

Menfri network: Euro-Mediterranean innovation for forest development

by Enrique DOBLAS-MIRANDA *et al*

This article presents the focus on the initiatives in terms of innovation for forest development of the session “Tools and initiatives for forest development” organised during the 4th Mediterranean Forest Week in Barcelona, through the MENFRI project.

This project is part of the European call “reinforcing cooperation [...] on bridging the gap between research and innovation» and was carried out on both shores of the Mediterranean.

Introduction: European projects as strategic tools for growth

Forest management strategies must be aimed at promoting the mitigation of the effects of global change and at guaranteeing the sustainable use of ecosystem goods and services in order to achieve a resource efficient, low-carbon economy (de BOISSEZON, 2011). The forest sector plays therefore a crucial role in bringing science into action for the development of Mediterranean communities.

In order to reach such consideration of forestry into the societal challenges of the European Commission, there has been an extensive history of projects on Euro-Mediterranean cooperation in Research and Innovation; from the first projects on science, technology and innovation capabilities in the Mediterranean countries (ESTIME, 2004) and socio-economic development (MEDPRO, 2010), where the forest sector was not even mentioned, to the achievement of an European Research Area Net (ERANET) focused in forestry in Euro-Mediterranean countries (FORESTERRA, 2012). The project MIRA (Fostering the EUMPC Innovation and Science & Technology Communities of Practice, 2008) merits special attention, which included forest management as particular area of mutual interest for the integration of the Mediterranean Partner Countries in the European Research Area (although its next phase, MEDSPRING 2013, is not specially devoted to forestry).

In 2013 the European call “Reinforcing cooperation with European Neighbourhood Policy countries on bridging the gap between research and innovation” arose with clear objectives in order to reinforce Euro-Mediterranean collaboration in innovation, principally: to foster mutually beneficial public-private-partnerships, to better align research objectives with socio-economic needs to address key societal challenges of common interest and to promote market uptake of research results through innovative products and services. Only one of the financed projects in the Mediterranean area was devoted to forestry, MENFRI.

MENFRI: Mediterranean Network of Forestry Research and Innovation

Climate change is affecting the entire Mediterranean Basin, but different land use changes result in different consequences all over the Region (DOBLAS-MIRANDA *et al* 2014). In European countries, land abandonment results in new but not managed forests, prone to fire and infestation due to increasing temperatures and drought. While in North Africa, forest intensification combined with a hotter and dryer climate causes desertification.

The MENFRI project poses a common solution to both problems: to promote forest conservation through forest use. This objective could be achieved by sharing knowledge between north and south Mediterranean;

traditional uses of forests from the Maghreb are sources of eco-innovation, which could promote the management of European new forests. On the contrary, land use practices from south European countries could decrease forest intensification for a more sustainable forest use (Figure 1).

MENFRI aims at founding the basis for this innovative Mediterranean forest management by three key actions:

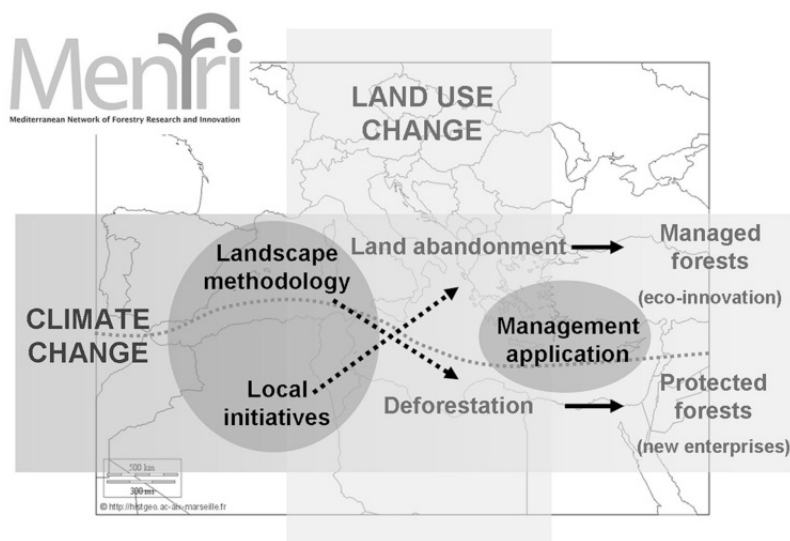
- First, by gathering experts in business development, forest researchers and managers, policy makers and forest users (from owners to population) in order to understand the main problems in the sector and to look for practical solutions.

- Second, by promoting the exchange of knowledge from both sides of the Mediterranean through training courses on business creation, Geographical Information System techniques, forest certification, associational management and European Commission projects.

- And third, by the creation of a Mediterranean Network of Forest Research & Innovation, where all kind of forest related actors could find each other to create innovative opportunities for the entire Region.

MENFRI, as a consortium representing all these stakeholders : CREAM (science,) Alienor.EU (politics), Institut national de la recherche en Génie Rural, Eaux et Forêts (management), Warrant Group (business), Consorci Forestal de Catalunya (owners), Université Hassan II (populations), should become the first step in the consolidation of Mediterranean forest management as a sustainable, eco-innovative and job creating business.

