Amadeu **ALTAFAJ I TARDIO**

Permanent Representative of the Autonomous Community of Catalonia – Spain

The Ter delta in Catalonia's Costa Brava is an area of great ecological interest, with coastal lagoons and marshes. But it is under pressure from man – in the form of tourism, farming, and a decades-old property development on marshland – while floods, storms and rainfall (the most recent extraordinary event being in December 2008) have shown how vulnerable the area is to the effects of water. Further deterioration is predicted, because of rising sea levels and extreme weather events associated with climate change.

Catalonia wants to adapt the area to climate change. Two projects in the EU's LIFE programme are helping its effort: MEDACC, which is designed to test innovative solutions aimed at adapting agro-forestry and urban systems to climate change in the Mediterranean, and Pletera, which aims to restore the coastal environments located on the River Ter. A real measure of adaptation to climate change has been achieved, with some recovery of the coastal lagoons, marshes and ponds, and with the removal of roads and embankments in the incomplete property development. Modelling suggest that future floods would be 25cm lower throughout the area than the flood that took place in 2008.

Henk **STAGHOUWER**

Member of Groningen Provincial Council – The Netherlands

Because of climate change, dykes in the Ems estuary need strengthening. At the same time, the estuary is suffering from too great a concentration of sludge – due to dredging and land reclamation – and the transition zone between land and water is too severe, affecting natural processes, with negative consequences for the fish and bird populations.

Together, the province of Groningen, regional water boards, local authorities and NGOs are working on a project – the Eems-Dollard2050 programme – that will combine nature recovery with water-safety measures and sustainable development. To ensure that the area will be resilient and climate-proof, new approaches for water safety are being developed and tested.

In the Twin Dyke pilot project, a new dyke is being built inland from the existing dyke to protect against floods. An inlet built into the existing dyke will allow salt tidal water into the area between the twin dykes; the space between the dykes will be used for salt-resistant agriculture, cockle cultivation, natural purposes, and sludge collection. In another pilot project, the Green Dollard Dyke, new resting and breeding areas for birds are being created.