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# « A to Z » farm outsourcing : the new corner stone of agricultural labor organization in France?

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# OUTLINE

1. Context of outsourcing in France
2. Research issues
3. Methodology and database
4. Three sets of results
5. Policy issues
6. Future research directions

# 1- CONTEXT OF OUTSOURCING IN FRANCE (1/3)

## Agricultural context – major features related to outsourcing issues

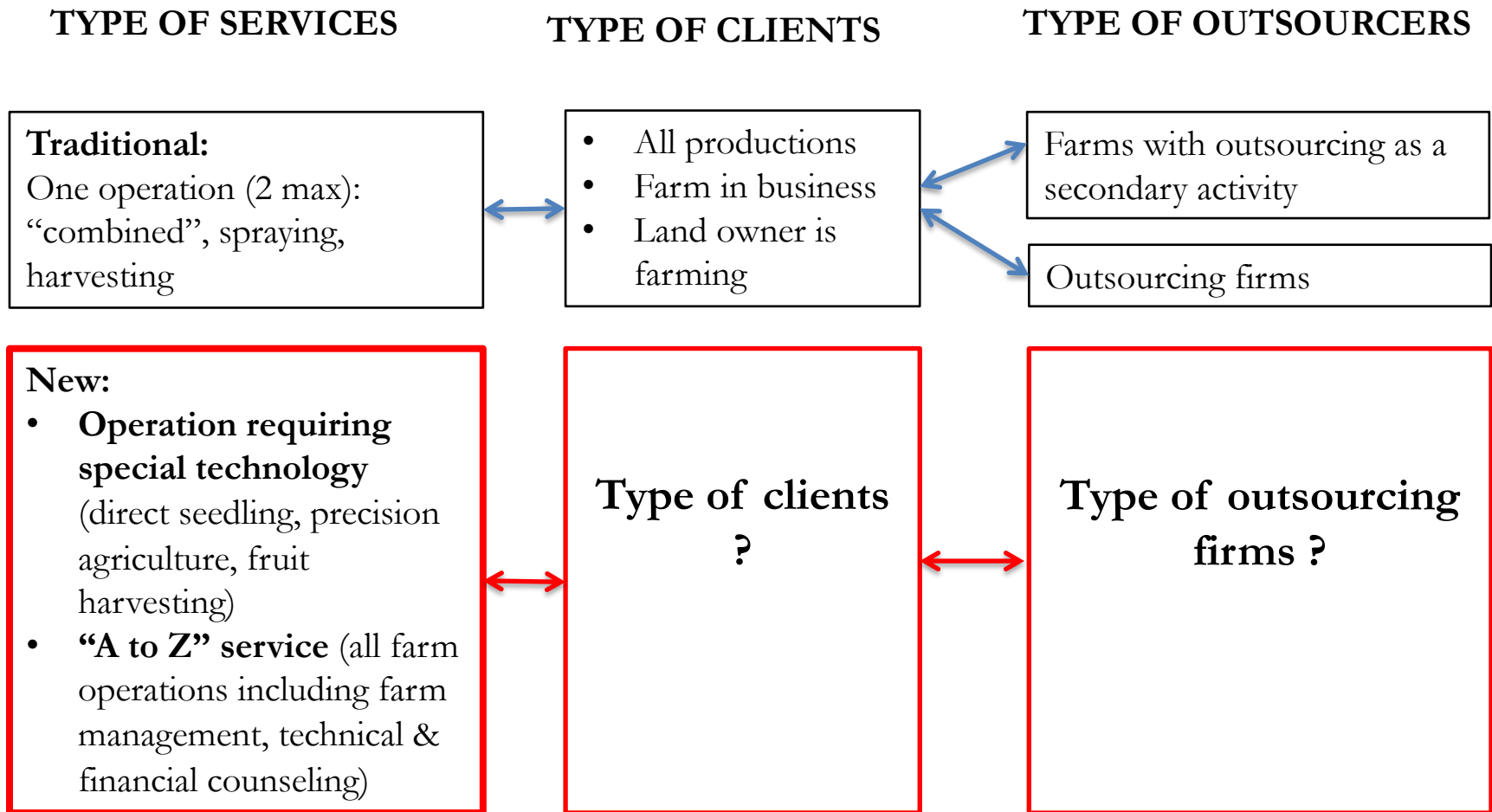
- Diminishing number of farms (especially medium size farms, family farms): -26% between 2000 and 2010
- Only one new young farmer for 4 retired farmers
- Changing labor structure: increasing hired labor (seasonal & permanent, more or less skilled)
- Rapidly changing policies: more restricted environmental and sanitary norms, new policy schemes (decoupled subsidies, subsidies conditional on environmental practices...)

