



Charente River basin – STAKEHOLDERS VISIONS

The visions were developed by local stakeholders of the Charente river basin during a cross-sectoral workshop held on 21st of May 2029 (24 participants) including representatives from agriculture and agro-industry, shellfish industry, port industry, water management, tourism, local authorities and research institution supervised by INREA, as part of the EU H2020 COASTAL project. 3 cross-sectoral groups of 8 persons were asked to envision a common sustainable future for their territory.

A harmonious territory with a mosaic of landscape and habitats

In this desirable future (2040-2050), a change of society has been supported by local stakeholders acting in collaboration and synergy, in the land-sea continuum. High population density on the coastal zone and strong territorial specialization of activities has been avoided. A mosaic of space and activities as well as improved local spatial and temporal governance has enhanced the resilience of the territorial, better equipped to face climatic and economic variability. A network of local actors and a more efficient stakeholders' dialogue within the territory, along practices facilitating shared knowledge and better understanding, allowed each sector to have a transversal vision of the evolution of the territory. Massive investments, and subsidies for local development, allowed for a fair share of public services including digital services and infrastructures within the basin, as well as a liveable population density and the possibility for inhabitants to remain in their local communities. Legal and economic innovations have been supporting the process. Decentralized water and energy resources have also contributed to more autonomy and resilience. The traditional activities have survived; the shellfish industry was even able to prosper thanks to a better management of the land-sea transitional zones, a regulation adapted to the local coastal characteristics and a regional and adaptive management of marine and fresh water resources. Boating/sailing activities and mass tourism are contained. Some parts of the coastal zone in non-urbanized areas have been left as free space for the natural processes of the sea and the coastal marshlands constitute buffer zones. Port industry and offshore energy activities share the maritime space with other coastal activities. Inland rural policy novelties towards employment, local development and the environment have supported the evolution of the agricultural systems. As far as export activities are concerned, these farming systems have become more diversified, following standards of organic farming. Reasonable farming size with rehabilitated rural landscapes (wells, buffer zones) are based on new market opportunities thanks to the relocation of agro-transformation and agro-food units and the development of short supply chains with medium size enterprises. These systems are more sustainable in terms of water and nutrients consumption, contributing to a better management of water resource, in collaboration with other uses. This has enabled to maintain a dynamic population in place, which can accommodate interdepartmental mobility or seasonal workers.



A territory with preserved water resource (continental and coastal) and uses

In this desirable future (2040-2050), local stakeholders unanimously stated that the human-nature relationship had been damaged. They have set themselves the common objective of restoring / preserving natural environments - ecosystems, continental and marine hydro systems, land-sea interfaces, wetlands -, to limit human impacts on the inland and coastal waters, soils, biodiversity. To this end, scientific knowledge and local expertise in the area have been organized, shared and widely disseminated. A new governance integrating land-sea continuum and interfaces has been implemented. The management of water resources is shared among all stakeholders and takes into account a continuum between continental water, marine water, interfaces and wetlands. Innovative “nature-based” technologies have been implemented. The land-sea boundary has been relocated and the dynamics of the transition zone is monitored. Monitoring indicators (salinity, trophic capacity, nutrients, etc.) are made available to local stakeholders. Soils have been re-vegetated and better fulfil their ecological functions, some areas have been reforested. Cities are greener. All activities are more water efficient and the reuse of waste treated water has become widespread. Micro-management of water has been implemented at the household level. Agriculture has evolved into more sustainable and diversified farming systems with a sustainable use of water and nutrients. Irrigation techniques are more efficient and better suited to the local context, irrigation management is collective and shared with other uses. Shellfish farming is present on the territory and takes advantage of a restored quality of the environment as well as a better management of land-marsh-shellfish interfaces. The use of water by a more educated and better informed population is sober, the distribution and treatment of water have been improved by new techniques and renovation / management of networks. Food security and drinking water supplies are ensured.



A sustainable agriculture and agro-industry

In this desirable future, agriculture has taken up the challenge of sustainable development and remains a major economic activity in the region. It is an agriculture that sustainably uses water and inputs, is profitable, and in synergy with other activities, which has made it possible the maintenance of a dynamic and innovative rural community. The conventional agriculture of the past has given way to a new 100% organic agriculture (but which does not necessarily see itself as such). Farming systems and practices have evolved with new crops, longer crop rotations and varieties adapted to new climatic conditions, cultivated on medium-sized plots, in a mosaic of landscapes (hedges, grass strips, etc.) which allow limit nutrient transfers and preserve biodiversity. Livestock farming has found its place with a more extensive mode of conduct: it has benefited from the support of decision-makers, other activities and inhabitants to vegetate the territory, maintain meadows and wetlands (marshes), thus contributing to mitigate climate change effects. The vineyards are still present, they have adapted to the new conditions with innovative pest control methods and occasional water supplies in the event of severe drought episodes. The lower water requirements of all these crops, coupled with the creation of a certain number of water storage spaces managed collectively by all the stakeholders, have enabled better management of water resources at the territorial level while at the same time, securing crop needs during periods of water deficit or drought. New technologies make it possible to use available water as efficiently as possible and to reuse wastewater for certain uses. While part of agriculture still exports its products preferentially via local ports, a large number of the farms have turned to local market, which benefit from the relocation of product processing units within the territory, and the development of short supply chains. These new local markets have been supported by a major regional project. Innovation within the aid system for local farmer settlements, changes in financing methods, have enabled farms to renew themselves and to be able to invest in innovative technologies, via new economic models. Easy access to digital technology, the development of services in rural areas and easy access to decentralized and renewable energy help to maintain a dynamic rural and agricultural population.