Ethical choices in relation to resilience

Symposium Resilience of Livestock production systems

Heleen van Kernebeek and Theun Vellinga, 29 January 2024

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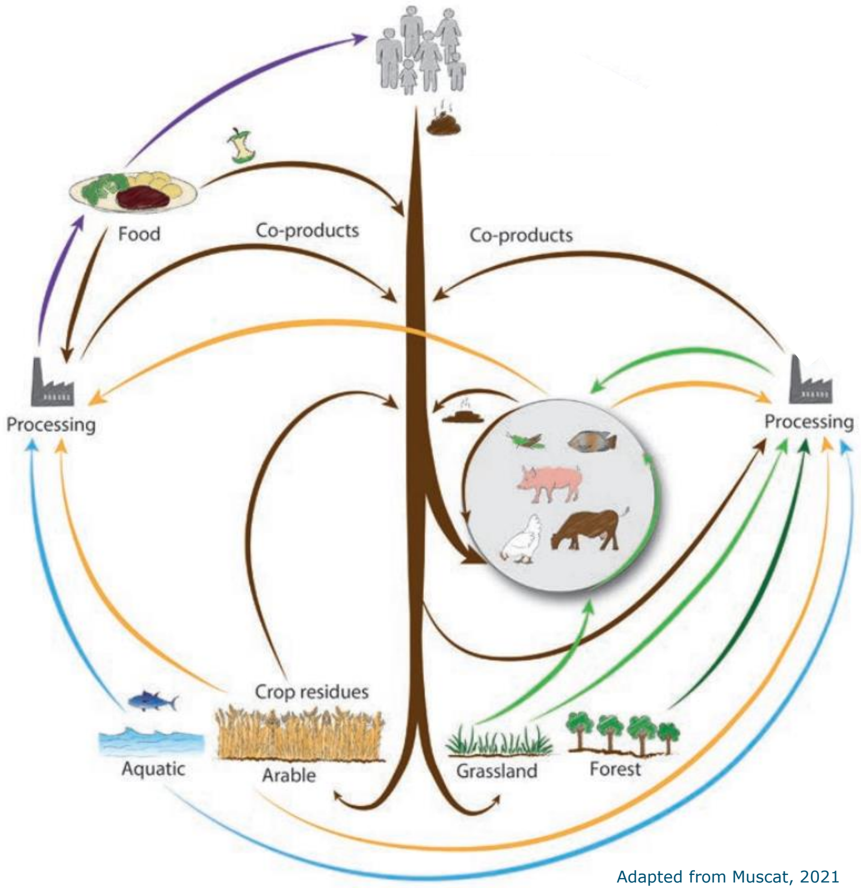
A food system perspective



Adapted from Muscat, 2021

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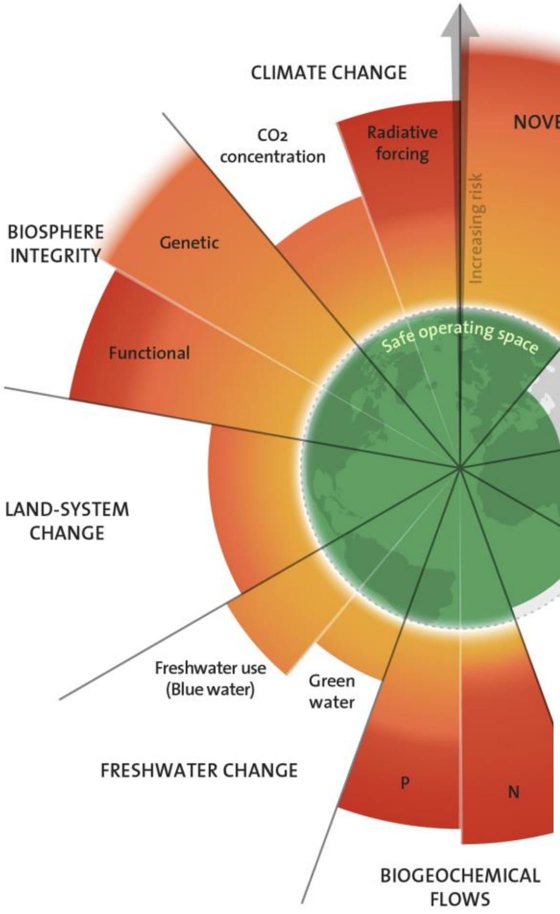
A broad range of challenges



