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Defining the Problem Is the Problem: Policy Participation and the Future of Our Agrifood System

Written by:

Aoife Behan NSch

June 2025

A NUFFIELD FARMING SCHOLARSHIPS REPORT

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"Leading positive change in agriculture. Inspiring passion and potential in people."

Date of report: June 2025

Title	Defining the Problem Is the Problem: Policy Participation and the Future of Our Agrifood System
Scholar	Aoife Behan
Sponsor	The MacRobert Trust
Objectives of Study Tour	To explore the role of policy in agrifood system transformation. To explore levers for change in agrifood systems.
Countries Visited	United States of America Italy Belgium Netherlands
Messages	**Defining the problem is the problem:** • What seems like a technical issue, feeding us all, is actually a complex web of competing values, interests, and priorities. • Polarised debates distract from shared goals. • Diversity is essential. It brings fresh ideas and is critical to tackling climate change, biodiversity loss, and ill health. • There are three key leverage points: 1. Access to land for new entrants 2. Access to new markets 3. Creation of meaningful livelihoods • Policy must be inclusive and grounded in lived experience. Lasting change requires diverse voices and practical, context-sensitive solutions. • We need a new way to engage in policy. One that embraces complexity, encourages participation, and moves beyond ideology.

EXECUTIVE SUMMARY

Defining the problem is the problem. In agri-food systems, what may appear to be a straightforward technical challenge, producing enough food to feed everyone is, in fact, shaped by a complex web of competing values and priorities. While there tends to be agreement that our current agrifood system is not serving us well, there is rarely consensus on exactly what needs to change, let alone how change should happen.

Through conversations with farmers, policymakers, researchers, and food system advocates, this study tour explored the challenges facing our current agrifood system, with a particular emphasis on the policy process and how it can help address these challenges. While the initial intention of this work was to focus on policies to support a transition to agroecology, it became evident early into the research that many of today's pressing issues, including climate change, biodiversity loss and human ill health (the triple threat) are not only complex but also highly contested. As such, they cannot be resolved through a one-size-fits-all approach, whether that involves prioritising particular production systems, investing in technical fixes, or even attempting to achieve full consensus. In fact, the limitations of binary thinking, such as organic versus conventional, land sparing versus sharing, plant-based versus animal-based, or local versus global are polarising debate and stalling progress.

There are, however, key leverage points that were identified throughout the research, which, if addressed, could radically and positively impact the agrifood sector within the United Kingdom. These are specific areas where a considered intervention could significantly shift the system as a whole (Meadows, 2009), thereby fostering innovation to address complex challenges. The primary aim of addressing these leverage points is to increase diversity within the agrifood system, and agriculture in particular.

This report proposes that improving diversity within the agricultural sector is not a 'nice to do' or a sideline project which makes organisations look good, only to be quickly dropped when budget restrictions bite. Diversity is the very life-blood of future innovation, and vital to addressing the triple threat. Diverse perspectives bring new understanding, and new solutions to longstanding problems. Without broadening who is included in shaping the future of our agrifood system, we risk repeating the mistakes of the past and entrenching further the current crises.

To do this, this study tour identified access to land for new entrants, the creation of meaningful livelihoods and access to new markets as key areas where policy could enable effective change if it is informed by both the lived experiences of those working in food and farming, those who are traditionally excluded and is responsive to local contexts. Fundamental to these three leverage points is the need to prioritise diversity and inclusion. It is therefore vital to have a framework

for participating in and influencing policy discussions; one that moves beyond traditional issue advocacy and lobbying approaches and finds a way to work productively on the 'wicked' issue that is our current agrifood system. There is a role to play in addressing the diversity challenge, at individual, social and structural levels. Indeed, any person or organisation that is interested in working towards a more sustainable agrifood system, must be prioritising diversity and inclusion in order to successfully drive change.

Drawing on insights from systems thinking, the report proposes a participatory approach to support more inclusive and context-sensitive policy development. Rather than offering a singular solution such as a wholesale transition to agroecology, it argues that by encouraging a diversity of perspectives, valuing lived experience, recognising different forms of knowledge, the policy process could support incremental yet cumulative change across the agrifood system even in the absence of complete consensus.

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CHAPTER 1: INTRODUCTION

Figure 1: The author, Aoife Behan. Photo@ author's own.

When I first applied for a Nuffield Farming Scholarship in 2019, I was driven by a strong belief in the power of policy to shape better food and farming systems. At the time, I was a director at a leading UK food and farming charity and deeply engaged in Scotland's evolving policy landscape. The Good Food Nation Bill was under consultation, and conversations about a post-CAP future offered hope for transformative change. I saw agroecology as a clear and compelling solution, an approach that could reconcile productivity with environmental responsibility and social justice. My research plan reflected that optimism: to visit regenerative, organic, and agroecological farms around the world and explore the policies that enabled them to thrive.

But when I boarded a flight to Australia in March 2020 to begin my travels, the world changed almost overnight. Borders closed, plans collapsed, and I found myself back home, reflecting not only on the state of the world but on my own assumptions about change. The months that followed were shaped by not only the pandemic and the massive impact it was having on my work within food and farming, but also by the powerful calls for justice by the Black Lives Matter protests, after the murder of George Floyd.

That disruption marked the beginning of a shift. I moved from advocacy into academia, wanting to spend time thinking deeply about how change happens in agrifood systems, not just the intended change, but also the surprising and incremental ways it unfolds and its potential to take us in different directions. I increasingly became concerned with the limits of binary thinking, organic vs. conventional, local vs. global, plant-based vs. animal-based and how it appeared to be hindering any progress whatsoever.

Over the course of my career, I have sat in many meetings and fora where a significant amount of valuable time was focused on being ideologically 'right' or semantically correct rather than achieving any measurable outcome. I was becoming increasingly frustrated that these discussions rarely engaged sufficiently with the issue at hand, but also barely considered deeper structural injustices such as those relating to land ownership, the production of knowledge and unfair supply chains which are the foundation of some of the challenges we now face. Participants at these events often came ready to defend their stance, rather than with curiosity about the viewpoints of others. Over time I have become more motivated to find the space between apparently opposing positions, where

tensions exist but also where possibilities emerge, and explore how we could move past binaries and start making slow and steady progress.

This report is the result of that shift in perspective. It takes as its starting point the complexity of the global agri-food system: a system that produces more than enough calories globally, yet leaves millions undernourished and at risk of non-communicable diseases. It is at once productive and destructive. Despite its efficiency, it is a system that often fails to deliver fair livelihoods for those who work within it. Finally, it is a system that has historically excluded many voices and forms of knowledge from shaping its direction.

In this context, agroecology still offers important insights. It emphasises ecological balance, local knowledge, and systems thinking, which are essential in navigating the challenges ahead. But like other proposed solutions, it is not without limitations. Fundamentally, no single approach can address the full range of challenges embedded in a system as complex as our agrifood system. To make any headway though, we must ensure that diverse perspectives shape decision making.

Over the course of this work, I have become less concerned with 'making the right decision' (in my mind this was a wholesale transition to agroecology) and more interested in how we can 'make the decision right', to paraphrase a well-known quote[1]. I have therefore explored how those working within the agri-food sector can engage more meaningfully in shaping the policy processes that define the system's future, rather than offering a singular solution. While these problems may not be solved in the traditional sense, for that is a defining characteristic of complex problems, some of the proposed responses to them will be more sustainable and more effective than others. Identifying those pathways requires the participation of those who live, work, and think within the system every day, and those that could work within the agrifood system and add real value.

As I have said, my initial intention was to explore policies that could support a transition to agroecology. I approached conversations with farmers, policy makers, and researchers with this focus in mind, keen to understand the enabling conditions for more regenerative practices. However, as I revisited my research notes and reflected on the shifting socio-political context, such as the Trump administration's attempts to roll back environmental and social protections, it became clear that something more fundamental was at stake; the imperative to hold diversity and inclusion at the centre of any agrifood system transformation. At a time when progress on these fronts has felt increasingly fragile, I have come to see diversity, not only in ecosystems and farm systems, but in people, voices, and experiences, as the cornerstone of resilience. We cannot build a fairer, healthier agrifood system if we ignore who is being left out of shaping it. Holding onto this

[1] Miller, D., 1994. Critical rationalism: a restatement and defence. Open Court, Chicago.

principle more tightly, not loosening our grip on it, is what will ultimately change things.

Despite my bleak framing of the issues, there are many reasons for optimism. There are many hundreds of thousands of people working within our agrifood system to make a difference: experimenting with new regenerative practices to restore soil health, building more equitable global supply chains and nurturing resilient local food economies. Many of these efforts are not framed as solutions to 'grand challenges'; they are just the way that some people and the business they work within have chosen to do things. As a result, they make farming more viable and livelihoods more resilient, while contributing to better outcomes for us all.

