



APPG Agroecology Inquiry Agroecology as a Nature Based Solution

APPG Agroecology wishes to seek the views of Parliamentarians, stakeholders, supporters, and the public on whether agroecology should be seen as a nature-based solution and, if so, the best way to integrate this within the existing and planned policy/legislature.

We support a transition to an agroecological paradigm for farming in the UK and elsewhere but recognise that there are several hurdles to clear in order to bring this about.

Central to our concerns is the lack of definition of key terms. Whilst we appreciate the clarity of your scoping document it is, to some extent it is irrelevant that this Inquiry has clearly defined its own meaning of 'agroecology' since it is the definition and perception of agroecology 'out there' in the policy and grant-making landscape that matters.

Likewise, there is a huge gap between the definition of 'nature-based solutions' in spirit versus how it is defined, and acted upon, by government, the agricultural business sector and grant-makers.

The question before the APPGA seems to be whether to ignore the inconsistencies and risks associated with acquiescing to the idea of nature-based solutions in pursuance of much needed funding or to challenge these and push for separate funding stream for a well-defined agroecology and agroecological projects.

Definitions

Although it has become a popular mantra, the concept of nature-based solutions is ill-defined and is being perversely interpreted by some sectors as a separation of relatively protected "natural areas" from "production agriculture".

This is exemplified by the discussions around "land sparing vs land sharing". All the various versions of this notion promote some form of "sustainable intensification" of agricultural production using a mixture of so-called "agroecological" and/or "regenerative" techniques " (such as minimum or no till, cover crops, livestock grazing) as well as new technologies such as "precision breeding/farming", "new plant breeding methods" and "gene editing", as well as data farming and robotics.

It is not true to suggest that agroecological techniques are not recognised in these kinds of scenarios. ELMs is built around a list or menu of techniques, many of which are framed as agroecological and/or regenerative.

What is not acknowledged is the farm system approach which in essence makes, for example, organic, a truly "nature-based system".

It's important to note that agroecology also suffers from a lack of a formal definition or criteria which would assure that we all mean the same thing when we say 'agroecology'.

It can, for example, be seen as a social movement built around the principles of equity and food sovereignty. Or it can be seen as a menu of agronomic techniques which sidesteps these principles and can be applied or rejected indiscriminately – the antithesis of a values-driven, nature-based system approach.

Who gets the funding?

Whilst we wish to see greater investment in agroecology, we are uncertain whether mechanisms such as the £10m [Natural Environment Investment Readiness Fund](#) referenced in the scope of this Inquiry, are the best way to achieve that goal.

This fund, in theory, was open to farmers. But the crucial point is that it was a fund aimed specifically stimulating future investment – at creating a pipeline of projects for the private sector to invest in – rather than investing in projects that directly benefit the farmers or the rural/agricultural environment.

The [Farming Investment Fund](#) also links profitability with “environmental good”. It includes a Farming Transformation Fund but the supported solutions are tech-based (e.g. “precision farming”) and for the most part support a piecemeal, business-as-usual approach to agriculture and sustainability.

In both these examples, a large agricultural concern, wishing to apply one or two attractive modalities from an ‘agroecological’ menu to its business could quite conceivably have been given a grant from the fund.

The menu approach dominates government dialogue and frames agroecology as one of the “tools in the toolbox’ of sustainability. But it also plays to the notion that all tools are equally beneficial and equally benign and that, in the name of urgency, sustainability, biodiversity loss, climate change, all have an equal place in sustainable agriculture. In this scenario all these different tools – devoid of values and being merely functional – can (and should) coexist.

This notion of nature-based solutions as primarily an economic opportunity with added environmental benefits is widespread. For instance, in the EU, nature-based solutions are [framed](#) as a tool that can stimulate new business opportunities and bolster Europe’s position as a leader in world markets.

The recent [Dasgupta Review on the Economics of Biodiversity](#) emphasises the “quick win” nature of investing in natural capital.

