

Presentation of the Special Section Agro-silvo-pastoral Systems

Agro-silvo-pastoral systems encompass a suit of highly complex systems that include trees, shrubs and herbaceous strata, frequently associated with domestic and wild livestock which adds more complexity to these systems. Associated to the different proportions of vertical strata there is also a wide range of variability in space and time as well as a multitude of productions, such as wood, firewood, forages and other non-wood forest products as cork, acorn and pine nuts, cattle and game. The multiplicity of products and services is also reflected in the silviculture applied to these systems, including a set of management approaches, methods and techniques that enhance their sustainability and conservation. Overall the management and planning of these agro-silvo-pastoral systems are very complex and specific, and require effective and specific tools for its development, including modelling of forest ecosystems dynamics, and the prediction of the respective products and services.

This special section includes selected presentations given at the World Congress Silvo-Pastoral Systems 2016 (Silvo-Pastoral Systems in a changing world: functions, management and people), held in Universidade de Évora, Portugal from 27th to 30th September, 2016, in the frame of the working group “Forest management and modeling: silviculture, tree management and planning”. The aim of this special section is to give a comprehensive view of latest research developed in the frame of planning and management of agro-silvo-pastoral systems in several countries, with a climate characterized by two seasons, respectively dry and wet, and thus with drought as a limiting factor.

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