GLOBAL
RESEARCH
ALLIANCE

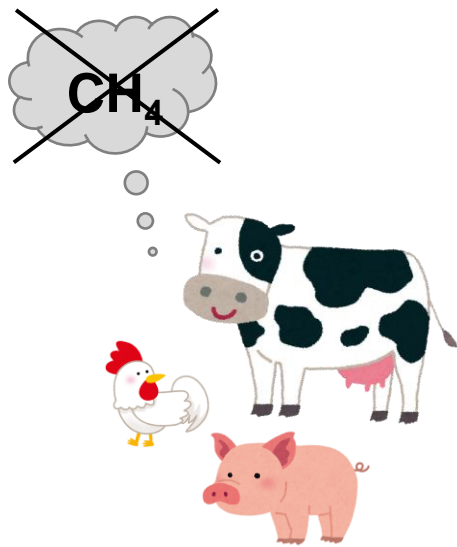ON AGRICULTURAL GREENHOUSE GASES

[*Japan*]

Summary of relevant activities, future priorities and capability needs.

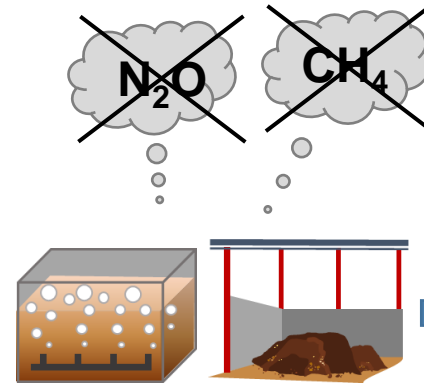Input to 2023 Livestock Research Group Meeting
Lyon, France

Relevant activities

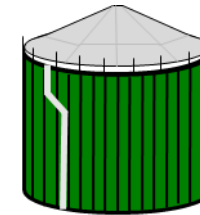**National Research Project (funded by MAFF, 2022-2026, approx. 5 million USD in total)**
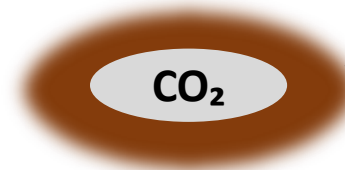
Breeding for low CH4 emitter cattle

CH_4

Lower N in the manure by amino acid composition optimized feed

N_2O CH_4

Technology with Less effluent from biogas digester

CO_2
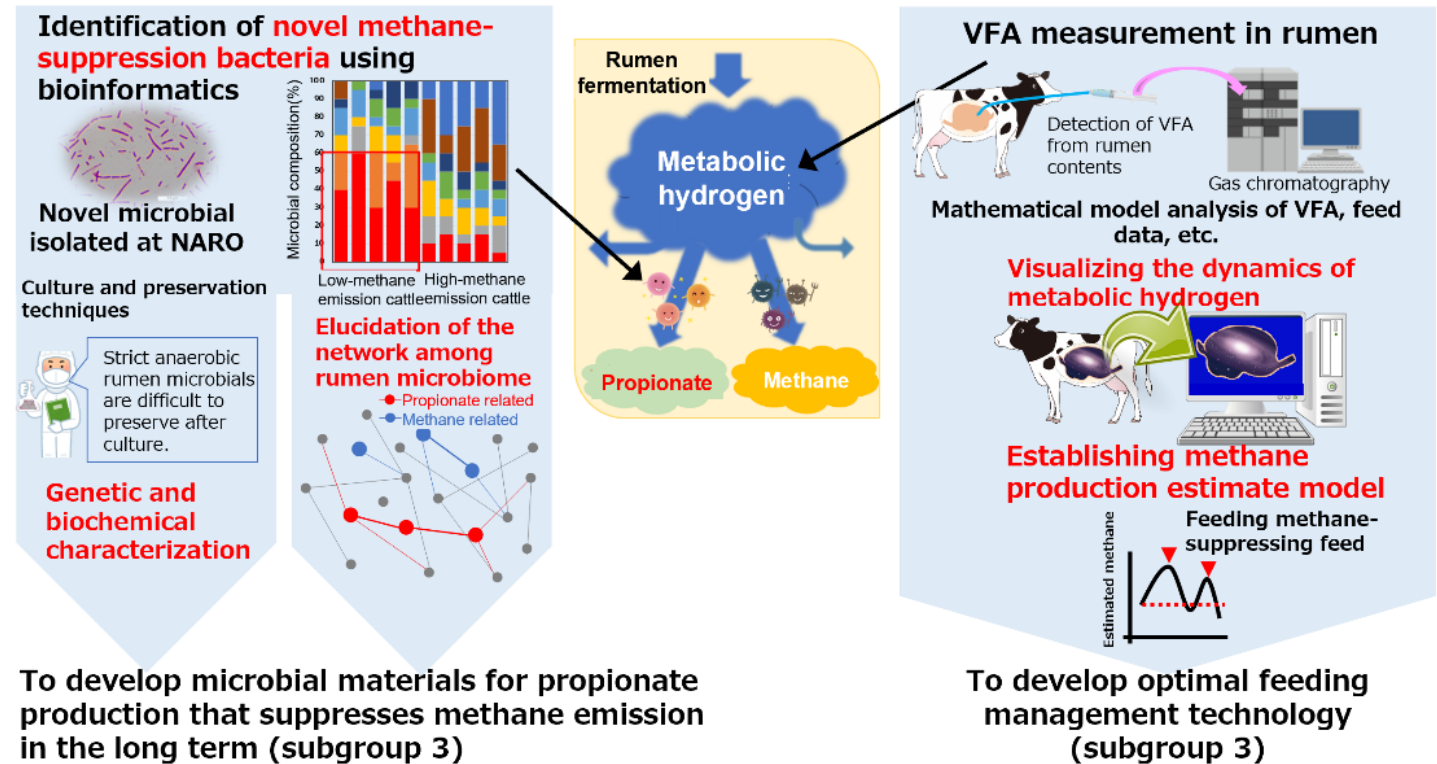
Utilization of biochar and CO2 storage in the soil

