

Assessing the value of seasonal climate forecasts in decision-making

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EUPORIAS



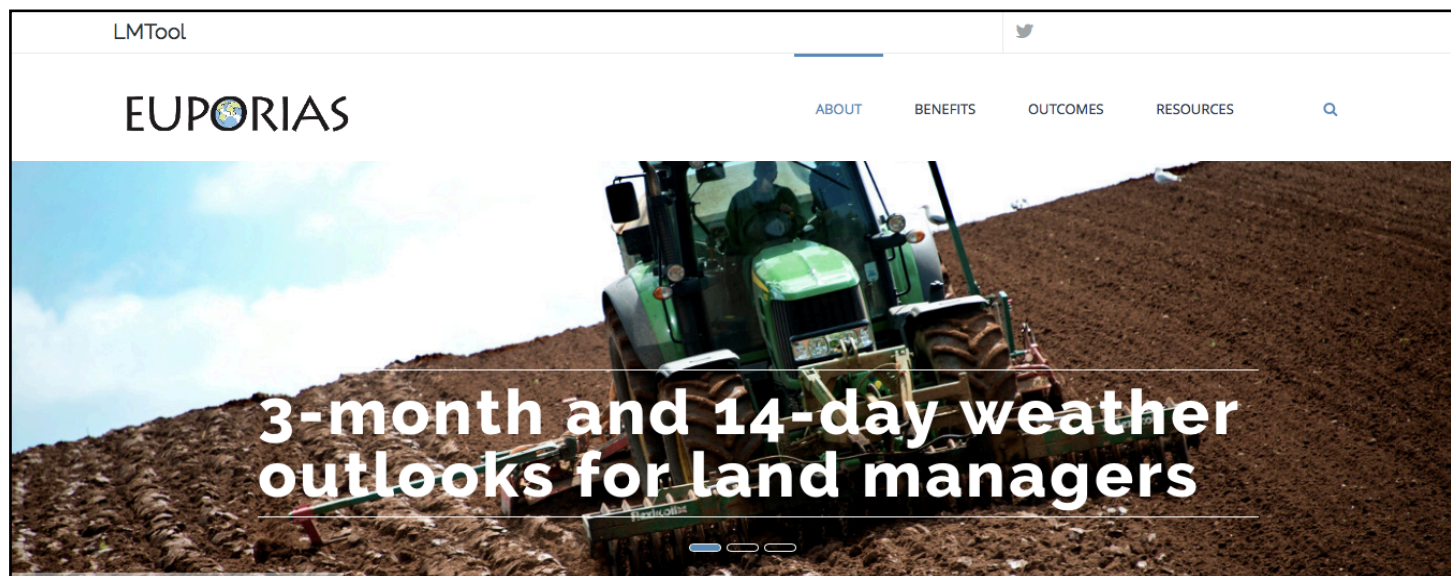


1. Why this concern with value?

- Potential benefits of using **SCF in decisions** (Harrison et al., 2008); SCF relatively new in Europe, reliability issues;
- **Assessing the “value”** of climate information e.g. value for money and services, investment in science, better decisions for/within society...
- **Meanings of “value”**: fair return in money, services or goods; something useful or important;
- Value of SCF dependent of range of factors e.g. the user, the decision-making context, the SCF itself...
- Different **methods** to assess value of climate information (see e.g. Clements et al., 2013).

2. The Land Management Tool prototype

- Developed under the auspices of the EUPORIAS project (see www.euporias.eu)
- Met Office, Uni Leeds, KNMI, Predictia;
- Focus on **land management decisions** during **winter months** in the South west UK.

