

## **Mbithi Andrew, Dr.**

### **Motivation**

My research focuses on the detailed understanding of precision feeding of animals. This involves the determination of the right amount of feed which will lead to efficient utilization of the nutrients with minimal excretion to the environment.

One of the major forms of excretion from the animals (especially ruminants) is the enteric methane. This is a greenhouse gas which has adverse effects to the environment, and ultimately leads to climate change.

Through the chamber measurements, am able to determine the levels of methane emissions from the ruminants (growing steers) which are fed at different maintenance levels. It is through this establishment that the mitigation measures against the methane emissions can be instigated.

Over and above this research, I am also interested investigating the levels of emissions of nitrates through the (Manure) feces and urine. In the determination of this some mitigation measures e.g. use of biogas can then be adopted. I am also exploring other indirect ways through which ruminants contribute to the global warming. This occurs through the cutting of the fodder trees which trap the carbon (iv) oxide which is a greenhouse gas.

Through this holistic research, I endeavor to provide solution to the problem of climate change of which the agriculture sector through livestock contributes a lot.

### **Short CV**

#### ***Academic***

2016|Graduate fellow, Mazingira Centre, International Livestock Research Institute (ILRI), Nairobi, Kenya. (*Apparent digestibility, nitrogen balance and enteric methane emission in boran steers fed basal diet of grass hay at different levels*).

Sept. 2014|Student, Master of Science animal nutrition and feed science, Department of Animal Production, University of Nairobi.

Sept. 2009-2014|Student, Bachelor of Veterinary Medicine, Department of Animal Production, University of Nairobi.

#### **Expertise**

Animal Nutrition (biased in ruminants).

#### **Projects**

Apparent digestibility, nitrogen balance and enteric methane emission in boran steers fed basal diet of grass hay at different levels.

#### **Publications**

Google Scholar Citations.

#### **Miscellaneous activities**

Student representative MSc. Class of 2016, department of Animal production, University of Nairobi.