Sociological Reflections on the Future of Agri-food Systems: Confronting 'models'

Europeanization of public policies

A LONG TERM VIEW ON PESTICIDES POLICY IN FRANCE & EU

Fanny PELLISSIER

PhD candidate – UMR LISIS

fanny.pellissier@versailles.inra.fr



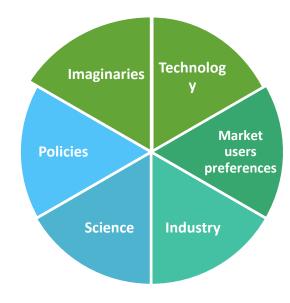


Why such a narrow focus on pesticides, in a reflection on the Future of Agri-food Systems?

- A key technology for modern intensive agriculture
- A controversial object
- A target of public policies for a long time
- > Pesticides: an appropriate entry point to speak about models of intensive farming and attempts to manage the undesired effects
- → How do policies **question and pressure** the regime of pesticides?
- → What are the prospects for **the future of agri-food systems**?

The regime: focus on policies

- A sociotechnical regime: heterogeneous composition
 - Technology
 - Market user preferences
 - Industry
 - Science
 - Imaginaries
 - Policy



The ST regime of pesticides: locked in but challenged

(Adapted from Geels 2002, Geels and Schot 2007)

The authorization of placing pesticide products on the market

FROM NATIONAL TO EUROPEAN RULES,
INDUSTRIAL INNOVATION UNDER PRESSURE

Pesticides & first uses: a matter of agricultural development

- ○1880's: first use of pesticides
 - Extracts of plants, metal powders...
- Early 1900's: first regulatory texts in France
 - 1943: each sold products must have been previously authorized
 - → Secure the **efficiency of the products** for the farmers
- Development of a tight network between civil servants, industries and researchers
 - Various forums: "Commission des toxiques" (toxics commission), professional magazines, think tanks...
- OAgricultural "revolution"
- → Installation of a high level of coordination in the regime

Pesticides & policy in France: under gradual EU influence

- ○1978: European black list
- 1992: a big change in the governance of the regulatory regime
 - Directive: subsidiarity principle
 - Authorization of active substances first at EU level
 - Pressure on the French network of plant protection
- 2009: new stronger regulation
 - Regulation: directly applicable
 - Cut-off criteria for endocrine disruptors

Regulation & innovation process: a pressure on the intensive farming regime

- Evolution of the regulations for market approval
 - Complexification of the requirements for the approval files
 - Need for big investments
 - → Selection of big global firms
- Complexification of the industrial innovation process
 - Need for a lot of anticipation
 - Orphan agricultural productions
 - →It is more and more difficult to market a product in the EU

→The construction of the EU pressure the regime of pesticides by indirectly transforming the innovation process

European incitement to produce National Action Plans

THE EXAMPLE OF ECOPHYTO 2018, AS A POTENTIAL PRESSURE ON PRACTICES



Pesticides & the dynamics of public problems: the framing of water quality

- Contestations over their use from the beginning: health framework
 - Part of the requirements for the placing on the market
- Late 1980's, 1990's: a water quality problem
 - Nitrates policy framework
 - A more complex problem
 - Evolution of the measuring equipment (proof)
 - Change in the experts committee's agenda

→A framing from the EU

Pesticides & public action: National Action Plans

From 1999, a series of NAPs corresponding to EU requirements

Name	Duration	Discourse	EU framework
Phyto 2000	2000 – 2003	To reduce water pollution	WFD (2000)
PIRRP	2006 – 2009	To reduce the risks links to the use of pesticides, particularly by having the use decrease	Thematic strategy "pesticides" (preparation of the directive 2009/128/EC)
Ecophyto 2018	2008 - 2018	To reduce the use of pesticides (by 50% by 2018)	Directive 2009/128/EC (by anticipation)

Encounter of European & national dynamics: Ecophyto 2018

- Ecophyto 2018: an ambitious plan
 - Published in 2008
 - Aimed at decrease the use of pesticides by 50% by 2018, if possible
- OA consequence of the *Grenelle de l'environnement*
 - Political event propelled by the environmental NGOs
 - Brand new Sarkozy government
 - An arena to discuss environmental problems
 - Temporary empowerment of the NGOs in the context of the "cogestion"
 - joint management of the sector by the trade unions and the State
- ORole of the expert reports (INRA, IRSTEA)
- The **anticipation** of the future Directive on the sustainable use of pesticides (2009)

