

Farmer knowledge to inform NFM

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Outline

- What we said we would do
- What we found out
- What we do next
- Lessons in engagement



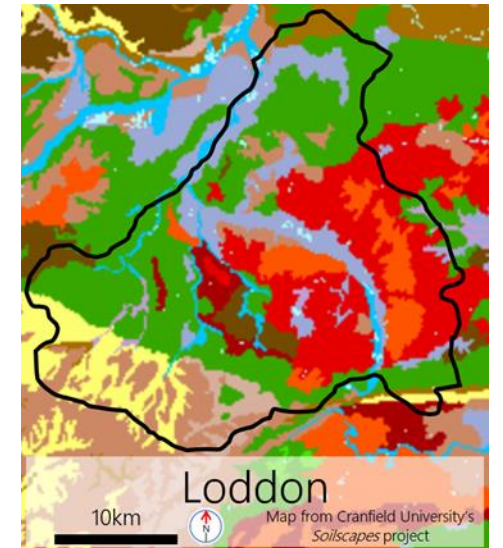
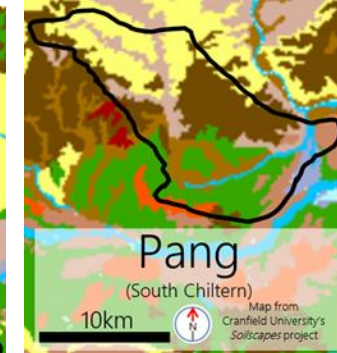
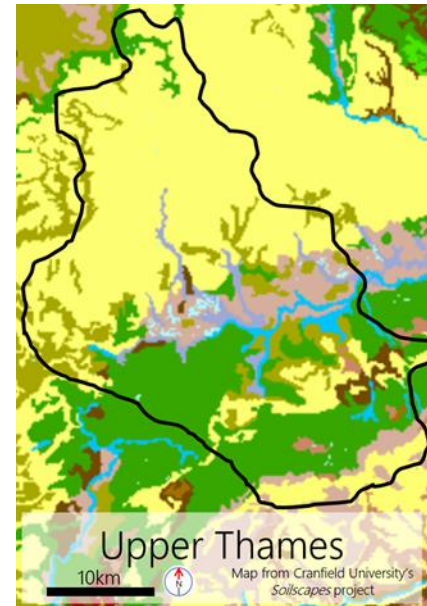
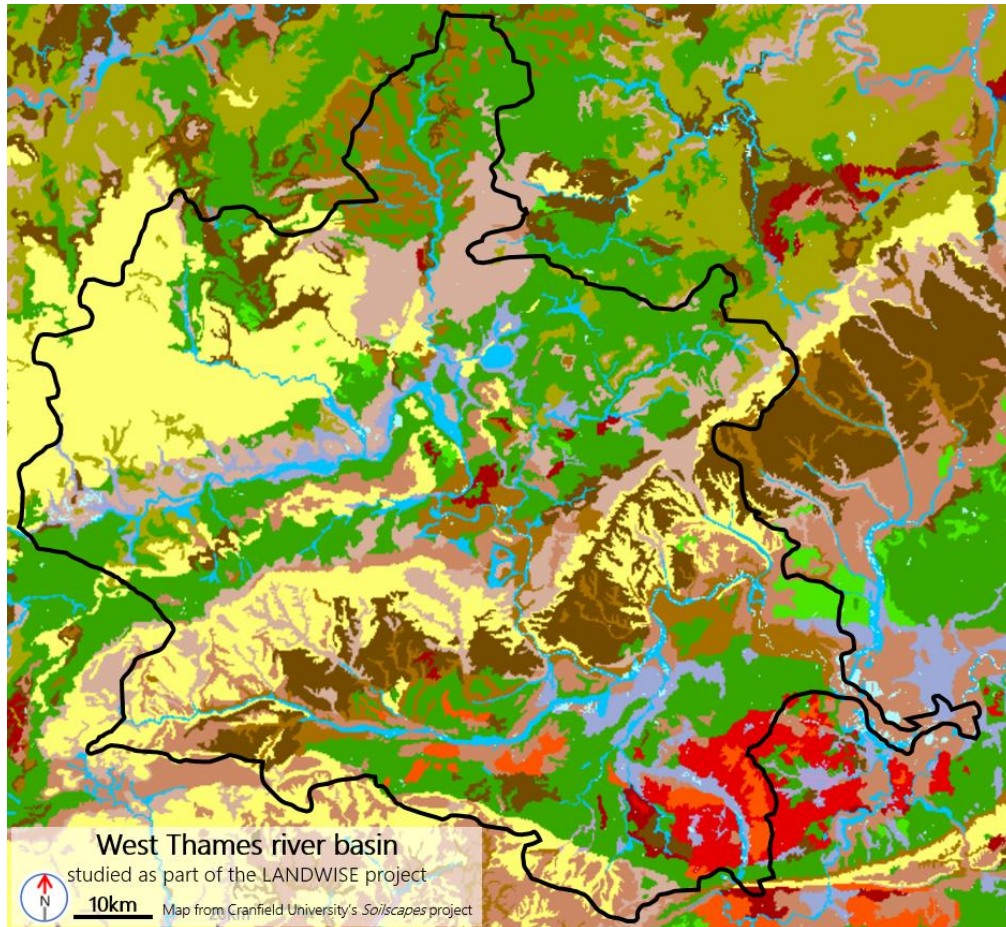
What we said we would do

- Over the last 2 years we have:
 - Sought the views of farmers across the West Thames (36 responses)
 - Had stands at Groundswell 2019 and ORFC 2020
 - Collected soil samples from 46 farms in West Thames
- ... Some farmers also attended the workshops.