It is also important to say that this report recognises that those working within the system are not passive recipients of policy; they are active agents of change, regardless of their level of participation in traditional policy-making processes. But we must ensure that those voices are supported to participate in the processes that shape the future of food and farming, so that emerging policies reflect real-world experience and knowledge. This means working to remove barriers to participation and creating inclusive policy spaces. While there may be no one-size-fits-all answer to these big, interconnected problems, the cumulative effect of many smaller, informed and inclusive decisions can still shift the system toward better outcomes.

CHAPTER 2: BACKGROUND TO MY STUDY SUBJECT

The global agrifood system is often described as a triumph of modern innovation. It produces more than enough calories to feed the world, around 3,000 per person per day, compared to an average requirement of 2,000 (Roser et al., 2024). On paper, this suggests hunger should be a problem of the past. But as with many aspects of the food system, this surface-level success masks deeper problems.

Despite its efficiency, the agri-food system is inequitable. Millions still experience food insecurity, while poor diets have become the leading cause of noncommunicable diseases (NCDs), which now account for 74% of deaths globally (WHO, 2024). At the same time, food production is a major driver of climate change, deforestation, soil degradation, and biodiversity loss. The agrifood system as a whole accounts for an estimated 30% of global greenhouse gas emissions. These impacts are not discrete issues that can be dealt with individually; they are interconnected. The Lancet Commission describes them as a "Global Syndemic," where obesity, undernutrition, and climate change interact in ways that deepen health disparities, erode natural systems, and widen social inequality (Swinburn et al., 2019).

These problems are widely recognised, and a wide range of solutions have been proposed by a variety of stakeholders, from nature-friendly approaches such as agroecology and regenerative agriculture to biotechnological solutions like gene editing, hydroponics, vertical farming, and precision technologies. Each offer different pathways to sustainability and food security. Yet each also comes with trade-offs, and, perhaps surprisingly, none are politically or ideologically neutral. While some approaches prioritise ecological resilience and local food economies, others emphasise technological innovation and efficiency at a global scale.

Take agroecology, the initial focus of this study tour, it integrates ecological principles into agricultural practice, focusing on biodiversity, soil health, and natural resource conservation. Techniques such as crop rotation, polycultures, and agroforestry aim to reduce reliance on inputs and increase system resilience over time. Proponents argue that agroecological systems are often more efficient in their use of water and nutrients, and they support local economies by fostering resilient local food systems.

However, agroecology is not without challenges. Transitioning away from conventional systems can be resource-intensive and disruptive, requiring time, technical and financial support. Yields may initially decline, particularly in already degraded landscapes. Scaling agroecological models while preserving their core values also remains a major challenge, especially in globalised food systems where market pressures and policy environments still favour uniformity and volume over diversity and resilient local food systems. Finally, even the loudest advocates for

agroecology recognise that this transition could not happen on a global scale without a radical overhaul of our consumption habits - something governments are extraordinarily reluctant to intervene in.

So, if no single approach can solve the agrifood system crisis, how do we begin to address the challenges on the horizon? The choices we make, what we prioritise, fund, scale, or regulate, matter immensely - but who gets to decide? These are political decisions that require the meaningful involvement of those who know the food system from the inside out. But we should also be acutely aware of those that do not have a seat at the table when decisions are being made - how do we involve them?

CHAPTER 3: MY STUDY TOUR

As a 2020 scholar, approximately 50% of travel funds were lost due to COVID restrictions on travel. To deliver on Nuffield travel commitments with a vastly reduced travel budget, some decisions were made to optimise the funds available:

- To go where relevant people would be e.g., conferences and industry gatherings.
- To align Nuffield travel with research conducted for a PhD in Agriculture and Food Systems

In addition to the support provided by the MacRobert Trust, special thanks must be given to Prof Geoff Simm, Chair of Global Agriculture and Food Security and Director of the Division of Global Agriculture and Food Systems at the University of Edinburgh, for providing this additional support to my work on my Nuffield Scholarship.

Country	Date	Why I visited
Belgium	April 24 May 25	Global Food Security Conference (Leuven) FoodPaths Festival (Brussels)
Italy	June 24	Food and Agriculture Organisation and United Nations Environment Programme hosted International Workshop on Sustainable Public Procurement for Sustainable Food Systems.
Netherlands	July 24	Feeding Cities Conference X EASST Conference in Amsterdam FUSILLI (Fostering the Urban Food System transformation through Innovative Living Labs Implementation)
USA	Aug/Sept 24	California – UC Davis, Berkeley Food Institute at UC Berkeley and other individuals organisations involved with the Farm to School programme.
Italy	Sept/Oct 24	Terra Madre at Salone Del Gusto in Turin Follow-up trip to FAO Site visits to urban agroecological farms & Rome Urban Food Policy (follow up to contacts made in Amsterdam)

CHAPTER 4: THE AGRIFOOD SYSTEM IS A POLICY CHALLENGE

Our agrifood system spans environmental, social, economic, and political boundaries, creating a complex, interconnected web. For policymakers, understanding and engaging with this complexity and treating the system as a whole is crucial to developing solutions that address multiple challenges simultaneously. Reductive approaches that address single issues often lead to unintended consequences elsewhere. There are numerous examples of this in agrifood policy-making, where narrowly focused interventions have created unexpected problems. One example, the Food and Drug Administration's ban on artificial trans fats in processed food, led to a dramatic increase in the use of palm oil, resulting in deforestation, biodiversity loss and worker exploitation. Yet, a simplistic response such as banning palm oil is not the right solution; it would exacerbate social and economic hardship in oil-producing regions and not necessarily lead to a reversal of deforestation and biodiversity loss.

This demonstrates that to create meaningful change, it is essential to think systemically and consider the entire supply chain, from production to consumption, to identify the critical leverage points where small shifts can create significant improvements. As systems expert Donella Meadows put it, these are the *"places within a complex system where a small shift in one thing can produce big changes in everything"* (Meadows, 2009). Before exploring leverage points for transformation, the following section examines the prevailing debates on agrifood systems.

Agri-food system transition: the debates

Recent geopolitical events have had a profound impact on policies relating to the agrifood system. The war in Ukraine has shifted the debates on food security. There is an increasing emphasis on protectionism, and a deprioritisation of longer-term environmental issues. Trump's tariffs are introducing a new level of uncertainty and the impact of which is yet to be seen. What is clear though, is that the assumed trajectory of ever-increasing globalism, marked by open markets and international cooperation and collaboration, is no longer a certainty (Talebian et al., 2024).

With multilateral cooperation waning and access to critical inputs uncertain, the stability of the agrifood system is being tested. The ability to work in partnership to coordinate responses to global challenges is being constrained. The concern is that without a systems approach, longer-term challenges like climate change, biodiversity loss and the impact of food on human health will be side-lined in

favour of policies underpinned by protectionism. A short-term view, which will ultimately impact negatively on food security in the longer term.

Many of these debates on agrifood systems were discussed at the Global Food Security Conference, held in Leuven in April 2024. The conference brought together 500 people from business, policy, and science to share perspectives, evidence, and stories on how changes to the agrifood system can improve both health and environmental outcomes in fairer and more equitable ways, while enhancing resilience to further shocks and stresses. A wide range of perspectives were shared on topics including agroecology. Sustainable intensification was also hotly debated and, in particular, presented as a critical solution by keynote speaker Glenn Denning of Colombia University, USA.

Land sharing? Land sparing?

Sustainable intensification aims to increase food production within existing agricultural landscapes with the express intention to conserve natural habitats. It is most commonly defined as an approach to production wherein '*yields are increased without adverse environmental impact and without the cultivation of more land*' (Fraanje et al., 2018). The '*intensification'* element tends to be more technologically driven. It employs a wide variety of techniques such as biotechnology, precision farming and improved management practices, to efficiently manage water and nutrient use in order to achieve higher yields (Fraanje et al., 2018). Like agroecology, it also emphasises the importance of maintaining soil health and overall sustainability while reducing the reliance on harmful and costly inputs like pesticides and chemical fertilisers.

Proponents of sustainable intensification argue that it is more compatible with existing agricultural systems, making it easier for farmers and agribusinesses to adopt practices incrementally without a complete overhaul of existing production systems. This approach can contribute to food security while minimising the environmental damage caused by conventional farming, making it an appealing option for both policymakers and agribusiness concerned with economic growth.

However, sustainable intensification comes with its own set of challenges. Critics argue that, while it aims to reduce environmental impacts, it often relies on intensive practices, which have the potential to harm ecosystems and animal welfare. Additionally, the reliance on technological solutions, such as genetically modified crops and precision farming tools, can exclude smallholder farmers who lack access to these resources, potentially exacerbating inequality in rural areas. In contrast to agroecology's focus on working with nature and local knowledge, sustainable intensification leans on industrial-scale solutions, which may not address the deeper social and ecological complexities of the agrifood system.

