



Animals in Extensive Production Systems

1.1 Australia in the world and agricultural innovation

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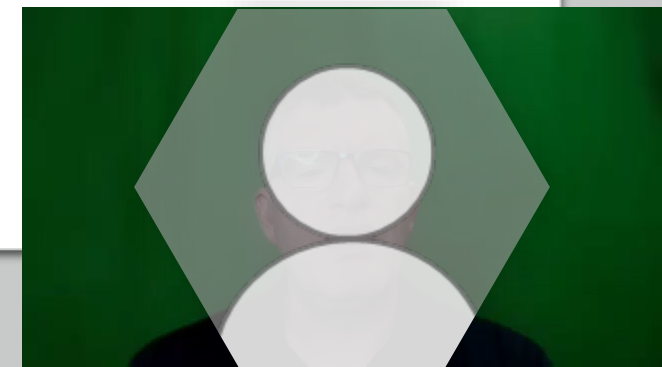
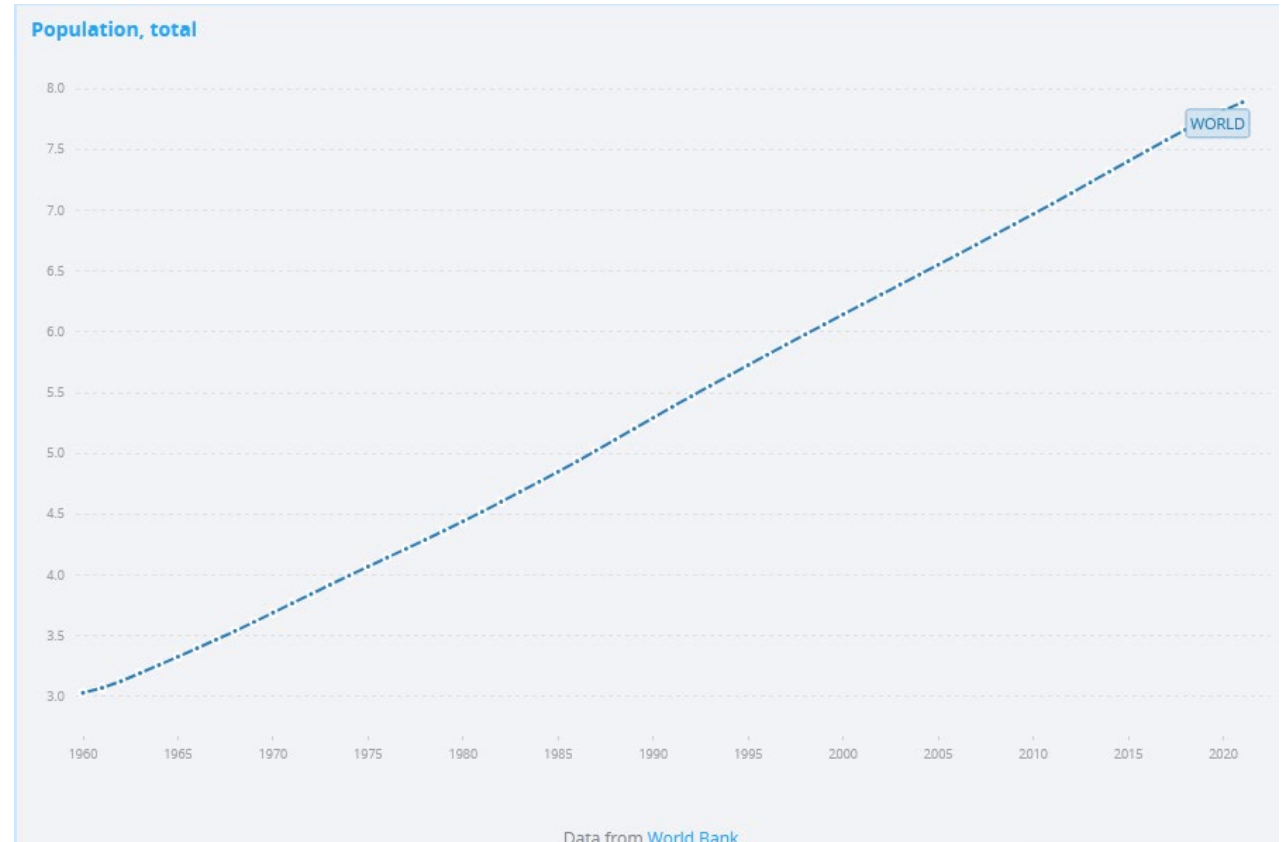
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Country and world population

