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Group Farming in France: Why Do Some Regions Have More Cooperative Ventures Than Others?

by Bruno Dorin and Bina Agarwal

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Group farming in France

Why do some regions have more cooperative ventures than others?

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Reference:

Agarwal Bina, Dorin Bruno, 2019. Group farming in France: Why do some regions have more cooperative ventures than others?, **Environment and Planning A: Economy and Space**, 51:3, May, pp. 781-804.
(<https://journals.sagepub.com/doi/full/10.1177/0308518X18802311>)



Article

Economy and Space

EPA: Economy and Space
2019, Vol. 51 (3) 781-804
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DOI: 10.1177/0308518X18802311
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Group farming in France: Why do some regions have more cooperative ventures than others?

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Abstract

The global debate on food security and the kinds of farming systems that could prove economically and ecologically sustainable has focused overwhelmingly on small family farms versus large commercial farms, with little attention being given to alternative models based on farmer cooperation. France offers a significant but under-researched and internationally little-recognized model of group farming – the GAEC (*Groupement Agricole d'Exploitation en Commun*) – based on farmers pooling land, labour and capital. This model is of considerable contemporary interest for both France and other countries. Catalysed by a 1962 law, GAECs accounted for 7.6% of farms and 15% of agricultural adult work units in 2010, but their incidence varied greatly across regions. Using data from the French agricultural census and other sources, this paper identifies the factors – economic, ecological, social and demographic – underlying this regionally uneven development of GAECs (and comparatively of EARLs – *Exploitations Agricoles à Responsabilité Limitée* – another type of group farm introduced in 1985). Regions with a higher incidence of group farms are found to be those that were historically dominated by middle-sized farms, had a local ecology favouring labour-intensive animal breeding, especially pastures, a higher proportion of agricultural graduates, greater economic equality and social institutions that promote community cohesion, among other factors. These results illuminate not only the conditions favourable to the emergence of group farming in France, but also the conditions under which such farmer cooperation could take root in other (including developing) countries, subject to context-specific modifications of the French model.

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Six associate farmers and their wives in 2002, during the 40th anniversary of their GAEC "Copex" in South Burgundy, France

International Conference of Agricultural Economists (ICAE), August 17-31, 2021
Session "Group Farming: An Institutional Innovation Whose Time Has Come?"

1 Introduction

GAEC: a unique form of group farming in the world

GROUP FARMING = farmers POOLING voluntary their primary factors of production:
LAND, CAPITAL & LABOUR

GAEC

- *Groupement Agricole d'Exploitation en Commun*
- Legalized by a law in 1962 (fully effective in 1965):
From 2 to 10 partners, family and/or non-family (but no GAEC = married couple only, until 2010)
Working full-time on the farm
- Propelled by the JAC (Young Catholic Farmers' association):
“a third road is possible is needed between the abuses of capitalism
and the excesses of Marxian collectivism”
- Supported by key political figures such as Edgard Pisani, Minister of Agriculture (1961-66)
to “modernise family-based agriculture”
- Overall political goal: help individual family farms improve
their managerial efficiency, productivity, and work conditions

EARL: another form of group farming under certain conditions

- *Exploitation Agricole à Responsabilité Limitée* legally instituted in 1985
- Limited-liability society with possibly 1 person only, or just a married couple

GAEC + EARL ≥ 2 in 2010 ≈ 73,000 farms in metropolitan France (with a bit more of GAEC than EARL)

2 French agriculture in recent decades

(Agricultural censuses 1988, 2000, 2010
Metropolitan France without Paris' districts)

(1) Sharp drop in farms & farmers Sharp increase in farm size

2010: 490,000 farms (twice more in 1988)
751,000 annual work units (AWU)

