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Climate crisis and governance approaches in the value chain of carob flour in Rethymno, Crete.

The carob tree (*Ceratonia siliqua*) is a species of flowering evergreen tree in the pea family that has been cultivated for centuries in Crete and in the Mediterranean basin (FAO, 2016; Tous, Romero, & Batlle, 2013). Carob trees are part of the long-established agro-silvo-pastoral systems of farming on the island. They have limited soil requirements and they thrive on the rocky, dry, sloping soils in rural areas. Sheep and goat herding along with carob tree cultivation are complementary activities that improve the environment by remediating pollution, preventing fires and naturally enhancing soil fertility (Papanastasis et al., 2009). Being multi-functional and biodiverse, agro-silvo-pastoral systems are resilient and mitigate the effects of climate change (Chebli et al., 2021). The economic and cultural value of carob has more recently resurged, as more and more people recognize that it can be used in pharmaceuticals, nutraceutical industries, cosmetics etc., Carob has traditionally been processed into flour used for human consumption during WWII is currently considered a “superfood” and it used as ingredient in a range of food products such as baked goods, pasta, dairy drinks, health bars, and dietary supplements (Papaefstathiou, et al., 2018).

In this presentation, using a variety of archival sources, statistical, interview and workshop data, we discuss the results of our work as members of the MOVING project. The presentation explores how the carob flour value chain can play a role in mitigating the effects of climate crisis in the region and highlights the necessity for a new governance framework. New governance interventions are required with regard to the need for cloning / breeding programs, the reduction of vegetative period (i.e. increase precocity in bearing) and the increase of pod yield. New governance systems that will incentivize young farmers to engage in carob production are also needed.

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