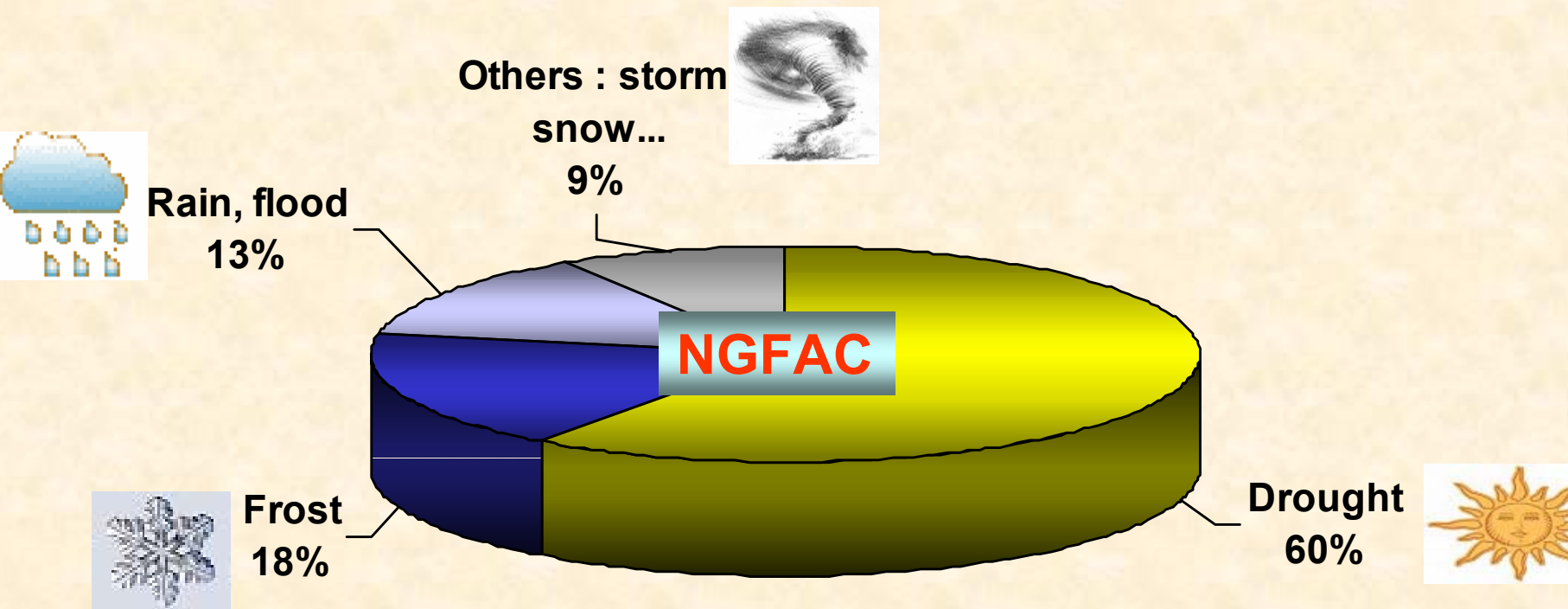


Indemnity rate : about 30%



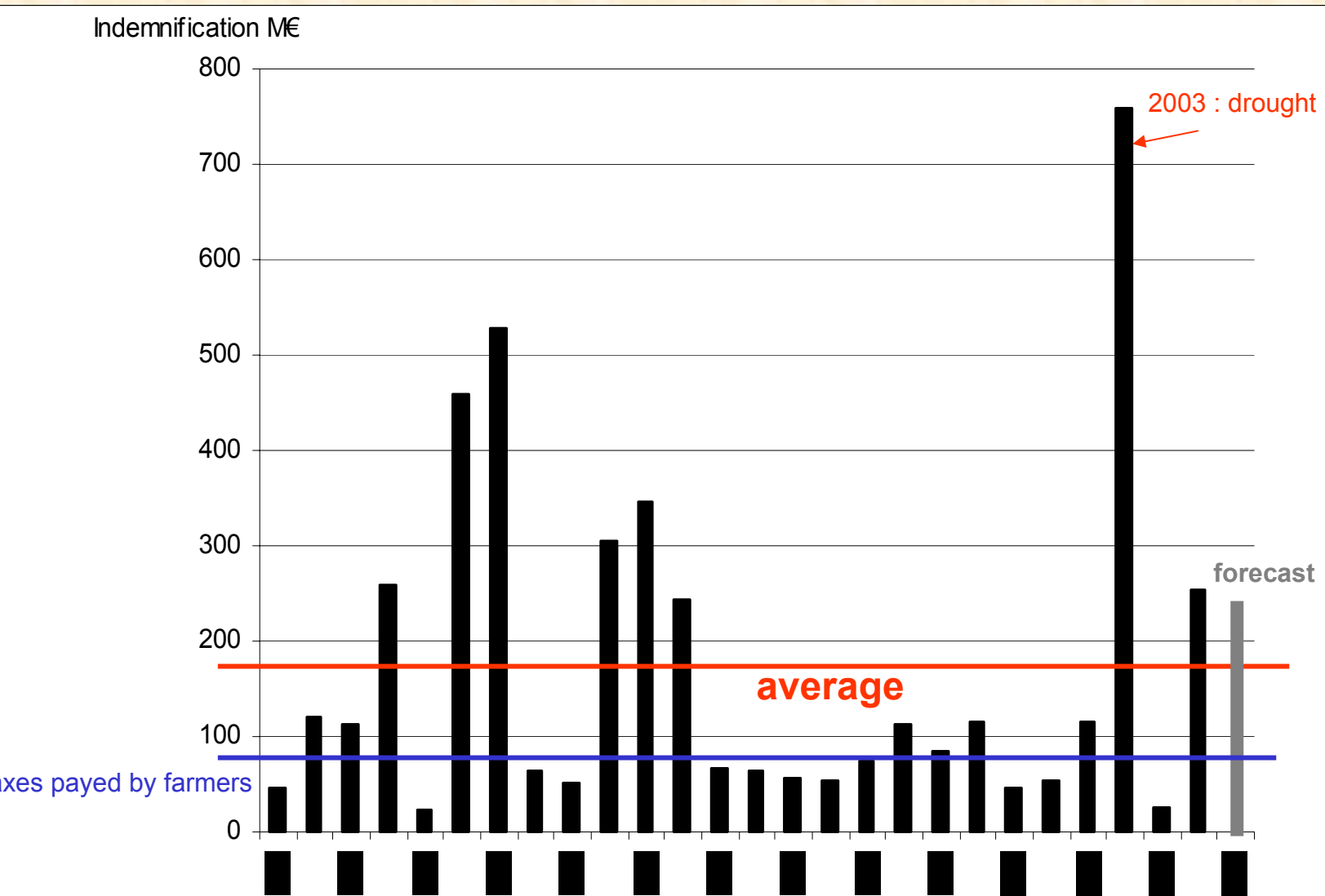
# CROPS DAMAGES PUBLIC INDEMNITIES ACCORDING TO TYPE OF DISASTER

Per cent of total long run average amount



