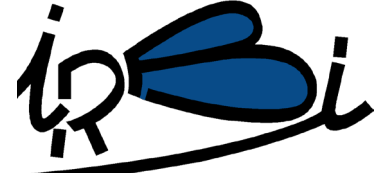


# RECENT CHANGES IN AGRICULTURE PRACTICES AN ACCEPTABILITY CONDITIONS SURVEY

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## Introduction

In France, the “Grenelle Environment” forum and “Ecophyto 2018” plan marked a turning point in the implementation to more environmentally friendly farming practices. They suppose drastic evolutions in professional expertise and social values for the practitioners which in turn, already adopt various attitudes towards the expected changes.

The aim of the research project SOPHY is to identify and analyze the social and technical dynamics that come with recent changes in agricultural practices like Integrated Pest Management of major vegetable productions in Région Centre of France, a place with a strong economic position (photo 1). The expected results are a list of social and technical bottlenecks that may restrain the extent of changes in agricultural practices and the conditions for a better acceptability of these changes.



Photo 1. Typical landscape of arable crops in Région Centre

## Materials and methods

**The zone of the surveys:** the study (2011-2013) is conducted in the Région Centre (Orléans administrative center) composed by 5 departments very diversified in agricultural productions. Arable lands represents 51 % of the total surface vs 34 % for the national territory. Figure 1 shows the relative proportions of agricultural area occupied by the major crops cultivated in Région Centre. The core of the agricultural activity in Région Centre notably relies on two important areas. The Beauce area is European leader in cereal production whereas the Val-of-Loire gathers diversified productions including arboriculture, ornamental horticulture, truck farming and an internationally acknowledged grapevine production (figure 2).

**The Methodology:** the methodology used is based mainly on field survey researches implicating interviews and ethnographic observations using video records. The sociologists group led their analysis with the expertise of biologists. Four different actions are led:

- Exploratory interviews and semi-directive interviews with near hundred farmers belonging to different agricultural sectors
- Interviews will be explored by SONAL, a software allowing to accelerate and to facilitate the retranscription and the thematic encoding of the conversations, in order to improve their analysis.
- Direct observations on farms: agricultural techniques, organization, professional equipment, know how...
- Filmic investigations to explore speech and gestures (photo 2).