# 1- CONTEXT OF OUTSOURCING IN France (2/3)

**The last official statistical study on farm outsourcing in France dates back to 2005 (Chevalier, 2007) :**

- 6/10 farmers are concerned by outsourcing
- 2,5 Md€ spent in outsourcing services
- Over the last 10 years : +8% since 95 for cropping operations, +23% for animal breeding operations, +49% for administrative operations
- 16.900 outsourcing firms: 90% of them are specialized in cropping operations and 65% of them have an average gross income of 235 K€

# 1 - CONTEXT OF OUTSOURCING IN FRANCE (3/3)



**NO** indication of « A to Z » outsourcing = the outsourcing of all of the farm operations including farm management

## 2 - RESEARCH ISSUES

### Research issues

- **An “invisible” phenomenon** from the statistical standpoint : how to identify and quantify this emerging phenomenon?
- What are the characteristics of the market for A to Z? of contractual relationships linking the different parties?
- What are the determinants and rationale of A to Z? Differences with standard economic models of outsourcing?
- What is the impact on labor division? farm performances and value chains?

# 3 - METHODOLOGY AND DATABASE

**A combination of quantitative and qualitative analyses**

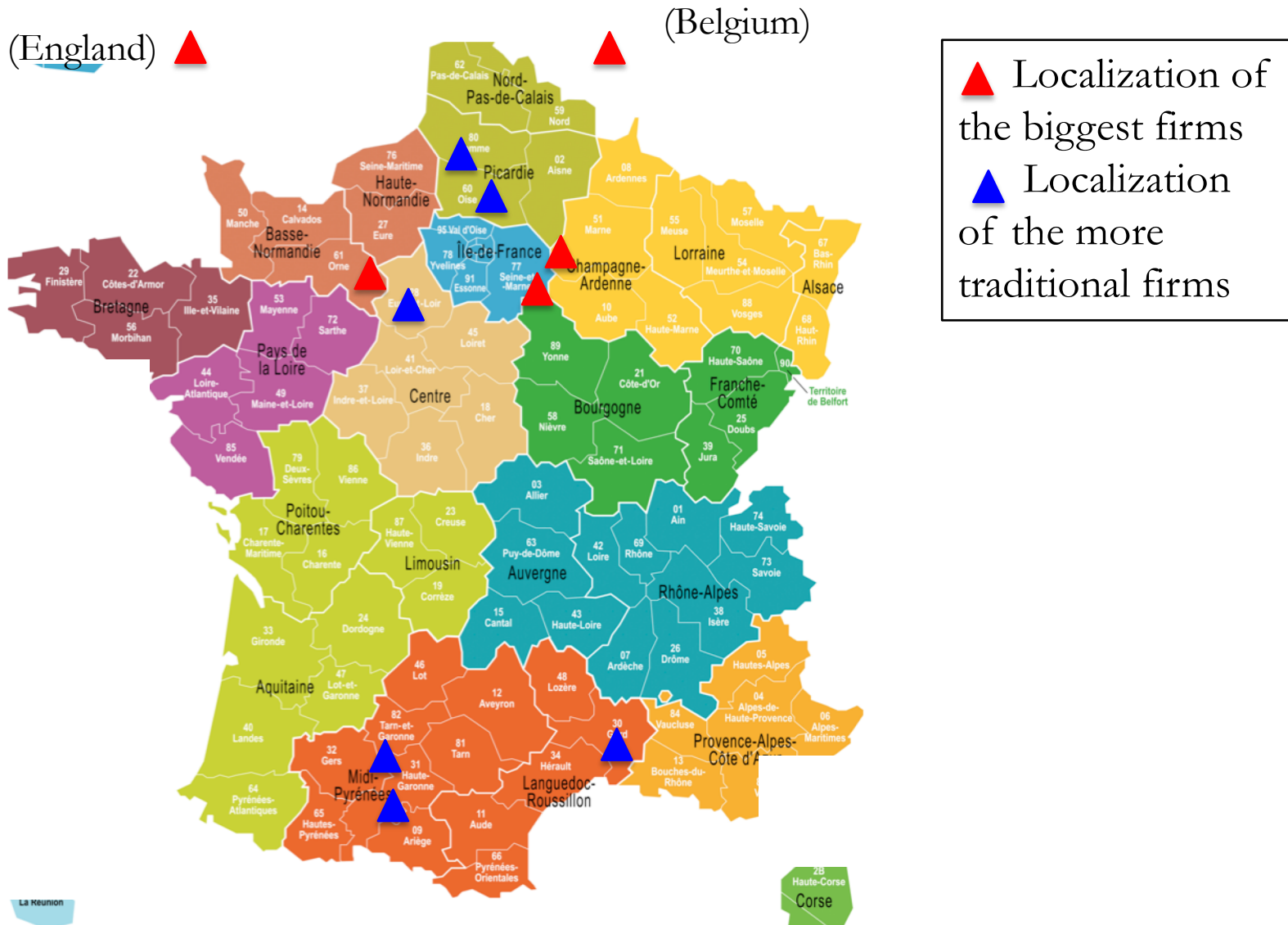
**Step 1 : Field survey and case study** of 20 of the biggest outsourcing firms + 20 farms with A-Z, to have an in-depth understanding of their organization & governance, business models and contractual relationships

