

## **LIFE CLIMATREE project: A novel approach for accounting and monitoring carbon sequestration of tree crops and their potential as carbon sink areas**

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Climate Change Mitigation is one of the most important objectives of the Kyoto Convention, and is mostly oriented towards reducing GHG emissions. However, carbon sink is retained only in the calculation of the forests capacity since agricultural land and farmers practices for securing carbon stored in soils have not been recognized in GHG accounting, possibly resulting in incorrect estimations of the carbon dioxide balance in the atmosphere. The agricultural sector, which is a key sector in the EU, presents a consistent strategic framework since 1954, in the form of Common Agricultural Policy (CAP). In its latest reform of 2013 (reg. (EU) 1305/13) CAP recognized the significance of Agriculture as a key player in Climate Change policy. In order to fill this gap the “LIFE ClimaTree” project has recently founded by the European Commission aiming to provide a novel method for including tree crop cultivations in the LULUCF’s accounting rules for GHG emissions and removal. In the framework of “LIFE ClimaTree” project estimation of carbon sink within EU through the inclusion of the calculated tree crop capacity will be assessed for both current and future climatic conditions by 2050s using the GISS-WRF modeling system in a very fine scale (i.e. 9km x 9km) using RCP8.5 and RCP4.5 climate scenarios.

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