

Knowledge Transfer Innovation Fund 2024/25

Agroecology: Strengthening Livelihoods

Project Report



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1. PROJECT TITLE

Agroecology: Strengthening Livelihoods was a peer-to-peer knowledge exchange project between farmers, crofters and growers. It was delivered by Nourish Scotland, The Soil Association, The Landworkers' Alliance (LWA), The Nature Friendly Farming Network (NFFN), Pasture for Life (PFL), Propagate and the Scottish Crofting Federation. Each partner organisation works directly with farmers, crofters and growers across Scotland.

Partnership Overview

Nourish Scotland (lead facilitating organisation) is a charity focused on food and farming policy in Scotland. Nourish chairs Scottish Environment Link's food and farming group. We also convene the Scottish Food Coalition, a partnership of around 40 civil society organisations. Nourish Scotland initiated and organised the Farming for 1.5 inquiry which brought together farmers, scientists and environmentalists to develop a consensus report 'From here to 2045'. Nourish also organised Fork to Farm dialogues with over 100 farmers and decision-makers from 11 different countries for COP26.

The Soil Association established in 1946, is the UK's leading charity working for healthy, humane and sustainable food, farming and land use. Soil Association Scotland was created in 2002, to provide a focus for the Charity's work in Scotland. The Charity has a long and successful track record of working with the Scottish Government and partner organisations to deliver programmes of work for sustainable and healthy food, farming and land use. Our programmes are delivered in partnership with a wide range of public and non-governmental organisations. These programmes aim to demonstrate and enable practical solutions for transforming the way we eat, farm and care for the natural world to restore nature, a safe climate and health.

The Landworkers' Alliance (LWA) is a union of farmers, growers, foresters and land-based workers with a mission to improve the livelihoods of our members and create a better food and land use system for everyone. We operate across the UK and represent more than 1500 agroecological farmers and landworkers. Our policies, representation and training come from farmers, growers, crofters, foresters and land-based workers who have direct experiences of the issues we work on. Projects include mentoring, support for peer-to-peer networks, knowledge exchange and policy-related activities. The LWA has been active in Scotland since 2018 and published a manifesto in 2021 with financial support from the Pebble Trust.

The Nature Friendly Farming Network (NFFN) is a farmer-led, independent UK organisation established in November 2017 with a growing farmer and public membership. NFFN unites farmers and crofters who are committed to managing their land for wildlife and the delivery of public goods, as well as growing and providing healthy and nutritious food. The membership covers a range of backgrounds big and small, organic and conventional and seeks to secure positive changes in policy, including how farming is supported by the public. With an established NFFN Scotland Steering Group and a dedicated Scotland Sustainable

Farming Lead, NFFN works to raise awareness of nature friendly farming in Scotland, shares insights and experience and works in collaboration with others for better policies for food and farming.

Pasture For Life (PFL) is the UK's only certification body for 100% Pasture-fed beef, lamb and dairy products. With over 800 members, paying an annual fee each year and more than 130 certified farms, PFL is the home of grass-fed ruminant agriculture in the UK. The organisation promotes the unique quality of produce raised exclusively on pasture, and the wider environmental and animal welfare benefits that pastured livestock systems represent. PFL is at the cutting edge of new grazing management techniques, is a platform for regenerative farmers to learn and succeed and is committed to providing support for farmers transitioning to more sustainable production methods. With a strong research focus, PFL is a highly networked organisation promoting the interests of its members and ensuring a secure and robust future for them.

Propagate is a worker led collective specialising in local, sustainable and community food projects. We work across Southwest Scotland and the Central Belt. Much of our delivery is nature and climate friendly food and farming education - we work with farmers building peer to peer learning networks that enable transitions to regenerative farming; with communities and schools understanding soil health, food sovereignty and agroecology; and local authorities and national government supporting policy and strategy for better food systems.

Scottish Crofting Federation

The Scottish Crofting Federation (SCF) is a membership organisation and the only organisation dedicated to sustaining crofting and campaigning for the rights of crofters and crofting communities. SCF promotes the environmental, social, and cultural benefits of crofting activity and communal land use as intrinsic aspects of rural development in the Scottish Highlands and Islands. The diversity of crofting land uses – including traditional livestock, forestry, and horticulture – holds great potential for biodiversity, and research shows the importance of crofting practices for habitat and species diversity. Crofting is at a crossroads as key post-Brexit policy reforms, such as for agricultural subsidies, hold both opportunities and risks for the survival of crofting and crofting's potential to deliver for nature, climate and community.

2. EXECUTIVE SUMMARY

We delivered Agroecology: Strengthening Livelihoods, a peer-to-peer knowledge exchange programme for farmers, crofters, growers, to support them in Scotland’s transition to sustainable and regenerative agriculture.

To do this we set up 7 topic-based or geography-based groups where agricultural workers jointly explored agroecological practices. Critically, we focused on practices mentioned in the Agricultural Reform Programmes’ Draft List of Measures, including winter cover, hedgerows, and water margins.

Land workers visited each other’s farms, learning from each other’s successes and mistakes. They also attended webinars on agroecological practices like regenerative grazing, seed diversity and using tree hay as fodder. Participants also stayed in touch through newsletters and WhatsApp groups.

This project was a continuation of our Agroecology: Enabling the Transition 22/23 project where 80% of those involved stated wanting to continue their peer-to-peer knowledge exchange.