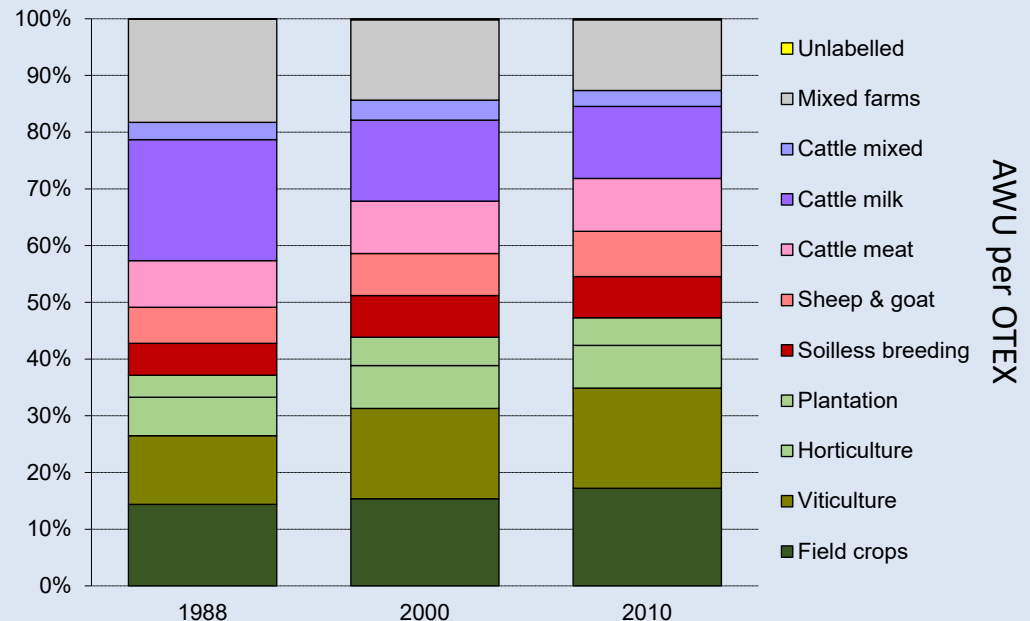
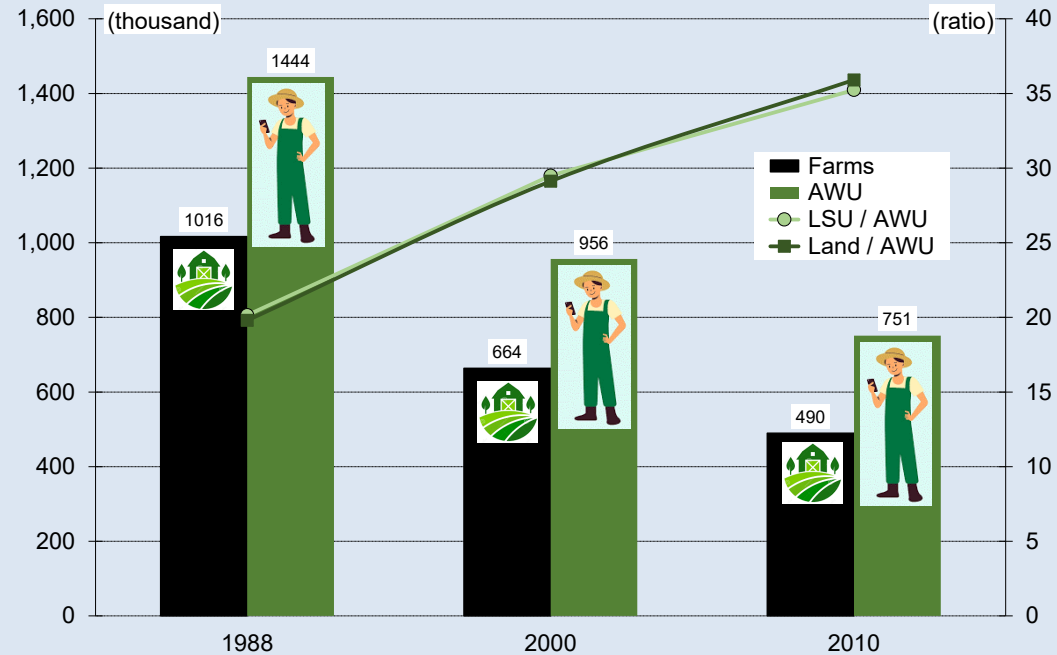
(2) Growing salaried work

- 71% own-employed (84% in 1988)
- 17% permanently salaried (10% in 1988)
- 10% seasonally employed (6% in 1998)
- 2% other (ETA, CUMA)

with \approx 28% women (30% in 1988)