The debate, often referred to as '*land sharing versus land sparing*', casts agroecological approaches and sustainable intensification as a binary choice on how best to balance agricultural productivity with biodiversity conservation. Land-sharing advocates argue for integrating biodiversity-friendly practices within agricultural landscapes, arguing that farms and nature can coexist on the same land, fostering a more harmonious relationship between food production and environmental health.

On the other hand, land-sparing proponents advocate for intensifying agriculture on smaller, designated areas of land, thereby '*sparing*' larger tracts of natural habitats from farming activities altogether. By concentrating food production in fewer areas through high-yield practices, more land can be preserved for conservation. Each approach has its benefits, and its trade-offs: land sharing can reduce yields and may not fully protect ecosystems, while land sparing risks the environmental and social consequences of intensified farming but potentially conserves larger, untouched natural areas. Underpinning both discussions is a broader debate on inequality and the corporatisation of the agrifood system.

At the Global Security Conference, Denning, while advocating for sustainable intensification, also outlined several other priorities to ensure food security: investment in market infrastructure to bring consumers and producers closer together; postharvest stewardship to address agrifood system waste; a transition to healthy diets by reducing consumption of meat and dairy products; and, social protection systems such as school meal programmes to address food insecurity. These are also interventions that would make a transition to agroecological production more viable. So, system-wide transformation is not just about a shift in the dominant methods of production but a wide range of interventions at individual, societal and structural levels.

Who decides?

There is no shortage of action on agrifood system intervention, but much of this does not achieve its intended impact or outcomes. This is because there is a disconnect between the decision-makers and those impacted by the decision. In her speech, Corinna Hawkes, Director of Food Systems and Food Safety at the UN's Food and Agriculture Organisation, highlighted the considerable number of interventions to transform food systems to date and that these are, for the most part, failing to deliver on the promised social and environmental outcomes. While there is an onslaught of drivers - such as urbanisation, rising incomes yet persistent inequality, economic downturns, conflict, unaffordability of healthy diets, and climate variability (FAO, 2024) - to contend with, well-intended actions are quickly undermined by a lack of understanding of local context and poor relationship building with those that are the recipients of or participants in the change that needs to happen.

Hawkes highlighted the farmer protests against the EU's Farm to Fork Strategy in Berlin as one example of how the perceived power imbalances in the decision-making process has undermined the ambition for the greener, fairer agrifood system outlined in the policy. In his comments Prof. Gerard Govers of KU Leuven built on this idea of power and relationships, and emphasised the importance of acknowledging our emotional connection to food. This connection makes it different from other areas of policy, and the reason why it is so challenging for policymakers. It is very difficult to intervene in a realm that is an intrinsic part of people's identity. As such, while all agrifood system analysis should be guided by evidence and science, relationships and emotions should also play a crucial role in establishing 'good' agrifood systems.

The overarching message emerging from the Global Food Security Conference is that food system transformation extends beyond a shift in dominant production methods; it requires a wide array of interventions at the individual, societal, and structural levels. Resolving the perceived power imbalances within decision-making processes is vital. Otherwise, this will continue to compromise aspirations for a more sustainable agrifood system. Finally, while all analyses of agrifood systems should be grounded in scientific evidence, the role of emotions in shaping conceptions of what constitutes a '*good*' agrifood system must not be underestimated. The themes raised here, were themes that were revisited throughout the study tour.

Fundamentally though, the transformation of the agrifood system in itself is not the point; it should be a means to an end, delivering positive environmental and socio-economic outcomes. While it is tempting to suggest that the purpose of our agrifood system needs to be redefined, shifting from one where cash and calories are the primary drivers to one where nutritious food, environmental sustainability, and social equity inform decision-making, this is perhaps naïve and unlikely to result in any real change – akin to wishing for world peace. Our current agrifood system perfectly exemplifies a 'wicked problem'. It is complex, interconnected and resistant to simple solutions (Lönngren and Van Poeck, 2021). Again and again, in discussions with stakeholders, the issue of defining the problem and agreeing on a solution proved to be a barrier to any change whatsoever.

Focusing instead on building participatory processes can help shift emphasis from polarised debates to shared agendas that are context-specific (whether that is a geographical location, a sector or a community of practice), which could result in incremental change. As such, this paper does not aim to answer the land-sharing versus land-sparing question, or indeed any of the other binary choices presented, nor does it propose a one-size-fits-all solution. Instead, it highlights the challenge of creating a shared vision when the nature of the problem appears differently to different stakeholders and suggests ways in which this could be navigated in future policy discussions.

Characteristics of a vibrant agrifood sector

Successful, growth-driving sectors in the UK economy tend to share several key characteristics: they attract and retain new talent, foster diversity in both people and ideas and create environments that support innovation. This continuous renewal through fresh skills and perspectives drives innovation and growth. In contrast, the agrifood sector, particularly agriculture, faces significant challenges in these areas.

Agriculture remains the UK's least diverse sector, with 97% of workers identifying as white (excluding seasonal labour), and the average age of a UK farmer now stands at 59 years (DEFRA, 2024). Young people in rural areas are increasingly choosing to work in other industries, while those who do want to farm often face significant barriers to entry, especially in accessing land. For those already within the sector, farm incomes are declining across nearly all types of operations. Throughout stakeholder engagements, these issues frequently surfaced as central points of concern but also as potential points of leverage for change.

Leverage points

Identifying the new voices and the bridge builders, alongside those with lived experience, will be essential components of reinvigorating the agrifood system. This study tour identified three strategic leverage points that should hold wide appeal across different worldviews:

1. Expanding access to land;
2. Creation of meaningful livelihoods within the agrifood sector;
3. Creating fairer, more stable markets, such as through public procurement (Fig 2).

As previously discussed, leverage points in a system are the areas where one small shift can lead to multiple positive outcomes. These are what might be called *'no-regrets'* interventions: actions that are beneficial regardless of ideological stance. At their core, they aim to bring fresh energy and drive innovation in a sector facing significant challenges. Diversity, across age, gender, race, and background, is not just a social good, it's a necessity for resilience and long-term sustainability.

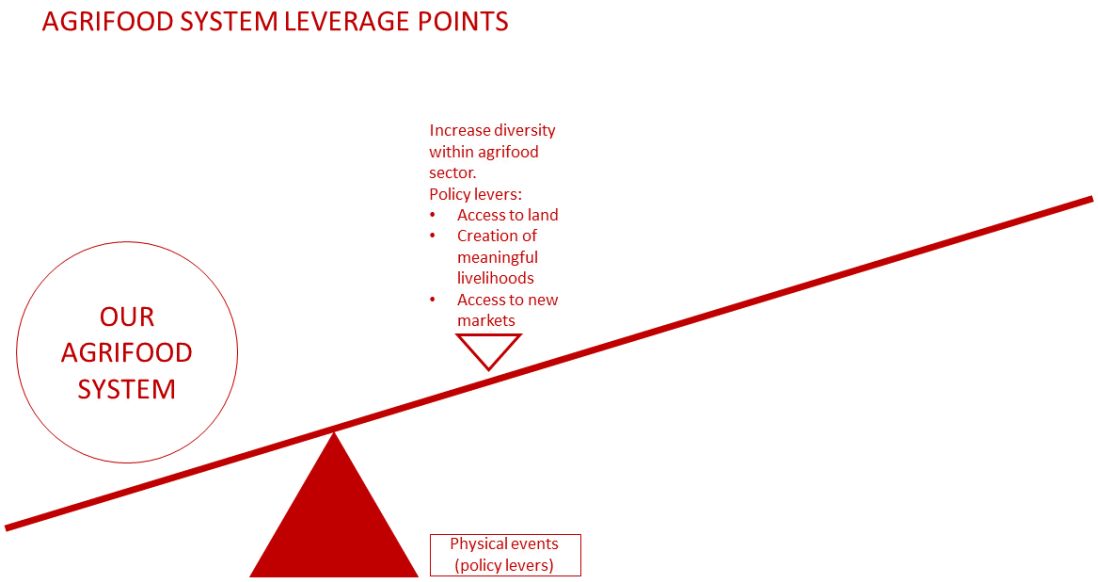

Figure 2: System leverage points (adapted from Donella Meadows, 1999)

Land access

It is well documented that new entrants to agriculture, particularly young people and those from marginalised communities, face significant structural barriers to both enter and thrive in the sector. One of the most pressing challenges is access to land, which has become increasingly difficult due to rising costs and competition from large-scale agribusinesses and real estate development. Access to capital is another major hurdle, especially for those without inherited assets or established credit histories, making it hard to invest in equipment, infrastructure, and sustainable practices.

These barriers are not just economic, but deeply systemic. Historical disenfranchisement, inequitable land policies, and discriminatory lending practices have compounded over time to exclude many from farming opportunities, particularly urban farmers, women, and people of colour. As urban agroecological farmer ab banks noted[2]:

"Access to land always goes back to who has it and why - urban farmers, especially Black and Brown people, face immense financial and systemic barriers. Agroecology isn't just about the Earth; it's about the people, the food, and the systems that make them sustainable. Farmers are starving, which is such an oxymoron in a world dependent on agriculture."