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Global Food Security

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The impact of Russia-Ukraine conflict on global food security

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Shenggen Fan[a], Philip

SCIENCE ADVANCES | RESEARCH ARTICLE

ENVIRONMENTAL STUDIES

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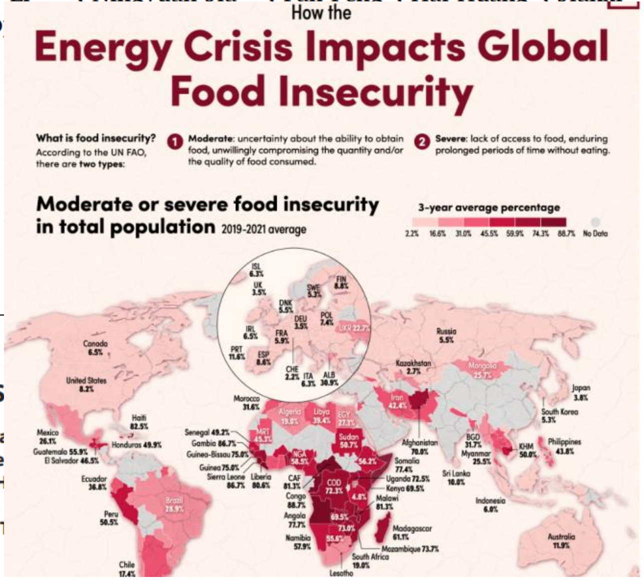
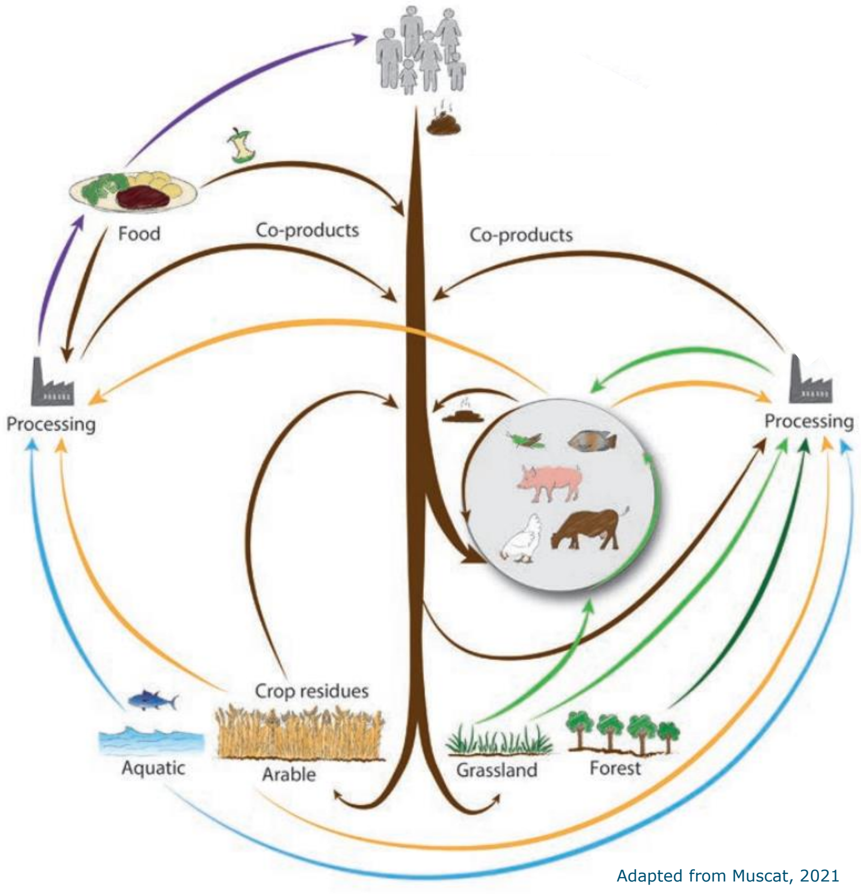


