



## Agricultural practice could help reduce flood risk

**Coherent agri-environmental schemes** could contribute to wider climate change adaptation objectives including safeguarding water quality, carbon storage, biodiversity and habitat conservation. New research suggests that integrating Sustainable Flood Management (SFM) principles into agricultural practice will require relatively few changes under the current legislative framework.

**Climate change is expected** to increase the intensity and frequency of rainfall, and hence flood risk, across much of Europe. Traditional flood management is dominated by hard-engineered flood defence structures, but the Water Framework<sup>1</sup> and Flood Directives<sup>2</sup> imply increasing use of SFM techniques. Using natural processes to reduce risk has also been specifically discussed in the recent EU adaptation green paper<sup>3</sup>, which outlined other 'soft' flood control measures.

The researchers gathered expert opinion on SFM and found that, at present, legislation and the distribution of responsibilities are uncoordinated. The analysis showed that past SFM schemes relied on the goodwill of landowners, who were under no legal obligation to consider downstream flooding. Experts expected that future agricultural and water policies would combine in order to meet SFM goals, but that contradictory urban planning and economic policies would remain obstacles to its implementation.

Agriculture is recognised as a significant factor in floods, but less often for its potential role in flood management. Therefore, education of farmers, advisors and service providers was highlighted as a vital component of SFM. Rural and urban land use policies should also avoid offering 'perverse' incentives for activities such as draining of wetlands or river straightening and confinement, which increase surface water run-off. A third major conclusion was that SFM demands a package of measures over entire catchments, rather than just isolated and local schemes.

The researchers suggested that subsidised water management under the reformed Common Agricultural Policy<sup>4</sup> may be possible as another way of delivering economic, social and environmental improvements.

<sup>1</sup> [http://ec.europa.eu/environment/water/water-framework/index\\_en.html](http://ec.europa.eu/environment/water/water-framework/index_en.html)

<sup>2</sup> [http://ec.europa.eu/environment/water/flood\\_risk/index.htm](http://ec.europa.eu/environment/water/flood_risk/index.htm)

<sup>3</sup> [http://ec.europa.eu/environment/climat/adaptation/index\\_en.htm](http://ec.europa.eu/environment/climat/adaptation/index_en.htm)

<sup>4</sup> [http://ec.europa.eu/agriculture/index\\_en.htm](http://ec.europa.eu/agriculture/index_en.htm)

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