Water management and agriculture: Conflict or synergy?

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The challenge

- MS fail to implement EU water policy - only some 50% of water bodies in good status in 2015
- The adverse effect of agriculture on water status – nutrients overload, pesticide pollution, overabstraction, erosion and hydromorpohological changes – 90% of river basins negatively affected
- Agricultural pressures will increase with climate change
- Most agricultural pressures are reversible and there has been some progress in the past

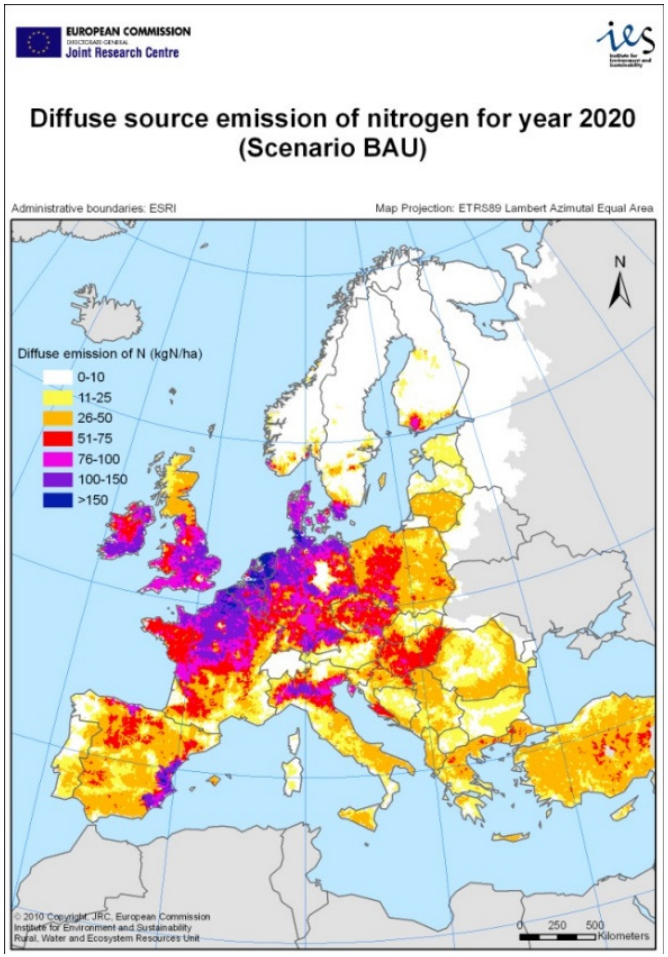
Nutrients and Water

- Pollution by Nitrogen (N) and Phosphorus (P) cause water eutrophication and acidification. Sources of nutrient discharge include household, industry, agriculture or fish farming.
- EU water quality improved in the last 3 decades. Trends for P better than for N, but P is more persistent in water.
- Eutrophication affects 22% of river and 37% of lake monitoring stations, mainly in Western, Northern and some Eastern MS.

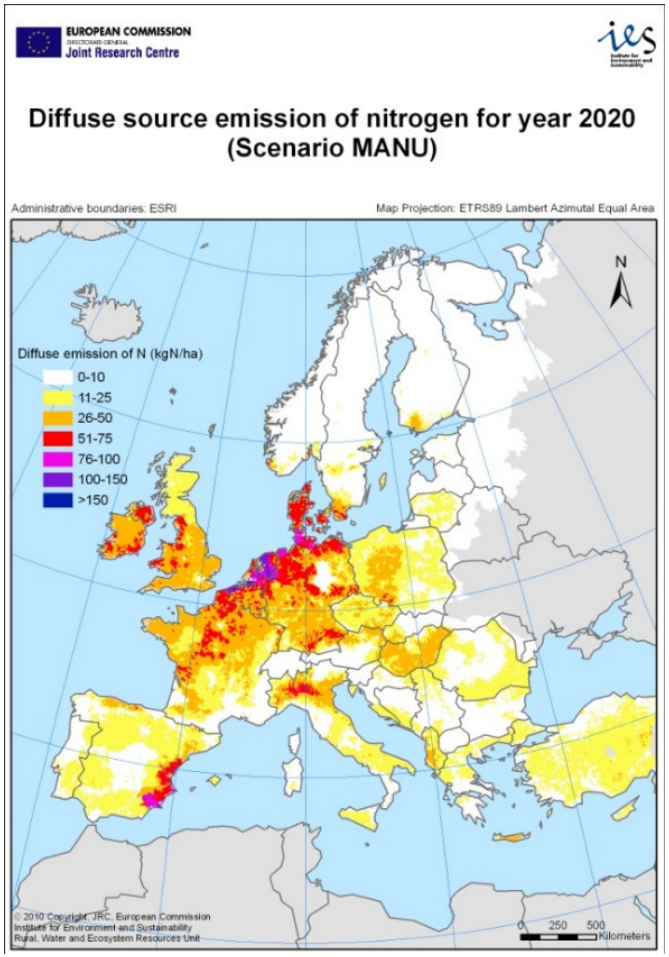
Agriculture

- Fertilizers are the main source of nitrogen and a significant source of phosphorus loading.
- Agricultural measures have reduced nitrogen inputs 15% since 1980s
- Agriculture is the sector with significant emission reduction potential (e.g. Nitrogen recovery rate is 30%–60% for cereal crops).