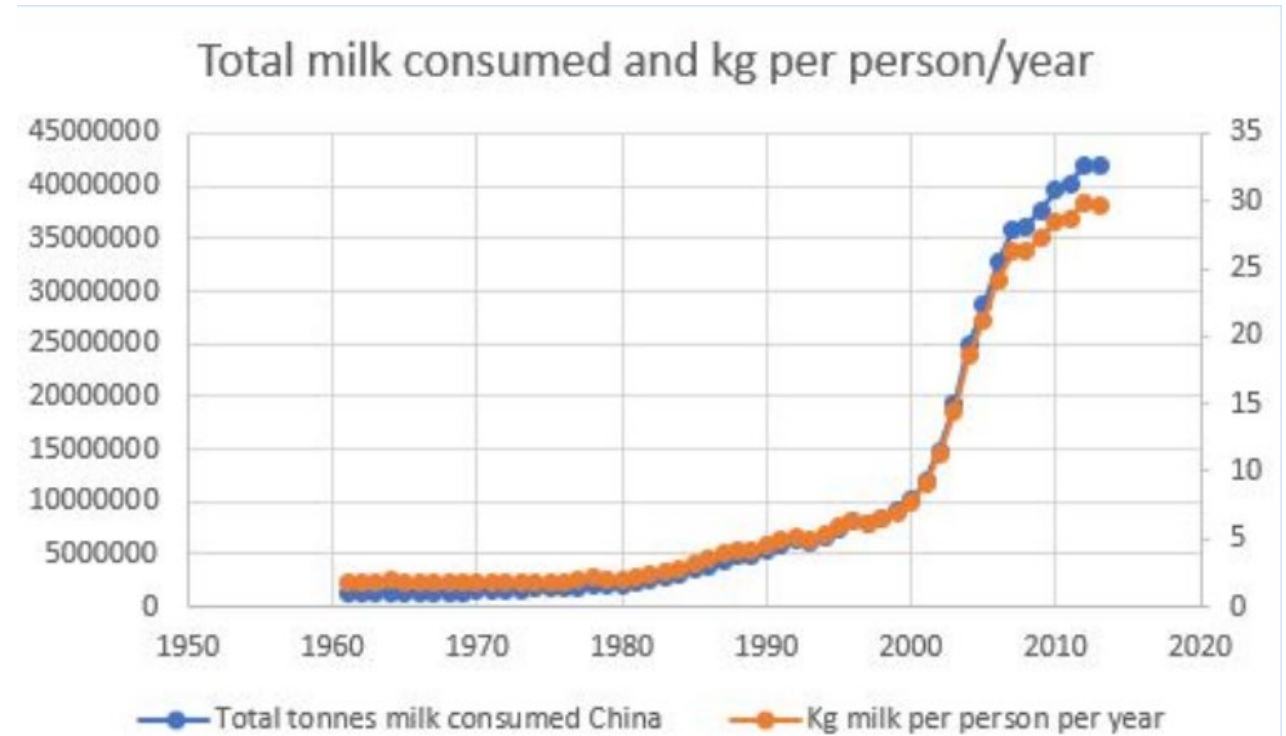
- In 2023 Australia population = 26.3 million
- As a worldwide % = about 0.3%
- Compare to China 18.5% and USA 4.3%
- Changes in food consumption patterns in countries can lead to major changes in export from countries like Australia and NZ with relatively small populations and large livestock production



What changes consumption patterns?

