

The Landworkers' Alliance

Agroecology:

Food, Farming, and Forestry for People, Climate, and Nature

This document is for stakeholders ahead of the UNFCCC COP26 to outline the commitments government should make regarding farming, tree planting and land use.

We are calling for recognition of the contribution that agroecological farming, sustainable forestry and better land use can make towards our commitments to reduce emissions, sequester carbon and build resilience. We want to see clear pathways and targets in our National Climate Action Plans and our National Determined Contributions for a transition to agroecology and sustainable forestry as part of our commitment to achieving climate justice.

Our food system is responsible for 30% of carbon emissions. The Committee on Climate Change calculates that agriculture in the UK is responsible for 10% of economy wide emissions. However, direct emissions are only part of the picture. To understand the full impact of food and farming, we have to account for the contributions of the food system in packaging, waste, transportation, refrigeration, and of land-use change overseas - the deforestation and cultivation of land for production of commodity crops and animal feeds. Up to 70% of deforestation globally results from growing commercial food crops such as soy, maize, sugar cane and palm oil. When all emissions from the wider food chain are included total emissions from food and farming in the UK increase to around 30% of economy wide emissions.¹

Our agriculture and land use systems must be able to produce sustainable, affordable and nourishing food, as well as fibre, energy and resources. Furthermore, they must do this whilst sequestering any carbon emissions that cannot be prevented by other sectors of society. It is not enough for agriculture and land-use to be net-zero alone. We must avoid land use changes that reduce overall production of food, fuel and fibre. Reducing UK production will lead to increased imports of food and resources produced elsewhere, thereby outsourcing responsibility for emissions onto other countries and externalising our impact rather than reducing it.

Agroecological farming and forestry are solutions. Agroecological land use plays a fundamental role in mitigating and adapting to the impacts of climate change. When managed in a way that promotes soil health, biodiverse plant growth, and trees, then agricultural lands have the capacity to sequester CO₂ from the atmosphere. Soil quality is integral to this. Fertile, well-structured soils have a much higher capacity to sequester CO₂ than degraded soils. In addition, agroecological farming methods practiced worldwide have been shown to be much more resilient in the face of severe weather like storms and droughts, and major pests and diseases.

Agroecological farming reduces emissions from the food system by:

- Promoting soil management that holds carbon
- Incorporating diverse ecological habitats into agricultural systems (including woodlands, trees, hedgerows, wetlands)
- Reducing imported animal feeds that may have been grown on land that had ecological and social value - whether this be forests, peasant farming systems etc
- Eliminating atmospheric pollution from nitrate fertilizers and slurry
- Managing livestock in a climate friendly way to reduce methane
- Localising food supply chains to reduce transport, waste, packaging and refrigeration

The world is facing a global climate and ecological emergency. But solutions exist. This year at COP26 the UK can inspire countries across the world to think about land use, bringing an innovative set of commitments to the table in our NDC and wider policy areas. We want to see ambitious programmes to improve our land use and reduce emissions from our food system. We specifically want to see targets for agroecological transition, local food production, better forestry and a reduction in our global Land Use Change footprint from animal feeds and industrial monocrops for bioenergy production.

Ten steps towards net zero - food, farming and land-use

1. **An ambitious programme to reduce direct CO2 emissions.** First and foremost, we must make dramatic and immediate reductions in fossil fuel emissions across all aspects of our economy. Nature Based Solutions for sequestering carbon will not be enough to reach net zero without reducing our emissions.
2. **Reducing direct emissions from farming.** We must reduce CO2 emissions from the agricultural sector by creating strict regulations on unsustainable agricultural practices, such as over-application of fertilisers and untreated slurry and use of heavy fossil fuel machinery. We also need to protect peatlands to halt burning and draining of peat and ban the harvesting of peat for horticulture.
3. **A transition to localised agroecological farming.** Re-localisation of the supply chain reduces emissions by creating more efficient food distribution systems. Local food systems not only reduce transport emissions, but can often reduce emissions from processing, packaging, refrigeration and waste. Localised food systems are shown to reduce food waste at all points in the food chain.
4. **Less and better livestock production.** We advocate the elimination of factory farmed, intensive meat and a transition to less but better “default” livestock production. Not all livestock production is harmful, and some methods build healthy soils that sequester carbon. The choice is not plant vs. meat but industrial grain fed meat vs. agroecological livestock raised on pasture, by-products and waste. Action is needed to: a. Set limits or tariffs on imported feed to help stop destruction of forests and ecosystems, matched with incentives for pasture-fed livestock farming and localised, sustainable production of non-grain animal feeds, like lucerne. b. Support “default” livestock and the integration of livestock on arable rotations. c. Invest in safe and legal waste food treatment for monogastrics. Pigs and chickens can be fed safely on waste food and by products, becoming recyclers, rather than net consumers of human grade food.
5. **Land sharing instead of land sparing.** Plans to ‘intensify’ agriculture so that we can produce more food on less land in order to “spare land for nature” are based on a false logic. It has been proven that farms increase, rather than decrease area under cultivation when they adopt intensive techniques. Intensifying industrial farming increases pollution and pesticide damage, leads to loss of farmers and their skills, and doesn’t address systemic problems. Agroecological farming integrates nature and wild areas into productive landscapes, creating win-win models for people, nature and climate.
6. **Incorporation of trees into a living, working landscape.** Planting at least 4 million ha of trees in the UK is essential to sequester carbon. The majority of these trees should be incorporated into working woodlands and skilfully incorporated into productive landscapes in a clear programme of support for agroforestry and silvopasture and a revived UK forestry industry.
7. **No to false solutions.** We support nature based rather than technological solutions to the climate crisis. We have serious concerns about Bioenergy Carbon Capture and Storage Schemes (BECCS). Large scale-single species plantations typically associated with BECCS are shown to have devastating ecological and social effects, and it is unwise to pin our hopes on technologies that are unproven at scale when the risks are so high. We also oppose industrial “Climate- Smart Agriculture” approaches, like GM seed, robotics and vertical farming because they encourage monocultures with unaffordable environmental externalities, undermine prices for farmers practicing sustainable systems, and fail to address the core challenge of integrating carbon sequestration and environmentally beneficial land-use with sustainable food production.
8. **A Just Transition in Agriculture.** Many farmers and workers in the food chain will need to learn new techniques, skills and knowledge in our path towards reducing emissions. The effort involved in learning and investing in this change should not be underestimated. It is important that we don’t lose farmers, destroy livelihoods, and lose our food production capacity both nationally and internationally. Government support for grants and training programmes to support transition are essential.
9. **An international climate justice agroecology programme.** Development funding must support peasant farmers and indigenous people to adapt to climate change through agroecology. The Climate Fund for Nature should support restoration of ecosystems by local peasant farmers and indigenous people. This support should be given using a climate justice approach, respecting food sovereignty and land rights. We must bring the environment and land rights to the forefront of trade negotiations in a way that limits our “global footprint”.
10. **Food Governance.** Our approach to our land use system respects the concept of Food Sovereignty, meaning that citizens play an active role in creating our food and land use systems. We support active citizen engagement in the development of future agriculture, land use and climate policies.