Figure 1:



Forestry as a tool for development

During the recent Bioeconomy Forum held in Barcelona (2014) was clearly stated that forestry offers business opportunities and initiatives in the Regional dimension. However, it was also pointed out that a series of measures are necessary to increase the potential of forests as development engines. For example, private forest owners and local communities depending on forest resources, which have been wrongly conside-

red as a destructive force, are in fact crucial actors that should be empowered and supported. To that end, society must give fair value to forest products, considering not only manufacturing costs but also the cost of production impacts.

The key message here is to promote conservation while exploitation. The balance between conservation and use of our forests is possible and recommendable. On the one hand, under the current context of global change, forests need to be actively managed in order to be preserved. On the other hand, forests should not be overexploited because the result is the loss of the raw material for associated industries or dependent populations. There is a need to reconcile environmental and business objectives in forestry. To achieve the mentioned balance, the collaboration of all stakeholders implied is very important. Forest owners and entrepreneurs should look for equilibrium between short and long-term benefits based in the advice of managers and researchers, who should work together in the search of enhancing forest resilience and resistance, more than only the increase in production. Finally, as mentioned, citizens should be aware of the importance (in quality, as source of development, in traditional knowledge) of local forest products. Only in this way the value of conservation will be enhanced and policy makers will see the need of being involved in paving the way to forestry innovation (through, for example, fiscal incentives for environmental services).

Existing barriers against forestry development

In the way to achieve such impressive goals, however, a series of gaps has been identified. Most of them imply contradictions or are “false friends”, meaning that they are based in good ideas or principles that need revision or a more holistic point of view.

For example, the “forest use rights” existing in most of Maghreb countries are based in an unquestionable moral code. However, growing populations (including evident immigration issues) depending on forests, without basic services and any professional training, result in overexploitation.

Similarly, several attempts of a common regional strategy on Mediterranean forests have been proposed but in the end there is a lack of real application. Not to mention the difficulties associated to the creation and application of a common forest legislation supported by regional coherence and agreement.

Finally, there is a clear gap between global economy and local benefits. Competition with, for example, wood producers from northern Europe or Chinese honey, has forced the southern forest sector to wrong practices; from the search of productivity in detriment to resistance to the abandonment of artisanal approach to a more industrial point of view.

Recommendations for the future

The mentioned barriers are only obstacles to be solved, and in fact they can be solved. The different experts gathered by MENFRI have already proposed several recommendations than can be summarized in four principal guidelines to increase the potential of the forest sector:

- Bring the factories to the forests: the complete value chain should be as near as possible the source of raw materials in order to contribute to the education, enrichment and development of communities.

- Research for innovation networks: there is a need to join initiatives from the public and the private sectors to transform good ideas into real action, support them and serve as a follow-up organization, learning about the challenges and opportunities of these cross-sector processes.

- Multi-sectoral pilot studies including the complete value chain: to serve as good examples for decision-makers about the possibilities and benefits of long-term (and therefore sustainable) approaches.

- Valorisation of forest services and products: people need to know the importance of consuming and paying the real value of regional products of proved sustainability in order to contribute to ecosystem conservation and societal development.

Concluding, a change is needed where education and collaboration are essential.

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Innovative research and management should be put into practice in order to be tested, owners and companies need incentives in order to adopt new practices, and society and governments should support these initiatives in order to provide them with the necessary strength.

E.D.M.

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Summary

The European Commission poses that innovation in forestry must be directed to mitigate the effects of global change while guaranteeing the sustainable use of ecosystem goods and services. Mediterranean forestry could be then considered as a tool for development; traditional uses of forests could be sources of eco-innovation against forest abandonment, and landscape strategies and business could decrease forest intensification for a more sustainable forest use. The Mediterranean Network of Forestry Research and Innovation (MENFRI) aims to set the basis for this innovative Mediterranean forest management by gathering experts from the entire value chain in the forest sector, by provoking the exchange of knowledge through training courses and by the creation of this network itself. In order to reconcile environmental and business objectives in forestry, experts gathered by MENFRI propose to: bring the complete value chain as near as possible the source of raw materials, create useful research for innovation networks, implement multi-sectoral pilot studies, and valorise forest services and products.

Résumé

La Commission européenne soutient que l'innovation dans le secteur forestier doit servir à l'atténuation des effets du changement global, tout en garantissant une utilisation durable des biens et services écosystémiques. La forêt méditerranéenne pourrait alors être considérée comme un outil de développement ; les utilisations traditionnelles des forêts pourraient être des sources d'éco-innovation empêchant l'abandon des forêts, et les stratégies des territoires et les entreprises pourraient permettre la diminution de l'intensification de l'utilisation des forêts et mener à une utilisation plus durable de celles-ci. MENFRI vise à établir la base de cette gestion forestière méditerranéenne novatrice en rassemblant des experts issus de l'ensemble de la chaîne de valeur du secteur forestier, en facilitant l'échange de connaissances à travers des formations, et par la création d'un réseau méditerranéen de la recherche et de l'innovation forestière. Afin de concilier les objectifs environnementaux et commerciaux du secteur forestier, les experts réunis par MENFRI proposent : d'insérer la chaîne de valeur complète au plus près de la source des matières premières, de créer des réseaux de recherche et d'innovation utiles, de mettre en œuvre des projets pilotes multisectoriels, et de valoriser les services et produits forestiers.