

STRATEGIC FRAMEWORK ON MEDITERRANEAN FORESTS



Rationale

Forests and other wooded lands are highly integrated into Mediterranean landscapes. Through millennia, Mediterranean civilizations have been using multiple social, economic and environmental goods and services provided by these ecosystems. As a consequence the present landscapes are the result of a long-term interaction between populations and forest ecosystems. These multiples goods and services provided by forest ecosystems contribute directly to food security of rural population in the Mediterranean.

Important disparities between northern and southern rims of the Mediterranean are the result of both different degree of urbanization, industrialization and globalization of trade and tourism, and distinct population growth rates. As a consequence of socio-economic processes, forest landscapes and uses have suffered strong alterations and pressures (rural abandonment, aging of rural populations, intensification of production systems, etc.) causing drastic changes in vegetation structure and modifying the role of the primary sector in national economies.

In the North, where forestland is mostly privately-owned, vegetation has expanded due to land abandonment and its natural dynamics. The lack of management has increased the risk of wildfires. The anarchic urban development has also damaged several forest ecosystems. In the South, where forests are mostly publicly owned, human pressure on forest resources – caused by dense and poor rural forest-dependent populations - is very high. Overgrazing and overexploitation of forest products like wood fuel are the most frequent pressures causing degradation, or even desertification, in the Mediterranean region. Several eastern countries are in transition between these two extreme situations due to a strong economic growth in the past ten years (e.g. Turkey, Albania and Croatia).

This pressure on Mediterranean forests is now exacerbated by climate change and socio-economic crisis.

An improved regional cooperation (North-South and South-South) is key to cope with these new challenges.

1. Mediterranean forests provide valuable goods and services

Mediterranean forests ecosystems are composed by forests (25.5 million hectares based on FAO/FRA remote sensing survey 2011) and other wooded lands (about 50 million hectares) which are strongly interconnected with urban and agricultural/rural areas. Mediterranean forests are well known for the extraordinary variety of goods and services they offer, and communities they sustain. Landscape quality, soil and water protection, erosion and desertification control, carbon sequestration, biodiversity conservation, wild-life and hunting, wood and non-wood forest products and recreational activities are some of the appreciated services and externalities provided.

The production of woody forest products is far from being negligible and represents 35% of the total economic value of Mediterranean forests (See Figure 3). Nevertheless it is not enough to meet the needs of the region, which remains a net importer of wood and wood products (See wood flows in the Mediterranean region in Figure 2). In 2010, Mediterranean countries have collectively imported wood products of a value greater than 40 billion USD. Eighty percent of this total (32 billion USD) has been imported from non-Mediterranean countries.



Figure 1: Map of Mediterranean forest ecosystems

Source : *State of Mediterranean Forests 2013* (Mediterranean forests are represented in green, Other Wooded Lands are represented in yellow and the orange limit represents the Mediterranean bioclimatic limit. Quézel - 1985)

Mediterranean forests are also recognized for the extraordinary variety of non-wood forest products used by local population (e.g. cork, medicinal and aromatic plants such as thyme and rosemary, berries, carob, pine nuts, mushrooms and honey). The production of commercial, non-commercial and self-consumable goods, as well as the management and protection of the ability to deliver environmental and social services, offer in job opportunities. This employment generates direct income (marketable goods and services), shadow remuneration (self-consumption) and indirect income through connected products (tourism services, increase values of houses).

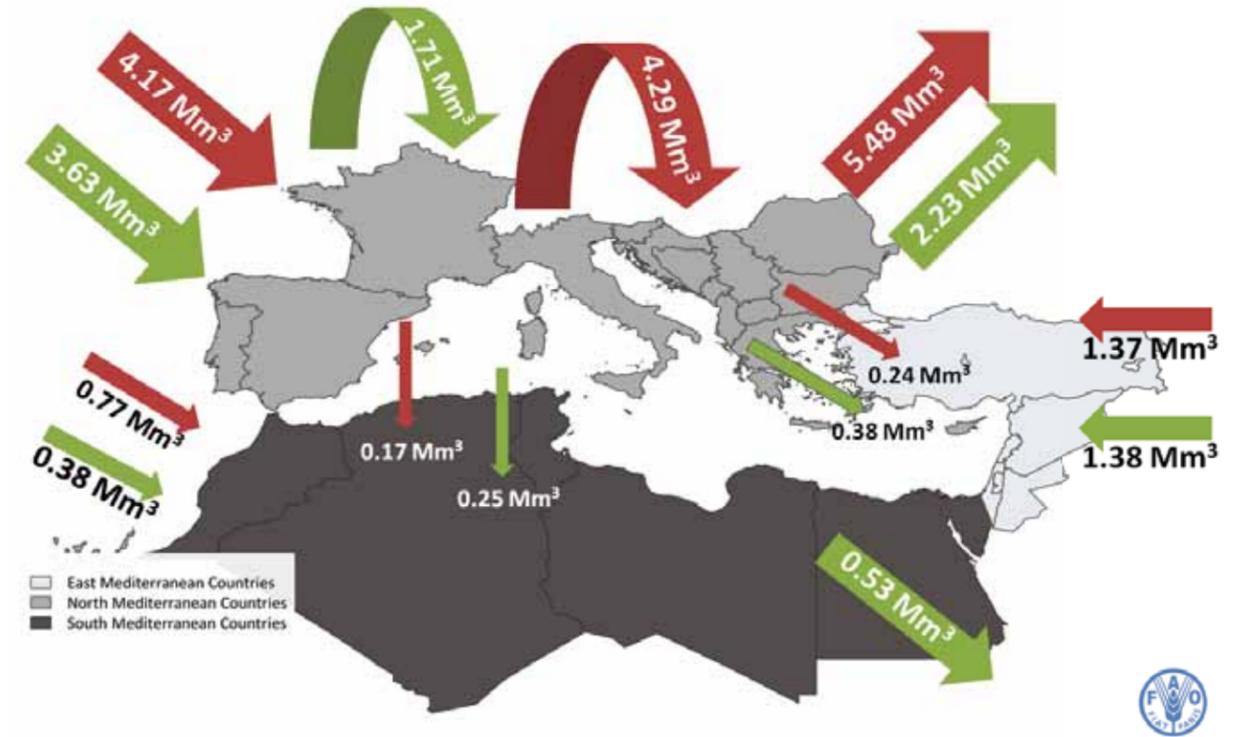


Figure 2: Representation of flows of round wood (in red) and wood-based panels (in green) within the Mediterranean region and with other regions (in millions m³) in 2010

Source of data: FAOSTAT and UNECE/FAO

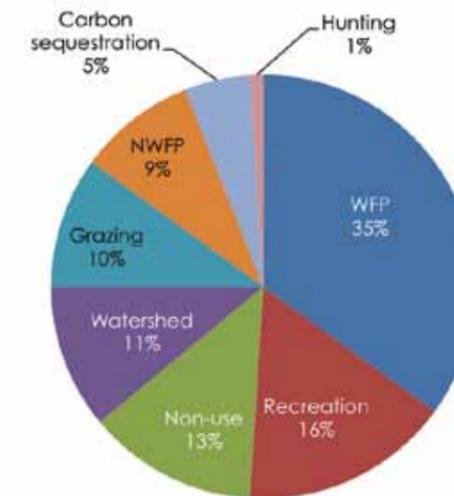


Figure 3: Composition of the total economic value of Mediterranean forests

Source of data: Merlo and Croitoru, 2005

NWFP: non-wood forest products - WFP: wood forest products - non-use: bequest and existence value

2. The Mediterranean: a challenging context

2.1. Increasing pressures on the environment caused by demographic and economic trends

The Mediterranean, with over 500 million people across three continents (Europe, Africa and Asia) and a rich cultural and natural heritage, is an ecoregion with a specific climate, where environment and societies have evolved together for centuries. The Mediterranean climate is characterized by mild winters and hot, dry summers. Precipitations are concentrated in autumn, winter and early spring. Winter temperatures only occasionally go below 0°C at sea level, whereas at high altitudes (e.g. Taurus Mountain in Turkey and the Atlas Mountains in Morocco and Algeria) snow and lower temperatures are common.

