

General introduction to the Policy background of Environmental Issues concerning aquaculture

Aquaculture existed in Europe for centuries during which the phrase ‘environmental impact’ was probably never thought of, let alone seriously debated. Low intensity, extensive, fish farming related peacefully with the landscape.

The second half of the twentieth century was a time of demographic change, including a rising intensity of industrial activity and agriculture and the birth of a more intensive and highly productive aquaculture industry. These trends were closely followed by an increasing awareness of the effects of society’s activities on the environment and the need for proper controls.

With the unification of European States under what has become the European Union, the widely varied approaches to environmental protection are becoming standardised under EU legislation, notably through the Habitats Directive and the Water Framework Directive. These seek to protect and improve the environment by fair and even-handed regulation of activities across Europe, to match the open market aspired to under Treaty of Rome.

The current era is one where the competition for use of resources is real and on-going, where public concerns for environmental protection is at a high level and where market forces require high levels of efficiency in the production of foods to meet consumer demands for high quality at competitive prices.

Environmental Policies

During the last decade there have been increasing efforts to address opportunities and needs for a sustainable development, understanding it as the “Development that meets the needs of the present without compromising the ability of future generations to meet their own need” defined by the World Commission on Environment and Development (WCED) in 1987.

To achieve this objective, aquaculture has attracted the attention of governmental authorities and non-governmental sectors. A more specific definition was defined by The Food and Agriculture Organization of the United Nations (FAO) in relation with agriculture and fisheries:

“Sustainable development is the management and conservation of the natural resource base and the orientation of technological and institutional change in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations.

Such sustainable development (in the agriculture, forestry and fisheries sectors) conserves land, water, plant and animal genetic resources, is environmentally non-degrading, technically appropriate, economically viable and socially acceptable” (FAO Fisheries Department, 1997).

The Directorate General for the Environment has as its mission statement “Protecting, preserving and improving the environment for present and future generations, and promoting sustainable development.” This approach is evidently reflected in the Strategy for the Sustainable Development of European Aquaculture.

There are a number of European environmental Policies that directly affect aquaculture and which have to be taken into account in both planning and operation.

These include:

- The Environment and Health – including reference to dioxin/PCB contamination – covered by the European Environment and Health Action Plan 2004-2010.
- Actions on industry and technology, including the Environmental Technology Action Plans, Ecolabelling and Eco-management and Audit Schemes (EMAS)
- Land and Water use, including Integrated Coastal Zone Management (ICZM) and Environmental Impact Assessments (EIA)
- The maintenance of biodiversity
- The sustainable use of resources
- The management of waste

Full details on the policies concerning these issues can be found on the website of DG Environment at http://ec.europa.eu/environment/index_en.htm under the Policies tab.

Aquaculture and the environment

European research has targeted projects concerning the interactions of aquaculture with the environment, looking at different aspects of this title.

Key topics have included how to measure the impact of aquaculture, how to reduce wastes and effluent, the effects of escapes from aquaculture on wild stocks, and assessments of the sustainability of aquaculture.

Included in the Technical leaflets on this aspect are:

- AQCESS
- BIOFAQS
- ECASA
- GENIMPACT
- MERAMED
- SALIMPACT
- SAMI