



Farmer knowledge to inform NFM delivery

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Outline

- What Farmers told us
- Shifts in policy for soils and trees
- LANDWISE contributions to current shifts
- Where next

What farmers told us

- About soils and soil management
- About trees and management of trees

What farmers told us about soils

*'I think most farmers probably would rather look at something where there's a **win-win in terms of soil structure** and through improving profitability as well as helping with percolation. I mean to me, you see the issue is always water percolation because it's heavy clay. Whereas some other farmers obviously on the lightest soil types may genuinely see erosion and be more concerned about that. – FT3*

*'[The co-benefits of NFM measures] are enormous! So from improvements to productivity to yield fluctuations to ... less nutrient leaching, to the **friability of the soil in terms of how the soil cultivates**, all those benefits are there and very apparent on our farm as a result of improving the **soil organic matter**. The SOM is really an indicator of what life you've got in the soil. And it's that life that is critical because it's the turnover of that living and the dying and the processes on a farm, it's the organisms in the soil. SOM really is a blunt instruments of measuring that actually, so hopefully in the next 10 years we're gonna find much **smarter ways of measuring that life in the soil** without actually counting, putting numbers under the microscope which is about the only way of doing it at the moment. – FT1*

What farmers told us about trees

*'I'm very **sceptical of tree planting being able to reduce flooding**, I just don't get it. I can see tree planting for stopping erosion in high rainfall areas, but we just get, when we have a heavy rainfall event, we have so much rain that's landing in the Southeast landing on concrete landing on tarmac, it goes into the river and the river level rises and overtops. I don't see how tree planting is ever going to make any difference whatsoever where we are'. – FT16*

*'I think it's **certainly possible to plant more trees**. No doubt about it. I mean, there's trees already. Why wouldn't one be able to plant? Yeah. I mean, obviously on the **rented land**, and, you know, that would require landlord's consent. And I'm not sure that they would willingly do it; one would be a bit **cautious about losing the land**...if you've got 25 acres out of 80 and you start chipping away at the balance, there's not really much farm left'. – FT23*

*'I'm actively, it's probably not for that purpose, actually, but I am doing, I have **a live application in for woodland planting**, to get a grant for doing some but I'm looking at it from the more from a **carbon sequestration point of view**'. – FT13*

Shifts in policy

- For soils and soil management
- For trees and management of trees
- Focus on thee aspects:
 - What actions can farmers do on tier own
 - What can they do in partnership with others
 - What can they offer to others

Shift in Policy for Soils and Soil management

- ELM, specific under SFI, included in other components
 - Increasing SOM under Arable and Improved Grasslands soils
 - Nature-based solutions & NFM under Local Nature Recovery and Landscape Recovery
- Growth in agro-ecology and regenerative farming

