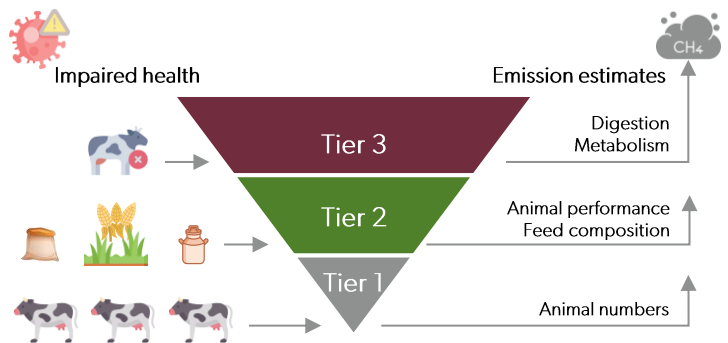


Policy Brief

Improve animal health to reduce livestock emissions: Quantifying an open goal

Key messages

- Poor animal health increases emissions intensity.
- Interventions to improve animal health can therefore contribute substantially to emissions reduction targets.
- This opportunity is being missed due to poor alignment with emissions accounting systems and a lack of critical data.
- We propose a framework and data sources to close this gap and apply animal health interventions to climate change mitigation.
- Impacts of animal health on individual animal-level emissions can be accounted for using the intermediate IPCC method (Tier 2), when health affects observable productivity estimates.
- The more complex IPCC method (Tier 3) enables the accurate estimation of animal health mitigations, as it can account for detailed changes in animal management & physiological benefits of interventions.



Contributors



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The Challenge



Globally, **livestock production accounts for around 11-14.5% of anthropogenic greenhouse gas emissions** and also contributes to other forms of pollution and biodiversity loss. Yet **simply reducing numbers would negatively affect food security**, rural livelihoods and options for climate change adaptation. Other, technical solutions to reduce emissions have potential but are costly and will take time to deliver.



The Opportunity

- **Improve animal health to reduce emissions & climate change.**
- **Interventions can be applied now using existing technologies for win-win outcomes.**

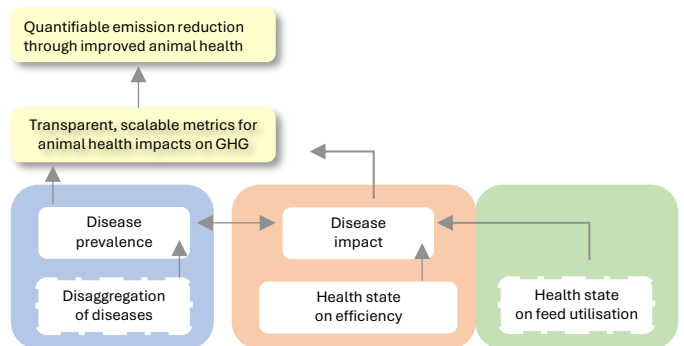


Recommendations

A **roadmap for research** is provided to address gaps in the data needed to properly quantify impacts of animal health—and animal health interventions—on emissions and drive concerted action.

Interventions can be:

1. Implement health measures immediately to attain benefits without delay.
2. Establish common, consistent & open data repositories for key variables.
3. Conduct routine health estimates at national scale to capture trends & impacts.
4. Incorporate livestock health into national emissions reduction plans.
5. Validate estimates with experimental data, using new data to increase accuracy.
6. Engage stakeholders on action and uncertainties to enhance transparency.



Read more

Kyriazakis I *et al.* 2024 Improve animal health to reduce livestock emissions: quantifying an open goal. *Proc. R. Soc. B* 291: 20240675. <https://doi.org/10.1098/rspb.2024.0675>

