

Dear Mr Drew,

I am glad to note that you have supported the Amendments 41, 49, 50, and 72 in the Committee stage of the Agriculture Bill, 30th Oct. I agree with your purpose to bring substance to the Bill, and am sure it is difficult to argue Mr Eustice and his colleagues' derogatory statements and insistence on not allowing binding principles in the Bill, thereby leaving much to a leniency for abuse of food production and environmental services.

However, on reading through the Hansard transcript for Sittings 5 and 6, I note that you are of the opinion that *".... agro-ecology is a new term, but in many respects it is revisiting the past: it is about how we have always tended to consider farming in certain parts of the world as traditional."*

I believe it is a serious misjudgement to refer to farming practices of the past in relation to this parliamentary debate. I do not believe that that is what Agroecology is. And it certainly is not 'traditional', or have anything to do with 'subsistence farming', as some tend to fear. It is an agriculture that is ecologically sound and economically profitable. Any reference to history should be in terms of centuries of mistakes in farming practice, which are known to degrade soil and desertify land, and has caused the demise of many civilisations to date.

It is the aim of my letter to disabuse you of this speculation which I think is circulated out of fear of change within the farming industry, who perhaps you are mostly being influenced by. This attitude is detrimental to the argument for the benefits of agroecological methods that restore a living and co-operating, sustainable-farming-landscape. Your comment was a negative contribution to the argument for Amendment 41, which failed in this stage.

Your following sentence *"How we maintain that landscape—a farmed and managed landscape—depends on a relationship between what is farmed and the environment being managed by those farmers."* ... reiterates the impression. This does not acknowledge the sociological, ecological, hydrological, soil and biological sciences that farmers now have to relate to, to apply these pragmatic methods to their farms and communities. This is new methodology with a new guiding principle. And, a new remit for land stewardship where we learn from the past, not reinstate it.

By default, agroecological methodology, which is a wide spectrum of practices, all share the common cause of Regenerative or Restorative Agriculture. Methods that are being proven to regenerate soil, water quality, flood prevention, woodlands, biodiversity and food quality provide opportunities for practitioners to also enjoy economic benefits and farm-business prosperity. Businesses that employ these methods and co-operate with neighbours already benefit nature's processes, and are reversing the desertification of landscapes. Measurement models of the economic benefits are recently available (See below).

Also by default, agroecological methodology with its wide spectrum of site specific practices, result in sequestered carbon. Both the IPCC sr15 report of Oct.9th and the Royal Society 'Greenhouse Gas Removal' report of Sept.2018, impress this upon us - that ecological and biological solutions must be implemented within 12 years, and if that isn't sufficient, only then technical fixes may be required.

The word desertification may shock you, but it is happening in our landscape already with the loss of plant species, soil, habitat, and wildlife numbers in the Severn Vale and Cotswold Edge. It is a creeping scourge. Growing up just outside Wotton-Under-Edge in the 60s and 70s, moving away and then returning to the area, it is very noticeable to me. Not noticeable to many though; so, when people who have moved into the area think we are lucky that it is so green here, I'm afraid I disabuse them of that also. The land is much less able to cope with impacts of the changing climate.

As a generalisation, the UK is made up of a geography of 'hill and vale landscapes' predominantly to the West of the country, and 'wide horizon landscapes' predominantly to the East. Concurrently, small mixed farm businesses predominate in the West and large intensive arable farm businesses predominate in the East. This is easily evident in your own constituency being divided by the Cotswold Edge. Just standing on Coaley Peak demonstrates this.

Agroecology as methodology, and regenerative agriculture as principle, needs to be integrated into this Agriculture Bill, because both current styles of farm business ('intensive conventional' and 'small-farm mixed') will necessitate different restorative actions to regenerate their farming landscape to be sustainable, profitable, living and cooperating, eco-agri-food-systems of the future. This has been addressed in France, whose Agroecology Bill was made law in 2016. The direction of reform of the EU agriculture policy is towards the regenerative principle. Many believe we particularly need to follow this trend for UK small farm prosperity, be they 'Upland Farmers' or hill and vale farmers, and despite Brexit.

Please note this meeting in Parliament that perhaps you could send a staff member/researcher to, if you cannot attend yourself. "The All Party Parliamentary Group on Agroecology for Sustainable Food and Farming are holding the discussion on how industrial agriculture and inefficient carbon-intensive outputs contribute to climate change, and how low input, agroecological methods of farming are needed if we're going to reach our commitments in the Paris Agreement and Climate Change Act. **Tuesday 13 November 4.30pm - 6pm in Committee Room 18, Palace of Westminster.**" (SUSTAIN website.)

As you know, many international agencies have determined that conventional intensive agriculture has for many years been a leading contributor to soil health depletion, a polluter of river water systems; of coastal waters and natural fish and seafood populations, and carbon emissions. Its contribution to climate emissions is also well documented. This is information that has been available for so very many years and we all can quote figures for it. Finally, we recognise it as a given thanks to the IPCC sr15 report of Oct 9th.

Agencies and research organisations are diligently finding solutions and advising policy makers like yourself to take onboard the necessary paradigm shift and understand these new methodologies and principle which can reverse the crises while securing food supply. This, therefore, is a 'step forward' in time, not a 'step back into history' as certain UK farming lobby organisations would seemingly have convinced you.