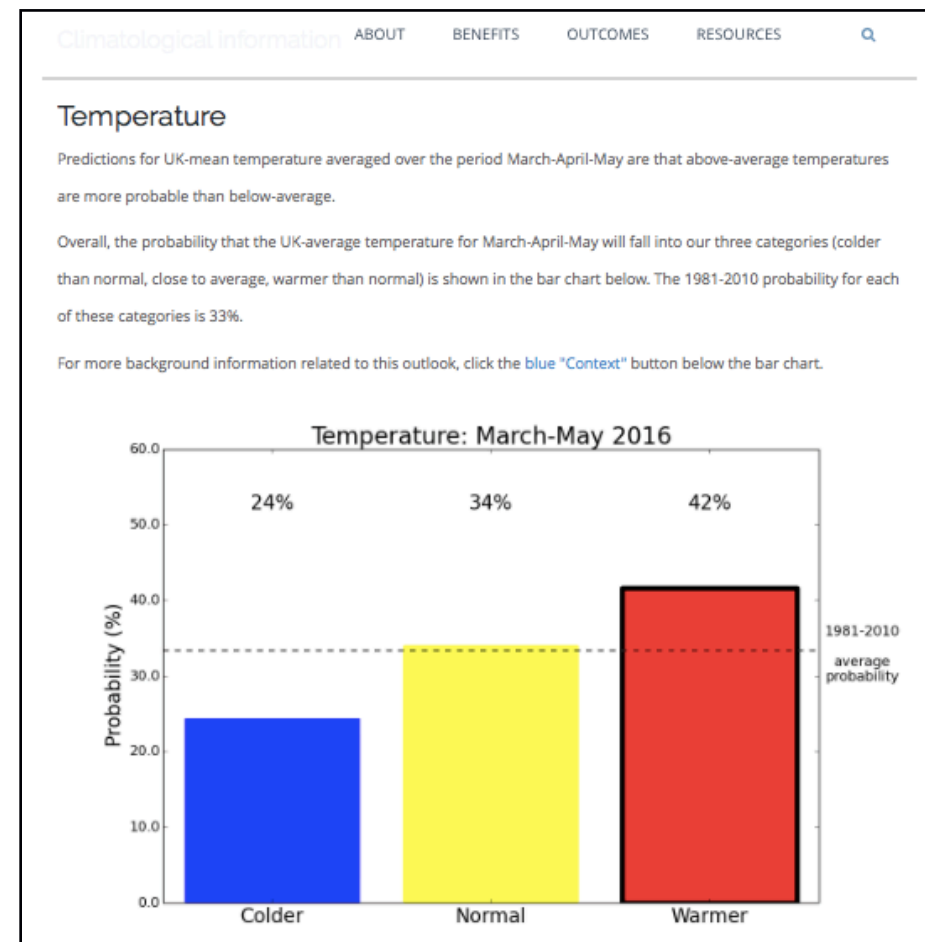
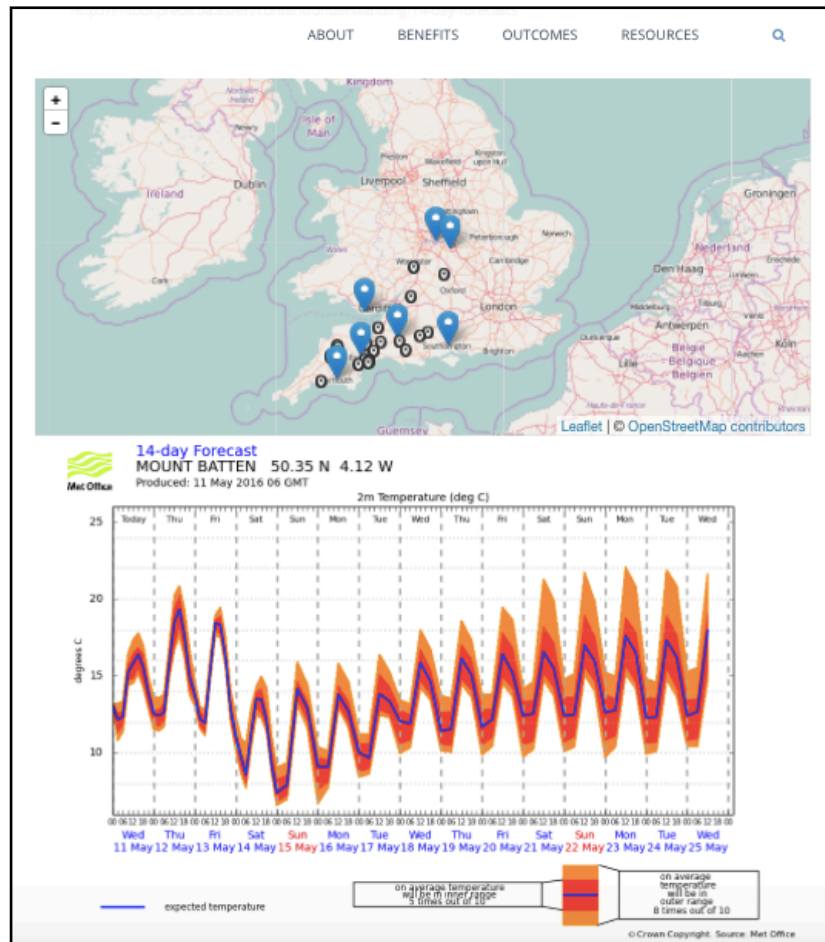




