

Peasant agroecological farms: drivers of rural development through generational renewal, employment, and social connections. The case of Terre de Liens farms in France.

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Abstract: Over the last decades in Europe, farm numbers have declined and the renewal of farming generations has stalled. In France, the Terre de Liens (TDL) movement experiments with land-related solutions to foster generational renewal and a transition towards sustainable farming models. One of the tools used by TDL is farm acquisition through citizen investment. This paper aims to analyse the contribution of TDL farms, which are embedded in wider territorial dynamics, to rural development. Drawing on a mixed corpus of qualitative and quantitative data and leveraging a collaborative practitioner-academic analysis, the paper highlights three main ways in which TDL farms contribute to rural development: they are a gateway into farming for young new entrants without agricultural backgrounds, they adopt peasant agroecology models that contribute to the local economy and preservation of natural resources, and they catalyse social and territorial dynamics that redefine rural areas as places of innovation and regeneration. TDL farms participate in a rupture from industrialised and exploitative models of farming, by reinventing the ways in which farmers relate to production assets such as land and labour. This rupture can however be nuanced as the TDL model continues to grapple with farm ownership and farm capital issues, which bring into light the shortcomings of the broader regulatory framework to enable socially and ecologically sound rural regeneration.

Keywords: Rural development, peasant agroecology, land, new entrants, social innovation

Introduction: a farming Europe in decline and the need for alternatives

Europe has lost 30% of its farmers and farm workers—4 million people—in the last 15 years (Schuh *et al.*, 2019). Through land concentration, mechanisation, and intensive use of inputs, industrial agriculture has allowed continued high productivity levels while employing fewer people and negatively impacting the environment. In France, between 2005 and 2013, nearly 95,000 farms disappeared and the farm labour force decreased by over 235,000 jobs in full time equivalent (Eurostat, 2013). European Union (EU) policies—notably CAP payments per hectare which incentivise land concentration (Kay *et al.*, 2015)—have long favoured the expansion of large mechanised farms, thus fuelling decline in numbers of farmers. This so-called “modernisation” of agriculture, however, did not bring a renewal of farming generations in its wake. 56 % of EU farmers are over 55 years of age, while less than 6% are under 35 (Di Frederico and Skakelja, 2019). The same trend is visible in France with an average age of farm managers and associates at 52 years, 11 years older than the rest of the working population (Agreste, 2019). According to the European Court of Auditors (2017), €9.6 billion of EU aid to young farmers spent from 2007 to 2020 has followed “a poorly defined intervention logic” and “should be better targeted to foster effective generational renewal”.

Evidence suggests that the profitability of agriculture is far from the main factor that motivates new farmers. Having close-to-nature and environmentally-friendly lifestyles, producing healthy food, escaping employment hierarchies, experimenting a manual job, and developing new skills, are some of the main reasons new entrants cite for wanting to get involved in farming (EIP Agri, 2016). In the last decade, faced with economic decline and sustainability issues, farmers have developed new strategies,

showing that other, non-industrialised styles of farming not only exist, but that they are environmentally, economically, and socially sustainable (van der Ploeg *et al.*, 2019). The agroecological approach has been identified by the RURALIZATION project¹ framework, as a possible pathway of rural regeneration. The RURALIZATION practitioners-academics consortium provides a privileged gateway into observing concrete approaches and strategies for rural regeneration and generational renewal. In this article we discuss the result of a research on farms owned by Terre de Liens (TDL)—a citizen organisation working to help farmers access land in France—and rented to aspiring farmers with ecologically and socially sound farming projects (TDL, 2007). We argue that these farms adopt a peasant agroecological approach and explore the factors that make them foyers of youth employment, innovation, economic and social activities for enhanced rural development, which is one of the research questions addressed within RURALIZATION.

Theoretical background: peasant agroecology as a rural regeneration solution

In recent years, various prominent international institutions such as the International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) and the United Nations (UN) have acknowledged the crisis of agro-industrialisation, which has consolidated large chemical input-dependent and monoculture-oriented industrial companies, with harmful effects on the entire ecosystem (IAASTD, 2009; De Shutter, 2011; UNCCD, 2017). This comes after years of international debate where, since the 1990s, experts have highlighted downsides of this model, while exploring concepts and practices as alternatives to a perceived imminent crisis of modernised agriculture. Among the wide array of reflections developed, some strands of influential thinking can be identified. The first strand focuses on what has been termed the “peasant mode of farming”. Its theoretical framework has been developed during the last decades by Jan Douwe van der Ploeg (2013, 2018), with two main assumptions. The first is that peasant rationality resides in the effort to create and retain value added through the de-commodification of factors of production such as labour, raw materials, and other inputs, which tend to be produced and exchanged through non-commodity circuits. The value added, made available after consumption, is then re-invested in the subsequent cycles of production, thus strengthening autonomy from the capitalist market. The next assumption is that this rationality is grounded in practices of co-production, understood in Marxist terms as mutual interaction between concrete labour and living nature (animals, plants, water, and so on): it is a dynamic relationship of social and material transformation of the world. The second strand of influential thinking is the agroecology approach. The first conceptualisations of ecology applied to agriculture began in the 1960s (Rosenberg, 2017), but it was Miguel Altieri (1987) who introduced the concept of agroecology, which places emphasis on complex and dynamic interactions of biological components within specific agroecosystems which “provide the mechanisms for the systems to sponsor their own soil fertility, productivity and crop protection” (Rosset and Altieri, 1997). In Altieri’s vision (2000), co-production is turned into co-evolution, as socioeconomic and natural “living systems”, each with their own principles and processes, interact with and modify each other. Agroecology thus produces “agroecosystems that are both productive and natural resource conserving, and are also culturally sensitive, socially just, and economically viable” (Altieri, 2018). In sum, the agroecological approach offers an alternate path to industrial intensification by relying on local farming knowledge and techniques, as well as by

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incorporating contemporary scientific understanding of biological principles to better manage on-farm resources and inputs (Altieri, 1999).

