

FORESTERRA PROJECT: AN USEFUL FORESTRY TOOL FOR MAPPING OF EXISTING FUNDING PROGRAMMES AND RESEARCH CAPACITIES IN THE MEDITERRANEAN AREA

FORESTERRA: UN PROGETTO DEDICATO ALLA MAPPATURA DELLA RICERCA FORESTALE NELL'AREA MEDITERRANEA

Giuseppe Scarascia Mugnozza¹, Sofia Bajocco¹, Elisabetta Raparelli¹, Pierfrancesco Nardi¹, Luigi Perini¹, Giovanni Di Matteo^{1*}

¹ Consiglio per la ricerca e la sperimentazione in agricoltura, Research unit for Climatology and Meteorology applied to Agriculture (CRA-CMA)

* giovanni.dimatteo@entecra.it

Abstract

The countries of the Mediterranean basin, as well as those of other Mediterranean Climate Areas, face similar challenges regarding the sustainability of forest ecosystems and the delivery of crucial goods and services that they provide in a context of rapid global changes. Advancing scientific knowledge and fostering innovation is essential to ensure the sustainable management of Mediterranean forests and maximise the potential role of their unique goods and services in building a knowledge-based bioeconomy in the region. In this context, FORESTERRA project (Enhancing FOrest RESearch in the MediTERRAnean through improved coordination and integration), aims at reinforcing the scientific cooperation on Mediterranean forests through an ambitious transnational framework to reduce the existing research fragmentation and maximise the impact of research activities puts the basis for: I) better coordination between partners' forest research programmes; II) in-depth and durable cooperation and integration among FORESTERRA partners (enhancing the scientific links between the northern and southern Mediterranean sub-regions); III) long term contribution to structuring the European Research Area.

Keywords: Forestry Mapping, Research Policies, Research Capacities, Mediterranean Research Areas.

Parole chiave: Ricerca Forestale, Mappatura Competenze Scientifiche, Inventario Programmi Di Ricerca, Foreste Mediterranee.

Introduction

Mediterranean forests and woodlands, which cover about 9% of the Mediterranean region's land area (Scarascia Mugnozza *et al.*, 2000), require special attention because: (I) they constitute a unique world natural heritage in terms of biological diversity, hosting around 25,000 species of vascular plants (50% are endemic species) and a high degree of tree richness and endemism with extraordinary genetic diversity; (II) their conservation and appropriate management have crucial impacts on the sustainability of the region's most strategic resource: water; (III) they provide highly appreciated and unique non-wood products and non-market services. However, Mediterranean forests and the important goods and services they provide are seriously threatened by drastic and rapid climate and land use changes. We need new scientific knowledge based on advancing and integrating research from different scientific areas and disciplines to support decision-makers in the development of:

- New policy frameworks to promote new economic instruments to ensure the delivery of key forest goods and services.
- New adaptive management strategies based on the understanding of forest ecosystem functions and risks in a changing environment.

In this context the FORESTERRA project (Enhancing FOrest RESearch in the MediTERRAnean through improved coordination and integration) being a part of the ERA-NET initiative within the 7th Research Framework Programme (see a previous ERA-NET initiative in Matrix-Rambøll, 2008) aims at reinforcing the scientific coordination and integration of Mediterranean programmes in forest research as well as

the scientific cooperation with countries of the Mediterranean area and with countries from other Mediterranean Climate Areas. One of the main objective of the project was the mapping of forestry research activities, characterizing the ongoing research programmes and projects carried on in the different FORESTERRA partner countries (12 Mediterranean countries in all) in terms of funding sources, main topics and institutions involved.

Materials and Methods

The mapping survey was prepared using dedicated questionnaires which covers quantitative and qualitative information on (I) bodies that have a funding role for forestry projects and (II) information about the research capacities on scientific forestry Institutions of the Mediterranean area. These questionnaires were implemented online on the FORESTERRA website (<http://www.foresterra.eu>) and afterwards, the survey was sent by each FORESTERRA partner to most of the forestry organizations/institutions of his/her respective country.

Results and Discussion

A Mediterranean forestry research framework database was generated from the information gathered from 81 questionnaires (i.e. 48 from scientific organizations, 13 from funding bodies and 20 forestry programmes financed by funding bodies) (Figure 1).

This database is an open one and it will be progressively updated during the course of the project.

To identify complementarities, overlaps, gaps, strengths and weaknesses in forest research the data from questionnaires



Fig. 1 - Total number of dedicated questionnaires submitted to the FORESTERRA database.

Fig. 1 - Numero totale di questionari sottomessi nel database di FORESTERRA.

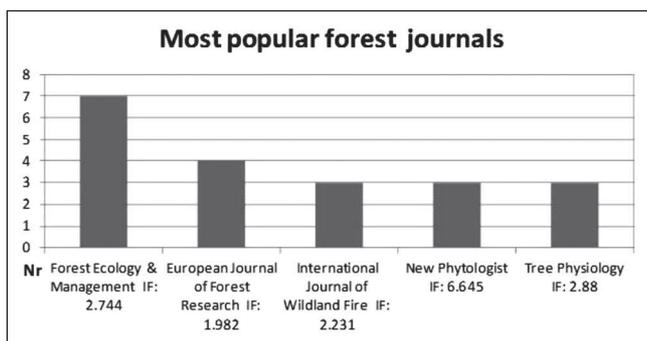


Fig. 2 - Frequency graph of the top five most popular ISI journals used in Mediterranean forestry research.

Fig. 2 - Frequenze delle principali cinque riviste ISI utilizzate per pubblicare articoli scientifici nel settore forestale del Mediterraneo.

were organized to select eleven indicators as follows: (I) staff involved in forestry scientific organizations; (II) ISI papers published by forestry scientific organizations; (III) top five most utilized forestry journals; (IV) top nine most prestigious journals (with highest IF); (V) overall forestry research budget; (VI) budget financed by funding Bodies for forestry projects; (VII) budget of forestry projects; (VIII) number of forestry projects; (IX) inventory of infrastructures dedicated to forestry research; (X) budget of forestry project per topic area; (XI) most promising forestry research lines.

One of the main results obtained from the mapping survey gave useful information about dissemination of scientific

papers in the Mediterranean area. Such information showed that the ISI (e.g. Thomson Reuters Web of Knowledge platform) journals used by the FORESTERRA countries to publish forest subjects papers are quite large and diversified (as large as 63), with variable impact factors (IF). The top five most utilized journals where the FORESTERRA countries publish their forestry scientific papers are: Forest Ecology & Management (IF: 2.744), European Journal of Forest Research (IF: 1.982), International Journal of Wildland Fire (IF: 2.231), New Phytologist (IF: 6.645) and Tree Physiology (IF: 2.88) (Figure 2).

Conclusions

The main aim of the FORESTERRA project was identifying complementarities, overlaps, gaps, strengths and weaknesses in forest research for providing strategic guidance to the project for future cooperation and forest research coordination activities. Preliminary results allowed to identify the relevant information on existing FORESTERRA countries research Institutions, structures and infrastructures (in terms of facilities, capacities, competencies, and constraints), and ongoing research programmes. Such activity will also allow to define the knowledge gaps and research needs common to the different FORESTERRA countries involved, as well as the barriers, duplications, strengths and weaknesses of existing research activities and capacities, all of which information constitutes the basis for others work packages of the project. Furthermore the information exchange for capacity building and innovation will allow to address the gaps in strategic research capacities and scientific updating between the FORESTERRA countries as basis for a coordinated and integrated process that will lead to the launching of joint activities and transnational research.

References

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