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► To cite this version:

Emilie Serpossian, Xavier Coquil, Alexis Annes. Involvement of women farmers in the agro-ecological transition and transformation of their work : chronicle of the agricultural organization Groupe Femmes 44. *Frontiers in Sustainable Food Systems*, 2022, 6, pp.869533. 10.3389/fsufs.2022.869533 . hal-04002305

HAL Id: hal-04002305

<https://hal.science/hal-04002305>

Submitted on 14 Sep 2023

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SPECIALTY SECTION

This article was submitted to
Social Movements, Institutions and
Governance,
a section of the journal
Frontiers in Sustainable Food Systems

RECEIVED 04 February 2022

ACCEPTED 19 October 2022

PUBLISHED 08 November 2022

CITATION

Serpossian E, Coquil X and Annes A
(2022) Involvement of women farmers
in the agro-ecological transition and
transformation of their work:
Chronicle of the agricultural
organization *Groupe Femmes 44*.
Front. Sustain. Food Syst. 6:869533.
doi: 10.3389/fsufs.2022.869533

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Involvement of women farmers in the agro-ecological transition and transformation of their work: Chronicle of the agricultural organization *Groupe Femmes 44*

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Women professional organizations appear as a resource for women to foster change in power relations on their farm. In this manuscript, we explore to what extent participation in a non-mixed professional organization named *Groupe Femmes 44* contributed to transformations of women farmers' work. Particularly, we question the role of women farmers in the transition of their farming system toward agroecological principles and the conditions of their empowerment within their farm which allows these transitions. Our results show that *Groupe Femmes 44* represents a socio-professional environment allowing women farmers to discuss, to put words and find answers on technical, communicational, organization as well as social issues. It allowed some participants to discover the existence, the relevance, and the more ecological dimension of self-sufficient and autonomous systems. Therefore, it stood as a key resource to foster professional transition toward these systems. For the women who were already involved in such systems, *Groupe Femmes 44* contributes to the transition toward more equitable systems by questioning work organization and gender inequality.

KEYWORDS

women farmer, agro-ecological transition, transformation of work, women farmer group, extension

Introduction

If French agriculture has long been dominated by men (Delphy, 1983; Barthez, 2005), several authors agree today to evoke a feminization of this sector (Annes and Wright, 2017; Comer, 2017; Le Brun et al., 2019). Results of the latest agricultural censuses in France suggest an increasing representation of women within the farmer population (In 2020, around 30% of farm operators or co-operator are women). This gain in visibility contrasts sharply with years of invisibility that characterized the experience

of women in agriculture, particularly during the second half of the 20th century. Indeed, the modernization of agriculture and the integration of agricultural activity into long marketing circuits have marked the exclusion of women from production activity (Lagrave, 1988), relegating them to less visible activities considered secondary (taking on administrative tasks for example). Today, women are more visible, and they are also actors of the evolutions which affect agricultural sectors. A multifunctional and sustainable agriculture is now being advocated, the benefits of which go beyond the productive sphere to form part of a more global societal and environmental framework. Several authors have shown that women are more involved in this form of agriculture, which provides them with a suitable framework for reclaiming the frontlines of the agricultural scene (Giraud, 2007; Annes et al., 2021) and thus gain visibility for their work. They are notably more involved in alternative and innovative approaches and bring a new look to the farm through new practices (Giraud and Rémy, 2013; Bessièrè et al., 2014): short circuits and local markets, organic farming, leisure activities or agritourism (Garcia-Ramon et al., 1995; Giraud, 2007; Brandth and Haugen, 2010). In other words, they contribute to redefining the agricultural profession (CASDAR-CARMA, 2015). Women farmers therefore appear to be part of the transition from productivist agriculture to so-called “post-productivist” agriculture. However, if the literature combining gender and agriculture shows the significant involvement of women in the implementation of innovative activities, what about in more “conventional” farms which have not necessarily committed to diversification activities?

In this manuscript we want to focus on these more conventional farms (farms which have not necessarily engaged in post-productivist transition) and assess the role of women farmers in bringing changes. Particularly, we focus on women farmers working on dairy farms and who are involved in a non-mixed professional organization. Agricultural networks and organizations are critical in bringing technical and social changes on farms (Sachs et al., 2016). They allow farmers to access resources, skills and information, they also provide the social support necessary to cope with the uncertain consequences of setting up new agricultural practices. In this manuscript, our aim is to question their role in the transition of their farmingsystem toward agroecological principles. Following other authors (Magrini et al., 2019; Caquet et al., 2020), we approach agroecological transition as a systemic transformation of agricultural systems toward not only self-sufficiency and autonomy, but also toward social justice and equity. In other words, we consider that agroecological transition brings both technical and social changes on farms. Consequently, in this article we explore how women dairy farmers participating in a non-mixed professional group bring more ecological practices as well as transform tradition gendered power relations on their farm. We analyze both (1) the conditions of their empowerment within their farm which allows these changes, and (2) to

what extent participation in a non-mixed professional group contributed to transformations of their work and their farm.

Literature review

The gendered structure of agriculture

For the past decades, women’s experiences in agriculture in the Global North have significantly evolved. From positions of invisibility, they are now considered as key actors of the agricultural sector, especially due to their involvement in practices strongly departing from productivist agriculture (Giraud and Rémy, 2013; Sachs et al., 2016; Annes and Wright, 2017). These types of agricultural activities, requiring new sets of skills for farmers (such as processing food, selling and marketing products, welcoming guests on the farm, etc.), give value to other types of knowledge. They allowed women farmers to get involved, to become agricultural entrepreneurs, and be more visible to public gaze (Giraud, 2004; Annes and Wright, 2017).

