

THE MANAGEMENT AND USE OF WATER IN AGRICULTURE

The land is not cultivated without water, water is not managed without the land. Water, soil and agriculture are inextricably linked. Even if many other factors play a part, present-day changes in agricultural production patterns have consequences for the natural water cycle and for maintaining the balance of this resource. Occupation of rural areas and land management processes have an impact on the quantity and quality of water available on a watershed. The relationship between water and agriculture is therefore a major issue for society.

The ESEC opinion addresses this issue within the strict framework of agricultural activity, primarily in metropolitan France. It takes into account the challenges facing agriculture in a globalised, highly competitive and fragmented context: better food autonomy at both national and European level, supply of drinking water, maintenance of the quality of water and of natural environments, adaptation to climate change... It resolutely addresses the issues causing debate in the regions. Among these controversial topics, two of them were the subject of differences of opinion in our assembly: the financing of some of the means of reducing diffuse pollution (charges, etc.) and the creation of new stores of water for irrigation..

Just as with all other uses of water, agriculture must respect the balances within ecosystems in order to remain productive in the long term.

“For the ESEC, the question is not about establishing liabilities but rather is about looking for effective solutions to meet current and future challenges.”

The recommendations formulated demonstrate the conviction that there is no fundamental conflict between the essential development of agriculture, the maintenance of

water quality and the preservation of aquatic environments.

However, with regard to the



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significant amount of progress still to be made, the ESEC is calling for structural changes. The approaches to take are clearly different according to the regions or territories and the specific issues they face: developing priority actions to address the most sensitive issues will allow the gradual development of solutions which will be useful to all.

This transition cannot be achieved without appropriate measures to assist farmers and other socio-economic stakeholders. The gradual

“The opinion identifies ways of achieving convergence, based on improvements in agricultural practices and the development of productions of agro-ecological interest, having regard to the economic sustainability of land use.”

and collective restoration of environmental balances is a vehicle for social and technical innovation, allowing secure management over the long term of the vital common resources of water and food.

Only a coherent and concerted approach, implemented gradually from agricultural parcels to large watersheds, can therefore move forward the dynamics already in operation, in order to deal effectively with the common challenges of water and agriculture. ■

Contact the Rapporteur?

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TURN THE POLICY FOR THE PROTECTION OF DRINKING WATER CATCHMENT AREAS INTO A TOOL FOR THE OVERALL RESTORATION OF WATER QUALITY

- **Reinforce this policy and use it as part of territorial land management**
- **Take action with regard to the most sensitive water catchment areas by giving**
 - a stronger priority to systems generating the least amount of diffuse pollution: organic farming, forest and agro-forestry etc
 - a rapid exit from the use of synthetic plant disease control products
 - a financial compensation in return for more stringent requirements for sustainability and a requirement for quantified results.

IMPLEMENT AN INTEGRATED SYSTEM OF MANAGEMENT FROM THE AGRICULTURAL PARCEL TO THE WATERSHED AND LOOK FOR ECONOMIC AND ECOLOGICAL EFFICIENCY IN FARMS TO THE WATERSHED AND LOOK FOR ECONOMIC AND ECOLOGICAL EFFICIENCY IN FARMS

- **Allow to each farm to determine its agro-ecological strategy**
 - Develop agronomic methods to reduce the level of synthetic inputs
 - Increase their ownership and training through funding from the gradual introduction of a charge on nitrogen mineral fertilisers and an increase in the levy on synthetic ones
- **Reduce the main sources of pollution by strengthening the link between production systems and environmental services**
 - Support low-input agro-ecological farms to promote transfers of experience
 - Produce agronomic, economic and ecological benchmarks
 - Ensure consistency in territorial regulations and their adoption by farmers
- **Improve integration of water systems for agriculture into hydrological basin management**
- **Define the legal and financial framework of “ecological reparcelling”**
- **Sustainably enhance the value of agro-ecology in the regions**

REDUCE THE VULNERABILITY OF AGRICULTURE TO METEOROLOGICAL HAZARDS AND PROMOTE ADAPTATION TO CLIMATE CHANGE

- **Choose productions and systems which are adapted to climatic conditions in order to reduce the impact of droughts and floods**
- **Anticipate the effects of climate change by building up the resilience of agricultural production**

PROMOTE EFFICIENT IRRIGATION AND SHARE THE RESOURCE EQUITABLY

- **Include irrigation in the regional balances of the large water cycle**
 - Generalise the definition of usage priorities and the distribution of the volumes to be abstracted between categories of user
 - Include the transfer of resources in the approach to regional planning
- **Optimise and improve allocation of the available irrigation water**
 - Organise the balanced distribution of the agricultural volume to be abstracted
 - Integrate the creation of “backup water volumes” into national policy.
 - Earmark public funding for regional programmes giving priority to agro-ecological food production practices and/or high employment rates
- **Modernise and put in place collective management systems adapted to the region**
 - Keeping regions serviced by a collective irrigation network in agricultural protected areas
 - Limit abstraction (modernisation of networks, development of innovative pricing systems, regulation of local stakeholders)

IMPROVE KNOWLEDGE AND MAKE GOVERNANCE MORE COHERENT

- **Intensify cross-sectional research activities and related support strategies**
- **Make the catchment scale the local performance share unit**
- **Make the actions of water agencies more preventative and incentivising**
- **Continue with rebalancing the contributions of the different types of user and look for a better deal for public funding**
- **Ensure national leadership and make water policy more efficient**
- **Coordinate water policy with Community policies, including the CAP**