**Step 2 : Statistical analysis of the French National Agricultural Census** (490.000 farms in 2010) to quantify A to Z outsourcing based on three main variables (use of spraying service, number of days contracted with outsourcers per hectare  $>1/4$ , % of days contracted over total  $> 15\%$ )

**Step 3 : Field survey of** 1200 surveys with farmer to study the characteristics and determinants of the demand  $\Leftrightarrow$  *surveys finished in July 2018, statistical analysis of data to be completed*

# 4 – RESULT A

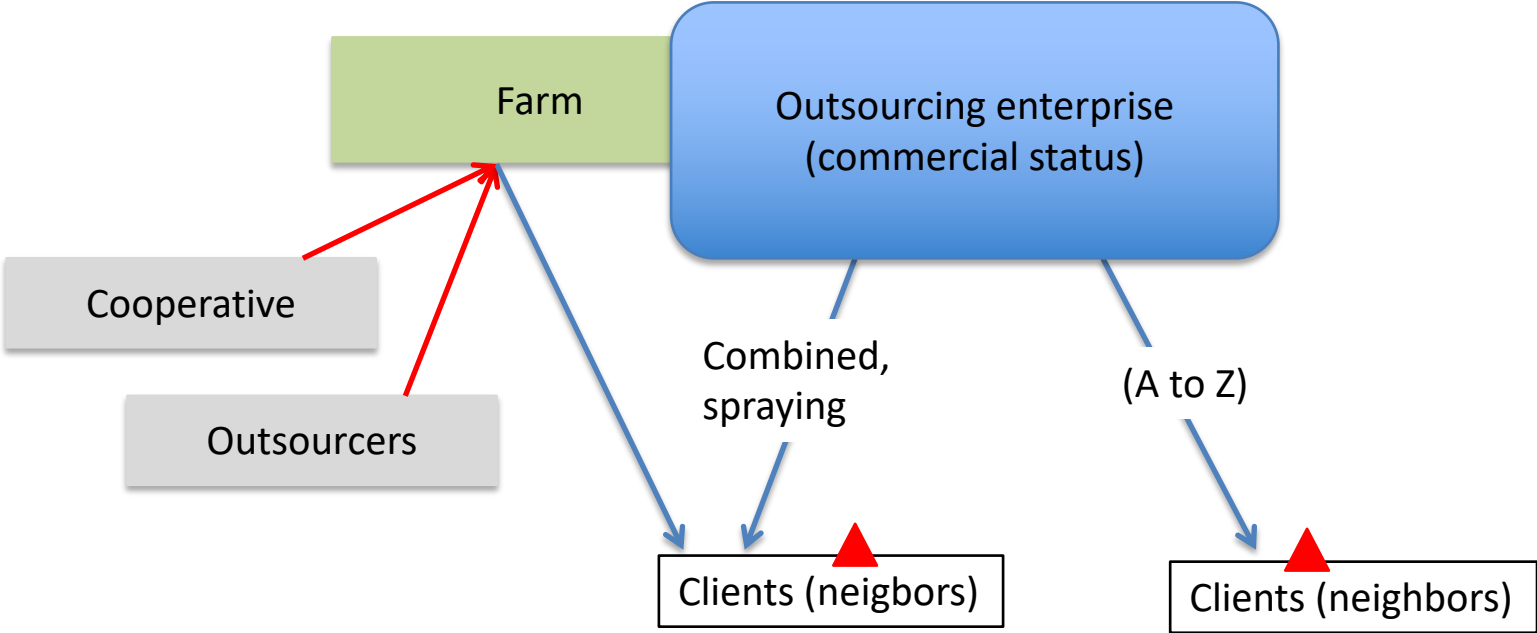
## CASE STUDIES OF A TO Z OUTSOURCING FIRMS





