***Report of the II meeting of the contributors of the State of Mediterranean Forests* – 2nd edition**

The meeting was organized *via* Skype in two days (15 and 16 December 2016) due to general problems in internet connection.

Several contributions/confirmations were received by email:

* Abdelmalek Abdelfettah and Ghania Bessah (GDF Algeria)
* Fabio Attorre (Univ. Sapienza, Italy)
* Ismail Belen and colleagues (Directorate General of Combatting Desertification and Erosion,Turkey)
* Nora Berrahmouni (FAO)
* Miguel Bugalho (University of Lisbon and WWF Mediterranean Program, Portugal)
* Irina Buttoud (FAO)
* Bruno Fady (INRA Avignon, France)
* Christine Farcy (Université catholique de Louvain, Belgium)
* Diego Florian (FSC Italy)
* Magali Maire (FAO)
* Marco Marchetti (Università degli Studi del Molise, Italy)
* Ameur Mokhtar (GDF Tunisia, to be re-contacted)
* Sven Mutke (CIFOR-INIA, Spain)
* Miguel Segur (MMFN)

**List of Participants**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Organization** | ***via* Skype** | **At FAO** |
| **15 December 2016** | | | |
| Nicolas Picard | FAO Silva Mediterranea |  | x |
| Valentina Garavaglia | FAO Silva Mediterranea |  | x |
| Carolina Gallo Granizo | FAO FLRM |  | x |
| Caterina Marchetta | FAO Silva Mediterranea/FLRM |  | x |
| Pablo Martin | FAO/Univ. Madrid |  | x |
| Michela Conigliaro | FAO UPF |  | x |
| Fabio Salbitano | University of Florence (Italy) |  | x |
| **16 December 2016** | | | |
| Nicolas Picard | FAO Silva Mediterranea |  | x |
| Valentina Garavaglia | FAO Silva Mediterranea |  | x |
| Carolina Gallo Granizo | FAO FLRM |  | x |
| Pablo Martin | FAO/Univ. Madrid |  | x |
| Ismail Belen (and colleagues) | Directorate General of Combatting Desertification and Erosion (Turkey) | x |  |
| Bart Muys | EFIMED | x |  |
| Ilaria Dalla Vecchia | FSC Italy | x |  |
| Gonzalo Anguita (separate wrap-up Skype conversation) | FSC Spain | x |  |

All comments were inserted into the Terms of Reference of the publication (see below).

**Main results of the meeting**

* The terms of reference of the chapters have been amended and validated (see new version of the ToRs below).
* The ToRs of the chapter are considered as clear enough to prevent overlap between chapters, with the exception of chapters 10 and 11 that could possibly bring confusion. It is recommended to arrange a meeting between the coordinators of chapters 10 and 11 (plus interested people) to ensure that there is a common understanding of these two chapters.
* Coordinators have been identified for all chapters except chapter 7. Nevertheless, five of them still have to be contacted and confirmed. Many voluntary contributions for chapter authorship have been received (see compilation in Table at page 9).

**Next steps:**

1. Identify last chapter coordinators
2. Each chapter coordinator will be responsible for identifying the authors and the reviewers. Detailed outline of the chapter to be provided by **30 January 2017**
3. FAO/Plan Bleu will provide guidelines for authors by 30 January 2017
4. FAO/Plan Bleu will be in charge of the selection of the **scientific board**
5. During the V Mediterranean Forest Week, during a side event on 20 March 2017, the outline of the SoMF 2018 will be presented. Some well-advanced chapters could be presented too.

***State of Mediterranean Forests* – 2nd edition**

**Terms of references for the chapters**

Central question to be addressed by the 2nd edition of the *State of Mediterranean Forests* and to be used as a guideline to connect the different chapters: **How do Mediterranean forests contribute to reach the goals of international commitments on forests, in particular the Sustainable Development Goals (*e.g.* SDG 13 and 15) and the Rio Conventions?**