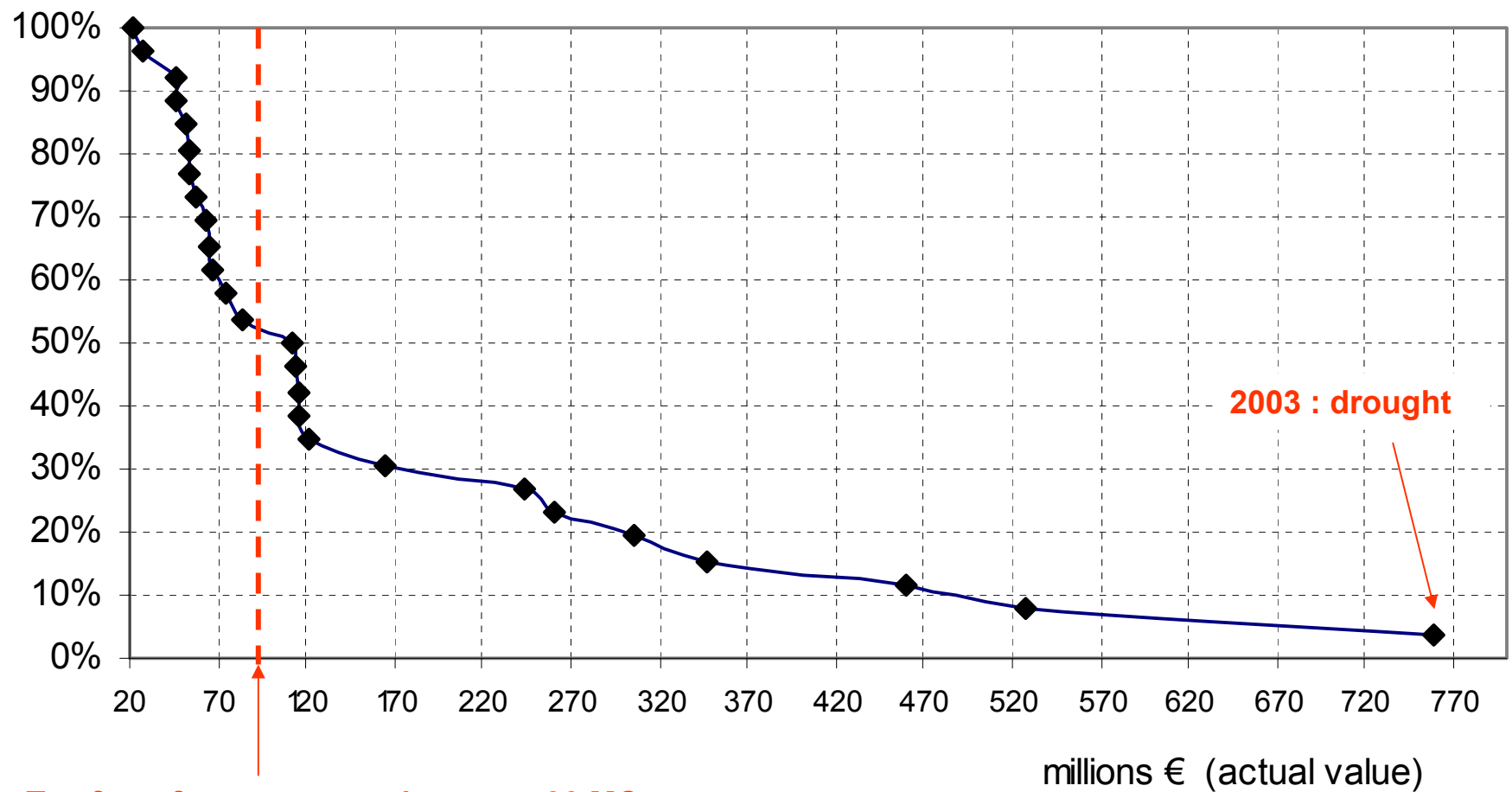
# CROPS DAMAGES PUBLIC INDEMNITIES BY YEAR OF OCCURRENCE

From 1980 to 2006, actual constant M€



# CUMULATIVE DISTRIBUTION OF ANNUAL COSTS FOR CROPS DAMAGES PUBLIC