What we did	What we achieved
Set up 7 region / topic groups / networks knowledge exchange groups attending farm visits / webinars, having zoom calls, participating in WhatsApp groups.	We had a core group of 176 farmers, crofters and growers and a further network of 327 .
5 nationwide public online webinars	352 attendants and 691 registrations, all of which have received webinar recording. 411 webinar views.
Linked the work delivered by the programme with the broader policy context.	We explored 20 from the Draft List of Measures in farm visits. We hosted civil servants and MSPs on farm walks. We held a gathering in Edinburgh bringing farmers, crofters, and growers from across the project together to meet each other, hear about each other’s works, and talk about challenges and opportunities in Scotland’s Agricultural Transition. They then attended parliament to share this with MSPs as well as learning from the project and highlighting the value of peer-to-peer knowledge exchange.
Active communications engagement. Sharing project activities in local and national media.	3898 downloads of information on the project /online views. 8 pieces about the project in local or national media

	84,189 social media impressions.
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What we found:

- Peer to peer knowledge exchange can provide safe, supportive, and inspiring space for agricultural workers to feel empowered to implement agroecological practices.
- When agricultural workers are feeling unsure about making changes to implement more nature friendly farming practices, seeing, and learning from others who have already made these changes can be the catalyst force that makes them feel confident to transition.
- Changing funding restrictions so that it is possible to support participation costs such as travel, accommodation, and caretaking can take us further towards realising Scotland's Just Transition ambitions.
- Bringing a diverse group of people together to learn from each other can open opportunities for collaboration, breaking down stereotypes and reimagining what agriculture could look like.
- Keeping agricultural workers informed on progress in policy changes can provide some certainty, even when these are in the form of updates and not finalised changes.

3. PROJECT DESCRIPTION

What we did

Agroecology: Strengthening Livelihoods took place between 23/05/2023 and 31/03/2024. The project aimed to support increased awareness, knowledge, and adoption of agroecological practices through farmer-crofter-grower knowledge exchange networks. It proposed to reach practitioners from conventional, organic, and regenerative systems through a peer-to-peer learning program.

Why we did it

Agroecology is a farming system that works for people, nature, and the planet. It supports enhancing and restoring biodiversity, climate change adaptation and mitigation and strengthening livelihoods. It is well placed to support the Scottish Government's vision for Scotland to become a global leader in sustainable and regenerative agriculture.

Policy changes in Scotland will expect farmers to make practice changes. Making changes can be difficult and having peer support can be an invaluable asset - for example, to see how other people have implemented certain agricultural practices, the challenges they've faced, and any lessons learned that they can share.

Project participants of previous partnership work continue to call for opportunities for knowledge exchange. They see it as an important support for mental health as it can be difficult to manage businesses within a changing policy context.

How we did it

Our project was led by an established partnership, responsible for delivering two previous KTIF projects: *Agroecology: facilitating mindset change* and *Agroecology: enabling the transition*.

This partnership is made up by The Landworkers' Alliance, Nature-Friendly Farming Network, Pasture for Life, Soil Association, Propagate and Nourish Scotland.

In this round, the Scottish Crofting Federation (SCF) joined the partnership, which brought in the SCF's networks and expertise and strengthened crofter engagement.

We delivered our project by:

1. Growing and strengthening the farmer, crofter, grower network we have built in previous years. We continued working with existing groups / networks:

- **Supporting Biodiversity within Island-Based Farming & Crofting Group**- Islay, Jura, Gigha and Colonsay.
- **Soil Health Group** - Southwest Scotland.
- **Biodiversity & Profitability Group** - Scottish Borders.
- **Market Gardening Group** - Across Scotland

- **Grazing Network** - Across Scotland

We started three new groups / networks:

- **Crofting Townships Group** - Caithness and Sutherland.
- **Agroforestry network** - Across Scotland
- **Multi-topic network**- Across Scotland

Each group / network had four farm / croft walks and kept in touch online in between these. This happened through WhatsApp groups, newsletters, and broader project communications.

2. Strengthening links between policy and practice. We did this by looking at some of the practices outlined in the Draft List of Measures such as winter cover, minimum / no tillage, use of nitrogen fixing crops, silvopasture, efficient nutrient management, diverse sward species content (legumes-herb-grass mixtures) and use of herbal leys, supporting and incentivising improved sheep nutrition, regenerative grazing and managed grasslands. We also invited civil servants to join farm walks, discussed policy changes and held a final event in the Scottish Parliament for participants to share learning from the project with decision-makers.
3. Delivering five online workshops and one in-person conference.
4. Producing 6 videos focusing on each of the groups / networks and one soundscape to build on our Agroecology Resources Library.

4. FINANCE

4.1 Sum awarded

The sum awarded to this project at 75% was 145,650.00

4.2 Detail of spend & underspent

Item Description	Overall Claim (£)	Grant Awarded at 75% (£)	Budget Remaining (£)	Noting underspend and why
Project Development Costs				
Project management Costs	118,125.00	118,125.00		
Fees for speakers / facilitators	4,957.00	6,750.00	1,792.50	We worked with fewer speakers than anticipated in webinars as we were trying to ensure each speaker had enough time to go in depth on their topic of expertise.
Travel and subsistence for speakers and facilitators	4,984.95	6,375.00	1,390.05	Farm visits ended up being closer than anticipated to facilitators' workplaces / homes so less budget was needed.
Event venues costs	6,361.76	6,450.00	88.24	Slightly less cost than anticipated.
Material costs	6,644.23	7,200.00	555.77	A bit less cost than anticipated.
Publicity	344.99	375.00	30.02	Slightly less cost than anticipated.
Other approved external costs	9.79	375.00	365.21	We are waiting for a couple of invoices for material printed.
Total	141,428.21	145,650.00	4,221.80	

5. PROJECT AIMS/OBJECTIVES

The overall aim of the project was to facilitate knowledge exchange between farmers, crofters and growers to enable them to make a living while implementing agroecological approaches which benefit climate, nature and communities.

Our key objectives set out in the application were:

- Growing and sustaining a strong network of farmers / crofters / growers who are aware and engaged with agricultural policy development across Scotland.
- Increasing opportunities to learn about agroecological practices for farmers, crofters, and growers.
- Creating safe, inspiring, and supportive spaces for farmers / crofters / growers to learn about, experiment and implement agroecological practices.
- Group participants learn from others in different groups enabling a more nuanced understanding of the diversity within the agricultural sector.
- Increasing the number of farmers, crofters and growers from conventional, organic and regenerative systems trying agroecological practices
- Supporting the reduction of loneliness in the agricultural sector

6. PROJECT OUTCOMES

6.1 Aims and Objectives: clearly define the main aim and objectives of the project. Give an indication of the outcomes that you hoped to achieve.