Mediterranean population is expected to increase up to 625 million inhabitants by 2050 (Plan Bleu, 2012). Due to decreasing birth rates in European countries, population growth is now occurring mainly in southern countries, and particularly in urban and coastal areas. This pattern is having strong impacts on the environment and causes major challenges to food and water supply.

Human activities are threatening more and more natural resources (evolution of ways of life - climate change), which questions sustainability of current uses of Mediterranean landscapes.

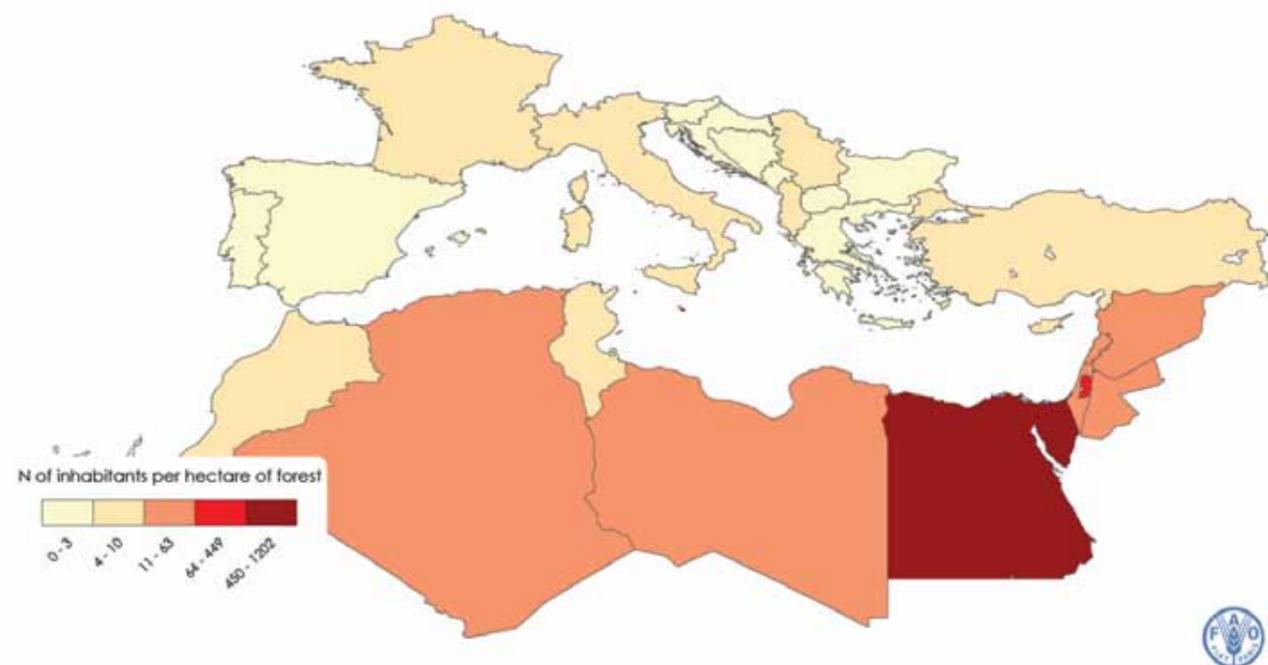


Figure 4: Number of inhabitants per hectare of forest in the Mediterranean basin

Source of data: FAOSTAT and FAO Global Forest Resource Assessment 2010

The number of inhabitants per hectare of forests highlight the human pressure on forest ecosystems (See Figure 4), particularly in the southern Mediterranean where population density per hectare of forest is very high.

The socio-economic situation of Mediterranean countries is also very contradictory with levels of Human Development Index between 0.55 and 0.9 (Figure 5). Consequently, we can observe different expectations among Mediterranean populations regarding forest ecosystems (recreational areas, biodiversity conservation, soil protection, fuel wood production).



Figure 5: Human Development Index 2011 in the Mediterranean region

Source of data: UNDP Report 2011 and Plan Bleu

2.2. A fragile region strongly hit by climate change

Climate change is already a reality in the Mediterranean. The observed and forecast effects, with increasing climatic and weather extremes, are adding new threats and risks to cope with. These factors reinforce the already existing pressures, degradation phenomena and the vulnerability of Mediterranean ecosystems and populations.

The Mediterranean basin: a climate change “hotspot”

By 2100, the Mediterranean climate is set to change with temperatures rising by an average of 2°C to 4°C, while rainfalls drop by 4% to 30% and sea level increases by 18 cm to 59 cm (IPCC, 2007, Plan Bleu, EIB, 2008). Mediterranean countries are particularly vulnerable to effects of climate change due in particular to increasing degradation of their water resources (overuse, pollution, salinification, drop in rainfall) and increased demand in the agricultural, urban and energy sectors. According to climate scenarios, some Southern and Eastern Mediterranean

countries (SEMCs) could see their available water resources fall by a factor of 4 due to drop in average rainfall (World Bank, 2008). Likewise, increasing spatial and temporal variability in rainfall distribution will lead to an increase in extreme events (floods, heat waves, droughts,) and associated risks in terms of economic losses and human lives. Such changes are likely to have significant consequences at the environmental, economic and geopolitical level, especially in Southern and Eastern Mediterranean countries.

During the 20th century, with an evident acceleration since 1970, climate change has led to an increase of temperatures of about 2 °C in the south-western Europe (Iberian Peninsula, southern France). This elevation of the average temperature also concerned North African countries.

The Mediterranean has experienced a rainfall decrease of up 20% in some regions of southern and eastern rims. It is expected that ongoing climate changes will continue and increase in the Mediterranean region in the next decades, mainly altering air and sea temperatures and precipitation patterns (with more irregular distribution of rainfall as explained in the box ‘The Mediterranean basin: a climate change hotspot’).

As a consequence, important and sometimes irreversible changes have been affecting the Mediterranean environment especially those wooded lands particularly fragile because close to the limit of their ecological range distribution. Many important economic activities and human settlement in the region are and will be more and more affected by these changes.

3. Mediterranean landscapes facing new threats and pressures

Climate change and anthropogenic activities are rapidly weakening Mediterranean forest ecosystems resilience, increasing land and forest degradation, loss of renewable resources and loss of biodiversity. The increase in magnitude and frequency of climate or weather extreme events is exacerbating threats and risks affecting forest ecosystems.