What we found out

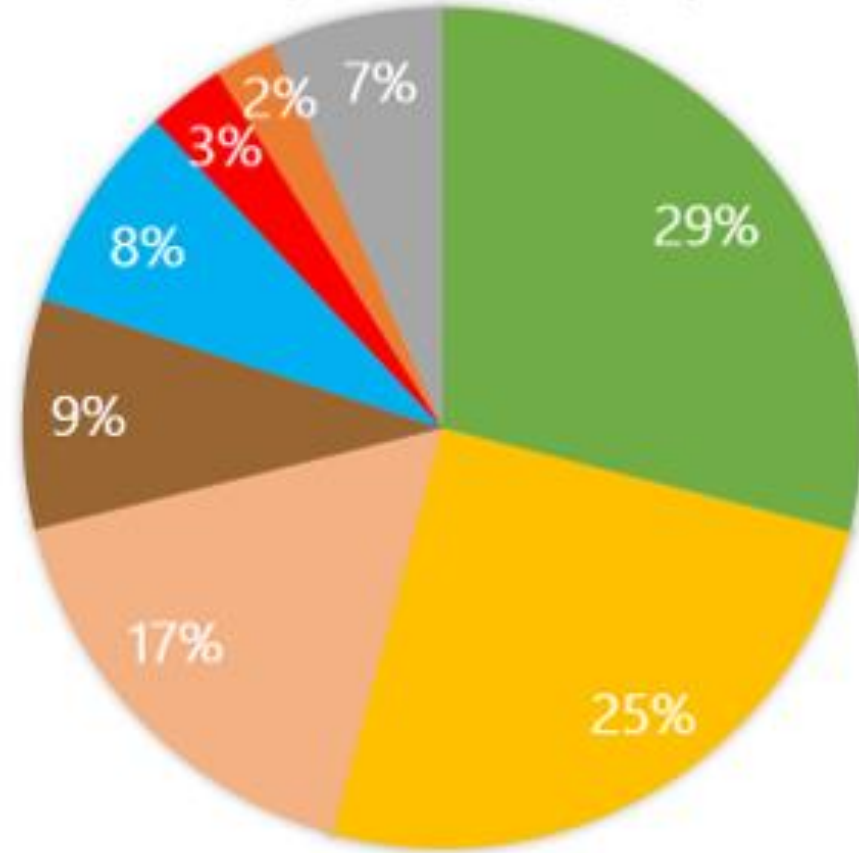
- The importance of soils
- A range of farming practices
- Diverse range of views and willingness to engage
- Farmers are diverse and reflect wider range of thinking