Outcome 1. Growing and sustaining a strong network of farmers / crofters / growers who are aware and engaged with agricultural policy development across Scotland.

We engaged 176 farmers, crofters and growers, making up the 'core' across all groups. These are people who attended farm visits and stayed in touch via other means like WhatsApp. A further 327 farmers, crofters, and growers who engaged more sporadically but were kept aware of events and were sent material such as webinar recordings. This is an increase from last year when we engaged 89 in a core group and 55 more sporadically.

Participants involved across the 7 groups / networks are keen to continue being involved, seeing peer-to-peer knowledge exchange as an enabler for the transition to sustainable and regenerative agriculture.

Engagement with agricultural policy development happened in different ways. Including:

- Scottish Parliament event
- Focusing on farming practices included in the Draft List of Measures during our farm walks
- Discussions within groups
- Civil servants and MSPs attending some farm visits
- Webinar content

This year 37 farmers, crofters, and growers across Scotland attended Scottish Parliament with MSPs and civil servants involved in the Agricultural Reform Programme, a significant increase from the 15 who attended last year. Participants shared what they did throughout the project, what they learned, and the challenges and opportunities faced.

Across all groups / networks it was mentioned that peer-to-peer knowledge exchange is key to enabling the transition to sustainable and regenerative agriculture. See Appendix 1 for presentations. Participants said they 'felt heard' when sharing their learning, challenges and policy asks with decision-makers.

During farm walks we explored practices within the Draft List of Measures including:

- Winter cover
- Minimum/No Tillage
- Efficient / Reduced use of inorganic fertilisers and lime
- Efficient / Reduced use of synthetic pesticides
- Use of N fixing crops
- Diversify crop rotation and break crop rotation period (esp. for root crop)
- Inter-cropping, under-cropping, and mixed cropping (e.g. peas and barley) and avoid monoculture
- Arable/ley rotations (transition from arable to arable/livestock mix)
- Regenerative grazing (mob, strip, adaptive multi-paddock grazing) on improved grassland
- Water Margins
- Pollinator strips and margins
- Retain Traditional Cattle
- Summer Hill Cattle Grazing
- Species diverse grass strips and margins
- Enhance existing Hedgerows
- Supporting and incentivising improved sheep nutrition
- Support maintaining and improving beef cattle health
- Silvo-arable systems
- Introduction of Small-Scale Tree and Shrub Planting
- Retain and Enhance in Field Biodiversity Cropping and Features

Some of these practices were explored in our webinars too, including:

- Tree hay – using trees as livestock fodder
- Novel crops: supporting biodiversity & profitability in Scotland's farms
- Introduction to Regenerative Grazing.
- Biodiversity Audits for crafters and farmers, developing the next steps.

In the Biodiversity Audit Webinar, Nature Scot presented their work under the Scottish Government's commission to produce a biodiversity app. Fifteen attendees volunteered to taking part in the testing of the next iteration of the app: *"Really interesting webinar and would be interested in being involved in further testing of the app."*

In this webinar, participants expressed the importance of getting information early, even if final decisions have not been made yet:

“Really useful session, obviously still under development but very helpful to get this early to crofters and farmers.”

Participants also asked for other updates in policy changes:

“Very interesting. Probably need to watch it again to capture all of the information! Can we have a further webinar on the state of play with the other parts of the Whole Farm Plan development?”

Overall, connecting project participants with policymakers was helpful as participants felt more aware of the policy changes planned, which in turn, helped some feel a greater sense of agency.

Outcome 2. Increasing opportunities to learn about agroecological practices for farmers, crofters, and growers.

We delivered 45 events in total, 32 were farm walks, 5 were webinars and the rest were online calls.

Outcome 3. Creating safe, inspiring, and supportive spaces for farmers / crofters / growers to learn about, experiment and implement agroecological practices.

Participants were inspired by seeing and hearing others who had already tried out agroecological practices on their own land. For example, when Martin Lines delivered a presentation on how his farming practices support both biodiversity and profitability a participant said:

“Many thanks for an inspiring talk today.... I felt he certainly demonstrated an approach that was more achievable for most...I’ve become more intrigued by nature friendly farming, the discussion we had with Martin I found fascinating, and it certainly showed me the extreme of where I can go with the arable side of our farm.”

At a farm walk, someone else noted that *“It was great to see a working, regenerative farm first hand.”* Similarly, another participant described the project as *“a really good way of actually finding out more, seeing what other people have done, learning from their mistakes and taking the information back.”*

Even with the short project time frame, for some, these experiences then translated into practical actions. A participant shared how they were *“about to do our first winter using bale grazing system so it was really helpful to see how this is done on other farms and get the chance to talk with other people on how to go about it.”* For others, this learning inspired them to learn more: *“I have a list of things I will research further.”*

Hearing from agroecological farmers and seeing their work was critical for participants to feel that implementing agroecological practices was feasible for them too.

Facilitators and participants were able to create safe and supportive spaces¹. People reported feeling *“safe to ask questions and share knowledge. Someone described it as “a community of farmers who are free to share their thoughts and experiences without prejudice or judgement.”* Further, someone noted how it struck a balance of *“encouraging, challenging and supporting us on our journey.”* Someone else shared how having the space to share and learn made them feel *“empowered.”* When asked what they would say to another producer who is considering joining a participant said:

“You'll feel welcome, there's delicious food, and it's really fun to geek out with others who are interested in similar things.”

