

Alternative Land Tenure Models: International Case Studies and Lessons for Scotland

Scotland's Land Reform Futures project, Rural Futures theme

Naomi Beingessner, James Hutton Institute, June 2023



A Herenboeren farm. Photograph by Mark van Stokkom

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List of Acronyms

BIPOC Black, Indigenous, and people of co	olour
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CLT Community Land Trust

CSA Community Supported Agriculture

LLC Limited Liability Company

SAFER Sociétés d'aménagement foncier et d'établissement rural

SPRAR System of Protection for Asylum Seekers and Refugees

SRUC Scotland's Rural College

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Highlights

What were we trying to find out?

This report is part of Work Package 2 in the Scotland's Land Reform Futures project under the umbrella of the 'Rural Futures' theme in the Scottish Government's Strategic Research Programme (2022-2027). The project will provide new knowledge regarding land reform, community land ownership and engagement in land use decision-making, as well as increasing understanding of the role of land ownership and land reform in achieving net zero emissions and reversing biodiversity decline in Scotland. This Work Package aims to facilitate understanding of how land reform policies can achieve more equitable and effective land use changes. As part of this, we ask, 'what international models of ownership and control of land exist that are different from those predominant in Scotland, and what might analysis of them contribute to achieving land reform outcomes in Scotland?'

What did we do?

Desk-based research was conducted on land tenure models in the Global North. A longlist of models was generated based on the similarity of the countries in questions to Scotland, including drivers for land tenure change and legal and social institutions. Both academic literature and grey literature, including media articles, websites, and policy reports, were reviewed. Seven models were shortlisted for further description, representing a range of ownership types and objectives.

What did we learn?

Four types of land tenure models provide alternatives to the primary models in Scotland: cooperative, foundation, not-for-profit, and land trust ownership. These models support diversified land tenure and provide environmental and community benefits. Keys to success in meeting objectives include partnerships and allies, a shared vision, and working on multiple scales while rooted in local communities.

What does the report recommend?

Scrutiny of structural barriers to implementation of alternative land tenure models is needed. Consideration should be given to how the models might fit into current reforms and can inform future land reform objectives.

What happens now?

This report will be shared with Scottish Government policy makers and other stakeholders to inform land reform policy land tenure initiatives. The report will also inform the next stage of research in the Scottish Government's Strategic Research Programme (2022-2027) Land Reform Futures project which is six case studies of international and UK models of community access to and use of land. This will help further assess measures proposed to reduce scale and concentration of ownership.

1. Introduction and Background

Research objective: To undertake an extensive literature and policy review to define a conceptual framework/typology of what is meant by 'land tenure models', and therefore examine what could be considered alternative/potential to those that already exist or are predominant in Scotland.

This report is part of the 'Scotland's Land Reform Futures' project, part of the Scottish Government's Strategic Research Programme (2022-2027). The project's goals include to provide new knowledge to inform Scottish Government policy development regarding land reform, community land ownership and engagement in land use decision-making.

Key points

This research explores international alternatives to the primary models of land tenure that currently exist in Scotland. These include cooperative, foundation, not-for-profit, and land trust ownership as well as varied forms of governance. These models are analysed in relation to Scottish land reform objectives, aiming to support the development of future scenarios for diversified land tenure in Scotland with environmental and community benefits.

Keys to success in meeting objectives include: partnerships, alliances, and networks; facilitative government policy or supports; and adaptation to local circumstances. Models need to be worked out in practice in communities, paying attention to who makes decisions and how rights and privileges are allocated.

Alternative models demonstrate other objectives such as decreasing inequity in access and control of land, diversifying land users, building rural-urban solidarity, and increasing the public's sense of responsibility for land. These goals may have relevance in the Scottish context, for example, with the proposed land use tenancy.

1.1 Understanding Land Tenure

'Land tenure', 'land ownership' and 'land management' are distinct concepts that are sometimes confused or conflated. In Scotland, there can be only one possible owner of land (i.e., one legal entity with title to a particular piece of land), but there are various entities that can be a landowner (Combe, 2020). Historically, Scotland's land has been owned by private (generally individual, company, or family trust) owners and public owners (e.g., the Crown, councils). Although community ownership first appeared in Scotland 1923, ownership by third sector organisations and communities has significantly increased since the 1980s (Warren, 2002). The

typical rights of a landowner in a Western property system include the right to all resources, the power to transfer ownership, and the right to exclude others (Singer, 2000). However, landowners do not often have absolute rights; these rights can be limited and can be distributed amongst non-owners. For example, the Land Reform (Scotland) Act 2003 limits a landowner's right to exclude access and in Canada the right to shoot large game (seen as Crown resources) does not go to the landowner, but to a hunting license-holder. This distribution of rights plays a role in alternative land tenure models.

Land tenure is a broader concept than land ownership that encompasses various aspects of control over and use of land. However, the definition of land tenure is often assumed rather than defined in academic literature. Some definitions conflate land tenure with land use or management or are overly vague. For example, "the set of relationships among people concerning land or its product" (Payne, 2002, p. 5) could refer to a contract for marketing wheat (which relates to land's product and management) or access by a hiker (which relates to land use). The following definition¹, which will be used in this report, draws firm boundaries that assist with the identification of land tenure models in international contexts that could be relevant to Scotland.

Land tenure is "the terms and conditions on which land is held, used and transacted, within a particular system of rights and institutions that govern access to and use of land" (Reale and Handmer, 2011)

A necessary element of land tenure is therefore the societal institutions and norms that sanction the relationships of ownership and control. These institutions and norms include not only the legal system, government, and education, but cultural values and approved land uses. The types of institutions that support land tenure in other countries and contexts was one lens by which models were identified for examination in this study.

1.2 Land Reform Objectives

As noted in multiple Scottish Government and land sector stakeholder publications, common objectives for land reform in Scotland include community empowerment and engagement, diversity of landownership², public benefits³, environmental goals around biodiversity and climate change, and economic wellbeing (i.e., 'community wealth building'). The most recent land reform consultation paper, 'Land Reform in a Net Zero Nation', foregrounds community empowerment and benefit,

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¹ Noting, however, that this definition is Western-centric (e.g., would not apply to some Canadian Indigenous peoples' relationships with land)

² Diversification refers to "an increase in the number and variety of local residents, businesses, and community groups exercising control over land and buildings" (Scottish Land Commission, 2020, p. 3).

³ The Scottish Land Rights and Responsibilities Statement explains public benefits as "wider benefits to society such as the provision of food, timber, recreational opportunities, environmental management and nature conservation, and provision of land for housing, commerce and industry" (Scottish Government, 2022b).

transparency in landholding, biodiversity, and a just transition to net zero (Scottish Government, 2022a). The principles of the Scottish Land Rights and Responsibilities Statement incorporate human rights relating to land, sustainable economies and environment, a balance of public and private interests, diversity of ownership and tenure, and increased community participation in decisions about land (Scottish Government, 2022b). The Scottish Land Commission explains its work toward these goals in everyday language: that Scotland's land is "owned and used in ways that are fair, responsible and productive; more of Scotland's people are able to influence and benefit from decisions about land; the way we own and use Scotland's land creates public value and economic wellbeing" (Scottish Land Commission, 2023). In this context, ideal land tenure models for a Scottish context should therefore reflect most or all of these objectives.

