Agriculture accounts for over 40% of total OECD water use, and for some EU countries the share is over 60%

Agriculture water use has been growing faster compared to other water users since 1990, especially in some water stressed EU countries

Over-exploitation of groundwater by farming is becoming more widespread

The share of agriculture in total pollutant loads into water bodies is increasing, although overall agricultural pollution is declining

Economic and environmental costs of agricultural water pollution are high but being reduced in some cases

Climate change and variability is projected to increase risks of water stress and pollution in some regions of the EU

Widespread EU agricultural production linked support for outputs (crops, livestock) and inputs (water), but support becoming more decoupled
Reference levels and environmental targets

- Environmental Target
- Reference Level
- Optimum

Environmental Quality

 Costs to be borne by society

 Costs to be borne by farmers
### Key trends in OECD agricultural water use: % change 1990-92 to 2002-04

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Spain</th>
<th>Australia</th>
<th>United States</th>
<th>EU-15</th>
<th>OECD avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>% change in total water use</td>
<td>-12</td>
<td>4</td>
<td>-6</td>
<td>2</td>
<td>-6</td>
<td>1</td>
</tr>
<tr>
<td>% change in agr. water use</td>
<td>3</td>
<td>4</td>
<td>-23</td>
<td>-2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture’s % share in total water use, 2002-04</td>
<td>14</td>
<td>60</td>
<td>55</td>
<td>40</td>
<td>29</td>
<td>44</td>
</tr>
<tr>
<td>Agriculture’s % share in groundwater use, 2002-04</td>
<td>18</td>
<td>68</td>
<td>Rising</td>
<td>70</td>
<td>30</td>
<td>58</td>
</tr>
<tr>
<td>% change in irrigated area</td>
<td>24</td>
<td>12</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>% change in agric. area</td>
<td>-3</td>
<td>-3</td>
<td>-4</td>
<td>-3</td>
<td>-3</td>
<td>-3</td>
</tr>
<tr>
<td>% irrigated area in total agriculture area, 2002-04</td>
<td>9</td>
<td>9</td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>% irrigated products in agr. production value, mid-2000s</td>
<td>?</td>
<td>50-60</td>
<td>25</td>
<td>50</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
EU-15 Agri-Environmental trends important for pressure on water pollution

- Pesticide use (tonnes active ingredients)
- Gross nitrogen balance (tonnes)
- Gross phosphorus balance (tonnes)
- Agriculture production volume (1)

Index 1990-92=100


OECD 5
Agriculture’s share in total emissions of nitrates and phosphorus in surface water: Mid-2000s

%
This presentation has drawn from four OECD publications:

- **Sustainable Management of Water Resources in Agriculture**, 2009 forthcoming
- **Managing Water for All: An OECD perspective on pricing and financing**, 2009
- **Environmental Performance of OECD Agriculture since 1990**, 2008
- **Water and Agriculture: Sustainability, Markets and Policies**, 2006

Visit the OECD websites:

- [www.oecd.org/water](http://www.oecd.org/water)

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