2. The Land Management Tool prototype

1st stage (2014-early 2015)	2nd stage (2015-2016)
Clinton Devon Estate (CDE) + 30 farmers with different farming enterprises	Involvement of the NFU 20 farmers involved in total (CDE+NFU)
SCF during winter months	14-days forecasts (T, P, W); Tailored SCF (P, T)
Interviews and survey Online feedback and mock- ups	Microsite - online feedback; Survey on visualisations; Workshop to refine content and visualisations; Development of the LMT App

2. The Land Management Tool prototype



Land Management Tool microsite

2. The Land Management Tool prototype

**Seasonal
climate
forecasts**



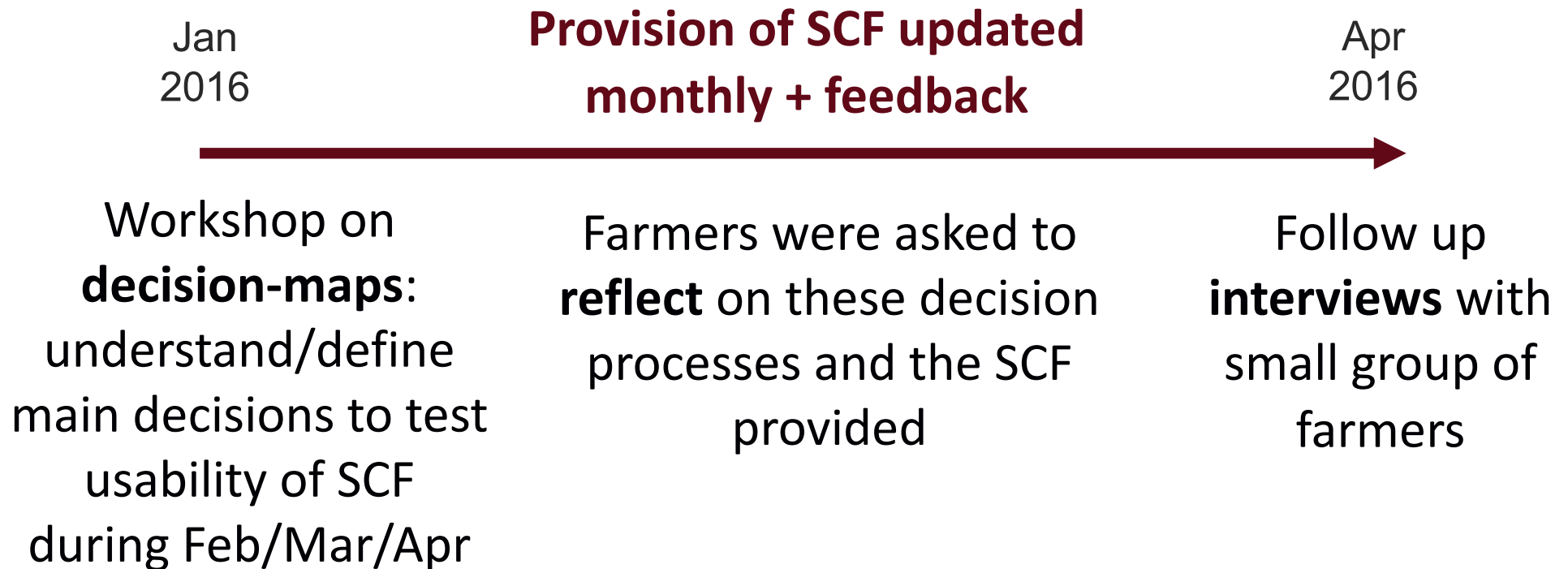
**14-day
forecasts**



Land Management Tool App

3. Assessing the value of SCF

- Novelty + reliability of SCF - qualitative approach

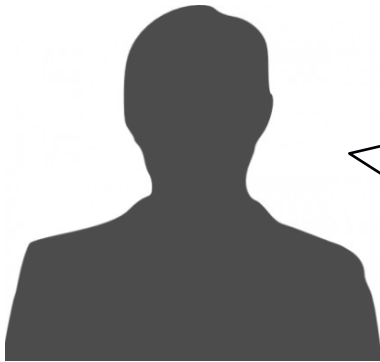




4. Main findings

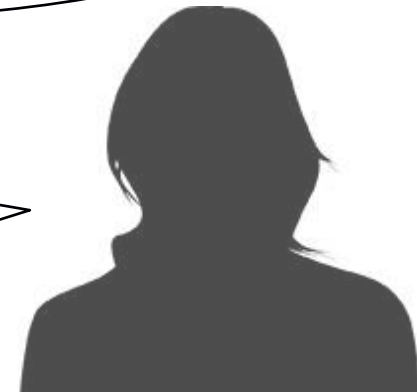
- Difficulty in **operationalising methodological** approach:
 - Decision-maps - difficult to discuss as decisions changed!
 - Complexity of decision-making processes – highly susceptible to change; adjustment to factors (weather, financial..);
 - Difficulty in linking a specific decision with potential value of SCF;
 - Re-adjustment: discussion on decisions pursued and reflections on the usability and value of SCF...

4. Main findings



“the prediction [from the SCF] was for a wetter but milder winter. It did focus us that (...) if we got a window [**for spraying**] we needed to take it because there would be **less dry spells** (...) So we did because the probability was that it was probably rain again.”