People who were newer to the topic felt comfortable in the space too: *“I know more about agroecological practices now that when I joined the network and I felt held from day one.”* Similarly, someone shared how they initially *“felt anxious about my experience”* but *“this dissipated at the first farm walk.”*

Supportive and safe environments were also enabled by farmers sharing more than just technical tips on farming practices. For some, this was about sharing how farmers manage a work-life balance. At a farm walk, the host shared how applying regenerative practices is *“the best way to run a farm and a family. I'm rarely needing to work past 5pm and the work itself is far less labour intensive than it used to be.”*

Someone who is aspiring to become a farmer shared how *“it's nice to hear farmers talking about lifestyle”* and how different farming practices might adapt to different lifestyles better, making them feel hopeful that they could find a way that worked for them.

Participants also found it useful when hosts shared the whole spectrum of feelings that their work generates. In one farm visit the host shared how *“I find mob-grazing enjoyable...there's something rewarding in opening the fence to let them move...it's a nice feeling.”* A participant said: *“I was grateful for the openness from farmers about trials and difficulties as well as the joys”.*

Sharing these experiences supported the creation of safe, inspiring, and supportive spaces.

Outcome 4. Group participants learn from others in different groups enabling a more nuanced understanding of the diversity within the agricultural sector.

Knowledge exchange across diversity of land workers happened within groups / networks as well as across groups / networks. Focusing on attracting a diverse range of people to the project in terms of agricultural practices, size of land, gender, age, land tenures, time farming / crofting brought benefits to participants. As someone noted:

“It's always good to hear about other people's experiences and different contexts.”

¹ A facilitator 'how to guide' is under development with researchers from the James Hutton Institute

It's also an opportunity to meet *"other folk who I might never have known. We go on farm walks, communicate online, have regular zoom calls."*

Meeting people beyond our usual circles can enable us to think in different ways and feel that different things are possible.

Further, meeting different people can help break down barriers, as someone reflected from meeting people involved in other groups / networks:

"I must admit, as I am a commercial arable farmer I was expecting to have quite a hard time [...] but very quickly in the conversation we realized that actually the goals were quite similar, but we just have different ways of thinking of how we're gonna do it."

Similarly, at our Edinburgh gathering for project participants from across Scotland someone said:

"The opportunity to learn from other groups is invaluable. Contacts that are made here have the potential to progress understanding in the future."

One large mixed farmer specifically mentioned the value of hearing a market gardener's perspectives on the challenges of selling produce in big retailers, making them rethink the approach they were planning to take. The farmer also expressed empathy for the wider difficulties faced by the market gardening sector.

For another participant diversity was essential for Scotland's agricultural future:

"Diversity is the key. Different viewpoints, styles, sizes, approaches. Variety in our flora and fauna. [Diversity is key] to building a resilient future in agriculture."

Outcome 5. Increasing the number of farmers, crofters and growers from conventional, organic and regenerative systems trying agroecological practices

It is difficult to measure uptake of farming practices in a short time frame. However, participants commented in both farm walks and webinars that they would implement some of the practices explored.

Reflecting on the overall collection of events someone said:

"The discussions from this program are very thought provoking and have allowed me to consider certain aspects of the way we farm and how we could adapt them to be more sustainable."

Farm visit reflections

"I found it interesting to see the [another group member's] system in terms of pasture-fed extensive grazing, it's definitely something we're looking at here and we'd like to implement more of."

Other practices participants talked about implementing after farm walks included: small scale timber/shelter belt, stock rotation, cover crops, hedge laying, regenerative grazing, tree planting for fodder and introducing yellow rattle.

Someone else reflected how taking part in these groups / networks could take you on a journey of reflection, eventually leading to implementing some practices:

"You find yourself sort of being influenced by but maybe not directly, but I think I think yeah [I have thought more about implementing some changes] regarding some of the cover cropping ideas and where it works in the rotation."

Participants also stated joining with the intent of implementing change:

"I joined the group because I was interested in finding out more, but finding out through the group which was to go and actually talk to other farmers and see what people are doing, so I can take some of that home, to what we do at home."

Similarly, for someone else:

"I was interested in cover crops, companion cropping, and I knew that would probably come up in the conversation we would have regarding arable crops so I thought, I would maybe learn and try a few myself."

Feeling like implementation as possible came not only from learning technical practices but also the support provided by being part of the project:

"I'm going forward from this experience with a view to establishing my own agroecological market garden - that's one more person for sure! I don't think I'd feel nearly as confident or capable of starting up my own project without this experience."

Still, some people mentioned the broader structural barriers that could hinder the implementation of some of these practices:

"Seeing different agroecological practices on different farms helps you to adopt these in your own context when you get the opportunity. Of course, we need other support mechanisms to facilitate an increase in jobs in this sector As far as the scope of the project goes, I feel this outcome was fulfilled."

Webinars

Introduction to Regenerative Grazing

Attendees: 54

Registrations: 137

When asked if they would implement anything that they had learned on the webinar, 50% said they would like to start regenerative grazing, 35% said they were already practising regenerative grazing but had decided to attend to learn from others.

Those who were interested in implementing said:

"The information was most helpful. I feel encouraged to try this on our farm this year. Very timely too since spring is a few months away and this gives us time."

“Yes, I might have a go on a small area.”

“Perhaps the electric fencing”

Novel crops: Supporting biodiversity and profitability in Scotland's farms.

Attendees: 48

Registrations: 97

78% of the people who attended this webinar stated having no experience in growing flax or hemp while 22% said they did have experience. 90% of those who responded said they would be keen to try growing either flax or fibre.

Those who were interested in implementing said:

“I would consider growing flax on a small-scale rotation with vegetables for soil health.”

“I would be especially interested in growing hemp for the organic matter uses also. I am keen to grow some flax to see how it does. I would want to grow it for edible seed.”

“The benefits of flax grown for fibre are also evident, especially for the pollinating and structural aspects.”

Still, someone recognised a potential barrier for hemp.

