

CLIMATE CHANGE AND THE RURAL ECONOMY

LANDOWNERS, FARMERS AND RURAL BUSINESSES ARE CHANGING HOW THEY WORK TO HELP MITIGATE CLIMATE CHANGE



GREENHOUSE GAS

Rural land managers are reducing greenhouse gas emissions by:

- reducing inputs such as fertilisers
- using precision farming
- using anaerobic digestion to treat farm and animal wastes and produce energy
- rotating crops with N-fixating legumes
- selecting adequate breeds
- improving the nutrition of livestock
- improving manure storage and spreading

CARBON

Rural land managers are conserving carbon by:

- protecting organic matter and restoring carbon in degraded soils
- diversifying crop rotations, including leguminous crops
- adjusting silvicultural systems and rotation lengths
- applying conservation agriculture to reduce soil disturbance
- working towards afforestation
- using integrated farming
- adjusting to shifts in the distribution of pests and diseases

FOSSIL FUELS

Rural land managers are replacing fossil fuels by:

- using energy crops, forest biomass and manure to produce biofuels and biogas
- managing forests sustainably to increase forest growth
- producing biofuels using break crops within the annual arable rotation
- increasing the proportion of perennial second generation energy crops
- considering the various renewable energy options
- using commodities from agriculture and forestry in the production of industrial materials

WATER

Rural land managers are maintaining water resources by:

- adapting crop rotation to make the best use of available water
- investing in farm water storage, including on-farm reservoirs
- applying sustainable drainage systems such as filter drains and grass buffers
- using effective methods of irrigation such as drop irrigation systems
- adjusting sowing dates according to temperature and rainfall patterns

ECOSYSTEMS

Rural land managers are providing ecosystem services by:

- creating migration corridors and site management
- conserving grassland
- maintaining, restoring or creating wetlands, ponds and water meadows
- improving balance of species and age classes in relation to site
- monitoring and controlling alien species
- applying the principles of sustainable forest management

ADAPTATION

Rural businesses are adapting for climate change by:

- increasing on-farm and off-farm diversification under rural development plans
- improving building standards to provide greater resilience in extreme events
- applying environmental land management to maintain and enhance essential rural tourism
- using integrated greenhouse gas accounting systems
- applying speculative planting to minimise yield variability
- diversifying energy supply and reducing energy use