



# Feeding Animals or Feeding People?



## Land Use Trade-offs in Global Grain Production

### Context



Land conversion for crop production drives deforestation, biodiversity decline, habitat loss and greenhouse gas emissions



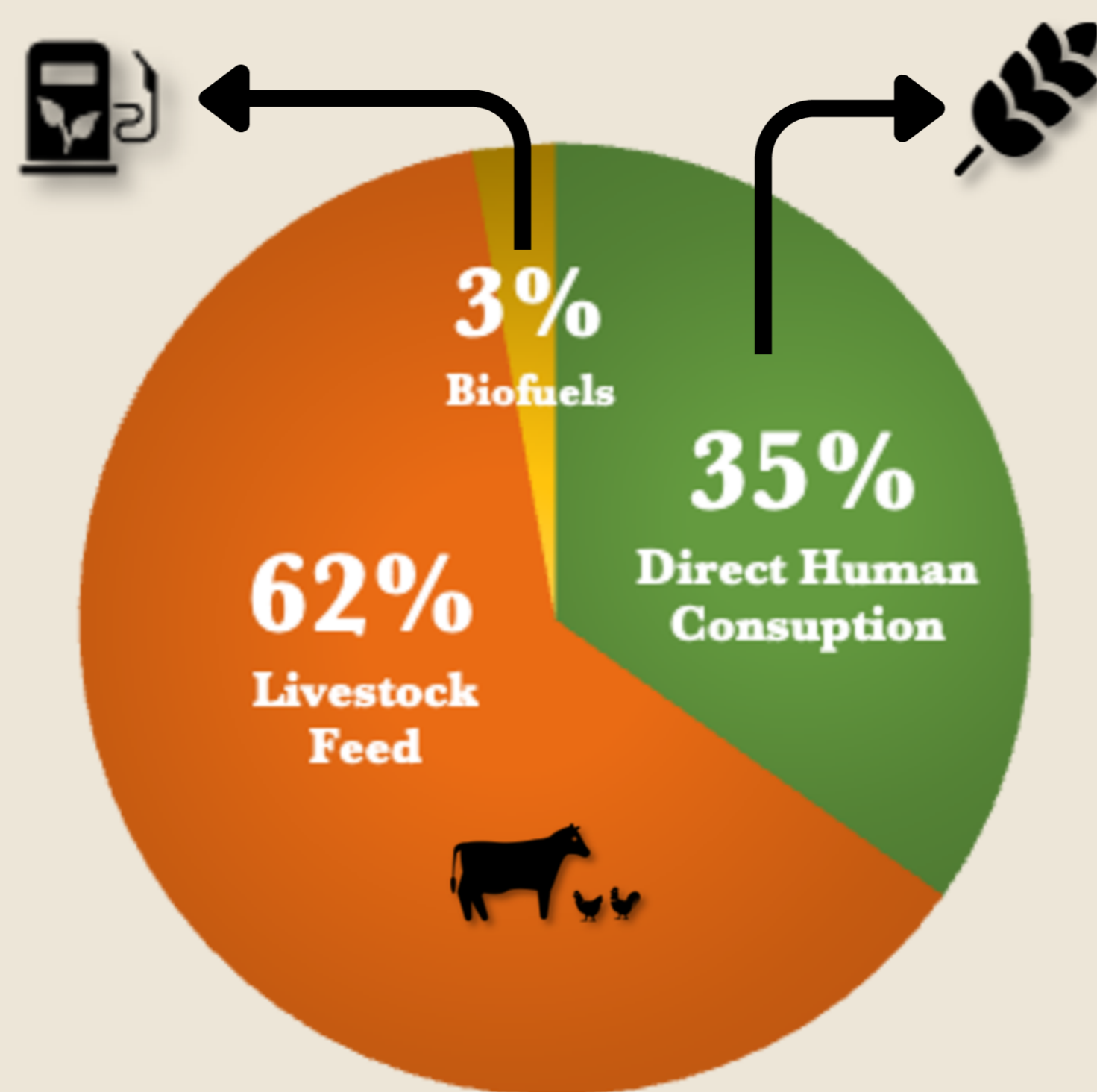
A significant portion of the grain we grow is not directly consumed by people, but instead is used for livestock feed



Intensive farming practices puts a strain on soils and water systems, and weakens the ecosystem resilience.