However, it is important to note that this new visibility did not necessarily translate into more equal power relations on farms or women’s ability to resist traditional gender roles. Overall, in the Global North and in the context of agriculture, women still have less access to material resources (land, capital and technology) and experience less social status and power, mainly due to the persistence of socio-cultural norms which still favor men (Shortall, 2014, 2017). For instance, land access remains an important issue for women. In fact, family inheritance strategies within farm households still favor male siblings, and daughters have more difficulties to be seen as a potential heir. When it comes to starting a new farm operation, banks and financial organizations are less likely to grant loans to a woman if she is single. Or, farmers who retire with no family member to take over the farm, tend to be more reluctant to sell their property to a woman. Consequently, facing more difficulties to access land and resources, farms operated by women tend to be smaller and less economically viable than the ones owned by men (Shortall et al., 2017; Adesugba et al., 2020). In addition, despite their increased visibility, women in agriculture remained perceived as lacking an innate knowledge of agriculture or physical strength, stopping them to become skilled and complete farmers. More recently, the work of Annes and Wright (2015, 2017) also point to the fact that if value-added agriculture gives a venue for farm women to be more visible and express agency, it also perpetuates traditional gender roles and women’s assignment to non-productive activities still perceived as secondary. For that matter, when women farmers work with their husband and/or son(s), traditional division of labor is always prevalent: to men, outside and mechanical activities, to women, activities more likely to be performed inside. This division is not problematic in itself, but it can become an issue

when it contributes to the reinforcement of an essentialist logic assigning women to specific and unchangeable tasks.

It is important to note that gendered power relations vary and women farmers' experiences are not homogeneous. Some women farmers might experience more balanced power relations. This is particularly the case for women having an official status on the farm. Also, women with more human and social capital (acquired through education or past professional experiences) are more likely to question unequal power relations and to develop their own farm activities (Giraud and Dufour, 2012). Recently, studying joint ventures in Ireland, Cush and Macken-Walsh (2018) showed evidence of more inclusive decision-making. On the other hand, other women might experience more unequal power relations. Of course, women who do not have an official status on the farm tend to participate less in the decision making process. This ability to express agency also depends on the type of farms in which women are involved. For instance, traditional division of labor particularly exists on dairy farms in which work units are often organized around a couple. *bib21 study 2012 shows the persistence of a very strong division of labor. Men take care of the livestock, work in the fields and take strategic decisions, women are in charge of milking, caring for calves, and administrative work. In addition, they are responsible for domestic work. Last, their study shows that women dairy farmers express difficulties to find legitimacy on their farms.

The role of women professional groups in bringing changes on the farm

When it comes to bringing innovation on farms in general, or agroecological practices in particular, for several years now, professional networks and organizations have become critical (Penunia, 2011). This is also the case when dealing with questioning and changing on-farm traditional power relations. However, existing professional groups do not necessarily address these issues, and they do not appear as safe and appropriate spaces for women to bring them up. In fact, research shows that agricultural extension training and services are mainly geared toward men (Adesugba et al., 2020). In Northern America or in Western Europe, for instance, women farmers find not only training inappropriate to their needs, but also feel unwelcome, overlooked and invisible (Sachs et al., 2016; Shortall et al., 2017; Le Brun et al., 2019). For instance, Sachs et al. (2016, p. 95) argue that "many organizations have not fully accepted women as farmers and have not sought to advance gender equity in agriculture." In fact, the educational programming of extension is generally divided into areas that reflect, reify and reinforce the gendered division of labor on farms (Trauger et al., 2010). Despite its so-called feminization, agriculture remains particularly dominated by men and women

are marginally, if at all, represented in most professional organizations. Consequently, women farmers gather and create their own organizations. These women professional networks and organizations can appear as a resource for women to foster change in power relations on their farm.

These non-mixed organizations and networks are not new in the French context. In fact, they were institutionalized in the 1960s and, since then, have fulfilled different roles: from improving home comfort in the 60s to claiming a professional status in the 70s and the 80s, to asserting women farmers' position as key actors of rural development in the 90s, and providing resources and skills to access professional governance bodies in the 2000s (Comer, 2017). Since the 2010s, in France, they have experienced new interest and enthusiasm (Le Brun et al., 2019). These networks and organizations create spaces located at the frontier between a place of dialogue (they create opportunities for socializing) and one to acquire professional skills. In fact, the acquisition of new technical skills to bring changes on the farm is becoming a major objective of these organizations and networks, which was not necessarily the case in the 1960s. In addition to providing social support (to overcome isolation or feeling illegitimate in a masculine professional environment), they allow women farmers to access knowledge, key information and new ideas to foster innovation and entrepreneurship. Therefore, these organizations and networks contribute to the empowerment of women farmers. By empowerment, we refer to the expansion of women's agency (Kabeer, 2001; Sachs et al., 2016). More precisely, following the work of Annes and Wright (2015), when referring to empowerment, we imply the process of: (1) acquiring new resources and skills, making decisions and being able to act upon them (learning and mastering agroecological practices), and (2) identifying sources of oppression and building self-esteem (developing gender consciousness). In this manuscript, we argue that women farmers' empowerment is critical when dealing with agroecological transition.

Agroecological transition is often associated with changes in agricultural practices, a more environmental-friendly way to produce, rendering farming less harmful to the natural environment (Caquet et al., 2020). We also consider that agroecological transition should bring more social justice on farms. In fact, social justice and care were two dimensions of the original definition of agroecology as defined by Altieri and Toledo (2011). The empowerment of women farmers is one issue among others that can be addressed to reach it. However, if we adopt the viewpoint of farmers, this transition implies profound work-related changes: how to perform a task, how to think about work, but also how to think about oneself in relation to one's environment. These changes also affect socio-professional networks and farmers' frames of references (Lamine, 2012; Chantre et al., 2015; Coquil et al., 2017). In the daily practice of their work, farmers develop ways of doing along with a set of knowledge and practical experiences, professional

norms and values, which are coherent with the object of their work—that is what they handle on a daily basis. This pragmatic coherence, which leads to farmers' well-being while performing their daily work, is solid and well embedded, therefore difficult to change. Agroecological transition can be cost-expensive when it comes to work because it questions, and implies changes in farmers' pragmatic coherence (Béguin, 2004). Therefore, we make the hypothesis that these non-mixed organizations and networks help women farmers to deal with the complexity of the agroecological transition of their farm by providing new resources and skills. As mentioned earlier, we explore both (1) the conditions of their empowerment within their farm which allows these changes, and (2) to what extent participation in a non-mixed professional group contributed to transformations of their work and their farm.

