



Organic - part of the solution!

CLIMATE CHANGE: agriculture at the epicentre

Agriculture is a big contributor to climate change, accounting for 10-12 percent of global GHG emissions. At the same time, agriculture will be one of the first sectors to feel the effects of climate change; already now, rising poverty and land abandonment are occurring due to deterioration in land quality and ecosystem health. The contribution of organic agriculture to climate change mitigation and adaptation is one of its great strengths, and must not be overlooked.

MITIGATION effects of organic

- Organic farming sequesters carbon because it is based on building soil fertility and structure through the incorporation of carbon-rich organic matter (Soil Organic Carbon or 'SOC'). The IPCC has identified increasing SOC in agricultural systems as an important mitigation option. The combination of organic cultivation methods and reduced tillage achieves the best results of any system for soil conservation and carbon sequestration.
- Banning chemical fertiliser has a massive impact on carbon and nitrogen emissions: no less than 1 percent of fossil energy globally is used in the production of chemical nitrogen fertilisers. The decreased overall nitrogen input of organic farms also reduces N₂O emissions.
- It makes perfect sense to do as organic farms do and exploit the synergy between crop and livestock operations, avoiding the need for fertiliser production and disposal of animal effluent.
- Organic farming as a system approach addresses several sustainability issues – it therefore is a climate change mitigation measure without unhealthy side effects on other areas, such as biodiversity or animal welfare.

ADAPTATION effects of organic

- Organic production is less vulnerable to droughts and flooding because high SOC binds the soil together, improving water infiltration and retention, and preventing erosion.
- The high biodiversity characteristic of organic systems improves adaptability by giving us a wider pool of genetic resources to work with.
- Organic farming nurtures ecosystem health by reducing toxicity and encouraging biodiversity, leading to better natural ecosystem adaptability and decreased yield variability.
- Organic production protects farm economies from climate change by dispersing risk through multiple production activities, reducing input costs and minimising exposure to volatile markets.

Tackling climate change effectively with EU Policy

The EU must make use of policies like the Common Agricultural Policy, as well as research programmes to develop and mainstream climate-friendly practices. Organic farming offers a model for environmentally-sound practice in agriculture, with its European-wide standards and comprehensive approach, and should therefore be prioritised. On-farm breeding programmes should consider the need for diverse genetic resources to allow for adaptation to climate change.