Soils at the heart of things

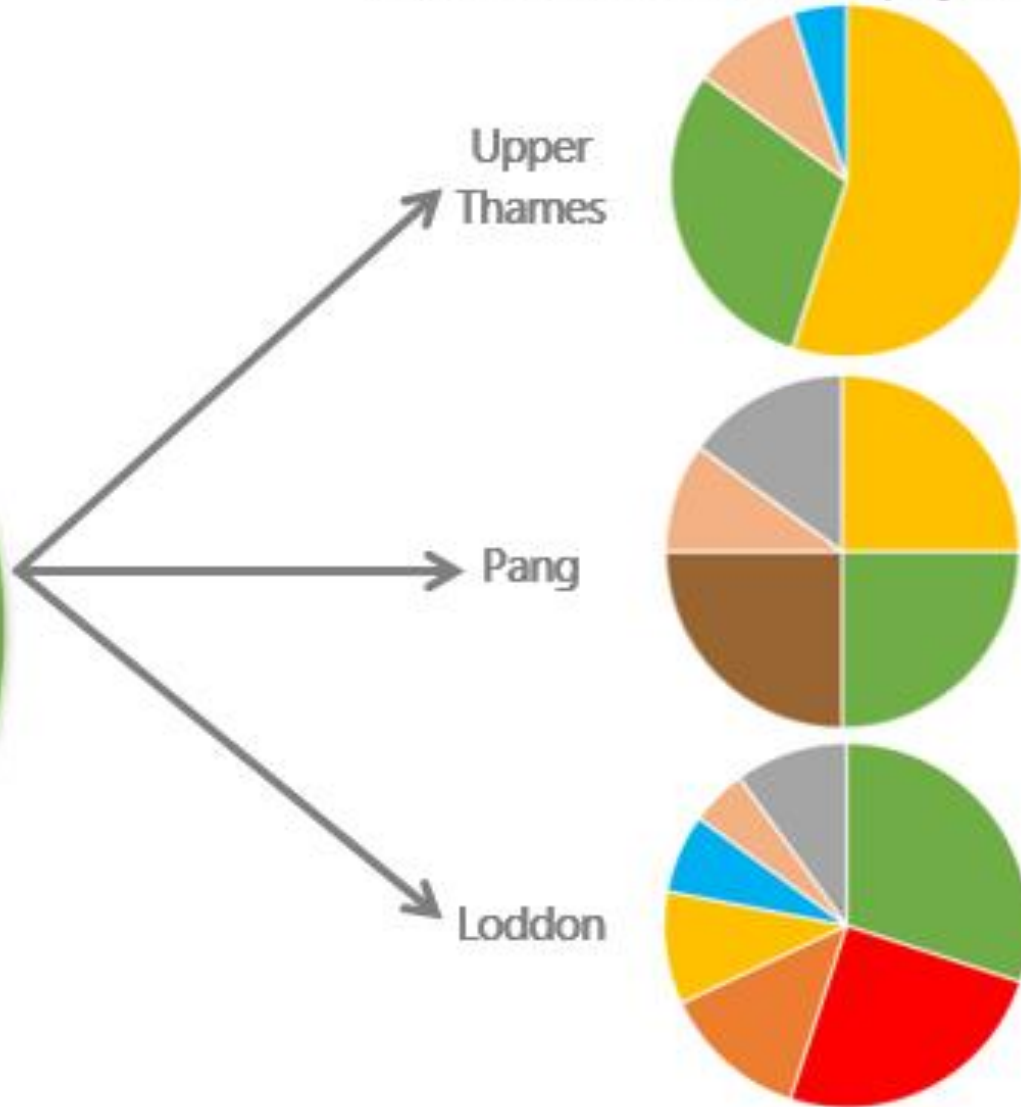


- | | | | | |
|---|--|--|---|--|
| 1 Saltmarsh soils | 7 Freely draining slightly acid but base-rich soils | 13 Freely draining acid loamy soils over rock | 18 Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils | 23 Loamy and sandy soils with naturally high groundwater and a peaty surface |
| 2 Shallow very acid peaty soils over rock | 8 Slightly acid loamy and clayey soils with impeded drainage | 14 Freely draining very acid sandy and loamy soils | 19 Slowly permeable wet very acid upland soils with a peaty surface | 24 Restored soils mostly from quarry and opencast spoil |
| 3 Shallow lime-rich soils over chalk or limestone | 9 Lime-rich loamy and clayey soils with impeded drainage | 15 Naturally wet very acid sandy and loamy soils | 20 Loamy and clayey floodplain soils with naturally high groundwater | 25 Blanket bog peat soils |
| 4 Sand dune soils | 10 Freely draining slightly acid sandy soils | 16 Very acid loamy upland soils with a wet peaty surface | 21 Loamy and clayey soils of coastal flats with naturally high groundwater | 26 Raised bog peat soils |
| 5 Freely draining lime-rich loamy soils | 11 Freely draining sandy Breckland soils | 17 Slowly permeable seasonally wet acid loamy and clayey soils | 22 Loamy soils with naturally high groundwater | 27 Fen peat soils |
| 6 Freely draining slightly acid loamy soils | 12 Freely draining floodplain soils | | | |

Soil types distribution
on the whole West Thames river basin
according to *Soilscapes* project

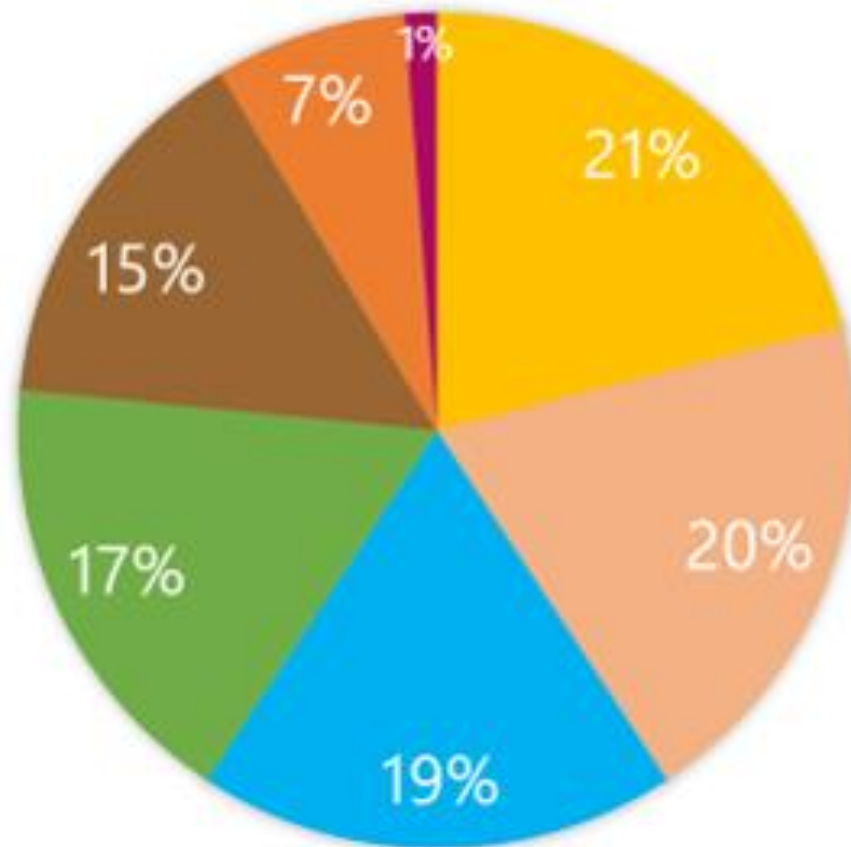


Details of soil types distribution within the three
catchments which have NFM projects

