SPANISH AGRICULTURAL INSURANCE SYSTEM

ENESA’s Approach

Madrid, 9th February 2014
1. Introduction.
2. Objective.
3. Background.
4. Stakeholders.
5. ENESA.
7. Successful keys
Why are we here?
Number of Climate-related Disasters Around the World (1980-2011)

- Floods: 3455
- Storms: 2689
- Droughts: 470
- Extreme Temps: 395
What could Governments do?

Legal Framework

Financial support

Direct aids
Ex - post

Indirect Aids
Ex - ante

Mutual Funds

Insurances

- Spain
- Morroco
- USA
- Turkey
Introduction.

DIRECT PAYMENT
EX POST

- Hard to implement.
- Difficult resources availability.
- Difficult damages assessment.
- Long administrative procedure
- Delay of payments.

INSURANCE GRANTS
EX ANTE

- Emergency pre-empted.
- Greater financial soundness.
- Transparency.
- Insurer responsible for:
  - damages assessment
  - payment of claims
- Early payment.
Offering protection against non-controllable risks.

- Adverse weather conditions
- Accidents
- Diseases

Supporting financial stability of farms.

Enhancing private business.
- **Private contract** between the farmer and the insurance company.
  - Waiting periods
  - Minimum damage thresholds
  - Deductibles
  - Bonus and surcharge system
- Contract **subsidised** by the government
- Contract **supervised** by the government
- Detailed contract **conditions** on [www.enesa.es](http://www.enesa.es)
Introduction.
More than 34 years of experience (since 1978).
Coverage for all agricultural productions.
Progressive development of livestock and aquaculture insurance since 2000.
Recent design of forestry insurance.
Sharing technical knowledge with other countries.
Spanish Agricultural Insurance System.

N. Policies

Budget

Claims
Legal agreements between all political groups
- Annual plan approved by agreement in the cabinet
- Central and regional governments grant subsidies
- Non ad-hoc aids by the central government for insurable risks
- Devising technical-financial viability studies
- Defining several aspects on the insurance contract: agricultural practices, prices, underwriting period...

Long – term political agreement
Legal Framework

- Law 87/1978
  - Objective
  - Stakeholders role.
  - Scope.
  - Insurable risks
  - Insurable productions.
  - Making decision procedure.

- RD 2329/79 Regulations in application of the law

- Triennial & Annual Plan

Long-term sustainable system
Farmers, represented by farmers’ unions

Insurers grouped in AGROSEGURO

Re-insurers
  - Private

Public: CCS-Insurance Compensation Consortium

Public administration
  - Central Government
    - ENESA- Ministry of Agriculture, Food and Environment
    - DGS+CCS- Ministry of Economy
  - Regional Governments
Spanish Agricultural Insurance System - Cost sharing.

- ENESA
- Regional Governments
- FARMERS
- Policy price
- AGROSEGURO, S.A.
- International reinsurers
- Insurance Compensation Consortium
- compensations

The document discusses the structure of the Spanish Agricultural Insurance System, highlighting the roles of ENESA, Regional Governments, FARMERS, International reinsurers, and the Insurance Compensation Consortium. The system involves the cost-sharing mechanism where farmers pay a policy price, and compensations are handled by AGROSEGURO, S.A., with regional governments and international reinsurers playing key roles.
- Coordinating **public and private activities**.
- **Defining the main** lines of action **through the Annual Plan**.
- **Granting** subsidies **for farmers**.
- **Developing feasibility** studies.
- Promoting **insurance in the agrarian sector**.
- Sharing know-how **all over the world**.
Vulnerability - FARMERS
Protection interest - GOVERNMENT

Coverage improvement
Premium adjustment
Innovation

Results of insurance application
+ Producers demands

Technical and actuarial studies
INSURERS
Insurance proposal

Local
Regional
National

Debate
Fora – All Stakeholders

Revision Insurance Proposal

Approval
National Fora
All Stakeholders

ENESA
Leadership
Co-ordination
Surveillance

Promotion & Marketing

ENESA - Co-ordination & Surveillance
Financial flows - 2012

**Insured Capital:** 11.200 million €

**N policies:** 484.513
LIMITATIONS

- Long period is required for satisfactory implementation
- Risk must be dispersed for the sustainability of the system
- The moral hazard must be limited
- Individualized application entails higher processing costs
- For widespread implementation, public sector involvement is needed

ADVANTAGES

- Financial soundness
- Predictable annual budget for grants
- Coverage adapted to special characteristic of areas, productions risks, farmers…
- Individual assessment of damages
- Quickly and efficient management
- Transparency
- Enhancing other agricultural policies.
- Reducing social pressure.
Spanish Agricultural Insurance System - Successfull keys.