The case: *Groupe Femmes 44*

Presentation of the group

To answer these questions, we use one specific organization called “*Groupe Femmes 44*” (Women Group 44). It is the name of a non-mixed professional group created in 2014 which, at its creation, brought together 15 women dairy farmers. This group was created by the local branch of an agricultural network named CIVAM² (*Centre d'initiatives pour valoriser l'agriculture et le milieu rural* / Center of Initiatives to Promote Agriculture and Rural Space) located in the North West of France. One of the employees of the local branch of the CIVAM organized the group and acted as a facilitator. The creation of this non-mixed group followed a direct request from women farmers to have space for exchange and information allowing them to legitimate their role, as women, on their farms, but also allowing them to tackle technical questions related to the transition to self-sufficient and autonomous systems seen as agroecological systems. Indeed, these women farmers wanted to be part of this transition, in order to strengthen the sustainability of their operations, while benefiting from a secure space where they could discuss freely.

Between 2014 and 2020, the group welcomed 36 women. Their participation in the group activities (meetings, training and workshops) varied from 6 months to 6 years (Table 1). On average, women stayed for 2 years. Fluctuation in participation can be explained by retirement, maternity leaves, or desires to attend other professional groups (for instance, desire and ability to join mixed-sex group focusing on technical issues once

their feeling of legitimacy was reinforced). Overall, each meeting brought together 10 participants.

Women involved in the group were between 30 and 55 years old, mainly involved in heterosexual couples, and worked on conventional dairy farms. The vast majority has an official status on their farm (they were mostly farm operators or co-operators). This is in line with recent research in the French context, showing that when involved in agriculture, women are now more likely to have an official status on their farm (Annes et al., 2021; Le Marchant and Seiller, 2021).

As shown in Table 1, *Groupe Femmes 44* embraced two groups of women. The first of these groups, which we name “married-in group” and which represents almost half of them, came into farming by marriage (see Table 1 “Engagement in agriculture-by marriage”), i.e., farming was not their initial choice. They started farming on their husband's farm because of the need of the labor force, usually following the retirement of their in-laws, and because working on the farm allowed them to also care for their children. If they did not necessarily come from a farm background, they all grew up in a rural setting, in the nearby area. They share the fact that they occupied low paid, low qualified jobs which required several hours outside their home as well as significant commuting.

The second group of women who participated in *Groupe Femmes 44*, which we name “by-choice” group, has slightly different characteristics (see Table 1 “Engagement in agriculture-by choice”). Most of them chose to farm as a first career choice. In other words, their involvement in agriculture was not dictated by family or conjugal agendas. At the time of their involvement in *Groupe Femmes 44*, they were in charge of the farm with a male partner (husband or brother). One woman in this group farms alone, two others farm together. It is a quite heterogeneous group in terms of age from 28 to 59, background (farm, rural or urban) or education (from technical training to higher education). Overall, they are more educated than the first group of women. Also, before entering *Groupe Femmes 44*, they already all farmed on organic pasture-based dairy systems. They shared the fact of not feeling legitimate as farmers to the eyes of others—farmers, employees, but also family, as well as to their own eyes. This second group of women arrived later in *Groupe Femmes 44*. In fact, during its first few years of existence, the group was mainly constituted of the first group of women.

Research method

In order to understand the role of these women in the implementation of an agroecological transition on their farm, we analyzed the various documents produced during the facilitation of the *Groupe Femmes 44* (training report, animation tools, action plans) from its creation in 2014 until 2019. This analysis is carried out according to the theory of the community of practice (Wenger, 2010): through content analysis of minute

1 The number 44 in the name of the group refers to the French department (administrative division) of Loire-Atlantique located in Western France, along the coast of the Atlantic ocean.

2 The CIVAM is an agricultural network providing extension services for farmers and rural entrepreneurs. Different local branches exist, usually one per French department as well as significant commuting.

TABLE 1 Main characteristics of women constituting *Groupe Femmes 44*.

Engagement in agriculture	Population by category	Average birth date (min./max.)	Farm background	Status when joining the group	Type of farms when joining the group	Highest degree	Average time spent in the dynamic of <i>Group Femmes 44</i> (years)
by marriage	14	1970 (1959/1986)	4	12 farm co-operators 1 collaborating spouses 1 farm employee	14 dairy farms (7 conventional, 7 organic)	7 professional certificate 3 baccalaureate 2 baccalaureate + 2 yrs. of higher ed. 1 baccalaureate+3 or 4 yrs. of higher ed. 1 baccalaureate+5 or more yrs. of higher ed.	2,4
by choice	18	1978 (1955/1992)	6	18 farm co-operators	18 organic dairy farms	2 baccalaureate 10 baccalaureate+2 yrs. of higher ed. 1 baccalaureate+3 or 4 yrs. of higher ed. 5 baccalaureate+5 or yrs. of higher ed.	2

TABLE 2 Main characteristics of the five women farmers interviewed.

	Engagement in agriculture	Date of birth	Farm background	Status when joining the group	Type of farm when joining the group	Highest degree	Year when joining the group	Time spent in the group (years)
Aude	By choice	1971	Yes	Farm co-operator	Organic dairy farm	Baccalaureate +2	2014	6
Clothilde	By marriage	1966	No	Farm co-operator	Conventional dairy farm	Baccalaureate	2014	4
Eliane	By marriage	1966	Yes	Farm co-operator	Conventional dairy farm	Professional certificate	2014	4
Fabienne	By marriage	1967	No	Farm co-operator	Conventional dairy farm	Professional certificate	2014	3
Marie	By marriage	1986	No	Collaborating spouse	Organic dairy farm	Baccalaureate +2	2016	3

reports of training sessions and meetings of *Groupe Femmes 44*, we analyze the constructions and the evolutions (i) of the mutual commitment of women of the group (around objects, themes that make sense), (ii) of a shared repertoire (the tools that the women of the group appropriate to work and exchange together), and (iii) of the joint venture, that is, the objects around which the actions of the women in the group converge.

