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Withdrawal from organic farming in France

Sophie Madelrieux · Françoise Alavoine-Mornas

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Abstract Many European nations envision organic farming as the future of sustainable agriculture. However, actual production is still far from objectives set for organic production. Both research and policies for organic farming have mainly focused on the conversion from conventional to organic farming. On the other hand long-term maintenance of organic farming has not been studied, despite its obvious importance for sustainability. Specifically, there is few knowledge on the extent and dynamics of farmer withdrawal. Little is known on farmer decisions to opt out, especially in France. Here, we study the extent and processes of withdrawal from organic farming in France. First, withdrawal extent was studied at the national level using data provided by the Agence Bio on organic certification and withdrawal from 2005 to 2010. Results show that estimated withdrawal varied from 208 over 16,446 organic farms (1.3 %) in 2009, to 610 over 11,978 organic farms (5.1 %) in 2007. Our findings thus show that organic farming withdrawal in France is lower than 5 % of organic farms. Nonetheless, there is a trend towards earlier withdrawals that raises issues. The withdrawal process was further analysed by a case study of interviews of 18 former organic farmers from the Rhône–Alpes region. Qualitative analyses show various processes of withdrawal at the interface of two dimensions: the circumstances causing farmers to leave organic farming and what farmers learned by experience. Our process-based method of this study gives more insights than current methods based solely on motivations for opting out. Our method integrates various aspects of the organic farming system, such as modes of certification, what being an organic farmer entails, and the transmission of organic

farming values and practices. We used this knowledge to help farmer keep farming organically.

Keywords Organic farming · Withdrawal · Extent · Process · Change · Outcome

1 Introduction

The total organic farming area as a percentage of the total utilised agricultural area in the European Union rose from 1.8 % in 1998 to 4.7 % in 2009 according to the Organic Europe Statistics. However, organic farming area still does not nearly meet the objective set by governments. In France, the land area devoted to organic farming in 2010 was 3 % of the utilised agricultural area, i.e. only half the target set by environmental agreements by 2012. In addition, incentives do not seem sufficient to secure the organic sector in the long run, as suggested by Llorens Abando and Rohner-Thielen (2007). The balance between new units and withdrawals seem to be very different from one country to another (Sahm et al. 2012). The much-vaunted success of organic farming hides more complex dynamics (Harris et al. 2008). These figures emphasise that the design of effective policies to promote organic farming requires an understanding not only of the factors that lead to the adoption of organic farming but also of the factors that induce its subsequent abandonment (Läpple 2010).

Both research and policy measures to help the development of organic farming have been narrowly focused until recently on conversions to organic farming (for a review, see Lamine and Bellon 2009). The maintenance of organic production is an emerging theme that is receiving interest now that there are signs of a slowing in some countries (Gambelli and Bruschi 2010; Sahm et al. 2012). For Flaten et al. (2010), ‘It may be more efficient to reduce the number of farmers ceasing organic certification than to use

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instruments designed to attract newcomers, who often lack experience in organic farming methods'. To help maintain farms in organic farming, we need to know why and how some farmers have ceased to uphold their certification.

1.1 An overview of withdrawal in the literature

A literature on withdrawal from organic farming is emerging but remains rather sparse. What is tackled concerns the extent of the phenomenon in some regions or countries, the type of exit and what remains of the organic farming experience, farmers' reasons to revert to conventional farming and characteristics or competencies of farmers and farms, and elements about the timing of the abandonment and duration of certification.

Concerning the extent of the phenomenon, Sahn et al. (2012) give an overview of the extent of reversion to conventional agriculture in Europe based on statistics supplied by the database Eurostat. In Denmark, Finland and Italy, the total number of organic farms decreased since 2000. In Germany and Norway, the share of reversion as percentage of organic producers never exceeds 10 % per year. For lots of countries, as France, the data are completely missing. In addition, it has to be noted that the statistics give a total figure of all the exits and do not differentiate between the reversions to non-certified agriculture and the cessation of farming altogether.

Some studies (Flaten et al. 2010; Koesling et al. 2008; Sierra et al. 2008) show a rather high number of withdrawers still retaining organic methods without certification. Sierra et al. (2008) mention also farmers who have reverted to conventional production and who reported that they now farm more sustainably as a result of their experiences, while others reported not retaining any of the 'sustainable' practices adopted as organic farmers. This indicates that farmers who have opted out may still be interested in an organic mode of production.

Farmers' motivations to revert to conventional farming are examined, statistically or qualitatively, sometimes coupled with the analysis of the characteristics or competencies of farmers' ceasing certified production (Alexopoulos et al. 2010; Darnhofer et al. 2005; Ferjani et al. 2010; Flaten et al. 2010; Harris et al. 2008; Kaltoft and Risgaard 2006; Kirner et al. 2006; Koesling et al. 2008, 2012; Rigby et al. 2001; Sierra et al. 2008; Strohlic and Sierra 2007). Sahn et al. (2012) compare farmers' reasons to revert to conventional farming in a review and they classify them into economic motives, difficulties regarding certification and control, problems with organic production techniques and farms' macroenvironment. Other authors (Sierra et al. 2008; Koesling et al. 2012) mention as well issues unrelated to organic production such as individual reasons, poor health or negative pressure from other farmers. The reasons for

choosing organic farming in the first place and thereafter to opt out include a complexity of reasons of technical, economic, social and cultural issues. Personal reasons such as disappointment and need for acceptance seem also important. These motivation studies provide valuable insight into farmers' decisions, but they are based on a static and causal framework. Relations are not established between the reasons for opting out and what is retained from the organic farming experience.