### HOW GLOBAL CROPS ARE BEING USED GLOBALLY

2021-2023



### Problem



#### Inefficiency in Food Conversion:

Grain allocation is structurally inefficient, with large energy and nutrient losses, as 36% of crop calories used for feed yield only 12% for human consumption.



#### Environmental and land system impacts:

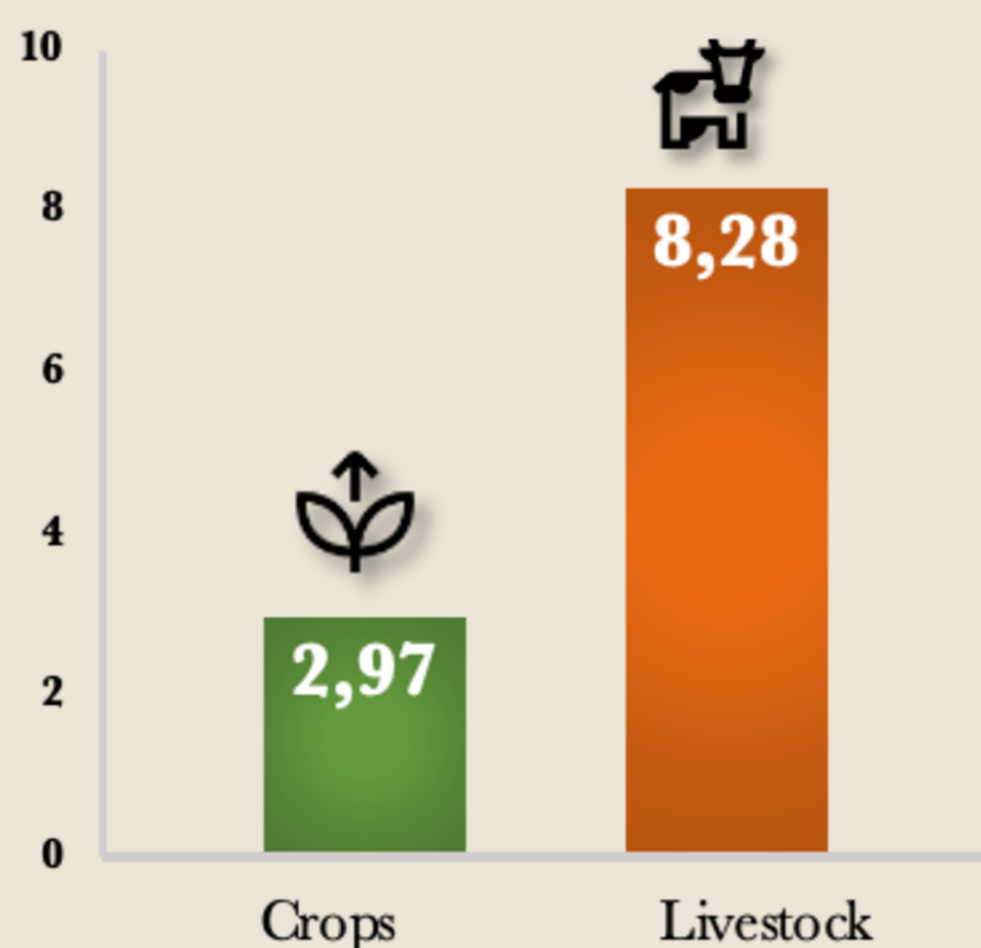
Agricultural expansion drives emissions, water use, and biodiversity loss through habitat conversion. Animal-based protein is highly land-intensive, requiring 50–100 times more land than plant-based sources.