We completed this analysis by carrying out individual semi-structured interviews with five women farmers from the group (Table 2). Four of the women interviewed belong to

the first group of women (“Engagement in agriculture–by marriage”), and one of them to the second group (“Engagement in agriculture–by choice”). These interviews were conducted by the facilitator of the woman group in two sequences which corresponds to 2–4 h of interview per woman interviewed. These five interviews aimed at expanding on the analysis of the various documents produced during or following the different meetings of the group. Specifically the main objective of these interviews was to assess technical, and social, changes that concretely occurred on the farms of the participants.

Groupe Femmes 44: Collectively gaining new resources and skills

In this section, we explore the conditions and the process of acquisition of new resources and skills in the context of the *Groupe Femmes 44*. First, we interrogate the motivations women farmers had to join the group, then, we move to the different dynamics of the group allowing them to gain different resources and skills.

Motivations for joining the group

Overall, the analysis of the various documents stemming from facilitation of the group of women farmers shows that motivations for joining the group are in line with existing literature. Both groups of women, i.e., the married-in and the by-choice, share the same motivations. [Table 1](#) share the same motivations. The first one is the need to find social support in order to prevent isolation. The second one the need to acquire technical knowledge in order to stop feeling illegitimate on their farm and to increase their participation in farm activities and decision-making. The five interviews conducted give us insights on these two motivations to join the group.

Clothilde³ explains, “especially because, us, women, we are isolated” and adds “I did not have contacts with others”. The need to create social bonds coincides with the gain of independence of children. Three out of the five women interviewed found in the farming profession and in farming with their husband, a means to balance professional and family lives. If taking care of their children gave sense to their professional involvement in the family farm, it also took up a lot of their time and fulfilled their needs of social interactions. As children grew older and became more independent, women farmers looked for other means to socialize. Research analyzing experiences of women in agriculture showed that the long period of modernization of agriculture highly contributed to their isolation ([Lagrove, 1988](#)). In fact, modernization led to the disappearance of feminine socialization places, contributed to women’s exclusion from production spaces and confinement to the domestic sphere.

The women interviewed acknowledged the fact that they had more time to get involved on their farm, but mentioned the lack of technical knowledge and resources. Four women farmers interviewed did not receive initial training in agriculture and three of them did not even grow up on a farm, giving them a limited professional capital. Therefore, as mentioned by Eliane, the *Groupe Femmes 44* acts as means to answer at the same time the need to create social bonds and to acquire more technical knowledge: “we got out of the farm, it created a network (...),

and, also, we received technical training on milking or heifers’ management.” Involvement in *Groupe Femmes 44* contributed to the acquisition of technical resources allowing women to be more involved, professionally on their farm.

Among the five women interviewed, one stands out regarding her motivation to join the group. Marie, a woman in her early thirties, not from a farm background, in fact defining herself as “a city girl” (she lived during several years in a nearby city), admits that she did not “know much about farming” before settling on her husband’s family farm. When she arrived on this farm, where her in-laws were still living, she had to learn not only to cope with life on a farm in a rural setting, but also to manage her (sometimes conflictual) relationship with her in-laws. When she decided to work on the farm with her husband, she immediately aspired to have an official status as well as an activity of her own. To that end, she started processing part of the milk into ice-cream sold directly on the farm and to local businesses. [Giraud and Dufour \(2012\)](#) showed that this search for autonomy characterizes spouses who have an education and a cultural capital giving them resources necessary to create their space within the family farm. However, even if Marie chose to develop her own activity on the farm, the perspective of working on a daily basis with her husband was a source of interrogations, as well as how to balance professional and private lives. She turned to the *Groupe Femmes 44* in order to benefit from the experiences of other women farmers on how to manage working with spouses on the family farm.

The different dynamics of the group

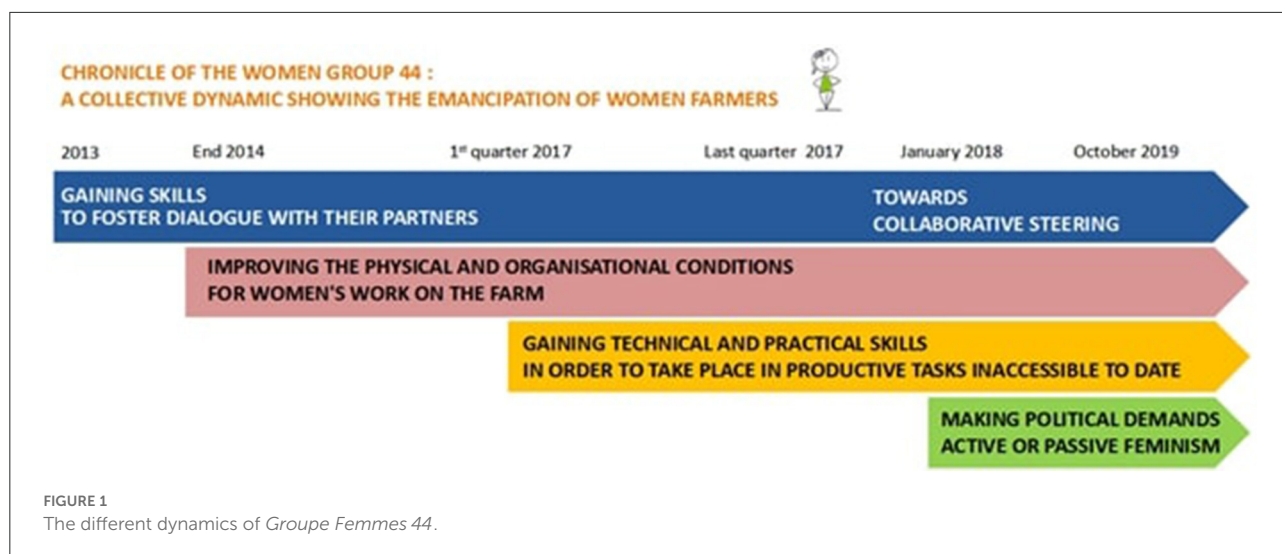
The analysis of the various documents produced during the animation of the *Groupe Femmes 44* shows the chronological emergence of four evolving themes ([Figure 1](#)) reflecting the changing needs and questions of the participants regarding their place on their farm in general and their professional implication in particular.