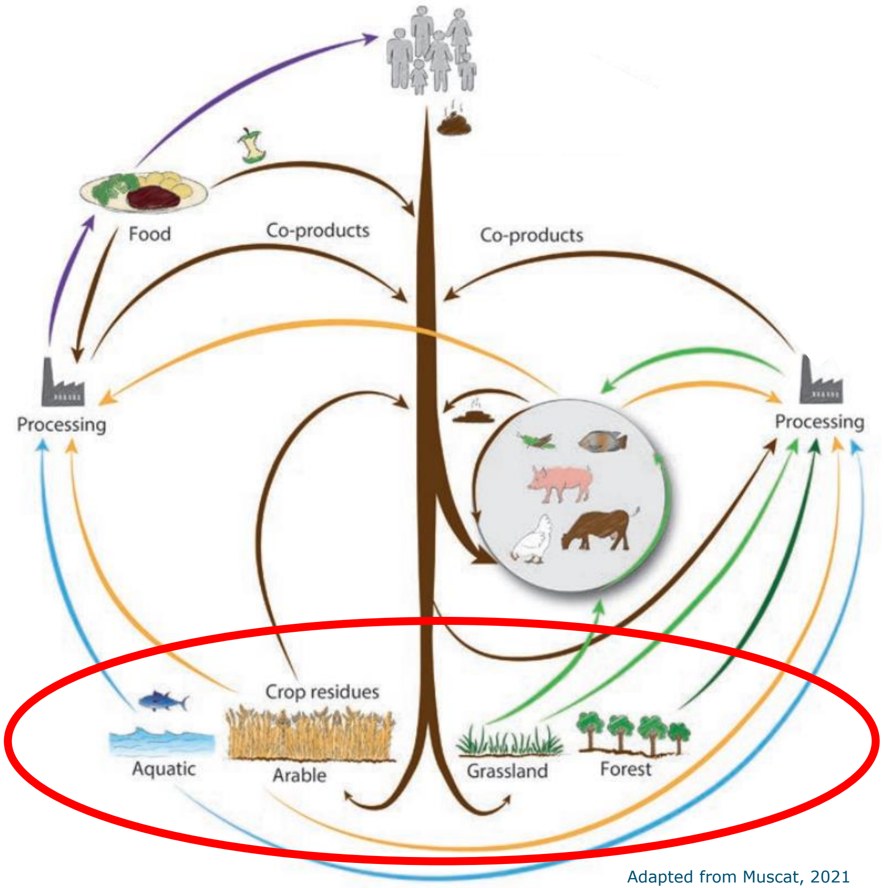
A food system perspective



Adapted from Muscat, 2021

- Many actors
- Interactions
- Animals not the centre

A food system perspective