* The 2nd edition is expected to be 180 pages in length, i.e. about 10-15 pages per chapter, figures and references included (guidelines for authors will be provided)
* Two versions in English and French will be prepared.
* Copyright will be shared between FAO and Plan Bleu, based on a co-publishing agreement
* A balance between North and South in terms of examples but also in terms of authorship will be sought
* The report will be composed by three main parts: each part will have an executive summary as an introduction referring to chapters (cf. the example of the book "Ecosystem Services from Agriculture and Agroforestry" https://books.google.it/books?id=UaceBAAAQBAJ)
* Each chapter will have a chapter coordinator. The chapter coordinator will be responsible of:
  + Identify the authors (do not forget gender and geographical balance)
  + Draw the outline of the chapter with the authors
  + Assist the writing of the chapter by the authors
  + Ensure that the guidelines for the authors are respected
  + Find the reviewer of the chapter
  + Ensure that the language (English or French) has a minimum level of fluency
  + Liaise with FAO and Plan Bleu
* **Scientific board**. One or two senior forestry experts will be responsible for assisting in the preparation of the report and review the final publication (possible candidates to be contacted are: Giuseppe Scarascia, Eduardo Rojas, Yves Birot, Youssef Saadani, Margarita Tomé, Gilles Mille)
* **Review committee**. A scientific reviewer will be assigned to each chapter by the chapter coordinator. The reviewer will revise the content of the chapter (not editorial review) and provide support to the authors. The reviewer can be selected also among the list of authors of other chapters of the SoMF.
* The preparation of the second edition of the SoMF is based on voluntary contributions.

**Preface**

As done for the first edition, the preface will be written by FAO Forestry Department’s ADG and Plan Bleu Director.

**General introduction**

How the socio-economic context has evolved since the last SoMF, etc.

# Part 1: The Mediterranean landscape: importance and threats

This first part will provide descriptive statistics on trees (both inside and outside forests) in the Mediterranean landscapes to underline their importance. It will also present the threats that are currently jeopardizing the importance of trees in Mediterranean landscapes.

## Chapter 1. Contribution of Mediterranean forests to the global agenda

This chapter will introduce the role that forests in general, and Mediterranean forests in particular, can play in contributing to reach the goals of international commitments: SDG 13 on climate, SDG 15 on forest management, SDG 11 on sustainable cities (related to urban and periurban forests), desertification and degradation, UNFCCC, CBD Aichi targets, UNCCD Land Degradation Neutrality, UNFF (IAF Strategic Plan, International arrangement on forests beyond 2015, http://www.un.org/esa/forests/) , COFO 23rd, Durban Declaration, Forest Europe and other accepted and upcoming international initiatives with a special focus on the Mediterranean region.

The chapter will present an overview of the role of the forest sector in the Nationally Determined Contributions of the Mediterranean countries. National commitments on forest restoration could also be presented. The chapter will also draw the attention on the specificity of the Mediterranean region that is at the same a climate change hotspot, an ecoregion that is more vulnerable than others to climate change, and whose ecosystems present a great potential for adaptation.

Keywords: SDGs, UNFCCC, CBD, UNCCD, NDCs, climate change hotspot, vulnerability hotspot, biodiversity hotspot.

## Chapter 2. Importance of Mediterranean forests

This chapter will focus on forests where they are the predominant element of the landscape and will present updated statistics on forest cover, biodiversity, forest carbon, forest land use and land use change in the Mediterranean, based on recent data available for the Mediterranean (FRA2015 whenever significantly different from FRA2010, FAO Global Dryland Assessment, etc.). This chapter will also address the questions of:

* definition of the Mediterranean ecoregion (using which limits? Using a geographic and/or a bioclimatic approach[[1]](#footnote-1)?)
* definition of forest (as it differs between countries)
* definition of the Mediterranean forest type.

This chapter will also raise the issue of reporting on Mediterranean forests within countries that are only partly Mediterranean, thus requiring to disaggregate national data to the ecoregion level (a focus can be made on some countries – *e.g.* Italy, France – where data from the National Forest Inventory are available).

Keywords: forest cover, land use, carbon, Mediterranean ecoregion, Mediterranean forest type.

## Chapter 3. Forests and trees outside forest (urban forests, agroforests, etc.)

This chapter will present the importance of trees in the Mediterranean landscapes even when outside forests (*sensu* FAO definition or IPCC land-use category), i.e. when tree is not the main element of the landscape and depends on its interaction with other human activities. Traditional Mediterranean agroforestry system combining low-density trees and agricultural or pastoral activities (like *dehesa* in Spain, *montado* in Portugal, olive and argan systems in Morocco, etc.) will be presented: importance, diversity of systems, management, history, recent changes, etc. Urban and peri-urban forests will also be presented in this chapter: importance for the resilience of cities and for human well-being, key examples of green infrastructure and urban forests in the Mediterranean, UPF for protection of natural resources, provision of ecosystems services, etc.