2. Methodology

Desk-based review:

- 1. Countries were selected for inclusion based on similarities to the Scottish context
- 2. Search of academic and grey literatures
- 3. Longlist of models that meet the definition of land tenure and meet Scottish land reform objectives
- 4. Shortlist illustrative of range of examples created

A desk-based review was carried out to identify, describe, and classify international alternative land tenure models. Firstly, countries were selected for inclusion based on similarities to the Scottish context. The important factors were:

- Similar sanctioning institutions: legal systems, governing structures, cultural perspectives
- Predominance of private/public land ownership and individual property rights
- Located in the Global North
- Shared context of global trends affecting land availability and use

Secondly, searches for 'alternative land tenure models' were carried out. Current knowledge of the research team and targeted requests to academics working in the area were employed to generate an initial list of examples and search terms. Google Scholar was used to find academic and grey literature, and Google Translate for Spanish, German, French, and Dutch websites. Scottish land sector stakeholder publications on similar topics such as land concentration and land for new entrant farmers were surveyed. Insights into alternative models were gathered primarily from grey literature, including reports from non-governmental organisations, news media, and the models' websites. Despite searching journal paper databases, alternative land tenure models appeared rarely in academic publications, but were occasionally the subject of masters' projects.

Subsequently, a longlist of alternative models was created (Table 1). Models that did not meet any of the land reform objectives were excluded⁴. The longlist of models was subjected to the following selection criteria:

⁴ For example, Canadian investment fund AgCapita/Assiniboia Capital is a new type of owner in the land sector, but it largely buys land from farmers and leases it back to them, decreasing landownership diversity and not purposely contributing to the other objectives.

- Align with chosen definition of land tenure
 - Not solely management models
- Meet many Scottish land reform objectives
 - Community engagement in models
 - o Public benefit
 - o Environmental and/or economic goals
- Currently active

Next, the models were classified by ownership mechanism, i.e., the entity that holds the land title, and primary land management activity.

Table 1: Longlist of Alternative Land Tenure Models

Model	Country	Ownership	Primary Land Management Activity
Agrarian Trust	United States	Land trust	Agriculture
BioBoden	Germany	Cooperative	Agriculture
CO.R.AG.GIO	Italy	Public (cooperative use model)	Agriculture
De LandGenoten	Belgium	Cooperative & foundation	Agriculture
Ecological Land Cooperative	England	Cooperative	Agriculture
Glen Valley Cooperative	Canada	Cooperative	Agriculture
Grondbeheer	Netherlands	Foundation	Agriculture
Hamburg City Estates	Germany	Public (lease model)	Agriculture
Herenboeren	Netherlands	Cooperative	Agriculture
Kulturland	Germany	Cooperative	Agriculture
Land Van Ons	Netherlands	Cooperative	Agriculture
Red Terrae	Spain	Public	Agriculture and forestry
Mt. Adams Community Forest	United States	Not-for-profit organisation	Forestry
Ökonauten	Germany	Cooperative	Agriculture
Sale Della Terra	Italy	Public (cooperative use model)	Agriculture
Terra Franca	Spain	Not-for-profit organisation	Agriculture
Terre de Liens	France	Not-for-profit organisation & trust	Agriculture
Terre en Vue	Belgium	Cooperative & foundation	Agriculture
Tatamagouche Community Land Trust	Canada	Land trust	Housing and agriculture

From this longlist, several models were chosen for further description and elaboration, to be used as illustrative examples. They represent a range of countries, goals, ownership and governance, and length of time they have been operating. They do not include examples already detailed in Scottish Land Commission research on community, communal and municipal ownership of land (e.g., housing through German municipal ownership and American community land trusts).⁵

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⁵ McMorran, R. *et al.* (2019) *Review of international experience of community, communal and municipal ownership of land.* Commissioned Report. Scottish Land Commission.

3. Examples of Alternative Models

Seven examples of 'alternative' land tenure models are described: Kulturland (Germany), Agrarian Trust (United States), Herenboeren (Netherlands), Terre de Liens (France), Grondbeheer (Netherlands), Red Terrae (Spain), and Sale della Terra (Italy). Ownership types are cooperatives, not-for-profit land trusts, foundations, and municipal ownership. The models are motivated by concerns about inclusivity and equity, environmental sustainability, local food systems, and rural development.

While some of the challenges the models face are specific to their country's policy context, they all find it difficult to source funding beyond ideological donors or impact investors, thus limiting their impact. Benefits attributed to the models include provision of local food, land protection, community cohesion, and environmental conservation.

This section describes seven examples of 'alternative' land tenure models that address one or more objectives of Scottish land reform as outlined in the Introduction. The models predominantly involve agricultural land, but a couple also include forest land and abandoned/vacant land. They represent various ownership types – cooperative, land trust, foundation, and municipal ownership – and governance arrangements. The motivations of the organisation's founders and stakeholders vary but are often environmental and social.

Table 2. Examples of Alternative Models

Model Name	Overview	Motivations of founders and stakeholders	Ownership & governance	Stakeholders/ participants
Kulturland (Germany)	Est 2013 1435 shareholders, 33 tenants, 580 ha	Environment, livelihood, ideology (commons)	Cooperative Board, member voters	Cooperative members, farmer lessees ⁶
Agrarian Trust (United States)	Est 2020 2531 donors, 8 farms, 168 ha	Land for next gen farmers, environmental stewardship, racial equity, rural economy	Not-for-profit land trust Local boards, national organisation	Farmers (lessees), local boards with community and farmer members, donors
Herenboeren (Netherlands)	Est 2014 ~1600 members, 10 farms, ~200 ha	Ethical and environmentally sustainable local food chain	Foundation 3-member board and supervisory board; each farm has local cooperative boards/organisation	Cooperative members, contracted farmers

⁶ In these models, a land lease is "a written legal agreement between a landowner (lessor) and an active farmer (lessee) utilising the land" (https://www.agriland.ie/farming-news/whats-involved-in-land-leasing-and-what-are-the-benefits/)

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Model Name	Overview	Motivations of founders and stakeholders	Ownership & governance	Stakeholders/ participants
Terre de Liens (France)	Est 2003 18,500 shareholders, 300 farms, 8000 ha	Agricultural land preservation and access, develop local farming, community, and urban-rural solidarity	Not-for-profit organisations, private company limited by shares, and land trust 22-member board with representatives from 19 regional trusts, working committees	Lessee farmers, shareholders, donors
Sale della Terra (Italy)	Est 2016 ~250 workers 32 municipalities	Social cohesion and inclusive and multifunctional agriculture	Municipal ownership of land Cooperative/association management	Local farmers, unemployed young people, people with disabilities, migrants
Grondbeheer (Netherlands)	Est 1978 30 tenants, 605 ha	Biodynamic agriculture for environment and health	Foundation 3-person board and 3-person supervisory council (no members)	Farmers, bondholders, donors
Red Terrae (Spain)	Est 2010 almost 50 municipalities	Promote agroecology and sustainable development, productive value of abandoned land	Municipal ownership Network governance	Productive land users, municipal representatives/ municipalities

3.1 Kulturland (Germany)



A Kulturland farm. Photograph courtesy of Kulturland

Overview: Kulturland was established in 2013 by a group of researchers and farm consultants. As of February 2023, it involves 1435 shareholders, 33 tenants, and 580 hectares of land.

Context: Germany is experiencing rapidly increasing land prices and competition for land, but there is a farmer right of pre-emption to buy land (Burjorjee, Nelis and

Roth, 2017). In the past couple of decades there has been a cultural shift towards more support of local and organic food, and the land management and use that accompanies it. German business and corporate law enables six forms of civil society organisation landownership, including: registered cooperative, registered association, foundation, limited liability company (LLC), publicly beneficial LLC, and joint stock company.

Mission/vision: Agricultural land should preserve fertility of soil, biodiversity, livelihood for people, and cultural landscapes, and should be a commons.