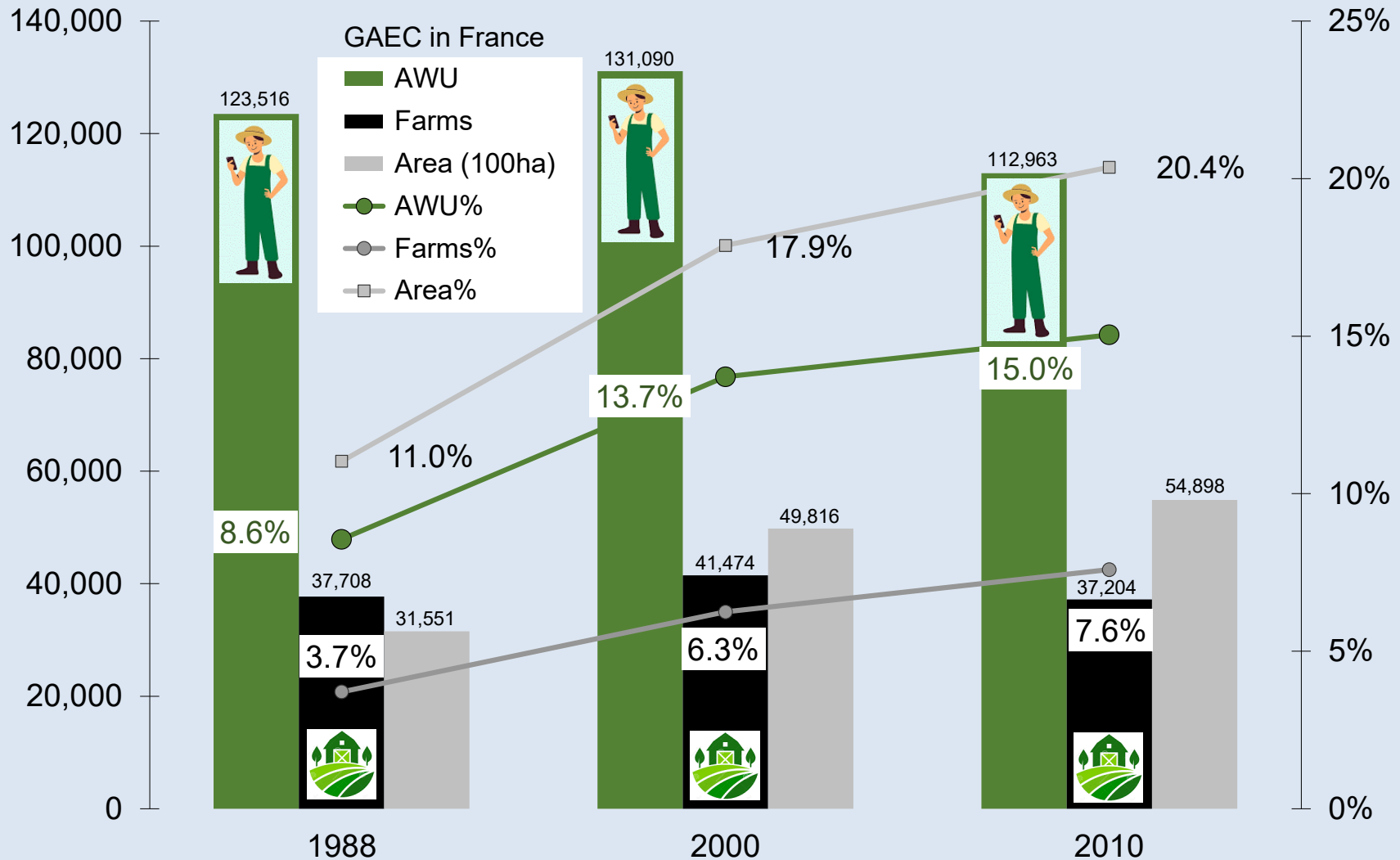
(3) Growing farm specialisation (industrialization, robotization...)

2010: 27 million ha (55 ha/farm on average)
23% owned by farmers (45% in 1988)
28% pasture
6% irrigated
26.5 million livestock units (LSU)
(54 LSU/farm)