In the last decade, these two strands of thinking have been combined by many scholars to form an alternative path connecting the peasant and agroecological approach. As van der Ploeg *et al.* (2019) underline, “agroecology improves farming incomes, creates more employment, and strengthens the resilience of farms and rural areas”. In this, agroecology parallels and reinforces the peasant quest for autonomy and processes of production and reproduction that are radically different from those put in place by conventional agriculture. Though partly overlapping with organic agriculture approaches, agroecology involves much more than simply ‘farming without chemical inputs’ (Migliorini and Wezel, 2017). Centered on principles of nature, independence, and knowledge-intensification, it is a political struggle in which European peasants seek to regain control over their labour processes while changing both the production and distribution of wealth (van der Ploeg, 2020). Empirical research in European countries highlighted this model contributes to maintaining biodiversity, and generates higher incomes and more employment per hectare than industrial farms (van der Ploeg *et al.*, 2019). Agroecology thus supports new pathways of rural development and counteract the abandonment of farms (Knickel *et al.*, 2017; Rivera *et al.*, 2018). This positively contributes to a ‘ruralisation’ process (Chigbu, 2015) not only in terms of better living conditions for farmers, but also through the benefits wider rural and urban communities enjoy from a lively local economy, healthy food, and a preserved environment. Not surprisingly, the approach has been integrated in the political framework of international organisations and promoted by institutions such as the IAASTD and UN.

A mixed approach to studying TDL farms: our method and scope

In France, TDL works to favour the establishment of a new generation of peasants.² One of the tools developed is collecting citizen investment to purchase land, which is then rented to farmers with “sustainable agricultural and agri-rural projects contributing to employment creation and the local economy” (TDL, 2007). Beyond farm acquisition, TDL works with citizens, agri-rural organisations, and political institutions to anchor its farms in wider territorial development processes. In 17 years of existence, TDL has acquired 5,750 hectares (ha), corresponding to 219 farms, 343 lessees and even more active farmers³ and employees. Annually collected data on age and gender of farmers, type of production, marketing methods, and other features is available for all of these farms (TDL, 2020). However, more specific quantitative findings concern smaller samples: 27 farms for a 2016-2017 TDL and Solagro⁴ study on environmental performance, and 47 farms for a 2015-2018 survey by TDL’s Mission for Social and Environmental Utility (MUSE) on profiles of farmers, farm revenue, employment, diversification, etc. (CGDD, 2017; TDL, 2017). These three quantitative data sources will be used in our

² TDL is a multi-faceted organisation composed of:

- Not-for-profit associations: one national Federation and 19 regional associations, united by a founding Charter and governance ties. Associations perform field work related to TDL’s general mission of advising and supporting farmers and generating local and citizen dynamics around land issues.
- A private company limited by shares (Ltd), La Foncière: it collects savings (shares of €103,5) from the public who adhere to values and goals set in the TDL Charter; it then buys agricultural land and buildings, which are rented out to farmers on long-term leases.
- A land trust, La Fondation: it collects donations (in cash or in kind) from individuals, companies (patronage) and public authorities. Like the Foncière, it rents the farms it acquires to farmers. It also has a general mission of informing and mobilising citizens and other stakeholders.

³ Not all farmers are lease signatories: the farms may be rented to an association or collective represented by a few individual signatories on the lease.

⁴ Independent engineering and consultancy association for renewable energy and agroecology.

research, along with qualitative data collected by the MUSE. This mixed corpus is supplemented by desk analysis including other scientific studies on TDL and its farmers.