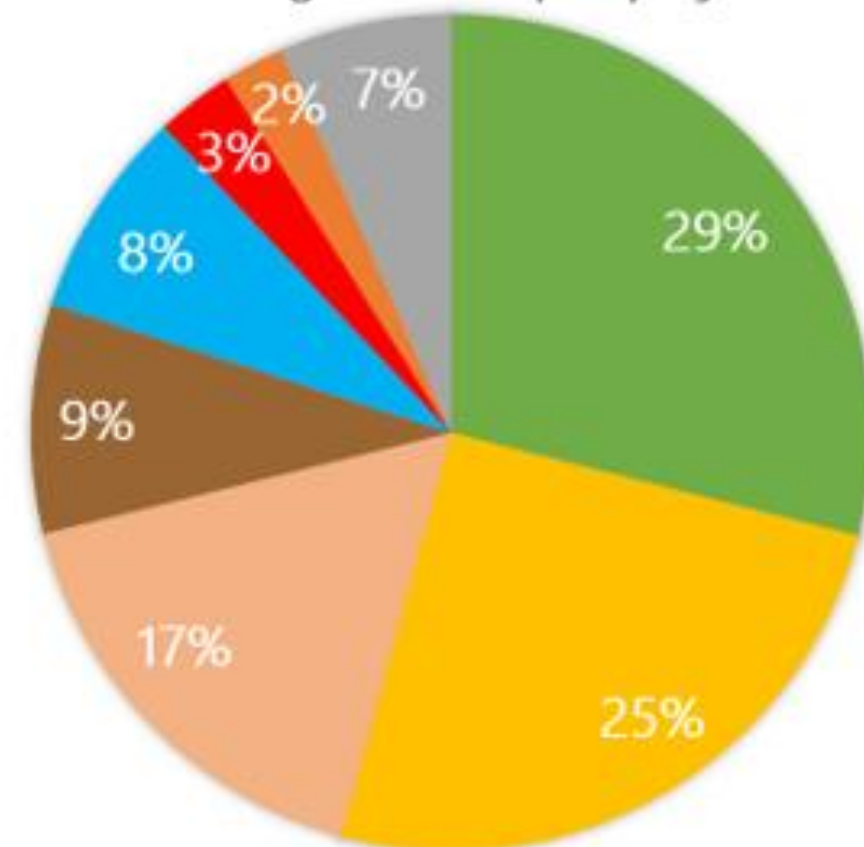


Soil types distribution according to farmers

Answers to question 2: "What soil types do you have?"



Soil types distribution on the whole West Thames river basin according to *Soilscapes* project