Operation: Kulturland is a registered cooperative that purchases farmland via a limited partnership with farmers as general partners. As farmers have a right of preemption to buy land, this limited partnership allows Kulturland to participate as a farmer. It responds to applications from organic farmers who have identified a piece of land they would like to buy, rather than Kulturland buying any land that appears on the market. Most of the money required for land purchase is raised from surrounding communities and the farmers who proposed the land for purchase are responsible for assisting with shareholder recruitment. Kulturland has also recently started online crowdfunding to recruit cooperative members from the broader public. The share price is €500, and the cooperative relies on "not-for-profit impact investors", as no interest is paid on shares. It has a partnership with a charity (Schweisfurth Foundation) to facilitate donations. Rents for farmers are low and predictable, and they have the right to use the land indefinitely (Kulturland Startseite, no date). Because the land is certified organic, labels or associations monitor farming practices rather than the cooperative. Examples of Kulturland lessee businesses include: an organic farm with a farm store also supplying to wholesalers, a farm with a community-supported agriculture (CSA) programme, and a dairy farm.

Challenges: Significant challenges prevent Kulturland from scaling up as quickly as they would like. No interest is paid to members, therefore the cooperative only appeals to certain investor types. There is reportedly also a lack of partner organisations, lack of available land, lack of funding for staff costs, and difficulty attracting new shareholders if earlier ones want to sell (Nourish Scotland, 2018). They are also finding the issue of ownership of farm buildings challenging to address, as management is complex (Loveluck *et al.*, 2021).

Public/community benefits⁷: Environmental benefits include the protection of drinking water and soil, biodiversity, and nature conservation, through organic farming practices. The cooperative land provides an aesthetic landscape, and depending on the farm business, local produce. Annually, Kulturland farmers are expected to carry out two of six possible activities to contribute to the integration of farm and community (e.g., educational work, cultural event, open farm, etc.).

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⁷ In the alternative models described in this report, some of these benefits occur because of the certification schemes required by farmland use. However, most of the benefits claimed are listed by organisations in their informational materials.

3.2 Agrarian Trust (United States of America)



Little Jubba Central Maine Agrarian Commons. Photograph by Kelsey Kobik

After conserving land for nature or wildlife, the second largest purpose of community land trusts (CLTs) in the United States is the provision of housing⁸ (Moore and McKee, 2012), and only a few are focused primarily on productive land. Agrarian Trust is the only tenure model within this report that specifically and forcefully addresses issues of racial injustice in ownership and access to land.

Overview: Agrarian Trust was established in 2020. As of 2023, it involves 8 farms in 6 states, 168 hectares of land, and 2531 donors.

Context: Farmland in the United States is subject to rising land prices, concentration, and processes of financialization (Fairbairn, 2020). Farmers identify lack of access to land and other assets as their biggest barrier to entry (Carlisle *et al.*, 2019). Inequality characterizes land ownership: for example, Black, Indigenous, and people of colour (BIPOC) are 70% of farmworkers (USDA Economic Research Service, 2023) but own 2% of farmland (Horst and Marion, 2019).

Mission/vision: "To support land access for the next generation of farmers" (*Agrarian Trust*, 2022) for ecologically restorative agriculture, farm viability, local agrarian economies, and community. The Trust is committed to land as commons, collective stewardship and governance, racial equity, food security, and food sovereignty.

Operation: Agrarian Trust is a not-for-profit organisation that uses various donation options as well as crowdsourcing campaigns engaging the local community and a national audience to obtain land. The trust has created Agrarian Commons subsidiaries (an organisation type that exists to hold title to property) and after land is purchased it is transferred to a new Agrarian Commons in the local area. Governance boards are established as 1/3 local partners and stakeholders, 1/3 leaseholders, and 1/3 Agrarian Trust representatives. 83% of board members are BIPOC and/or women. Maximum legal lease terms for farmers are mostly 99 years (depending on state legislation) and leases are tied to the farm's viability rather than a market rate. Farmers can build equity through owning building and

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⁸ A discussion of housing-focussed CLTs can be found in: Scottish Land Commission (2020) *International experience of community, communal, and municipal ownership.*

infrastructure. The Trust also provides legal assistance and education; it partnered with a Vermont law school to create template bylaws and lease agreements. The model is scalable: Agrarian Commons can be started anywhere there is an impetus, and 12 exist currently in various stages of fundraising, recruitment, and implementation. An example of Agrarian Trust participants is Little Jubba Central Maine Agrarian Commons, which involves approximately 100 acres of land and Somali refugee farmers who self-provision and/or grow commercially in groups for local markets.

Challenges: Broadly, Agrarian Trust identifies as challenges the legacy of unequal and unjust ownership (Lance, 2021), and rising land prices given trends the in American farmland market. It also notes that while conservation trusts can access government funding, there is no public funding for farmland acquisition (*NFU Farmland presents Agrarian Trust on Alternative Forms of Farmland Tenure*, 2022).

Public/community benefits: The Trust benefits new entrants to agriculture, particularly BIPOC farmers which make up 75% of farmers on Trust lands. The land management on Agrarian Commons-owned land also provides ecosystem conservation and locally-sold produce. Communities may see social benefits from cooperative decision making (Cryer, 2021).

3.3 Herenboeren (Netherlands)

Herenboeren has evolved from the model of CSAs, which began in the 1990s in the Netherlands. It is part of the 'social and solidarity economy' that serves ethical consumers who are motivated by sustainability concerns, community support, and local food.



A Herenboeren farm. Photograph by Mark van Stokkom

Overview: Herenboeren was established in 2014. As of 2021, it includes 10 functioning farms of 20 ha (with 200 household members each) and 24 farms in a start-up phase.

Context: As of 2022, the Netherlands has the highest average price of farmland in the EU (Bosma, Hendriks and Appel, 2022). Returns for farmers are poor. Money lending regulations in the Netherlands are relatively strict, which creates difficulties in raising money through community shares on a larger scale (Hagenhofer, 2015).

Mission/vision: Building community through ethical and environmentally sustainable food production, consumption, and distribution. Herenboeren is described as "nature driven, socially connected and economically viable" (Espinoza Zuazo, 2021, p. 19).

Operation: Herenboeren is a foundation that recruits consumers and oversees a number of cooperatively owned farms. Herenboeren farms are created top-down when a group of around six families in a close geographical community express interest in the model and approach the foundation, which helps them recruit other members in the area (up to 200 households) and find nearby land – a process that usually takes 2-3 years. The initial member 'buy-in' cost is €2,000 and then €6-12 a week to cover farm costs. The members set up a cooperative and the cooperative buys the land. The Herenboeren foundation then hires a farm manager who is seeking land access, and who provides weekly produce according to a strict schedule set by Herenboeren. The members are the only customers for the produce. Overall, Herenboeren established the vision and mission, pays the salaries of the farmers on the different cooperatively owned farms, monitors the farms for adherence to practices, and sets the food distribution policy. Unlike some models, the farms are located close to cities (to get enough local consumer supporters) and is based on CSA model. The farmer and cooperative board members organise activities such as farm visits and cooking workshops to help create a sense of community amongst members. The farm model works on 20 ha with 200 households, but with less demand the farm is not as viable. The model is meant to be scalable, therefore when there is more demand in an area than the current farm can supply, the process of creating a new farm begins.

Challenges: The model relies on motivated consumers because the price of farm produce is higher than it is in supermarkets. A study found that some Herenboeren farms rely a great deal on volunteer labour, because the farm manager is salaried for certain set hours and seasonal work makes this difficult (Espinoza Zuazo, 2021). Member expectations of produce may also be hard to fulfil because the output is set by the national organisation, not individual farms, so it is more difficult to take into account, for example, variable weather or soil conditions. Thus, the model may be an idealised construct, and a simple solution to more complex problems (Espinoza Zuazo, 2021).

Public/community benefits: The primary beneficiaries are those in the geographical community who become members of the Herenboeren and receive the farm's produce. Other community members may benefit from participation in events. Environmental benefits result from farming practices, which Herenboeren call 'nature-driven' (*Herenboeren - Samen duurzaam voedsel produceren*, no date).

