

## GM Freeze submission to APPG Agroecology Inquiry Agroecology as a Nature Based Solution

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[GM Freeze](#) is the UK umbrella campaign for a responsible, fair and sustainable food system, focused on concerns around the use of genetic engineering in food and farming. Our member organisations include large NGOs, scientists, farmers, retailers and grassroots campaign groups.

GM Freeze joined the APPG Agroecology Advisory Group in 2015 and is still listed on the [group's website](#). We very much support the group's aims and would be pleased to work with the group's officers and secretariat to improve awareness and understanding of the debate around the use of genetic engineering in food and farming. However, we have been very disappointed by the group's unwillingness to respond to recent promotion of genome editing, including through [attempts to amend the Agriculture Bill](#) to give Ministers the power to decide what does, and does not, count as a GMO; and [Defra's Consultation on the Regulation of Genetic Technologies](#). We are responding to your inquiry to highlight specific concerns about the links between "Nature Based Solutions" and the promotion of genetic engineering.

Although definitions for the terms Agroecology and Nature Based Solutions are included on the [inquiry page on your website](#), neither of these definitions is universally adopted. Indeed, both terms are highly vulnerable to co-option by actors promoting the "tools in the toolbox" approach beloved of GM lobbyists.

Current debate around genetic engineering is heavily focused on the newer gene (or genome) editing techniques and language is a key battleground. Terms such as "precision breeding", "speed breeding" and "New Plant Breeding Techniques" have all been coined to present genetic engineering as a simple 'helping hand for nature'. Even gene drives, which seek to overpower natural laws of inheritance to super-charge the spread of artificially altered genes through entire species in a few generations, [are presented as "a natural process"](#).

[Defra's Consultation on the Regulation of Genetic Technologies](#) is built around the notion that, because gene editing techniques are more targeted than older GM methods, they are so comparable with nature that they require no additional regulation whatsoever. In fact, such techniques involve many complex molecular modification steps, each of which takes place in the lab with significant potential for unplanned DNA changes, unexpected effects from both planned and unplanned DNA changes, and unanticipated impacts when released into the ecosystem.

Genetic engineering has played a significant role in the increasing industrialisation of farming. It is a trait-based approach supported by a tightly controlled patenting regime that is completely at odds with the need to address systems-based problems with whole system solutions. There is no place for genetic engineering in agroecology, but we are concerned that the pursuit of "Nature Based Solution" status will challenge this boundary and undermine the ecological principles that lies at the very heart of agroecology.

This response is brief and limited by timing issues. We would, however, be pleased to discuss the issues raised further and would be delighted to engage with APPG Agroecology over wider concerns around the UK and International agenda for the deregulation of new GM techniques.

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