Designing economic instruments to maintain and enhance hay meadow biodiversity in South-West European mountain areas

Laura García de la Fuente  
University of Oviedo-INDUROT (Spain)  
Presenter

Co-authors:  
David Guzmán Otano - Regional Government of Aragon (Spain)  
Amparo Mora Cabello de Alba - Picos de Europa National Park (Spain)  
Silvia Nobre - Polytechnic Institute of Bragança (Portugal)  
Catherine Brau-Nogué - CBNPMP (France)
I. INTRODUCTION

• **Mountain hay meadows and biodiversity.** Agri-ecosystems with a high botanical and faunistic value, key for European rural landscapes and biodiversity (Dengler et al., 2012).

• **Natural habitat types of Community interest.** 2 types are catalogued according to the Habitats Directive: **6510-Lowland hay meadows** and **6520-Mountain hay meadows**.

• **Strong decline in EU.** This process (Keenleyside et al., 2014) has already reached South-West EU, where traditional use still survives in mountain areas.
I. INTRODUCTION

• Intense loss of surfaces in SW EU. Due to intensification of hay meadows, abandonment, conversion into grasslands or urban parcels (García Manteca et al., 2017).

• Lack of specific/effective economic support. Most of SW EU mountain areas currently lack specific or effective subsidies for their conservation and sustainable management.
II. RESEARCH QUESTIONS

• What kind of agricultural payments are applied in Europe to promote the maintenance of hay meadows?
• What are their main characteristics and results?
• Can we obtain any strategic aspects for the design of future measures?

III. OBJECTIVES OF THIS RESEARCH

• To analyse how current payment schemes from CAP and Rural Development Programmes (RDP) are used in Europe to enhance biodiversity conservation by promoting the maintenance/recovery of hay meadows.

• To get guidelines and transfer criteria to (re)design subsidies for mesophile hay meadows conservation in Natura 2000 mountain sites within SW EU.
IV. MATERIALS AND METHODS

• Extensive review of economic instruments to maintain mountain hay meadows in Europe
  • Subsidies from CAP, RDPs and other EU instruments to maintain/recover them and their traditional extensive use.
  • Technical/Legal documents on the application and assessment of measures provided by governments and territorial agencies.
  • Recent initiatives and European programmes: Results Based Agri-environmental Payments Schemes (RBAPS) and LIFE Programme.

• Database and descriptive data sheets to characterise all these subsidies, evaluate their effectiveness and transfer possibilities
IV. MATERIALS AND METHODS

• Classification and comparative analysis
  • Subsidies classified into 3 main groups, designed to tackle the problem of hay meadows disappearance in a similar way.

• Descriptive statistics: frequency of implementation, prevailing subcategories, distribution by regions, etc.
• Virtues and problems of design and implementation.
• Lessons learnt to transfer similar experiences to SW EU areas.
V. RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Specific/direct, aimed at:</th>
<th>Indirect, aimed at:</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commitments</td>
<td>Biodiv. results</td>
<td>Commitments</td>
</tr>
<tr>
<td>II Pillar CAP (RDPs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M10-Agri-environment-climate</td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>M12–Natura 2000 &amp; WFD</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Particular programmesa</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M13-Areas with constraints</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>I Pillar CAPb</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coupled payments</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-EU Direct payments</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Pilot projects c</td>
<td>-</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

aG.L.A.S. (Ireland). bExcluding greening. cResults Based Agri-environmental Payment Schemes (RBPAS)

Analysis of 30 subsidies applied in Europe since 2007 that contribute to hay meadows conservation:

- 80% channelled through the European RDPs (II Pillar CAP).
- 57% applied in SW EU (France, Spain and Portugal).
- 63% of payments specifically earmarked for hay meadows.
- 33% of other subsidies with (+) indirect effects.
V. RESULTS

• The 3 major specific payment schemes are linked to the II Pillar CAP:
  • Flexible local-regional design to capture specific environmental problems and objectives.
  • Natural heritage and territorial conservation approach.
  • Most of measures: voluntary and applied at parcel scale throughout Agri-environment-climate measures (M10).

• (M10) Subsidies aimed at complying with commitments for the sustainable management of hay meadows:
  • They reduce control efforts and reach broad territorial scope.
  • To preserve traditional good practices and hay meadows surfaces.
V. RESULTS

• (M10) Results-oriented subsidies aiming highly biodiverse hay meadows:
  • Earmarked to environmental priority areas to sustain agri-ecosystems that favour biodiversity and habitats of interest.
  • Higher costs and complex methods to assess if environmental objectives have been indeed reached.

• Other subsidies play indirectly an important role in hay meadows conservation:
  • I Pillar CAP: coupled payments linked to basic payment for livestock farms in mountain areas.
  • II Pillar: areas facing natural constraints, protection of local breeds in danger of being lost, communal mountain grasslands in extensive use, traditional irrigation systems, etc.
V. RESULTS

• Effectiveness of existing subsidies has been scarcely assessed (only some French subsidies have been partially assessed before 2010).
• Transfer guidelines for SW EU mountain areas are limited for the moment:
  • Portugal and Spain lack experience in applying results-oriented subsidies to hay meadows, so pilot programmes are needed.
  • Payments (€/ha and year) should be focused on costs or losses linked to traditional extensive management, opportunity costs of maintenance (opposed to other alternatives), and reward professional stockbreeders for their environmental excellence.
  • Commitments-oriented subsidies: verifiable, accurately based on good traditional extensive practices according to local-regional customs regarding mown and grazing.
  • Results-oriented subsidies: both subsidy and results assessment locally defined and territorial stakeholders strongly engaged. Key role of accompanying measures (animation, training, awareness).
VI. CONCLUSIONS

• 30 European subsidies analysed, applied since 2007 for the conservation of hay meadows, their natural value and traditional extensive practices.

• Mountain areas in Portugal, Spain and France still preserve mesophile hay meadows of an exceptional quality, but their fast disappearance requires specific economic sustainability programmes.

• Agri-environmental subsidies (M10) seems to be the most important scheme so far: subsidies aimed at complying with management commitments or at obtaining biodiversity results.

• Next CAP reform: a strategic opportunity to improve hay meadows maintenance support within I Pillar, especially for extensive livestock farms highly dependent on them.

THANK YOU

Authors thank EU Interreg SUDOE Programme and ERDF 2014-2020 for co-financing this study (www.sospraderas.eu).