As in most paradigm shifts, terminology may be inconsistent, but a suitable policy advisor (perhaps from CAWR) would help you on that. Agroecology really does need mainstreaming into an integrated agriculture policy as soon as possible.

From my private research, most new thinking about agroecology is evolving internationally, predominantly in challenged developing countries, and they are succeeding. But, not in the UK and USA so much. Both governments continue to tread a path of non-sustainable agriculture under the aegis of the phrase 'we have to feed the world' and corporate profitability. The UK farming community continue this mistake, whilst in developing countries communities are making the changes and seeing to their own needs (apart from where Western corporate land-grabs occur, of course, and we know what that leads to), and is a growing discipline.

Soon we will be left behind with a desertifying landscape and reduced food security, rather like it has crept up on Spain, and Iceland. Please review the world-wide trends so that you can realistically influence policy-making and debate in this country, and if Labour gets into power you can make the changes this country desperately needs to adjust to, as I'm sure the Tories will fail to do. "The challenge for those championing agroecology is how to upscale these successes to compete on the level of industrial farming." (ref: British Ecological Society, see below.)

Please acknowledge this 'step forward' to regenerative agriculture and agroecological methods so that the farming community can include the new and appropriate sciences that will a) address climate and ecological crisis; b) revive living and cooperating rural communities, and farm prosperity.

Please see the references below. I hope they provide you and your researchers with new contacts and information to change your current opinion that Agroecology is a 'step back'. The list below represents a very tiny proportion from the archive of research and reports circulating on this topic.

1. SCIENTIFIC AND ECONOMIC FOUNDATIONS REPORT 2018

"The Economics of Ecosystems and Biodiversity for Agriculture and Food" (TEEBAgriFood), a new study launched by UN Environment on the occasion of World Environment Day 2018, demonstrates how to capture the complex reality of today's diverse and intertwined "eco-agri- food" systems in order to evaluate their performance in a holistic manner to support decision-making, avoiding the risks and limitations inherent in simplistic metrics such as "per hectare productivity".

http://teebweb.org/agrifood/wp-content/uploads/2018/06/Foundations_vJun6_v2.pdf

2. CENTRE FOR AGROECOLOGY, WATER AND RESILIENCE.

Research being undertaken by the Centre for Agroecology, Water and Resilience. CAWR contribute to APPG Agroecology in Parliament. Please see this page and video:

http://www.campaignforreal farming.org/wp-content/uploads/2018/10/Michel_P_Pimbert-Global-Status-of-Agroecology.pdf

<https://www.coventry.ac.uk/research/areas-of-research/agroecology-water-resilience/-policies-and-institutions-for-resilient-food-and-water-systems/>

3. BRITISH ECOLOGICAL SOCIETY.

“Productivity data compiled on these small hold urban farms found their efficiency ratio to be 15-30, while industrial farms in the UK and USA average 1.5, meaning in some instances these small farms are 20 times more efficient than industrial farms. Not only are these systems more efficient, but they are more resilient too, with polyculture and agroforestry systems proving far better equipped to withstand extreme climate events than monocultures. The challenge for those championing agroecology is how to upscale these successes to compete on the level of industrial farming.”

<https://www.britishecologicalsociety.org/mainstreaming-agroecology-is-this-the-future-of-farming/>

4. UN-FAO. SAVE AND GROW IN PRACTICE – A GUIDE TO SUSTAINABLE CEREAL PRODUCTION. 2016

“But the study offered another, more optimistic scenario: with sufficient levels of investment in *increasing yields sustainably on existing farmland*, the resulting higher productivity would keep inflation-adjusted cereal prices in 2050 very close to those of 2010 [Figure 1.3]. Lower prices for maize would lead to a drop in the cost of milk and meat, while the lower cost of rice would relieve burdens on net food importers. Overall, productivity gains would improve food security in all regions, reducing the population at risk of hunger globally by around 40 percent²¹.

The transition to sustainable crop production intensification requires fundamental changes in the governance of food and agriculture. Making those changes depends on a realistic assessment of the full costs of making the necessary transitions. It also requires the careful adaptation of sustainable farming practices and technologies to site-specific conditions.

An enabling policy, legal and institutional environment should strike the right balance between private, public and civil society initiatives, and ensure accountability, equity, transparency and the rule of law. Fao’s vision of sustainable food and agriculture can guide the framing of national policies, strategies and programmes aimed at facilitating the transition to cereal production intensification that is highly productive, economically viable, environmentally sound, and based on equity and social justice.”

<http://www.fao.org/3/a-i4009e.pdf>

5. THE CARBON FARMING SOLUTION – A GLOBAL TOOLKIT OF PERENNIAL CROPS AND REGENERATIVE AGRICULTURE PRACTICES FOR CLIMATE CHANGE MITIGATION AND FOOD SECURITY. Eric Toensmeier, 2016.

“Restoring carbon into the soil, where it belongs, and out of the atmosphere, where it is causing havoc, is one of the few win-win solutions to global (as well as local) problems and is the underlying theme of this book”. Dr Hans Herren.

6. Please see this article below of 8th Nov. for its pertinence, if you haven’t already read it.

https://www.theguardian.com/environment/2018/nov/03/stop-biodiversity-loss-or-we-could-face-our-own-extinction-warns-un?CMP=share_btn_fb&fbclid=IwAR302qP1Gwy-NA1ynHKhoYJb4WvGVJWsD8D-RSYJd4-mP57ss-kjIKZmhXQ

Yours sincerely,

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