Farmers’ compromises to develop autonomy through agroecological practices: revealing the lock-ins of the agrifood systems

Véronique Lucas, Jan Douwe van Der Ploeg, Pierre Gasselin

To cite this version:

Véronique Lucas, Jan Douwe van Der Ploeg, Pierre Gasselin. Farmers’ compromises to develop autonomy through agroecological practices: revealing the lock-ins of the agrifood systems. AFHVS/ASFS Conference 2018 - The Agroecological Prospect: The Politics of Integrating Values, Food and Farming, University of Wisconsin. Madison, USA., Jun 2018, Madison, United States. hal-02788172

HAL Id: hal-02788172
https://hal.inrae.fr/hal-02788172
Submitted on 5 Jun 2020

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Distributed under a Creative Commons Attribution - NonCommercial| 4.0 International License
Farmers’ compromises to develop autonomy through agroecological practices: revealing the lock-ins of the agrifood systems

Véronique LUCAS
FNCUMA / UMR Innovation (INRA-SAD Montpellier)

Jan Douwe van der PLOEG
Rural sociology group (Wageningen University)

Pierre GASSELIN
UMR Innovation (INRA-SAD Montpellier)
Introduction
Introduction

PhD Sociological Research Work

• **Aim**

• To understand the interaction between:
  • Farmers’ pursuit of autonomy
  • Cooperation through machinery co-ops,
  • Development of agroecological practices

Towards agroecological practices?
Plan

• Context: brief insights

• Theoretical inspiration, methodology and case studies

• Farmers’ strategies for developing autonomy

• Modes of cooperation between peers

• Discussion: Why do these farmers accept becoming more interdependent with their peers to increase their autonomy?
Context: brief insights
Context: brief insights

Autonomy as a key principle of agroecology

• **In the literature**  
  *Gliessman, 2007; Coolsaet, 2016; Koohafkan, Altieri, & Holt Giménez, 2012*

• **In the narratives of the agroecological social movements**  
  *La Via Campesina, 2015*

• **In public policies:**
  • In France: legal definition of the agroecology including the objective of autonomy

⇒ *But few studies about how farmers compromise the pursuit of autonomy with other aims and concrete everyday realities!*
Context: brief insights

A research based on machinery cooperatives experiences

12 000 co-ops (CUMA)
1/3 of French farms
A research based on machinery cooperatives experiences

- Local co-op with 25 members on average

- To share machinery, labour, buildings and paid workers

- Farmers studied in six machinery co-ops:
  - With common machinery to develop practices using the ecological functionalities: legumes introduction, no-tillage.
Theoretical inspiration, methodology and case studies
Theoretical Inspiration

- 6 mechanisms to gain autonomy: to face harsh context

1. Diversification of the products and of the modes of marketing
2. Decreasing external inputs
3. Enhancing ecological functionalities
4. Pluriactivity
5. Cooperation and collective action
6. Improving technical efficiency and skills

Van der Ploeg, 2008
Methodology

• **In-depth research into 6 machinery co-ops**
  • With on-farm legume introduction or no-tillage practices: *increasing common investment in needed machinery for these practices revealed by national data*

• **34 semi-structured individual interviews**, focusing on:
  • Conceptions of autonomy
  • On-farm implemented changes
  • Modes of cooperation with peers
Theoretical inspiration, methodology and case studies

Case Studies

*Brittany* : 4 farms
- No-tillage, cover crops with legumes
- Co-op: machinery for no-tillage

*Touraine* : 10 livestock farms
- Legume grass, cover crops with legumes
- Co-op: hay-making machinery adapted for legume grass

*P. Basque* : 3 sheep farms
- Legume grass
- Co-op: design of a collective barn hay-drying

*Aube* : 5 farms
- No-tillage, direct seeding, cover crops with legumes
- Co-op: machinery for no-tillage and direct seeding