Even if ecosystems responses to a strong increase in temperature and in climate aridity are difficult to predict, it is certain that the loss in biodiversity, desertification, water scarcity and risk of forest fires and health damage will aggravate by the next decades.

3.1. While loss in biodiversity is already under way, forest genetic diversity is crucial for adapting to climate change

The Mediterranean is a biodiversity hotspot with high biologic diversity and endemism rates. It has over 25 000 plant species (compared to only 6 000 species in central and northern Europe), and about 250 arborescent species, among which 150 are exclusively or preferably found in the region (endemic). In addition, 15 genera are specific to Mediterranean forests (Scarascia-Mugnozza et al., 2000). According to the IUCN Red List, about 124 plant species found in forests of Mediterranean countries and about 18% of almost 3 000 species of different taxonomic groups are endangered.

The Mediterranean region is also a key area for conservation and differentiation of European gene resources and, therefore, it is also considered as a hotspot of gene diversity. Conservation of forest genetic resources is recognized as vital as it provides the basis for the evolution of forest tree species and for their adaptation to current global changes. Only few studies in the past decades have focused on genetic diversity of Mediterranean species but recent research networks (e.g. EUFORGEN and *Silva Mediterranea* Working Group on Forest Genetic Resources) carry out activities of pioneering explorations, exchanges, evaluations and conservation of Mediterranean forest genetic resources.

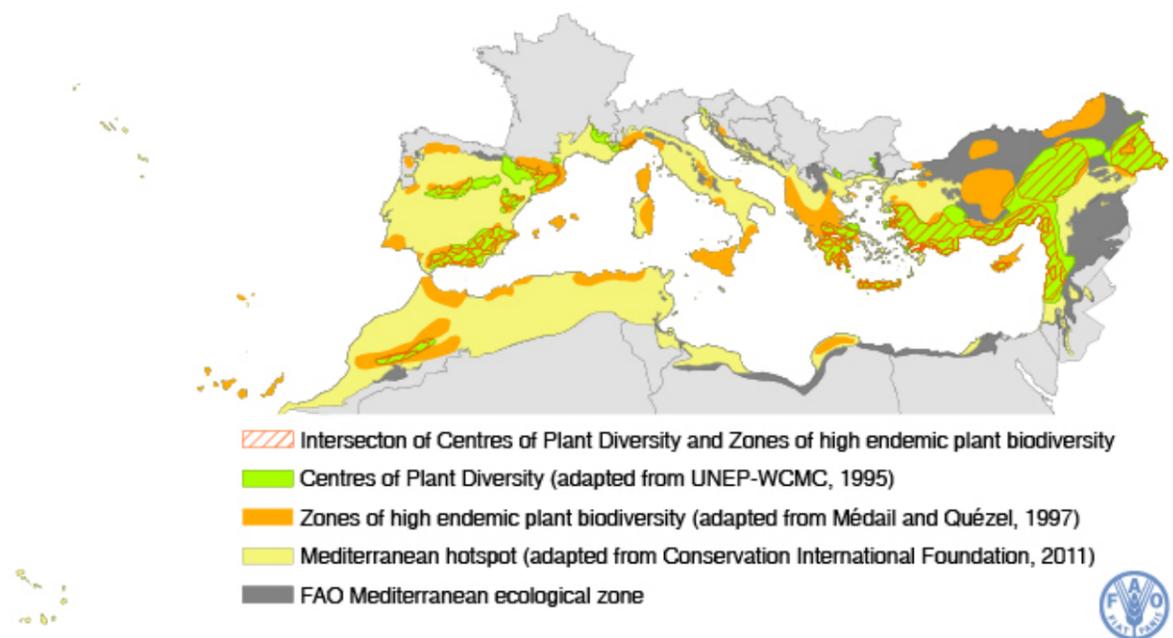


Figure 6: Biodiversity hotspots and centres of high endemic plant diversity in the Mediterranean
 Source: State of Mediterranean Forests 2013

3.2. Coping with water resources scarcity

High pressures on water resources are already calling for rationalizing management of water uses and demands in the Mediterranean region. Sixty percent of the world population living in water-poor countries is concentrated in the Mediterranean region. Water scarcity is even more problematic as resources are unequally distributed through the region: in 2009, Turkey, France, Italy and Spain shared 67% of renewable resources in water whereas southern and eastern Mediterranean countries had only a quarter of the available water resources (27%).

The areas affected by water scarcity are expected to increase in the next decades, affecting more and more seriously human well-being, local economies, and aggravating pressures on the environment and land degradation. In particular, high density of trees due to the lack of forest management can increase the vulnerability of forests to water scarcity and other natural hazards such as pests, diseases or wildfires. Forest management should address water scarcity issues, as it can contribute to increase forest resilience to water stress and to find a better balance between water demands from various sectors.

