

 **O.56 - Rising concerns over the impact of pesticides: an analysis of the public controversies about pesticides.**

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Abstract

Our objective, in RA3.5, was to consider the state of the public debate. What are the issues at stake? By whom were they supported? What were the main evolutions of the debate? Pesticides have long been a matter of discussion in a professional forum which brings together farmers, public institutions and the pesticides industry with no room for the lay people because they lacked the technical knowledge that would have made them able to participate in the debate. Some NGOs have acquired this knowledge and, referring to the notion of "framing", we analyse the evolution of the public debate both at EU and National levels. The NGOs have first focused their action on the environmental impacts of pesticide use while lobbying public institutions for changes in the pesticide regulation and supporting alternative forms of agriculture. Their positions have evolved and public debate is now constructed by the opposition between the actors of the agribusiness which target risk reduction without questioning the organisation of agriculture and NGOs which claim changes in the very conception of agriculture. Since 2004, recently formed NGOs specializing in Public Health issues reinforce the environmental NGOs' position by raising controversies on the cumulative impacts of pesticides on human health. These evolutions are expressed in numerous sub controversies that we will describe. By suggesting that the long term impact of pesticide use might be as negative for human beings as it might be for soil or birds, NGOs break the line that usually separates Man and Nature with the practical consequence that pressure on policy makers increases: they have to take responsibility for the not-yet-demonstrated consequences of agricultural practices on public health.

In 1962, Rachel Carson's book *Silent Spring* highlighted the side-effects associated with pesticides, and their use and production became a matter of contention. Political answers to the debate were first conceived as a matter of risk management to avoid acute pollution of nature, risks linked to food intake (MRLs) and farmers' exposure to dangerous substances. Our objective, in RA3.5, was to consider the state of the public debate. What are the issues at stake? By whom were they supported? What have been the main evolutions in the debate in recent years?

Because pesticides have long been a matter of discussion in a professional forum which brings together farmers, public institutions and the pesticides industry, to turn pesticides into a matter of public debate, NGOs - which don't belong to this professional world - raise concerns about pesticides and change the localisation of the debate from professional to public forums. They are able to do so because they have acquired a knowledge capacity that makes them able to participate in a debate as technical as that surrounding pesticides. Therefore, each organisation's understanding of the pesticide issue contributes to the construction of the public debate. To describe it, we will refer to the notion of 'framing' as an interpretative scheme that allows actors (Van de Graaf & Grin, 1999) or social movements (Joly, 2000) to analyse events and to give them a meaning. In both cases, it depends on their conception of the world and the normative elements that it implies.

Method: Web search. Face-to-face interviews with NGO leaders. Document analysis.

Analysed countries: EU level, F, NL, SW with insights from the UK (RSS)

Results

1. Public debate on pesticides is animated by a small number of NGOs that target the institutions for gaining normative changes.

In each country, the public debate is animated by a small number of NGOs that establish strong networking for getting their voice heard at national or EU level. Their framing of the pesticide issue can be different (Table 1) but they share many normative demands such as the definition of a treatment frequency index and stricter registration rules. They also support alternative forms of agriculture. The case of Switzerland is different because integrated production is implemented by law therefore Swiss NGOs are less active on the pesticide issue.

The main objective of most NGOs is a normative one. But claims about pesticides have to be supported by public opinion if one wants MPs and public institutions to put them on their agenda and public controversies participate in achieving this aim.

2. Evolution of the public debate: human health becomes a main issue.

The environmental NGOs first focused their action on the environmental impacts of pesticide use on biodiversity and water. But pesticide use was considered by most environmental NGOs as something unavoidable because of the economic imperatives, the state of farmers' education and knowledge or the necessity to fight against hunger. However, because there was no change in both farming practices and agricultural policy, NGOs have stiffened their positions. They started (at dates that vary per country) stronger campaigns against pesticide use. Public debate is now constructed by the opposition between the actors of the agribusiness which target risk reduction without questioning the organisation of agriculture and NGOs which claim changes in the very conception of agriculture.

Reducing pesticides risks or reducing the use of pesticide?

NGOs create controversy on the ongoing risk reduction strategy on two points:

A controversy about the substances that should be banned

A controversy about the capacity of Good Agricultural Practices to reduce the environmental impact of pesticides: they don't always translate into a reduction in the amount of pesticide given to the plant, in the frequency of treatment and, generally speaking, don't challenge the technical conception of the crop management.