3.4 Terre de Liens (France)

Terre de Liens is probably one of the best-known current models of alternative land tenure and appears the most in academic literature (e.g., Baysse-Lainé and Perrin, 2018; Léger-Bosch *et al.*, 2020; Lombard and Baysse-Lainé, 2019; Macombe, 2021). It also has the most clearly political intent, advocating in the public sphere for agricultural land as a common good, supporting environmental protection, and building solidarity with citizens and movements, rather than only seeking support. It uses the framing of 'citizen agriculture' ("l'agriculture citoyenne"), i.e., agriculture being 'everyone's business' – a public good and heritage to be managed and protected collectively (Lombard and Baysse-Lainé, 2019).



A Terre de Liens farm. Photograph by Adam Calo

Overview: Terre de Liens was established in 2003 and has 300 farms, 8000 hectares of land, over €90 million raised and 38,000 members.

Context: France has faced decades of high land prices, a competitive market, a decline in farm numbers and increase in size, an increase in numbers of new farmers who don't inherit land, and a lack of subsidies/support for small farms. Terre de Liens was formed to address these concerns when stakeholders from education, organic and biodynamic agriculture, ethical finance, and rural development interests came together. SAFERs (Sociétés d'aménagement foncier et d'établissement rural), Farmland Ownership Regulation Societies, are not-forprofit organisations overseen by the government that regulate farmland ownership, through pre-emptive rights and farm transfers, and support local authorities in policy planning.

Mission/Vision: "Preserve land and ensure it remains in effective agricultural use, support access to land for farmers [...], enhance the development of [localized] farming, promote community connections and solidarity in rural and urban areas [...], foster public debate on land ownership, management and use" (Access to Land, no date).

Operation: Terre de Liens consists of one national and 19 regional not-for-profit organisations, a private company limited by shares (La Fonciere) that collects shares and buys land to rent to farmers on long-term leases, and a land trust (La Fondation) that collects cash/kind donations and rents out the farms acquired. La Fonciere limits shareholders to 5% of the capital. The national and regional organisations coordinate, and assist with education, outreach, fundraising, and partnerships with other organisations. Land-seekers organise local fundraising and support, and the national level organisation assists with raising capital. Leases with farmers are often for 9 years (typical in France), but increasingly longer, while land rents are state-controlled and are lower than many other EU countries. Leases are 'environmental agriculture' leases, which have legally binding environmental clauses that are negotiated with farmers and monitored by certifying bodies, e.g., Demeter, Bioland. Terre de Liens has partnerships with organisations such as organic farming associations, unions, La Via Campesina, and the Seine-Normandie state water agency. Some SAFERs pre-empt in favour of Terre de Liens when land comes up for sale. Terre de Lien's first public issuing of shares was successful largely due to Biocoop, France's largest organic retail network, mobilising its consumers.

Challenges: Ownership of farm buildings/houses consumes over half of La Fonciere's capital. There are constant fluctuations of legal provisions on the regulation of shareholding, donations, and especially on taxation (e.g., possible tax exemptions) that apply to shareholders (Macombe, 2021).

Public/community benefits: Terre de Liens land provides local produce and local processing which creates employment. The farms are multifunctional and employ more farmers per hectare than average in the French agricultural sector (Rioufol and Wartena, 2011). They focus on support for new farmers. As a French foundation cannot sell its assets, the land is removed from the market and protected from speculation (Léger-Bosch *et al.*, 2020). Terre de Liens has become a strong voice in policy arenas.

3.5 Sale della Terra (Italy)

Using abandoned land productively for social inclusion is one of Sale della Terra's main objectives, and it has done so by creating partnerships with many other organisations working in social care and the social economy.



©Sale della Terra. Photograph by Gianpaolo De Siena

Overview: This consortium of cooperatives was established in 2016. Its members include eleven cooperatives that are undertaking social farming, run social enterprises, and provide social care (e.g., housing and therapy for men with psychiatric disorders, employment skills for disabled people). There are over 250 employees within the cooperatives, and the consortium has expanded to four regions of Italy.

Mission/vision: Social cohesion, inclusive and multifunctional agriculture, and the repopulation of rural areas.

Context: Sale della Terra began in one of Italy's poorest regions, Campania. It suffered from rural depopulation, a high unemployment rate, especially for young people, and farm abandonment. Migrants entering found themselves isolated and excluded.

Operation: The consortium is a "social cooperatives" model – one with the goal of providing social services – with members who share its mission and vision. It was founded by four cooperatives that wanted to respond to the needs of people "experiencing social and economic exclusion" (ARCO, 2021, p. 3) and quickly expanded beyond its focus on mental illness. The consortium functions as an administrative services provider, trainer, and a general contractor, as well as providing governance. Lentamente, one of the founding cooperatives, set up farming and food processing businesses on land that had been abandoned for decades. Lentamente train vulnerable people, including migrants, unemployed youth, former prisoners, and people with disabilities, and market branded goods

through e-commerce and other means. Sale della Terra has three stores, a hotel, five branded lines of products, and 11 SPRAR nodes (the Italian system for the accommodation of asylum seekers and refugees). In addition to its work on inclusion, it preserves local seeds and food traditions via a pastry shop and cafés. Sale della Terra addresses 11 of the UN's Sustainable Development Goals.

Challenges: While Sale della Terra has gained a lot of positive media attention and accolades, a report by Burini and Sforzi (2020) reveals challenges the Consortium has faced. Sale della Terra met some resistance from communities to the idea of a process for welcoming migrants. For example, some worried that migrants would be lower-paid agricultural workers who would supplant locals. However, the Consortium realised, through visits to municipalities, that this was a communication problem rather than racism, and addressed that angle. Another challenge was facilitating communication between not only many different stakeholders but also government departments. The Consortium has low membership, mainly workers and volunteers, because most of the regions' inhabitants are elderly people; they benefit from the activities and services offered even if they are not members. A final challenge is geographical; because many smaller communities are distant from each other it is difficult for a single cooperative to offer the same services to them. This means networking is essential, in addition to grassroots entrepreneurial initiatives in these communities (Burini and Sforzi, 2020).

Public/community benefits: Sale della Terra provides rural development via employment, training, and other entrepreneurial possibilities. Its work with vulnerable people contributes to social inclusion and repopulation (Saladino, 2022). Vacant, derelict and abandoned land (in one case, used as an illegal dump) has been rehabilitated (di Redazione, 2022).

3.6 Grondbeheer (Netherlands)

This model is one of the longer-running in this sample of alternative models, and it appears one of the few that offers interests on bonds (e.g., Bioboden in Germany intended to offer interest, but as of 2017 had not made enough profit to do so).

Overview: Grondbeheer was established in 1978, and now involves 30 tenants and 605 hectares of land.

Context: See Herenboeren, page 10.

Mission/Vision: To increase the amount of land under biodynamic agriculture⁹ and ensure healthy food and environment for the future. Grondbeheer does not believe that land is a commodity to be sold to the highest bidder.

Operation: Grondbeheer is an independent foundation, i.e., a Dutch legal entity with limited liability, and a charity that purchases agricultural land with donations

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⁹ Biodynamic agriculture shares most of organic agriculture's principles and rules but has some further obligations such as inclusion of farm animals on the farm (Santoni *et al.*, 2022).

and through sale of perpetual bonds with a 1.5% interest rate. These bonds are unredeemable. The foundation does not have a ready stock of land, but, like Kulturland, responds to approaches from biodynamic farmers, either new or existing, who want to buy land that is up for sale. It purchases the land and then uses long-term leasehold contracts (26 year minimum) with the farmers and bases lease price on the land's sustainable productive capacity rather than market rates.

Challenges: There are a lack of pension models for farmers whose capital is bound in the farm. Dutch law makes it very difficult to link sustainability criteria to a lease (Bosma, Hendriks and Appel, 2022). While biodynamic farms are growing in number, they are still a tiny fraction of the total organic hectares in Europe, which may make it more difficult for Grondbeheer to grow.

Public/community benefits: The benefits cited by the organisation are environmental benefits from biodynamic farming.