- Mutual recognition
- Universalize risks & productions
- Risk dispersion
- Financial solvency
- Assurance technic
- Consensus
- Voluntary
- Solidarity
- Dynamic
- Coordinated Agrarian Policy
- No ad-hoc grants
AGRICULTURAL INSURANCE & DROUGHT
Spain - Agroclimatic conditions.
What need we bear in mind?

- Drought damages are progressive.
- Drought is a systemic risk.
- Damages could be shadowed by other factors or risks.
- Moral hazard and adverse selection must be controlled.
- Crop’s development could be the best choice to evaluate drought’s damages.
Agricultural Insurance & Drought.

Options:

- **Yield Insurance.**
  - Geographical reference.
  - Individual reference.

- **Index Insurance.**
  - SPI: based on rainfall (Morroco, India).
  - NDVI: satellite images.
Apply since 1983

- Designing for cereals, leguminous, sunflower, olive trees, almond trees without irrigation and fruit trees in several áreas.

- Guaranteed yield: 50% or 70%.

- Individual yield defined with historic data from de own farmer.

- Geographical yield: reference defined by government’s data.

- Collaboration with Morocco.
Apply since 2001.

Based on NDVI measured by satellite imagines (MODIS).

Coverage: additional food support due to pasture availability reduction.

Different level of claims according to season, area and intensity of drought.

NDVI survey by University (LATUV).

Collaboration with Chile.
Normalized Difference Vegetation Index (NDVI)

Simple graphical indicator that can be used to analyze remote sensing measurements, and assess whether the target being observed contains live green vegetation or not.
Index insurance for pasture.

Where could we measure?

CORINE LAND COVER
1:100000 → 30 mts$^2$

74 Clases de cubierta
1 : 2.000.000 → 100 Ha

DEGRADACION A RESOLUCION NOAA (100 Ha/ píxel)

PIXELES CON APROVECHAMIENTO
Index insurance for pasture.

Where could we measure?
Index insurance for pasture.
Index insurance for pasture.
Index insurance for pasture.

<table>
<thead>
<tr>
<th></th>
<th>Medium cost without subsidy</th>
<th>Medium cost with ENESA’s subsidy</th>
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<tbody>
<tr>
<td></td>
<td>Euros/animal</td>
<td>Euros/animal</td>
</tr>
<tr>
<td>Bovine</td>
<td>32.82</td>
<td>21.20</td>
</tr>
<tr>
<td>Equine</td>
<td>32.89</td>
<td>21.83</td>
</tr>
<tr>
<td>Sheep</td>
<td>4.84</td>
<td>3.01</td>
</tr>
<tr>
<td>Goat</td>
<td>4.84</td>
<td>3.01</td>
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<tr>
<td></td>
<td>Yield Insurance</td>
<td>Index Insurance</td>
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<td>-----------------------------------------------------------</td>
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<tr>
<td><strong>STRENGTH</strong></td>
<td>• Reducing anti-selection.</td>
<td>• Limited administrative expenses.</td>
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<tr>
<td></td>
<td>• Compensation more accurate.</td>
<td>• Limits moral hazard.</td>
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<tr>
<td></td>
<td>• Easier to be understood by farmers</td>
<td>• Avoid direct damages assessment</td>
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<tr>
<td><strong>WEAKNESS</strong></td>
<td>• Need special measures to reduce moral hazard.</td>
<td>• Not applicable to all sort of risks.</td>
</tr>
<tr>
<td></td>
<td>• High administrative expenses.</td>
<td>• Geographical reference.</td>
</tr>
<tr>
<td></td>
<td>• Need a predefined procedure to damage assessment.</td>
<td>• Anti-selection could happen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Difficult to be understood by farmers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Difficult to select a useful parameter.</td>
</tr>
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THANKS

www.enesa.es

María José Pro
Head of Area for International Cooperation and Advice
mprogonz@magrama.es