“If there was no licence needed, I would love to grow hemp for seed to feed myself. I would also be interested in exploring it for fibre. I would also be very keen to grow it for its soil benefits”

Tree hay – using trees as livestock fodder

Attendees: 135

Registrations: 250

42% of attendees had no experience of using trees as livestock fodder while 58% had some experience. Even though the majority had some previous experience, 78% of attendees said they would try something they had learned on the webinar on their own farm / croft / market garden.

Those who were interested in implementing said:

“Will try again with storing tree hay rather than only fresh, maybe try the blocks for cropping.”

“Yes. Hanging tree hay in bundles on fence.”

“Try feeding some tree cuttings to our poultry and pigs.”

“Will try harder with apple cuttings for my horse, I couldn't work out what he was meant to eat! so, the info from today was brilliant and I shall do further research.”

“The concept of ensiling some of the woody production. Hadn’t thought about for the pigs, though they do seem to browse some of the brush.”

Outcome 6. Supporting the reduction of loneliness in the agricultural sector

Across the groups / networks participants recognised the loneliness in the sector and talked about the project as something that contributed to providing social opportunities. As a participant said:

“it’s an isolated industry so as farmers sharing our own experiences and how we deliver on our own businesses is fundamental.”

Similarly, someone else noted:

“I really struggled with the isolation on the farm, and in the rural setting that I was working in, public transport didn’t exist past 7pm and I was completely new to the area. Having a social network of people made it possible for me to stay where I was, and helped me to understand that this is one of the challenges of farming and to have others in the sector that I could talk about this with and discuss our struggles with having to relocate to quite remote areas, potentially each season.”

This was also achieved by the project being designed so that people can engage in a variety of ways. This diversity in ways of engagement facilitated the reduction of loneliness:

“Being connected through the WhatsApp chats and visits meant that I was aware of events in my area and had a community of people I encountered.”

For some, having an in-person element was essential:

“We’re meeting in person as well. So, we’re actually together, we’re not doing it via Zoom, we’re not doing it via some disconnected digital entity that’s, you know, disconnecting us as people and we can share emotion, we can share body language, and I think that’s also a fundamental thing that’s missing from our community.”

Participants noted how they felt easiness joining as newcomers: *“this was my first Farm Walk with the group, it was really friendly and welcoming.”* Further, being part of a bigger project happening across Scotland gave participants a sense of being part of a wider agricultural community. This was mostly reflected in our Edinburgh gathering:

“Good meeting of like-minded people from all over Scotland sharing ideas and a common purpose of suppling good quality food whilst looking after the land and communities”

The events delivered also seem to be sustaining relationships, as someone noted *“I’m finding this community increasingly important to me.”*

Specific to the funding limitations, some noted how the timeframe is too short making it harder to create enough *“opportunities for growers to meet over a sustained period of time so we could make more meaningful connections.”*

More broadly, some reflected on the livelihood possibilities for market gardeners:

“I didn’t know that there was such a community of young, like-minded folk working on the land in Scotland. I just wish that it was easier for us all to make a living and build that community!”

Someone spoke about agroecological practices, when structurally supported to be part of a bigger agroecological food system, have the potential to *“help farmers connect with communities and customers.”*

It was also noted that the existence of these peer-to-peer groups was especially beneficial within current policy changes. Agricultural workers mentioned feeling a toll on their mental health with all the uncertainty and inability to make business decisions. Even though it was not enough, having the peer support did help alleviate some of the stress.

Additional impact

Throughout the lifetime of the project, we partnered with different stakeholders for mutually beneficial outcomes.

We were approached by researchers from the James Hutton Institute doing Scottish Government funded research on: *“.. examining how novel interventions related to cross boundary collaborations can facilitate transformative change in land management practices that could impact on biodiversity conservation gain...”*

Researchers attended some of our farm walks and other events. They also supported facilitator reflection sessions as well as gathering feedback from project participants. They will be producing a policy brief for Scottish Government in September and a short report in more accessible language available in April. This was decided in collaboration with partnership organisations who were keen for a report that could be shared widely amongst participants.

There are also plans to co-develop a practice guide for facilitators as a resource that can support others facilitating peer-to-peer knowledge exchange.

We also collaborated with others to deliver events with a wider impact. For example, we delivered an in-person conference ‘Farming for the Future: planning for profit and nature’, partnering with the GSA Biosphere and NFUS. The conference was also attended by the FAS regional managers. Feedback from participants described the event as *“brilliant, interesting and informative.”* This has also created opportunities for further collaboration on regional work to support the agricultural transition.

We also delivered a farm walk partnering with AHDB which brought soils expert Joel Williams to Scotland. Participants found the event inspiring and led them to look deeper into their soil. The event created connections with other farmers in the region with the aim of sharing resources. For example, the resident farmer invited farmers from our group to drop by and use the microscope when needed. Farmers also discovered they had a common interest in fermentation for soil enrichment and plant growth enhancement and are keen to share learnings with each other.

6.2 Milestones

Date	Milestone Achieved
May 2023	Partnership fortnightly meetings re-start FAS podcasts
June 2023	Recruitment for new groups begins
June 2023	Farm / Croft visits begin
January 2024	Webinar series begins
February 2024	Cross Group Knowledge Exchange Event Scottish Parliament Event 5 films & podcast finalised 2 more videos filmed (final version expected end of March)
March 2024	Webinar Series Ends Final farm / croft visits

7. LESSONS LEARNED

7.1 Issues/Challenges

Timing

The annual funding cycle is too short to be able to measure impact and implementation of farming practices. With the funding being released in June, co-designing with participants can only realistically start end July / August as agricultural workers need time to arrange meet-ups in a busy part of the year. This then impacts what can be done as when arranging farm visits after harvest there's not always a lot to see.

Participation Costs

As we outlined in our previous reports, the restriction of funds to not support participants' costs like travel, accommodation and caretaking disproportionately affects those on low incomes, juggling multiple jobs and those with caretaking responsibilities, who are often women.