The studies about the timing of abandonment point out the importance of time in gaining a better understanding of exit from organic farming. These approaches seek to model the exit over time (Gambelli and Bruschi 2010; Klonsky and Smith 2002; Läpple 2010; Zanolini et al. 2010). They test different factors with dynamic models to identify the factors that most influence the abandonment of organic farming. The use of duration analysis gives important insight into the timing of abandonment decisions and its possible links to changes in the economic environment or subsidy-driven policies. However, these studies, which use mathematical models, do not offer a sharpened understanding of farmers' thinking on withdrawal, of the deeper reasons behind their decision over time (Flaten et al. 2010) and of the events leading to leave organic certification (Harris et al. 2008).

Other elements of the timing concern the duration of certification. In the studies, the reference to the policies and specific support payments for 5 years is very present. Harris et al. (2008) mention that one third of the quitters had not even completed their minimum contract period of 5 years and had to pay back the subsidy they had been given. Kaltoft and Risgaard (2006) show that organic farming constituted an opportunity to achieve higher subsidies for developing farms and nothing more. Some farmers never planned to continue farming organically on termination of the compulsory 5-year period. For Rigby et al. (2001), the reduction in margins after the fifth year may cause many of the more 'pragmatic', new organic producers to consider reversion. But the duration of certification can also be longer. Sierra et al. (2008) show that at the time they opted out, the respondents had farmed a mean of 20 years, with a range of 3–50 years. And they reported farming organically for a mean of 10 years, with a range of 1–34 years.

1.2 Conceptualising process of withdrawal

Many studies have emphasised the motivations behind transitions out of organic farming. The approaches vary but few authors have chosen to follow organic farmers' trajectories and to study the changes in their conceptions and practices over time (Koesling et al. 2012; Lamine 2011), even though such approaches were at the core of some pioneering studies on organic farming (Harris et al. 1979). Indeed, motivation theories can be classified broadly into two different perspectives: content and process theories (Lamine and Bellon

2009). Content theories deal with ‘what’ motivates people and are concerned with individual needs and goals. Process theories deal with the ‘process’ of motivation and are concerned with ‘how’ motivation occurs. In the existing literature, the studies are almost all of a content type, aprocessual in character. Alexopoulos et al. (2010) suggest that studying the process of exit from organic farming through the identification of farmers’ biographical and farm trajectories, and their interconnectedness with time, as other authors did for conversion, may be fruitful.

In this study, we draw on Pettigrew’s conceptualisation of process of change (Pettigrew 1990). His theory explores the context, content and process of change altogether with their interconnections through time. The aim is to provide data on the mechanisms and processes through which changes are created. The key points are firstly the importance of embeddedness, studying change in the context of interconnected levels of analysis. The second key point is the importance of temporal interconnectedness, locating change in past, present and future time. Thirdly, the need is to explore context and action, how action is a product of context and vice versa. And finally, the central assumption about causation: causation is neither linear nor singular; explanations of change are bound to be holistic and multifaceted. Adopting this framework means going from a causal approach (why) to a sequential one (how). It allows a detailed examination of the circumstances surrounding the decision to leave, while the context of individual business change has suffered from a lack of emphasis (Evans 2009).

With such a framework, our hypothesis is that the processes of exit are not the same according to the duration of certification, in particular the circumstances and what was left of this temporary organic farming experience. According to the literature, we can even specify this hypothesis according to duration of certification.

For the withdrawal before 5 years, we can make the hypothesis that such withdrawal is due to an underestimation of the changes that had to be made on the farm, and an overestimation of market opportunities (Harris et al. 2008). And we can advance that this experience is too brief for farmers to retain much of it.

For exits at 5 years of certification, we hypothesise that these farmers either came to organic farming as their main motivation conversion aid for 5 years and leave organic farming as soon as this period is over or they have underestimated the difficulties they might meet, but still carried on to the end of their 5-year commitment before withdrawing (Kaltoft and Risgaard 2006). When this organic farming experience was purely opportunistic, we hypothesise that the farmers returned to their previous practices. By contrast, if they had truly tried this other mode of production with the intention of adopting it permanently, then we can suppose that they retained something of their organic farming experience in their production system or in how they viewed their activity.

For exit after a longer time, which seem the most puzzling, and are not given much attention in the literature, we hypothesise that in this case withdrawal is linked to changes in the farmer’s situation, to unplanned events, or changes in regulation (Koesling et al. 2012; Sahm et al. 2012). Indeed, not only can the regulations themselves be the reason for opting out but also the fact that they are getting stricter over time makes compliance increasingly difficult or costly and can force some to abandon. But we hypothesise that the organic farming approach and practices persist after exit.

The present study investigates withdrawal in France, with an emphasis on time. Through dynamic and contextual approaches, we test the hypotheses. We approach the phenomenon in a two-stage process at two different scales, with each part of the investigation providing more finely grained detail:

- a quantitative study at national level thanks to data provided by the French Agence Bio. The aim is to evaluate the extent of the phenomenon, and its dynamics, as statistical data are lacking in the literature. The effect is also masked by the positive in/out balance of recent years. This information provides an overview of movements out of organic farming throughout France and tests the validity of the three groups of hypothesis according to the duration of certification;
- a qualitative study at farm level through a longitudinal comparative case study work. The aim is to identify diverse trajectories of evolution and what led farmers to leave the organic sector. From detailed interviews with 18 farmers who have left organic farming, the information enables us to test the hypotheses and clarify the processes in play. We use the concept of process of change (Pettigrew 1990) to interpret the outcome of in-depth interviews with former certified organic farmers about their ways to withdrawal. It allows getting behind the statistical data and improving our understanding of the decisions to opt out.