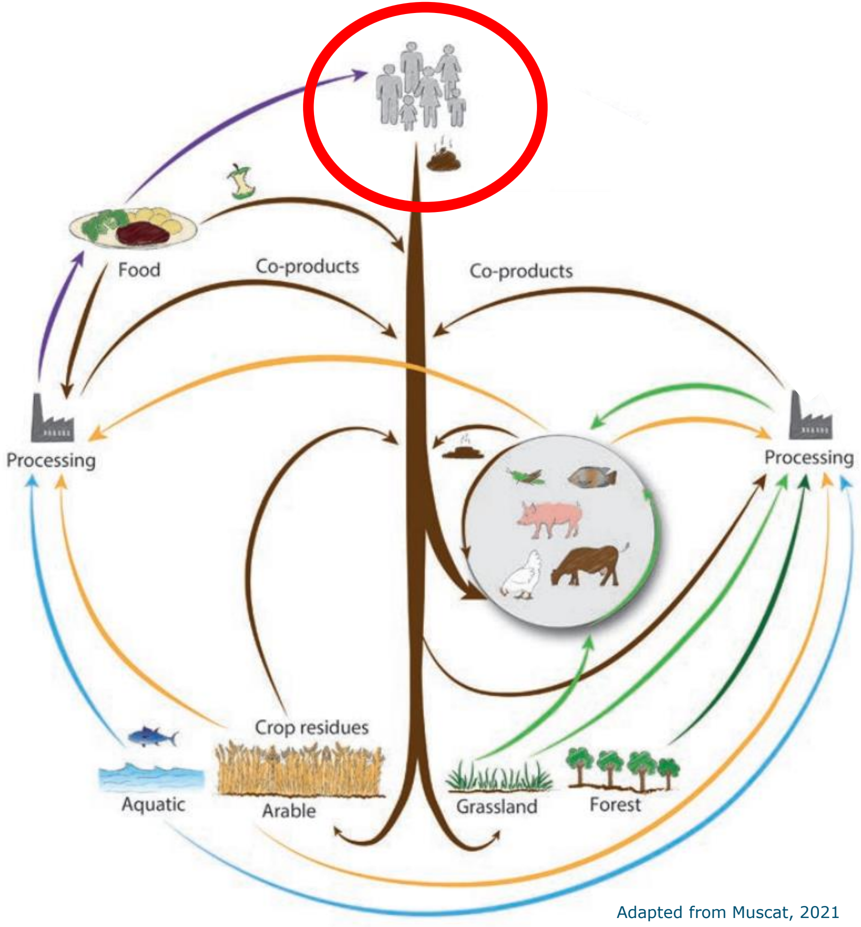


Adapted from Muscat, 2021

- Many actors
- Interactions
- Animals not the centre

- Renerative agriculture
- Agroforestry