7.2 Impacts and would you do anything differently

Target	Achievement
Network of 180-220 farmers, crofters and growers across Scotland engaging in bridging policy and practice	We had a core of 176 and a further network of 327.
8 groups set up with 12-15 core members and 10-15 participants with more flexible engagement. Each group organises 4 farm visits.	We decided to set up 7 groups instead of 8 and use the funding from the 8 th group to develop a 'cross-group' programme of events, building on the feedback from the previous year that people valued meeting and learning from peers across Scotland. We organised 28 group / network specific farm walks, 2 cross-group ones and 1 gathering for all project participants.
300 farmers / crofters / growers attend an online workshop	286 farmers / crofters / growers attended with a further 120 registering. We would consider this target met as more people are tending to register to webinars to get the recordings and watch them at their own time.
800 views of webinars produced	1478 views.
3,500 farmers / crofters / others download information on the project / watch online content	3898
8 pieces about the project in local or national media	8 completed, 1 forthcoming.
50,000 impressions on social media	85,989

Doing things differently

If we were to be successful in receiving funding for future work we would consider:

- Collaboratively developing the program of events. This year each organisation took responsibility for designing their own events. This is useful to some extent as it can respond to more localised needs, but we can build a more coherent national framework that still responds to need. This could give participants opportunities to attend a broader range of events across Scotland, and give the project a higher profile.
- Extending the amount of time in webinars for Q&A. For the first couple of webinars this was too short but after participant feedback we increased this.
- We would like to include more focus on dairy, arable and organics.
- There might be opportunities to connect the project with CPD (Continuing Professional Development) for agricultural workers.

8. COMMUNICATION & ENGAGEMENT

8.1 Detail comms throughout the project's lifetime

Throughout the project timeline our comms included:

Social media posts on Twitter, Instagram, and Facebook. These were used mostly to showcase farm visits and invite people to online and in-person events. They were also used to promote our resource library, particularly the videos produced by each group / network and the webinar recordings.

We also produced a set of new videos. These are all available on our website 'Agroecology Resources' along with webinar recordings and everything produced in previous years:

<https://www.nourishscotland.org/agroecology-resources/>

Title	Link	Type
Can you have a profitable farm & support biodiversity?	https://vimeo.com/917604124?share=copy	Group / network video
How do we skill up more people to grow fruit & veg in Scotland?	https://vimeo.com/914716365?share=copy	Group / network video
Wool as a high value crop: can nature friendly farming make it pay?	https://youtu.be/E4y4giE_o4c	Group / network video
Cattle and Corncrakes: how are cows delivering for high nature value farmland?	https://youtu.be/3DGMavdCZeg	Group / network video
Soil Health in Southwest Scotland	https://youtu.be/Qcbx5ZDwqLY?si=eDBhJ0v-4_pCUXxd	Group / network video
Cattle & Community	https://youtu.be/Bc12bzNkO2M	Group / network video
Seed Diversity in Scotland	https://vimeo.com/908263062?share=copy	Webinar
Biodiversity Audits for Crofters and Farmers - Developing the next steps	https://www.youtube.com/watch?v=TPJDBsQW7sl	Webinar
Novel Crops: Supporting biodiversity & Profitability on Scotland's Farms	https://www.youtube.com/watch?v=aVrgatzMTxM&t=3s	Webinar
Tree hay: using trees as livestock fodder	https://www.youtube.com/watch?v=Syst03T7JOU	Webinar
Agri Culture – Ana Allamand: Culture and Connection	https://www.fas.scot/publication/agri-culture-ana-allamand-culture-and-connection/	FAS podcast

Rural Roundup – Working Together in Agriculture to Amplify Success	https://www.fas.scot/publication/rural-roundup-working-together-in-agriculture-to-amplify-success/	FAS podcast
Rural Roundup (22nd February)	https://player.captivate.fm/episode/65b49e41-5dd8-4e35-88b3-7c052ec861b4	FAS podcast

We had the following mentions in local and national media:

Title	Link	Media
Crofters in Caithness and Sutherland aim to share knowledge on farming for nature	https://www.crofting.org/crofting-federation-joins-new-scottish-government-funded-programme-for-crofter-led-agricultural-knowledge-exchange/	Northern Times
Crofting federation joins new Scottish Government funded programme for crofter-led agricultural knowledge exchange	https://www.crofting.org/wp-content/uploads/2023/09/WEB-CROFTING-FEDERATION-JOINS-NEW-SCOTTISH-GOVERNMENT-FUNDED-PROGRAMME-FOR-CROFTER-LED-AGRICULTURAL-KNOWLEDGE-EXCHANGE.pdf	Scottish Crofting Federation Webpage
Agri Culture – Ana Allamand: Culture and Connection	https://www.fas.scot/publication/agri-culture-ana-allamand-culture-and-connection/	FAS Agri Culture Podcast
Farm Labour shortages, free upskilling events, and a conversation with The Soil Association	https://www.fas.scot/publication/farm-labour-shortages-free-upskilling-events-and-a-conversation-with-the-soil-association/	Rural Roundup Podcast
Working Together in Agriculture to Amplify Success	https://www.fas.scot/publication/rural-roundup-working-together-in-agriculture-to-amplify-success/	Rural Roundup Podcast

Soil Secrets with Joel Williams	https://www.youtube.com/watch?v=bebHuLnsbUk	AHDB (Agriculture and Horticulture Development Board) YouTube
Inaugural Farming for the Future Conference takes place in Newton Stewart	https://www.dgsustainablefoodpartnership.org/inaugural-farming-for-the-future-conference-takes-place-in-newton-stewart	Sustainable Food Partnerships
'Critical' that farmers are informed of Holyrood's plans for agriculture	Print	Scotsman
Farmers, crofters, growers visit Scottish Parliament	Forthcoming	NFFN website

9. KEY FINDINGS & RECOMMENDATIONS

9.1 Analysis and discussion: analyse and discuss results or findings. Outline the key issues arising from the project and explain why they are important or significant.