2 Materials and methods

We focused our analysis on farmers who had opted out but were still farming, termed ‘withdrawers’ in what follows. These are the cases that interested us the most in this research as they pointed to a farmer’s decision to leave organic farming certification, but to carry on farming.

2.1 Quantitative analysis of exit from organic farming in France

Our aims were to estimate the extent of withdrawal in France and its dynamics, and to test our hypotheses. This quantitative

analysis was based on anonymous data supplied free by Agence Bio. The list supplied gave farms that left certifying bodies between 2005 and 2010. For each exit instance, we had the years of exit and entry, and a reason classified by Agence Bio into cessation of activity, change of site, certifying body and business name; return to conventional farming; and breach of contract. Unfortunately, a certain number of records contained no reason and were classified as 'reason not given'. These were the only data available on exit from organic farming in France, and although they did not finely detail the reasons for giving up organic farming, they revealed certain trends.

We considered that the reasons 'return to conventional farming' and 'breach of contract' were the only ones corresponding to withdrawal. The cases with 'reason not given' made up from 6 % to 86 % of the total exits between 2005 and 2010 depending on the year (Table 1). These strong variations remain inexplicable by the Agence Bio at this stage. But it was not possible to ignore these cases. Some of them may include withdrawals. We thus considered that the actual number of withdrawals may lie between two extreme values, stated withdrawals only and stated withdrawals plus 'reason not given'. We decided to estimate the number of withdrawals as the average between the two extreme values. In what follows, we will always take this estimation of an average value when discussing withdrawal to smooth the database information.

To test our hypotheses, we needed to estimate withdrawal according to the duration of certification and the year of certification, seeking to validate the three groups of hypothesis and possible links with subsidy programs. We visually confronted the data by referring to the French subsidy programs (see Textbox 1). In this purpose, we calculated withdrawal per year of entry into certification, then per duration of certification. For each withdrawal and 'reason not given' instance, the database gives the years of exit and entry; thus, for each entry year, for each exit year and for each duration of certification, we had the total withdrawal and the total 'reason not given', and we could estimate, as well, the number of withdrawal as the average of the low and high values.

Textbox 1 Overview of the organic farming sector in France and its regulation

In France, a subsidy program for the 2 years of conversion has been implemented since 1992. It was replaced from 1999 to 2002 by the Territorial Farming System Contract (CTE) program which granted large subsidies for conversion with a 5-year commitment (an average of 45–50k€ per farm). From 2004 to 2007, an appreciably less attractive 5-year aid program (sustainable agriculture contract) took place. Besides the reduction of the budget, the allocated funds arrived 2 years after the end of the Territorial Farming System Contract. Lots of farmers had to convert without public aid, which deterred many candidates from converting. An aid to maintaining organic farming in farms has been introduced since 2008, with a 5-year commitment, besides the subsidy for conversion which still exists. If a farmer engaged in organic farming with one of these aid programs and quitted before the end of his contract, he had to pay back.

Dynamics of development of organic farming in France seem to be linked to this subsidy programs. From 1995 to 1998, the number of certified farms had increased by 64 %, rising from 3,602 to 5,914. The rate rose to 91 % between 1998 and 2002, and the number of certified farms almost doubled over this period, in relation with the Territorial Farming System Contract program. For the next years of lower subsidies, the rhythm slowed down (+18 % from 2002 to 2008) and the number of certified farms stagnated between 11,000 and 12,000. Since 2008, we observe a restart (+74 % between 2008 and 2011) leading to 23,135 certified farms in 2011.

2.2 Qualitative analysis of withdrawal processes in farms

To test further our hypotheses, we carried out a longitudinal comparative case study work. Face-to-face interviews were conducted in 2011 with 18 farmers in the Rhône–Alpes region. This region ranks first among French regions for the number of organic farming operators, which helped us in finding cases of farmers who had opted out. The choice of farmers was made to cover a maximum variation in terms of certification durations (early opting-out, at 5–6 years and after a longer time), systems of production and small regions. The aim was to avoid a too-marked sectoral or territorial effect on these exits, and to increase the number of possible sources of variations and processes in play.

Comprehensive interviews, of a life narrative type (Bertaux 1997), were conducted with the farm manager or the older associate in case of associations. They lasted approximately two hours and a half, followed a semi-structured interview guide and were recorded. The guide included the evolution of the combination of agricultural and non-agricultural activities of the family. The agricultural activity was split up into the evolution of the system and mode of production, the dimensions, the buildings and machinery, the work organisation and also the position regarding the founding principles (health, ecology, fairness and care) and the vision of organic farming (regulatory; societal–ethical, local, autonomy-; neutrality). The farmers were also invited to tell the story of the conversion to organic farming until the exit and what has followed. We sought to identify the processes, i.e. prior experiences, triggering events or circumstances of entry, reasons for choosing organic farming, factors favouring this choice, the shifting or switching between modes of production, and implications of the conversion, and then likewise for exit (Lamine and Bellon 2009; Madelrieux and Alavoine-Mornas 2011; Pettigrew 1990). We always took care to distinguish between farmers and farms (Padel 2001).

This guide was built after meetings with organic advisers to identify the elements of the family-farm system at stake in withdrawal. It was tested in two farms and refined. Interviews were then compressed into two types of documents:

- a graphic representation of the family-farm trajectory in time: the evolution throughout time of the particular

organisation of the elements (1) of the studied family-farm system at stake in changes, especially during the transition to organic farming and then until the withdrawal; and (2) of the context (individual, family, local, global events, tensions...) leading to changes. It allowed us to examine farmers and farms' path regarding organic farming specifications and principles.

