**GOAL**

To bring profitable livestock methane mitigation technologies to market

**HOW?**

Some product discovery and screening ➔ Feasibility assessments ➔ Product scale-up and delivery ➔ Facilitate adoption

**WORK AREAS (CN30)**

**EMISSIONS AVOIDANCE (ON FARM / ANIMAL)**

**SUPPLEMENTS AND ADDITIVES**

- Technologies to avoid methane emissions from livestock (anti-methanogenic compounds, natural marine and terrestrial bioactives)
- Supplement delivery system design – feedlot and grazing

**FORAGES**

- Assessing new pastures, shrubs and legumes that offer co-benefits of livestock productivity and lower enteric methane emissions
- Facilitate adoption of known methane-reducing legumes and forages

**LOW METHANE LIVESTOCK**

- Improvement in animal genetics and husbandry practices to increase production efficiency and lower enteric methane emissions
- Manipulating rumen microbiome and fermentation

**INTEGRATED MANAGEMENT SYSTEMS**

- Licence to operate (CSR, regulatory, markets)
- Technical and economic analysis of farming systems to determine appropriate combinations of emissions avoidance (and carbon storage) technologies and practices
- Incorporating emissions avoidance (and carbon storage) practices into existing extension and adoption platforms;
- Developing resources and tools to support adoption and proper execution of emissions avoidance (and carbon storage practices)
- Developing new scientific methodologies to generate carbon credits
- Aligning outputs with generation of GHG accounting frameworks (so that we deliver environmental and productivity benefit)

**ACTIVITIES**

building on work conducted as part of NLMP (2012–2015) and RELRP (2009–2012)

**DEVELOPMENT REQUIREMENTS**

- Collaborators and partners
- Timelines and budgets
- Outcomes from previous research

**VALUE PROPOSITION**

- Economic benefits (increase productivity gain, improved drought resilience etc)
- Environmental benefits (reduce methane emissions, improved soil health etc)
- Social benefits (nutritious, red emissions diet)
- Animal health and welfare benefits (improved diet and nutrition)

**OUTPUTS**

**ENABLERS**

GHG emissions accounting framework, carbon credit methods, certification/accreditation services