





M. S. Ferdinand, P. Bertin, P. V. Baret Earth and Life Institute / UCLouvain, Louvain-la-Neuve, Belgium

Conservation Agriculture and glyphosate Strategies, lock-ins and diversity in the Walloon Region

1. INTRODUCTION

An alternative agrarian system based on 3 pillars

Conservation Agriculture (CA)

disturbance

Minimum soil







3. METHODS Conducting semi-directed interviews

Interviews: 22 farmers



14 not certified organic



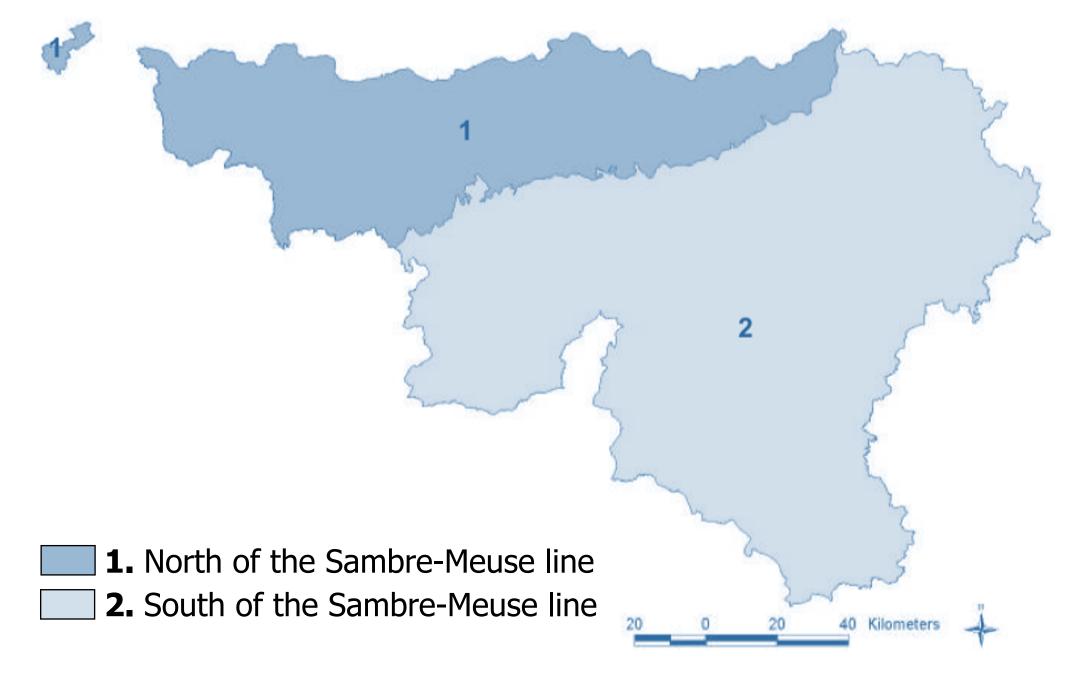
8 certified organic



Informations taken:

- Farm's characteristics;
- Relationship to each pillar of Conservation Agriculture;
- Management of the destruction of cover crops, volunteers and weeds.

Study area: Wallonia, North of the Sambre-Meuse line (1.)



Source: http://environnement.wallonie.be

weeding practices

working

5. DISCUSSION

either by using

herbicides or by

ploughing

Diversity of models in Conservation Agriculture

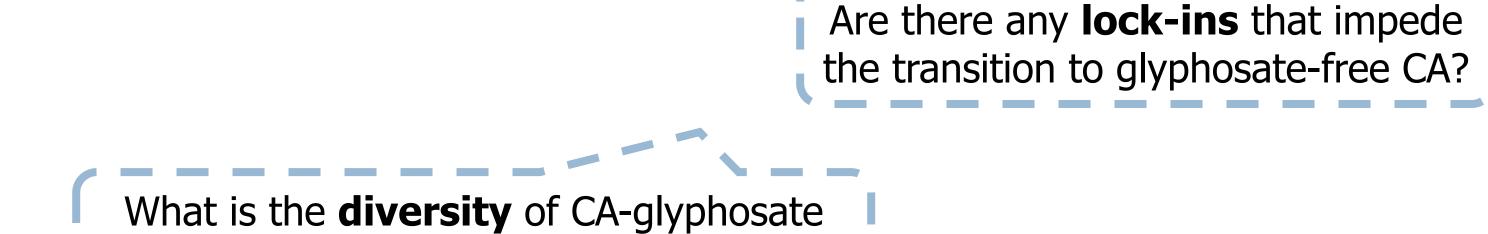
Four sub-models of CA Herbicide-dependent Organic Conservation Farming **Traditional** Innovation Field traffic Redesign Weed Use herbicides Replace tillage Use redesign and herbicides by as a safety net strategies to management must be done to continue to an increase of reduce soil

innovate in the

three pillars of CA

2. QUESTIONS

Is it possible to practice CA without glyphosate?



relationships?