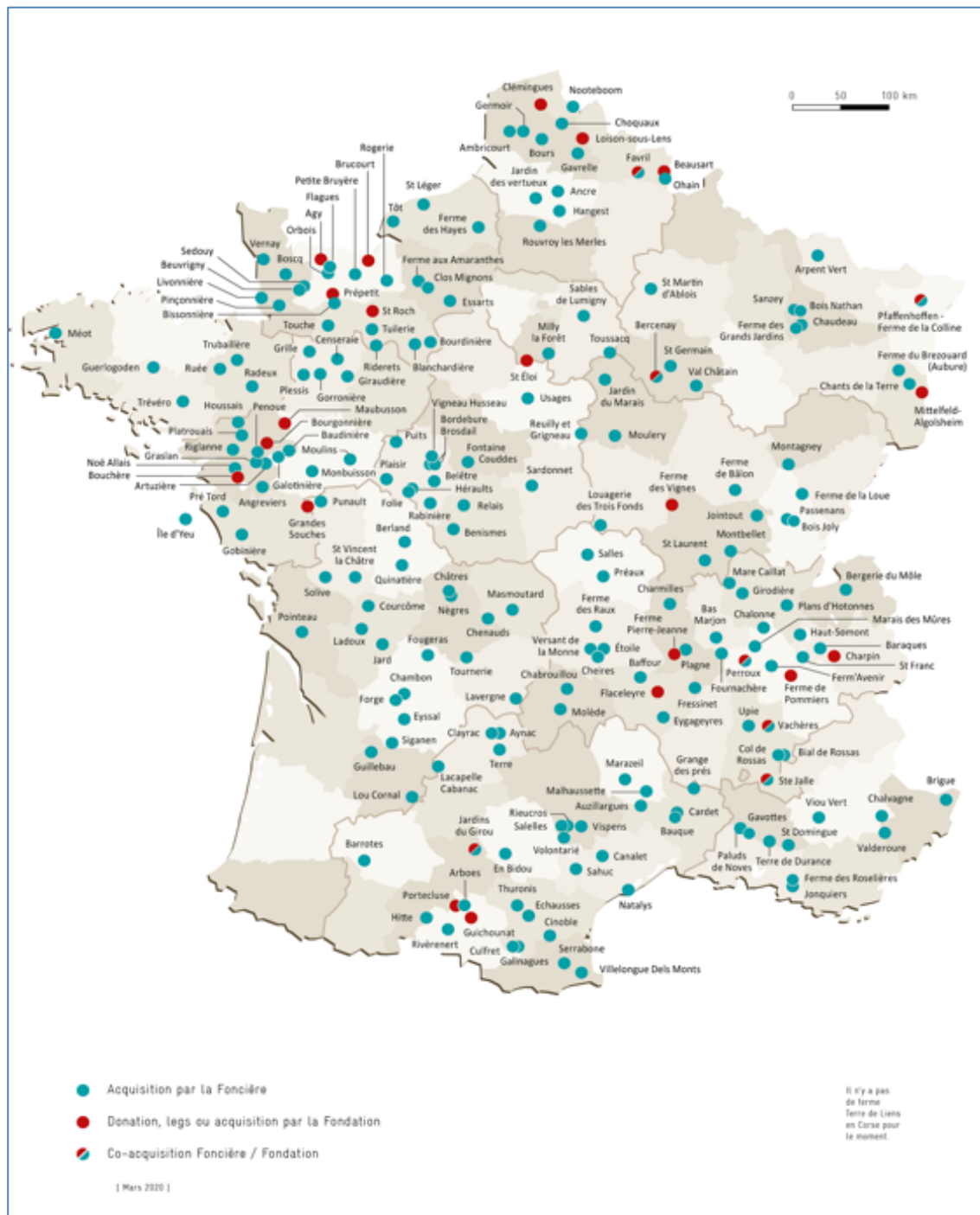


Figure 1. Map of TDL farms. Source: TDL 2020.

We shall point out that data gathering on TDL farms meets limitations. For instance, TDL often owns only part of the farms' land or buildings, while the farmers own or rent additional hectares or infrastructures. Such arrangements correspond to field realities, farmers' needs, and TDL's capacity, and may change over time. They complexify data analysis, notably regarding the total surface farmed by TDL tenants and how we may qualify farm performance based on available land. Furthermore, the methods of growing, selling, number of employees, etc. evolve quickly to adapt to contextual changes and—although farmers are in large part open to collaboration—many internal or external requests for data- and experience-sharing are not always compatible with farm priorities. Finally, TDL is a social movement with many priorities and has limited means for research and data recording. This article will attempt to balance such limitations through leveraging insiders' perspectives on this complex grassroots movement. In the vein of the MUSE methods, our approach mixes scientific expertise and collective deliberation to produce analyses that cross-reference observations with investigative work.

Results

TDL and its farms: supporting extra-familial renewal of agricultural generations

Demographic loss is a major factor of decline affecting, in the long term, the pool of human, social, and cultural capital available within rural and farming communities to solve issues of decline and regenerate (Bock, 2016). TDL farms shelter a young population, with farmers averaging 36 years of age versus 52 nationally (Agreste, 2019; TDL, 2020). The farmers' socio-economic backgrounds are not those of typical farm successors. According to Pibou's sociological study (2016), of 63 surveyed TDL farmers in 2015, 72% were new entrants with no agricultural background and many were career changers, with a higher-than-average education level. The majority of their university training is focused on biology, agronomy, nature management, and rural development, with central links to the environment. A third of the farmers had parents in "intermediary professions" (e.g. teachers, nurses), and their decision to take up farming often reflected a path of rupture from family socialisation or salaried work models (Pibou, 2016). These features correspond to a farmer category called *non issus du milieu agricole* (or NIMA) in French, which designates new entrants without an agricultural background. While no official statistics exist on NIMAs, more than a third of newly established farmers receiving the Young Farmers Grants in France today are getting started outside of a family farm⁵ (MSA, 2019) and NIMAs are increasingly recognised as a source of generational renewal in agriculture (Bienvenu, 2018; Martin-Meyer, 2019; Coly 2020).