Therefore these controversies reflect a controversy about the very conception of agricultural systems. Since 2004, newcomers reinforce the NGOs' position.

Table 1: Framing of the pesticide issues by NGOs in F, NL and at EU level.

	PAN Europe	MDGRF (F)	FNE (F)	SNM (NL)	Milieudefensie (NL)	CLM (NL)
Framing	The globalisation of agriculture has adverse impacts on human health and on the environment.	The pesticide industry participates in globalisation and in the environmental pollution that both prevent rural development.	Nature and human beings should be reconciled	Food safety	The environment is part of the food chain.	Reconciliation citizen and food production
Place of debate	European institutions	General public EU institutions	Nature conservation associations	Regulation areas. EU institutions	General public EU institutions	Cropping systems Regional /provincial institutions
Main normative demands	Regulation and transparency of the pesticides' authorisation process Assessing the consequences of pesticide use taking into account the toxicity of pesticides Treatment frequency index, concrete targets and timetables.	Regulation taking into account the toxicity of pesticide Treatment frequency index	Concrete targets for pesticides reduction. Protection of the non farming population Taxation of the most dangerous molecules Organisation of farmers' education on pesticide use.	Legal enforcement of IPM systems Strict pesticide regulation	Ban of the most harmful pesticides Smart application techniques Supply of residue free products	Registration of plant protection products of natural origin Deliberate reduction of pesticide residue levels

Controversies about the impacts of pesticides for human health.

Newer NGOs are working in the field of public health with the support of medical doctors or organisations. They have no links with the actors involved in agriculture but work with NGOs such as PAN Europe. *They contribute in raising awareness of the results of medical studies involving chemical use and human health and on the knowledge gaps that these studies enhance.* Particularly, they create controversies about:

a) The approval process for pesticides substances by emphasising that:

Tests of toxicity are made by the industry itself with no public access to the results.

There is no sufficient knowledge of the effect of the combination of substances within the same products.

b) The cumulative impacts of pesticides. There is a scientific uncertainty about the long term cumulative effects of pesticides particularly on specific weak target groups (e.g. pregnant mothers) and new results show adverse effects. NGOs mobilise the precautionary principle and ask for the change of MRLs standards and the generalisation of IPM. But they also expand the debate outside the boundaries of the agricultural community (hence contributing in the reduction of the importance of the usual stakeholders) by asking for the extension of protected areas, regulation of home use etc. Actually, we can make the hypothesis that every book and broadcast programme where doctors make a link between chemicals/food and health builds a background that will give credibility to new information on the links between pesticide accumulation and human health. And, on the contrary, it will build suspicion for every official denial of the very existence of this risk.

For reinforcing the impact of these controversies, *communication strategies are important and create a controversy with the professional world because they often associate pesticides to poisons.*

Tensions with the farming communities are all the stronger as NGOs have concentrated their action on lobbying the institutions and didn't develop their relationships with the farming world. However some NGOs are beginning to establish links with alternative farming groups and consider working with supermarkets.

Conclusion

The debate on pesticides is not framed in the same way by all EU-NGOs but NGOs present a homogeneous position in the various debate arenas. We suggest that this is due to the fact that they both share at least a common value i.e. protecting health and the environment, and common ideas about the norms that should be implemented. In other words, they share the same referential with the meaning that Muller (2000) has given to the concept i.e. a range of values, rules and perceptions that make up a common reference basis for building up forms of cooperation. Newcomers in the debate, the health associations, expand the debate on uncertainty linked to pesticide use by focusing on its cumulative impacts in the long run on the human body. By expanding the debate to everybody's health, NGOs put policy makers in an uncomfortable position. They have to endorse responsibility for public health and not for a specific professional group. Lack of preventive action could be as destabilising as was the mad cow crisis, at any time according to new research results or poisoning cases.

By suggesting that the long term impact of pesticide use might be as negative for human health as it might be for soil, water birds or bees, NGOs break the line that usually separates man and nature. The public perception that individuals share a common destiny with other living beings is a characteristic of the environmental risk perception that participates in redefining the links between Nature, Society and the Techno sphere¹ (Scherer, 2004). This emphasises the need to include ecosystems and ourselves in the design of sustainable production systems.

1 What is commonly refer to as People, Planet and Profit

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