

7th training style workshop: *Modelling and development of scenarios for LULUCF including HWP*

1st workshop style training, 15-17 January 2019, Ankara

“Technical Assistance for Developed Analytical Basis for Land Use, Land Use Change and Forestry (LULUCF) Sector”

Project identification no. EuropeAid/136031/IH/SER/TR

Day 1

Session 1.1 (1 hour)

What is modelling? Types of models in LULUCF Sector and their specifications

What is a scenario?

Why do we need modeling and scenarios? Implementation of climate change policy: connection to mitigation of GHG emissions

Session 1.2 (1 hour)

General structure of forestry models (i.e. stand and tree based modeling: CBM-CFS3, EFISCEN-space, CO2fix). Calibration and validation.

Session 1.3 (1 hour)

Challenges in modeling dynamics of C stocks in managed forests: age-structure dynamics, natural and anthropic disturbances allocation of C in stand biomass compartments. Example of implementation of business-as-usual scenario in forest

Session 1.4 (1 hour)

Consistent modeling of C fluxes across living biomass and dead wood pools: wood biomass transfers among the pools

Session 1.5 (1 hour)

Accuracy in estimating GHG in conversions to forest: methods for gap filling of volume and growth data for early ages of stands (when Yield tables and growth data is available from 20-30 years old on) – spreadsheet demonstration

Day 2

Session 2.1 (1 hour)

Practices/applications: simulation of C stocks dynamics in afforestation (planting or natural expansion) by open source simulator CO2fix (to download the model from: <http://dataservices.efi.int/casfor/models.htm>)

Session 2.2 (1 hour)

Practice/Spreadsheet applications: compensation of emissions from deforestation with removals by afforestation

Session 2.3 (1 hour)

Practice/Spreadsheet applications: HWP concept and modelling HWP - understanding the emission “legacy” effect

Session 2.4 (1 hour)

General structure of agricultural soil and models

Challenges in modeling dynamics of C stocks in agricultural lands: biomass, soils management and land use changes

Session 2.5 (1 hour)

Practice/Spreadsheet applications: using spreadsheets to project CO2 emissions from croplands and grasslands soils

Day 3

Session 3.1 (1 hour)

Scenarios development for climate change policy implementation. Methods for the identification and use of most appropriate proxy to activity data and emission factors for key categories. Policies and measures - sources of assumptions for scenarios.

Session 3.2 (1 hour)

Development of consistent scenarios and projections for: a) area of land use and land use change, b) harvest and growth in managed forest, c) HWP, d) expansion of perennials, e) soil management practices

Session 3.3 (1 hour)

GHG mitigation actions examples for major land use categories in agriculture: land/soil management practice - some excel practice to demonstrate mitigation by without/with measures/with improved measures for agricultural soil, rangeland management & rehabilitation

Session 3.4 (1 hour)

GHG mitigation measures by forest management & rehabilitation in case of wildfire and forest degradation by firewood collection