Some studies show access to land is the main barrier this kind of entrant faces to entering farming (EIP Agri, 2016; Rioufol and Diaz de Quijano, 2018). TDL works mainly with these farmers to address obstacles they face—lack of information on land sales or rent, limited integration into local agri-rural networks, low financial capital—and thus favour a transition to sustainable models upheld by many of them. The acquisition of farms is the result of a larger territorial work, where TDL regional associations are involved in collecting and circulating information about land (performing regional land diagnosis, organising ad services, meeting with key local actors), in sensitising and organising local communities on preserving and sharing farmland, and in counselling aspiring farmers (providing advice to about 1800 aspiring farmers every year on finding land, determining farm potential and price, negotiating with owners, etc.). This holistic approach is an essential counterpart to farm purchases to foster generational renewal in agriculture.

⁵ This data concerns only establishments assisted by Young Farmers Grants, if accounting for farmers who are not eligible for the grant or do not ask for the grant, the share of farmers getting started outside a family farm is higher but unknown.

TDL and the agroecological peasant model: regenerating local economies

Farms in the TDL network are relatively small—33.7 ha of Utilised Agricultural Area (UAA)⁶ on average, against 63 ha nationally—but perform better in number of workers employed per ha within the following activities: arable crops and caprine, ovine, and bovine productions (TDL, 2016; Agreste, 2014). Such a comparison with national statistics, however, implies a focus on farms' main productions, while most TDL farms develop complementary productions. Table 1 illustrates how TDL farms sustain a diverse "proximity economy", with 170 farms (78%) involved in direct sale (on-farm sale, markets, CSA, and producer stores) and 123 (56%) practising on-farm processing. In the spirit of diversification, non-agricultural activities can also be an integral part of TDL farm projects, notably through the development of crafts workshops (wool, soap-making, blacksmithing, etc.) and activities for the public. MUSE research found that 44% of surveyed farms hosted visitors for diverse activities, including pedagogical visits, workshops, internships, cultural events, and agri-tourism.

Marketing strategies of TDL farms			TDL farms transforming products locally		
Strategy	n°	%	Strategy	n°	%
Markets	107	51%	Cheese making	51	23%
On-farm sale	103	48%	Other transformation	33	15%
CSA & consumer groups	94	44%	Bread making	33	13%
Specialized stores	75	36%	Canning	25	11%
Producer stores	49	23%	Meat transformation	13	6%
Cooperatives	36	16%	Beehive products	7	3%
Wholesalers	26	12%	Wine making	6	3%
Catering sector	21	9,5%	Brewery	7	3%
Hypermarkets & supermarkets	11	5%	Health products	2	1%

Table 1. TDL farms marketing and product transformation. NB: The totals in the table can surpass 100% because farms are engaged in multiple sale or transformation activities at once. Source: TDL, 2020.

Such diversification, as many studies have shown, is key to increasing the revenues, resiliency, and viability of farms and therefore maintain small and medium farms' contributions to their rural economies and communities (van der Ploeg, 2018; Schuh *et al.*, 2019). In the case of TDL, we can highlight common drivers behind it: an attachment to peasant models combining organic, low-input, little-mechanised farming models with locally-oriented activities, an economic rationale aiming to expand sources of revenue and increase farm resiliency, and, often, a quest for autonomy and life- and work-styles compatible with farmers' ecological and social values.

⁶ This figure aggregates TDL-owned as well as not TDL-owned land used by the farmer on a sample of 47 farms.

"I could stop with the sheep or the hens, which do not bring me much money, but that's not my goal. We are autonomous in meat, eggs, fruit, bread; we do a lot of bartering so it's been 5 years since we paid for vegetables (...) It's this globality that's interesting to me. I can't conceive a farm that would be only grain crops. I have an orchard, I'm not going to bulldoze it, I'm going to learn how to maintain it, especially since there are old varieties. (...) we are planning to buy a building in the village to expand the bakery and build a small store. Maybe make a café or a lodging for my partner to work in and develop farm-hosting."
(Guillaume, La Monne farm)

A regenerative primary sector: how TDL farms preserve and value natural resources

In line with the promotion of an agroecological peasant model, all TDL farms practice organic agriculture or are in conversion to do so. Since 2010, TDL has been authorised by law to sign environmental rural leases (ERLs) with farmers (Access to Land, undated). These contracts allow the preservation of the features of regular farm leases, notably tenant protection, but allow environmental clauses to be added (Sanglier *et al.*, 2017). TDL has been the main organisation working experimentally on the implementation of ERLs. While the implementation raises questions (TDL, 2017), our research shows that the use of ERLs relies in large part on mutual trust between TDL and the farmers as well as on the fact that this scheme usually fits farmers' aspirations for environmentally sound farming.

"[regarding the ERL clauses] I had to behave like 'a good family's patriarch' [cf. the rural code's traditional expression] and maintain the existing [resources]: there was a tree and a ditch! (...) I planted 700 trees and dug the ditch further. No, for me, it wasn't complicated, I was steeped in TDL values before so it wasn't a problem at all." (Christophe, La Plagne farm)

"And about environmental clauses, how did it work?

In fact, on all the points, we checked the boxes.

So, it wasn't restrictive?