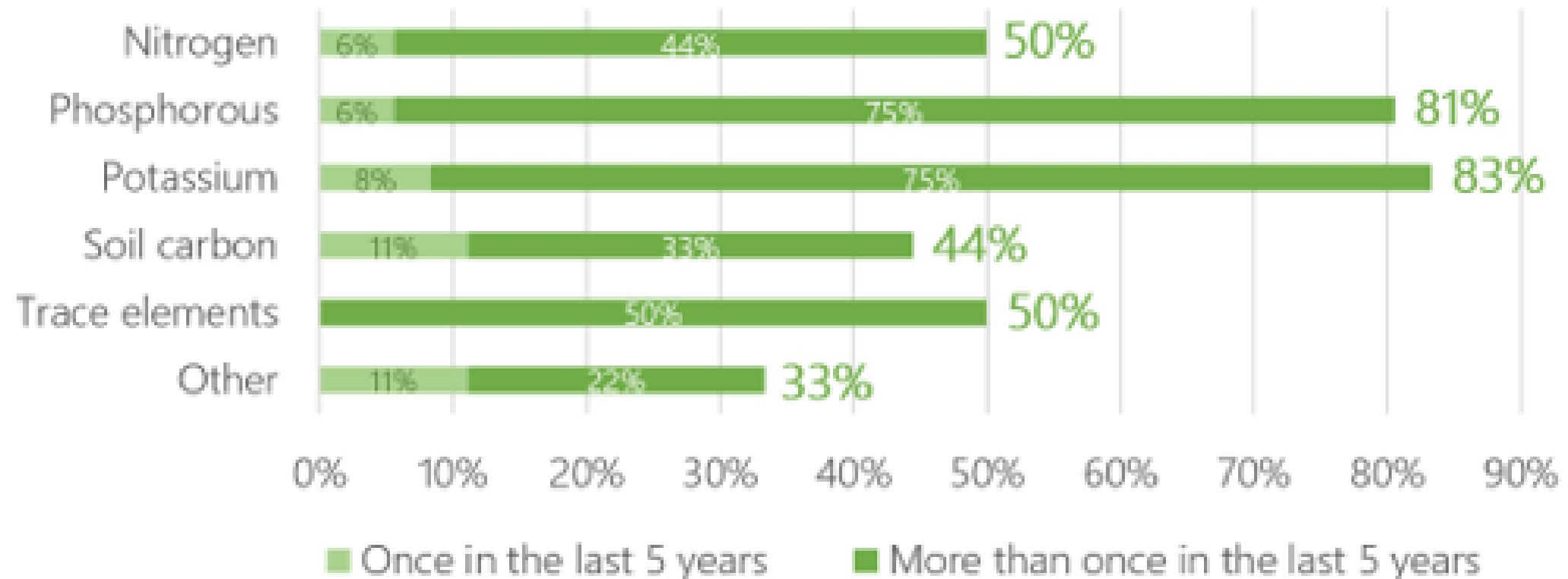


Views on soil management

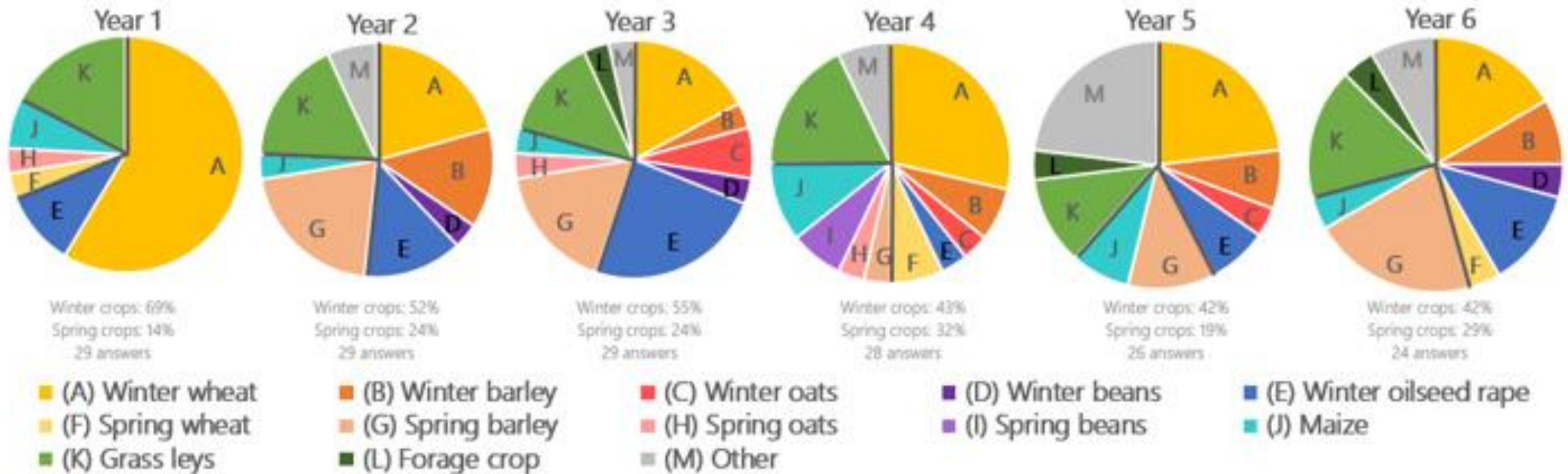
- Is it worth investing in good soil structure?: Yes 92%
- SOM helps me access fields more quickly: Yes 58%
- Do you try to improve your SOM?: Yes 94%
- Each year to do something to help SOM: Yes 89%
- Is soil testing useful: Yes 83%
- Cover crops part of my rotation: Yes 28%, Undecided 44%