- a monograph of a narrative type to describe the process of exit from organic farming for each case (when, how, why and with which implications), integrating illustrative quotations of the different points by the farmer. This approach required us to adopt a common grid to all cases for describing the processes and characterising the changes in practices. The comparison between cases helps in finding categories and patterns in processes. By iterations, we developed a core set of constructs to take account of the different cases. We worked in a three-person project team which helps to balance detachment and involvement, tendencies to over-identify with particular interpretations or interests. Through team discussion and debates, categories, patterns and interpretations were tested and refined (Pettigrew 1990). It allowed us to identify the place of withdrawal in farmers and farms' path, so as to understand the meaning of this temporary organic farming phase.

3 Results and discussion

3.1 Dynamics of withdrawal in France

3.1.1 Withdrawal: a phenomenon of limited extent

Table 1 presents all the withdrawals from organic farming, from the data given by the Agence Bio, between 2005 and

2010, and our estimation of withdrawal (average value). The number of exits remained fairly stable with an average of 700 per year. Half of them were withdrawals, according to our estimation. Estimated withdrawal made up 1.3 % to 5.1 % of all the certified farms, depending on the year. It can then be considered as a phenomenon of limited extent over 2005–2010 in France.

3.1.2 A phenomenon that depends on the year of entry and the duration of certification

If we look at withdrawal rates according to entry year (Fig. 1), entries between 1995 and 1998 make up 21 % of withdrawal. The year 1995 corresponds to the first year recorded in the database for the setting up of organic farming regulation. An exit peak corresponds to entry years 1999 to 2002 (47 % of withdrawal), concerned by the Territorial Farming System Contract program, which granted large subsidies for conversion with a 5-year commitment (see Textbox 1). Regarding our hypotheses, we can wonder which proportion left at the end of the 5-year contract. For those who entered certification between 1999 and 2002, we found a total of 517 withdrawals. Half of them opted out after 5–6 years, 10 % before the fifth year, and 40 % after 7 years. Even if the attractiveness of the subsidies could have been a useful incentive for conversion, some farmers went on operating beyond the subsidy period. And others, early withdrawers, met difficulties higher than repay the subsidies if they engaged with the aid program. Decisions to opting out were influenced by other circumstances than the end of the subsidies period. Looking at withdrawal for the entry years 2003–2005, we found that 75 % occurred before the fifth year and only 22 % at the end of 5 or 6 years, showing an increase of early withdrawals.

Table 1 Estimation of withdrawal from 2005 to 2010 in France

Year of exit from organic farming	2005	2006	2007	2008	2009	2010	Total	Year
Exits by category								
Cessation of activity	43	303	23	292	328	251	1,240	207
Change (of site, certifying body, business name)	5	3	0	129	60	69	266	44
Reason not given (NG)	542	49	40	62	94	178	965	161
Withdrawal (given by the database) = low value (L)	38	360	590	304	161	209	1,662	277
All exits	628	715	653	787	643	707	4,133	689
Estimation of withdrawal								
High value H = L + NG	580	409	630	366	255	387	2,627	437
Estimated value = (L + H)/2	309	385	610	335	208	298	2,145	357
Total organic-certified farms	11,402	11,640	11,978	13,298	16,446	20,604		

This table shows the steps of calculation and allows a comparison with all exits from organic farming and number of organic-certified farms

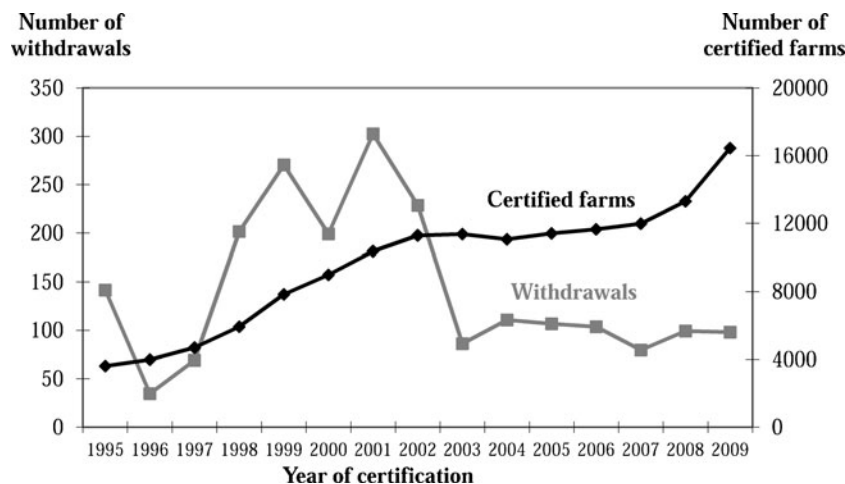


Fig. 1 Evolution of estimated withdrawal in France according to the year of certification. The figure presents our estimation of the total number of withdrawals (between 2005 and 2010) according to the year of certification (grey curve), compared with the total number of certified farmers for the same years (black curve), from 1995 to 2009. Thus, farmers who certified in 1995 were approximately 150 to opt out

between 2005 and 2010, and in 1995 there were approximately 6,000 certified farms in France. Entries between 1995 and 1998 make up 21 % of withdrawal. An exit peak corresponds to entry years 1999 to 2002 (47 % of withdrawal), concerned by the Territorial Farming System Contract program. Thirty two percent of withdrawal corresponds to certification after 2003

If we now analyse the certification duration, we find an average duration of 5.8 years. Graphically (Fig. 2), we can discern three duration periods: exit before the fifth year (early exits), between the fifth and the seventh year, and later. Despite the imprecision of the database we used, these three groups correspond to our hypotheses. But if we look in detail, the early withdrawals are mostly before the third year. Withdrawals at the end of 5 years spread out over the fifth to the seventh year, and the later withdrawals after the seventh year.