No, we never told ourselves 'we're going with TDL so we won't be able to do that', it was a perfect fit. At the beginning, we didn't even ask ourselves what was in the lease." (Charline, Tournierie farm)

This sensitivity regarding environmental topics, also confirmed by the environment-focused training of many farmers, was corroborated by a diagnosis co-conducted by TDL and Solagro. The study showed that TDL farms have good results in terms of energy consumption (amounting to 177 EQF [equivalent of a litre of fuel oil] per hectare of utilised agricultural area, versus 253 EQF for other organic farms and 663 EQF for conventional farms) and reduction of inputs (using less phytosanitary products than both other categories) (CGDD 2017).⁷ TDL farms also display higher diversity in vegetable production, devote an important share of the UAA (21%) to legumes, which have nitrogen-fixing properties, and have a high fodder (roughage) autonomy (79%). Overall, they exert little pressure on the natural environment and contribute to the preservation of wild and domestic biodiversity, notably through sustaining environmental infrastructures such as hedges, ditches, and ponds (CGDD, 2017). Beyond farming itself, our research highlights further environmental practices of TDL farmers with the development of low impact housing, renewable energies, fossil fuel-free ways to deliver farm produce (biking), partnerships with environmental organisations, and more.

⁷ The TDL farm data was compared with data gathered through the same methods on 753 conventional farms and 873 certified organic farms.

TDL farms, mobilising new and wider networks for rural development

We have so far commented on the local resources that TDL farms use and generate. In their framework to assess promising practices for rural regeneration and generational renewal, Murtagh *et al.* (2020) acknowledge the importance of capitalising on place-based resources, but also highlight the role of networks in fostering rural development (Vitale and Sivini, 2017; Murtagh *et al.*, 2020b). Urban-to-rural or rural-to-rural interconnections may, for instance, generate knowledge, innovation, and business or funding opportunities, which can be leveraged as exogenous sources of development (Murtagh *et al.*, 2020a, Murtagh *et al.*, 2020b). TDL farms do leverage external capital, whether financial (investment for farms raised from local as well as non-local supporters), social (connection with rural and urban networks of volunteers, donors, and consumers, with communities of farmers, with local authorities, activist organisations, etc.), human (training support from a wide circle of agri-rural organisations, partnership with researchers, etc.), or political (connection with farmer unions, work in partnership with land agencies, advocacy for peasant agriculture by TDL or the InPACT⁸ coalition for a citizen and territorial agriculture, etc.).

This is inherent to the previously illustrated holistic approach, where farms are the product of territorial work and embedded dynamic networks. This involves citizens in farm management in very concrete ways with, for instance, the nomination of local TDL farm referents, volunteer participation in farm work, biodiversity monitoring in connection with environmentalists, and more. Therefore, TDL farms become objects around which the importance of sound rural development for our entire society's well-being is not only discussed but materially experimented. They also illustrate that, in the face of prominent industrial agricultural models and deficient political frameworks, community solidarity is at the core of an agricultural transition. Farmers are both on the receiving and giving end of community solidarity: they benefit from the support of citizen networks yet "give back" in many ways, e.g. through fostering interconnections for rural innovation (joint researcher-farmer work on tools to improve farm autonomy on the Salleles farm, introduction of a marketing software in connection with German farmers on the Moulery farm, etc.), developing rural community dynamics, and working to change mentalities.

"Farmers must get involved so that Terre de Liens thrives. It's not a bank, a cash drawer. When you get up in the morning and you know that there are 100 people who have bought shares so that you can go to work, well, that carries you like crazy! (...) What Terre de Liens brought me: talking about agriculture with consumers, non-farmers. Connecting agriculture to citizens." (Nino, Salelles farm)

"Whenever I work, I think of all the people who have helped me. So there is a very strong link, even if it is not necessarily palpable, tangible, it is in the heart. Every year I organise two picnics with the shareholders. (...) I broadened to more people revolving around the farm: customers, people interested in permaculture, people who asked me for educational visits. I am trying to make it so there is porousness between these different entities, social ties. Terre de Liens is also about links with the outside world, to help educate a lot of people about access to land." (Christophe, la Plagne farm)

These interconnections do not reflect a situation of dependency of TDL farmers on external actors. Rather, they reverse the perception of farms and rural areas as "exploited" or "dominated" peripheries. Farms become, in fact, the heart of the innovation and development processes, with an essential role

⁸ At the national level, this network includes the following organisations: InterAFOCG, FADEAR, Réseau CIVAM, Accueil Paysan, MRJC, TDL, L'Atelier Paysan, Nature et Progrès, and Miramap.

of the rural spatial marginality in providing freedom for creativity and experimentation (Giraut, 2009; Martin-Meyer, 2019).

Discussion

Our analysis of TDL farms and farmers reveals a series of ruptures compared to conventional and industrial agriculture models. The first rupture consists of a transformation of the relationship to farms and farmland as a production asset and as a family capital.

"My motivation for Terre de Liens was to get the land out of private property, more than [a] financial [motivation]." (Anonymous, Moulery farm)

This can be interpreted as a way to resist the current wave of commodification on a global scale (Vitale and Sivini, 2017) and the "conversion of social life into the commodity form" (McMichael, 2005). Farms and farmland seem to not be considered neither as an asset nor as a mere factor of production to be used in a "modernised" logic aimed at increasing production for the market. It is indeed transformed in a place filled with new emotional and social relationships, where they choose to live.