3.7 Red Terrae (Spain)

This inter-municipal network focuses on abandoned or unused land and training in agroecology to put the land into productive, sustainable use and to stimulate local economies.



"Las Montañas", San Cristóbal de la Laguna, Tenerife. Courtesy of Red Terrae

Overview: Established in 2010, Red Terrae (Asociación Intermunicipal Territorios Reserva Agroecológicos Red TERRAE) is a network of almost 50 mainly rural municipalities offering land banking and land matching as well as training and mentoring land users.

Mission/vision: Through facilitating the use of abandoned land, promote agroecology and sustainable development to address challenges of biodiversity

loss, climate change, unemployment, and lack of generational renewal in agriculture and rural areas.

Context: Many municipalities in Spain have problems of unemployment, depopulation, and abandoned land. The agroecological aspect of the Red Terrae land bank addresses environmental problems such as pests, soil erosion, and fire risk.

Operation: The inter-municipal network facilitates the transfer or lease of abandoned municipal or private land through a land bank and land match service. The land bank is a public, voluntary and free service, which assists the owners of abandoned land to transfer or lease this land to third parties who put it into production through agroecological initiatives (including agricultural, livestock, forestry, nature and heritage conservation uses or other uses of social interest). Land seekers and those offering land can be matched on their website, and the type of contract is facilitated by Red Terrae, including whether rent is paid 'in-kind' (offering part of the harvest) or by financial transactions, or if land is purchased. Partnering with regional authorities, the network implements demonstrative and educational activities related to fostering employment in rural areas, waste management, local supply chains, native seed banks, and more. Red Terrae focuses on providing training in agroecology and facilitates contracts between producers, restaurants and other consumers.

Challenges: The grey literature does not address challenges to the model. However, a possible limitation of the model is scalability as it is dependent on availability of abandoned land. As well, the plots of land available are quite small, with most under two acres, which may limit farm viability.

Public/community benefits: There are environmental benefits from agroecological initiatives on previously abandoned land, such as reducing pests, fire risks, and loss of agricultural soil. The initiatives also assist with repopulation and have contributed to self-employment and self-provisioning. For example, the City Council of Villena partnered with Red Terrae to implement reforestation and publicise and offer training in organic agriculture (M.I. Ayuntamiento de Villena, 2020). The Comunidad (Community) of Madrid has partnered with Red Terrae and other organisations to promote an agroecological transition in the region. Specifically, Red Terrae assists with the implementation of itinerant agroecological training schools for new farmers and ranchers to settle in rural municipalities with abandoned or underused land (ItíNERA, no date).

4. Discussion

The models were created to address common issues with land such as high land prices, increasing land concentration, new entrants' land access needs, rural depopulation, and ecological damage. Their desired social and environmental outcomes were not being met under existing dominant land tenure regimes.

The models align to a great extent with land reform objectives: almost all provide community benefits (e.g., contribution to the local food chain, local involvement in governance) and environmental benefits. All of the models diversify ownership beyond the typical public and individual private ownership and control. Some provide use rights to a diverse set of users (e.g. migrants, BIPOC), a form of land tenure rather than land ownership diversity.

Success in meeting objectives can be attributed to several factors. In many cases, partnerships and allies were key to broadening impact and operating on multiple scales. Facilitative government policy or supports often played a role. Importantly, models rooted in community, were able to respond flexibly to local needs while appealing to a broader public with a shared vision.

4.1 Comparison of Models

The countries where these case studies are located have common motivations for creating the alternative land models, with many of the factors also found in the Scottish context. Many are reacting to issues such as high land prices, increasing land concentration, the difficulty of land access for new entrants and/or smaller farmers, shrinking rural communities, and ecological damage. Occasionally the motivation is more proactive, such as a desire to increase the area of organic or biodynamically farmed land. In many cases, the high price and lack of land put on the market (low turnover of land) results in the models involving or affecting a comparatively small amount of land area in countries where private and public ownership dominate. As participants in the German cooperatives acknowledged, "the alarming rate of land concentration and loss of the small and medium-sized farms will not be solved through land purchases alone, not least because of limitations of scale" (Kumnig and Rosol, 2021, p. 39).

The organisations driving these alternative models all have multiple goals, many relating to social or environmental objectives that they feel were not being met under existing dominant land tenure regimes. Certainly, some model participants agreed with academic researchers Theesfeld and Curtiss that the commitment to private property and increasing financial sector investment of land "suggest that a change to more sustainable land use practices will require land governance innovations" (2012, p. 315). Dovetailing with this, the models appeal most to those who share those goals. Almost all of the models are based on ideological investment (such as impact investment or charitable donations) or a 'solidarity economy' based on democratic participation and social impact, which ensures motivated donors and participants but potentially limits the number of contributors

and therefore also limits impact and expansion. Many models are rooted in or engage primarily with local geographical communities e.g., Herenboeren, Kulturland, Glen Valley Cooperative (see Table 1). This helps to ensure that local needs are met but limits the range of supporters and partners and makes a wider sphere of influence less likely. Others engage on regional and/or national levels as well as local – and in the case of members of the European 'Access to Land' network, such as Terre de Liens and De LandGenoten (see Table 1), internationally too. This can increase complexity and workload but also increase impact and opportunities for partnerships and support. Engaging with a community of interest, such as consumers of organic food in the case of Bioboden and Terre de Liens, can also result in additional support for the model across a wider scale. On the other hand, donors may be more supportive of a model they can see for themselves or experience the effects of directly.

The extent of direct or indirect participation by stakeholders in the models varies, even between models of a similar type. For example, Kulturland and Herenboeren farmers are expected to carry out community engagement activities in addition to farming, but the only requirement of farmers in Grondbeheer is to practice biodynamic agriculture. The board of Grondbeheer's foundation is three people, whilst the Agrarian Trust has boards for each farm in the Trust with local representation on each board. While the latter ensures that local needs are addressed and diverse voices are heard, this democratic governance model means decision-making is less quick and easy. Different governance mechanisms and participant requirements may be influenced by the different motivations and objectives of the models.

4.2 Alignment with Land Reform Objectives

Many objectives of the alternative models align with Scottish land reform objectives. The three main objectives of community benefit, environmental benefit, and diversification of ownership are outlined in Table 3. The alternative models also fulfil objectives that are not at the forefront of current motivations for Scottish land reform but nonetheless address important economic and social issues.

Some of the organisations are very focused on community benefit and include it as part of their goals (e.g., contribution to local food chain, local involvement in governance) whilst some are more tangentially focussed. For example, while Bioboden helps farmers producing for export, which has a less direct impact on the local community's food chain, some benefits accrue to the community via the continued employment of local farm operators. However, since many models arose to address problems affecting local communities, they attempt to address those directly, as in the case of Salle della Terra's Lentamente cooperative that sought to address abandoned land and lack of employment opportunities in Benevento, or Herenboeren that respond to urban consumers' desire for sustainably produced local food. Many also have specific community engagement activities built into the model. Information about community access of land for purposes incidental to the model, such as recreation, however, is not readily available.