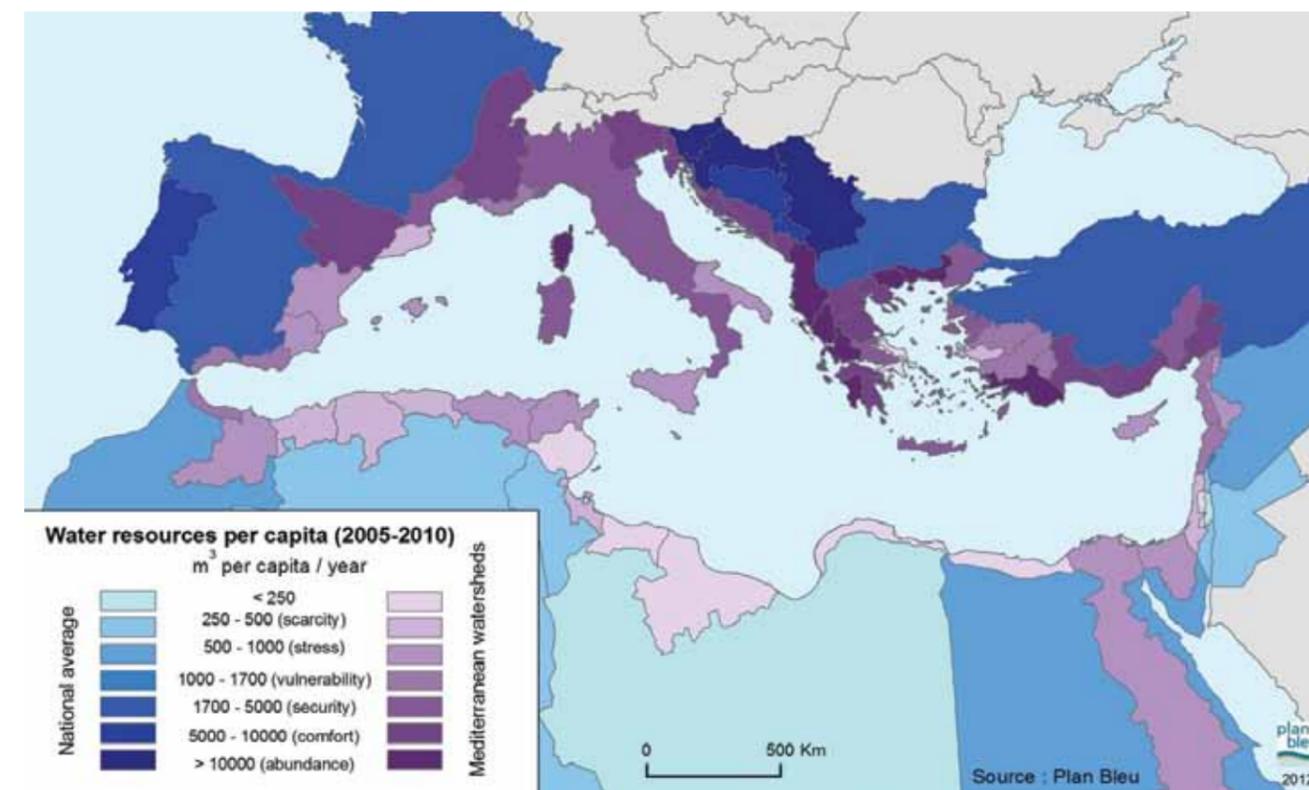


Figure 7: Water resources per capita in watersheds around the Mediterranean Sea
 Source of data: Plan Bleu

3.3. An increasing risk of wildfires over next decades

Lack of land management or rural abandonment over last decades in North Mediterranean countries has caused the development of shrubs and fine fuels that facilitate wildfires propagation.

Wildfires are already a major issue in the Mediterranean region. From 2006 to 2010, the total burnt area was over 2 million hectares with a total number of wildfires in the Mediterranean up to 250 000 (about 54 000 wildfires per year).

Consequences of wildfires are both socio-economic (including loss of human lives, properties and other infrastructures) and ecological (degradation of forest cover and loss of biodiversity). The socio-economic impacts of wildfires for the society entail a decrease in market prices of goods and huge losses in environmental and social services provided by forests.

Cost of wildfires: the case of Portugal.

In the National Forest Strategy published in Portugal in 2007, the average annual costs of wildfires for the previous 10 years, with 162,000 ha burned per year, was 378 million Euros, about one third of the value annually produced by Portuguese forests (including wood, cork and other non-wood products, the protective functions of forest). The estimated annual cost includes prevention and suppression of wildfire. In the National Forest strategy the minimization of wildfire risk is a priority for the conservation of Portuguese forests.

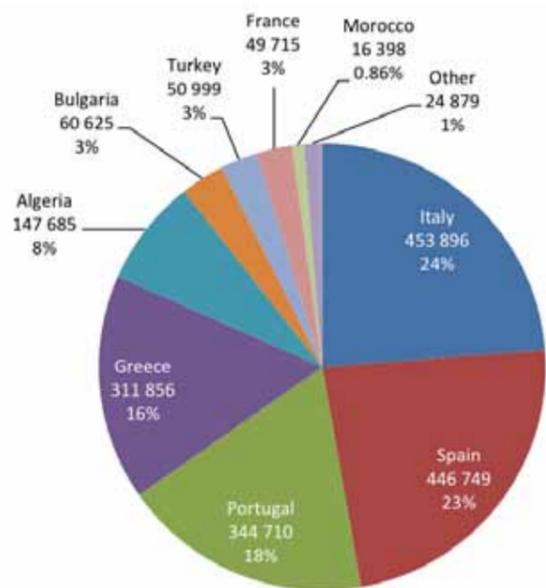


Figure 8: Total burnt area for the period 2006-2010: 2 078 975 ha
Source: State of Mediterranean Forests 2013

As a consequence of climate change, an overall increase in burnt areas and a rise in the frequency, intensity and severity of wildfires are expected by next decades. The number of days per year of high fire risk is already increasing and new areas will be affected by wildfires. The risk of mega-fires, difficult to extinguish, will also rise in the Mediterranean. In northern Mediterranean countries, due to reforestation programs and agricultural decline, forests and other wooded lands are expanding increasing fire risks, while in southern Mediterranean countries, the pressure remains high, maintaining the fire risk at lower levels, with wood fuel collection, grazing and agricultural encroachment.

This information on wildfires is reported at national level and, consequently, does not distinguish wildfires among different forest types. This lack of information on wildfires in Mediterranean forest type does not allow showing the exact burnt area in Mediterranean landscapes, even if the highest percentage of burnt area is concentrated in these ecosystems. For example, wildfires in the French Mediterranean region represented 69 % of the national total burnt area for the period 2000-2010.

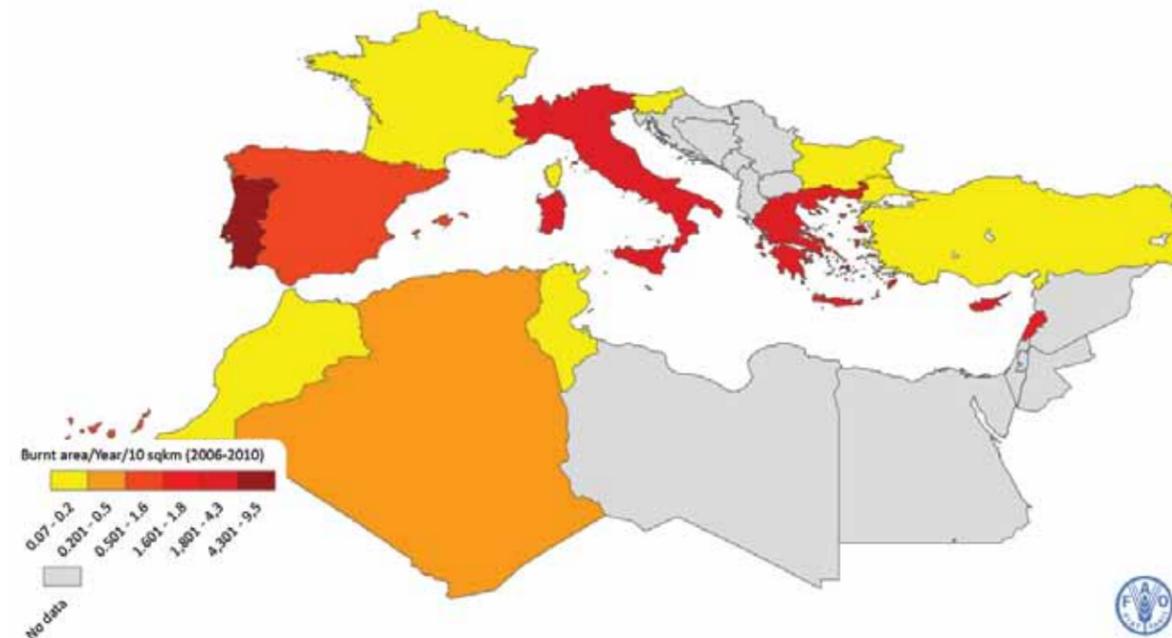


Figure 9: Mediterranean total burnt area per year per 10 square kilometers of total national land area
Source: State of Mediterranean Forests 2013

3.4. New forest health threats in the Mediterranean

Outbreaks of forest insect pests damage some 35 million hectares of the world's forest annually (FAO, 2010). Out of this global figure, over five million hectares were reported from the Mediterranean region alone, which represent over 14% of the global damage and almost 6% of the total forest area of the region.