Theme 1: Acquiring skills to foster dialogue with (male) partner

The first dynamic to appear (and present until 2019) focuses on the need to gain skills to enter into dialogue with their (male) partner. This dynamic is reflected, among other things, in training in communication, and aims to establish the legitimacy of women on their farm. Most women farmers participating in the different group activities belonged to the group of women who did not initially intend to become farmers but got engaged on their husband’s farm when additional labor force was required.

This dynamic stems from women’s perception that if they want to be more involved on their farm by participating more in production activities or decision-making, they need to learn

³ All first names have been modified to preserve anonymity.



how to communicate with their male partner: “it’s to our responsibility to make our own space on the farm (...), by understanding the men we are working with and by trying to change them.” This very pragmatic premise shows that women believe that change can only be brought by themselves, not their male partners. It also suggests they had experienced unequal power relations.

Theme 2: Finding solutions to improve women’s working conditions

Started at the end of 2014, several discussions took place focusing on improving working conditions for women farmers. In the different meetings and workshops organized by the *Groupe Femmes 44*, women express the fact that their professional involvement on the farm is often considered secondary by their (male) partners. They are often obliged to adjust their routine to allow the continuity of their male partners’ activities. Women farmers consider improving their work conditions on three different levels: (1) the recognition of the invisible, but nevertheless necessary, work of women, (2) the adjusting and adapting their workstation so that their morphology and physical capacity are not limiting, and (3) the acquisition of skills and know-how allowing them to preserve their mental and physical balance.

The different minutes of meetings express difficulties among women farmers to be a creative force regarding organization/layout of their workstation. Some even express a complete lack of knowledge regarding the different options available when it comes to farm equipment (milking machines, barriers and gates, tractors and other machines, etc.). Acquisition of this knowledge as well as knowledge and skills on how to care for one’s body under farm work conditions and how to preserve one’s mental health, is permitted by

different workshops on working posture, body warm-up, but also special training aiming at providing tools to prevent stress, fatigue and promote health through healthy diets.

Theme 3: Acquiring technical skills

From 2017, a new dynamic has emerged around the acquisition of technical and practical skills in order to take part in productive activities. At this stage of the lifespan of the group, women farmers engaged in agriculture “by marriage” or “by choice” participated equally in these activities. Women expressed the desire to gain such skills in order to take part in strategic farm decision-making. From that period, workshops and meetings focused on animal behavior, nutrition and care, but also on the use and maintenance of tractors and other agricultural machinery. This dynamic reflects a strong desire of women farmers to be considered as legitimate professionals in the eyes of their (male) partners and other professionals.

In addition, during the second semester of 2017, communication workshops on how to create dialogue with partners (cf. Theme 1) were replaced by training on collaborative farm management. The focus was not only on how to communicate with one’s partner, it was also on how to jointly manage the farm. This focus can be illustrated by the title of the different workshops: “tools for joint-decision,” “mutual consent management,” or “acknowledgment of the skills and values of each farm partner.”

Theme 4: Politicization of actions of *Groupe Femmes 44*

Finally, the last dynamic appearing from the beginning of 2019 has been that of the feminist commitment of women farmers. It is also when women farmers who started farming

by choice (see Table 1 “Engagement in agriculture-by choice”) became the majority. During the different meetings and workshops, time was devoted to discuss the political role of *Groupe Femmes 44*. Some women farmers then wished to publicize the empowering effects of these single-sex interactions. Others, however, clearly display reluctance to the political dimension by arguing that these exchanges had essentially reinsurance effects between peers. Meetings and workshops minutes revealed disagreement and conflicts within the group, especially around whether or not identifying the group agenda with a feminist agenda. Some women were reluctant to use the term “feminist” which they found “aggressive” and incompatible with their experience. Despite these disagreements, and after the departure of the most reluctant women⁴, a 2-day public workshop was organized during the Fall 2019 focusing on “Women in agriculture and in rural space.”

The empowering effect of the group

When it comes to changes in power relations in general, or *empowerment* in particular, the collective dimension appears to be significant. Previous research on women farmers’ empowerment suggest that women farmers can gain power through establishing bonds with other women in the contact of agricultural organizations or networks (see for instance, Annes and Wright, 2015, 2017). In the same way, *Groupe Femmes 44* played the same role for women interviewed. First, if it allows not only “the establishment of strong bonds of friendship,” it mainly gives an opportunity to meet “women farmers who share similar experiences.” This mirroring effect allows participants to collectively become conscient that the uncomfortable situations they endure on their farm are not fair. By listening to other women farmers’ testimony, Aude realized that she was “just serving as a stopgap” on the farm and to admit that “this type of questions, I had never asked them to myself.” For her, the group stands for “a place of expression allowing to verbalize something” and then “to give the strength to speak about it with the right persons,” in her case, her brother.

Participation in the group contributes to the emergence of a “gender awareness” (Comer, 2017). However, participation in the group does not only allow to name and become conscious of the existence of gender inequalities, it also gives the possibility to acquire technical skills: “[I realized] other women were doing other stuff than milking, they were more assertive on their farm, and that there are stuff on grass management, on topics like the milking room, on work conditions.” Thus, workshops organized by the group gave women farmers an opportunity to develop their technical training. In addition, bonds and solidarity developed between group members during

⁴ The women were not kicked out of the group. They left it by choice because they disagreed with the political turn undertaken by the group.

these workshops built their self-confidence and gave them the courage to attend other workshops organized by other mixed-sex professional groups. In other contexts, several studies showed that women farmers can be reluctant in going to agricultural spaces dominated by men (Trauger, 2004; Sachs et al., 2016; Annes and Wright, 2017). In these very masculine space (whether it is the ag cooperative to deliver crops or the general assembly of a farmer union), women generally feel excluded, not taken serious or that they are not perceived by others as legitimate. Participating in *Groupe Femmes 44* can act as a catalyst for joining other professional training.