# The traditional outsourcing firms = Farms with outsourcing as a business

Rationale: maximize the investment in machines and income from outsourcing



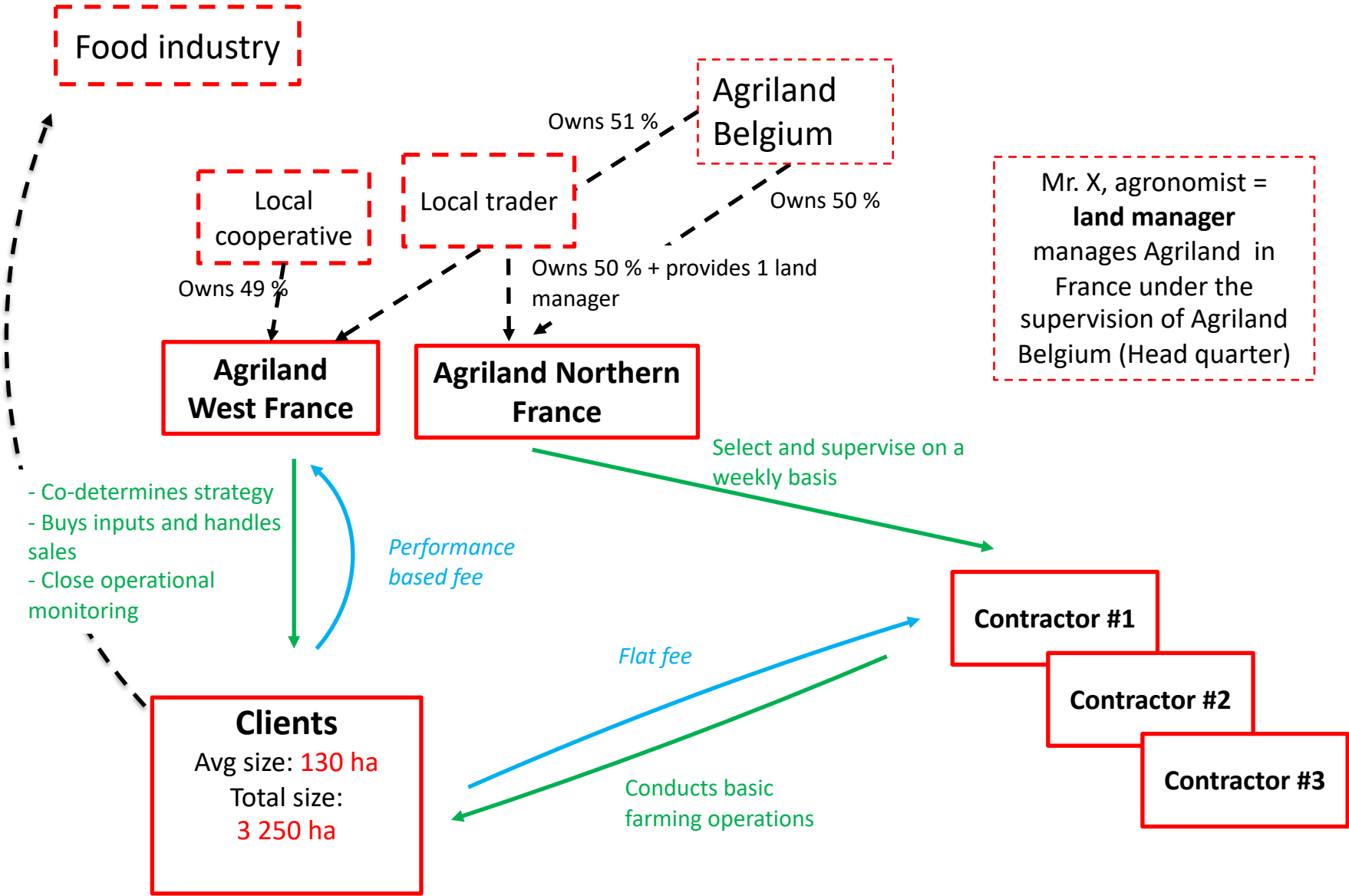
- Gives order to
- More or less informal contracts: fixed payment per hectare and per type of operation
- ▲ Decision maker