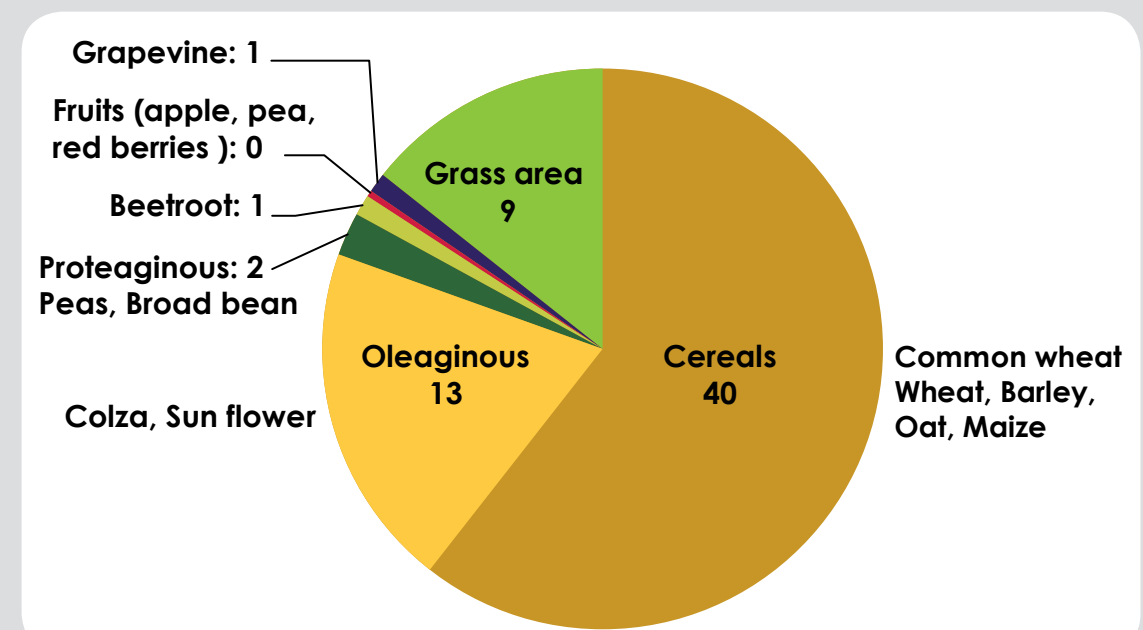


Figure 1. % of surface by major crops in Région Centre

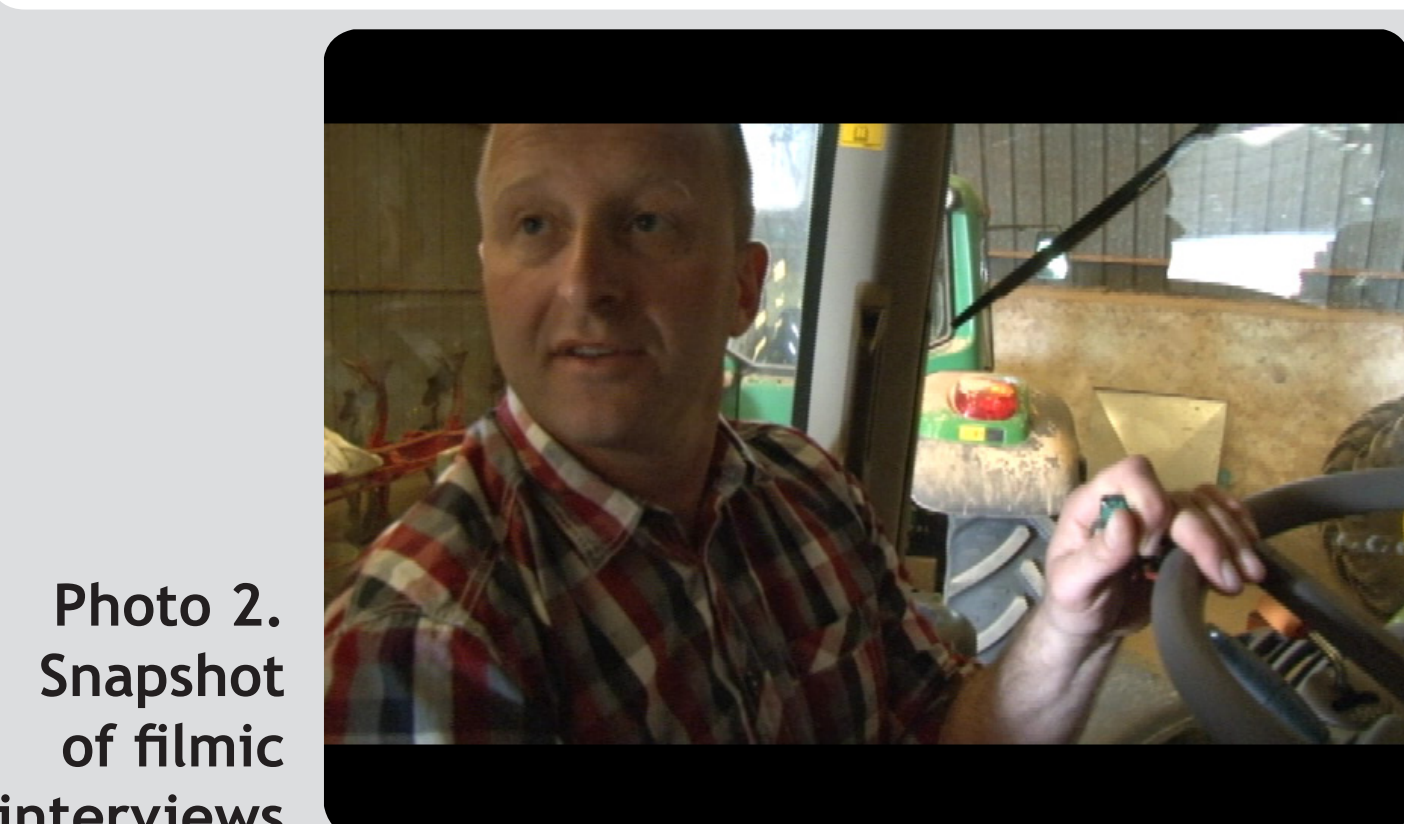


Photo 2. Snapshot of filmic interviews

The analysis of the professional behaviors will be essentially based on the data modeling from behavioral observations and analyses of records.

The results obtained will be considered by biologists to establish a prospectus for futur research needs on biological control.