INDEMNITIES

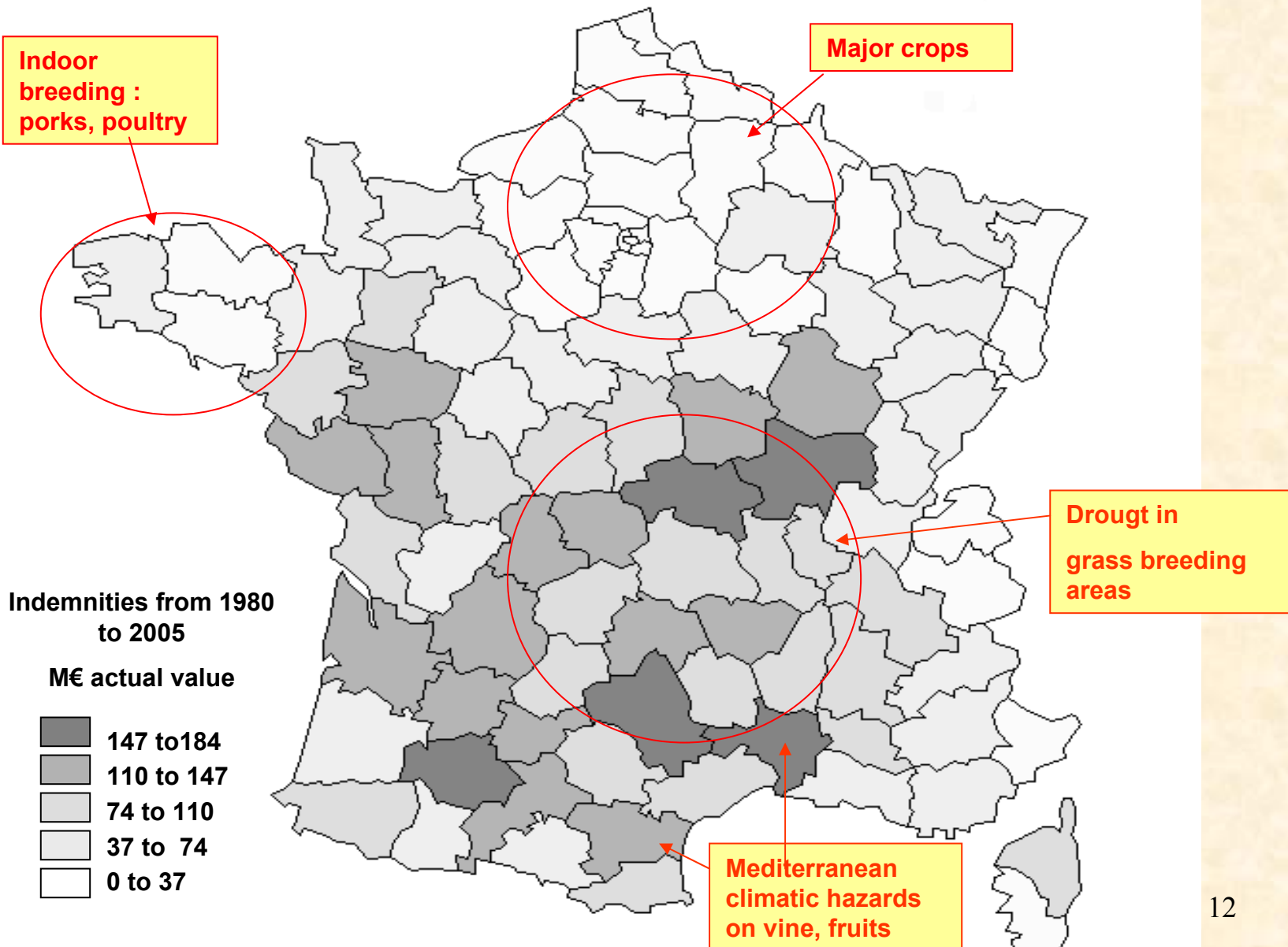
1980-2005



Tax from farmers, annual amount 90 M€

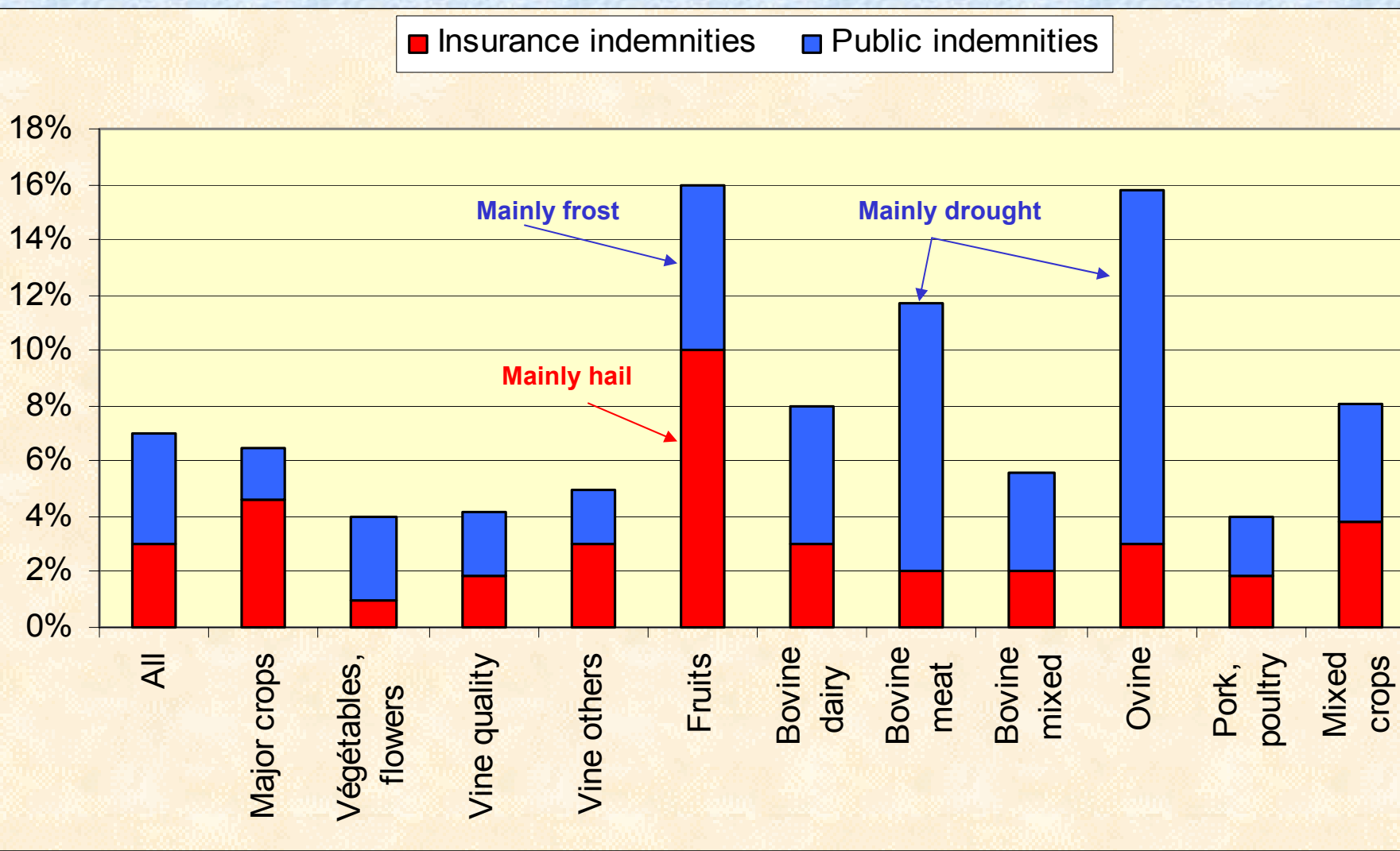
millions € (actual value)

# GEOGRAPHY OF CROPS DAMAGES PUBLIC INDEMNITIES









# AVERAGE WEIGHT OF INDEMNITIES IN THE NET INCOME YEAR 2004

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



# MAIN CROPS INSURANCES 2002-2004

					
<b>HAIL</b>	<b>HAIL &amp; FROST</b>	<b>RAIN</b>	<b>FLOOD</b>	<b>STORM</b>	<b>DROUGHT</b>



Hail insurances, all crops.

**Restricted experiment (subsidies in 2002-2005) : climatic multiperil (except drought) insurance for cereals, oilseeds and peas**