We were able – as in previous years – to attract a roughly equal number of men and women and an equal number of farmers over and under 41. This is a significant achievement as women and young farmers are typically underserved by advisory services.

Peer-to-peer knowledge exchange can provide safe, supportive and inspiring spaces for agricultural workers to feel empowered to implement agroecological practices which are better for people and planet. This is critical as Scotland is in a period of transition, and peer to peer knowledge exchange is an enabler for land workers who need to make changes.

Agricultural workers who are feeling a bit more hesitant to implement agroecological practices can be taken a step further if they hear from other practising farmers how these ways of farming have worked out for them. It is critical to identify and support farmers, crofters and growers already implementing agroecological practices both to continue doing so and to share their journey with others.

Safe and supportive spaces allow participants to share more than technical tips. When agricultural workers talked about emotions and lifestyle, participants empathised and could better imagine themselves taking on a similar journey. While the initial focus of knowledge exchange is often on technical approaches, life, work and family all go together on a farm: so values and relationships are often key to people making changes in their business.

The restriction to support participation costs such as travel, accommodation, and caretaking disproportionately affects women as they are more likely to be juggling multiple jobs and roles and to have less disposable income. This is significant as Scotland has committed to a Just Transition.

Bringing a diverse group of people, in terms of age, gender, ethnicity, farming practices, size of farm etc together can break down misleading perceptions of others in the sector. This is significant because it can open opportunities for learning, collaboration and reimagining what farming can look like.

Keeping agricultural workers informed of changes, updates and progress on policy changes can support their mental health. Even if final decisions have not been made on the new rules and policies, regular updates on progress are beneficial.

While it is incredibly valuable to explore technical aspects of farming practices, there comes a point that no matter how much you do on-farm if you don't have the wider systems to support these then change is limited. Broader structural changes are required for these practices to become investable, for example ensuring routes to market for agroecological produce. There is an opportunity to generate more meaningful change if post-farm gate activities could be included in this fund. Knowledge transfer and exchange on processing,

local food hubs and access to markets could support more of Scottish Government's ambitions, such as those under the Good Food Nation Act.

10. CONCLUSION

Our Agroecology: Strengthening Livelihoods project brought farmers, crofters and growers from across Scotland together to learn from each other and feel empowered to transition to more nature friendly farming practices. We managed to significantly increase the number of participants engaging and these continue to call for more of this work.

We delivered positive results for all our outcomes and managed to meet our targets.

Exploring practices on the Draft list of Measures was useful. Participants saw value in learning more about evolving policy. It is an uncertain time and having the peer support to do so can ease the difficulties of transitioning.

When agricultural workers see others implementing nature friendly farming practices, they can feel it is more feasible to make changes themselves. Supporting those already implementing agroecological practices to continue doing so and to share learning with others enables and empowers a wider group of people.

The project also supported a more nuanced understanding of diversity within the agricultural sector, opening new opportunities for collaboration and reimagining what agriculture in Scotland could look like. The in-person meetings, WhatsApp groups and regular catch ups were successful in providing more social opportunities in a sector that suffers from loneliness.

Additionally, we explored collaborations with other stakeholders in the sector like NFUS, FAS, AHDB and the James Hutton Institute. Working together at different points in the project was mutually beneficial for each to meet their desired outcomes. We are looking forward to the facilitator guide being co-produced with the James Hutton Institute as another resource that could be used more widely in the future.

We had an opportunity to reflect on the future of this work and see potential changes in trying to deliver a more cohesive programme across organisations with a more targeted focus, which is something called for by some of the participants. We also think there might be more opportunities to expand the work into to the dairy, arable and organics sector.

Overall, peer-to-peer knowledge exchange can support people to feel empowered to make the changes needed in Scotland's transition to sustainable and regenerative agriculture.

11. ANNEXES/APPENDICES

1. To see the group / network presentations in Scottish Parliament please visit this link: https://docs.google.com/presentation/d/1ek4SQAdduDcZDREpCY56Pu28nm_8GobFk5C0h4FHbRo/edit?usp=sharing

2. Example notes from one of the farm walks

Farm visit: Biodiversity & Profitability Group

Whitriggs Farm | 22 September 2023

With Host Stuart Mitchell and Featuring Doug Christie of Durie Farms, Leven

The Scottish Borders group had the pleasure of visiting Whitriggs farm last Friday. Farmers from the region, as well as others interested in topics of low input farming, came together to learn from Stuart Mitchell and from each other. The visit was joined by Doug Christie, a trailblazer in no-till and cover cropping farming techniques.

We began the day by hearing from both Stuart and Doug about their farming stories.

Stuart

“Dad wishes we farmed like we do now for the previous 40 years.”

Stuart took over the family farm 4 years ago, transforming a conventional beef and sheep farm into an organic, low-input, higher yielding enterprise.

In 2016, Maedi Visna ran rampant through his 1000 sheep flock. “I was sick of sheep by that time, and getting rid of them gave me a blank canvas,” Stuart explained.

With this blank canvas, Stuart made significant changes: to begin farming deer instead of sheep, to design a low-input system and to become a certified organic farm. Taken together, these three changes have improved both the farm’s biodiversity and profitability.

Stuart also says the improvements to his lifestyle are considerable – “it’s the best way to run a farm and a family. I’m rarely needing to work past 5pm and the work itself is far less labour intensive than it used to be.”

Whitriggs now farms a total of 442 ha. 50 hectares of which are cereals. There are 350 red deer and 140 Shorthorn and Angus suckler cows.

Doug

“I just got fed up with going up and down the field with a plough”

Doug joined the discussion after driving up from Oxford, where he received the award for “Carbon Farmer of The Year”. Doug runs Durie Farms: a mixed farm, consisting of 200ha of mixed organic livestock based farmland and 340ha of arable rotation.

This one third of the farm has been organic since 2006. Doug has opted for a mob-grazing approach since 2014, after visiting some regenerative farms in the USA.