#### Economic and Structural Pressures:

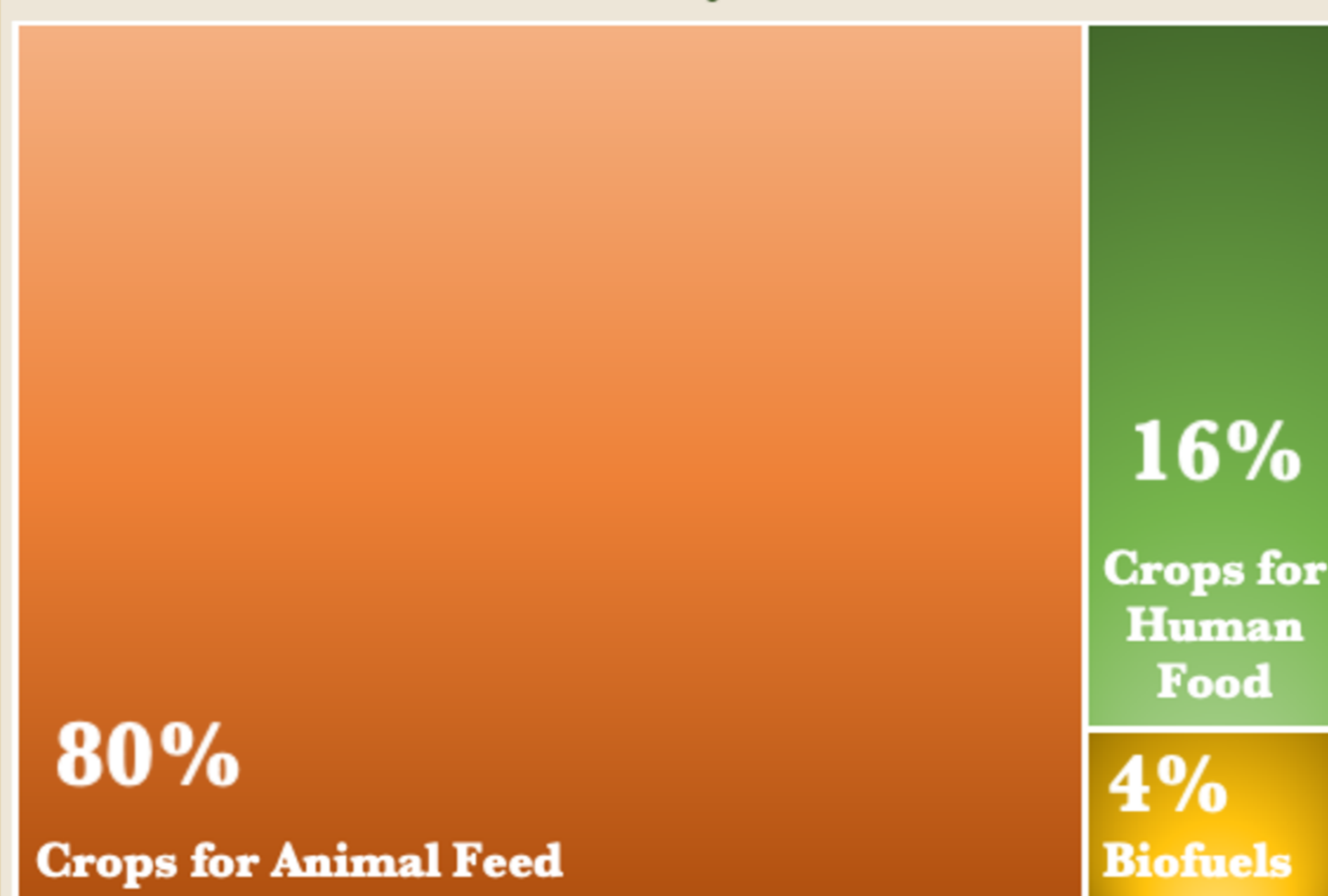
Grain allocation prioritises profitable livestock production, creating global dependencies and externalising environmental costs, while reducing overall food system efficiency.