This dimension of "conscious choice" behind the farming vocation is another rupture. Adoption of the peasant agroecological model is not operated in continuity with the past, nor is it linked to the need to perpetuate the family business. TDL farmers settle outside of family farms and are also not certain to be able to transfer the lease to their children, a paradigm shift compared to traditional agricultural transmission patterns. If TDL farmers decide to exit agriculture, they are freer to do so as they are less bound by ownership and debt constraints. Pibou (2016) developed the notion of "peasants in transit" to describe TDL farmers. This illustrates the fact that they no longer necessarily envision agriculture as a career-long choice. It also highlights that they participate in a reverse land logic, where a social movement holds the land and organises the passage of peasants on it, instead of land being "passed on" from one peasant to another.

Finally, the adoption of this new logic allows a redefinition of farm work, another rupture, as farmers become more empowered to decide on the times and modalities of their activity. If the debt ratio of French farmers is growing—it was on average 42.6% in 2017 against 35% in 1995 (Forget *et al.*, 2019)—TDL farmers, on the contrary, are lowering the need for a high amount of financial capital. This means they are able to experiment with alternative business and organisational models.

"It's not as if I had a banker. If I had a credit, had to work to repay a loan, it would not be the same, I would not have as much joie de vivre, I would not have fun practicing free pricing, I would be much more serious, I would go towards the most profitable." (Christophe, La Plagne farm)

Their approach to farming, living nature (animals, plants, natural resources), and concrete labour are linked by a dynamic relationship of co-production (Ploeg, 2018; Vitale Sivini 2017).

"Together we had 520 sheep on both farms, we lowered to 300 after associating (...). Instead of asking 'how much milk we need to live', we wondered 'how many sheep can the farm feed'. We want to buy the least possible and produce the milk outdoors." (Nino, Salelles farm)

In this context, work, like land, is not a mere productive factor. It takes on new and fuller meanings. This conception of work has concrete effects: farmers reduce external inputs, increasing the use-efficiency of internal resources—for example by producing their own seeds—and implement greater control over production organisation (devising arrangements to reduce the workload, sharing this load through establishing as collectives, or valuing natural resources better and limit investments, e.g. use of

grassland system, self-construction of buildings and equipment). Their marketing strategies, mainly based on direct sales, allow them to retain a higher value added on their products and, in the meantime, offer the opportunity to reconnect economic relations to human relations, giving a different social character to their labour, in addition to connections maintained with wider networks of TDL volunteers. Nevertheless, we can nuance the “ruptures” operated by TDL farmers by raising some of the cross-cutting issues debated within and around TDL. Indeed, in a social context where agricultural pensions are very modest—both due to historical choices of the agricultural profession and low incomes during the professional career—the fact that TDL farmers are not owners of the production tool raises questions about their “exit” options in the absence of farm sale revenue upon retiring or changing careers. If farmers own the farm housing, they may find it easier to retire with a home as safety net. Yet this poses the question of then transferring the land itself to a new tenant, without on-farm housing. Farm buildings are another important concern, as their management is costly for TDL, which applies low rents on farm housing and invests in small diversified farms where the building-to-land ratio is often high. The rent rates hardly cover charges linked to the maintenance and renovation of an ageing patrimony. Therefore, the question of the transformation of the land users’ (farmers’) economic models raises questions on the land owner’s economic model as well. Despite attempts to transform relationship to work and capital, some issues “come back through the window”. This highlights the need for a broader debate on the remuneration of the multifunctional services provided by peasant agriculture. Successive CAP reforms have introduced payments for ecological services—ranging from agri-environmental measures introduced in the 2000s to the recent “eco-schemes”—but these are often considered too weak and hardly solve the question of financing agroecological peasant farmers’ production assets and retirement pensions. Some scholars argue for a wider and more systemic transformation. According to Hardt and Negri (2009), for instance, while capitalist systems allow a few people to benefit from the privatisation of common goods and services produced by the labour of many, a commons-based economy would instead enable the value produced by labourers to be reinjected into the growth of the valuable services they provide, thus benefitting society as a whole. This is a compelling theoretical base to reflect on ways in which peasant agroecology, as a key provider of common goods and services (preserved natural resources and landscapes, healthy food, and so on), could be supported in a transformative way—to provide not only more societal services, but also better livelihoods for the next generations of farmers.

Conclusion

Our findings show that, beyond igniting positive demographic dynamics (maintaining a lively fabric of independent farms, enabling the settlement of younger population in rural areas), TDL farms catalyse rural development through two main levers: a peasant agroecological model that upholds autonomy, diversification, local rootedness, and the preservation of environmental resources; and the spurring of interconnections and collective dynamics around farms and agriculture. Peasant agroecological farms such as the ones supported by TDL perform better in terms of job creation and participate in rural development by supplying local food systems, hosting mixed agri-rural activities, and maintaining crucial rural assets such as landscapes and natural resources. As the EIP Agri’s investigation suggests (2016), this model of farming matches aspirations of new entrants driven by lifestyle choices and social values. TDL farms display various ruptures from the industrialised farming world, which must be nuanced, but surely participate in the redefinition of the rapport of farmers to and their place in work, capital, and society. Such redefinition, we argue, is likely to be a condition for more rural regeneration and generational renewal in France and in Europe. Yet peasant agroecological farms are still overlooked as

a lever for rural development and generational renewal in agriculture, and remain little-supported by European subsidy schemes and national agricultural strategies