Persistent problems in hotspots: diffuse nutrients pollution



55% reduction possible through fertilisation management



Pesticides and water

- Information on sources, trends in usage and contamination is limited.
- Pesticides affect 16-20% of water bodies in 'poor chemical status', in 16 MS.
- Excessive pesticides affect 7% (groundwater) and 5% (river) monitoring stations (excluding endosulfan and cyclodienes).
- Declining trends are observed as a result of restrictions
- Persistency is a key problem.

Agriculture

- The share of agriculture to the problem is not clear. Groundwater at risk mostly located in areas used for intensive agriculture.
- Main pesticides in excess in rivers (cyclodiene-group and endosulfan) and groundwater (Atrazine and its derivates) are banned substances
- Herbicides (alachlor, isoproturon) contribute to poor status in 11 MS, despite their presence seldom exceeds quality standards.

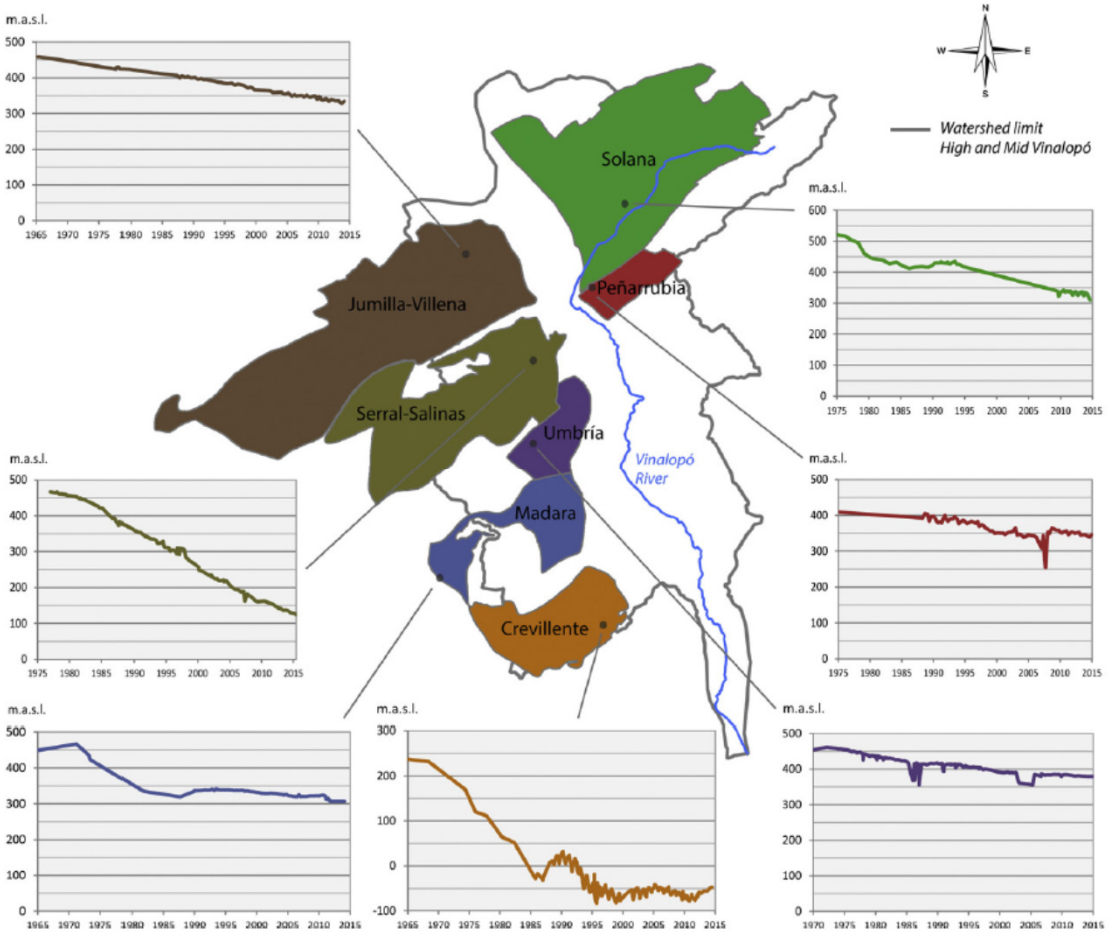
Water quantity

- Only 5 % of renewable freshwater resources are abstracted in EU.
- Areas under pressure: Mediterranean region (low availability + high demand), and some Atlantic basins (high demand).
- Water abstraction decreased by >20% over the last 15 years
- Over-abstraction affects 10% of surface and 20% of groundwater bodies
- Climate change will widen the differences N-S in water availability.