Climate change can affect forest pests and the damage they cause by: directly impacting their development, survival, reproduction and spread; altering host defences and susceptibility; and indirectly impacting the relationships between pests, their environment and other species such as natural enemies, competitors and mutualists.

A deeper understanding of the complex relationships between a changing climate, forests and forest pests is vital to enable those responsible for forest health protection and management to anticipate and prepare for changes in pest behaviors, outbreaks and invasions (FAO, 2008).

4. Forest governance in the Mediterranean: towards integrated national forest programmes and policies

Today, forest administrations and other stakeholders in the Mediterranean, particularly in southern and eastern countries, are aware of the different forms of overuse, competing land uses and climate change impacts, which negatively affect forest resources and other related sectors (agriculture, energy, tourism, water, etc.).

In northern Mediterranean countries, forest managers are under the pressure of high social demands for environmental services, without enough adapted policies, financing mechanisms and other instruments. In the whole region, most national development policies do not consider the forest sector as a priority.

Furthermore, closely related sectors which benefit directly from forest goods and services (e.g. agriculture, energy, tourism, mining and health) rarely recognize their value and/or contribute through investment for their sustainable management.

Most countries in the region have engaged in a National Forest Programme process to move towards sustainable forest management, improve forest governance and develop more cross-sectoral and participatory approaches for the development, implementation and evaluation of forest policies.

National Forest Programmes (NFP) are encouraging multi-stakeholders participatory approaches at both national and local levels, which are not widespread practices yet, but are progressing in many countries.

In the past ten years, most countries have paid greater attention and adopted specific policies to the issues of climate change, forest fires, forest health and vitality as well as the protective functions of forests, especially erosion control.

Until now, little attention has been given to most of Non-Wood Forest Products (NWFPs) except for well recognized products such as cork (Portugal and Spain) or pine nuts (Spain, Turkey, Lebanon, etc.).

Although some countries have adopted policies to encourage sustainable management and use of NWFPs, there is still much to be done to recognize their value and take them into account in management decisions.

At the territorial level, local initiatives based on participatory and intersectoral approaches are multiplying and bringing progress in terms of governance, enabling to face the new challenges of sustainable forest management. Land tenure reform should also be addressed in several Mediterranean countries in order to improve the involvement of local stakeholders in sustainable management of forest ecosystems.

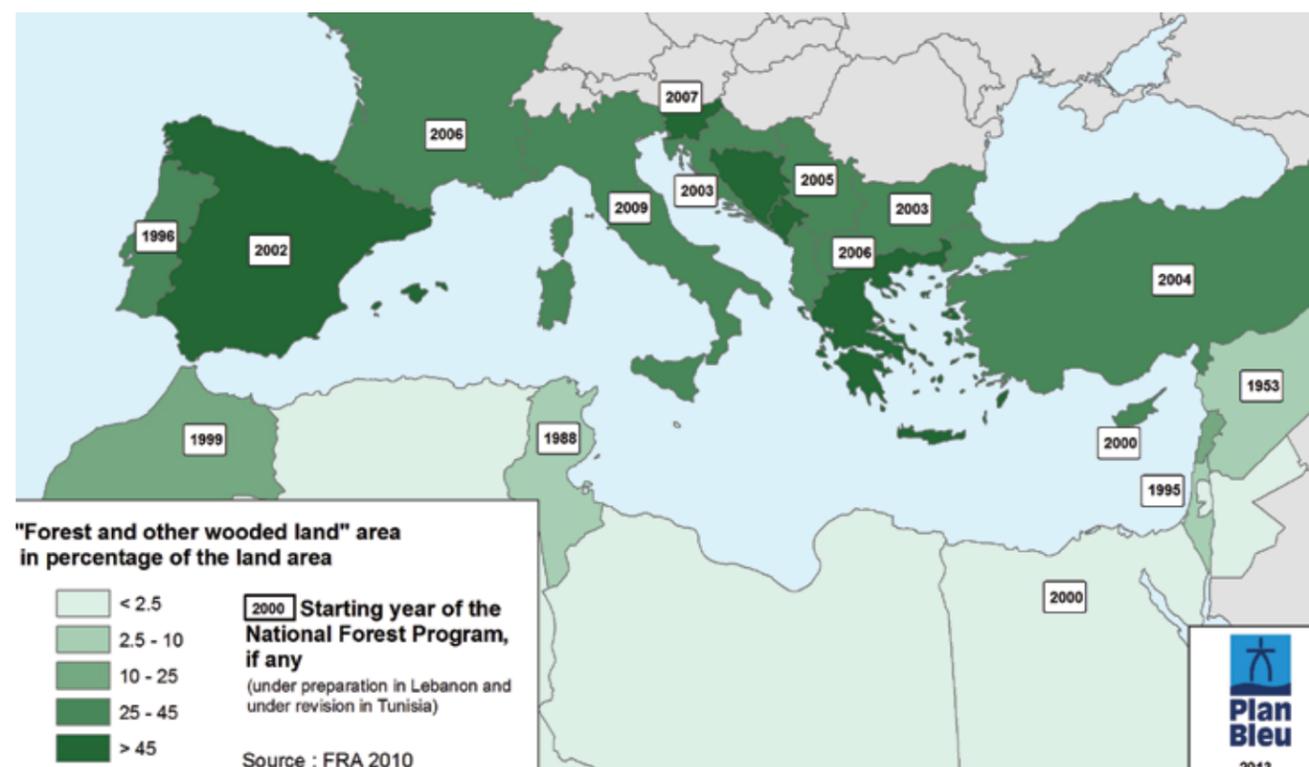


Figure 10: National Forest Programmes in the Mediterranean
Source: Plan Bleu

The need for a regional cooperation to face these Mediterranean forest issues led to the creation of the Collaborative Partnership on Mediterranean Forests in 2010, as well as to the organization of Mediterranean Forests Weeks every two years.

5. Policy orientations for the management of Mediterranean forests

National and regional forest policies should be revised, completed or adapted and implemented for Mediterranean forests to maintain their quality, to continue to provide the various ecological and socio-economic goods and services and to contribute to socio economic development, based on an integrated landscape planning. As forests provide essential contributions to rural and urban populations and economies, such policies should be closely coordinated with socio-economic development strategies.

Improving governance of policy development, implementation and monitoring appears crucial, and implies to work at landscape/territory level and to foster the participation of all stakeholders.

The most critical aspects in this process are the effective involvement of all stakeholders at territorial level (local governance including land tenure aspects) and the continued support of training, research, innovation and communication, along with a stronger collaboration between relevant economic sectors.

Renewed policy orientations for the management of Mediterranean forests are needed.

Three main objectives and encompassing nine strategic lines are recommended as follow:

Objectives	Strategic lines of the Strategic Framework on Mediterranean Forests
Developing and promoting forest goods and services	Improve sustainable production of goods and services by Mediterranean forests
	Enhance the role of Mediterranean forests in rural development
	Promote forest governance and land tenure reforms at landscape level
Promoting resilience under global changes	Promote wildfire prevention in the context of global changes
	Manage Forest Genetic Resources and biodiversity to enhance adaptation of Mediterranean forests
	Restore degraded Mediterranean forest landscapes
Enhancing capacities and mobilizing resources	Develop knowledge, training and communication on Mediterranean forests
	Reinforce international cooperation
	Adapt existing financing schemes and develop innovative mechanisms

This **Strategic Framework on Mediterranean Forests: policy orientations for integrated management of forest ecosystems in Mediterranean landscapes**, should be implemented according to the characteristics and needs of each Mediterranean country.