Will the strong development of organic farming and in particular the recent conversions lead to a similarly high rate of early withdrawals? Such an effect would suggest that certifications are encouraged by sectoral incentives or subsidies, but are not sufficiently thought out at the farm level leading to early withdrawals once the farmers have fully realised what their commitment entails.

If we take a closer look at these variations in duration, for each of the years 2005 to 2010 with Fig. 3a and b, withdrawals between the fifth and the seventh years of certification have been supplanted from 2009 by early exits. We found an increasing proportion of exits before 3 years, climbing from 12 % of withdrawal in 2005 to 43 % in 2010 for an average of 21 % over the 6 years.

3.2 Withdrawal from organic farming: processes in play on farms

The sample of 18 farms surveyed displayed a broad diversity of combination of production: cropping, fruit farming, market gardening, grape growing, livestock farming (dairy and meat cattle, sheep and goats) and beekeeping, in short or long circuits. Farming areas ranged from 2 ha to 118 ha, with a workforce ranging from a single person up to five

Fig. 2 Estimated withdrawal in France according to the duration of certification. The figure presents our estimation of the total number of withdrawals (between 2005 and 2010) according to the duration of certification. Most of the farms opt out between the fifth and the seventh years of certification (39 %). Thirty three percent of farms opted out before the end of the fifth year, almost two thirds before the end of the conversion period. Twenty eight percent left later than the seventh year

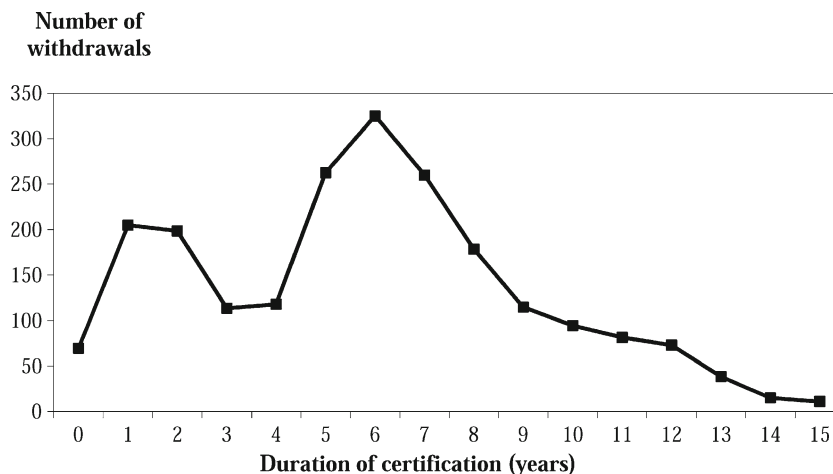
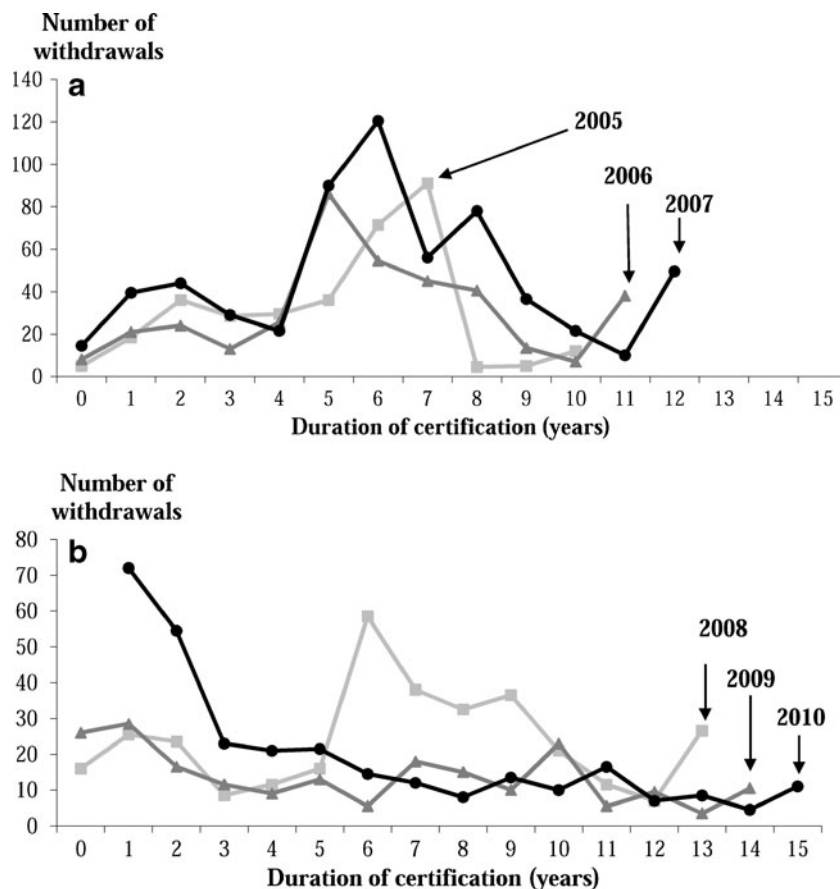


Fig. 3 a, b Estimated withdrawal in France according to the duration of certification, for each of the years 2005 to 2010. The figure presents our estimation of the number of withdrawals according to the duration of certification for each year: 2005, 2006, 2007, 2008, 2009 and 2010. The exit peak at 5–7 years falls away from 2009, and we find an increasing proportion of early withdrawals before 3 years



associates. Durations of certification encountered ranges from 1 year to over 15 years.