## New types of outsourcing firms

### Characteristics of the contractual relationships

- **A multi-agent partnership** : farmer / pool of contractors / input providers / food industries WITH in the middle the « **land manager** » as the conductor
- A make-or-buy decision guided by **multiple rationalities** (and not only a cost-reducing strategy) and addressed both generic & specific resources
- **Transfer of the use right on land to the « land manager »**
- **Separation between production and advice**

# Example of Agriland France



## **4 - RESULT B**

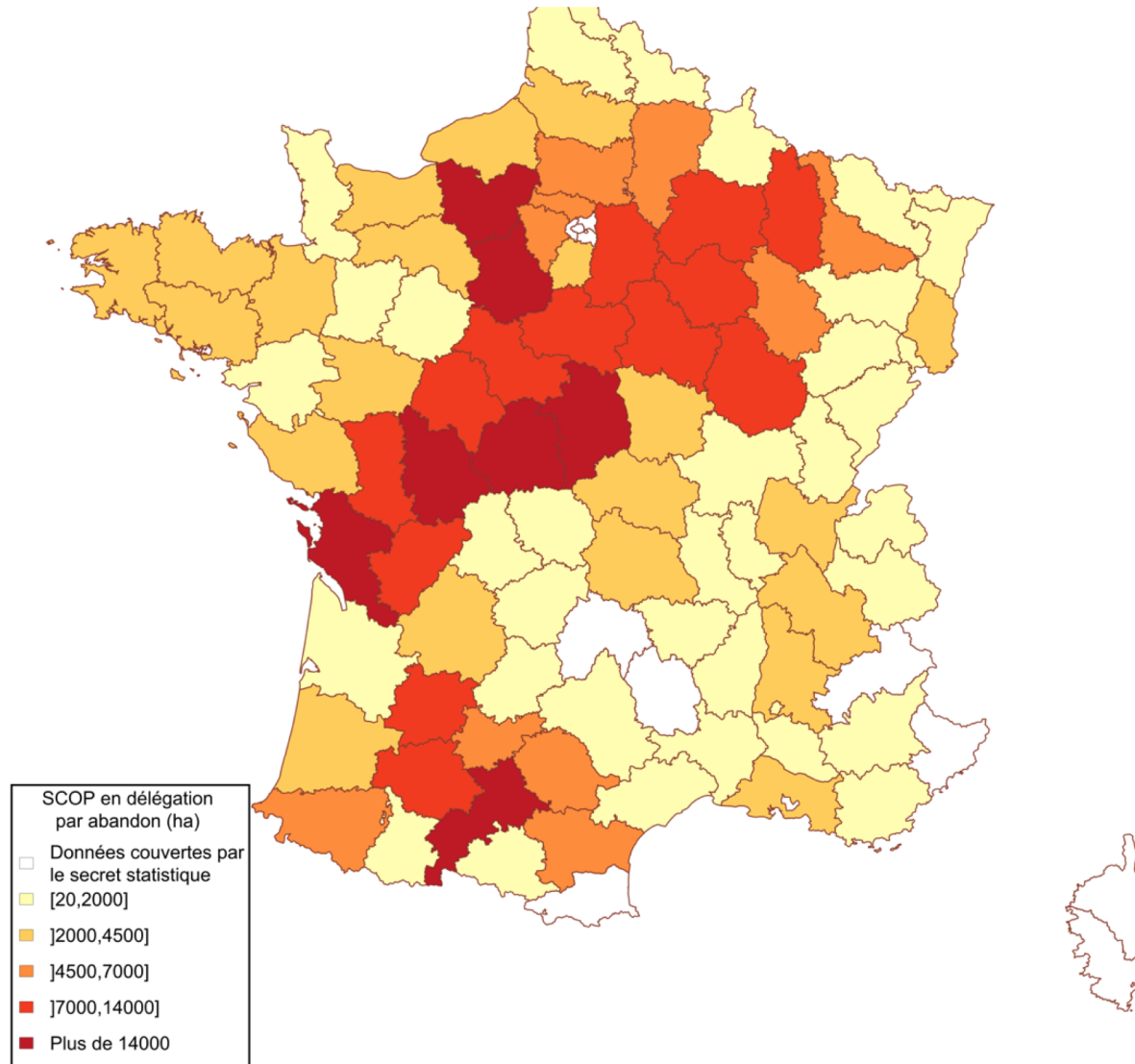
### **STATISTICAL QUANTIFICATION OF A TO Z**