A food system perspective



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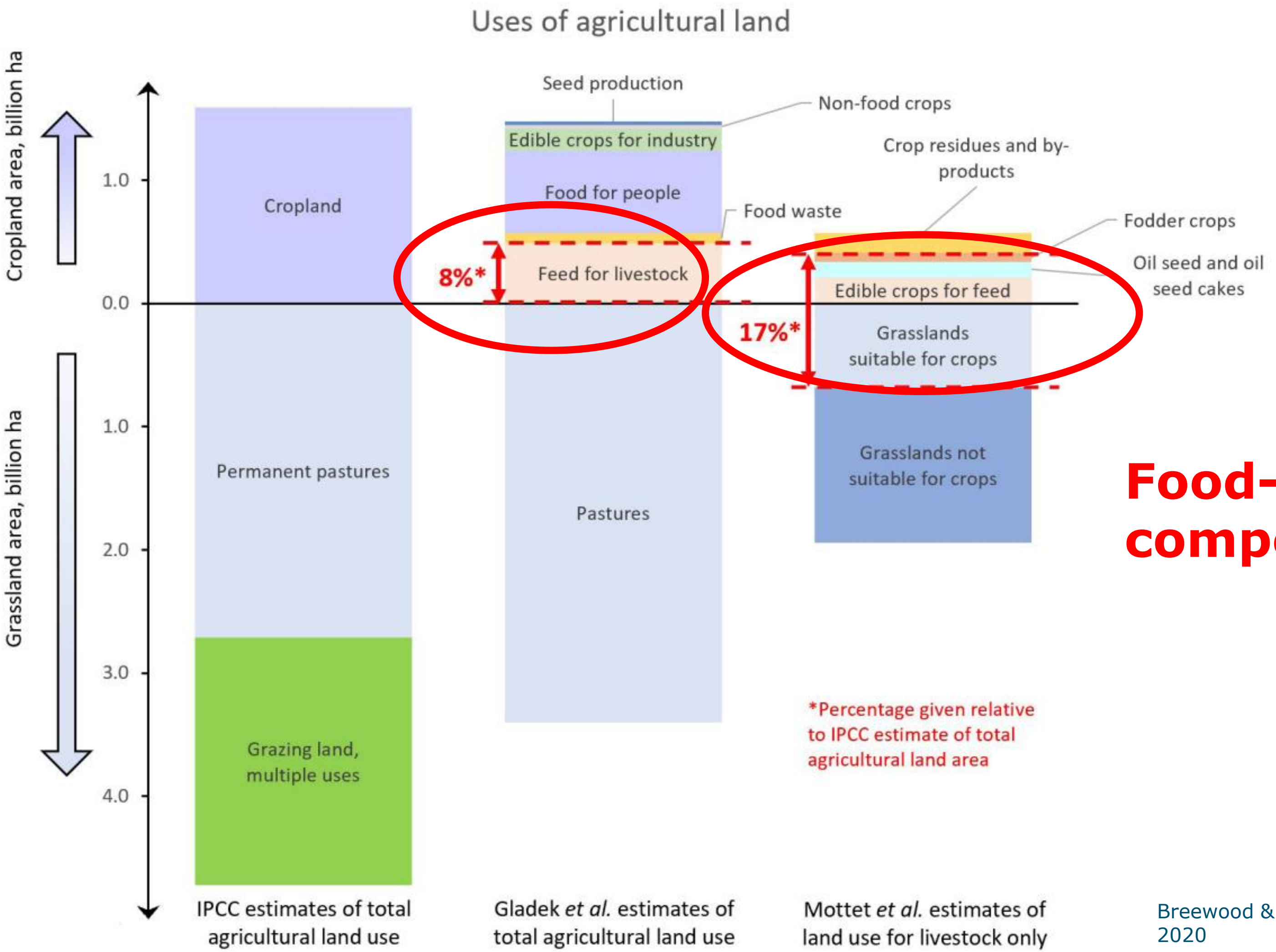
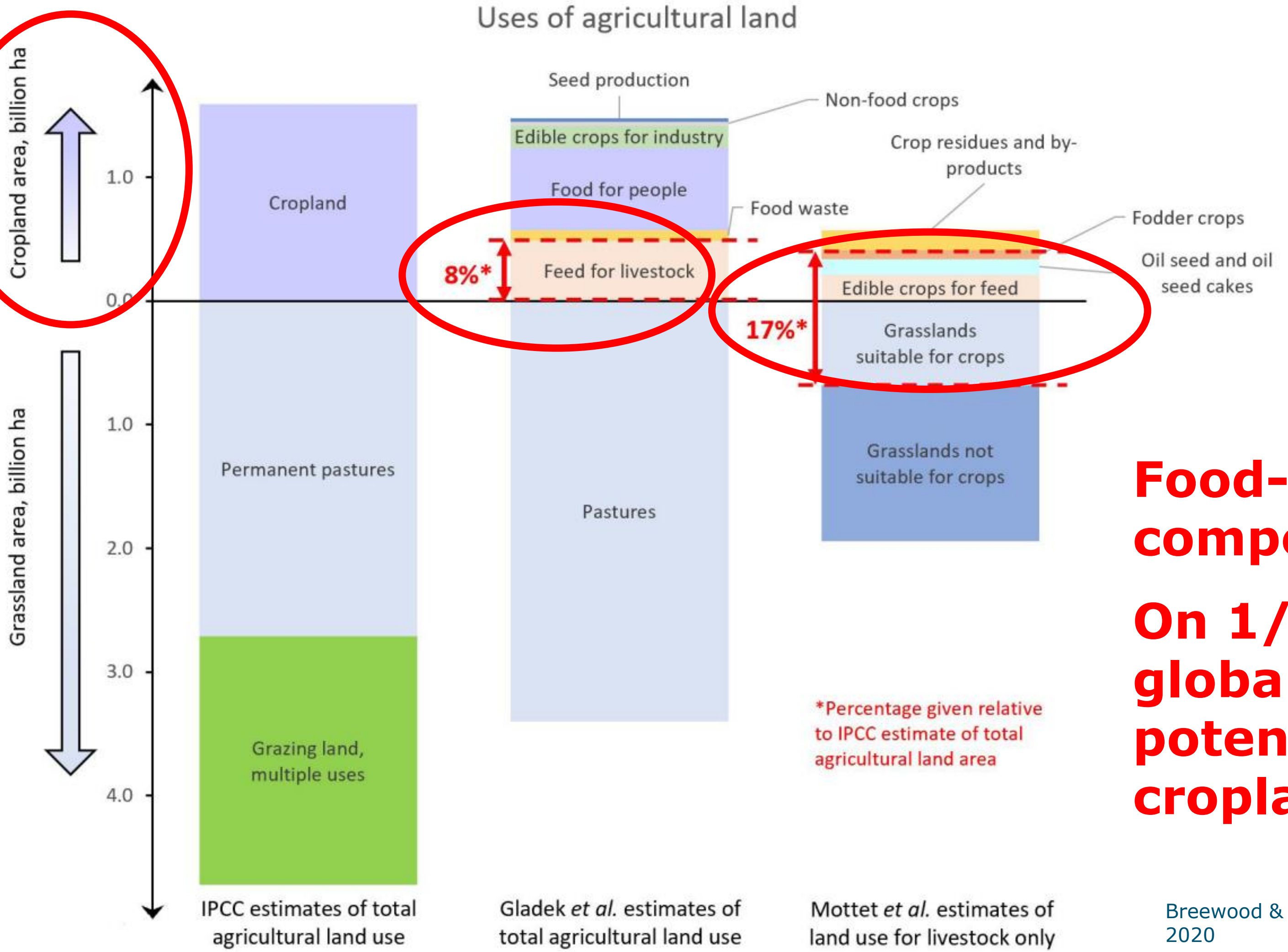