Changes on farms following participation in the group

As pointed out in the previous section, our results show that by participating in *Groupe Femmes 44*, women farmers gain access to different resources. First they built social capital providing social support to prevent feeling isolated and illegitimate as a farmer. Through participation in group discussions, they gained new knowledge and skills, and exchanged information which allowed them to bring technical changes on their farm. Last, they developed gender awareness helping them to understand and make sense of their experience as women. From individual explanations to give sense to their experience, women farmers developed their sociological consciousness and gave birth to collective feminine identity. Thus, participation in the *Groupe Femmes 44* contributed to the creation of the necessary conditions for women farmers to bring agroecological transitions on their farms. Based on the five in-depth interviews conducted, this section describes in more detail the professional evolutions at stake, as well as the social and technical changes which occurred.

Professional developments: A double assertion to become farmer and farm co-manager

First professional transition: Asserting oneself as a farmer

The five women farmers interviewed mentioned a genuine professional development on their farm during their career. This professional development was twofold for the four “married-in” women farmers and simple for the woman farmer who had set up with her brother (“by-choice”). In fact, the four women farmers Eliane, Fabienne, Clotilde and Marie, who settled with their husbands, experienced a first professional transition that led them to assert themselves as farmers and a second transition that led them to assert themselves as partners in the farms that they co-manage. Aude, who started farming with her brother and does not live on the farm, only experienced this second

professional development: gaining legitimacy through work in order to become a real partner, not only on paper by her status, but including participating in decision-making.

Eliane, Fabienne, Clotilde and Marie started to live on their husband's farm / place of work, and choose a lifestyle that allows them to reconcile family life with their contribution to the work of the farm. We note a traditional division of labor corresponding to the one usually observed on dairy farms (Giraud and Dufour, 2012). In addition, family life was very much marked by their husband's strong professional investment. This investment was characterized by: (1) long working hours, (2) mainly outdoor activities (caring for the herd, monitoring crops, maintaining buildings and equipment, etc.) and (3) a strong presence in the place where they lived (the farm) but a weak presence in the home (the house). By default, our interviewees were assigned domestic and family work. When they started to be more involved on the farm, their goal was clear: to keep on being in charge of domestic and family work, and to carry out tasks that could be done without being too far away from the family unit. Thus, they became involved in administrative work and other activities taking place close to the house: milking and caring for the calves being the main activities they participated in. Even if they had the official status of a farmer (both their husbands and themselves being co-operators of the farm business), it was more in theory since they had more of a supporting role and did not really take decisions concerning production activities. In addition, the tasks in which they were involved (administrative, domestic and family work) and which do not have the status of productive agricultural work, were highly invisibilized. This situation and this traditional gender division of labor allowed them to be very available for their children. To them, their lifestyle was an acceptable compromise when their children were young and quite demanding. However, they all expressed a desire to invest more time working on the farm when their children became older and more independent.

The first "professional development" of these four women farmers was characterized by taking the responsibility for a productive activity in addition to their continuing support with certain agricultural tasks (administrative ones and/or milking), as well as the maintenance of a strong involvement in domestic tasks. Becoming responsible for rearing heifers or creating value-added activities such as a veal calf production or making ice creams from milk are examples of activities our interviewees became in charge of. This commitment in new activities was motivated by values such as personal fulfillment, social equality and adaptability in a changing family (children growing up) but also economic context. In fact, in an uncertain agricultural context that is not very promising in terms of remuneration, finding new activities adding value to the production appeared appealing to our interviewees rather than focusing on increasing production. As a first step, the four women farmers invested in and created a working environment of their own on the farm, without disrupting the whole production system. They

acquired resources through training: participation in technical groups and training courses, interaction with technicians, training with experts (master ice-cream maker, veal calf rearing technician, etc.).

Second professional transition: Embracing the role of farm co-operator

Groupe Femmes 44 also provided a socio-professional environment for exchanging and discussing technical, communication and organizational issues, and thus for gaining access to the singularity of each participant's work situation. This professional organization enabled Eliane, Fabienne and Clotilde to discover the existence, the economic relevance, as well as the more ecological character of self-sufficient and autonomous dairy systems. Discussions which took place during the different workshops allowed Marie and Aude to question the organization of work and the distribution of responsibilities on their farms.

Therefore, it appears that *Group Femmes 44* was a strong resource for a second professional evolution of Eliane, Fabienne and Clotilde toward economical and autonomous systems and for the transition of Marie and Aude, already engaged in economical and autonomous systems, toward more symmetrical work organizations with their partners.

Following their involvement in the group, Eliane, Fabienne and Clotilde tried to promote an agro-ecological transition on their farms with three motivations: (i) taking care of their husbands and themselves by reducing the volume of work (reduction in the number of animals) and the risks at work (reduction in the use of phytosanitary products), (ii) taking care of the animals by no longer subjecting them to unnatural practices standardized by the generalization of productivist thinking in agriculture such as the overuse of antibiotics or drenching⁵. For instance, when Fabienne was asked about calf drenching in general and what she thought about this practice in particular, she explained that she did not like it ("It's not natural," she said) and that she could not do it any longer because it seemed to be too much pain for her animals.

Last (iii), they were also motivated by setting up a more economical and more profitable production system to ensure the family's income more serenely. For these three women farmers, in addition to gaining credibility through their work, they also had to initiate and accompany the professional transitions of their husband which represented a great challenge. Their involvement in other mixed technical groups also organized by the local branch

⁵ Drenching is the forced pouring of liquid medicine down the throat of a bovine using a tube through the esophagus and possibly into the rumen.

of the CIVAM was one of the conditions for initiating these transitions.