[2] In discussion with Aoife Behan on 27 November 2024.

In this context, the wider principles that underpin agroecology, i.e., that it is a movement for social and economic justice, can be helpful for developing potential solutions that break down these structural challenges. The following case study of Cooperativa Agricola Co.r.ag.gio in Rome shows how land access, diversity, and participatory policy engagement can be actively reshaped through agroecological practice and community action.

Case Study: Transformation of public land in Rome

Cooperativa Agricola Co.r.ag.gio (Cooperativa Romana Agricoltura Giovani) is an example of how equitable access to land, inclusive governance, and agroecological practices can come together to shape more sustainable urban food systems. Founded in 2011 by a group of farmers, agronomists, chefs and educators, the cooperative set out to reclaim underutilised public land for social and environmental good.

Figure 3: Giacomo Lepri, Alicia and Elisabetta Luzzi at Borghetto San Carlo. The flying donkey is a symbol of agroecology in this region. October 2024. Photo: author's own.

In 2015, following a successful campaign advocating for access to farmland for young people, Co.r.ag.gio was granted a 30-year lease on 22 hectares at Borghetto San Carlo, through the municipality's "Roma città da coltivare" (Rome: City to Cultivate) initiative. The land, once destined for housing development, was under a protection order due to archaeological findings, a common occurrence in the Roman landscape. As was typical in these cases, the land was held by the municipality and at risk of lying barren, due to a lack of resources for development. The Cooperativa team advocated for the land to be repurposed for agriculture.

Today, the cooperative uses the land to demonstrate the potential of multifunctional urban agriculture, rooted in the principles of agroecology. Their work prioritises biodiversity, offers training and employment opportunities for young people and marginalised groups, and provides a vibrant community space on the city's northern outskirts. Co.r.ag.gio is not just a farm but a movement advocating for land reform and food sovereignty.

Giacomo Lepri, a founding member of the cooperative and its president, has been a key voice in Rome's food policy transformation. Through his involvement in the city's Food Council and advocacy work, he has campaigned for public land to be

made more accessible to young agroecological farmers. Lepri has worked to develop a framework that simplifies the process of securing public land for sustainable farming, recognising that the bureaucratic barriers faced by Co.r.ag.gio should not deter others.

Challenges still persist. Much of the team's advocacy work is unpaid and time-consuming, relying heavily on their individual dedication and energy. Livelihoods for those involved in such initiatives remain precarious, and the impact of their efforts often take years to materialise. Still, Co.r.ag.gio demonstrates what is possible when farming is viewed not just as a business, but as a public good, rooted in community. This case illustrates the power of grassroots activism in informing policy, creating frameworks to support others, and addressing systemic barriers. It offers important lessons for others seeking to foster diversity, enable access to land, and support the next generation of sustainable farmers.

Farmer livelihoods

Overcoming the challenge of accessing land is one issue for young people in agriculture. Beyond this structural barrier, there is also a widespread perception that farming is financially unrewarding and lacks long-term prospects, and this discourages young people from entering the sector. Encouraging young people to pursue careers in agriculture is critical for the sector's longer-term sustainability and innovation.

This means creating pathways for a more diverse generation of farmers and agrifood system professionals, ensuring greater representation across age, gender, race, ethnicity, and socio-economic backgrounds. Diversity brings a broader range of experiences, fresh perspectives, and solutions, ensuring the sector's capacity to adapt and thrive in a changing world. Like any other sector, a vibrant agricultural sector needs renewal; without it, progress stalls and future capacity is put at risk.

Figure 4: A student at the University of California's Davis Farm. August 2024. Photo: author's own.

Case study: Morals and money, why is it a choice?

The UC Davis Student Farm was established in 1977 in response to student advocacy; driven by concern for the environmental and social impacts of large-scale, chemical-intensive farming, students lobbied the university to create a space for hands-on education in sustainable agriculture. Their

efforts aligned with broader movements of the time, such as organic farming and environmentalism. The Student Farm became a hub for exploring and teaching these alternative practices. While the university prioritises conventional agricultural practices, it is recognised that practices such as organic farming are becoming increasingly mainstream. Today, students intern on the Student Farm to broaden their knowledge of agroecological farming. The internships provide an opportunity to gain hands-on experience in farm management, sustainable farming practices, and the business aspects of agriculture.

While some student interns plan to pursue careers in food production, agriculture, or related fields such as environmental science, others are drawn to the experience for personal growth and a deeper understanding of the food system. Many said they value the connection between food production and environmental sustainability, even if they don't plan to make it their profession. The students interviewed for this research came from various disciplines, including law, economics, sustainability, and agriculture, and most did not have farming backgrounds. However, all expressed a growing interest in sustainable farming and food production, stemming from their personal experience. Sadly, they also shared a scepticism about farming as a sustainable livelihood.

"It's hard because for myself and my friends, who are into [sustainable] agriculture, we do want to work in agriculture or something along those lines. It's simply not a profitable business, and you cannot make a living on it without risking your whole livelihood. It's one of the unfortunate realisations that I've had in every class I am in. And when you speak to real farmers, they're like, "Don't do it", "It's not worth it", "It's not a good business model". That is disappointing to see, and that is why it drives a lot of people to work for these huge corporations that will actually make money. And it shouldn't be that way. Unfortunately, that's how it is, so it's like weighing your morals and what you believe with your actual livelihood." UC Davis undergraduate agriculture student, August 2024

Figure 5: Photo: Students at UC Davis Farm, with the author (centre). August 2024. Photo: author's own.

The students acknowledged the barriers to entering the sector such as the difficulty of securing land and start-up capital. Aside from these challenges, agroecology's focus on ecological balance and social equity, while valuable, seemed less financially viable in the context of today's competitive, profit-driven agricultural economy. The lack of institutional support, clear career pathways, and scalability fuelled doubts about agroecology's ability to provide a stable, long-term income, particularly for young people looking for career security. Despite the challenges, many considered farming a meaningful and rewarding career but one that would likely impact their long-term earning potential and, in turn, the quality of their lives.

This point was further highlighted at UC Berkeley in a discussion with an agroecological urban farm manager at Oxford Tract, Berkeley Food Institute, ab banks, who chose a career in agroecology despite knowing that the decision would likely have a personal cost. In a detailed conversation, banks highlighted how agroecological farming often comes at a personal and financial cost, making it unsustainable for many. This is compounded by the structural challenges faced by small farms compared to large industrial farms.

Figure 6: ab banks, urban agroecological farmer at Oxford Tract, Berkeley Food Institute, Sept 2024. Photo: author's own.

"Small farms can't afford to offer benefits like health care or dental because they don't get the same tax breaks as large corporations. Farmers are often set up to fail because basic needs like schools, heating, and fair wages aren't met before asking them to adopt more sustainable practices." ab banks, urban farmer and advocate, 2025.

Additionally, policies intended to support agroecological farming often fail to be implemented due to bureaucratic hurdles and a lack of technical assistance.

"There's always a gap between the policy and the people it's meant to help. Policies can hurt small farms, such as those that favour industrial-scale operations or fail to address logistical barriers for small-scale farmers. Farmers need technical assistance programmes to navigate grants and implement policies effectively." ab banks, urban farmer and advocate, 2025.

These interviews revealed that there was no lack of interest in careers in farming amongst this cohort, but a lack of enabling conditions. They felt that significant economic, institutional and cultural barriers would have to be overcome in order to have meaningful livelihoods in the sector. Therefore, to attract and retain young people, particularly those from under-represented groups, the structural disincentives must be removed. This includes not only access to land, but funding models and subsidy and providing technical assistance earlier and on an ongoing basis. This issue of technical assistance was also referred to as an important aspect of developing access to new markets for small scale farmers. This is explored further in the section below.

Access to new markets via public food procurement

At the 2002 World Summit on Sustainable Development, public procurement was identified as key to tackling issues such as climate change, biodiversity loss, and economic development. The intention is that governments, by using their significant purchasing power, promote sustainability outcomes by shifting the focus from securing best value for money to prioritising broader societal values. Public Food Procurement (PFP) focuses on food served in public institutions, such as schools, hospitals, and care homes. Given the scale of public sector food spending, PFP has the potential to drive substantial change throughout the food system. By creating demand for healthy and sustainably produced food, such as organic, it can influence agricultural practices and land use. These types of food policies have gained traction for their potential to create new markets for

sustainable agriculture, while also addressing socio-economic challenges, such as supporting small scale farmers and racialised communities. The following case study explores the experience of institutional food procurement in California and the impact that this has had on diversity within the sector.

Case Study: Supporting diversity and biodiversity through school food

The state of California has made a significant investment in farm-to-school programmes, allocating approximately 100 million dollars over three years since 2020. The Farm to School Incubator Grant Programme food programme connects local farms with schools. Aimed at improving public health, supporting regional farmers, and promoting sustainable food systems, the programme harnesses the purchasing power of public institutions to create stable markets for local producers while ensuring nutritious meals for school children.