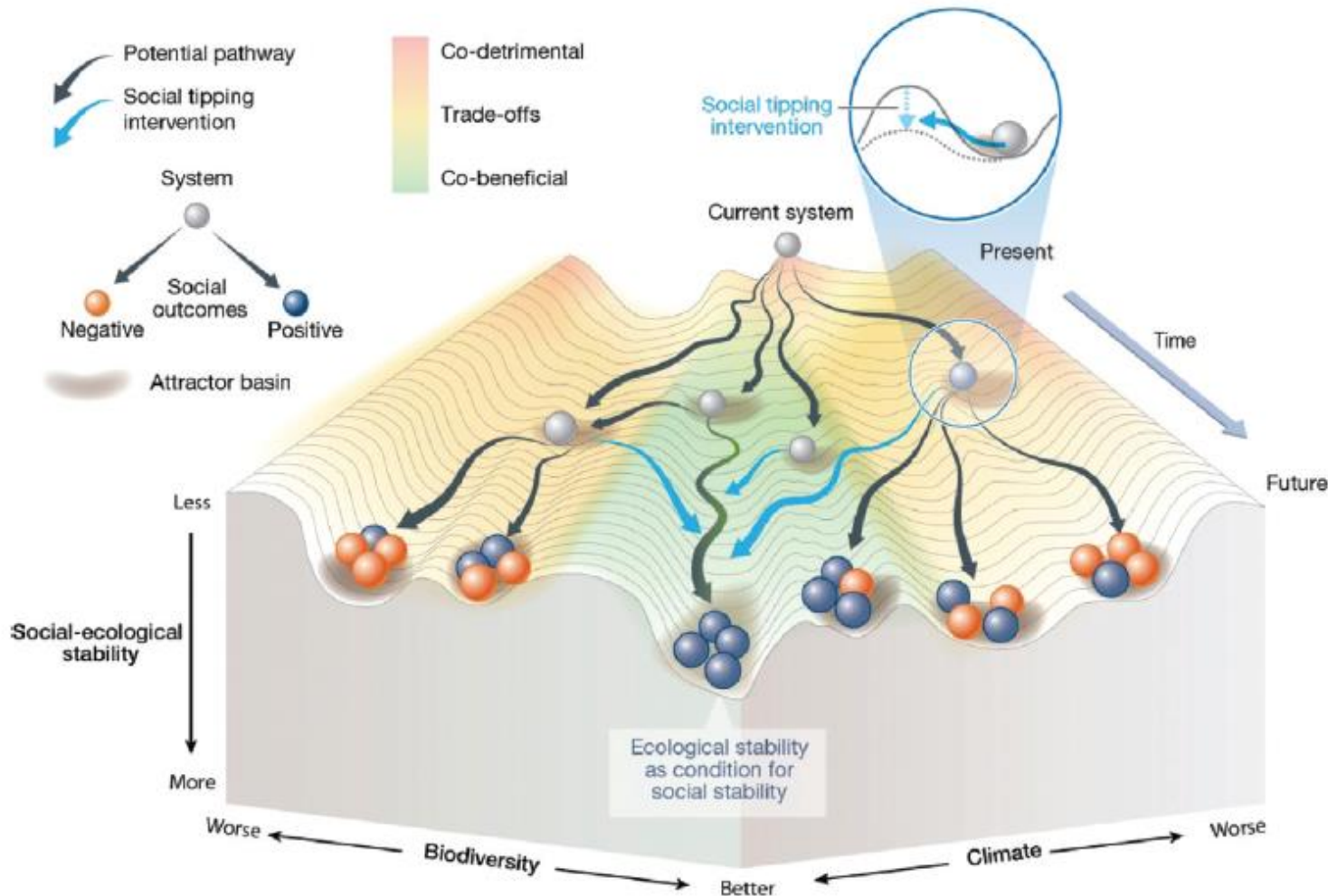
Shift in policy for trees and tree management

- Targets from last election not met
- Tree strategies across many Local Authorities
- Incorporation within ELM, with broad(er) understanding
 - LNR talks of “trees and woodlands, including agroforestry, traditional orchards”
 - Trees in the landscape more popular?

LANDWISE contributions to

- Shifts in how we think about soils
- Shifts in how we think about trees

Social pathways and tipping points



- Influencing changes in current thinking
- Different pathways
- Interventions to help reach tipping points.
- Pascual et al 2022, adapted from Portner et al 2021

Soils and soil management

- Growth in practice of agro-ecological/regenerative farming techniques
- All positive from an NFM perspective, esp. soils
- Evidence helps increase pathway, reduces resistance to tipping point

Trees and tree management

- Resistance to planting trees remains, esp. among farmers
- Some support for agro-forestry, support by NFM
- Evidence could help increase support for change
- Support for a 'messy' landscape not solely trees
- Link to role of trees for other aspects, biodiversity of Climate.

Where next?

- Catchments are complex, so are farms and fields
- Transformations are happening

Assisting transformations

**Principles for fostering
transformative governance
in the biodiversity-climate-society nexus**



**Transformative
governance**

- LANDWISE will contribute to embedding NFM
- Different scales is key
- Integrated farm advice is key
- Pascual et al 2022

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