On the arable part of the farm, Doug hasn't used a plough since 1999. Instead, he's been direct drilling, but he cautions that this needs to be done in synch with things like cover crops and diverse rotations to ensure the soil is kept healthy.

Doug emphasises the value of experimentation – he says he's still trying to get it right but that things have been noticeably better since keeping the soil covered and minimising disturbance to it.

One of his most recent experiments is different combinations of intercropping. He says that since 2016, he has witnessed the real time transfer of nitrogen between legumes and cereals and that this is something which he tries to honour in his crop rotation.

"I don't want to rely on that bag of nitrogen," he explained, "I'd be happy to tell that merchant to sod off and I hope doing more experiments like this will one day allow me to."

The group then embarked on a full tour of the Whitriggs farm.

1. Arable

We first visited the pastures where Stuart has experimented with drilling winter oats into a grass ley – this not only protects the soil during the winter but provides a grazing crop for his cattle.

He has also trialled undersowing milling oats with a living mulch of clover to further soil and crop health. The group agreed that the clover is coming up well. Stuart hopes to leave it in for at least 8 years –covering the soil for a long time without the effort of resowing those crops.

Whitriggs uses 50ha of their property for cereals – mostly milling oats which are sold to the local mill (15 miles away).

Part of the conversion that Stuart initiated in 2016 was the growing of grain for milling (for human consumption) as opposed to just using it to feed cattle.

Stuart says that for the most part, the arable farming provides insurance if the cattle and deer don't deliver. He says he contemplates the cost reduction that would be possible if he didn't have to farm cereals (tractor etc.).

2. Cows

We then visited 1 of Stuart's 2 mobs that were grazing on the lower hill. Removing the 1000 sheep freed up the ground needed to outwinter his cattle, which were otherwise having to be housed for 6 months of the year.

He also explained that the mob-grazing he can now do all summer and spring has allowed him to build up a crucial grass stockpile capable of feeding his herd through autumn and the first half of winter. He uses a Kiwi-tech Trough for water supply.

The cost reduction he estimates (from not having to put them in the shed) is a whopping £25,000 based on the cost per cow per week.

Stuart also commented on how this kind of grazing has improved biodiversity on the farm. He says his soil samples continue to improve with this method of grazing. The longer grass:cereal rotations help here by reducing soil disturbance and facilitating his cattle mob-grazing approach.

The farm no longer has to buy in any straw to feed the cattle – they feed from the hay bales and from the grass via his strip grazing method (moving the cattle almost every day). He said that along with the neighbouring farm they used to buy in the equivalent of £20,000 of straw.

Stuart's invention, the Bale Unroller, capable of distributing hay to his 140 cows over winter each day, recently earned the RHS Silver award for Innovation.

Stuart also explained that they have been experimenting with the bulling period – as the later calving cows were costing the farm the most. Currently, they are shortening the bulling period to about 6 weeks.

It's not just the cost reductions and biodiversity increase that Stuart is thankful for:

"I haven't had an abortion in the herd for 3 years, compared to at least 1 every season – removing the stress of being inside has improved cattle health and of course, my productivity"

3. Deer

Finally, we visited the 350 red deer that Stuart introduced to the farm when he made the decision to sell his sheep.

He explained how they established 20km of deer fencing themselves and designed a deer handling facility which is designed to reduce risk - both to the staff and the deer themselves - in the handling process.

Stuart has thought about selling the antlers he removes as dog toys, but the profit margin is low, at 50p per antler. So far, he has been gifting them as decorations but is open to more inventive, possibly profit-increasing uses.

Further reading

Whitriggs Farm:

<https://www.fwi.co.uk/arable/farmers-weekly-awards-mixed-farmer-finalists-2022>

<https://www.fas.scot/publication/whitriggs-an-introduction/>

Durie Farms:

<https://www.fwi.co.uk/arable/crop-management/20-years-of-regenerative-agriculture-one-farms-success-story>

<https://ffcc.co.uk/field-guide-for-the-future/farming-with-nature/future-proofing-the-farm>

3. Breakdown of events attendance

Course /meeting duration-rounded up to days	Number of participants in trainings	Number of training days (Days multiplied by participants)	Gender (Male)	Gender (Female)	Gender (Other)	Age Range 40 and under	Age Range 41 and over
1	9	9	7	2		2	7
1	18	18	7	11	0	10	8
1	13	13	3	10		12	1
1	13	13	3	10		12	1
1	12	12	3	9		11	1
1	9	9	2	7		9	0
1	10	10	2	8		9	1
1	12	12	3	9		10	2
1	14	14	5	9		10	4
1	30	30	18	12	0	9	21
1	6	6	4	2			6
1	13	13	6	7			
1	8	8	6	2			8
1	10	10	2	8		10	0
1	9	9	2	7		9	0
1	15	15	5	10		14	1
1	7	7	4	3	0	3	4
1	17	17	10	7			
1	7	7	4	3		7	0
1	10	10	4	6	0	2	8
1	10	10	1	9		6	4
1	10	10	5	5			10
1	85	85	50	35		48	37
1	11	11	7	4	0	1	10
1	6	6	6	0	0	3	3

1	5	5	5	0	0	1	4
1	12	12	7	5	0	1	11
1	13	13	10	3	0	4	9
1	7	7	5	2			7
1	6	6	3	3		5	1
1	14	14	5	9		5	9
1	25	25	18	7		22	3
1	56	56	31	24	1	23	33
1	58	58	13	43	2	27	31
1	9	9	3	6		5	4
1	13	13	6	4		4	9
1	10	10	8	5		2	8
1	8	8	4	4		6	2
1	65	65	31	34		45	20
1	8	8	7	1		1	7
1	62	62	22	37	3	20	42
1	48	48	12	32	4	16	32
1	135	135	58	72	5	41	94
1	65	65	34	30	1	28	37
45	983	983	451	516	16	453	500