The cross-reading of the monographs and the graphic representations of family-farm trajectories revealed several common patterns and themes among the interviewees, in spite of their high diversity. Two dimensions seemed to be discriminating regarding the process of withdrawal: the circumstances causing the farmers to leave organic farming and what farmers retained of their organic farming experience. We situate the process at the intersection of these two dimensions.

3.2.1 Circumstances of exit from OF

The cross-reading and analysis of the monographs and trajectories show four types of circumstances. Quotations of the farmers are used to illustrate the results (the initial after the quotation corresponds to the name of the author, also used in Table 2).

In the first type, withdrawal was the result of a path followed by organic farmers who were trapped in identity-based tensions (as defined by Van Dam 2005) expressed against the ‘organic farming system’. These farmers had all long been committed to an organic lifestyle, and no changes had occurred in their farming linked to organic certification.

Their exit was due to a worsening of relations between them and the certifying bodies (inspections, increased cost of certification). This led them to a negative view of certification (evolution of specifications, contractual agreements...) which no longer matched their organic farming commitment and the values they espoused.

We did not engage in organic farming for speculative or marketing reasons, for the image, we came to organic farming because it seems crazy to do something else [...] The problem with chemicals is that it seems really effective, almost too much [...] But what is absurd is that organic farmers have to pay whereas they are the ones who do a good job [...] Each year the certification’s costs increase, and it is now too expensive (B).

In the second type, withdrawal was the result of a path followed by farmers who had come to organic farming for income, but who found themselves beset by tensions linked in this case to the setting up of organic farming in the farm and expressed within the family or work group, where the farmer was unable effectively to defend a view of organic farming. Collective identity was challenged in these cases, and the organic farming mode of production, which presented a greater risk in these economically fragile farms,

failed to withstand tensions in the family, among associates, or a marked fall in production.

When I farmed organically and bought conventional chips, I didn't tell, you should speak only about organic. I could not buy organic products, it is too expensive [...] I don't want to impose my children a way of life and that they are said at school they eat seeds and seaweeds [...] I didn't feel good because you live with a sword of Damocles above your head. If something happens to the crops, we can do nothing (S).

In the third type, withdrawal was the direct consequence of lack of income from organic farming due to the agrofood production chain or linked to economic or commercialisation difficulties. Farmers refused the additional constraints imposed by certification (inspections, paperwork, specifications) and preferred to opt out. This could happen at the end of the subsidy period, in the light of the first year's results, after a marked loss of production or a series of inspection that went badly.

At the end of the aid program, as the dairy could not pay the organic milk a higher price than the conventional one, as both milk were mixed, and as there were even so constraints, we stopped! [...] The organic farming is a good thing, it is easy when the outlets are worthwhile (A).

In the fourth and last type, withdrawal was an effect induced by the evolution of the combination of activities on the farm due to changes not linked to organic farming. These exits all took place after a long period of certification. This might be a refocusing on non-organic farming activities because of the withdrawal of an associate who supported the organic farming activity and who was not replaced, or because of problems of work or health. It might be a profitable activity the farmers wish to develop at the expense of an organic farming activity to meet competition for land and labour. Or it might be a change in activity due to a change in various constraints (access to markets or land) making organic farming irrelevant.

My father went to organic farming in 1965 and we kept on [...] At the age of 18, I fell from a tree and now I suffer. The milking is less hard than market gardening [...] In 2004, my father had already stopped helping me, so when my mother retired at her turn, I stopped the market gardening. Consequently I stopped selling on markets and making cheese, which were intended to the markets as well. As there was no organic milk collection, we stopped the certification (I).

3.2.2 *What remains of the organic farming experience*

Concerning what remained of the organic farming experience, the cross-reading and analysis of the monographs and

trajectories reveal two types, covering five modes in all. The first type groups farmers who changed their ways of thinking and working through organic farming. This experience brought them a different view on their activity and their practices. Even when brief, their organic farming experience showed them that another way was possible, whether organic farming without certification, or more thoughtful conventional farming. These farmers include (1) those who were already engaged in an organic lifestyle, and who want to take organic farming practices further, with a radicalisation in the positions of individuals in favour of the founding principles of organic farming but against organic farming certification; and (2) those who did not revert to the system they had before organic farming, but who instead set up a hybrid system, combining practices from their previous conventional system and practices learnt during the organic farming period.

The second type concerns the farmers for whom the organic farming experience seems not to have influenced their views on their activity. These include (1) those who retained the same approach, which was already organic; (2) those who reverted to or continued the conventional approach they had before organic farming, or continued in parallel with organic farming in cases of partial certification, and extending it to the whole farm; and (3) one noteworthy case where a new intensive conventional system was set up on a farm that had long been run under organic principles.

3.2.3 *At the intersection*

At the intersection of these two variables, the withdrawal processes refer to the different types of situation presented in Table 2.

In our cases, regarding our hypotheses, the duration of certification is not associated with a single type of process. Early exits were not solely the direct consequence of difficulties linked to entry into organic farming, but could reveal identity tensions (cases T and J) that caused farmers to redefine their position, and even radicalise it against organic farming. Even a brief organic farming experience could lead to practices being retained (case C). Exits at 5–7 years were admittedly linked to the end of subsidies and results judged unfavourable at that time. However, lack of income (cases A and H) or criticism of certifying bodies and organic farming certification could support and trigger withdrawal (case B). Some farmers claimed they would have liked to carry on in organic farming if their activity had been more profitable. Simple economic opportunism is thus not a final explanation in these cases. Subsidies were more an opportunity to help overcome obstacles that the farmers could not have faced without it (Madelrieux and Alavoine-Mornas 2011). For the exits after a longer time, in some cases (P, X, M and L), there were difficulties that could not be solved even with

Table 2 Withdrawal processes in cases encountered according to exit circumstances and what is retained of the organic farming experience