Ecophyto 2018 in 9 axes: an attempt to change market users preferences

- 1. Assess the progress in the decrease of pesticides use
- 2. **Inventory and generalize** the systems and means known to enable a decrease of the use of pesticides, by mobilizing partnerships between research, development and transfer
- 3. Innovate in the design and adjustment of crop management techniques and farming systems less intensive in pesticides
- 4. **Training** on how to decrease and secure the use of pesticides
- 5. Strengthen the networks that watch biological pests
- 6. Take into account the specificities of overseas territories
- 7. Decrease and secure the use of pesticides in non-agricultural areas
- 8. Organize the national monitoring of the plan and its territorial form, and communicate on the reduction of the use of pesticides
- (Strengthen user safety)

Ecophyto & implementation: the disenchantment

- Few (or no) results compared to what was expected
 - Delay in the implementation
 - Main indicator of change stable (NODU, number of unit doses)
 - Loss of the quantitative objectives (50%, 2018)
- A dynamic launch anyway?
 - Context of reflection on attempts to change the regime
 - A huge package of around Ecophyto
 - Non-reversible dynamic
 - Prospect of the Agroecology project of the Minister of agriculture, GIEE
- Or the capacity of adaptation of the regime?

Conclusions

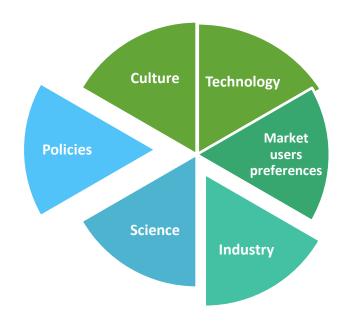
WHAT SHOULD WE EXPECT AT THE AGRICULTURE LEVEL?

Conclusion: a de-alignment in the regime of pesticides?

- Pressure of policy dimension to change market users preferences
- Pressure on the industrial innovation

- → De-alignment in the regime?
- → De-coordination?
 - →Attempts to re-coordinate: adaptation?

• The beginning for a bigger move toward a greener agriculture?



Thanks for your attention!

Fanny PELLISSIER

PhD candidate - UMR LISIS

fanny.pellissier@versailles.inra.fr

Very short bibliography

Aubertot, J.N., Barbier, J.M., Carpentier, A., Gril, J.J., Guichard, L., Lucas, P., Savary, S., Savini, I., and Voltz, M. (2005). Pesticides, agriculture et environnement. Réduire l'utilisation des pesticides et limiter leurs impacts environnementaux (France: Expertise scientifique collective, synthèse du rapport, INRA et Cemagref).

Borraz, O., Guiraudon, V., Benamouzig, D., Besançon, J., and Collectif (2008). Politiques publiques: Tome 1, La France dans la gouvernance européenne (Les Presses de Sciences Po).

Butault, J.P., Dedryver, C.A., Gary, C., Guichard, L., Jacquet, F., Meynard, J.-M., Nicot, P., Pitrat, M., Reau, R., Sauphanor, B., et al. (2010). Ecophyto R&D. Quelles voies pour réduire l'usage des pesticides ? Synthèse du rapport d'étude (France: INRA Editeur).

Fouilleux, È. (2000). Entre production et institutionnalisation des idées. La réforme de la Politique agricole commune. Rev. Fr. Sci. Polit. *50*, 277–306.

Fourche, R. (2004). Contribution à l'histoire de la protection phytosanitaire dans l'agriculture française (1880-1970). Histoire. Lyon 2.

Geels, F.W. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. Res. Policy.

Geels, F.W. (2014). Regime Resistance against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective. Theory Cult. Soc. 0263276414531627.

Geels, F.W., and Schot, J. (2007). Typology of sociotechnical transition pathways. Res. Policy 36, 399–417.

Jas, N. (2007). Public Health and Pesticide Regulation in France Before and After Silent Spring. Hist. Technol. 23, 369–388.

Lascoumes, P., and Le Galès, P. (2004). Gouverner par les instruments ([Paris]: Presses de sciences Po).

Vanloqueren, G., and Baret, P.V. (2009). How agricultural research systems shape a technological regime that develops genetic engineering but locks out agroecological innovations. Res. Policy 38, 971–983.