Keywords: agroforests, silvopastoralism, urban and peri-urban forests, green infrastructure.

## Chapter 4. Drivers of degradation and threats

This chapter will present the different threats on the Mediterranean forest landscapes by structuring them according to indirect (global changes: climate change, social change, demographic change…) and direct threats (as follows from the former at a local scale: emergence of pests and diseases, dieback, forest fires, overgrazing, unsustainable fuelwood collection, conversion to agriculture, urbanization, land abandonment, genetic erosion…). A distinction will be made between deforestation and degradation, and between agents and factors. The analysis should highlight the geographical heterogeneity of the drivers and threats, with different prevailing processes in the North (land abandonment, forest fires, etc.) and in the South/East Mediterranean (overgrazing, overexploitation of fuelwood, migration etc.). Consequences of forest degradation will also be addressed in this chapter (soil erosion, water quality degradation, biodiversity loss, loss of forest functionality, etc.)

Keywords: vulnerability, forest fires, pests and diseases, dieback, overgrazing, unsustainable management, land abandonment, urbanization, genetic erosion, biodiversity loss, migration, water scarcity.

# Part 2: Mediterranean forest-based solutions

The second part will present the solutions based on forests that can be implemented to solve the threats that are jeopardizing Mediterranean forests. The common feature of these forest-based solutions is the valorization of the goods and services provided by Mediterranean forests through local sustainable development.

## Chapter 5. Human needs and ecosystem services

This chapter will present how ecosystem services provided by Mediterranean forests address human needs. The chapter will present the different goods and services provided by Mediterranean forests, structuring them according to provisioning, regulating, cultural, and supporting services. The chapter will present the connections between Mediterranean forests and agriculture, and the role that forests play for food security and energy. Other social roles that Mediterranean forests can play include people’s wellbeing (including green care), and the integration of minorities (e.g. migrants) in the society. A description of which ecosystems services answer to human needs will be detailed in this chapter.

Keywords: forest and food security, forest and energy, forest and water, social integration, provisioning services, regulating services, cultural services, forest and culture, supporting services.

## Chapter 6. Forest and landscape restoration

This chapter will present the role that Mediterranean forests can play in forest and landscape restoration to address regional or global commitments related to restoration or reduction of land degradation (Bonn Challenge, Aichi target 15, SDG 15.3, etc.) The state of the art in restoration in the Mediterranean will be presented to define the current baseline on restauration in the region. Success stories on restoration in the Mediterranean, and future restoration opportunities (including forest genetic resources) in the Mediterranean will be presented. Cost-benefit of restoration in the Mediterranean, monitoring of restoration and impact assessment, post-fire restoration will be addressed as well.

Keywords: restoration baseline, ecological restoration, restoration opportunity, restoration cost-benefit.

## Chapter 7. Adaptation and mitigation

This chapter will present the potential of Mediterranean for mitigation and adaptation to climate change. Mitigation will include the potential of Mediterranean for the REDD+ and NAMA mechanisms (including cost-benefit analyses). Adaptation will include the management of forest genetic resources (including seed banks) and of forest reproductive material, the maintenance of forest health and vitality to reduce vulnerability, the improvement of fire prevention, suppression and control (e.g. by promoting fire-resistant species like *Quercus faginea*), the adjustment of forest management practices and adaptation for communities. Building resilience in forest ecosystems and in local communities will also be addressed in this chapter.

Keywords: adaptation, resilience, mitigation, REDD+, forest genetic resources, fire control.

## Chapter 8. Biodiversity conservation/protected areas

This chapter will show the diversity of biota associated to the Mediterranean forests, their knowledge, conservation status, current conservation actions and their role in forest management. Direct threats (presented in chapter 4) affecting different taxonomic groups will be ranked and discussed from the taxonomic groups perspective. The level of representativeness of forest ecosystems in protected areas and Key Biodiversity Areas and examples of conservation programmes (active protection of species, reinforcement and reintroduction of populations, models of sustainable forest management) will be presented.

Keywords: management of emblematic areas, protection, conservation, biodiversity-functionality relationship, productivity-functionality relationship, multifunctionality.

# Part 3: Enabling environment to scale up solutions

The last part will present the conditions that need to be met to scale up the forest-based solutions presented in Part 2. It will elaborate on the new conceptual approaches to forest management that are needed to solve the paradox of the Mediterranean forests.

