



# Smart Mediterranean forestry, bioeconomy and social integration

## Key Messages

- The Mediterranean basin, socially and ecologically diverse, is facing challenges at many levels and notably, high unemployment rates, strong pressures on natural resources and climate change. A sustainable, inclusive bio-based economy can be part of the solution, by creating jobs and reducing the ecological footprint.
- Society must look back to nature for replacing non-renewable feedstocks with green solutions and bio-based materials. Knowledge from science and practice must be leveraged to develop nature-based solutions and sustainable value chains, deeply rooted in the community and local environment.
- Mediterranean forests are rich in goods and services. The challenge is how to best incorporate them into a smart and efficient bioeconomy. Technological breakthroughs, social innovation and increased societal engagement will play a key role in taking advantage of the current momentum.
- The creation of employment and integration opportunities must be a priority in the Mediterranean, with a special focus on vulnerable sectors of society. The potential and the creativity of the young and rural populations, locals as well as migrants, must be unleashed. Third-sector actors can play a major role along with public and private initiatives.
- Creativity alone cannot guarantee long-lasting solutions. A supporting policy framework, favourable business environment and societal engagement are needed to facilitate innovation and promote partnerships at multiple levels.
- The bioeconomy offers an opportunity for a deeper integration of economic, environmental and social objectives. It demands a stronger focus on synergies and multifunctionality. New knowledge and technologies are helping to manage and monitor multifunctional forestry.

## The Mediterranean region needs a bioeconomy

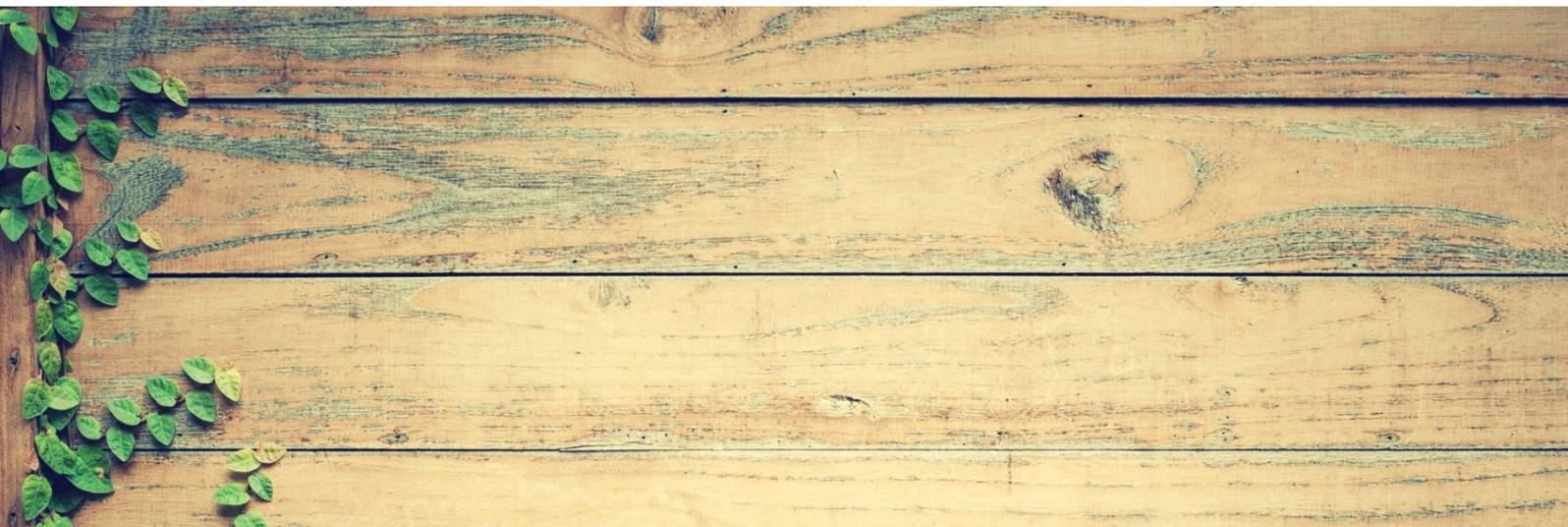
The Mediterranean region is ecologically, socially and politically diverse, yet it shares a common sense of identity and important complementarities. The region needs a bioeconomy because:

