



## **The Agroecology Research Collaboration (ARC)**

**Impact Report 2021-2025: Building Evidence for  
Sustainable Food System Transformation**

## **Executive Summary**

The Agroecology Research Collaboration (ARC) has established itself as a vital bridge between grassroots agroecological practitioners and academic research institutions across the UK. Over four years, ARC has facilitated groundbreaking research demonstrating that agroecological approaches can deliver higher yields than conventional systems while supporting greater biodiversity, enhanced food security, and improved community wellbeing.

### Key Impact Metrics:

- 160+ research enquiries facilitated, connecting practitioners with academic researchers
  - 15+ peer-reviewed publications and research reports generated
  - 40+ farmer-led research projects funded and completed through our "Experts in Your Field" initiative
  - Over 10,000 members across our collective organisations
  - Evidence base established showing agroecology's viability as a scalable alternative to industrial agriculture
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## **What We've Proven: Research Breakthroughs**

ARC's collaborative approach has generated compelling evidence that challenges conventional agricultural assumptions:

### **Productivity & Biodiversity**

- Polycultural cropping systems deliver higher yields than conventional industrial methods while maintaining superior biodiversity compared to conventional organic systems (Martinez, ongoing)
- Market gardens achieve extraordinary crop diversity averaging 118 crops per farm (83 per hectare) – substantially higher than conventional farms, demonstrating their critical role in UK food security (Wagstaff, 2023)

### **Food Security & Self-Sufficiency**

- Domestic food security is achievable: Modelling shows that 80% UK self-sufficiency in vegetables and fruits would require only 2.3% of cropland (up from current 0.6%), producing 5 portions per person daily at 18 tonnes/ha yield (Zhang, 2024)

### **Local Food Systems**

- Landworkers' Alliance members are local food champions: 90% sell within 25 miles of their business, with 40% selling within 5 miles, proving the local resilience of agroecological enterprises (Chivers et al., 2022)

### **Community Health & Wellbeing**

- Urban agriculture improves mental health: Volunteers on urban and peri-urban farms report higher wellbeing scores and lower anxiety than the England average (Jackman, 2023)

### **Climate & Systems Change**

- Agroecological urbanism addresses multiple challenges simultaneously – climate, health, and social issues – providing integrated solutions for local and national decision makers (Laughton, Tornaghi, Goldring, Longhurst, 2025)

### **Social Innovation**

- Breaking down barriers: New agri-environmental schemes are dismantling social barriers by requiring collaboration across diverse stakeholder groups, driving increased interest in collaborative farm clusters (Dewally, 2025)
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## **About ARC: A Unique Collaborative Model**

The Agroecology Research Collaboration represents an unprecedented alliance of six leading UK organisations:

- Landworkers' Alliance
- Community Supported Agriculture Network UK (CSAN)
- Ecological Land Cooperative (ELC)
- Organic Growers Alliance (OGA)
- Permaculture Association (PAB)
- Pasture for Life (PfL)

Together, these organisations represent thousands of agroecological practitioners working across food, farming, forestry, and land-use sectors throughout the UK.

## **Our Mission**

To build a farming, forestry, and land-use system rooted in agroecology and food sovereignty through practitioner-led research that informs policy and demonstrates viable alternatives to industrial agriculture.

## **Our Approach**

- Practitioner-centered: Research agendas are driven by the needs of grassroots farmers, growers, and foresters
  - Collaborative: We bridge the gap between academic institutions and working practitioners
  - Evidence-based: We build rigorous research foundations for agroecological advocacy
  - Accessible: Research outputs are designed for practical application by practitioners
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## **Proven Track Record: 2021-2025 Achievements**

### **Knowledge Exchange & Capacity Building**

Major Conferences & Events:

- October 2021: "Opening the Conversation" – inaugural practitioner-researcher gathering
- October 2022: "Growing Connections" – expanded network engagement
- March 2024: Online "Introduction to ARC" – broadened accessibility
- October 2024: "Cultivating Wisdom" conference (with Association of Applied Biologists)

