Economic tools for basin management: integrating environment and biodiversity in cost-recovery

December 10, 2021
Costs of water services WFD

- Financial costs
- Resource costs
- Environmental costs

Another costs

- Flood protection
- Water administration and management
- Monitoring nets

Another costs nor linked to uses
## Duero river basin (Spain)

### Cost-generating uses ...

<table>
<thead>
<tr>
<th></th>
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<th>Resource</th>
<th>Environmental</th>
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### Cost recovery instruments

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Duero river basin (Spain)
Economic instruments regulated by current laws in Duero RB

- Tax for the use of DPH assets (art 112)
- Fee for the use of water for the production of electrical energy (art 112.bis)
- Discharge control fee (art 113)
- Water regulation and water use fees (art 114)
  - Tax on the environmental damage of the use of dammed water in Galicia
  - Canon da Auga de Galicia
- Environmental damage tax of hydropower production with dammed water through dams
  - Town authority taxes
Cost recovery for uses in Duero RB

Households

Agriculture/ Livestock farming

Industry

Costs

Incomes

Households

Agriculture/ Livestock farming

Industry

Financial costs

Incomes
## Impact of a 100% cost recovery on uses

### Households

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<th>Water average allocation</th>
<th>Analysis unit</th>
<th>Cost increase</th>
<th>Comparison unit</th>
<th>Cost increase (%)</th>
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<tr>
<td>10,26 m³/month/person</td>
<td>Monthly tax for a 4 people family</td>
<td>23,30 €/month</td>
<td>2.306,58 Average monthly income per household INE 2019 (€/month/household)</td>
<td>1%</td>
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### Irrigation

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<tr>
<td>6.150 m³/ha/year</td>
<td>Irrigated hectarea</td>
<td>544,87 €/year</td>
<td>815,00 Irrigation gross margin (€/ha/year)</td>
<td>67%</td>
</tr>
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</table>
New instruments to recover environmental and biodiversity costs

- **New finalist character tribute:**
  Motivate Environmental objectives
  Penalize PRESIONS
  Benefit uses that do not cause significant pressures.

- **IRPF**
  Distribute environmental costs among the entire society, current and past, responsible for the current pressures.

- **“Green” treasury or particular bonds:**
  Complement the current financial scheme with the issuance of debt or green bonds.
New instruments to recover environmental and biodiversity costs

- Modify the current economic regime with a higher tax burden on the use of water for economic purposes
INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS (INBO)

oph@chduero.es