## Chapter 9. Contribution of Mediterranean forests to the green economy

This chapter will show how Mediterranean forests can contribute to the green economy to solve the paradox that they are a valuable green infrastructure whose value remains unrecognized by our societies. Innovation in forest-based green economy and emerging markets like bioenergy, biomaterial or ecotourism (including ecoparks) will be addressed in this chapter, presenting data and study cases[[2]](#footnote-2). The adjustment of forestry training programme to address the needs in human resources of the green economy will also be addressed here.

Keywords: forest and employment, green economy, job provision, education, research, innovation, bioenergy, biomaterial, ecotourism, green job.

## Chapter 10. “Local approaches to community engagement” or “Governance and community engagement”

This chapter will present local and participatory approaches to forest management in the Mediterranean to include local populations as active managers of the forest. An overview of the region regarding multi-stakeholder and multi-sector governance will be presented, including the issues to be addressed regarding shared visions of rural territorial development. Outlooks regarding possible co-management of Mediterranean forests will be presented.

Keywords: participatory management, multi-stakeholder governance, co-management, communication, perception.

## Chapter 11. “Policy frameworks and governance styles” or “International policies”

This chapter will address rural rights, land tenure, legal framework, forest policies and governance related to the forest sector in the Mediterranean countries. The chapter will include a comparison of forest legislations (regarding protected areas, fire, forest reproductive material, etc.) and a review of international agreements on forests for the Mediterranean. The chapter will focus also on international cooperation and will reserve a box on forest certification (FSC).

Keywords: governance, rural rights, land tenure, forest policies, international cooperation.

## Chapter 12. “Valuing the ecosystem services for the decision-maker agenda” or “New value chains from Mediterranean forests”

This chapter will present an assessment of the economic value of the goods and services provided by Mediterranean forests, and discuss the different possible options for valorizing these goods and services. The chapter will also deal with the ecosystem disservices that can be brought by Mediterranean forest ecosystems. The chapter will show how the economic value attributed to goods and services can help decision-makers in defining viable options for sustainable development. Moreover, the development of value chains on wood, non-wood forest products and agroforestry will be addressed in this chapter.

Keywords: economic value, disservices, value chain.

Chapter 13. Financial incentives and tools

This chapter will present the different financial options for valorizing the Mediterranean forests, addressing both the mechanisms (e.g., in relation to the carbon finance, the REDD+ or NAMA mechanism, or Payments for Ecosystem Services) and the funds at the international (e.g. Green Climate Fund, Land Degradation Neutrality Fund) and national (e.g. National Forest Fund) levels. Outlooks from private funding (e.g. in the context of restoration or of reforestation) will also be presented. A review of financial mobilization for the forest sector in the Mediterranean could be presented, as well as prospects on innovative or emerging financial options.

Keywords: financial mechanisms, payment for ecosystem services, carbon finance, restoration finance, funds