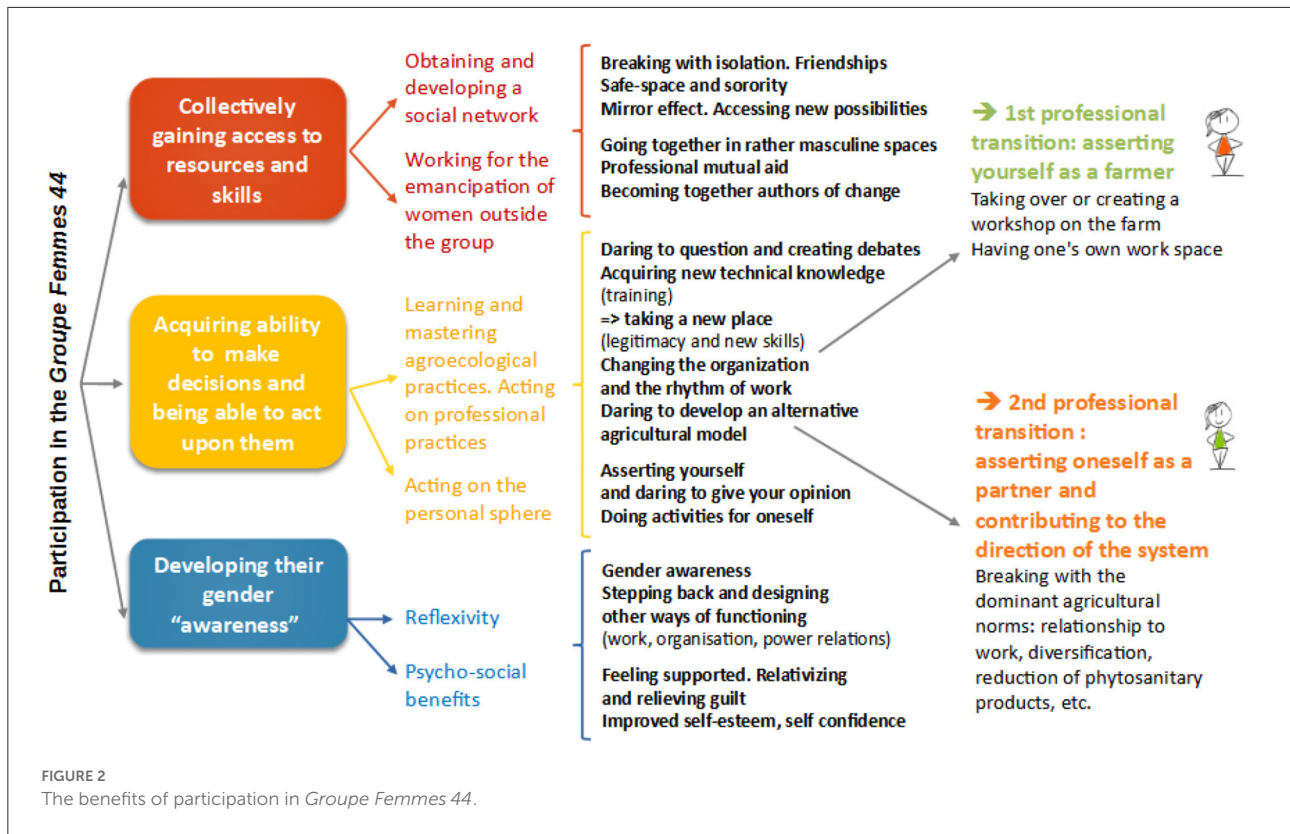
Marie and Aude followed a slightly different second professional condition. Both of them already worked on self-sufficient and autonomous organic farms. Their second professional development was more related to achieving a better balanced distribution of power and division of labor with their partner in order to get more personal fulfillment at work. For Marie, this meant setting up conditions that enabled her to be as involved as her partner and husband on the farm: this investment was an additional argument for seeking a more balanced involvement of her husband in the family and domestic sphere. However, this strategy had its limits because it highlighted the very different work organizations of the two partners: Marie explicitly followed a work organization aiming at reconciling the professional, family and personal spheres, whereas her partner followed an implicit one focusing on the farm. For Aude, this search for balance referred to a search for recognition from her brother: her own work activities (direct sale of different crops for human consumption, educational tours of the farm) was little, if not, discussed with her partner. As a consequence, Aude tried to obtain recognition from her brother by proposing ecological technical innovations. According to her, those propositions were not sufficiently followed up, which led her to question her ability to influence her brother and the development of the farm.

From a theoretical point of view, the professional transitions of these women farmers enrich the work of [Coquil et al. \(2017\)](#), which focused on the professional transitions of farmers toward self-sufficient and autonomous systems. Hence, the developmental processes at work among women farmers in the context of work transitions was initiated by access to the unthinkable: by interacting with women farmers working in self-sufficient and autonomous systems, they discovered alternative ways of thinking and practicing agriculture, but also of thinking about their place and contribution to society. However, the life stories of the five women farmers point to an initial stage which is essential: a professional development in order to make agriculture an object of work for them. This step implies that they include the domestic work that they carry to the full in the agricultural work of the farm. This transformation of the environment into a milieu, inspired by [Canguilhem \(1965\)](#) in the theory of professional worlds, is particularly structuring here: the five women farmers who settled with their husband or brother accepted, for a more or less long period of time, to conform to the life and work situation proposed to them by their partners, their socio-professional environment, their family environment, but also by the production system in place. They progressively emancipated themselves from it on a personal and private level by becoming professional (step 1), then on a socio-professional and even technical level by becoming experts on these issues (step 2).

Being more empowered by developing gender consciousness

The transformations in the daily work of the five women interviewed are both the consequence and the catalyst of their empowerment. Indeed, through their participation in the non-mixed group, these five women have initiated changes in their daily lives: the concretization of these changes reinforces their commitment and their interest in this gender dynamic. Their empowerment is related to four intersecting changes in their daily lives. Three changes are related to concrete transformations in their work on the farm: questioning traditional division of work on the farm, being in charge of new activities, wellbeing and satisfaction in work. The last change is a political object appearing in the work of five women: women recognition in agricultural organizations. As we showed in the previous section, the women farmers interviewed acquired technical knowledge as a result of their participation in different workshops, organized by *Groupe Femmes 44* or encouraged and motivated because of their involvement in this non-mixed organization. *Groupe Femmes 44* provided them with the necessary resources they were lacking to create a work place of their own, to gain legitimacy on their farm and be in charge of productive activities. Clothilde, decided to take charge of heifers in total autonomy. Eliane acknowledges that she “learned how to better know the farm, to go into the pastures and check upon the grass.” She concluded: “I learned to be a farmer.” By switching from an intensive to an extensive (grazing-based) farming system, checking the grass growth has become a new task that she equally shares with her husband. For that matter, when they decided to convert their farming system, she was the one who contacted and talked with the extension specialist. She was a key agent of this strategic decision.