References

- Access to Land, undated. *Environmental Rural Lease*, <https://www.accesstoland.eu/Environmental-rural-lease/>
- AGRESTE, 2014. *GraphAgri Régions – Exploitations agricoles*.
- AGRESTE, 2019. *Graph'Agri 2019*, Report, Service de la Statistique et de la Prospective, Paris.
- Altieri M.A., 1987. *Agroecology: the scientific basis of alternative agriculture*, Boulder, Westview.
- Altieri M.A., 1999. Applying Agroecology to Enhance the Productivity of Peasant Farming Systems in Latin America, *Environment, Development and Sustainability* 1, 3, 197–217.
- Altieri M.A., 2000. *Agroecology: Principles and strategies for designing sustainable farming systems*, Report, University of Berkeley.
- Altieri M. A., 2018. *Agroecology: The Science of Sustainable Agriculture* (Second Edition), New York, Boca Raton.
- Bienvenu C., 2018. L'installation des néo-paysans en Ille-et-Vilaine : les conditions d'une vraie rupture ?, *Pour* 2-3, 234-235, 209-2016
- Bock B., 2016. Rural Marginalisation and the Role of Social Innovation. A Turn Towards Nexogenous Development and Rural Reconnection, *Sociologia Ruralis* 56, 4, 552-573
- Chigbu U.E., 2015. Ruralisation: a tool for rural transformation, *Development in Practice* 25, 7, 1067–1073.
- Coly B., 2020. *Entre transmettre et s'installer, l'avenir de l'agriculture !*, Avis du Conseil économique, social et environnemental (CESE), Section de l'agriculture, de la pêche et de l'alimentation.
- Commissariat général au développement durable (CGDD), 2017. *Transition écologique agricole. L'exemple de Terre de liens*, Analyse thématique, Ministère de la transition écologique et solidaire, Paris.
- De Schutter O., 2011. *Agroecology and the Right to Food*, Report presented at the 16th Session of the United Nations Human Rights Council [A/HRC/16/49].
- Di Frederico E., Skakelja N. (eds), 2019. *The European Agricultural Fund for Rural Development. Youth and Generational Renewal*, Report, European Network for Rural Development, Brussels.
- EIP Agri Focus Group, 2016. *New entrants into farming: lessons to foster innovation and entrepreneurship*, Final Report, Focus Group New Entrants into Farming, Brussels.
- Wojciechowski J., Wisniewska-Danek K., Radecka-Moroz K. Faria Viegas H., Pirelli L., Frydel M., 2017. *EU support to young farmers should be better targeted to foster effective generational renewal*, Special Report, European Court of Auditors, Luxembourg.
- Eurostat, 2013. *Eurostat database*.
- Forget V., Depeyrt J-N., Mahé M., Midler E., ... Hérault B., 2019. *Actif'Agri. Transformation des emplois et des activités en agriculture*, Report, Ministère de l'agriculture et de l'alimentation, Centre d'étude et de prospective.
- Giraut F., 2009. Innovation et territoires : les effets contradictoires de la marginalité, *Journal of Alpine Research* 97, 1.
- Hardt M., Negri T., 2009. *Commonwealth*, Harvard University Press, Cambridge MA.
- IAASTD, 2009. *Agriculture at crossroads*. Report, United Nations Environmental Programme (UNEP).
- Kay S., Peuch J., Franco J., 2015. *Extent of Farmland Grabbing in the EU*, Rapport, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels.
- Knickel K., Ashkenazy A., Chebach Calvao T., Parrott N., 2017. Agricultural modernization and sustainable agriculture: contradictions and complementarities, *International Journal of Agricultural Sustainability* 15, 5, 575-592.
- Lucas V., Gasselin P., van der Ploeg J.D., 2019. Local inter-farm cooperation: A hidden potential for the agroecological transition in northern agricultures, *Agroecology and Sustainable Food Systems*, 43, 2, 145-179.
- Martin-Meyer, L. 2019. *Néo-agriculteurs : Tenez ferme !*, Sesame, 6.