The programme is state funded; California Governor Gavin Newsom has been a strong advocate, allocating over 86.8 million dollars to improve the diets of children, support sustainable farming, and reduce greenhouse gas emissions. This funding has been critical in developing the infrastructure, supply chain coordination and farmer training necessary to develop this route to market for small scale farmers. Since its launch, the programme has reached 49% of all California students through 375 projects

A key achievement of the programme has been its emphasis on inclusive participation: in the second funding cohort alone, producer grantees reflected greater demographic diversity than the state's farming population overall, offering a rare opportunity for Black, Indigenous and people of colour (BIPOC) farmers to access public sector markets. The programme also supports biodiversity-based agricultural practices, for example 66% of these producers practice cover cropping, compared to 14% of farmers state-wide, marking a clear shift towards more ecologically resilient systems often rooted in the knowledge and traditions of BIPOC and immigrant producers.

One example of the programme's impact on diversity and equity comes from a case study of a small, five-acre organic farm that had previously struggled to engage with the local school market due to language barriers, limited infrastructure, and lack of knowledge about procurement processes[3]. With the help of grant funding, the farmer helped establish a cooperative with other small organic growers and partnered with a culturally responsive support organisation.

"I can't do this alone, but maybe together we can"

This collaboration enabled the group to navigate vendor registration, comply with food safety standards, and build relationships with nearby schools. Their produce, once sold only at farmers' markets, is now on school menus and integrated into hands-on learning activities and food education sessions.

[3] Case study shared at the Farm to School Grant Incubator Webinar, 22 October 2024

Beyond immediate sales, the grant helped to open market opportunities and strengthen institutional relationships. Several members of the cooperative went on to become registered vendors for neighbouring school districts, creating new income streams. A representative from the support organisation described the emotional significance of the work, sharing how one farmer hosted school nutrition directors on their land and secured a contract for their cherry tomatoes and snap peas.

This case highlights how a well-designed policy to open up market opportunities, backed by timely technical assistance and cultural support, can effectively reduce systemic barriers and promote greater diversity in the agriculture sector. Yet, despite the successes, barriers persist for small scale farmers who want to participate in these types of opportunities. It could be as simple as lacking basic facilities to process or store produce, which is compounded by unfair access to capital. Many also lack the long-term financial security to align plans with the academic year, for example there is a seasonal mismatch between peak harvest times and the academic calendar which can complicate procurement efforts. This second case study looks at the role of schools and regional hubs in addressing some of these issues.

The team at the Alice Water's Institute praised the support received from the California government, which provided funding to improve kitchen infrastructure and encourage farm-to-school programmes. They felt that the funding had been crucial in enabling schools to take the first steps toward adopting regenerative food practices.

Case Study: Rethinking institutional food in California

The Alice Waters Institute is leading an initiative to transform public food procurement in California by placing regenerative, organic agriculture at the heart of institutional food systems. With an initial focus on K-12 (kindergarten to 12th grade) schools, they plan to expand into universities, hospitals, and prisons. The Institute aims to achieve three core outcomes: healthier children, a healthier planet, and better livelihoods for farmworkers.

Building on Alice Waters' decades-long advocacy for sustainable food through her work at Chez Panisse and the Edible Schoolyard Project, the Institute now serves as a platform for influencing food policy and practice. Central to its approach is a commitment to shifting procurement practices in institutions away from industrial supply chains and towards direct, local purchasing models. By fostering relationships between schools and nearby farms, the Institute is working to create reliable demand for seasonal, organic produce and to encourage farmers to adopt more regenerative methods.

A key part of this work involves training and professional development. Food Service Directors participate in practical workshops where they learn to cook with fresh, seasonal ingredients, meet local farmers, and build peer networks to share challenges and solutions. These engagements are designed to increase confidence

and capacity within school food services, while also strengthening trust between institutional buyers and small-scale producers. The programme has benefitted from strong policy support. The Californian government has provided funding to improve kitchen infrastructure and to support farm-to-school pilot projects. This investment has been critical, helping schools take early steps towards adopting more sustainable food procurement practices and supporting farmers to meet institutional requirements.

Although progress is being made on this front in the UK, there are still lessons from this initiative that are highly relevant for both policy makers and farmers. For policy makers, it highlights the importance of aligning procurement rules, public health goals, and agricultural incentives to enable schools and other institutions to buy more local, sustainable food. Planning and resourcing infrastructure, such as kitchens and food storage, must be part of the policy conversation. For farmers, public procurement represents a stable and long-term market, albeit one that comes with specific logistical and compliance demands. With the right support and relationships, it can offer a route to diversification, more resilient incomes, and the opportunity to contribute to broader public good outcomes. Involving farmers in the policy development process in cases such as PFP, can lead to better chance of policy success. Without meaningful engagement, these types of policies can fall short of their ambitions. Providing financial resources alone would not have achieved the intended outcomes in the Californian case, technical assistance and collaborative hubs and cooperatives were key to early success. The next section reflects on the policy process and the ways in which farmers can participate in it.

Farmer mobilisation and policy engagement

Policy refers to the actions and decisions governments take to achieve outcomes. More simply, *'it is what governments do and neglect to do'* (Klein and Marmor, 2006: 893). Policy making is a structured process that starts with the identification and defining of problems, then framing the issue and proposing solutions. Policymakers must balance a wide range of competing priorities which adds complexity to policy design and the development of potential solutions. Underpinning this process are a range of factors ranging from the practical i.e., *can it be done*, to the ideological. It is accepted by policy makers that farmers can play a crucial role in this process by contributing practical knowledge that ensures policies are relevant to real-world challenges. By actively contributing their expertise and experiences, farmers can help shape policies that support more resilient and sustainable farming systems.

While there are opportunities for farmers to engage with the policy-making process through farmer organisations such as the National Farmers' Union, public consultations, lobbying or advocacy efforts, and collaborations with policymakers, they also face barriers to engagement that limit their ability to influence. Unsurprisingly, the day-to-day demands of their work and potential geographic isolation leave little room for activism in this space. The tensions facing farmers was a point highlighted by ab banks (urban farmer, Berkeley Food Institute). There is a

real challenge when farmers are pulled into advocacy and policymaking without consideration for the other demands on their time. Policy engagement can detract from their ability to focus on farming. *"Farmers just want to farm, and they should be allowed to - farming is already a 24-hour job."* However, when farmers do want to participate in advocacy and policy work, support systems that allow them to engage meaningfully without compromising their primary work are needed.

"I wish there were more roles like mine, where farmers can both farm and advocate, with resources to back them up. Farmers often miss out on policy discussions because they're too exhausted or isolated to participate." ab banks, agroecological urban farmer.

Even when farmers do engage with policy making with a view to reshaping the agrifood system, the outcomes do not always align with expectations. There are many opportunities and initiatives which encourage participation in meetings and fora, yet these can sometimes become the end rather than the means of participation. The case study below demonstrates how even effective cross-sector groups can struggle to move beyond experimentation and strategising and fully engage with making change happen. Creating space for diverse perspectives is not the same as making tangible efforts to break down the entrenched structures that are the foundation of current agrifood systems crises.

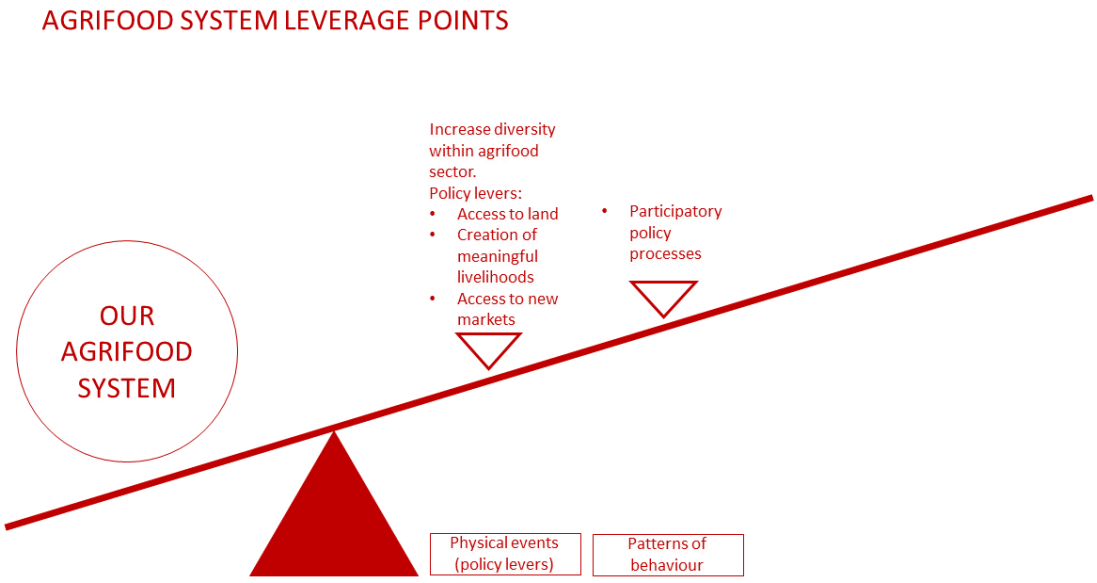

Figure 7: System leverage points (adapted from Donella Meadows, 1999).