*Ain* : 6 farms
- Legume grass
- Co-op: collective barn hay-drying

*Tarn* : 6 farms
- Direct seeding, cover crops based on legumes
- Co-op: machinery for direct seeding
Farmers’ strategies for developing autonomy
Farmers’ strategies for developing autonomy

Farmers’ Practices

- Troubled socio-economic and ecological context
  - New practices implemented

- Towards new farming systems
  - More diversified
  - Fewer inputs
  - Better use of the internal resources
  - Enhancing ecological functionalities
Farmers’ strategies for developing autonomy

Farmers’ Practices

• Troubled socio-economic and ecological context

• Towards new farming systems

• Conventional practices maintained
  • High yields
  • Robotics
  • Use of some inputs
Farmers’ strategies for developing autonomy

Farmers’ Narratives

• Few words about environmental issues
• Pursuit of Autonomy: mainly in relation to input providers
  • To solve economic concerns: Prices Volatility
  • Beyond the economic:
    • Inputs considered as ineffective
    • Asymmetrical interaction with market operators
      • “We had two peaks of milk prices. That's strange, the prices of the inputs have often followed! Then, the better we had in the products markets, we have often spent it in the costs...”
      • “What we try to do for a few years, it is precisely to try to manage to get through, and to avoid suffering and re-suffering, that's all...”
Farmers’ strategies for developing autonomy

Renewed processes of cooperation with peers

• **New pooling processes within the machinery co-ops:**
  - Common investment in expensive machinery
  - Collective labour organization during workload peaks

• **New transfers of resources**
  - Seeds, fodder, organic matter
    - Grazing of winter cover-crops by sheep of a neighbouring farm
    - Knowledge and resource-sharing facing the lack of appropriate resources from other operators
Farmers’ strategies for developing autonomy

Renewed processes of cooperation with peers

FIGURE 5 Map of the sharing arrangements that specifically facilitate conservation agriculture in the Aube co-op
Farmers’ strategies for developing autonomy

Renewed processes of cooperation with peers

**FIGURE 3** Map of sharing arrangements that specifically facilitate conservation agriculture in the Tarn co-op
Renewed processes of cooperation with peers

• New pooling processes within the machinery co-ops:

• New transfers of resources

• Joint learning and study groups
  • Training sessions, study trips
  • Production of common appropriate knowledge
  • Shared through technical dialogs within the co-op
Detachment through new attachment

• Induced attachments (or burdens)

  - No-Tillage
  - Herbicides

  - Frost-sensitive species of winter cover-crops
  - Input Efficiency through reduced dosages
    • Grazing of cover-crops

  - Legumes
  - New task: On-farm seed production
  - Planned Seed-sharing between peers

• Ways to minimize the induced attachments
Final discussion
Autonomy of dependencies shift?

Several functions of the cooperation with peers

• Facing new material needs brought by new practices, diversification, self-provisioning

• Improving access to/use of strategic resources: self-provisioning strategies beyond the farm level

• Optimising the on-farm labour organization:
  • Additional tasks: experimental activities, cover-crops cultivation, ...
  • Labour-sharing arrangements: collective venture to hire workers, time bank,...
Several functions of the cooperation with peers

- Facing new material needs
- Improving access to/use of strategic resources:
- Optimising the on-farm labour organization:
  - Producing common appropriate knowledge: through joint learning and study groups
  - Collectively managing the uncertainty context: cooperation as a protective space
Autonomy of dependencies shift?

Several functions of the cooperation with peers

- Facing new material needs
- Improving access to/use of strategic resources:
- Optimising the on-farm labour organization:
- Producing common appropriate knowledge:
- Collectively managing the uncertainty context:

⇒ more balanced and horizontal interactions between peers

!!! But inequalities to benefit from the cooperation
Conclusion
Conclusion

Compromises revealing lock-ins

• Knowledge and resource-sharing facing the lack of appropriate resource from other operators

• Remaining dependencies:
  • glyphosate
  • difficulty of designing multi-species pastures

⇒ Cooperation between peers: interesting mean for agroecological transition...

... but not sufficient!
Thank you for your attention!