Strategic line 1



Improve sustainable production of goods and services by Mediterranean forests

EXPECTED RESULTS

- Policies are improved and adapted to Mediterranean challenges with an intersectoral approach
- Mediterranean forests are managed to provide multiple goods and services
- Benefits to forest owners are ensured to promote sustainable forest management
- Environmental and social services are recognized as challenging elements in Mediterranean forest management

Recommendation 1:

Valorize processing market value chains of wood and NWFP (cork, honey, mushrooms, etc.) while preserving Mediterranean forest resources;

Recommendation 2:

Develop knowledge on quantity and quality of goods and services that are produced and used, to improve management plans and increase sustainability of forest management;

Recommendation 3:

Involve all stakeholders in the process of forest policy design, formulation, implementation and monitoring, especially local population and private sector;

Recommendation 4:

Recognize, make the population aware and further explore services provided by urban and peri-urban forests to population;

Recommendation 5:

Develop and implement forest policy rules and mechanisms facilitating trade-off between water, soil protection and other goods and services;

Recommendation 6:

Define management rules and practices that support provision of goods and services benefiting rural population;

Recommendation 7:

Set up financial mechanisms (national funds, PES, compensations) to support policies ensuring the provision of environmental and social services;

Recommendation 8:

Improve knowledge and assessment on social and environmental services for their integration into policies;

Recommendation 9:

Integrate existing international initiatives on the economic valuation of ecosystems goods and services, such as TEEB (The Economics of Ecosystems and Biodiversity) and the IPBES (International Platform on Biodiversity and Ecosystem Services);

Recommendation 10:

Promote researches to provide valuable tools which will ensure the sustainable production of goods and services.





Strategic line 2

Enhance the role of Mediterranean forests in rural development



EXPECTED RESULTS

- Income and employment are created in rural areas
- Local resources are valorized and their local added value is enhanced to benefit rural population
- Local population is involved in maintenance, protection and development of forest resources
- The role of Mediterranean forests is increased in rural development policies

Recommendation 1:

Adapt measures and fiscal arrangements to encourage rural pluriactivity;

Recommendation 2:

Support local stakeholders to organise themselves (cooperatives, associations, groups of producers for innovative activities);

Recommendation 3:

Develop management plans which recognize the wide range possible sources of income from Mediterranean forests;

Recommendation 4:

Encourage production, quality label development, marketing and traceability of local products, especially through short supply chains;

Recommendation 5:

Enhance the development and marketing of eco-tourism by promoting eco-touristic strategies and related investments in wooded areas;

Recommendation 6:

Clarify land use rights and adapt rules in order to facilitate or control the access of local population to forest resources;

Recommendation 7:

Encourage sharing of experiences in innovative approaches of integrating forest issues in rural development through existing international networks;

Recommendation 8:

Raise necessary investment capacities for Small and Medium Enterprises (SMEs) working in WFP and NWFP value chains;

Recommendation 9:

Create job opportunities for young people (men and women) in the WFP and NTFP value chains as a way to combat rural exodus.





Strategic line **3**



Promote forest governance and land tenure reforms at landscape level

EXPECTED RESULTS

- All relevant stakeholders are involved in Mediterranean forest management
- Dialogue is enhanced between the forest sector and other sectors
- Decisions taken at various levels are coordinated (from local to international level)

Recommendation 1:

Support the development of inter-sectoral collaborative bodies at all levels;

Recommendation 2:

Ensure the involvement of stakeholders in the decision making process;

Recommendation 3:

Take into account traditional use rights of local populations for implementation of land tenure reforms in Mediterranean landscapes;

Recommendation 4:

Better communicate on benefits provided by forests and success stories outside the forest sector;

Recommendation 5:

Launch pilot projects at landscape level integrating various sectors that benefits from forest goods and services;

Recommendation 6:

Encourage a bottom-up approach for landscape planning based on local expectations and needs in order to adapt forest management practices and to optimize the production of goods and services;

Recommendation 7:

Reframe the role and structure of forest administrations towards coordination and support service;

Recommendation 8:

Promote networking efforts to produce cross-checked and shared knowledge on Mediterranean forests;

Recommendation 9:

Consider forest-based solutions to adapt economic sectors and people to climate change at landscape level.





Promote wildfire prevention in the context of global changes



EXPECTED RESULTS

- The increasing risk of wildfires are addressed through new fire management approaches and policies
- Good practices are developed in order to reduce the increasing risks of Mediterranean wildfires in the context of climate change

Recommendation 1:

Enhance international cooperation on wildfire prevention

Promote exchange programmes at all levels and improve bilateral or international cooperation;

Place the debate on wildfire management in the international agenda;

Encourage agencies and groups to support the adoption of Fire Management Voluntary Guidelines;

Develop transboundary cooperation on wildfire prevention and suppression in the Mediterranean;

Recommendation 2:

Integrate wildfire prevention in forest programs/policies and in adaptation strategies to climate change

Implement the recommendations proposed in the Position Paper on wildfire prevention in the Mediterranean published by FAO in 2011;

Carry out cross sectoral prevention actions with more coordination among stakeholders to face forest, agricultural and spatial planning issues (grazing, stubble burning, woodland organization);

Clarify legal aspects and define obligations of stakeholders;

Encourage development of wildfire management plans;

Promote integrated fire management approaches including possible use of prescribed fire;

Recommendation 3:

Promote knowledge and education on wildfire prevention

Tackle the priorities on forest fires identified in the Mediterranean Forest Research Agenda (MFRA) for the period 2010 – 2020;

Develop and implement International training courses with a harmonized training methodology on wildfire prevention for land and forest managers;

Implement awareness campaigns targeting local communities and people visiting the region;



Strategic line 4

Recommendation 4:

Enhance sustainable financial mechanisms for prevention of wildfires

Allocate specific funds to support wildfire prevention plans and programmes;

Promote the economic value and potential of forests to increase interest and engagement on their management in order to decrease the cost of wildfire prevention;

Evaluate effects and efficiency of prevention measures;

Recommendation 5:

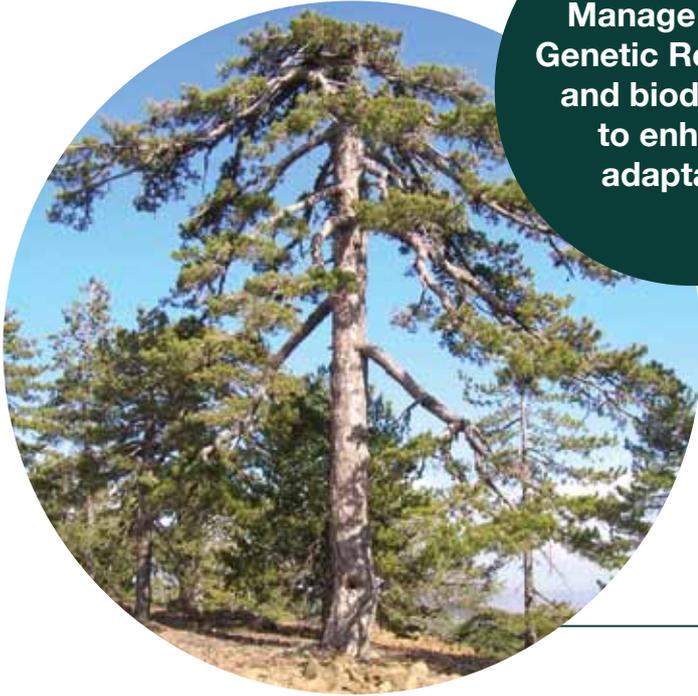
Enhance harmonized Information Systems to deal with new wildfire risks

Share updated information between countries on structural prevention issues;

Maintain, improve and enlarge the European Forest Fire Information System (EFFIS).