Case study: A shared vision for the future of farming in Rotterdam

Mara de Pater is a food system activist who works as an action researcher at the Dutch Research Institute for Transitions (DRIFT) on transitions in nature, biodiversity, landscapes, and agriculture, focusing primarily on transformative collaborations between actors with different perspectives. De Pater has been supporting the work of Rotterdam de boer op! (translated as Rotterdam on the Farm!). Rotterdam de boer op! is a broad movement of farmers, conservationists, businesses, and other organisations in the agrifood system working to protect and increase biodiversity in the Rotterdam countryside, produce sustainable food, and improve farmer livelihoods. Alongside colleagues, de Pater's role is to act as a transition advisor. To support the partnership's work, they have developed a dynamic dashboard of indicators to monitor the partnerships alignment with transition principles and progress: systems perspectives, beyond experimentation, unlikely and diverse coalition, engaging with the future, and a learning approach.

So far, de Pater and her colleagues observed that the two areas the partnership seems to find most challenging are "Beyond Experimentation" and "Engaging with the Future". To demonstrate success in moving beyond experimentation, the participants must show how they are mainstreaming and institutionalising change and breaking down structures that drive non sustainable practice. It has been challenging to influence the core activities of established partners. Additionally, while it is recognised that it is essential to have a vision of the future (and there are lots of different ideas for a sustainable future food system), the group has been unable to create, through dialogue and insight, a radical and ambitious future vision that all partners can sign up to and work toward in their organisations. So, different visions of the future and solutions sit alongside each other within the partnership and explicit engagement with different perspectives has been avoided. The partnership has found it challenging to be 'political', in this case understood as taking an explicitly critical stance toward the status quo, and has opted for a position of comfort by focusing on positive examples rather than calling out unsustainable practices.

Agrifood partnerships at municipality and regional levels are increasingly seen as mechanisms for driving change at local levels. In the United Kingdom, the Sustainable Food Places approach has now been adopted by almost 60 different local authority areas. In Scotland, the Good Food Nation Act 2022 makes local food plans a legal requirement, and these local food plans will require cross sector engagement. For these types of local food partnerships to fulfil their potential more must be done to ensure that farmers can engage with these processes effectively. Most importantly, ensuring that the influence of larger agribusinesses and lobbying groups don't overshadow the voices of small-scale farmers, making it harder for their concerns to be heard at the policy level. When all voices can contribute equally to shaping the vision, only then is there an opportunity to innovate new rules, structures and goals for the agrifood system (Fig 8).

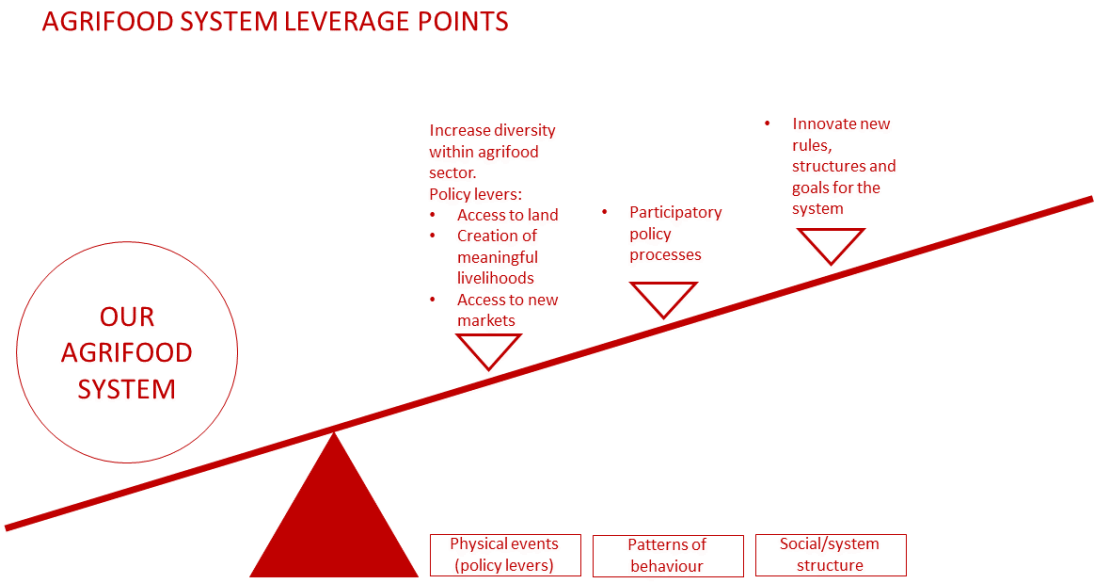

Figure 8: System leverage points (adapted from Donella Meadows, 1999)

The following chapter explores the more fundamental challenge of creating shared visions of the future, and how these play into agrifood system narratives. It provides a case study example of how diverse interest groups can come together to start to make progress while respecting different viewpoints.

CHAPTER 5: DISCUSSION

Defining the problem is the problem

Complex problems are inherently challenging. Firstly, they are characterised as 'complex' because there is rarely a single definition of the problem that everyone can agree upon. Secondly, these types of problems are rarely 'solved' in the traditional sense. Despite this, there are some approaches to managing them that are more effective than others. The key is identifying and advancing those better pathways. The agrifood system is the perfect example of a complex problem. What looks like a technical or practical issue, producing enough food to feed us all, is in fact a deeply political, value-laden, and highly contested challenge.

While researching these issues, conversations highlighted several shared concerns: the impacts of climate change on farming practices, the decline of biodiversity across agricultural landscapes and its impact on productivity, the increasingly fragile livelihoods of farmers, and the shifting geopolitical landscape. Stakeholders described how farmers trying to transition to more sustainable practices often find themselves caught between competing pressures. New entrants struggle to access land. Profit margins are tight, or in some cases non-existent without subsidies, meaning that farming with environmental care can feel like "choosing between money and morals". While many recognised and spoke of the importance of engaging in policy-making to shape a better future, doing so often amounted to unpaid labour. It is time and energy taken away from already demanding work.

Yet, even when stakeholders come together in good faith, the process of defining shared goals is fraught. Competing interests and values make it difficult to agree on a collective vision for the future. This is often compounded by binary thinking, whether it is about production (organic versus conventional), consumption (vegan versus meat-based diets) or systems (local versus global), which limits the space for timely, creative, pragmatic solutions. While there is no doubt that these types of binaries can offer a sense of clarity and can be a call to action, they oversimplify the complexity of the agrifood system.

What sits beneath these binary positions are narrative frameworks i.e., the stories we tell to make sense of our world. These stories help communities create social realities and they often share common characteristics, such as taking place in a setting, there are characters (often cast as 'good' or 'bad'), there is a plot and finally they champion a cause (Schlaufer et al., 2022). These narratives are not fixed, nor are they inherently right or wrong, but they are a driving force in how we interpret problems and make decisions. They also offer insight as to why people may have vastly different interpretations of the same issue or situation.

In the context of food systems, polarisation is rarely about the veracity of an individual fact. Yet, facts are deployed to justify existing standpoints, rather than inform new ones. Also, there is rarely disagreement on the outcomes stakeholders

want to see; few disagree with a vision of a future where everyone has access to healthy and sustainable food, soils are regenerated, climate change is halted, farmers have secure livelihoods. So, the tension stems not from fundamentally opposing visions of the future but from living in different narrative communities, with divergent views on the plot, the heroes and villains, and the moral of the story. As a result, even when these communities use the same language, meanings differ, causing friction and misunderstanding. Creating new and unifying narratives about the agrifood system that result in a paradigm shift is one of the highest points of leverage. Yet this is also where the system is most resistant to change (Fig 9).