		What is retained of the organic farming (OF) experience				
		Take OF further	Set up a hybrid system (OF and conventional)	Stay in the same OF approach	Resume conventional approach	Set up a new conventional system
Exit circumstances	Identity-based tensions against “OF system”	<u>T</u> <i>J</i>		B P X		
	Collective identity-based tensions from setting up OF on the farm		<u>C</u>		<u>E</u> S	
	Lack of income from OF		<i>A</i> M	<u>F</u> L	<i>H</i>	
	Induced effect of changes in combination of activities			R	G F D	I

A letter in the table corresponds to a farm, and the colour to the duration of certification. In underlined: the early exits (<3 years); in italic: the exit at 5–7 years; in normal font: the late exit (> 7 years)

time, or tensions that appeared in particular with the evolution of the organic farming system. Somewhat unexpectedly, organic farming did not leave its mark on these systems.

Finally, out of the 18 farms surveyed, eight were still engaged in an organic farming approach at the time of the survey, of which two in a more radical mode after withdrawal, three set up a hybrid system combining organic farming and conventional systems, six reverted to the conventional approach they had before entering organic certification, or pursued in parallel, and one set up a new conventional system that had not been present before organic farming. Thus seven farms out of the 18 are ‘lost’ for organic farming as regards farm management.

3.3 Discussion

3.3.1 Withdrawal: a phenomenon of limited extent but which raises questions

Sahm et al. (2012) note that, due to the amount of missing data, it is difficult to report the overall trends of withdrawal from organic farming across European countries over time. They also note that in most cases the statistics only describe the exits in general and do not differentiate between the reverted farmers those who still farmed without certification, and those who gave up farming.

With this study, we brought data concerning France. The database used presents uncertainties and lack of consistencies as regards recording, and so the data must be handled with caution. We tried therefore to be careful in our analyses and interpretations accordingly. Nevertheless, some

interesting developments can be observed and compared with other countries. At the present time, exit in France is limited in extent, and the turnover does not exceed 5 % of the certified population. Withdrawal represents half of the exits, the other half corresponding to cessation of the farming activity. However, comparisons with organic farming development dynamics in other countries prompt a number of questions. France is currently experiencing a strong development of organic farming; will there be a ceiling, even a decrease in organic production as observed in other countries (Sahm et al. 2012)? It is important to consider the challenges that those farmers leaving the sector have found insurmountable and to assess whether they represent the beginning of a larger outflow or just a temporary ‘blip’ (Harris et al. 2008).

The originality of this work is to analyse the number of withdrawals according to the year of certification and the duration of certification. It enables to specify the dynamics of withdrawal and helps better understanding the phenomenon. It is another way to arrive to hypotheses as to the possible links to changes in the economic environment or subsidy-driven policies (Läpple 2010). It can help to evaluate the efficacy of a subsidy program regarding the proportion of exit before and at the end of the contract. And finally, it questions the future. Indeed, given the current boom in organic farming in France and the trend towards more early exits, as seen here, questions arise of how long these newcomers to organic farming will last.

Considering the attempts of many governments to support the expansion of organic farming, and considering the dropout rates, it seems promising to take measures to

prevent organic farmers from reverting rather than merely trying to recruit new ones (Sahm et al. 2012). To better know the phenomenon in each country of the European Union is a first step. It would necessitate the setting up of ‘observatories’. To allow aggregation at European level and comparison between countries, a common database is essential. From this study, we recommend differentiating the different types of exit, to know how many farmers each year revert to non-certified agriculture or stop farming altogether. We suggest collecting and recording the data in different fields on whether or not farming activity is continued. If so, is a certified organic farming pursued or not, with a change of certifying body, site, structure or with some other type of organic farming certification? If organic certification was stopped, is there a reversion to conventional practices or do farmers still follow organic principles? The reasons for withdrawal could be usefully elicited by means of a set list drawn up on the basis of studies already conducted on the subject. To follow this opting-out phenomenon and its time course, the data should also indicate the entry and exit years, and so the duration of certification.

3.3.2 *Utility of a process-based approach to gain a better understanding of withdrawal from organic farming and to question the ‘organic farming system’*

In order to capture withdrawal, we have chosen to use the concept of process of change (Pettigrew 1990) since this approach has focus points on context, interaction and time. It helps to understand the paths taken by farmers and farms, how organic farming certification was sought and later abandoned, and gives an idea of what is retained from this experience. Our hypotheses were too simple and the reality is much more complex. Thereby, our approach offers a rich understanding of this socio-technical reality of a farming practice and the path that led to stop farming organically. And it took us further than approaches based on motivations. Indeed, an economic reason to leave organic farming can hide various circumstances: the end of subsidies combined with an agro-industry unable to pay higher for organic products whereas the costs of production are higher for the farmer, and with the cost of certification and the constraints of the organic specification and controls. The other interest is to confound dualisms very present in the literature. Early converters are shown in many studies to be more motivated by environmental concerns, whereas later converters tend to be more motivated by economic profitability (Guthman 2004). Our study shows early converters who resumed to conventional farming and late converters who went ‘beyond’ organic certification. This process-based approach remains exploratory and the trends evidenced need to be further validated by more case studies. However, the processes of

withdrawal that are evidenced here question certification in different ways.