# Conclusion

# Table of chapter coordinators and authors.

|  |  |  |
| --- | --- | --- |
| **Chapter** | **Chapter coordinator** | **Chapter author** |
| General introduction | Plan Bleu |  |
| **Part 1: The Mediterranean landscape: importance and threats** |  |  |
| Chapter 1. Contribution of Mediterranean forests to the global agenda | Ismail Belen | FAO (FLRM + Silva Med + Drylands), Fulvio Ducci, DGF Algeria,  Uğur Zeydanlı, Turkey, Director General of Nature Conservation Center, <http://www.dkm.org.tr/>, email: [ugur.zeydanli@dkm.org.tr](mailto:ugur.zeydanli@dkm.org.tr)  Prof. Dr. Sezgin Özden, Turkey,  Prof. Dr. Sezgin Ayan,  Dr. Kenan Kılıç(Chair of European Forestry Commission+) |
| Chapter 2. Importance of Mediterranean forests | Univ. Madrid | FAO (Silva Med + Drylands), Univ. Madrid, Eray Özdemir, FSC, Marco Marchetti (Univ. Molise), Yıldıray Lise, |
| Chapter 3. Forests and trees outside forest (urban forest, agroforest, etc.) | WG UPF (person to be selected) | Fabio Salbitano, FAO UPF, Fulvio Ducci, Christine Farcy, **Mr. Dursun Baş,** |
| Chapter 4. Drivers of degradation and threats | José Ramon Gonzalez (CTFC) (proposed, to be contacted) *or*  FAO Silva Mediterranea | FAO (FLRM + Drylands + Silva Med), Ludwig Liagre, Elsa Enriquez, Fabio Attorre (Univ. Rome), Bahtiyar Kurt, Aysun Demet Güvendiren+, |
| **Part 2: Mediterranean forest-based solutions** |  |  |
| Chapter 5. Human needs and ecosystem services | EFIMED (proposed, to be confirmed) | EFIMED (proposed, to be contacted), DGF Algeria, Nihan Yenilmez Arpa+, |
| Chapter 6. Forest and landscape restoration | FLRM (C. Gallo Granizo, FAO) | Fulvio Ducci, FAO (Drylands), DGF Algeria, Özlem Yavuz + colleagues, Jordi Cortina (proposed, to be , contacted), Prof. Dr. Nilgün Karadeniz, Serap Kargın |
| Chapter 7. Adaptation and mitigation |  | FAO (FLRM + Drylands), Fulvio Ducci, Bruno Fady, Çağlar Başsüllü |
| Chapter 8. Biodiversity conservation/protected areas | IUCN Malaga (to be confirmed) | DGF Algeria, Fabio Attorre (Univ. Rome), Bart Muys, Ayhan Çağatay, Nihan Yenlmez Arpa, Hasan Tahsin Ertaş, Ozan Çekiç, Emrah Erdoğan, Aysun Demet Güvendiren, |
| **Part 3: Enabling environment to scale up solutions** | Inazio Martinez de Arano (proposed, to be contacted) |  |
| Chapter 9. Contribution of Mediterranean forests to the green economy | Inazio Martinez de Arano (EFIMED) | Sven Mutke, Nicolas Robert, Startree project (EFIMED), MMFN, Laura Secco (proposed, to be contacted), Nuno Calado (Portugal) (proposed, to be contacted), Marco Marchetti (Univ. Molise), Sabri Avcı, Ayhan Çağatay, |
| Chapter 10. Local approaches to community engagement *or* Governance and community engagement | Magali Maire (FAO) and/or Plan Bleu | FSC, Nicolas Robert, Mohamed Qarro, MMFN, Mr. Dursun Baş, Mr. Cemil Ün and Ahmet Şendağlı, FSC-Italy+Portugal+Spain, Dr. Nihan Yenilmez Arpa, Ekrem Yazıcı, Ass. Prof. Emel Baylan, |
| Chapter 11. Policy frameworks and governance styles *or* International policies | Irina Buttoud (FAO) | AIFM, Ismail Belen and colleagues, MMFN, FSC Portugal and Spain, Mauro Masiero (Univ. Padua) (proposed, to be contacted), Paolo Manzini (Univ. Padua) (proposed, to be contacted), FSC-Italy+Portugal+Spain, Ekrem Yazıcı, |
| Chapter 12. Valuing the ecosystem services for the decision-maker agenda or New value chains from Mediterranean forests | Plan Bleu/Hamed Daly-Hassen (proposed, to be contacted) | Nicolas Robert, Hamed Daly-Hassen, DGF Algeria, FSC, Alessandro Leonardi (Univ, Padua) (proposed, to be contacted), FSC-Italy+Portugal+Spain |
| Chapter 13. Financial incentives and tools | Ludwig Liagre (GM) or Elena Górriz (EFIMED) | FAO (FLRM), Ludwig Liagre, Rao Matta (FAO), Valérie Merckx (EFIMED), FSC-Italy+Portugal+Spain, Sedat Kalem, Selin Devranoğlu, Erdoğan Atmış, |
| Conclusions | FAO/Plan Bleu |  |

1. *E.g.* Olson, D.M., E. Dinerstein, E.D. Wikramanayake, N.D. Burgess, G.V.N. Powell, E.C. Underwood, J.A. D'Amico, I. Itoua, H.E. Strand, J.C. Morrison, C.J. Loucks, T.F. Allnutt, T.H. Ricketts, Y. Kura, J.F. Lamoreux, W.W. Wettengel, P. Hedao, and K.R. Kassem. 2001. Terrestrial ecoregions of the world: New map of life on earth. Bioscience 51(11):933-938. [↑](#footnote-ref-1)
2. Mediterranean Growth Initiative: http://www.litus.eu/mgireport/ [↑](#footnote-ref-2)