

# Wetlands – a cultural landscape

**F**rom prehistoric times, many hundreds of generations of people have settled in and around wetlands, often transforming their wetlands into cultural landscapes in which natural and human-made elements are uniquely combined. These landscapes are living records of human occupation and represent an invaluable cultural and historical heritage.

The cultivation of rice, for example, has created a characteristic landscape in many parts of the world. Originating in China 6,000 years ago and then spreading throughout Asia, rice cultivation heralded the beginning of large-scale modification of wetlands by humans. Rice fields, now found in many other parts of the world as well, are highly productive agroecosystems and have made a fundamental contribution to the development of Asian societies. In Binong on the island of Java, Indonesians have been growing rice for thousands of years; this cereal growing, in combination with fish farming, has produced an integrated exploitation of wetlands known as *mani-padi*, providing families with an important source of animal protein as well as carbohydrates and at the

same time creating a specialized wetland environment. The rice terraces of the Philippine Cordilleras, which follow the natural contours of the steep mountains, provide another remarkable example of a living, cultural landscape – generations of farmers have maintained the terraces over 2,000 years, creating a cultural landscape of such beauty that the area was accepted as a World Heritage Site in 1995. In freshwater wetlands in the Mediter-

anean basin, rice has been grown for centuries, constituting the basic food for a large portion of that population and creating a specialized food culture in these regions.



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A traditional fish trap off Pulau Sembilan in Peninsula Malaysia, a common sight in shallow coastal waters in southeast Asia.

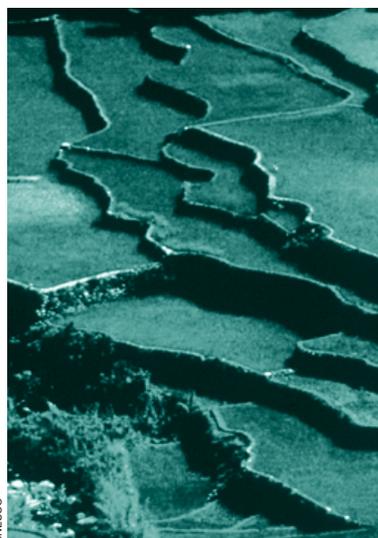
Coastal and even some inland wetlands have supplied salt to human populations for thousands of years, and a diversity of extractive techniques have evolved to suit local conditions. Because of its vital importance in cooking, as a pickling agent, and for obtaining several chemical products, salt has been of economic significance to wetland communities throughout history. The saltmarshes of Uyuni in Bolivia and the Atacama Desert in Chile are outstanding cultural landscapes that have been modified by generations of salt mining activities. In coastal areas, and also farther inland, salt is extracted through evaporation of water with a high salt content, in a process in which the “four basic elements” are reflected: the water that provides the salt; the soil for building walls and dams; the air that contributes to evaporation and turns the windmills that pump the water; and the heat of the sun. This can be observed in the salt flats of Petatlán in the state of Guerrero, Mexico, in the salt pans of the Guérande Ramsar site in France, and in the numerous salinas around the Mediterranean, many of which were first exploited by the Romans.

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In estuaries, contact between freshwater from upriver and marine water produces a high nutrient level for the natural reproduction and growth of prawns, shrimps and other crustaceans, as well as shellfish and fish, and more recently, for coastal aquaculture activities that may not always be sustainable. In many parts of the world there are examples of wetland landscapes that fishermen and seafood gatherers have created with their fishing traps and platforms – from the rías of Galicia in Spain, the estuaries of the Salúm in Egypt, the Saloum River Delta in Senegal, to Manila Bay in the Philippines, these human-made structures form unique cultural landscapes.

Similarly, in the world's arid areas, the human need to exploit water has often created a fascinating cultural landscape through ancient water management practices. In Algeria, the Oasis de Ouled Saïd, a newly-designated Ramsar site, is maintained by residents of the oasis community through the construction of a *fouggara*, a traditional, human-made water distribution system. This ingenious method unites underground water sources and distributes the water through a complex system of small channels, under a traditional social mechanism, to the families cultivating date palms, cereals and vegetables in the oasis. *Fouggaras*, still in use today in Iran, Iraq and Morocco as well as Algeria, are thought to have originated in Persia and been introduced to the Maghreb during the Arab conquest of the 7th century.

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For 2,000 years, the high rice fields of the Ifugao people in the Philippines have followed the contours of the mountain, creating a cultural landscape of great beauty.

place that is so important to people, whether or not they live or work in a wetland, and they constitute an important component of a nation's cultural heritage. A growing recognition of this heritage is reflected at national, regional and international levels, for example, in the development of strategies and regulations by a number of countries to conserve cultural landscapes, the adoption of the European Landscape Convention (the Florence Convention) by the Council of Europe in July 2000, and developments in recent years within the World Heritage Convention to bring greater recognition to cultural landscapes (see the fact sheet "The World Heritage Convention, cultural landscapes and wetlands").

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CONVENTION ON WETLANDS  
(Ramsar, Iran, 1971)