Table 3. Matrix of Land Reform Objectives

	Community Benefit	Environmental Benefit	Diversification of Ownership
Kulturland	Local produce; social, educational, training activities, shared purpose, land for young people	Organic agriculture: biodiversity, soil and water protection	Cooperative (3 rd sector) ownership, some new entrants, small farmers
Agrarian Trust	Local produce, new entrants to farming, rural regeneration	Agroecology and regenerative practices	Not-for-profit (3 rd sector) ownership, BIPOC farmers, new entrants, collective farming
Herenboeren	Local produce to cooperative members in community, community-building activities	Biodiversity protection, soil conservation	Cooperative ownership, some new farmers
Terre de Liens	Local produce, local processing employment, increased number of farmers, voice in policy arenas	Environmental lease clauses: protect biodiversity, water resources, soils	Land trust/not-for-profit (3 rd sector) ownership, farmers with environmental leases, new and small farmers
Sale Della Terra	Increased employment in communities, work with vulnerable people, rural regeneration	Reclaiming abandoned land	n/a
Grondbeheer	Unclear	Promote conversion to and practice biodynamic ag: fertile soil	Foundation (3 rd sector) ownership, biodynamic farmers
Red Terrae	Training, contribution to local supply chain	Agroecology, reclaiming abandoned land	New entrants through land matching (subletting)

Many models claim positive environmental outcomes, but the literature relating to these models largely did not evaluate these claims. The claims that are verifiable are those backed by certifying organisations such as Demeter or Ecocert and, to an extent, those backed by requirements for practices such as Terre de Lien's environmental lease clauses. While land reform in Scotland has not been focussed so far on changing agricultural systems or practices, there is a question of whether there is scope for future land reform measures to support these types of alternative models that seek to promote agroecology, new entrants, etc. The example of Red Terrae, where new land users engage in activities that are not solely agricultural, may connect with the proposed land use tenancy described in 'Land Reform in a Net Zero Nation' (Scottish Government, 2022a).

Diversification of landownership, other than in models that provide access to land for new entrants to farming or small farmers, is not a specific focus or motivator for the alternative models described. However, all of the models diversify land tenure beyond the typical public and individual private ownership and control. Cooperative ownership shares landownership and to some extent the governance (depending on the cooperative structure) to many members through democratic processes. Other models have boards that are representative of different communities, with

Agrarian Trust addressing injustices through their explicit efforts to include women and Black, Indigenous, and people of colour on their boards and among their farmers. While the municipalities that own land in some of the models are 'public' owners, they lease land or provide use rights to a diverse set of users, from agroecological farmers, to migrants, to people with disabilities. This latter example is a form of land tenure diversity rather than land ownership diversity.

Diversity of Ownership Environmental Benefit Community Benefit - access to land - biodiversity - social cohesion - sustainable farming - governance - local food - employment - protected water - participation - repopulation - improved soil - support - participatory decisions - reclaimed land

Figure 1: Alternative models and land reform objectives

There are some objectives that these models address that fall outside the three main objectives of Scottish land reform as outlined in Table 3. For example, in order to decrease inequity, the Agrarian Trust model addresses not just diversity of ownership types but of land users, explicitly facilitating participation by BIPOC and women, two groups traditionally excluded from land ownership and control in the United States. Terre de Liens aims to build urban-rural solidarity through the frame of 'citizen agriculture', to increase people's sense of responsibility for managing and protecting public goods. These goals may have relevance in the Scottish context.

4.3 Extent of Alternative Models' Success

The models' success may be defined by the extent to which they are meeting their objectives. Although it is not mentioned explicitly above, in addition to environmental, social and political objectives, all of the models want to grow in size and reach. While the reasons for their successes vary, there are some commonalities that can be drawn out, partnerships and networks, facilitative government policy or supports and rooted in communities, shared vision and work on multiple scales (Figure 8).

Figure 2: What contributes to the models' success?



Partnerships and networks

It appears that for many models, partnerships and networks are key to success. These models are embedded in community but also partner with other organisations e.g., ethical banks, churches, consumer groups, and groups doing similar things in other countries. For example, Bioboden was founded by GLS Bank, an ecological and ethical bank that had decades of experience financing organic agriculture, with support from some organic food companies. Despite being more recently formed than Kulturland, it has much more land, largely due to the support of those established institutions. When Glen Valley Cooperative (see Table 1) was seeking financing for its farmland purchase, a local credit union was the only institution willing to take the risk - and work through the regulatory hurdles - of giving a mortgage to a cooperative. Glen Valley's members attribute their success to this partnership, along with the backing of a community of interest - middleclass, urban professionals who support sustainable agriculture – and the simplicity of the cooperative's role. The involvement of communities of interest also allowed many models to expand their holdings or reach their goals more quickly. The larger organisations (e.g., Terre de Liens, Red Terrae, Agrarian Trust), regardless of establishment date, operate on multiple scales, with a grassroots base that has ways to contribute to upper-level decision making. These organisations are responsive to local needs and able to be adaptable and have advantages of regional or national-scale support, partnerships, and visibility.

Facilitative government policy or supports

In some models, facilitative government policy or supports have made a significant difference. For example, the French government requires pensions to invest a certain percentage in social bonds, from which alternative land tenure models could potentially benefit (Bosma, Hendriks and Appel, 2022). Also in France, Terre de Liens was able to persuade the government to amend legislation to allow them to use environmental leases. In Belgium, De LandGenoten took advantage of a government scheme whereby individuals can loan up to €75,000 to medium-sized enterprises, increasing their cash flow. De LandGenoten pays a low interest rate, and the government offers tax advantages to lenders and guarantees some of the loan amount. Through this method, De LandGenoten raised enough money to purchase a farm in less than two years (Loveluck *et al.*, 2021).

Rooted in communities

Other lessons may be drawn from the academic analyses of alternative land models. In her study on Herenboeren, describing the challenges that the top-down model faced, Espinoza Zuazo (2021) suggests that those attempting to implement an alternative form of land tenure cannot necessarily rely on traditions or a general template to follow that may not be suitable for the context. She states that the models must be worked out in practice in communities, with attention paid to who makes decisions and how rights and privileges are allocated. Rioufol and Wartena (2011) offer an example of a 'workaround' that Terre de Liens and a French municipality identified to circumvent a French law that local authorities are not allowed to invest in private companies or donate to endowment funds. In order to support the establishment of an organic farm on municipal land, Terre de Liens bought the land and buildings, leased the land to the farmers, and leased the buildings back to the municipality to avoid maintenance costs. The municipality then rented the buildings to the farmers.

Shared vision; human, social, and financial capital (capacity)

In Scotland, the main law that provides an enabling environment for alternative land tenure is the Land Reform (Scotland) Act 2003 and its subsequent amendments (including the most recent Act, the Land Reform (Scotland) Act 2016), which collectively may be considered the most comprehensive land reform legislation in the Global North. Many community buyouts of land and infrastructure have been accomplished as a result. Other factors have contributed to a suite of legislation leading to landownership diversity, including community landownership. In their study of a community asset acquisition in Portobello under the Land Reform Act, Lovett and Combe listed a number of factors they believed led to the urban community's successful purchase. These included a shared vision; human, social, and financial capital (capacity); the sense of place residents held; the definition of the community by recognised boundaries; as well as luck and timing. Along with the timing element, they introduced a psychological element: "a significant threat and a significant opportunity" (2019, p. 214). This element was also apparent in the community land purchases in Assynt and Eigg.

5. Conclusion

International land tenure models share some of the same objectives and attributes as emerging Scottish models such as new woodland crofts, Highlands Rewilding, Scottish Farm Land Trust, and Smart Clachan.

Next steps on the Strategic Research Programme land reform research include to consider how the models summarised in this research might inform future land reform goals in Scotland like diversification of land users and increasing equity in access.

This report describes several models of land tenure. The context for these models is similar in many ways to aspects of the Scottish context, with rising land prices, land concentration, rural communities struggling with depopulation and lack of employment, and environmental concerns. The models have arisen to address these issues.

The report also considers these models in terms of the current main objectives for land reform in Scotland. Most of the models researched have the objectives of community and economic benefit and diversity of land ownership. They attempt to fulfil these objectives in different ways but nonetheless there are similarities that lead to successes. Models that are achieving their objectives work on multiple levels, appeal to a range of stakeholders, and are ultimately grounded in a local context addressing needs of local communities. Partnerships and alliances among different sectors often contribute to greater success.