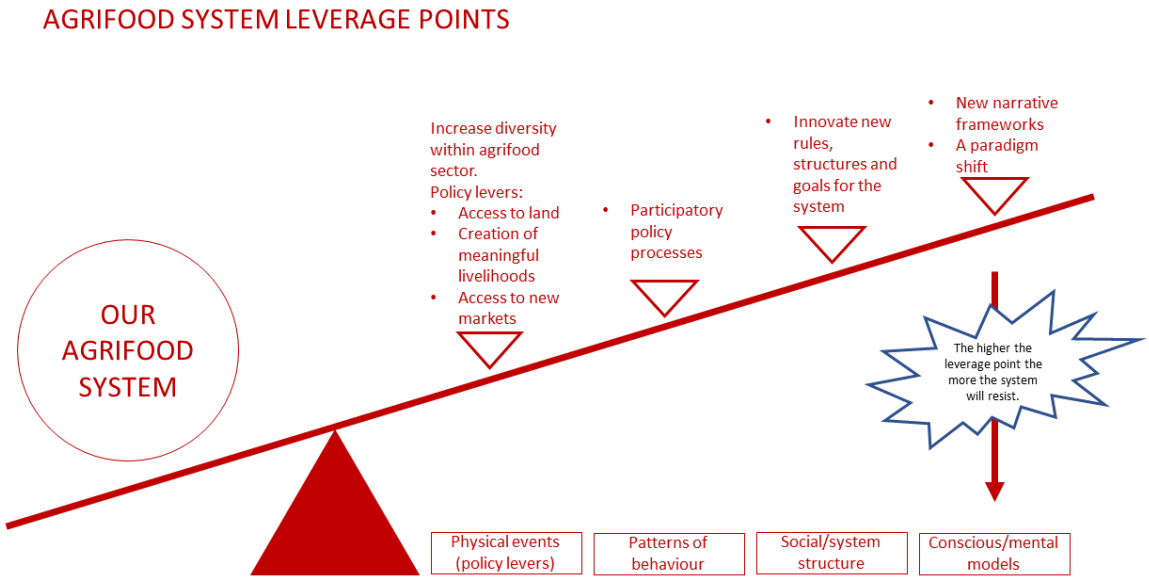

Figure 9: System leverage points (adapted from Donella Meadows, 1999)

Recognising and working with these deeper frameworks can help us move beyond ideological gridlock, creating space for more nuanced policy conversations, says Erika Staël von Holstein of Re-Imagine Europa. As she puts it: "*we don't use facts to inform our narrative of the world; they are used to justify how we already feel about it*"[4]. This matters because we are living through a period of "*narrative elasticity*"; a time when existing stories about the world are being questioned, and new ones are forming. In the European Union, agriculture has become a deeply polarised policy space, described as "*the apple of discord*", where disagreements run so deep that few policy makers are enthusiastic about taking a lead on change.

[4] Speaking at FoodPaths, Brussels, 20 May 2025.

As a result, agrifood policy is increasingly reactive and somewhat tentative, rather than ambitious and transformative.

Staël von Holstein identifies three dominant narrative traps that limit agrifood system debates:

1. The framing of "people versus planet," which sets human well-being in opposition to environmental protection.
2. The belief that doing good must involve sacrifice, casting sustainability efforts like the new Green Deal as a form of suffering.
3. The perceived opposition between sustainability and innovation.

She highlights that these are not immutable truths but misunderstandings, and overcoming them, requires a shift in thinking. This will come about if we treat narratives not as tools of persuasion but as tools for listening, empathy, and shared understanding, thereby creating space for more constructive dialogue. This lays the groundwork for agrifood system shifts that are not only technically feasible but socially and politically possible.

These misleading narrative traps have exaggerated tensions and created false dilemmas, making issues seem more 'wicked' than they are. When in fact the reality of many agrifood system challenges is that multiple goals can be pursued simultaneously; food security can be achieved alongside sustainability. Overcoming these narrative traps opens the door to collaboration and coalition building. Those best positioned to drive change are not those with the most followers within their own narrative community, the loudest voices within an echo chamber, but those that can transverse narrative communities, make connections and build bridges.

Inaction and policy paralysis are often justified by the argument that "*more research is needed*". This creates a comfortable loop in which decision-makers can appear engaged while avoiding difficult choices. However, complex systems do not require a full understanding of them in order to function effectively. And, while it is not possible to control complex systems, one can learn from them, respond to their feedback, and intervene thoughtfully to improve them (Meadows, 2009). This requires decision-making that is grounded in evidence, responsive to its specific context, and open to diverse perspectives.

Taking one of the most contentious issues as an example, that of red meat production. Glenn Denning guides: "*policies that deter animal production must be nuanced and localised to recognise the impacts on livelihoods and the value of nutrient-dense animal products for the world's undernourished people*".[5] To move forward, we must shift the conversation beyond entrenched positions such as animal protein-based diets versus plant-based diets. Rather than seeking perfect consensus it would be more beneficial to focus on early wins, those areas

[5] At the Global Food Security Conference, Leuven, April 2024

of clear dysfunction where agreement already exists; for example, in the case of red meat it might be animal welfare concerns, rural livelihoods or environmental stewardship. This does not mean avoiding hard issues, it means tackling them through collaborative rather than combative approaches.

Accepting that we are navigating not only technical challenges but also deeply held narratives and value systems is an essential starting point. Progress will depend not on entrenched agendas or polarised debate, but on building coalitions around shared concerns and identifying areas of narrative overlap that can act as bridges to more fruitful dialogue. Creating policy spaces that prioritise inclusivity, recognise the legitimacy of diverse experiences, and embrace collective responsibility is crucial. This requires a willingness to engage across narrative divides, fostering trust and enabling cooperation in pursuit of more sustainable, equitable agrifood futures.

There is no neat solution to the agrifood system's complex challenges, but an effective policy process can provide frameworks that facilitate meaningful discussions. Agrifood professionals play a crucial role in shaping the direction of system change through active participation in the policy process and bold leadership by decision-makers, whether in the public or private sectors. Farmers need to be supported, in practical terms, to participate in the policy-making process. This means material support, not just an invitation to the table.

Case Study: Rome's participatory path to agrifood system transformation

The municipality of Rome is currently reinvigorating its urban food governance. As one of the largest agricultural municipalities in Europe with over 65% of its territory designated as green space and approximately 58,000 hectares used for farming the city is well positioned to enhance urban resilience through localised food systems.

Rome's recent engagement in the FUSILLI (Fostering the Urban food System transformation through Innovative Living Labs Implementation) project has served not only as an innovation platform but also as an opportunity to revisit and reshape its own food system governance. Rather than following a traditional top-down policy model, Rome's approach has been bottom-up and democratic, with the FUSILLI team coordinating a participatory "living lab" that has brought together over 250 stakeholders, including small and medium-sized enterprises, NGOs, and public institutions.

This inductive process, framed not as abstract research but collective learning, aligns with the city's ambition to build a robust metropolitan food policy. The Food City Council, convening since January 2024, acts as a collaborative forum for envisioning and shaping the future of food in the city. Rome's goals are wide-ranging yet tightly interconnected: strengthening support for local agri-food

supply chain actors, improving food access and equity, encouraging generational renewal in agriculture, and reinforcing urban-rural linkages.

The Rome Living Lab embodies narrative-aware policymaking, sensitive to the diverse experiences and values held by its many participants. Recognising that food system transformation cannot rest on fixed binaries or technical fixes alone, the city has embraced an approach grounded in dialogue and inclusion. Its guiding framework, the "10 Es", captures this ethos: Enquire, Enlighten, Embrace and Empathise, Endorse, Envision, Enable, Empower and Entitle, Experiment, Embed, Embody and Establish. These principles reflect a willingness to listen across differences, co-create solutions, and build new narrative bridges between communities.

In a time of growing polarisation in food policy debates, Rome's experience is one of many which demonstrate that progress in complex systems emerges not from control or consensus, but from structured openness and shared responsibility. This can lead to policies that reflect both the realities of their context and those they aim to serve. While there is no singular solution, it is possible to build a sustainable agrifood system on trust, collaboration and inclusivity underpinned by research and evidence. Importantly, the process matters as much as the goal: pursuing perfect outcomes is unrealistic in this context. Instead, embracing imperfect, step-by-step solutions may offer a more effective path toward an agrifood system that serves both people and the planet.

CHAPTER 6: RECOMMENDATIONS

The following recommendations are organised around the overarching theme of prioritising diversity and inclusion in order to build a resilient agrifood system and underpinned by three key policy leverage points that are critical to building that diversity. The three key leverage points are improving access to land, creating secure and meaningful livelihoods, and increasing access to new markets. All of which, if leveraged correctly, should increase diversity of the agrifood sector. In addition, working to develop and implement participatory policy processes should result in greater innovation and resilience. In the longer term this could lead to a system that is more balanced and serves our needs better (Fig 5).

