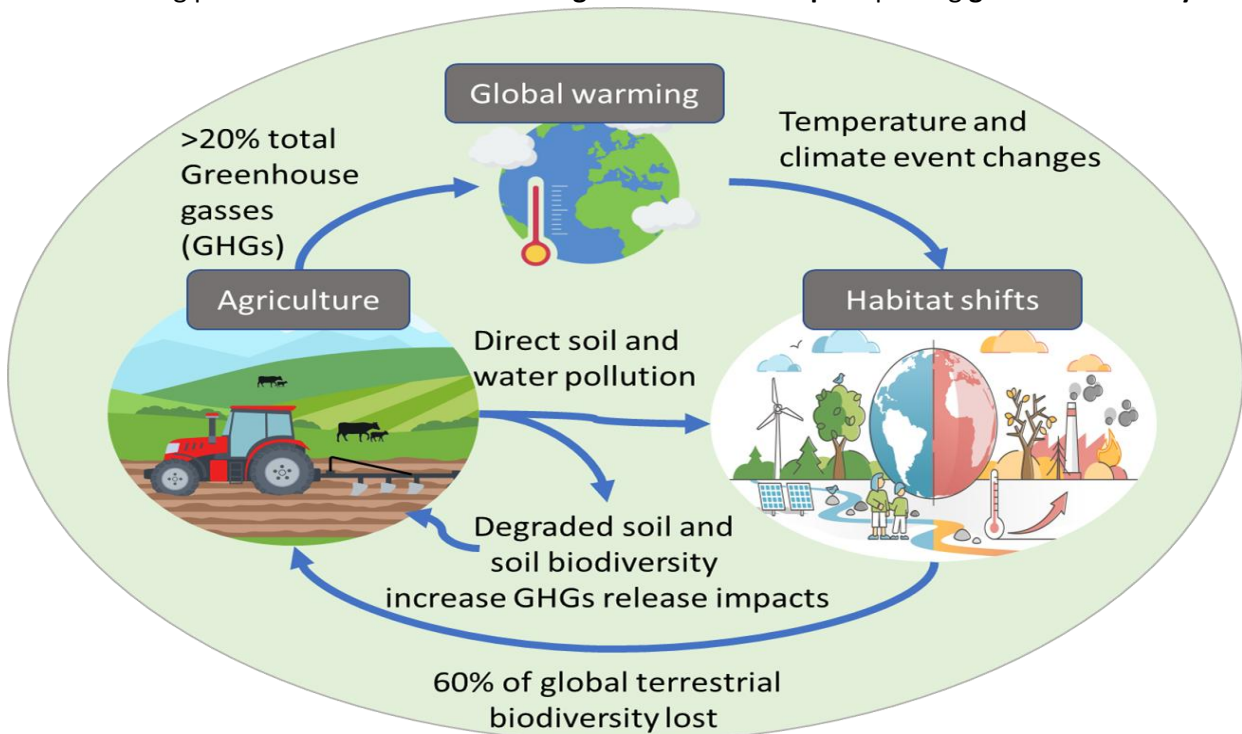


Biodiversity, land sharing and land sparing

Maintaining and increasing our levels of **biodiversity** plays important roles in **global ecosystem functions, ecosystem services, mitigation and resilience to climate change and food security**

Globally more than 50% of land is farmland so agriculture has a big responsibility and opportunity

Farming practices can lead to **circular negative feedback loops** impacting **global biodiversity**



By **considering nature** via environmental strategies we can **increase biodiversity and gain benefits**

Diversify crops more locally adapted species



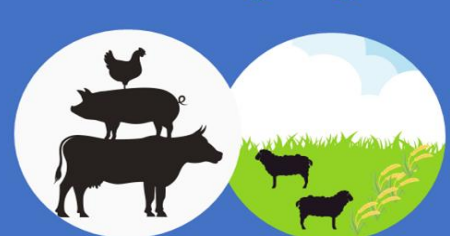
- Increase plant biodiversity
- Increase insect / bird species
- Diversification of habitats
- Increase resilience to climate
- Increase pollination source

Species rich swards and hotspots



- Increase plant biodiversity
- Increase insect / bird species
- Diversification of habitats
- Increase pollination source
- Natural biological controls
- Increase resilience to climate
- Sequester more CO₂