Emerging Scottish models of alternative land tenure display some attributes found in the models described in this report, tailored to a Scottish context. For example, Community Housing Trust and Glengarry Community Woodlands are partnering to address issues of affordable housing, rural repopulation, and forest management through the creation of six woodland crofts with a shared ownership model (Carrell, 2023). Also addressing affordable housing and rural employment, the 'Smart Clachan' model aims to create small communities that use community-led or cooperative housing models with shared services and facilities, including community work hubs (Rural Housing Scotland, 2021). The Scottish Farm Land Trust, learning from European models (Nourish Scotland, 2018), hopes to provide new entrants to farming with access to land for sustainable agriculture (Scottish Farm Land Trust, no date). Finally, Highland Rewilding has purchased land with institutional and crowdfunded investments. Its mission is to "enable nature recovery and community prosperity through rewilding" and it partners with research institutions like Oxford University and Scotland's Rural College (SRUC) to this end (Highlands Rewilding, 2023). These examples also illustrate a diversification of land ownership in Scotland beyond private and public land tenure.

5.1 Next Steps

Further application of this research to Scotland reveals key questions and areas for further examination.

- 1. What are the legislative or policy potential facilitators and barriers to alternative land tenure models in Scotland?
- 2. How important to success are, for example, policy factors compared to less tangible factors such as human capital?
- 3. Given the relative success of cooperative land ownership in Europe, what further factors might be inhibiting their development in Scotland?
- 4. What role might communities of interest play in land reform or alternative tenure models?
- 5. How do cultural values and expectations support or inhibit alternative land tenure?

Next steps involve considering how the alternative land tenure models in this report might fit into current reforms and how they could inform future land reform objectives. The focus on land tenure, rather than solely land ownership, allows consideration of diversification of land users and decreasing inequity in access. The models also have implications for bettering urban-rural relations and sense of responsibility for land.

As none of the models described in this report have been significantly statesupported, and grassroots initiatives largely have limited impact scale-wise, there is room for more government-level support: policy, funding, other facilitation. Scrutiny of structural barriers to implementation is needed, and consideration of possible supports of the 'soft' factors enabling success such as human capital.

The report will inform the next stage of research in the Scottish Government's Strategic Research Programme (2022-2027) Land Reform Futures project: six case studies of international and UK models of community access to and use of land. This will help further assess measures proposed to reduce scale and concentration of ownership.

References

Access to Land (no date) *Terre de liens*, *Access to Land*. Available at: https://www.accesstoland.eu/-Terre-de-liens- (Accessed: 3 March 2023).

Agrarian Trust (2022) Agrarian Trust. Available at: https://www.agrariantrust.org/ (Accessed: 3 March 2023).

ARCO (Action Research for Co-development) (2021) Setting up a consortium of social cooperatives: insights from the consortium 'sale della terra' in Italy. UNDP ART Initiative, p. 4. Available at:

https://issuu.com/artpublications/docs/fiche_guideline_sale_della_terra (Accessed: 6 March 2023).

'Atlas of Utopias: TERRAE Agroecological Municipalities Network' (no date)

Transformative Cities. Available at: https://transformativecities.org/atlas/atlas-62/
(Accessed: 6 March 2023).

<u>Banco de Tierras Agroecológicas (no date). Available at:</u>
https://bancode.tierrasagroecologicas.es/ (Accessed: 6 March 2023).

Baysse-Lainé, A. and Perrin, C. (2018) 'How can alternative farmland management styles favour local food supply? A case study in the Larzac (France)', Land Use Policy, 75, pp. 746–756. Available at: https://doi.org/10.1016/j.landusepol.2018.03.012.

<u>BD Grondbeheer (no date). Available at: https://www.bdgrondbeheer.nl/ (Accessed: 3 March 2023).</u>

Bosma, D., Hendriks, M. and Appel, M. (2022) *Financing regenerative agriculture:* regenerative finance solutions to restore and conserve biodiversity. Rotterdam: The Sustainable Finance Platform. Available at: https://www.dnb.nl/media/adjnzhdz/web-financing-regenerative-agriculture-final.pdf.

Burini, C. and Sforzi, J. (2020) *Imprese di comunità e beni comuni: un fenomeno in evoluzione*. 018. Trento, Italy: EURICSE, p. 93. Available at: https://euricse.eu/wp-content/uploads/2020/05/Rapporto_Imprese-Comunita%CC%80-e-beni-comuni.-Un-fenomeno-in-evoluzione_def.pdf.

Burjorjee, P., Nelis, Y. and Roth, B. (2017) Land cooperatives as a model for sustainable agriculture: a case study in Germany. Masters Thesis. Blekinge Institute of Technology. Available at: https://www.diva-portal.org/smash/get/diva2:1111078/FULLTEXT02.

Carrell, S. (2023) 'How community crofting experiment could help repopulate the Highlands', *The Guardian*, 10 January.

Carlisle, L. et al. (2019) 'Securing the future of US agriculture: The case for investing in new entry sustainable farmers', *Elementa: Science of the*

Anthropocene. Edited by A.R. Kapuscinski and E. Méndez, 7, p. 17. Available at: https://doi.org/10.1525/elementa.356.

Combe, M.M. (2020) 'Legislating for community land rights', in M.M. Combe, J. Glass, and A. Tindley (eds) *Land reform in Scotland: history, law and policy*. Edinburgh: Edinburgh University Press (Scotland's land), pp. 154–176.

Consorzio Sale della Terra (no date) Consorzio Sale della Terra. Available at: https://consorziosaledellaterra.it/ (Accessed: 6 March 2023).

Cryer, S.A. (2021) Commodifying the commons: American individualism and corporate agriculture. Fordman University. Available at: https://research.library.fordham.edu/cgi/viewcontent.cgi?article=1114&context=environ_2015 (Accessed: 30 November 2022).

di Redazione (2022) 'La Coop Lentamente vince l'International Land Coalition Award', *Vita*, 1 June. Available at: https://www.vita.it/it/article/2022/06/01/la-cooplentamente-vince-linternational-land-coalition-award/163035/ (Accessed: 19 March 2023).

Espinoza Zuazo, M. (2021) New alliances on farmland: balancing scalability and local empowerment on Herenboeren farms in the Netherlands. Masters Thesis. Utrecht University. Available at: https://studenttheses.uu.nl/handle/20.500.12932/1388.

Fairbairn, M. (2020) Fields of gold: financing the global land rush. Ithaca [New York]: Cornell University Press (Cornell series on land: perspectives in territory, development, and environment).

<u>Herenboeren - Samen duurzaam voedsel produceren (no date) Herenboeren.</u> <u>Available at: https://www.herenboeren.nl/ (Accessed: 19 March 2023).</u>

Highlands Rewilding (2023) *Highlands Rewilding - Rewilding Scotland, Highlands Rewilding*. Available at: https://www.highlandsrewilding.co.uk (Accessed: 19 March 2023).

Horst, M. and Marion, A. (2019) 'Racial, ethnic and gender inequities in farmland ownership and farming in the U.S.', *Agriculture and Human Values*, 36(1), pp. 1–16. Available at: https://doi.org/10.1007/s10460-018-9883-3.

How to access farmland using cooperative models (2023). National Farmers Union Canada. Available at: https://www.youtube.com/watch?v=VZFWaZteG2w&t=4683s.

International Land Coalition (no date) Social farming for social inclusion in Italy.

International Land Coalition, p. 8. Available at:

https://d3o3cb4w253x5q.cloudfront.net/media/documents/ILC_Case_Study_C0167

_Italy_EN.pdf (Accessed: 6 March 2023).

<u>ItíNERA</u> (no date) <u>Escuela itinerante de Nueva Ruralidad Agroecologica ItíNERA</u>, <u>TERRITORIOS RESERVA AGROECOLÓGICOS</u>. Available at: https://www.tierrasagroecologicas.es/itinera/ (Accessed: 19 March 2023).