In this landscape of equal tools, those that promise of “quick wins” will always gain the advantage when it comes to funding.

Gene-editing as an agroecological tool

Beyond GM specialises in raising awareness around issues connected to biotechnology and gene editing in agriculture.

We believe that the government push for deregulated gene editing and calls for greater investment in this area, represents a real threat to the adoption of agroecology and that the perception of gene editing (and other high-tech options) as a nature-based solution is making it harder for a true nature-

based solutions such as agroecology to get a foothold and to get the funding that they need to proliferate.

From our perspective, the tools in the toolbox narrative is what lies at the root of an emerging belief that gene editing can have a role in organic, regenerative and agroecological farming. It is a dangerous and invidious narrative which, in spite of the initial promise and the optimism of civil society groups around 'green' agendas, is pivotal in several key sustainability UK government policy documents:

- The use of gene editing was enshrined in the UK government's Health and Harmony vision for agriculture and "Future Farming Policy" although it is hidden behind names such as "precision farming", "agri-tech", "new plant breeding methods" and "the bioeconomy".
- It is a key part of the European Commission's Farm to Fork 2030 strategy.
- It is central to the NFU's Achieving Net Zero strategy.
- It will be part of the focus of Part 2 of the National Food Strategy, due July 2021.

It is true that agroecology is mentioned in the Agriculture Act but not in a context that is at all meaningful.

In each these scenarios agroecology is seen as a menu of options and it is hard to see how funding gained under such criteria will benefit the whole systems approach needed to make an agroecological transition.

In contrast, the case made by the [English Organic Forum](#) for payments under ELMs and other schemes is compelling and is the best available for arguing the case of whole system-based agroecology. By definition, the organic system also excludes all forms of genetic engineering technologies.

Aim higher

While we sympathise with the urgent need for funding we would like to see the agroecological community aim higher than simply trying to ride the nature-based solutions train.

Some civil society groups are already challenging this concept.

A number of civil society organisations are now rejecting the term Nature-based solutions as meaningless and even distracting.

The Climate Land Ambition and Rights Alliance (CLARA) which represents leaders in the climate justice movement, in rainforest and temperate/boreal protection movements, and in land-rights and agroecological movements is [deeply critical](#) of ill-defined nature of nature based solutions.

On the eve of the 2019 COP25, a group of civil society organizations circulated a talking-points memo to guide their engagement during the global summit. Among its [recommendations](#) was an agreement not to use the term "nature-based solutions" at all.

In an effort to add some clarity, the International Union for Conservation of Nature (IUCN) is in the midst of a [process](#) (set back somewhat by the pandemic) to create a "global standard for the design and verification of nature-based solutions." But it should be noted that IUCN also proposes to use gene editing, gene drives and synthetic biology as "quick wins" for conservation goals.

To further the cause of true agroecology will require bolstering its position as a solution of greater merit rather than just another tool in the toolbox.

If agroecology is the paradigm shift needed for sustainable agriculture then APPGA should demand that it is financed through a discrete fund that excludes “quick wins” and techno-fixes and requires grantees to meet a strict values-based definition of agroecology.

In short:

- Agroecology is only a nature based solution when it is practiced as a whole farming system, as in the case of organic systems.
- When ‘agroecology’ and ‘regenerative’ are seen and presented as a collection or menu of techniques they are not ‘nature based’ and are not a solution. Instead, they serve to facilitate the modified business as usual, sustainable intensification and land sparing approach.
- In this context agroecology becomes part of the proposed paradigm that promotes intensification through e.g. genetic engineering technologies.
- APPG Agroecology should direct resources into helping to clarify the definition and description of principled, whole system agroecology and take note of the threats posed by e.g. gene editing and synthetic biology.
- APPG Agroecology should promote and build on the case for organic systems as the pre-eminent agroecological system.
- APPG Agroecology should lobby for government to provide a discrete agroecology funding platform for a whole system, values-based agroecological transition that excludes the “quick wins” and techno-fixes so lavishly funded by other platforms.

**Beyond GM
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