Regional support to national livestock GHG inventories in Southern Africa:

Development of Tier 2 Cattle GHG inventories in Botswana, eSwatini, Lesotho and Mozambique

Simba Sibanda, FANRPAN

ssibanda@fanrpan.org

Regional support to national livestock GHG inventories in Southern Africa

- FANRPAN, University of Pretoria and the New Zealand Agricultural Greenhouse Gas Research Centre collaborated in an initiative to move four countries in Southern Africa from Tier 1 to Tier 2 GHG inventories for cattle

- Project was funded by the New Zealand Ministry for Primary Industries

- The movement from Tier 1 to Tier 2 would facilitate development of better and more appropriate policies in support of national adaptation and nationally determined contributions (NDCs)

- The four countries were selected because they have similar cattle production systems (i.e., commercial ranching, emerging sector, communal sector)

- All four countries have common cattle genetics in the commercial beef and dairy sectors, with local breeds dominating the communal sector

The Approach

- All countries had some of the necessary data for moving from Tier 1 to Tier, but none had all
- Collated all available data in each country: herd structure, animal performance and manure management
- Combined available data in a regional database that can be searched by production system, breed, agro-ecological zone, among other factors
- Countries could use own data or values from the regional database to compile national cattle GHG inventories
- Strengthened inventory management and improvement capacities by involving all relevant stakeholder institutions and provided training on data collection, inventory calculation and GHG inventory report
- Lessons can be applied to small ruminants and other countries in the region

Capacity Needs

- Development of standard operating procedures for GHG inventory compilation: responsibilities of relevant institutions, data collection templates and archival systems

- Documentation of processes

- Equipment for measuring animal performance

- Use of GHG emission data for policy engagement in support of NDCs