Jonker, J. and Faber, N. (2021) 'Business Model Archetypes', in J. Jonker and N. Faber (eds) Organizing for Sustainability: A Guide to Developing New Business Models. Cham: Springer International Publishing, pp. 75–90. Available at: https://doi.org/10.1007/978-3-030-78157-6_6. Kulturland Startseite (no date) Kulturland Genossenschaft e.G. Available at: https://www.kulturland.de/de/start (Accessed: 3 March 2023).

Kumnig, S. and Rosol, M. (2021) 'Commoning land access: collective purchase and squatting of agricultural lands in Germany and Austria', in A. Exner, S. Kumnig, and S. Hochleithner (eds) *Capitalism and the commons: just commons in the era of multiple crises*. Abingdon, Oxon; New York, NY: Routledge (Routledge studies in global land and resource grabbing), pp. 25–49.

<u>Lamparte</u>, A.M.G. (2019) <u>RURALIZATION - The opening of rural areas to renew rural generations</u>, jobs and farms, <u>EIP-AGRI - European Commission</u>. Available at: https://ec.europa.eu/eip/agriculture/en/find-connect/projects/ruralization-opening-rural-areas-renew-rural (Accessed: 6 March 2023).

Lance, T. (2021) Local matters! Community-based organizations, changemaking, and the food system. Capstone Project. Illinois State University. Available at: https://ir.library.illinoisstate.edu/cppg/36 (Accessed: 30 November 2022).

<u>Léger-Bosch, C. et al.</u> (2020) 'Changes in property-use relationships on French farmland: A social innovation perspective', *Land Use Policy*, 94, p. 104545. Available at: https://doi.org/10.1016/j.landusepol.2020.104545.

Lombard, P. and Baysse-Lainé, A. (2019) 'Terre de Liens, un levier foncier militant au service d'un projet politique pour l'agriculture', *Économie rurale. Agricultures, alimentations, territoires*, (369), pp. 83–101. Available at: https://doi.org/10.4000/economierurale.7010.

Loveluck, W. et al. (2021) Report on novel land practices. D6.5 Deliverable. RURALIZATION.

Macombe, C. (2021) 'Is an alternative to private property durable in agriculture?', <u>Economia agro-alimentare</u>, (1), pp. 1–11. Available at: https://doi.org/10.3280/ecag1-20210a11350.

M.I. Ayuntamiento de Villena (2020) 'Resultados medioambientales muy positivos de la unión del ayuntamiento con la Red Terrae | Villena', 2 December. Available at: https://www.villena.es/noticia/resultados-medioambientales-muy-positivos-de-la-union-del-ayuntamiento-con-la-red-terrae/ (Accessed: 19 March 2023).

Moore, T. and McKee, K. (2012) 'Empowering Local Communities? An International Review of Community Land Trusts', *Housing Studies*, 27(2), pp. 280–290. Available at: https://doi.org/10.1080/02673037.2012.647306.

NFU Farmland presents Agrarian Trust on Alternative Forms of Farmland Tenure (2022). Available at: https://www.youtube.com/watch?v=YgzV8K190yE (Accessed: 3 March 2023).

Nourish Scotland (2018) *The Scottish Farm Land Trust: what can we learn from existing models?* Scottish Farm Land Trust, p. 20. Available at: https://www.scottishfarmlandtrust.org/uploads/7/5/6/3/75636971/sflt_land_trust_comparison.pdf (Accessed: 6 March 2023).

Oudda, L. (2020) Terre de liens: to facilitate the installation of new farmers in France thanks to the solidarity investment of committed citizens, Food Ideas.

Available at: https://letsfoodideas.com/en/initiative/terre-de-liens-faciliter-linstallation-de-nouveaux-paysans-en-france-grace-a-linvestissement-solidaire-de-citoyens-engages/ (Accessed: 30 November 2022).

Payne, G. (2002) Land, rights, and innovation: improving tenure for the urban poor. London: ITDG Publishing.

Reale, A. and Handmer, J. (2011) 'Land tenure, disasters and vulnerability', *Disasters*, 35(1), pp. 160–182. Available at: https://doi.org/10.1111/j.1467-7717.2010.01198.x.

Rioufol, V. and Wartena, S. (2011) Terre de liens: removing land from the commodity market and enabling organic and peasant farmers to settle in good conditions, p. 18. Available at: https://www.nourishscotland.org/wp-content/uploads/2014/06/2012-Terre-de-Liens.pdf (Accessed: 30 November 2022).

Rural Housing Scotland (2021) 'Smart Clachan', *Rural Housing Scotland*, 2

November. Available at: https://ruralhousingscotland.org/smart-clachan (Accessed: 19 March 2023).

Saladino, D. (2022) 'The abandoned land of hope and opportunity', *International Land Coalition*, 18 September. Available at: https://www.landcoalition.org/en/newsroom/the-abandoned-land-of-hope-and-opportunity/ (Accessed: 6 March 2023).

Santoni, M. et al. (2022) 'A review of scientific research on biodynamic agriculture', Organic Agriculture, 12(3), pp. 373–396. Available at: https://doi.org/10.1007/s13165-022-00394-2.

Schuringa, P. (2006) *Initiatieven voor alternatief grondbeheer*. Nederland: Wageningen UR. Available at: https://library.wur.nl/WebQuery/wurpubs/fulltext/20398.

Scottish Farm Land Trust (no date) *Home*. Available at: https://www.scottishfarmlandtrust.org/ (Accessed: 19 March 2023).

Scottish Government (2022a) 'Land Reform in a Net Zero Nation'. Scottish Government. Available at: https://www.gov.scot/publications/land-reform-net-zero-nation-consultation-paper/ (Accessed: 3 September 2022).

Scottish Government (2022b) Scottish Land Rights and Responsibilities Statement 2022. The Scottish Government. Available at: https://www.gov.scot/publications/scottish-land-rights-responsibilities-statement-2022/ (Accessed: 15 March 2023).

Scottish Land Commission (2020) *Diversification of ownership and tenure*. Inverness, Scotland: Scottish Land Commission. Available at: https://www.landcommission.gov.scot/downloads/5f32ffc5a6c87_LRRS%20Protocol%20on%20Diversification%20of%20Ownership%20and%20Tenure.pdf (Accessed: 8 February 2023).

Scottish Land Commission (2023) What we do, Scottish Land Commission. Available at: https://www.landcommission.gov.scot/about-us/what-we-do (Accessed: 14 March 2023).

Singer, J. (2000) 'Property and social relations: from title to entitlement', in C. Geisler and G. Daneker (eds) *Property and values: alternatives to public and private ownership*. Island Press, pp. 3–19.

Talen, A. (2021) Caring organisations: ethics and practices for more than human worlds. Masters Thesis. Utrecht University. Available at: https://studenttheses.uu.nl/handle/20.500.12932/41204.

<u>Terre de Liens - Et si vous faisiez pousser des fermes ? (2023) Terre de Liens.</u> Available at: https://terredeliens.org/ (Accessed: 3 March 2023).

Theesfeld, I. and Curtiss, J. (2021) 'New types of ownership to sustain life on land', in V. Beckmann (ed.) Transitioning to sustainable life on land. Basel, Switzerland: MDPI (Transitioning to Sustainability), pp. 313–335.

Urso, K. (2021) 'Understanding international migrations in rural areas: new processes of social innovation and rural regeneration in Southern Italy', *Italian Review of Agricultural Economics*, 76(1), pp. 59–75. Available at: https://doi.org/10.36253/rea-12197.

<u>USDA Economic Research Service (2023) Farm Labor. Available at:</u>
https://www.ers.usda.gov/topics/farm-economy/farm-labor (Accessed: 17 March 2023).

Warren, C.R. (2002) 'Occupying the middle ground: the future of social landownership in Scotland', *ECOS Magazine*, 23(1), pp. 2–10.

Contact and feedback

Dr Naomi Beingessner; naomi.beingessner@hutton.ac.uk





