

## **Dr Lisa Norton, UK Centre for Ecology and Hydrology – Supplementary written evidence (NSD0045)**

*Evidence from Dr Lisa Norton, Agroecology researcher at the UK Centre for Ecology and Hydrology, following her evidence session on Tuesday, 7 September 2021*

### **1. Concerning best nature-based options for agricultural land.**

Finding nature based solutions for reducing C losses and impacts on biodiversity of practices on agricultural land must include reductions of inputs (both inorganic fertilisers and pesticides). There are many vested interest in this sector and the food security message, that was so much of a driving force in recent years, supported those interests. It is essential that we switch practices away from those which rely heavily on such inputs towards practices which are more nature-based, which look to rely on fundamental ecological processes, not enhanced by chemical inputs, to support production. Concerns about the ability to produce enough food need to be held in balance with our knowledge of over-consumption and waste. We also need to take account of a huge differential in investment in science to support ecology based production enhancements (very limited) as compared to investments in chemical inputs.

### **2. Concerning what could be put in place to help ensure progress towards the implemental of nature based solutions**

I wanted to draw attention to what I feel is something of a lack of capacity for applied research in this area. In the US, universities have extension services which help to take research findings into agriculture. In the UK Scotland's Rural College incorporates practical farmer training and extension services alongside state of the art research in agriculture in a distributed set of locations across Scotland. We lack a similar model in England and whilst there are some excellent institutions like Duchy College, there doesn't seem to be a consistent model which could similarly serve the agricultural industry across our regions.

*13 September 2021*