



LIBERATION

Linking farmland Biodiversity to Ecosystem seRvices for effective ecological intensificATIOn



APPROACH



Using existing databases we will link farm land biodiversity patterns to landscape context and farm management. A large scale standardized field study will be used to examine the relationship between biodiversity and ecosystem service delivery across Europe. Targeted field studies in multiple countries will elucidate the effectiveness of various management practices to promote ecosystem service delivery. Farmers will be interviewed to assess willingness to participate in ecological intensification practices. Modelling studies will be used to analyse the relationship between biodiversity and ecosystem service delivery and yield, farm profit and income volatility and to evaluate the potential of ecological intensification under different future land-use scenarios.

OBJECTIVES



- > Characterise general relationships between semi-natural habitats and on-farm management and above- and below-ground biodiversity of different functional species groups.
- > Quantify the relationship between semi-natural habitats, on-farm management and multiple ecosystem services delivered by biodiversity in representative farming systems across Europe.
- > Assess the effectiveness of on- and off field management practices for promoting ecosystem services.
- > Analyse the relationship between flows of multiple ecosystem services and crop yield in individual fields.
- > Examine effects of ecological intensification on farmers profits and income volatility over time.
- > Survey farmers' perspectives and attitudes towards mobilization of on-farm ecosystem services.
- > Evaluate the potential of ecological intensification under different future land-use scenarios.

DISSEMINATION

The project will provide management and policy recommendations on appropriate rates and quality of semi-natural habitats and on farm management. It will demonstrate management options promoting ecological intensification. Findings of the project will be presented in scientific and popular journals and during stakeholder meetings and scientific congresses. A special emphasis will be placed on local level policies focused on furthering ecological intensification by exploring its linkages with policies related e.g. to climate change, health and pollution. The project aims to link farmers practicing ecological intensification to local governments and build capacity amongst scientists and policy makers to address and support ecological intensification.

PARTICIPANTS

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