### GHG Emissions (%) in 2023 Worldwide



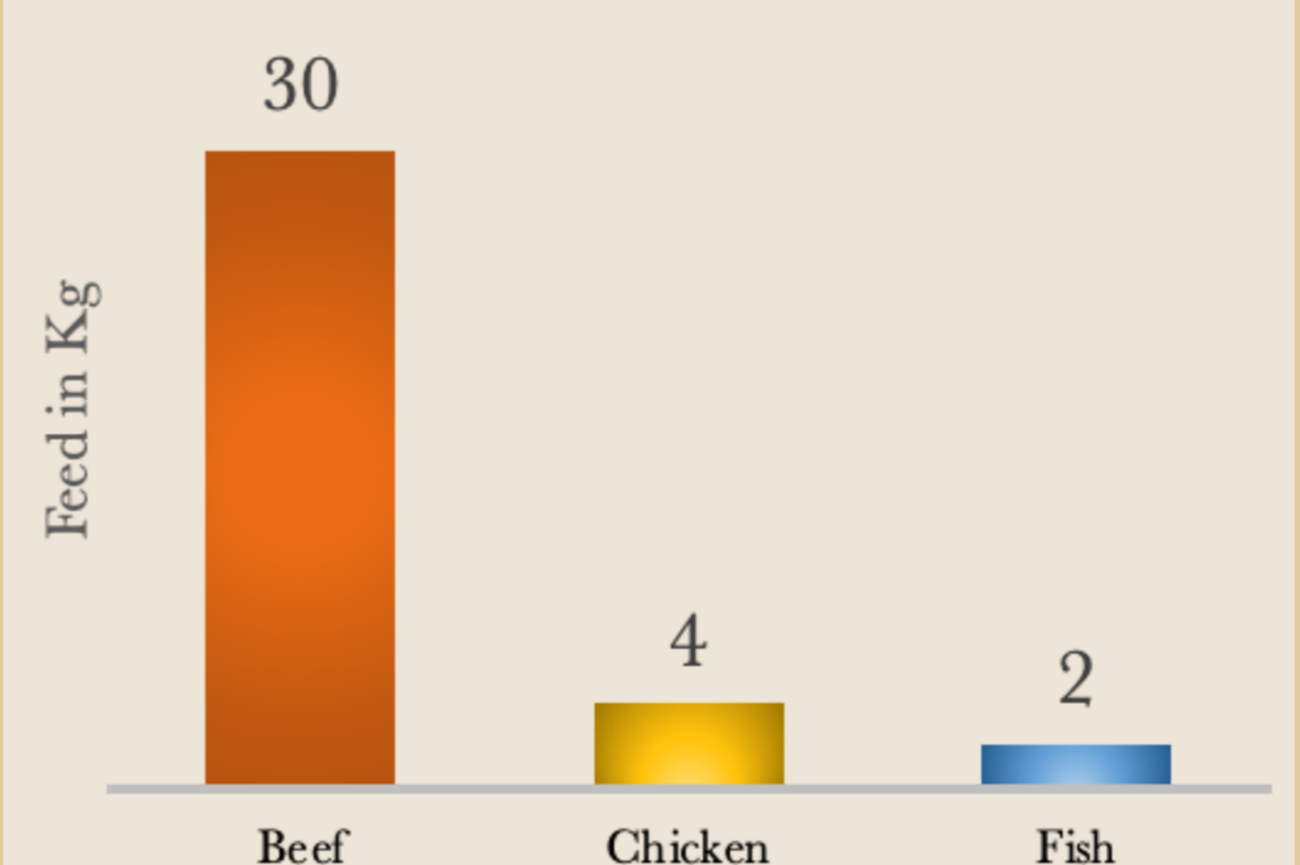
Livestock & aquaculture emissions are an order of magnitude higher. (FAO, n.d.).

### % of Agricultural Land that is used directly for:



More grain is produced and processed for animal feed than is used for human food. (FAO, n.d.).

### How many Kg of Feed are needed to produce 1Kg of Protein?



Animal-based protein production is highly resource- and land-intensive. (FAO, n.d.).

## Solution Pathways

### 1. Plant-based diets



Shifting toward plant-based diets reduces land use, greenhouse gas emissions, and improves food-system efficiency

### 2. Reduce meat consumption



Lowering demand for meat frees up land, reduces resource use, and strengthens food security

### 3. Align policies & incentives



Support sustainable land use, reward ecosystem protection, and redirect subsidies toward sustainable food systems.

### 4. Reduce food waste



Cutting food waste reduces land-use pressure and helps protect biodiversity and ecosystems

## KEY TAKEAWAY

By reducing meat consumption and reducing area used to produce crops, we can reduce land pressure, protect ecosystems, and improve food-system efficiency.

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