- March 2025: "Farmer-led Agroecological Research: Reflecting on the Present, Co-designing the Future"



#### Educational Partnerships:

- Schumacher College collaboration: Two-day teaching program on MSc Regenerative Food, Farming and Enterprise course (March 2023)
- Research Guidance publication: Comprehensive booklet supporting practitioner engagement with research

#### Research Facilitation & Direct Impact

##### Research Request System:

- Established systematic approach to connecting MSc/PhD students with practitioner-identified research priorities
- Research Priorities spreadsheet helps direct and facilitate academic-practitioner partnerships

##### Direct Research Participation:

- Kate Briton's involvement in socio-economic dynamics research of rural food enterprises (Chivers et al., 2022)
- Barriers research: "The Attraction of Agroecology and barriers faced by new entrants" (Talks, Tomlinson & Styles, 2022)



- Urban agroecology implementation: Current project exploring pathways for agroecological urbanism in Bristol and Leeds (2024-2025)

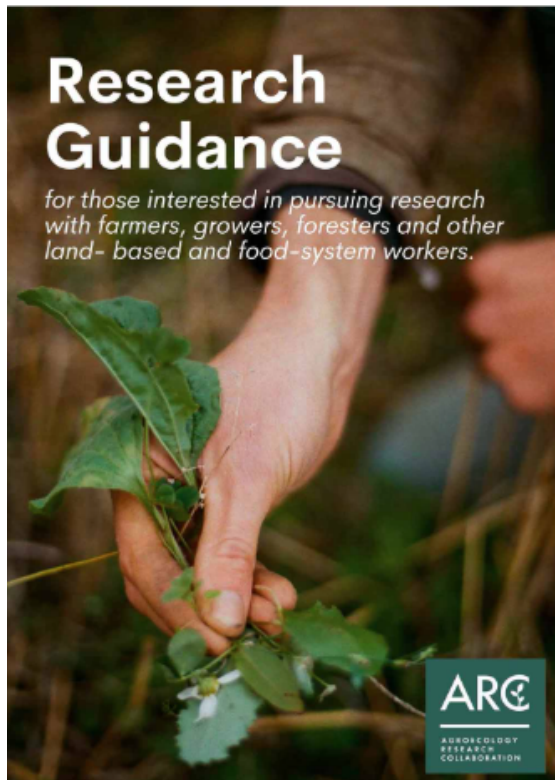
### **Innovation: "Experts in Your Field" Initiative**

Community Knowledge Fund Success:

- Secured funding from Young Foundation for groundbreaking "Experts in Your Field" project
- Supported 40+ farmer-led research projects across the UK
- Published comprehensive report: "Cultivating Wisdom: Agroecological research and innovation from experts in the field"
- Demonstrated model for practitioner-led research that other organizations can replicate

### **Cultivating Wisdom**

*Agroecology Research  
and Innovation from  
Experts in the Field*



### **Growing Publication Portfolio**

ARC has catalysed an impressive body of research spanning:

- Socio-economic analysis of rural food enterprises
- Crop diversity and food security studies
- Urban agriculture and public health research

- Biodiversity and polyculture investigations
  - Social movement and systems transformation analysis
  - Environmental land management policy research
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## **Why Fund ARC: The Strategic Case**

### **1. Proven Model with Scalable Impact**

ARC has demonstrated that practitioner-led research generates both rigorous academic outputs and practical solutions. Our model is replicable and ready for expansion.