Relevant activities

MOONSHOT Project – Laboratory of Animal Function & Nutrition, Graduate School of Agriculture, Hokkaido University (hokudai.ac.jp)

Official HP available above

Future priorities

- ✓ Integration of our scientists and national project into GRA related activities is not enough
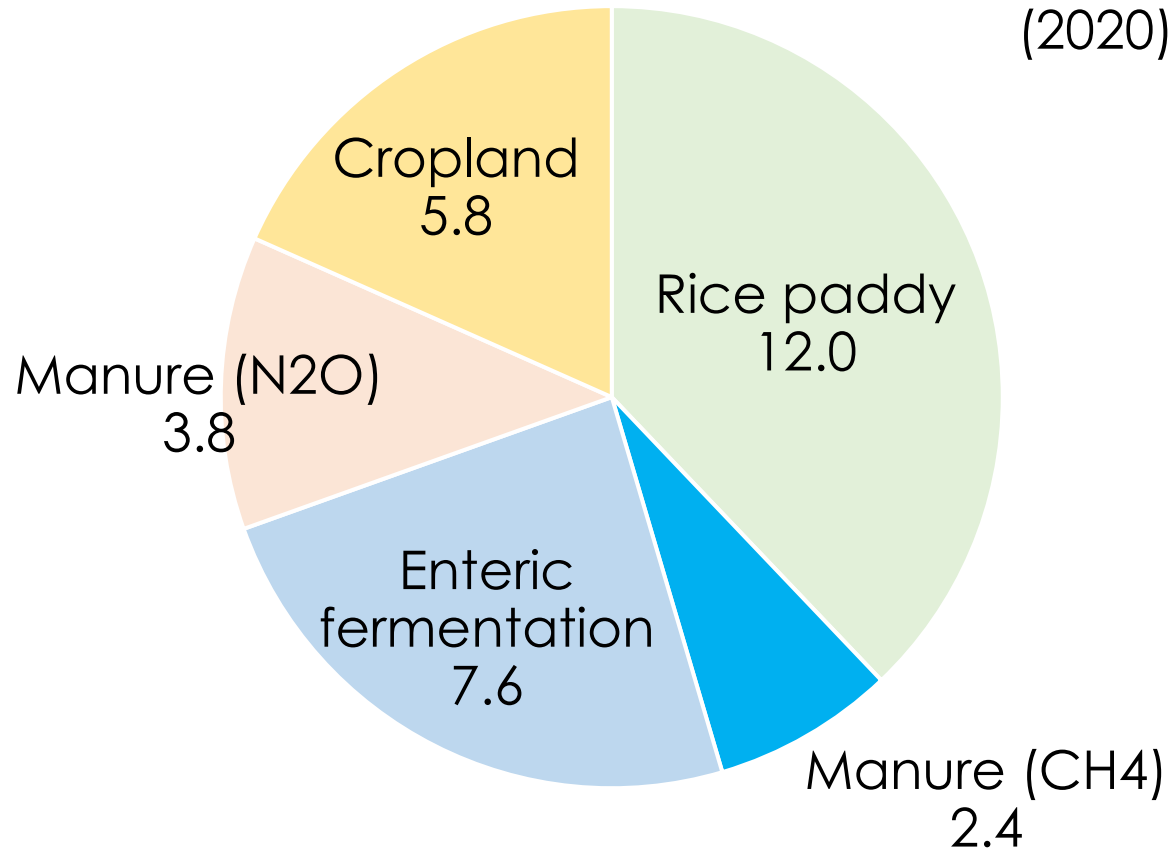
- ✓ We would like to send the representative person for each group (especially for Feed and Nutrition Network, Animal selection, Genetics and Genomics Network and Manure Management Network) meetings, and to be included in their activities both for research and funding.
- ✓ We keep sharing our research outcomes with GRA activities for future collaboration.
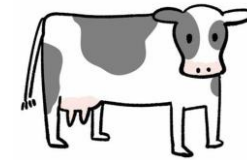
Capability needs

- ✓ None, we need more integration of our scientists to the international framework
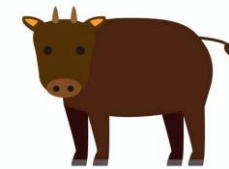
Our Emissions

Non-CO2 GHG emission from agriculture:
31.7 million t CO2-eq, 2.77% of total emission
(2020)

Rice paddy
12.0

Cropland
5.8
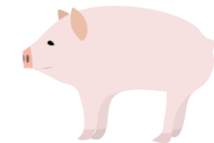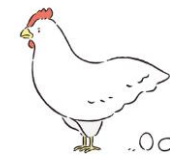
Manure (N2O)
3.8

Enteric
fermentation
7.6

Manure (CH4)
2.4

Million heads (2022)

1.37

2.61

8.95

183   139