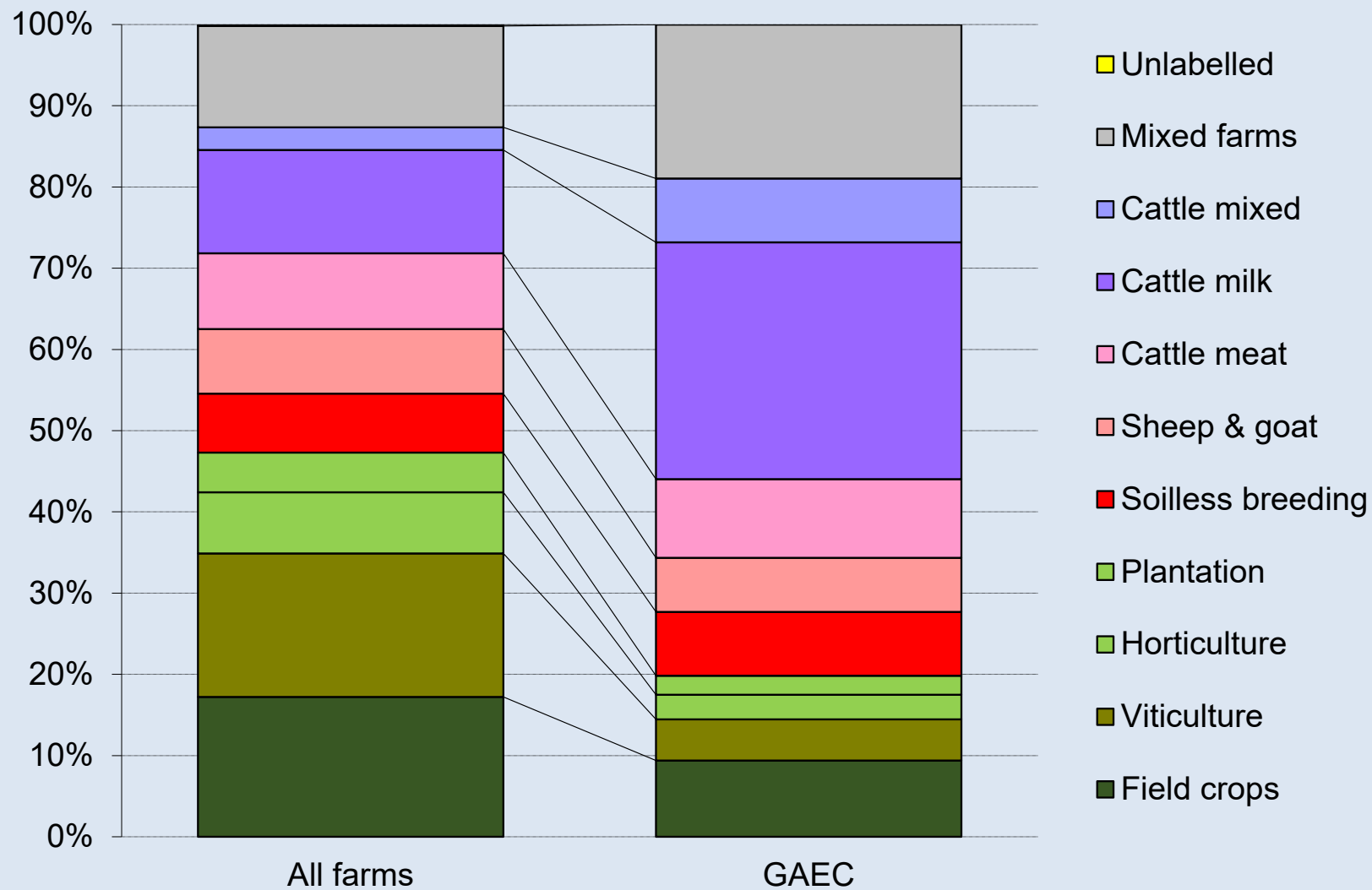


③ Growing importance of group farming

■ Growing shares in employment, farms and agricultural area

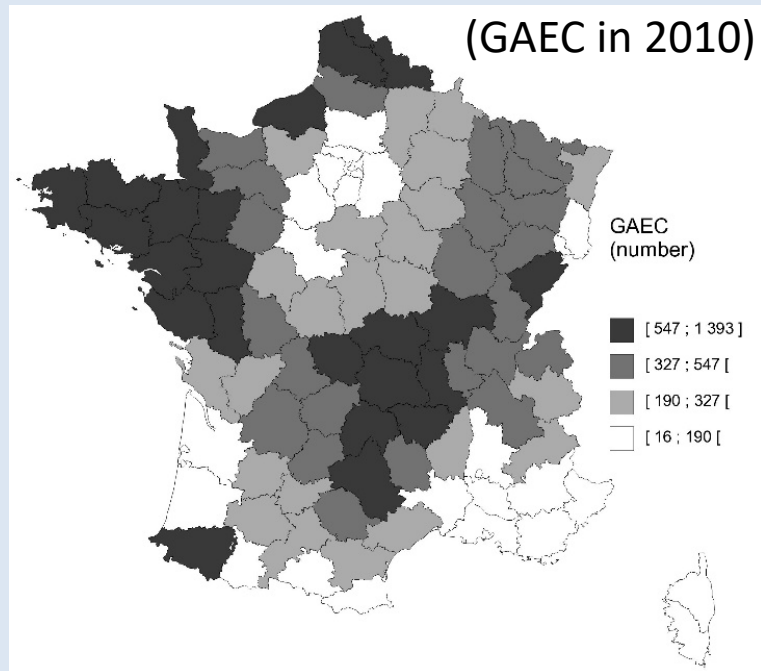