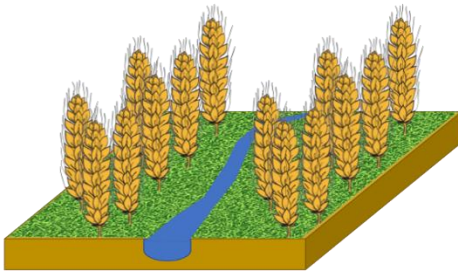
Mixed farming and mixed grazing



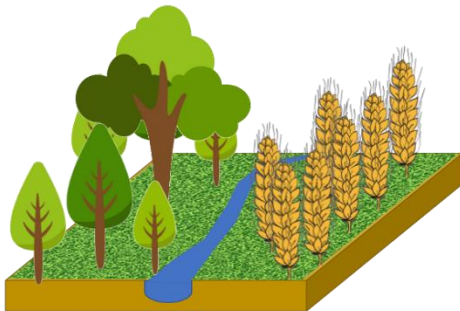
- Creates unique habitats
- Can reduce fertiliser input
- Increased resilience to disease
- Soil health and fertility
- Dung beetle food sources
- Reduce emissions

Taking species rich hotspots, a step further is essential what occurs in land sparing strategies

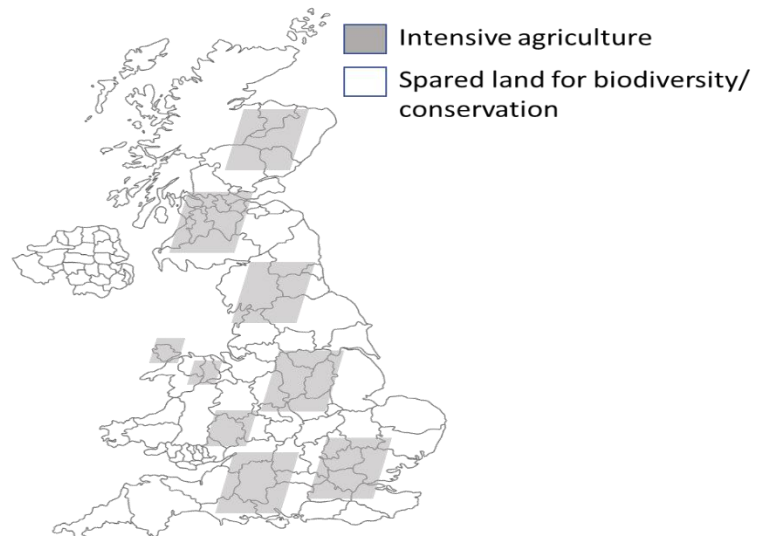
Field level
Production focus



Land spared for biodiversity



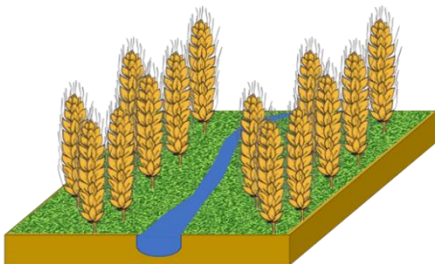
Regional level



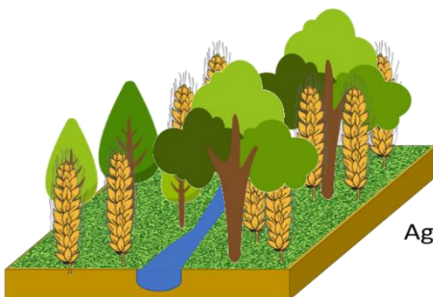
Note this is just an example of concept and not a representation of likely patterns based on any knowledge

The opposite strategy to sparing is land sharing

Field level
Production focus



Land shared for biodiversity

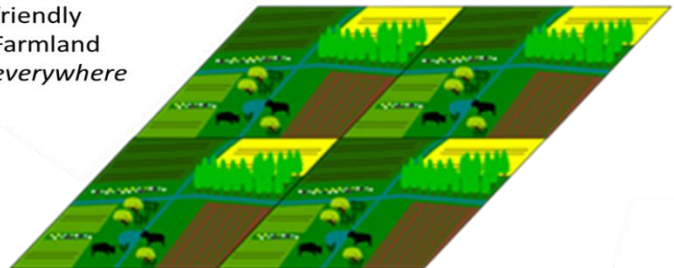


Agroforestry/mixed cropping
intercropping etc

Regional level

Land Sharing

Wildlife-
friendly
Farmland
everywhere



Both these **biodiversity strategies** have **pros and cons** and
could work **better in different locations** or **work together in some areas**

	Pros	Cons
Sharing	-Shares labour and risk -Can work with little but often	-Complex management -lots of balance trial and error -Can impact conservation areas negatively
Sparing	-Each area is managed separate -Less complex management -Self continuing with minimal input in spared areas	-intensive regions could be pollution hotspot -Ethical/ aesthetics issues of intensive areas -Intensive production could lead to offshoring of impacts

