

Portugal

FMM and aFMM	Guidelines Deliverable D1.3 May 2020	Demonstrations sites Deliverable D1.4 July 2020
FMM 1 & FMM 2 Mixed eucalypt and maritime pine	<p>The Vale do Sousa case study area forest structure is representative of Portuguese forests in its Northwest region, which are mainly dominated by eucalypt and maritime pine stands, both pure and mixed. Two mixed FMMs were identified in the CSA, differing only by the species proportion, being very similar regarding management and ecosystem services provisioning.</p> <p>Although these were not considered as aFMMs, a leaflet was produced to inform stakeholders of the recommended silvicultural practices for the current areas, including also information on the main ecosystem services provided along one full rotation of both maritime pine and eucalypt.</p>	<p>For these current FMMs, a guideline was produced aiming to improve the stakeholders' knowledge on suitable management practices, but no demonstration sites will be installed.</p>
FMM 3 Pure chestnut	<p>As an alternative broadleaved forest species, chestnut stands were suggested targeting the provision of other ecosystem services, namely chestnut timber production in the CSA (currently negligible).</p> <p>The respective leaflet includes information on silvicultural practices calendar, species adaptation to local conditions, and the expected provision of ecosystem services throughout one rotation.</p>	<p>For this current FMM, a guideline was produced aiming to improve the stakeholders' knowledge on suitable management practices, but no demonstration sites will be installed.</p>
FMM 4 Pure eucalypt	<p>Recent legislation has restricted new plantations of eucalypt in the country, in areas where it has not been established in the past. However, demand for eucalypt pulpwood drives forest owners to choose this fast growth species, hence, adequate management models are needed.</p>	<p>For this current FMM, a guideline was produced aiming to improve the stakeholders' knowledge on suitable management practices, but no demonstration sites will be installed.</p>

	<p>The leaflet aims at informing landowners of the general species characteristics, recommended silvicultural practices calendar and the expected ecosystems services along a rotation.</p>	
<p>aFMM 5 Pure maritime pine</p>	<p>Although maritime pine is a native species, there is technical know-how to manage it and there is a strong internal demand for pine wood, a relatively small area is allocated to these stands within the CSA. To meet the stakeholders preferences, an alternative management model is suggested, focusing on the provision of other ecosystem services namely pine and resin production.</p> <p>The leaflet includes some species characteristics, highlighting the adjustments made to the current FMM, associated management practices calendar and expected ecosystem services provision along one rotation.</p>	<p>Two maritime pine forest owners were contacted: “Floresta Atlântica”, a private industrial forest owner (Lat: 41,117449, Lon: -8.374286), and João Seabra, a private forest owner (Lat: 41,044696, Lon: -8.390415). Final location and all practical implementation aspects are still being discussed.</p>
<p>aFMM 6 Pedunculate oak</p>	<p>This aFMM was suggested for abandoned agricultural lands, which would better suit the oak growth requirements. Rotations were shortened in an attempt to increase the stakeholders interest in this species. Pedunculate oak is suggested as an alternative broadleaved species to meet the demands of other ecosystem services, besides wood production.</p> <p>The leaflet introduces the species general characteristics, silvicultural practices calendar and ecosystem services provided over one rotation.</p>	<p>A local private owner, Cristina Silva, was contacted and is available to make a mixed oak species plot into a demonstration site (Lat: 41.141565, Lon: -8.351415). Practical implementation aspects are still being discussed.</p>
<p>aFMM 7 Cork oak</p>	<p>Cork oak is found as a spontaneous species in marginal areas of the CSA. It was suggested as an aFMM due to an increase in the demand of cork and the impacts of climate change. Further benefits may include increasing broadleaved species, productions diversification, as well as fire and diseases risks reduction.</p> <p>General characteristics of cork oak trees, recommended silvicultural practices and the expected provision of ES along a 90-years planning horizon are described in the leaflet.</p>	<p>A public administration stakeholder, Junta de Freguesia da Sobreira, is interested in establishing a cork oak plot in a recently burned public forest area (Lat: 41.118871, Lon: -8.391891). Implementation and other practical aspects are still being discussed.</p>

<p>aFMM8 Riparian species</p>	<p>Riparian areas within the CSA were suggested to address conservation concerns.</p> <p>A leaflet was produced to inform landowners of the predominant species and the benefits of preserving these areas, including some of the qualitative information on the conservation and regulatory roles they play in forest ecosystems.</p>	<p>Although a guideline was produced, aiming to inform stakeholders on the riparian area importance and ES provision, no demonstration site installation was planned.</p>
<p>General</p>	<p>The leaflets are meant to provide information to landowners as well as other stakeholders. Thus, they include the location of the respective demonstration site as well as the contacts of the local forest owner's association (AFVS, the non-academic partner) where they can be further informed on relevant technical aspects.</p> <p>Leaflets will be printed and distributed by AFVS. They will also become available online in the AFVS webpage and the respective download link will be shared on CEF (ISA) webpage and social media. Additionally, the download link will also be sent via email to all the stakeholders and participants in the ALTERFOR workshops and to the regular recipients of the ALTERFOR Newsletters.</p>	<p>The forest owner's association of Vale do Sousa (AFVS) is making efforts to contact landowners and ensure the establishment of demonstration sites for the aFMMs. Plots selection and/or implementation is expected to be concluded in the summer of 2020.</p>