Promote wildfire prevention in the context of global changes





Manage Forest Genetic Resources and biodiversity to enhance adaptation

EXPECTED RESULTS

- Management rules practices and tools are improved to enhance forest resilience to climate change
- Quality and genetic diversity of reproductive materials are improved in order to build resilient landscapes

Recommendation 1:

Integrate knowledge on genetics, eco-physiology and forest dynamics to develop new decision support models and tools useful for forest managers and develop adaptive silvicultural practices in the context of climate change;

Recommendation 2:

Keep forest management options open to maintain genetic diversity over the long term;

Recommendation 3:

Take action on natural regeneration and plantations to foster evolutionary processes;

Recommendation 4:

Choose the suitable species, varieties and genotypes, in particular native ones, well adapted to local constraints and needs;

Recommendation 5:

Promote innovative technologies with low water intake for plant production in tree seed centres and nurseries to improve the quality of seeds, seedlings and cuttings;

Recommendation 6:

Review existing guidelines (e.g. FAO and EU guidelines) for transferring reproductive material, in particular to facilitate ex situ conservation of specific endangered species;

Recommendation 7:

Produce high quality reproductive plant material (seeds, seedlings, cuttings) of Mediterranean trees, shrubs and grasses with wide gene diversity;

Recommendation 8:

Incorporate the management of forest genetic resources into National Forest Programmes and National Adaptation Strategies to Climate Change;

Recommendation 9:

Maintain and establish networks for long-term multidisciplinary experiments to analyse responses of species/ecosystems in a changing environmental context;

Recommendation 10:

Establish protected areas to conserve forest genetic resources and biodiversity for the future generation, particularly in order to protect endangered species and habitats (especially ancient forests).







Restore degraded Mediterranean forest landscapes

EXPECTED RESULTS

- Resilience to climate change is enhanced by restoring Mediterranean forest ecosystems with a global vision to cope with desertification issues
- Forest ecosystems restoration is promoted as an opportunity to enhance food security and livelihood in Mediterranean drylands
- Environmental and cultural services (including biodiversity) are regained in these restored forest ecosystems
- Forest restoration is considered long term and integrated approaches, restored forest ecosystems are managed, monitored and evaluated

Recommendation 1:

Recognize and ensure the contribution of forests and sustainable forest management in the combat against desertification;

Recommendation 2:

Identify restoration priorities and goals as well as required funding on the long-term;

Recommendation 3:

Develop capacity of foresters and users on restoration approaches, practices and tools;

Recommendation 4:

Manage restoration as a collaborative action by promoting good governance at local level, involving all relevant stakeholders and sectors;

Recommendation 5:

Plan forest restoration actions at the right scale and with an integrated approach on the long-term and addressing drivers of land degradation and desertification;

Recommendation 6:

Select the right species, varieties and genotypes. The promotion of native species is often the best choice as they meet social, environmental, cultural and economic demand and they are well adapted to environmental constraints such as water scarcity and communities needs;

Recommendation 7:

Use high quality reproductive plant material (seeds, seedlings, cuttings) of Mediterranean trees, shrubs and grasses with wide genetic diversity;

Recommendation 8:

Promote natural regeneration to restore forest ecosystems as often as possible particularly after wildfires;

Recommendation 9:

Ensure sustainable management and protection of the restored areas;

Recommendation 10:

Ensure monitoring and evaluation for adaptive management;

Recommendation 11:

Develop and implement participative methods for assessment and monitoring of forest restoration projects for future improvement of results in degraded landscapes.







Develop knowledge, training and communication on Mediterranean forests

EXPECTED RESULTS

- A shared vision is developed on Mediterranean forestry questions
- Knowledge and expertise are improved on Mediterranean forests
- Communication is reinforced towards other sectors and the general public
- Capacity is strengthened to help stakeholders in addressing new challenges

Recommendation 1:

Promote training of forest sector stakeholders (forest owners, forest managers and private sector), students, local representatives and other decision-makers;

Recommendation 2:

Improve the coordination of forest research in the Mediterranean (Foreterra, Horizon 2020, COST, etc.) and implement the Mediterranean Forest Research Agenda 2010-2020;

Recommendation 3:

Develop knowledge and tools to manage new biotic and abiotic disturbances of climate change;

Recommendation 4:

Promote innovation on Mediterranean forestry issues;

Recommendation 5:

Develop and, when necessary, harmonize information systems avoiding administrative burden (EFFIS, national monitoring systems, national forest inventories and other international processes as Forest Resources Assessment or State of the European Forests);

Recommendation 6:

Publish every 5 years, an updated report on the State of Mediterranean Forests taking into account the new challenges. The preparation process of this report will be an opportunity to identify gaps in data and to improve and strengthen monitoring systems;

Recommendation 7:

Promote and adapt forestry training to new challenges in the Mediterranean. Strengthen cooperation among forestry training centres;

Recommendation 8:

Enhance dialogue and cooperation with other sectors: water, energy, mining, tourism, rural development as well as other regions in the world with Mediterranean climate conditions;

Recommendation 9:

Develop and implement a communication strategy on Mediterranean forests to highlight their positive impacts on Mediterranean landscapes and rural development;



Strategic line 7

Recommendation 10:

Raise media awareness on Mediterranean forestry issues and reinforce the quality of communication for forest users and the general public;

Recommendation 11:

Continue the networking efforts developed by members of the Committee on Mediterranean Forestry Questions - *Silva Mediterranea* and partners to produce cross-checked and shared knowledge on Mediterranean forests.