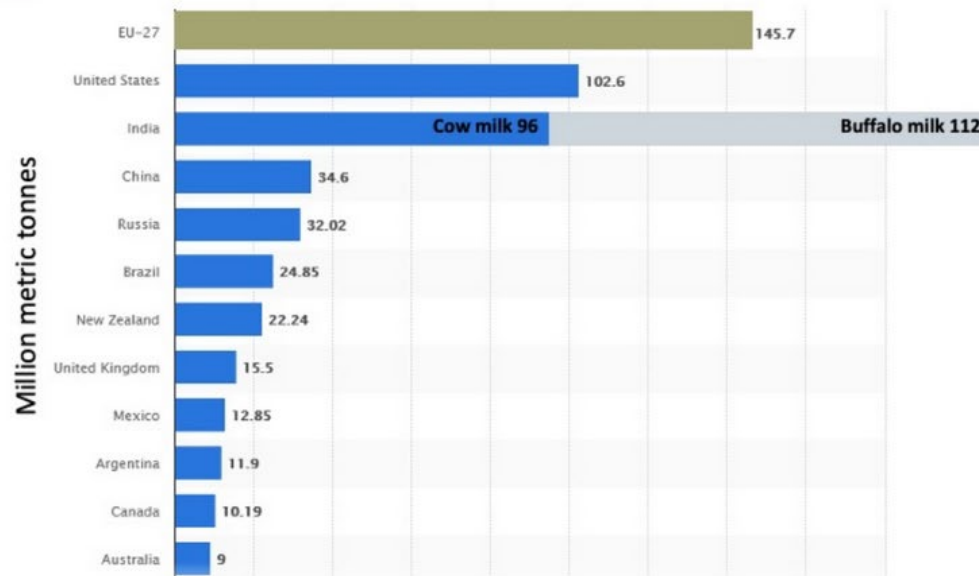
- As wealth increases, consumption of a range of products, including livestock products tends to increase
- Example showing Chinese milk consumption
- Not all produced in country
- Import versus export

- From: www.fao.org/faostat/en#data/CL



Import/export and supply/demand

Major producers of cow milk worldwide in 2021



FAOSTAT
<https://www.statista.com/statistics/268191/cow-milk-production-worldwide-top-producers/>



- Need to import food varies based on demand per head and total population
- If enough livestock to produce amount then don't need to import
- May import specific type
 - E.g. USA lean beef
 - Country may both import and export



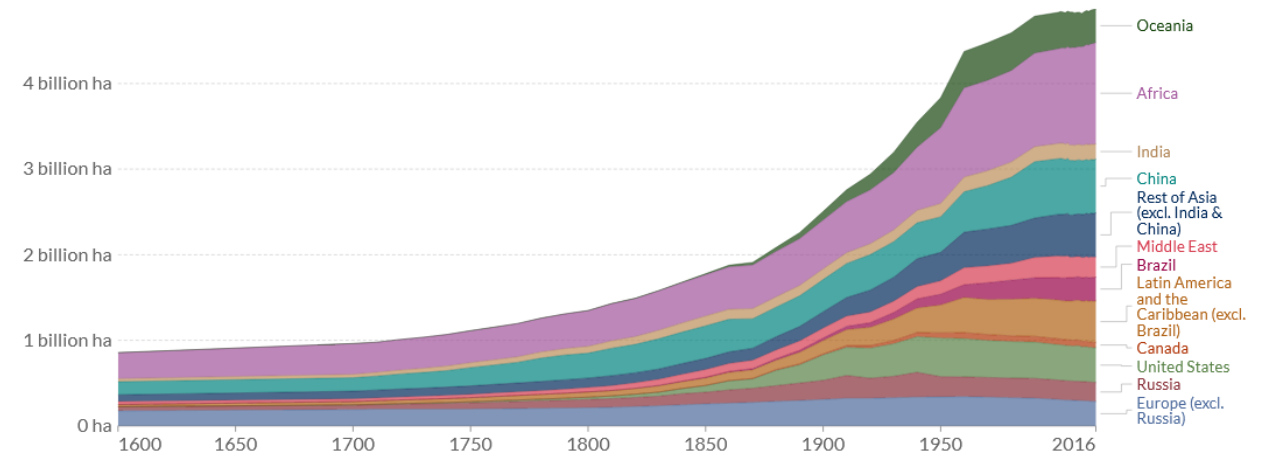
Area of world devoted to agriculture

- Nearing limit of land for agriculture in many areas
- Agriculture versus wild areas
- Increasing intensification of current areas to produce more per unit area
- Climate change impact (positive and negative, depends on location)

Agricultural area over the long-term, 1600 to 2016

Total areal land use for agriculture, measured as the combination of land for arable farming (cropland) and grazing in hectares.

[+ Add country/region](#) ☐ Relative



Source: History Database of the Global Environment (2017)

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