Food-feed competition

Breewood & Garnett, 2020

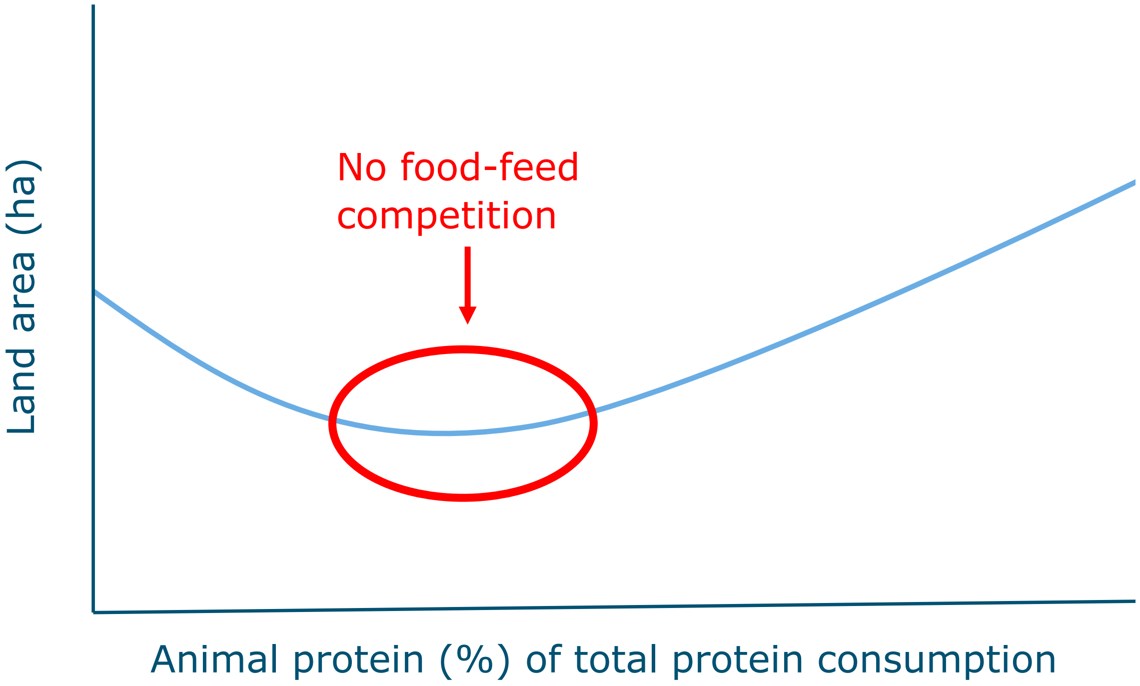


Food-feed competition

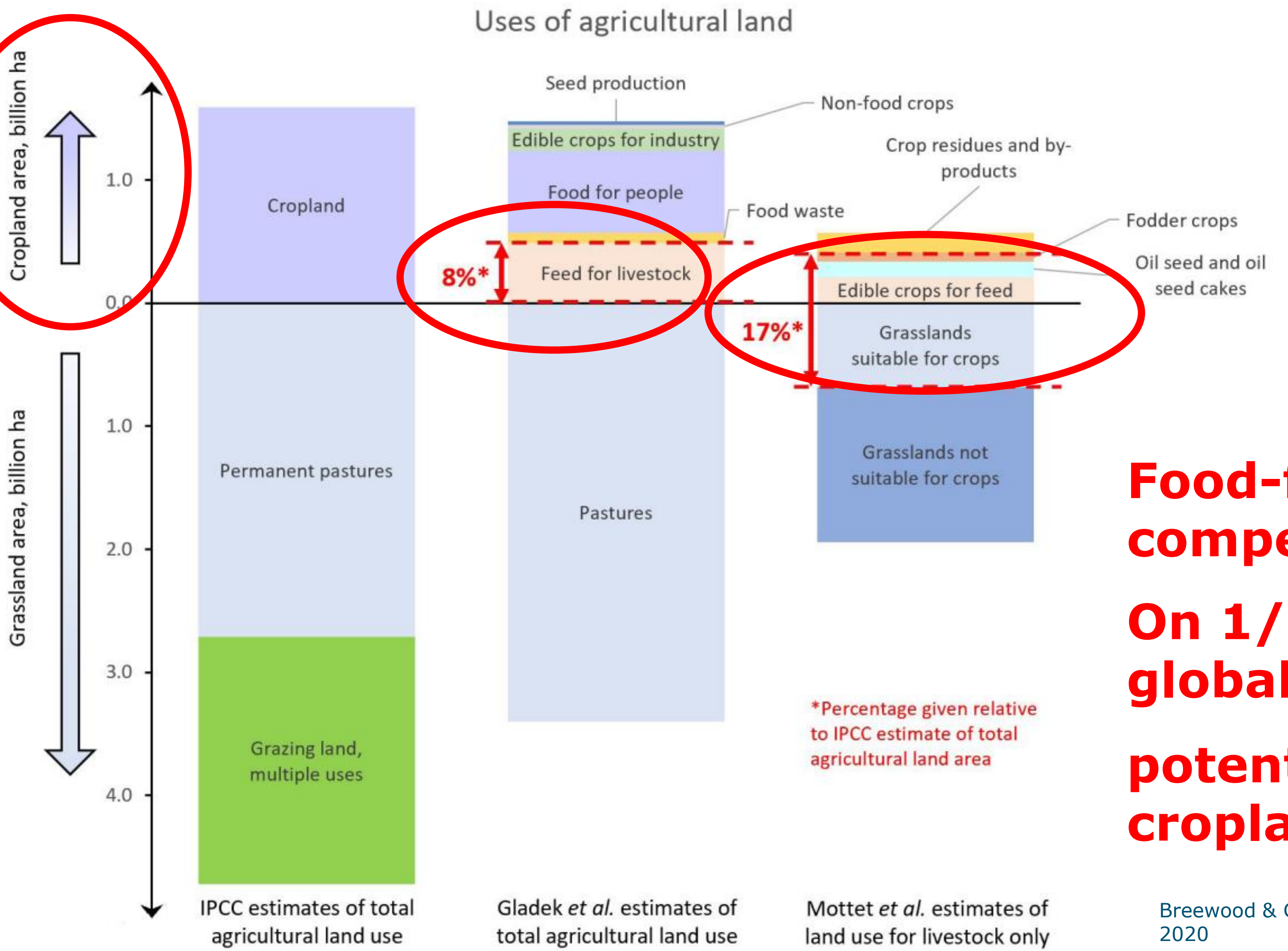
On 1/3 of global potential croplands

Breewood & Garnett, 2020

Land use in relation to animal protein consumption



Based on Van Kernebeek, 2016



Food-feed competition

On 1/3 of global potential croplands

Breewood & Garnett, 2020

Why reducing food-feed competition?

- Reducing global resources use for food and feed production, creating system reserves
- "System reserves, i.e. (natural) resource stocks are a generic principle to which a system needs access when responding to stress and shocks" (Meuwissen et al., 2019)
- "System reserves serve as a buffer that allows to compensate for the loss or failure of system functions" (Meuwissen et al., 2019)
- It increases the ability of food systems to cope with challenges
    - ➢ It increases resilience of the food system

Which (ethical) choices can we make?

- How much do we value resilience of the food system?
- How do we divide scarce resources?
- Which changes in human consumption can we make?
- Which changes in human consumption are we willing to make?
- ...?

Thank you!

Any questions?