

INESC TEC has a Agriculture and Forestry R&D line with a 10-year road-map, considering the Portuguese reality (needs and desires) and aligned to the European Robotics agenda. This R&D line is focused in three main context application: Permanent Crops (Steep Slope Vineyards), Forest biomass harvesting, Greenhouses (urban and traditional). We are developing cost-effective visual-based sensors, manipulators and smart small machinery with advanced localisation, mapping, control and perception algorithms (where technology transfer may occur) in order to increase the agricultural task precision in these three main agriculture and Forestry contexts. These robotic technologies are being tested in two projects BIOTECFOR and GOTECFOR, where we will use robot to harvest forest biomass between the main trees and steep slope forestry. This biomass will be tested in two main uses cases: production of composite materials for automotive industry and greenhouse heating.