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



Subsidies for fruits and vegetable until 2005

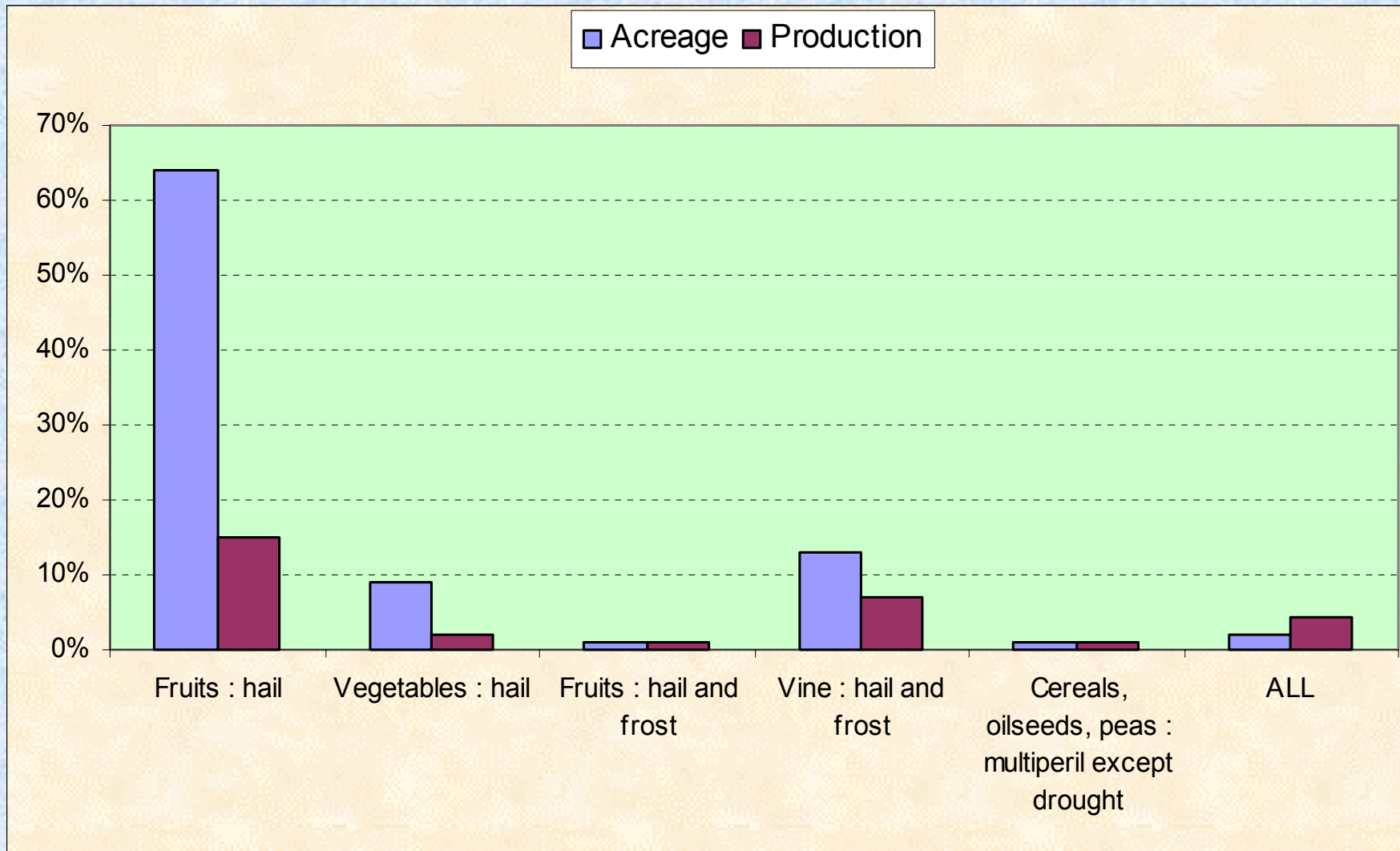


**Tobacco multiperil insurance**







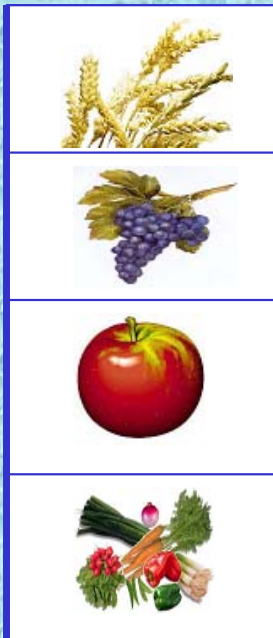
# SUBSIDIZED CROPS INSURANCES IN 2005 : OLD PROGRAM