### **2. Addressing Critical National Priorities**

- Food Security: Evidence shows agroecological approaches can significantly increase UK self-sufficiency
- Climate Change: Research demonstrates agroecology's role in climate mitigation and adaptation
- Biodiversity Crisis: Data proves agroecological systems support substantially higher biodiversity
- Public Health: Studies confirm connections between sustainable food systems and community wellbeing
- Rural Development: Research shows how agroecological enterprises strengthen local economies

### **3. Unique Position & Relationships**

- Trusted intermediary between academic institutions and grassroots practitioners
- Established network of engaged researchers across multiple universities
- Direct access to thousands of practitioners through partner organisations
- Proven ability to generate high-quality, policy-relevant research

### **4. Cost-Effective Research Leverage**

ARC's facilitation model generates significant research value by:

- Connecting existing academic capacity with real-world research needs
  - Enabling practitioner-led investigations at minimal cost
  - Creating research partnerships that continue beyond initial ARC involvement
  - Building evidence base that supports broader movement goals
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## **Future Opportunities: Building on Success**

### Immediate Priorities

- Systematic research tracking: Implementing comprehensive system for logging research requests and following up on publications
- Network expansion: Growing relationships with additional academic institutions and research funders
- Digital infrastructure: Developing online platforms for research collaboration and knowledge sharing

### Strategic Development Areas

- Policy engagement: Translating research findings into policy recommendations
  - International collaboration: Connecting with global agroecological research networks
  - Practitioner capacity: Expanding training programs for farmer-researchers
  - Impact measurement: Developing metrics to track long-term outcomes of ARC-facilitated research
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## **Investment Opportunity**

ARC represents a unique opportunity to support an established, effective model for generating evidence-based solutions to some of our most pressing challenges. With a proven track record, extensive networks, and clear vision for expansion, ARC is positioned to significantly amplify the impact of research investment.

Our research has already demonstrated that agroecological approaches work. Now we need your support to scale this evidence base and accelerate the transition to sustainable food systems.

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For more information about partnership opportunities or to discuss specific funding proposals, please contact the Agroecology Research Collaboration ...



## **Publications**

Nichol, P and Taherzadeh, A. (2019) [Working Co-operatively for a Sustainable and Just Food System in Wales](#). The Co-operative Party.

2021 Maher, A - was doing a PhD on “Overcoming the barriers to increased horticultural production in existing agricultural enterprises: understanding the perspective of Devon's growers - past, present and future” Following up

2021 Trulock, Cherry “Making Food Sovereignty and Agroecology Work in the UK: the role of commons in the building of regimes of care and farmer-based research” ” Following up no answer on email

Chivers et al. (2022) Exploring the socio-economic dynamics and innovation capacities of rural food and farming microbusinesses, NICRE Research Report No 10: August 2022.

Jackman, J. (2023) The effect of public engagement in urban and peri-urban agricultural farms on the health and well-being of volunteers, Institute for Global Prosperity, UCL.

Wagstaff, A. (2023) The role of market garden crop diversity in supporting UK food security and planetary health.

Experts in Your Field (2025) Cultivating Wisdom Agroecology Research and Innovation from Experts in the Field, [online], Available at:  
[https://landworkersalliance.org.uk/wp-content/uploads/2018/10/LWA-Publication\\_Digital\\_compressed.pdf](https://landworkersalliance.org.uk/wp-content/uploads/2018/10/LWA-Publication_Digital_compressed.pdf).

Taherzedah, A. (2024) [The Role of Social Movement Praxis in UK Agroecology Transformations](#). PhD Thesis

Zhang, Q. (2024) Spatialising a UK Agroecological Market Garden Renaissance - in Urban Green Belt, Architectural Association - School of Architecture, Landscape Urbanism.

Taherzedah, A. (2025). [Building a Movement Ecosystem Capable of Transforming the Food System](#). Farming the Future Blog

Aitken, C. (2025) PhD Topic - Agroecological Transition: Lessons from the New British Peasantry

Dewally, K., Bark, R.H., Harwood, A.R., Lovett, A.A. (2025) Learning from the past and embracing future opportunities: Perceptions of new Environmental Land Management Schemes and private nature markets, *Journal of Rural Studies*, 119.

Laughton, R., Tornaghi, C., Goldring, A., Longhurst, M. (ongoing) Pathways to Agroecological Urbanism, [online].

Martinez, D. (ongoing) Polycultures and Biodiversity, University of Edinburgh.

Maughan, C. (ongoing) Bioindicators, ongoing.