- Unemployment rates are very high in most Mediterranean countries. Affecting especially young and rural populations, this is often a cause of social unrest and increased migration fluxes towards urban areas and across countries. Developing bioeconomy value chains in rural areas can help mitigate forced migration and rural exodus, while offering increased opportunities to further integrate migrants and vulnerable populations.
- It is a highly populated and urbanised region, hosting a very large proportion of the global tourism and still largely dependent on a fossil fuel economy, non-renewable materials and imported goods and services. It requires a radical transformation of its production and consumption patterns.
- Climate change will greatly affect the Mediterranean region, with very significant increase in temperature and decreases in precipitation. This increased environmental stress could lead to economic failures, disrupt social cohesion and trigger political conflicts and forced migration, as has been seen in the Sahel and Syria. Restoring ecosystem functions and sustainable value chains can have a broad range of positive social, environmental and economic consequences.

## The bioeconomy offers the opportunity to better integrate economic, environmental and social aspects

Rural landscapes are under rapid transformation as a consequence of global change and profound urbanisation. In some regions, the lack of sustainable value chains is leading to rural abandonment, rapid forest expansion and megafires. In others, paradoxically, the result is uncontrolled exploitation and degradation. Inserting forests into the economic fluxes is necessary to their conservation as intrinsic natural value might not suffice.

- Developing sustainable and complete value chains on wood, non-wood forest products, agroforestry and ecosystem services might be the cornerstone for the protection and management of Mediterranean forests. It will also create jobs and opportunities for new generations, migrants and other vulnerable populations.
- As society looks back to nature-based solutions and bio-based materials, the permanent search for synergies between nature conservation and economic development, provision of raw materials and ecosystem services must become dominant. Focusing on, and accepting, trade-offs will not work.
- The digital revolution is bringing us technologies that facilitate precise evaluation and monitoring of forest conditions. Forestry practices can take advantage of them to design flexible, adaptive management approaches to enhance multifunctionality and secure synergies in the production of raw materials and ecosystem services.



## Empowering people is key for a smart, innovative and socially inclusive bioeconomy

The bioeconomy implies a radical transformation in current production and consumption patterns and requires technological, business and social innovation at all levels. The potential of people must be realised. It is necessary to change current mind-sets, promote creativity and to nurture entrepreneurial attitudes with knowledge and skills in order to promote innovation and bridge the knowledge-action divide.

- Innovation efforts must target all possible aspects related to the bioeconomy, from biotechnologies to business models on ecosystem services, including new uses of timber and territorial marketing of ecosystem services with special attention to social innovation.
- Business competences should be included in educational curricula across disciplines and also focusing on those in rural-related domains such as, but not only, agriculture, forestry and biology. Mentoring programs, as well as training services, should be arranged to improve integration and capacities of rural and vulnerable populations as youth and migrants, with a comprehensive approach to gender issues.
- In the long term, innovation requires a favourable environment including a supporting and responsive policy framework. Public-private and social partnerships must be encouraged and promoted at multiple levels. Start-ups and new initiatives often need strong connections to larger actors in order to create resilient business ecosystems. Innovative public procurement and societal engagement can help create favourable market conditions, also facilitating access to traditional and innovative financial sources.
- The third sector has a relevant role to play in an inclusive bioeconomy. Existing initiatives in social forestry and green-economy should be supported, enhanced and replicated. As with bio-based products, social enterprises will only gain consumers' support through high quality products and services. In this respect, they will greatly benefit from specific support actions targeted to increased professionalisation (training) and by lowering initial access to markets. In addition, generally, grass-roots initiatives will benefit from enhanced international linkages and greater connections with larger third-sector actors, including corporate social responsibility programmes.

