

EMERGING ISSUES

The meeting was a precious opportunity to take stock of the implementation of regulations, plans and programmes for the safeguard of Alpine mountain ecosystems - with particular reference to water ecosystems – and to analyse the role of forests in the mitigation of risks induced by climate changes. In this context, the European directive 2000/60/CE is a reference document also for non-EU regions (Switzerland and Liechtenstein) which participate in the Alpine Convention and in the Alpine Space Programme, as well as in many other cooperation projects at Alpine level.

During the meeting, it emerged how Alpine forests can contribute to the significant reduction of natural risks caused by climate changes, such as avalanches, landslides, floods or draughts, thus protecting settlements, the economic system, touristic areas, water production and many other activities carried out in these areas. On the other hand, climate change can have several negative impacts on Alpine forests: it can influence the growth and health of forest ecosystems, change the distribution and development of tree species in the Alps, jeopardise the economic value of forests, spoil the scenic beauty and the landscape, and have an adverse effect on tourism and the local economy.

Nevertheless, there is a high level of uncertainty on how the many functions of forests can be influenced by the consequences of climate change. In this context, the MANFRED project becomes particularly relevant. This project aims at defining management measures to adapt the forest located in the Alpine Space to the climate change related risks. The project has two objectives: the protection and safeguard of forest ecosystems and the promotion of an effective management of forests through adaptive strategies based on knowledge.

As for the safeguard of water ecosystems, it emerged that the Management Plans for hydrographic basins foreseen by the framework directive on waters 2000/60/CE are implemented in all EU countries, and Switzerland follows a similar planning process. The analysis of such plans shows that, although the environmental quality of Alpine water bodies is generally good, only some of those which still have not reached a good qualitative status will be able to meet the directive objectives by 2015.

The Management Plans for hydrographic basins must be implemented with a clear and realistic approach – which may sometimes require bold choices – limiting the use of derogations as much as possible. To this end, it is necessary to establish - on the basis of economic analysis (which must still be adequately developed in the Plans) - that the costs for the implementation of the plans shall be carried by the users of water resources (tariff or fee), according to the "polluter pays" principle.

A structured monitoring activity, in compliance with the directive requirements, is one of the key actions needed to guide and fine tune useful actions to reach environmental quality objectives. In Italy, the state of quality in the Plans shall be reviewed on the basis of the results of the monitoring activities carried out in compliance with the recent Ministerial Decree DM 56/2009.

Data and statistical analyses in the environmental field are essential to plan and manage water resources, but it is necessary to use unique indicators in classifications and calculation methodologies, so that these can be compared. There are still difficulties in finding statistical data, sharing standardised classifications, as well as a lack of adequate measurements. In some

areas, the level of knowledge is still completely inadequate, such as in the case of consumption of underground waters.

For the next cycle of European financial planning it is necessary to have, among other things, more detailed studies on the optimisation of the monitoring network – especially at high altitudes – and on the actual effects of climate changes.

Hydromorphological impacts – particularly those generated by the hydroelectric sector – are among the main criticalities affecting Alpine streams and water protection works. However, the classification tools used in Management Plans are not very sensitive to hydromorphological pressures, and in the case of Alpine rivers – which generally present a good quality of waters – they tend to overestimate environmental quality.

River or Lake Contracts are a useful tool for negotiated planning and promote a “harmonious” implementation of plans and programmes covering very wide ranging issues. From this perspective, Contracts can be a very effective tool for the implementation of Management Plans, similarly to what happens in France, where River or Lake Contracts have now become a common practice. River Contracts help achieving the environmental quality objectives of water streams through forms of involvement and widespread participation (of both public and private subjects). They do not create further procedural constraints and – while respecting the respective competences and commitments of all parties involved – make investments more effective by integrating and guiding the economic resources and plans of a territory.

For the future 2014/2021 planning, it is essential to require the inclusion of Alpine mountain territories among the areas of particular interest at European level, for which specific resources supporting processes (involving local communities) and programmes for the safeguard and protection of these territories – which still play a fundamental role as biodiversity and environmental hotspots – should be earmarked.