When identity-based tensions are expressed against the organic farming certification system and lead to opting out, the certification and inspection procedures and the specifications are called into question. These farmers continue to adhere to the founding principles of organic farming. How can we prevent them being statistically diluted in the population of conventional farmers, and continue to identify and encourage them in their chosen approach? Emerging alternatives to the prevailing third-party certification may help reduce regulatory barriers as Participatory Guarantee Systems, built on a foundation of trust, social networks and knowledge exchange (Flaten et al. 2010). The Participatory Guarantee Systems are reflective of this growing ‘beyond organic’ movement, which focuses on reconstructing the local and re-embedding food systems in their socio-ecological contexts (Nelson et al. 2010), and could thus be a condition for the re-appropriation by producers and consumers of the ecological transitions in agriculture (Stassart et al. 2011). Governments also need to be alert to the dilution of standards and dubious farming practices, as already mentioned by Guthman (2004) and Flaten et al. (2010). The regulatory challenge is to design standards that maintain the integrity of organic ideals and consumer faith yet do not come across to farmers as unnecessarily bureaucratic.

When the setting up of organic farming in the farm leads to collective identity-based tensions, the choice and integration of an alternative to the mainstream farming practice are at stake. For the farmers, their family is still their most important network, and decisions about farming practice are discussed in the family (Koesling et al. 2012). So when the family or the work group divide about organic farming, as told us one of the interviewee, ‘it is the divorce inside the family or from organic farming’. Organic farmers also experience negative pressure from other farmers or the neighbourhood, facing negative comments about organic production or way of life. Farmers are bound to their farms, and they are sensitive to other people’s opinions in the local community. A key factor to maintain in organic farming is the importance of positive standing in the community and family (Koesling et al. 2012). Comprehensive and specific communication about the social and environmental benefits of organic food and farming may help strengthening farmers’ position. Information could be directed to the farmers themselves who sometimes express lacking proof and also to the communities and families.

The farmers for whom organic farming was not profitable raise the more classical questions of securing production and sectors, but also those of the burdens of certification, or subsidies for organic farming practice. Will subsidies to maintain organic farming, recently put in place in France, change

the situation? Based on the research findings, and following Sierra et al. (2008), we recommend programs and policies to help farmers continue farming organically, which should include efforts to reduce the paperwork and regulatory burdens associated with organic farming: paperwork reduction, help with the application process, registration simplification, more trained and experienced organic certifiers, and controls not just to sanction but also to advice. It should also include efforts to help farmers deal with the high cost of organic inputs and certification costs as cost-share programs. And it is not only the regulations themselves which can be a reason for opting out but the fact that they are getting stricter over time (Koesling et al. 2012). So regulatory changes should be implemented carefully and with information a long time before to enable anticipated adaptations.

Opting out of certification induced by changes in combinations of production independent of this certification questions whether different approaches can coexist on the same farm without some dilution of the founding principles of organic farming (Guthman 2004), again with an adverse effect on the integrity of organic ideals and consumer faith (Flaten et al. 2010). There is a noteworthy trend towards resuming to conventional approaches when difficulties are encountered with the partial organic certification or when individuals supporting the organic part are no longer present on the farm. Partial certification can be a transitional step in a process of extension of organic farming to the whole of a farm (Madelrieux and Alavoine-Mornas 2011), but here we find situations where one part of the farm is certified, without any transmission of values and practices of organic farming to the other parts of the farm, to associates on the same farm or between generations.

Those who have gone back to the production system that preceded organic farming question the way entry and maintenance in organic farming are accompanied. These cases, and also the greater numbers of early exits, suggest that the farmers had not always fully appreciated the commitment implied by organic farming certification. The transition to organic production is complex, and there are no guarantees of success. In particular, the 'input substitution' approach is often not that successful (Strochlic and Sierra 2007). Transitioning farmers must understand that organic is a different farming system, which requires a deep understanding of soil health and the interconnectedness of all on-farm systems. And the information supplied to farmers before their decision to convert should allow them to have a realistic expectation of what organic farming will entail, for example in terms of paperwork and record-keeping, certification costs, the high cost of organic inputs and often greater time requirements associated with organic production (Sierra et al. 2008). On this purpose, Koesling et al. (2012) suggest more research to explore whether better preparation and more information on various aspects of organic farming and marketing before conversion

could contribute to lower reversion rates and the form in which this information should be communicated.

4 Conclusion

Organic agriculture in France has grown rapidly in the last few years. This growth is characterised by many new entrants and exiting farms each year after an average duration of certification of almost 6 years, but limited to 5 % of the certified population. As a result, the composition of organic farming has evolved. The currently strong entry dynamics may foreshadow strong exit dynamics at a more or less close time, as observed in other European countries. The future size and picture of the organic system are still unknown. What will happen if exits after at least 5 years give way to exits during the conversion period? Work on a broader scale should give us a more detailed picture of withdrawal from organic farming, and a better assessment of its time course and extent. Observatories in each European country would help following this phenomenon.

To reduce withdrawal, we would do well to pay attention to the paths of farmers ceasing organic production. Our study shows in several ways that government support is important but may not be sufficient to motivate farmers for persisting in organic farming. Initiatives to help farmers cope better with the major tensions or difficulties behind their decision to opt out seem essential to ensure that those who plan to continue farming stay on in organic production. The experiences of the farmers who had gained useful knowledge from farming organically, and reverted, then can be used to aid understanding how to maintain in organic farming. The burden farmers associate with documentation and control should not be underestimated. Legislation and certification bodies should contemplate measures which may help reduce or at least simplify the procedures involved. Participatory Guarantee Systems should be tested. Communication about social and environmental benefits of organic farming could help farmers adopting a positive standing in their community. And information supplied to farmers should allow them to have a realistic view of what organic farming entails.

Farmers' decision to convert to organic farming is not necessarily a one-way decision but a decision that might be put into question after some years. A comparison between organic farmers deciding to remain organic and farmers choosing to revert would give a deeper understanding of the influencing factors and changes that are necessary for farmers to remain organic, and should be a research prospect.

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