■ Over-representation in livestock breeding

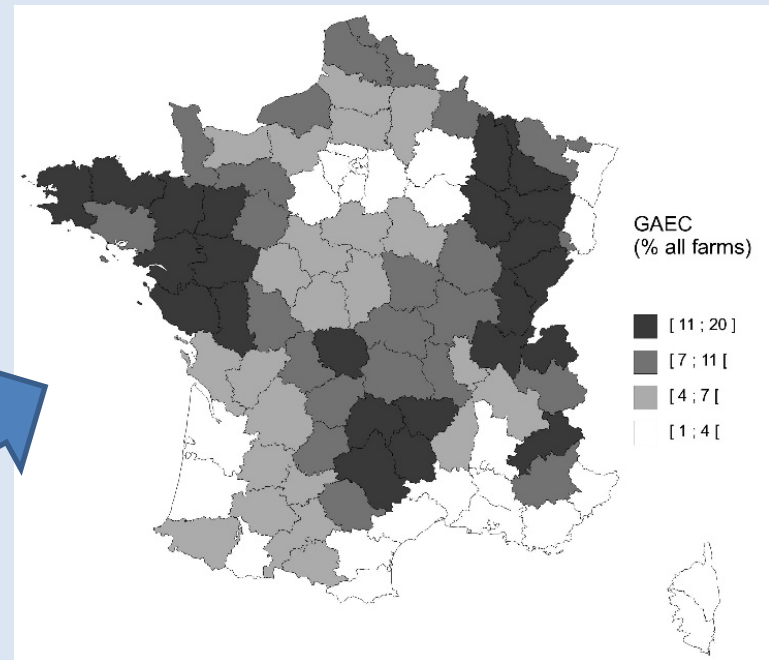


AWU per OTEX in 2010

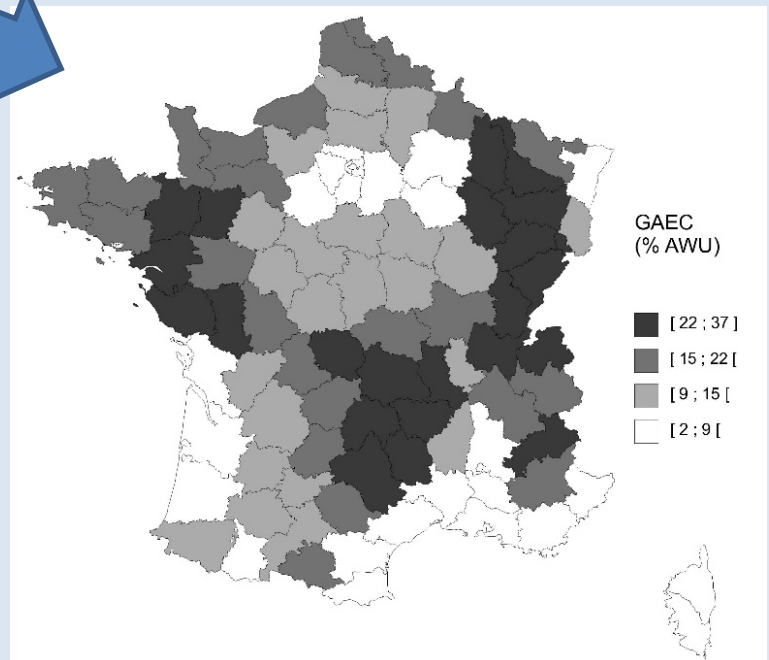
■ Great variation of incidence across French districts...