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



# MAIN CROPS INSURANCES IN 2005

					
<b>HAIL</b>	<b>HAIL &amp; FROST</b>	<b>RAIN</b>	<b>FLOOD</b>	<b>STORM</b>	<b>DROUGHT</b>



**Hail insurances, all crops.**

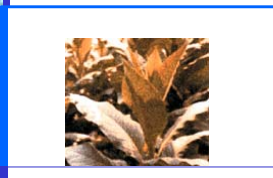
**Subsidies for fruits and vegetable until 2005**

**Restricted experiment (subsidies in 2002-2005) : climatic multiperil (except drought) insurance for cereals, oilseeds and peas**

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

**New multiperil multiproduct crops insurances, from 2005 :**

**60 000 contracts, 20 p.c. of « professional » farms**



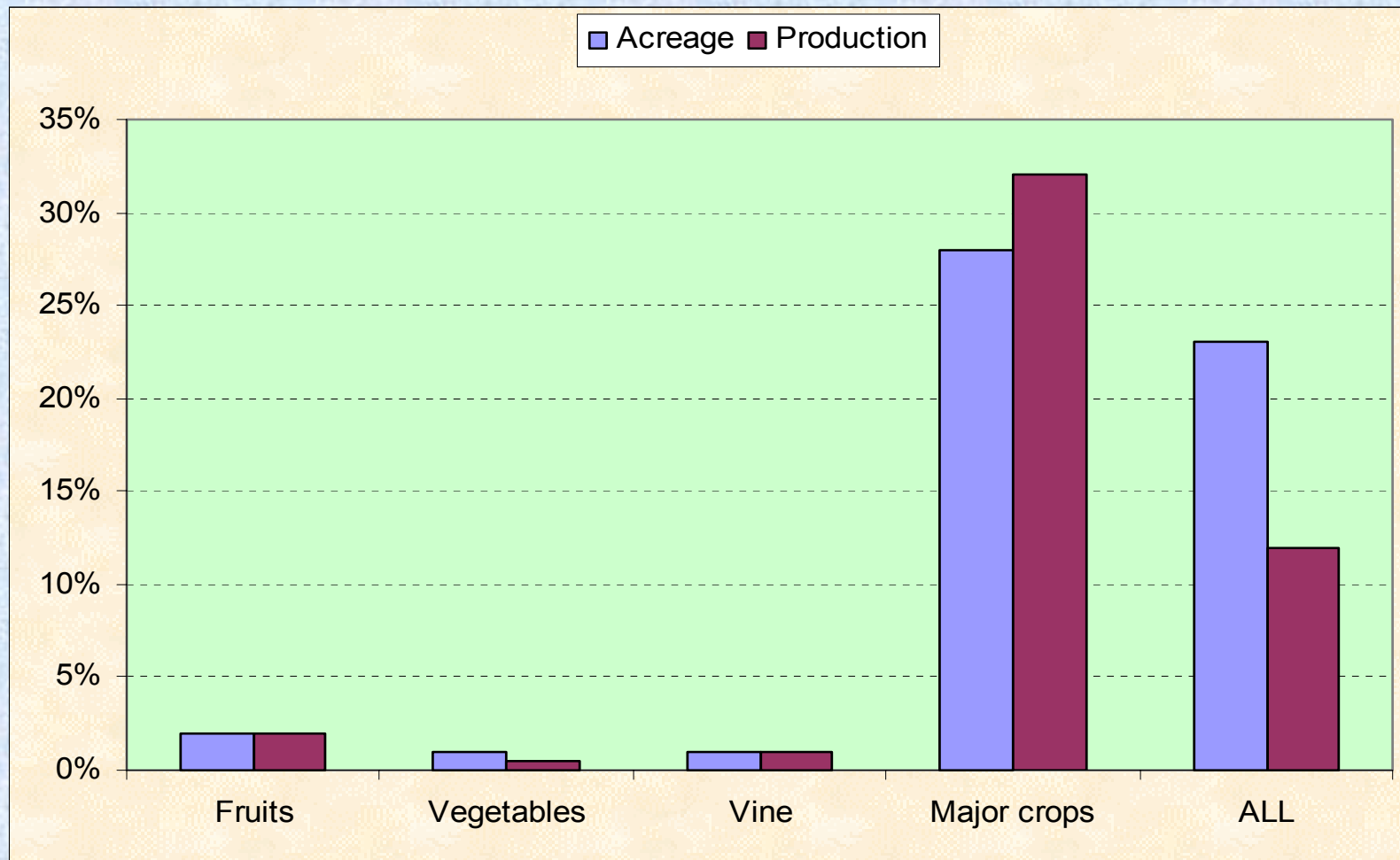
**Tobacco multiperil insurance**





# NEW CLIMATIC MULTIPERIL MULTIPRODUCT CROPS INSURANCES SUBSIDIZED IN 2005

Weight of different insured crops in national acreage and product value



## PREMIUMS SUBSIDIES RATES IN 2005 per cent of premiums

	General case	Young farmers
<b>« OLD » PROGRAM :</b>		
<b>Hail on fruits and vegetables</b>	<b>7,5%</b>	<b>10%</b>
<b>2002-2005 PROGRAM :</b>		
<b>Hail and frost on fruits</b>	<b>25%</b>	<b>34%</b>
<b>Hail and frost on vine</b>	<b>10%</b>	<b>14%</b>
<b>Climatic multiperil on cereals, oilseeds and peas</b>	<b>10%</b>	<b>14%</b>
<b>« NEW » PROGRAM (2005 – 2...) :</b>		
<b>Climatic multiperil on all crops except forage</b>	<b>35%</b>	<b>40%</b>

# PREMIUMS SUBSIDIES ALLOCATION IN 2005

Provisional amount : 21 M€

	« Old » program	Program 2002-2005		« New » program 2005 – 2...	ALL