**Develop knowledge,
training and
communication
on Mediterranean
forests**





Reinforce International Cooperation

EXPECTED RESULTS

- Regional institutions and collaborative partnerships are strengthened in the Mediterranean
- New regional cooperation programmes are developed to enlarge the current projects portfolio
- Fundraising and investments are promoted in Mediterranean forest sectors

At the institutional level

Recommendation 1:

Continue the current dynamic of the Committee on Mediterranean Forestry Questions-*Silva Mediterranea*, in terms of exchange of experiences and promotion of collaborative partnerships;

Recommendation 2:

Integrate forestry topics in the several fora on the UE-MENA dialogue and raise awareness of the European Commission on Mediterranean forest issues;

Recommendation 3:

Develop collaboration on prevention and mitigation with United Nations Convention to Combat Desertification considering the high risk of desertification on Mediterranean forest ecosystems

Recommendation 4:

Develop shared vision and positions on Mediterranean forests specific issues, and promote them within international organizations (UNFF, Forest Europe, UNECE, EU, FAO, EFI, World Bank, Rio conventions);

Recommendation 5:

Integrate forest issues in the programs of bilateral cooperation agencies (North-South, South-South and North-North);

Recommendation 6:

Simplify administrative procedures and reduce the delay for the preparation and negotiation of project proposals;

At the level of the Collaborative Partnership on Mediterranean Forests

Recommendation 1:

Strengthen and expand the Collaborative Partnership on Mediterranean Forests (CPMF) as an open and flexible model of cooperation and dialogue;

Recommendation 2:

Raise awareness among managers of European funds and programmes eligible for Mediterranean forests (European Neighbourhood Policy Instrument, Structural Funds, Social funds, Europe Aid, Horizon 2020, etc.);

Recommendation 3:

Support local stakeholders in the establishment and preparation of bilateral, European or international project proposals;

Recommendation 4:

Encourage decentralized cooperation mechanisms to reinforce direct links between Mediterranean landscapes.







Adapt existing financing schemes and develop innovative mechanisms

EXPECTED RESULTS

- Budget allocations of forest administrations are adapted to financial needs for ensuring sustainable forest management (SFM) and the sustainable provision of forest goods and services
- Sustainable financing strategies for the forest sector are developed, based on a wide range of financing solutions from public, private, national and international sources
- Innovative financing mechanisms and instruments are explored and adapted to the Mediterranean context

Recommendation 1:

Adapt the budget allocation of the forest sector in the Mediterranean region by developing financing strategies based on a wide range of financing solutions from public, private, national and international sources;

Recommendation 2:

Develop, according to the legal framework, the use of National Forest Funds (NFF) as a key institutional and financial instrument for supporting SFM through mobilization of public and private resources;

Recommendation 3:

Promote the assessment of the value of forest goods and services and related management costs and benefits in order to:

- Advocate for adapted budget allocations for the forest sector;
- Help to build cost-efficient financing mechanisms for SFM;

Recommendation 4:

Adapt to the Mediterranean context Innovative Financing Mechanisms (IFM) and instruments such as Payments for Ecosystem Services (PES) schemes, REDD+ and compensation mechanisms;

Recommendation 5:

Create the enabling environment for the development of Innovative Financing Mechanisms (IFM):

- Improve the understanding of these mechanisms through capacity development;
- Learn good practices from other regions;
- Communicate widely on the importance of forest ecosystems goods and services and the need to raise necessary financial resources for their sustainable management;
- Start designing first initiatives of IFM, such as REDD+ pilot projects in selected areas of the region;

Recommendation 6:

Enhance the involvement of the private sector in developing the value chains of wood and non wood forest products;



Strategic line 9

Recommendation 7:

Promote the use and the value of wood and non-wood forest products from sustainable forest management including the use of certification schemes (forest management certification, ethical bio-trade, fair-trade, etc);

Recommendation 8:

Support decentralized financing tools (micro-finance, local investment banking) for Small and Medium Enterprises (SMEs) working on wood and non-wood forest products;

Recommendation 9:

Promote forest-based solutions to offset emissions of greenhouse gases or compensate biodiversity loss and develop systems for the private sector to support these solutions through their Corporate Social and Environmental Responsibility (CSE) strategies;

Recommendation 10:

Explore and seize the financing opportunities of the three Rio conventions (UNCBD, UNCCD, UNFCCC), including the REDD+ mechanism, the Adaptation Fund, the Green Climate Fund, the Access and Benefit Sharing mechanism (ABS), the opportunities presented by the Global Mechanism of the UNCCD, and the synergies between Rio conventions (financed by GEF).

**Adapt existing
financing schemes
and develop
innovative
mechanisms**



We, participants at the high-level segment of the third Mediterranean Forest Week held in Tlemcen -Algeria -March 21, 2013, have taken note of the policy orientations proposed by experts from the Mediterranean and discussed during the week.

Convinced that forest ecosystems and other wooded lands in the Mediterranean are an important component of our landscapes and they contribute significantly to rural development, poverty alleviation and food security of these Mediterranean landscapes.

Aware that these forest ecosystems and other wooded lands in the Mediterranean are both sources of wood, cork, energy, food, incomes and many other environmental goods and services (*biodiversity conservation, soils and water protection, recreational areas, significant potential for carbon storage*) often crucial for many economic sectors of our country (*food and agriculture, soils and water conservation, drinking water supply, tourism, energy and forest industry*).

Whereas the global changes that affect today the Mediterranean region (*changes in societies and lifestyles with, in addition, climate change*) heavily mortgaging the future of these forest ecosystems and other wooded land (*loss of biodiversity, increasing risk of forest fires and other biotic hazards, watershed degradation and desertification processes*) and, therefore, jeopardizing the sustainable provision of these multiple goods and services to populations.

Convinced that combatting the already on going desertification in our Mediterranean landscapes should be a priority in our forest and environmental policies.

We wish that the political and administrative authorities at national, regional and local level and all other stakeholders involved in the management of forest ecosystems and other wooded lands in the Mediterranean (*private or public managers and civil society*) continue to develop and, if necessary, adapt their strategies and policies, including governance, for sustainable development of our landscapes.

We also ask forest managers, experts and scientific community of the forestry sector to develop and implement, in consultation with all relevant stakeholders, innovative and sustainable management practices of landscapes to be disseminated and shared between countries of the Mediterranean region.

In this spirit, according to characteristics and needs of each country, we are committed to continue implementing actions and measures in order to achieve the proposed objectives in the document entitled "Strategic Framework on Mediterranean Forests: policy orientations for integrated management of forest ecosystems in Mediterranean landscapes", namely:

1) Developing and promoting goods and services provided by forest ecosystems and other wooded lands in the Mediterranean through implementation of the following strategic lines:

- Improve sustainable production of goods and services by Mediterranean forests;
- Enhance the role of Mediterranean forests in rural development;
- Promote forest governance and land tenure reform in Mediterranean landscapes;



- 2) Promoting resilience of forest ecosystems and other wooded lands in the Mediterranean to face global changes through the implementation of the following strategic lines:
- Promote wildfire prevention by integrating increasing risks associated to ongoing climate change in the Mediterranean;
 - Manage forest genetic resources and biodiversity to enhance adaptation of forest ecosystems and other wooded lands to climate change in the Mediterranean;
 - Restore degraded Mediterranean forest landscapes.
- 3) Enhancing capacity of stakeholders and the resources mobilization necessary for the sustainable management of forest ecosystems and other wooded lands in the Mediterranean through the implementation of the following strategic lines:
- Develop knowledge, training and communication on Mediterranean forests;
 - Reinforce international cooperation on Mediterranean forests;
 - Adapt existing financing schemes and develop innovative mechanisms to support implementation of forest policies and programs on Mediterranean forests.

High Level Segment of the Third Mediterranean Forest Week

Tlemcen, March 21, 2013