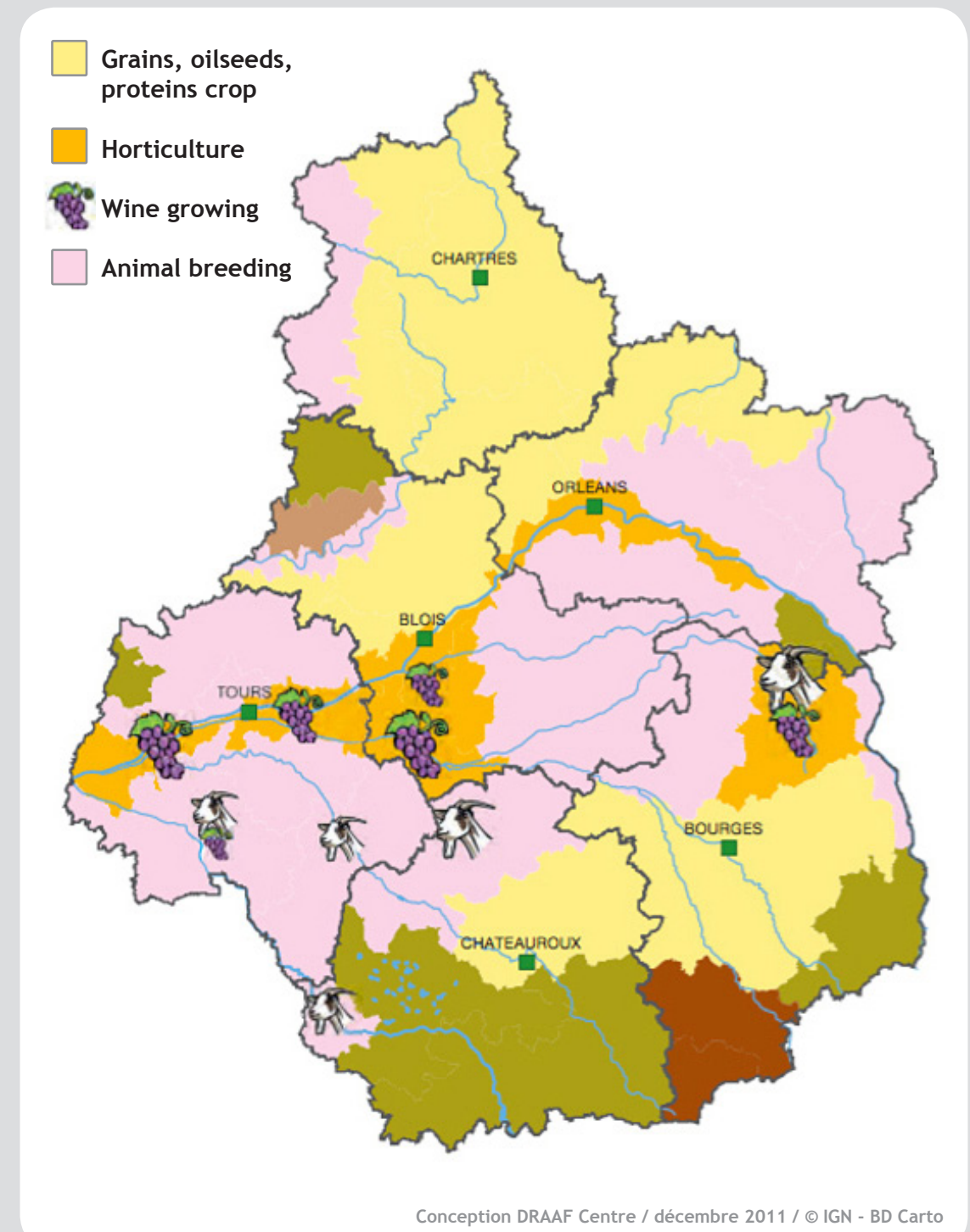


Figure 2. Agricultural crops in Région Centre

## Results

Thanks to the methodology used, important items influencing the conditions of acceptance of agricultural changes should be addressed during the course of the SOPHY project such as: farm history and major sociological evolutions, professional education, training and career history, organization of work, professional practices and techniques, the use of inputs, the impact of practices, behaviors and perception in a situation of change, the nature of professional and social network.

Some specific questions about the management of biodiversity in agrosystems might also be raised by determining the level of knowledge that practitioners have on natural enemies and by exploring the practices implemented to improve wildlife conservation or biological control of crop pests in conventional and alternative cultural systems (organic farming, agroforestry).