

Chapter 9

Agroforestry Systems in Southeastern Spain

E. Correal^{1*}, M. Erena¹, S. Ríos², A. Robledo³, and M. Vicente⁴

Abstract Two types of agroforestry systems can be found within the Segura river basin: (a) silvopastoral systems (forest-pasture-ruminants) on cold and moist mountain zones (1,000–2,000 m); – occupying 20% of the basin, where the Segura river originates and the major proportion of protected forest is concentrated – but where human presence is insignificant (1%) – livestock activity is scarce (11.6% of the census), and (b) agrosilvopasture systems (sheep-cereal-rangeland), on dry and cold high tableland (500–1,000 m altitude); occupying 40% of the basin; sustaining half of the ruminants; where half of the land is cultivated under dryland agriculture and sustains a high biodiversity, its human population is scarce (16% of total basin); the economic situation is marginal and; soil erosion losses are high (40% of total). In the other 40% of the basin (lower coastal areas), true agroforestry systems do not exist because livestock is fed with forage by-products from agriculture and concentrates, maintaining high stocking densities, exceeding the capacity of the natural resources. Altogether, agroforestry systems occupy 60% of the basin territory and maintain 62% of the livestock population, but only 17% of the human population, who live under a marginal economic situation and depend on external assistance to maintain their economic activity and to protect the water, forest and biodiversity resources of the basin.

Keywords Segura river basin, agrosilvopasture, land use, desertification

¹IMIDA, Finca Sericícola 30150 La Alberca, Murcia, Spain

²CIBIO, Universidad Alicante

³Islaya, Consultoría Ambiental, Murcia, Spain

⁴D.G. Medio Natural, Murcia, Spain

*Corresponding author: e-mail: enrique.correal@carm.es