Soil testing

Soil tests implemented by farmers

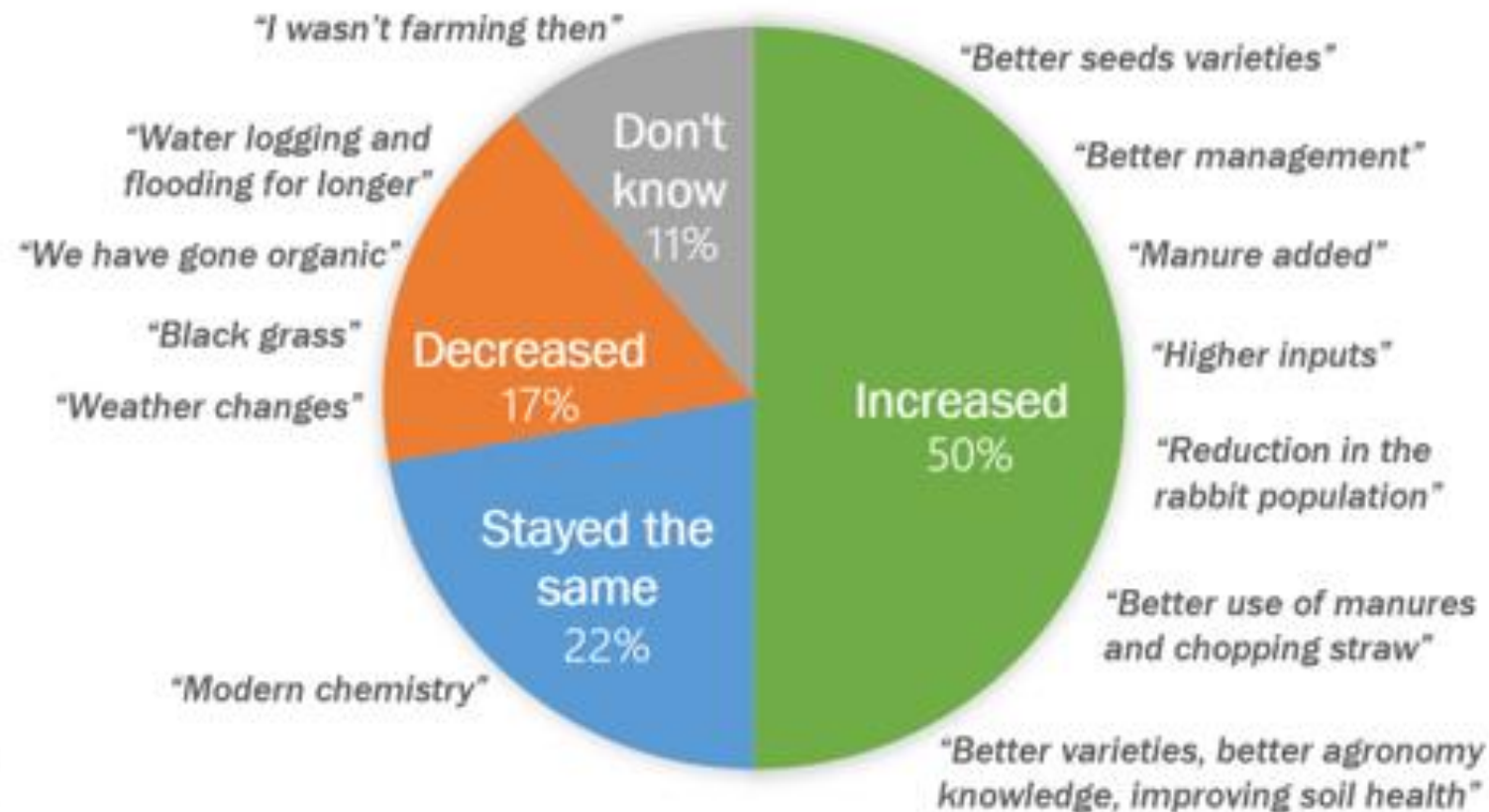


Arable rotations



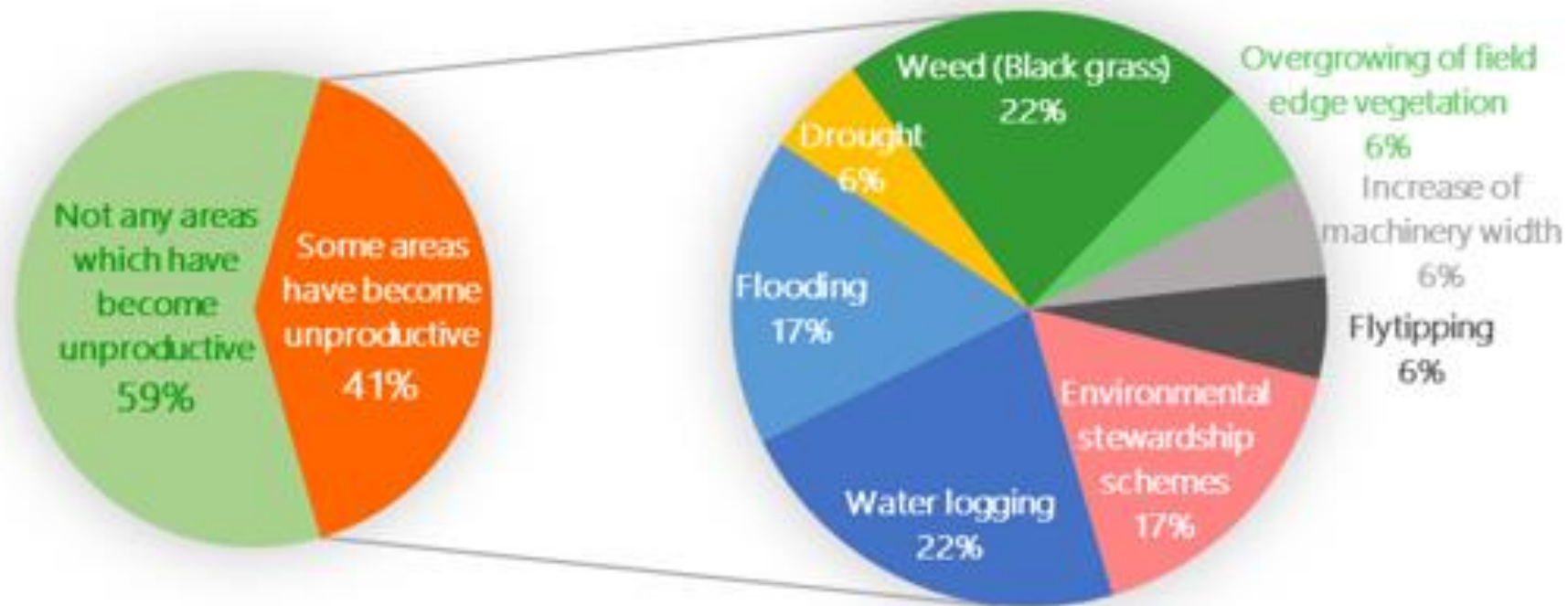
Compared to 20 years ago ...