Of course, if some women farmers interviewed were able to bring concrete agroecological changes on their farm, it is not the case for all of them. This « new » agency should be understood as a process or a continuum. Among our five interviewees, two of them acknowledge the fact that their ability to take decisions remains limited. However, they admit that, thanks to their involvement in *Groupe Femmes 44*, changes in their relationship to their male partners occurred. At least, they can now discuss and give their opinion on technical matters. If this lack of consideration when it comes to technical matters can be a source of frustration, overall, the five interviewees express satisfaction in their work. All of them feel valued and state that they have found legitimacy on their farm. Eliane, who now takes part in the technical decision, explained: “in a way, it gives value. That’s what I was missing...being recognized. My husband understood that, otherwise, I did not see any more interest [in just following orders]”. For Aude, even if its capacity to influence the strategic decisions taken by her brother remains weak, being a member of *Groupe Femmes 44*



allowed her to express what was just not right for her in the daily practice of her work. Dialogue, which did not exist before, now occurs with her partner. When she speaks about her first years on the farm and the type of work she was conducting, she remembers particularly caring for the calves and cleaning boxes. “Unsatisfied,” “hard,” “tough” are the words she uses. She even confessed that, at one point, she thought it would “kill [her].” Today, when she speaks about her daily work, another rhetoric appears. The notion of “freedom” is prevalent, being able “to organize her schedule” gives her satisfaction. The notion of “meaning” is essential: “I work with living things, I raise cows, I grow seeds, I welcome people on my farm, I train interns. All of that gives meaning to what I do”. Reflecting on how her participation in the group affected her professional life, she concluded without hesitation: “without the group, I would no longer be a farmer.”

For our five interviewees, participation in *Groupe Femmes 44* legitimated their involvement on the farm. As mentioned previously, it helped them to put words on the gender inequalities they had endured on their farm. Some of them decided to act upon these inequalities in order to stop them. Marie explains that the group gave her the courage and strength to “tell things,” to say, for instance: “stop, no more, I don’t want that to happen.” The participation in the group contributes to giving women farmers the ability to become agents of change on their own farm and in other agricultural

professional spaces (such as the farm coop). Of course, it does not mean that it puts an end to gender inequality. It suggests, above all, that it allows women farmers to start a dialogue on their farm (their workplace), which might lead to more social justice.

Discussion—conclusion

In conducting this research, our objective was to question how women dairy farmers who participate in an organization specifically supporting women bring social and technical changes on their farm.

Our results showed that participation in *Groupe Femmes 44* created the conditions to bring changes on the farm (Figure 2). *Groupe Femmes 44* gave women farmers an opportunity to collectively gain access to resources and skills by developing social capital which provides social support as well as a channel to exchange information. Over the years, women developed their gender “awareness” by identifying their sources of oppression. Sharing their experience of their farm, having the support from other women, built up their self-esteem and contributed to help them see themselves as agents of change. These resources and skills, as well as this reflexivity, gave women farmers the ability to make decisions and to act upon them. These concrete actions took different forms: from changing the organization of

farm work, to suggesting changes in agricultural practices, to developing new activities. Results show that two main changes, or two professional transitions, related to how women farmers practice (but also position themselves regarding) their work: (1) a first professional transition, in which they tend to assert themselves as a farmer by claiming a farmer professional identity, and then (2) a second professional transition, in which they tend to assert their role of their farm by contributing to concrete changes in the farm systems. Results suggest that women farmers who entered agriculture “by marriage” went through the two professional transitions when women farmers who entered agriculture “by choice” only went through the second transition since they had already claimed the farmer identity.

Most women who participated in the group brought changes on their farm to improve work conditions as well as more ecological practices. Women already working on organic pasture-based dairy systems also brought changes on their farm by developing new activities such as processing milk into cheese or ice-cream or opening their farms to the public. In fact, *Groupe Femmes 44* allowed some participants to discover the existence, the relevance, and the more ecological dimension of self-sufficient and autonomous systems. Therefore, it stood as a key resource to foster professional transition toward these systems. For the women who were already involved in such systems, *Groupe Femmes 44* contributes to the transition toward more equitable systems by questioning work organization and gender inequality. Interestingly, participating in *Groupe Femmes 44* seems rather to foster professional transitions in general than an explicit transition toward agroecology. Asserting oneself as a farmer, claiming the professional identity, taking part in production activities and making strategic decisions for the farm business, appear as direct consequences of participation in this agricultural organization. In fact, agroecological transition seems to emerge as a second step. Moreover, our results suggest that a strong ecological commitment is not necessarily critical in moving toward self-sufficient, autonomous and equitable systems.

A strong desire to improve their work conditions, as well as the one of their partner(s), and to take better care of their animals, appear as the main driving force to question the agricultural systems of the women farmers of *Groupe Femmes 44*. Paying attention to the emotional, physical, social needs of all the individuals working on the farm and considering animal welfare, appear as an important source of motivation to modify their system. Their wish to work in collaboration with, and not in opposition to, their partner(s) reveals the importance of the relational dimension they want to give to their professional activity. In that regard, women farmers interviewed expressed, in their discourses and practices, a real ethics of care, as defined by Gilligan (1982). Therefore, we believe that *Groupe Femmes 44* created the conditions of the concrete expression of this ethics. Through the different discussions and

workshops, women farmers found means to express their desire to improve their working conditions. Given the small size of our sample, and the focus on only one particular women-only organization, we are not able to determine if these findings are widely representative. If our study suggests the critical role of these women-only organizations in bringing in social and technical changes on farms, then contributing to transform work in agriculture, additional research should be conducted to validate this finding.

Data availability statement

The data that support the findings of this study are available from authors, upon reasonable request.

Ethics statement

Ethical review and approval was not required for this study in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

Funding

This research has been supported by the TRANSAE program funded by the European Regional Development Fund.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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