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- McMichael P., 2005. Globalization, In Janoski T., Alford R. R., Hicks A. M., Schwartz M. A. (eds.), *The handbook of political sociology. States, civil societies, and globalization*, Cambridge, Cambridge University Press.
- Migliorini P., Wezel A., 2017. Converging and diverging principles and practices of organic agriculture regulations and agroecology, A review. *Agronomy for Sustainable Development*, 37–63.
- Murtagh A., Farrell M., Mahon M., McDonagh J., Conway T., Conway S., 2020a. *D3.2 Detailed conceptual guidelines*, Report, RURALIZATION project.
- Murtagh A., Farrell M., Mahon M., McDonagh J., Conway T., Conway S., Korthals Altes W. 2020b. *D3.1 Assessment Framework*, Report, RURALIZATION project.
- Pibou E., 2016. *Paysans de passage, les fermiers du mouvement Terre de Liens en France*, Thèse de doctorat, Université Jean Jaurès (Toulouse).
- Rioufol V., Diaz de Quijano M. (eds), 2018. *Europe's New Farmers: Innovative ways to enter farming and access land*, Report, Access to Land.
- Rivera M., Knickel K., de los Rios I., Ashkenazy A., Šūmane S., 2018. Rethinking the connections between agricultural change and rural prosperity: a discussion of insights derived from case studies in seven countries, *Journal of Rural Studies* 59, 242–251.
- Rosenberg A., 2017. A Brief History of Agroecology in The Tropics and Its SocioEcological Implications in the Context of Climate Change, In G. Poyyamoli (ed), *Agroecology, Ecosystems and Sustainability in the Tropics*, New Delhi, Studera Press, 13-35.
- Rosset P.M., Altieri M.A., 1997. Agroecology versus input substitution: A fundamental contradiction of sustainable agriculture, *Society & Natural Resources* 10, 3, 283-295.
- Sanglier et al., 2017. *Policies and instruments of land market regulations: The Environmental Rural Lease (ERL)*, Toolsheet, Access to Land.
- Schuh B., Maucorps, A., Münch A., Brkanovic S., 2019. *Research for AGRI Committee. The EU farming employment: current challenges and future prospects*, Rapport, European Parliament, Policy Department for Structural and Cohesion Policies, Brussels.
- Terre de Liens, 2007. *Charte du Mouvement Terre de Liens*.
- Terre de Liens, 2016. *Arpenter n°1 : Mesurer l'utilité sociale et environnementale de Terre de Liens*, Report, Mission d'Utilité Sociale et Environnementale (MUSE).
- Terre de Liens (TDL), 2017. *Arpenter n°2 : Accompagner l'accès à la terre*. Report, Mission d'Utilité Sociale et Environnementale (MUSE).
- Terre de Liens, 2020. *Recto-verso des chiffres*, Internal report.
- van der Ploeg J.D., 2013. *Peasants and the Art of Farming: A Chayanovian Manifesto*, Agrarian Change and Peasant Studies Series, No. 2, Winnipeg, Fernwood.
- van der Ploeg J.D., 2018. *The New Peasantries: Rural Development in Times of Globalization*, London, Routledge.
- van der Ploeg J.D., Barjolle D., Bruil J., Brunori G. Costa Madureira L.M Wezel A., 2019. The economic potential of agroecology: Empirical evidence from Europe, *Journal of Rural Studies* 71, 46-61.
- van der Ploeg J.D, 2020. The political economy of agroecology. *The Journal of Peasant Studies*, DOI: 10.1080/03066150.2020.1725489
- Vitale A., Sivini S., 2017. Return to the Land: Decommodification of Local Foods in South Italy, *Transforming the Rural*, 265-281.
- UNCCD, 2017. *The Global Land Outlook*, Report, GLO 1st Edition.

Appendix: main data sources

Data referenced in the text	Sample size	Data collection year	Explanation and corresponding citation
- TDL farmers average 36 years of age - 170 TDL farms (78%) are involved in direct sale and 123 (56%) practise on-farm processing - Table 1 figures	219 TDL farms	2019	Annually-updated quantitative data on TDL farms (internal survey). Terre de Liens, 2020. <i>Recto-verso des chiffres</i>, Internal report.
- TDL farms consume 177 EQF per hectare of utilised agricultural area, (versus 253 EQF for other organic farms and 663 EQF for conventional farms) - TDL farms display high diversity in vegetable production, devote an important share of the UAA (21%) to legumes, and have a high fodder (roughage) autonomy (79%)	27 TDL farms, compared with 753 conventional farms and 873 certified organic farms.	2009 to 2016	Study on environmental performance of TDL farms based on the Dialecte diagnosis developed by Solagro. Commissariat général au développement durable (CGDD), 2017. <i>Transition écologique agricole. L'exemple de Terre de liens</i>. Analyse thématique, Ministère de la transition écologique et solidaire, Paris.
- Farms in the TDL network are relatively small—33.7 ha of UAA on average - TDL farms perform better than national averages in number of workers employed per ha within the following activities: arable crops and caprine, ovine, and bovine productions - 44% of surveyed TDL farms hosted visitors for diverse activities, including pedagogical visits, workshops, internships, cultural events, and agri-tourism - all farmer citations	Questionnaire filled by 47 farms; semi-directive interviews on 12 farms	2013 to 2015	TDL's Mission for Social and Environmental Utility (MUSE) carried out successive fieldworks to diverse aspects of the TDL experience (e.g. profile of farms, engagement with volunteers and local authorities). The main data used was collected through the 2014-2015 farmer survey and is presented in some publications of the MUSE cited below. Terre de Liens, 2016. <i>Arpenter n°1 : Mesurer l'utilité sociale et environnementale de Terre de Liens</i>, Report, Mission d'Utilité Sociale et Environnementale (MUSE). Terre de Liens, 2017. <i>Arpenter n°2 : Accompagner l'accès à la terre</i>. Report, Mission d'Utilité Sociale et Environnementale (MUSE).
- Of 63 surveyed TDL farmers, 72% were new entrants with no agricultural background and many were career changers, with a higher-than-average education level - The majority of their university training is focused on biology, agronomy, nature management, and rural development, with central links to the environment - A third of the surveyed farmers had parents in "intermediary professions" (e.g. teachers, nurses)	63 farmers	2015	Surveys carried out in 2015 by Elsa Pibou in the frame of a PhD in sociology. Pibou E., 2016. <i>Paysans de passage, les fermiers du mouvement Terre de Liens en France</i>. Thèse de doctorat, Université Jean Jaurès (Toulouse).