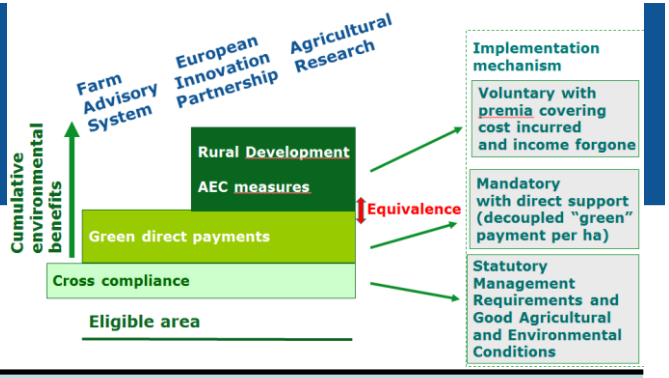
Agriculture

- 36 % of annual consumptive water use (60% in summer)
- 24% share in EU water abstraction: irrigation in S countries (65%, up to 80%); livestock in N countries (0-30%).
- Abstraction for irrigation is being reduced (by 22% since 1990s), but patterns vary (more in E & N, less in S).

Persistent problems in hotspots: water scarcity



CAP 2014-20 & Water



Pillar I

Cross-compliance: compulsory to all farmers. Water related:

- SMR 1 on Nitrates Directive;
- SMR 10 on Plant Protection Products
- GAEC 1 (buffer strips) 2 (irrigation) & 3 (groundwater pollution).
- Indirectly, GAEC5 (limiting erosion), GAEC 7 (landscape features), or SMR 10 (pesticides)

Green Direct Payment: indirect effects on water. Condition for 30% of direct payment.

- Crop diversification
- Ecological focus areas: 5% arable land
- Permanent grassland
- Equivalent

Pillar II

Rural development: Sustainability aims - environmental, social, economic.

- Strategic programming for MS fit RDPs to specific needs.

- Two water-specific focus areas:

- 4a. water management (fertilisers, pesticides)
- 5b efficiency in water use by agriculture

☞ Target: 15% of agricultural and 4.3% of forestry land under contracts to improve water management.

- Art. 46 (irrigation investments) + *Ex ante* Cond.

- Many measures for farming sector

- Relevant measures include also non-agricultural water management (drinking, waste water, floods)

Main-streaming good practice?

- **Assessment of 1st RBMPs + POMs**

Gaps in basic measures, high reliance on RDPs - will the target of good status be reached?

- **Assessment of RDPs (2014-2020)**

SWOT, strategy, measures > will the target of good status be reached?

- **Ex- ante conditionality 5.2 water pricing in agriculture**

EAC added to ensure EU funds contribute to EU (ENV) objectives, has stimulated discussion/cooperation between both sectors

Action is needed!

EU level

- Water Taskforce AGRI-ENV
  - What can be done under the current legal and financial framework
    - Improve implementation
    - Replicate good practice
- Cooperation and water directors and senior agriculture decision-makers

Regional level ???

- EUSDR
- ICPDR
- V4(extended) Presidency initiatives

National level ???

Thank you for your attention

Water-Agri Workshop: Problems

- Knowledge gap, complexity (scope, interaction between levels, objective, effectiveness of actions)
- Structural problems/market failures (intensity, land ownership, nonexistence of markets)
- Governance
- Behaviour

Water-Agri workshop: Legislative framework and tools

- Good on paper (better coordination)
- Implementing plans – RBMPs, NAPs, RDPs:
  - Better aligned
  - More ambitious
- Fail to deliver on the main objectives
  - Hard to reach individual farmers
  - Lack of resources
  - Use of EU funds suboptimal
  - (sufficient determination?)

Water-Agri Workshop: Principles of solution

- Keep the objective of good water status in mind
- Better understanding/communication of issues
- Collaboration between administration, agreement on a common objectives
- Collaboration with farmers and other stakeholders
- Reconcile the need of tailored local measures and large scale solutions to have a significant impact
- Make improving water status profitable for farmers
- Better enforcement of legal obligations
- Use EU funds better to support voluntary actions

Water-Agri Workshop: The way forward

- Continue the discussion
- Develop better knowledge, method and tools
- Collect and promote good practice developed and applied in Member States
- Facilitate collaboration between water managers, agriculture administration and farmers at EU, regional, national and local level
- Stimulate MS to take more ambitious actions (WFD and ND) and better use of CAP for addressing water issues
- Develop innovative tools to communicate with farmers, make farmers benefit and involve other sectors (e.g. retail sector)
- Bring water-agri issues in the future reviews of WFD and CAP