

# MODELECO

## Bottom-up mathematical programming for sustainable food supply in the 21st century

### ABSTRACT

The MODELECO project consists in building a complete two-tier self-contained course on modeling techniques based on mathematical programming for economic analysis in agriculture and environment. The first tier introduces basic concepts and skills and will be developed as a self-study package. The second tier includes advanced modules presenting more sophisticated techniques and simulation exercises and is conceived as a teaching package (with both teaching material and teaching instructions for tutors).

**Year :** 2015

**Project number :** 1501-007

**Type of funding :** AAP FORMATION

**Project type :** AAP

**Research units in the network :** CEE-M ABSYS

**Start date :** 2016-04-01

**End date :** 2018-03-31

**Flagship project :** no

**Project leader :** Florence Jacquet

**Project leader's institution :** InstitutAgro

**Project leader's RU :** MOISA

**Budget allocated :** 170000 €

**Total budget allocated ( including co-financing ) :** 170000 €

**Funding :** Labex

### GOAL

The objectives are threefold:

- (1) to use modelling techniques as a pedagogical tool to introduce and explain the links between economic and technological constraints in farm decisions
- (2) to teach how to build models suitable to run simulations illustrating and highlighting the stakes of policy choices related to agriculture and environment (from farm level through national/regional to global level)
- (3) to re-build rapidly and efficiently a community of agricultural economists mastering these modelling skills which are highly demanded by various institutions (European Commission, OECD, FAO, IFPRI, etc.) since they are widely used to evaluate policy options and to identify the best design of policy instruments.