Compared with 20 years ago, yields have:



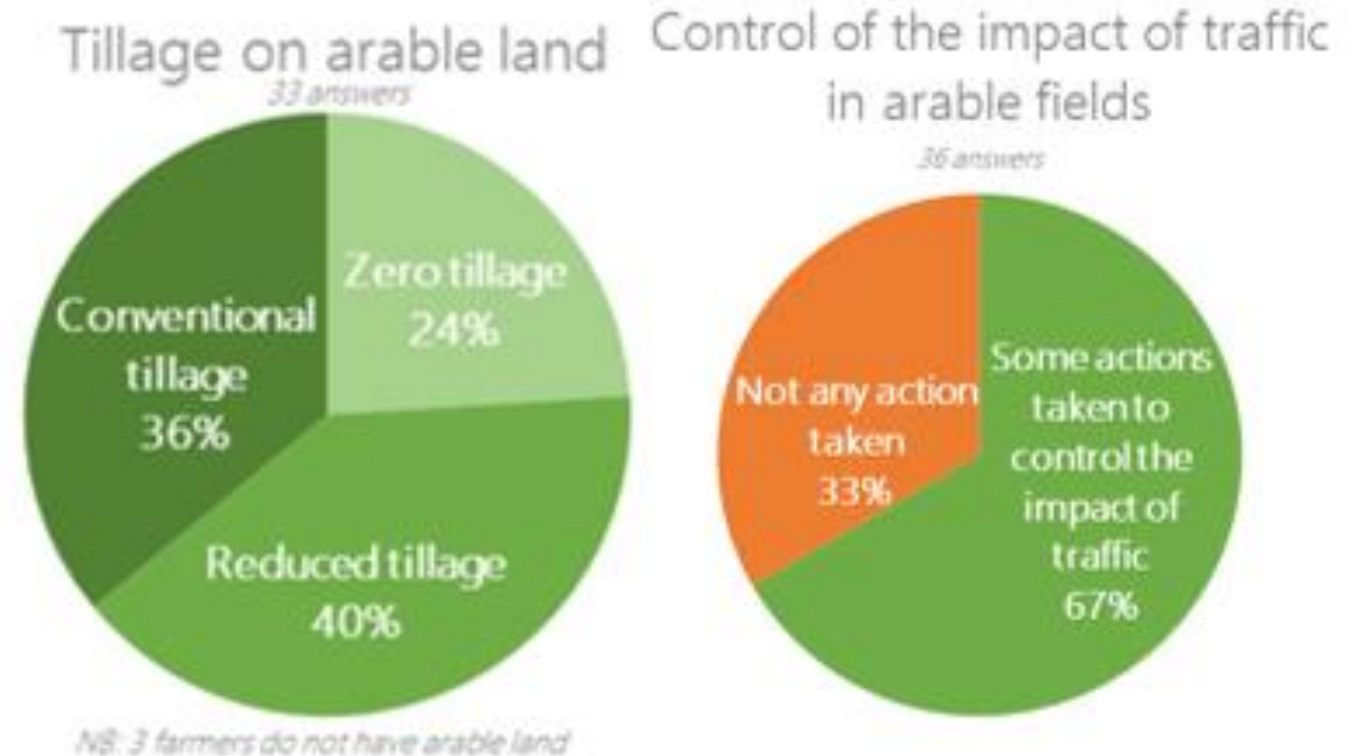
Some unproductive areas

In the last ten years, are there any areas of your farm which have become unproductive or unusable?