Do farmers have **strategies** to

achieve a CA without glyphosate?

Efficiency

4. RESULTS

 Composition of the herbicide Timing of spraying Low volume...

Substitution

Mechanical weeding tools Agronomic ploughing Manual weeding...

STRATEGIES To achieve a CA without glyphosate

Redesign

- Rotations
- Pasture Fodder breaks...

Organisational

- Dependence on the weather
 - Difficulty managing weeds

Low investment capacity

Fuel consumption

Technical and financial

Cost of manual weeding...

Lock-ins

Cultural

Risk aversion

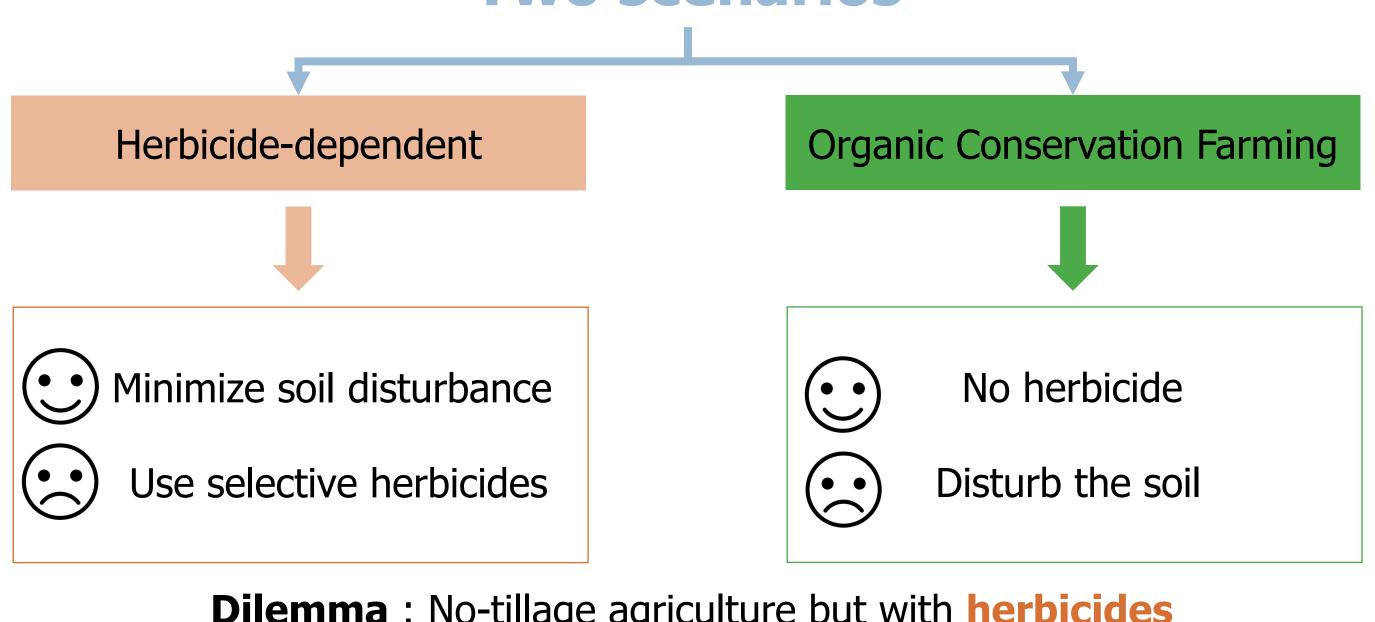
Knowledge

- Lack of support
- Lack of knowledge...

6. CONCLUSION

Two possible scenarios of CA without glyphosate

Two scenarios



Dilemma: No-tillage agriculture but with herbicides

herbicide-free agriculture but with soil disturbance?