	Hail Fruits and vegetables	Hail + frost fruits and vine	Multiperil Cereals, oilseeds, peas	Multiperil All crops except forage	
Fruits	9%	2%		4%	15%
Vegetables	1%	ε		ε	1%
Vine		5%		2%	7%
Major crops			ε	77%	77%
ALL	10%	8%		82%	100%

# THE 2 TYPES OF MULTIPERIL CONTRACTS

## Example

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

<b>CONTRACT</b> <b>« all farm »</b>	<b>Crop 1</b>	<b>Crop 2</b>	<b>All farm</b>
(a) Insured production value*	1 000 €	3 000 €	4 000 €
(b) Deductible 20%	200 €	600 €	800 €
(c) Saved production	700 €	3 500 €	4 200 €
(d= c- a) Loss (-) or gains (+)	- 300	+ 500 €	200 €
Max (- $\Sigma d$ - $\Sigma b$ ; 0) Indemnity	-	-	0 €

\* : 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

<b>CROPS FOR SALE</b>	<b>Insured value = National production value 2005</b>	<b>Average premium rate Premium / insured value (estimate)</b>	<b>Premiums amount</b>	<b>Subsidies rate ~35%  Full diffusion</b>	<b>Subsidies rate ~35%  70 p.c. diffusion</b>
<b>Fruits</b>	<b>2 290</b>	<b>8%</b>	<b>183</b>	<b>64</b>	<b>45</b>
<b>Vegetables, flowers</b>	<b>5 625</b>	<b>3%</b>	<b>169</b>	<b>59</b>	<b>41</b>
<b>Vine</b>	<b>7 846</b>	<b>2%</b>	<b>157</b>	<b>55</b>	<b>38</b>
<b>Major crops</b>	<b>9 277</b>	<b>2%</b>	<b>186</b>	<b>65</b>	<b>45</b>
<b>Total crops for sale</b>	<b>25 038</b>		<b>684</b>	<b>243</b>	<b>170</b>

<b>FORAGES</b>	<b>5 800</b>	<b>2,24%</b>	<b>130</b>	<b>46</b>	<b>32</b>
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- **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**
  - **Reinsurance**
  - **Budgetary constraints and choices**
  - **European cofinancing outlooks**