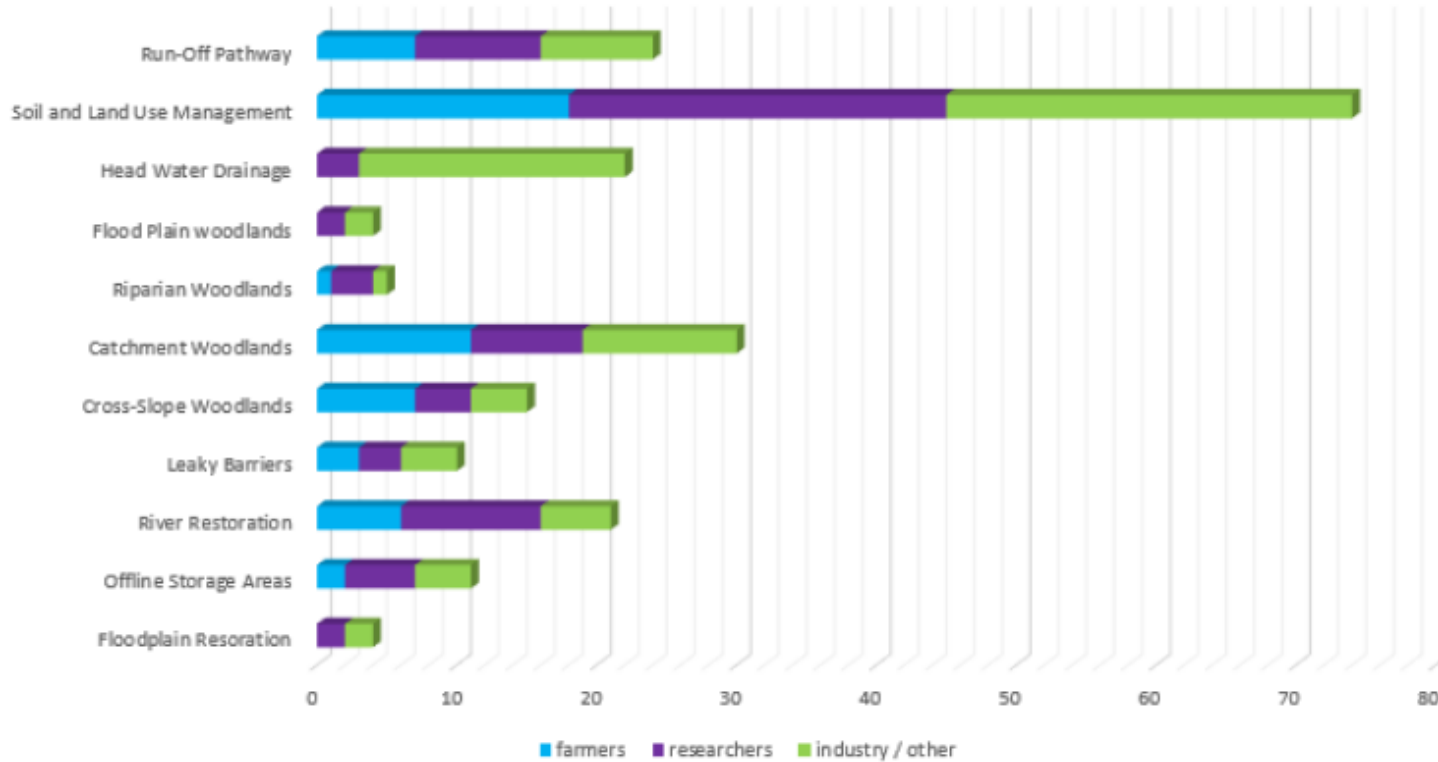
Willingness to change

- 64% considering significant changes
- 61% consider advice very/fairly important

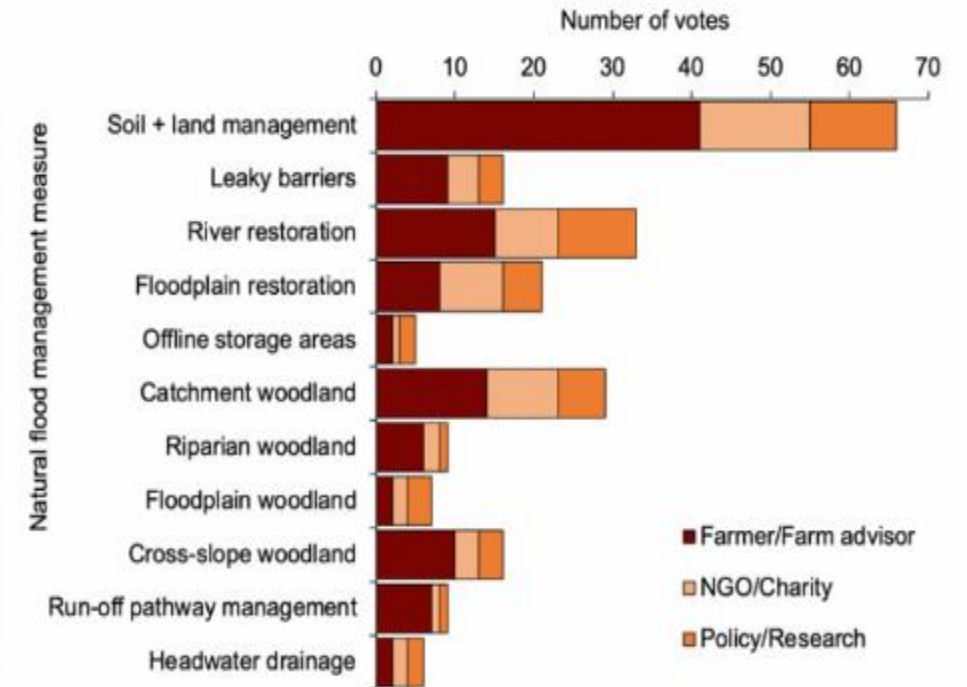


Farmers not so out of step

NFM Measures Preferences
Groundswell2019 attendee 'votes'



Oxford Real Farming Conference 2020



What we do next

- Interviews with farmers in West Thames (Mar & Apr 2020)
- Further views from farmers in West Thames (Mar 2020)
- Draft report on agri-policy to inform thinking (April 2020)
- Input into scenarios development (Spring onwards 2020)
- Continue the dialogue:
 - discussion on soils and ground truthing the scenarios.

Lessons in stakeholder engagement

- Food & drink matter
- Venue for least comfortable
- Invitations via gatekeepers
- Ask them questions
- Attendees are your partners
- Keep dominant voices busy
- Individual activities so all input
- Have maps & photos to view
- Listen & let them off-load
- Regular communication before & after

Relax and enjoy 😊

When referring to LANDWISE work

- For this Webinar please cite as follows:

Elwin A and Short C (2020) Integrating local knowledge in to NFM work: Insights from lowland catchments in the Landwise project, Webinar for NERC NFM programme March 19 2020.

- Other publications:

Short C et al (2020 planned) Assessing farmer knowledge of soil and land management practices in relation to natural flood management, Soil Use and Management

Elwin A et al (2020 planned) Co-creating landscape scenarios for natural flood management through participatory workshops, Land Use Policy

Broadmeadow S et al (2020 planned) Opportunity mapping for natural flood management interventions based on soil typology and farmer knowledge, ?? Which journal?

Thank you.

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