**First time that A to Z outsourcing is being quantified.**

Over a total of 490.000 of French farms,

- **In France in 2010: the demand for A to Z outsourcing concerns 8752 cereals farms = 12% of the total population of cereals farms**

**FIGURE 1. Surface of cereals concerned by the A to Z outsourcing (in hectares, one hectare = 2,47 acres)**



## 4 – RESULT C

### CHARACTERISTICS AND DETERMINANTS OF THE DEMAND FOR A-Z (PRIMARY RESULTS)

- Age of farmers = 40 to 50 year old
- **80% of the farmers are part-time farming** (<3/4 of their time) \*
- **Almost half of the farms have a corporate status** (corporate capital structure with in particular shareholders who are not farming)

#### **Three major reasons :**

- (1) Transmission issue => retired farmers who wish to keep their farm in business in the hypothetical expectation of transmission to a child
- (2) Environmental issue => farmers who do not have machines nor skills to comply with new environmental regulations and who do not want to invest
- (3) Productivity issue => farmers operating diversified farming systems (breeding-cropping, vineyard-other crops, etc.) who outsource all of the cropping operations in order to improve the global productivity of the farm

\* France : 19% of the farmers are part time farmers and outsource most of the farming operations

## 5 - POLICY ISSUES

- Impact on agricultural sustainability: do outsourcing firms help to maintain family farms in business? perform better than traditional farming systems from a sustainability standpoint?
- Impact on value chains: to what extent new horizontal relationships associated with A to Z organizations (between the land manager and input industries / food industries) can modify existing value chains?
- Impact on policy (Common Agricultural Policy / French agricultural policy): two major controversies raised by A to Z outsourcing
  - Who is really farming and shall receive farm subsidies? the farmer/land-owner or the outsourcing firm?
  - How to control land concentration knowing that there is yet no limit as to the surface that a land manager can manage?

## 6 - FUTURE RESEARCH DIRECTIONS

1. Analysis of the demand
    - cluster analysis + testing a choice model
  
  2. Analysis of the contractual relationships
    - Price negotiation: fixed & variable parts, types of service included
    - Risk allocation between the different parties
    - Institutional comparative analysis of outsourcing organizations
- 
1. Impact analysis



## Bibliographical indications

- Anzalone G., Purseigle F., 2016, « Délégation d'activités et sous-traitance : au service de la transmission de l'exploitation ou d'un patrimoine », In P. Gasselin, J-P. Choisis J. P., S. Petit, F. Purseigle, S. Zasser, S., 2015, *L'agriculture en famille: travailler, réinventer, transmettre*, EDP sciences, Paris, 327-338.
- Chevalier B., 2007, « Les agriculteurs recourent de plus en plus à des prestataires de services », *Insee Première*, n°1160, octobre 2007.
- Clasadonte L., De Vries E., Trienekens J., Arbeletche P., Tourrand J-F., 2013, « Network companies : a new phenomenon in South American farming », *British Food Journal*, Vol. 115, n°6, 850-864.
- FNEDT, 2015, « Rapport d'activité consolidé 2015 », FNEDT-CCMSA, téléchargé le 15 février 2018 depuis le site < <https://www.fnedt.org/rapport-d-activite>>.
- Gibbons R., Roberts J., 2013, *The Handbook of Organizational Economics*, Princeton University Press, Princeton.
- Hebrard L., 2001, « Le développement des services agricoles. Une sous-traitance spécialisée au service des agriculteurs », *Insee Première*, n°817, décembre 2001.
- Purseigle F., Nguyen G., Mazenc L., 2017, « Chapitre 1. Anatomie des firmes agricoles », In F. Purseigle, G. Nguyen, P. Blanc (eds) 2017. *Le nouveau capitalisme agricole : de la ferme à la firme*, Presses de Sciences Po, Paris, 29-64.
- Qanti S-R., Reardon T., Iswariyadi A., 2017, « Triangle of Linkages among Modernising Markets, Sprayer-traders, and Mango-farming Intensification in Indonesia », *Bulletin of Indonesian Economic Studies*, Vol. 53, n°2, 187-208.
- Schnaider P. S. B., Ménard C., Saes, M. S. M., 2018, « Heterogeneity of plural forms: a revised transaction cost approach », *Managerial and Decision Economics*, 1-12, DOI: 10.1002/mde.2935.
- Zhang X., Yang J., Reardon T., 2017, « Mechanization outsourcing clusters and division of labor in Chinese agriculture », *China Economic Review*, n°83, 184-195.