% all farms



% all AWU



Why do some regions have more cooperative ventures than others???

4 Econometrics of cooperative ventures

■ The OLS regression model

$$Y_d = \beta_0 + \sum_i \beta_i X_{i,d} + \sum_j \lambda_j Rdummy_j + \varepsilon_d$$

where:

Y	% GAECs (or EARL \geq 2) to total farms in the district/department
d	district/department of the farm (n=92)
X_i	explanatory variables
β_0, β_i	parameters to be estimated
R	control for regions (n=13)

■ The explanatory variables

Many variables tested in four fields of explanatory factors:

- Economic
- Ecological
- Social
- Demographic

■ The database

Data collected/verified/estimated from three main sources:

- Ministry of Agriculture (Agricultural censuses, Agreste...)
- INSEE (The national institute of statistics and economic studies)
- Église catholique de France (Catholic Church of France)

5 Results

In simple words

Regions with a higher incidence of GAEC in 2010 are found to be those that:

- (1) were historically dominated by middle-sized farms
- (2) had a local ecology favouring animal breeding (especially pastures)
- (3) had a higher proportion of agricultural graduates
- (4) had greater economic equality
- (5) had social institutions that promote community cohesion

Scientific evidence

Explanatory variables	Dependent variables (% of total farms in 2010)	
	GAEC	EARL
% farms with SAU 20-49 ha in 1970	0.154*** (0.000)	0.054* (0.063)
% farms with SAU ≥50 ha in 1970	-0.106*** (0.001)	0.058* (0.069)
% SAU under permanent pastures in 2010	0.077*** (0.000)	-0.030*** (0.009)
% SAU 2010 that was irrigable in 2007	-0.047 (0.119)	0.041** (0.028)
% students specialised in agriculture in 2010	0.346** (0.023)	0.116 (0.234)
Income Gini index in 2010 (from 0 to 100)	-0.398** (0.042)	-0.074 (0.637)
No. of active priests in 2010-2014	0.008* (0.055)	0.003 (0.291)
% women among farm workers in 2010	-0.916*** (0.000)	0.061 (0.483)
Controlled for 13 regions	yes	yes
Constant	43.747***	6.87
N	92	92
Adjusted R^2	0.82	0.81

Notes: (1) SAU = *Surface Agricole Utile* (utilized agricultural area).

(2) All regression equations are with robust standard errors and adjusted for regional fixed effects

(3) Figures in parenthesis are p values. Significance: *** at 1% ** at 5%; * at 10%

Socioeconomic interpretation

historically dominated by middle-sized farms

- allocation of government subsidized loans is conditioned by a minimum farm surface area (SMI)
- large farms have their own machines and employees and do not need to pool their resources to save costs

local ecology favouring animal breeding (especially pastures)

- livestock farming is labour intensive 365 days a year (milking, feeding, etc.):
group farming makes it possible to share this work and free up time (for rest or other)
- irrigation and soil in the plains favour industrial monocultures, not livestock or crop-livestock farming

higher proportion of agricultural graduates

- agricultural degree is needed to access some farm subsidies, loans, markets, etc.
- higher education facilitates collective work, good accounting, technical or market innovations...

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greater economic equality

- equality among associates is an important principle in GAEC formation and functioning
- group homogeneity is more conducive to cooperation than heterogeneity (Baland and Platteau 1996)

social institutions that promote community cohesion

- social norms and relations of trust and reciprocity are ground conditions conducive to cooperation
- catholic priests and religious associations emphasized community, cooperation and benefit sharing

less women in farm work • husband-and-wife GAEC forbidden until 2010

- one of GAEC's ambitions in the 1960-1970s was to free wives and children from (hard, unpaid) agricultural work to enable them to access nonfarm jobs or pursue studies

6 Concluding remarks

Group farming can provide an important third model of farming, beyond family farms and corporate agriculture, not only for small farmers who are seeking better economic and ecological outcomes, but also for newcomers interested in community-based options, agroecological practices & services, and building social & solidarity economies around food and farming systems.

GAECs emerged in France as a result of young farmers searching a third path, away from the negative features of both capitalist and socialist farming, and a government seeking to modernise agriculture within the ambit of families and communities.

These motivations are as relevant today, and not just in one country or region but increasingly more globally...