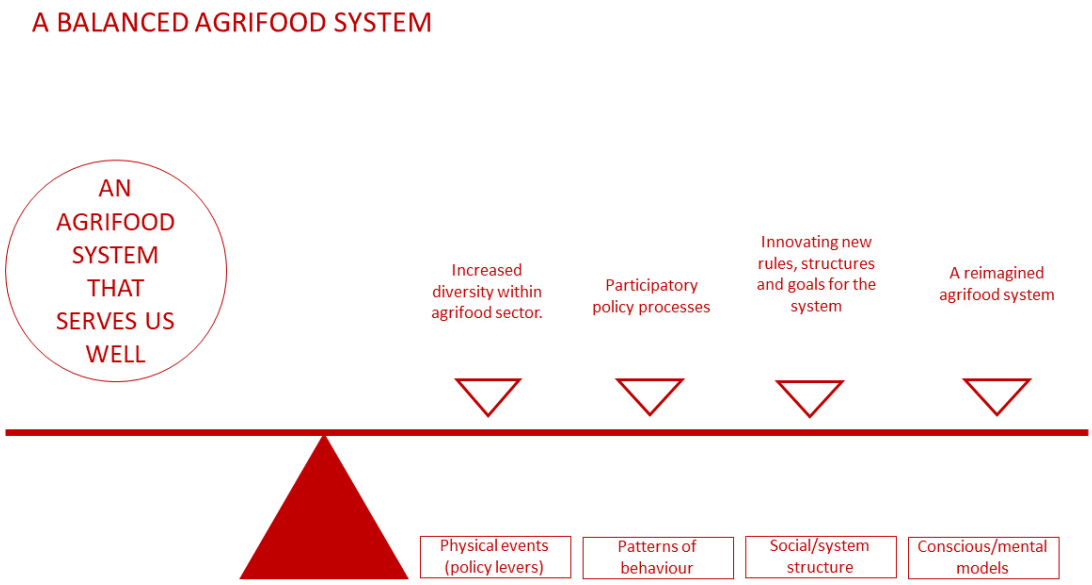

Figure 10: System leverage points (adapted from Donella Meadows, 1999)

Prioritise diversity and inclusion

Why it matters: Diversity brings new perspectives and drives innovation. A more inclusive agrifood system is not just more equitable it is better equipped to respond to complex global challenges. Individual learning is crucial, recommendations from Navaratnam Partheeban's 2021 Nuffield Report "Encouraging and Supporting Black and People of Colour in Agriculture" provide a clear pathway for personal and professional steps to take to engage effectively:

- Learn about the history and culture of Black and People of Colour in the UK.
- Communicate and engage with Black and People of Colour.
- Understand your own biases and barriers.

- Work to become a positive and active ally.
- Organisations need to look in before looking out.

A list of organisations and resources to assist with these action points is included at the end of this chapter.

Expand access to land for new entrants

Why it matters: Land access remains one of the most significant barriers for young people and people from marginalised communities in agriculture. Without land, skills and motivation alone are not enough to launch a viable farming career.

Establish clear and supported career pathways in sustainable agriculture

Why it matters: young people often see sustainable agriculture as morally valuable but economically risky. By institutionalising pathways, these roles can become more visible, supported, and viable.

Provide financial incentives and social protections for small-scale farmers

Why it matters: Farmers are often expected to deliver sustainability without first meeting their basic needs. Without a more equitable policy framework, sustainable farming will remain personally and financially unsustainable.

Create new markets for small scale farmers and new entrants

Why it matters: Markets such as Public Food Procurement can provide a stable income, and a social good. It is vital to ensure these opportunities are accompanied with the appropriate financial and technical support.

Support farmer mobilisation and policy participation

Why it matters: Farmers and people from underrepresented communities, interested in becoming farmers hold vital context specific knowledge that is essential for shaping effective policies.

Recommendations for Funders (and NGOs seeking funding)

- Fund processes, not just outcomes: support long-term projects and processes that allow for collaboration and experimentation, not just fixed deliverables.
- Support capacity-building activities: Fund training in systems thinking, facilitation, and policy navigation for diverse food system actors, especially new entrants.
- Invest in inclusive governance and make it a requirement of new grants: Ensure that resources are allocated within projects and initiatives to embed

participation of underrepresented communities in agrifood systems governance.
- Ensure that the leadership of delivery organisations is diverse or making clear steps to be more diverse and inclusive, and is allocating adequate resources to support this activity.

Recommendations for Policy Makers

- Enable equitable land access: Develop and expand land access schemes for agroecological and community-led farming models, including on public or underutilised land.
- Create enabling policy environments: Reduce bureaucracy and streamline processes to support new entrants, especially those without traditional assets or access to capital.
- Institutionalise participation: Establish inclusive agrifood fora and advisory bodies that give voice to farmers, all citizens, SMEs, and civil society in decision-making, and ensure that under-represented groups are given the resources to participate.

Recommendations for Agribusiness

- Integrate diversity and inclusion in business strategy: Allocate resources to drive agenda forward.
- Collaborate across value chains: Build partnerships with producers, especially SMEs and agroecological farms, to co-design fair, resilient supply chains.
- Invest in ecosystem services: Recognise and pay for the non-market public goods (e.g., biodiversity, education, community resilience) provided by sustainable farmers.
- Engage in policy dialogue: Advocate for policies that promote long-term sustainability and diversity.

Recommendations for Farmers

- Work collectively: Form or join cooperatives, networks, and advocacy alliances to negotiate better terms within the system.
- Engage in policy: Participate in local food stakeholder events or public consultations to influence decision-making on food, land, and rural development.
- Mentor the next generation: Support entry pathways for young people and underrepresented groups through apprenticeships, training, and land-sharing initiatives.

Organisations and Resources

https://drosebusiness.com/

D'Rose Development is an award-winning Diversity and Inclusion Consultancy, which showcases how ethics and equity practice should be part of everyday

business strategy by helping clients conceptualise their values and build an understanding of how equality and diversity make businesses resilient.

https://www.wood-water.org/

Wood & Water is a social enterprise dedicated to a world where global development stories inspire action towards justice for all.

https://www.nuffieldscholar.org/agdiversity

AgDiversity is an online awareness course about diversity, equity and inclusion (DEI), targeted at the UK agricultural and other land-based industries.

CHAPTER 7: AFTER MY STUDY TOUR

The Nuffield Scholarship experience has given me invaluable time and space to step back and consider the systemic challenges facing our agrifood system. Unlike traditional academic research, this journey was not bound by conventional methodologies or disciplinary frameworks. This allowed me to engage with the topic and write in an expansive way about the interconnected nature of our food system.

Through conversations with stakeholders in agriculture, academia and policy, I have been able to explore how complex, value-laden issues like diversity, land access and livelihoods are impacting our ability to tackle global challenges like climate change, biodiversity loss and human health. These insights are already shaping my ongoing research at the University of Edinburgh, where I am focused on understanding how a diverse range of actors working within complex systems can engage with and navigate the policy landscape.

In addition to my doctoral research, I am developing a One Health Policy Impact Lab which aims to better connect academic research, policy, and frontline experience. The Lab's purpose will be to act as a collaborative platform for change by bringing together a diverse range of voices to co-create policy solutions that support the health of people, animals and ecosystems. The Lab will be founded on principles of inclusivity, evidence-informed decision making, and long-term thinking. It will prioritise combining rigorous academic knowledge with lived experience, ensuring that policies reflect the needs and values of the communities they serve. This strand of work will be based at the Royal (Dick) School of Veterinary Studies and will draw on both my Nuffield experiences and my career to date.

To drive this work forward, I am keen to collaborate with others who share an interest in agrifood systems transformation, particularly those exploring cross-cutting approaches, inclusive policymaking, and systemic change. ***If you are a funder, organisation, or policymaker interested in shaping this next phase of a One Health Policy Impact Lab, I would welcome the opportunity to connect and explore how we might work together to co-develop ideas, pilot interventions, or build capacity across the food system: A.M.Behan@sms.ed.ac.uk***

CHAPTER 8: ACKNOWLEDGEMENT AND THANKS

I am very grateful to everyone who generously gave their time to speak with me during this research. I met a great many people at conferences and events that have had an influence on my work. In a post-COVID world, when face-to-face meetings have become harder to arrange, I particularly appreciated the opportunity to meet with some people in person. Being welcomed into places of work and seeing these environments first-hand added a depth of understanding that would have been significantly more challenging if conducted remotely. It is often the relaxed conversations at the beginning and end of formal discussions that trigger new ideas. Thank you for your time:

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- Nichole Accettole, Chef, Restaurateur and formerly of House of Food, Copenhagen
- Jocelyn Cavins and the student farmers at UC Davis
- The leadership team at the Alice Waters Institute
- Jeanne Merrill, Executive Director at Berkeley Food Institute
- Mara De Pater, Researcher & Advisor, DRIFT for Transition
- The team at Cooperative agricola Co.r.ag.gio. – Giacomo and Alicia

I am particularly grateful to those who not only met with me, but also kindly connected me with others. Your generosity and willingness to share your networks made the process of international research much easier and for that I am very grateful indeed. Thank you for your time, openness, and hospitality:

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- Yael Cypers Kotick (Director of Procurement, Alice Waters Institute)
- Luanna Swenson (Policy Specialist for Sustainable Public Procurement, Food Agriculture Organisation, United Nations)

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In accordance with the University of Edinburgh AI policy, I employed ELM (Edinburgh access to Language Models) and Chat GPT (for early-stage research) to refine interview transcriptions and summarise fieldwork notes, check early drafts of writing for clarity and errors (Grammarly), and for brainstorming.

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