Factors influencing farmer adoption of water pollution mitigation measures in England

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Demonstration Test Catchment

The Demonstration Test Catchment project seeks to assess the effectiveness of a variety of land management measures aimed at reducing water pollution whilst maintaining farm profitability.


http://www.demonstratingcatchmentmanagement.net/

Engaging stakeholders is key

1. What will it take to encourage adoption of specific mitigation measures?
   - What are the motivations? And what are the barriers?

2. Which advisors are best placed to deliver advice / influence uptake?
   - Why farmers listen to certain organisations for advice on specific measures?

In-depth farmer motivations survey

Mitigation measures investigated

<table>
<thead>
<tr>
<th>Management</th>
<th>Infrastructure</th>
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<tbody>
<tr>
<td>• Sub soiling/ grass aeration</td>
<td>• Track re-surfacing</td>
</tr>
<tr>
<td>• Reduced cultivation systems</td>
<td>• Roofing over yards</td>
</tr>
<tr>
<td>• Tramline management</td>
<td>• Re-site gateways</td>
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<tr>
<td>• Cover crops</td>
<td>• Biobeds</td>
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Management

Infrastrcutre

Land use change

• Take land out of production
• Tree planting
• Sediment traps

Farmers who **have** adopted a measure

Internal factors

Market factors

Regulations

Financial incentives

Advice and education

Decision process for measure uptake

Farm characteristics
**Predominant pathway**

- **Secondary pathway**
- **Short cut in the decision process**

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**Farmers who have adopted a measure**

- Protests
- Poor behaviour
- Inadequate land
- Land title dispute
- Wet area
- Reluctant
- Variable incidence
- Poor performance
- Farm management
- Re-surfacing
- Sediment traps

**Land out of production**

**Barriers to mitigation measure uptake**

- Internal factors
  - Capacity
  - Social cultural
  - Economic
  - Environmental
  - Physical

- External factors
  - Regulative
  - Institutional
  - Economic

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**Barriers to: Land use changes**

- Take land out of production
  - "It's not cost effective"
  - "Not fit for tourism"
  - "Not suitable"
  - "It's a hassle"

**Subsoiling**

- Cover crops
  - "I don't have a problem"
  - "Not enough reduction"
  - "No step drains on my farm"

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**Farmer attitudes towards advisors**

- **Word Clouds**

  - **Wildlife Trust**
    - Knowledge
    - Biased
    - Helpful
  
  - **Rivers Trust**
    - Grant
    - Trust
    - Free
    - Advice
Farmer attitudes towards advisors

Regional differences

Key messages

- **Engage** with farmers when designing policy, to understand your audience.
- Gain knowledge of the motivations and barriers to uptake for **specific measures**.
- Discover the **role of advisors** and who farmers most listen to help influence uptake.

It is not only important to decide **what** to encourage but also **how** and **who** should do the encouraging!