

The Health of the Planet

Worried about biodiversity loss?	Focus on food.
Worried about freshwater supply and quality?	Focus on food.
Worried about deforestation?	Focus on food.
Worried about overfishing?	Focus on food.
Worried about climate change?	Focus on energy, and food.

Richard Waite, World Resources Institute, April 2021

BEFORE we get into the faulty mechanics of the food system, let us take a moment to consider its extraordinary achievement. It feeds us. Billions of us. More humans than ever before in history.

The two graphics on page 16 illustrate how successfully humans have thrived since we first began to farm our own food. The first shows the estimated biomass of humans and wild land-dwelling vertebrates (mammals and birds) on the planet in 10,000 BC. This was the start of the Holocene era, when global temperatures entered an unprecedented era of stability, and agriculture became possible. At this point, there were 2.5 million humans on Earth – a population dwarfed by the multitude of wild animals.

Figure 1.2 shows the situation today. The population of humans has swollen to 7.8 billion. The biomass of wild animals has withered, in part thanks to our enthusiastic hunting of megafauna (the first big

extinction event caused by humans), destruction of habitats, pollution and environmental damage. The animals we keep, as pets and for leisure (green circle), now weigh almost as much as all the wild mammals and birds on the planet put together.

Success breeds its own problems. We have a lot of mouths to feed. Around 50% of Earth's habitable land is now used for agriculture. Our appetite for meat and dairy products puts a particular strain on the Earth's resources: 77% of the world's farmland is used to graze animals or to produce crops to feed to animals (see Figure 1.3). The combined weight of animals bred for food is now ten times the combined weight of all wild mammals and birds put together.

Figure 1.1

12,000 years ago humans were a tiny proportion of biomass compared to wild animals⁴

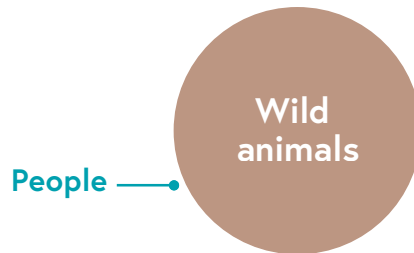
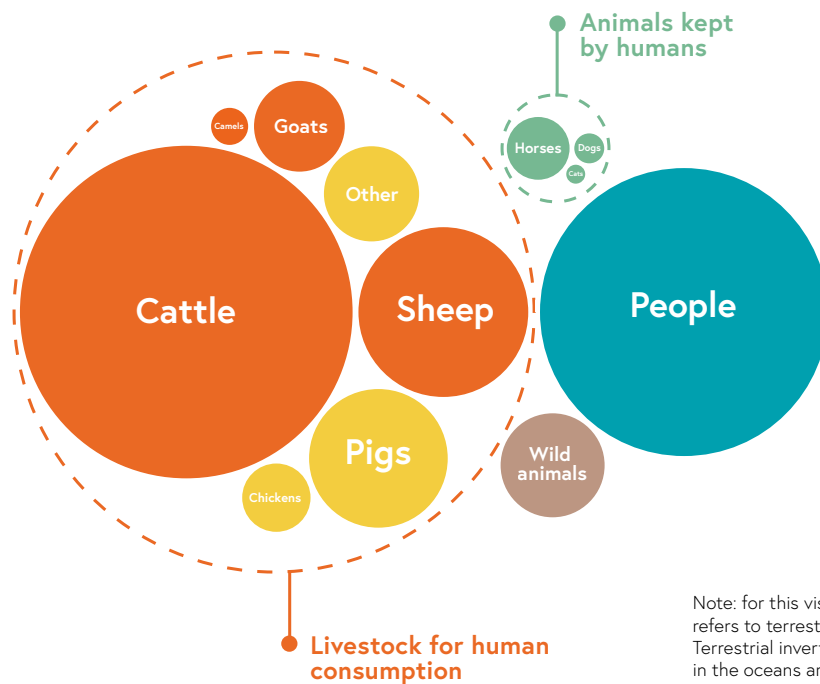


Figure 1.2

Today, the combined weight of animals bred for food dwarfs that of the combined weight of all wild mammals and birds put together⁵



Note: for this visualisation "animals" refers to terrestrial vertebrates. Terrestrial invertebrates and all life in the oceans are excluded.

参考資料2

Figure 1.3

More than 77% of the world's farmland, crops to feed to animals⁶