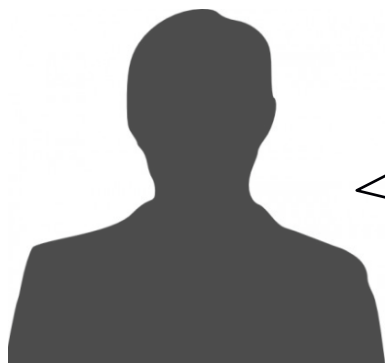
“I’ve not done **any contracts or invoicing** for anybody to go on any of my fields because the fields aren’t good enough, **they’re too wet**, and I knew that they would be too wet because it was going to be so **wet in February and March.**”



Difficulty in attributing an economic value to the use of SCF but **agreement on benefits** (e.g. potential avoided costs).

4. Main findings

- Unable to use it this winter due to weather conditions which conditioned their decisions (amount of rainfall);
- Others not interested due to their type of activities (e.g. rent the land to others; not too susceptible to weather);
- **Building trust in SCF** – time to develop confidence and allow farmers to translate the SCF information into the specificities of their land.



“The problem I’ve got with it [SCF] at the moment is I’ve not got enough confidence in it because it’s **not been running long enough** to actually overrule my gut feeling.”



5. Remarks and reflections

- Getting **farmers involved** is challenging - how can we motivate them beyond usual channels?
- **Complexity** of farming decision-making – what methods can we consider/develop to assess the value of SCF particularly in very complex decision-making contexts?
- Need to **assess value** over a longer period of time e.g. one year cycle but limitations in terms of SCF reliability...
- Farmers interested in continuing receiving forecasts but **limitations** of research context – follow up project?



Thank you

Questions?

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