Concept Note: International Workshop on
"Statistics on N input from livestock manure: Estimating availability and use"
30th November 2015, Kigali, Rwanda

Overview

On 1st – 4th December 2015 the African Commission on Agricultural Statistics (AFCAS) will hold its 24th session in Kigali (Rwanda). One day before the start of the AFCAS the Statistics Division (ESS) of FAO will organize, as part of its capacity development efforts, a regional workshop on the estimation of statistics on N inputs from livestock manure. This workshop will be held in Kigali (Rwanda) on 30th November 2015. The conclusions from this workshop will be reported in the 24th session of AFCAS.

Resources available allow for the participation of up to six countries in this workshop, considering the attendance of 3 participants from each country. The three participants are expected to

represent their: i) National Statistical Offices (NSOs), ii) Ministries of Agriculture and iii) Ministries of the Environment.

Criteria for selecting the five participating countries include: representation of FAO African sub-regions and high livestock density per agricultural area (with a minimum of 1 million ha).

A set of questions will be sent to participants before the workshop, in order to provide a summary of key data needs and challenges.

Background

Manure plays an important role in sustaining agricultural production, particularly in extensive (low inputs) systems, where it provides a cheap, readily available resource that helps to replenish soil nutrients and maintain soil fertility. Used properly, manure applications can complement or even substitute the use of chemical fertilizers, contributing to sustainable farming and sustaining incomes (by reducing expenditures for chemical inputs while improving soil properties and providing micro and macro nutrients for optimal plant growth). Appropriate management of manure storage and application is however needed in order to minimize possible negative environmental impacts linked to nitrogen leaching and run off and to greenhouse gases emissions.

Despite the importance of manure for sustainable food and agriculture production, data on manure availability, storage management and application are currently scarce and scattered.

Objectives

The workshop aims to raise awareness on the importance of livestock manure statistics and the development of national capacity to generate improved livestock manure data, including availability, storage and application as fertilizer. Both technical and institutional aspects will be discussed. Technically, the workshop will explore available methodologies, including those recently developed at FAO, to improve national statistics on manure. Institutionally, the workshops will aim at facilitating communication and exchange among the different national entities directly involved in manure data production and in the assessment of related environmental impacts (e.g., local water pollution or greenhouse gas emissions). Improved technical and institutional capacity are both necessary to strengthen the ability of member countries to identify and implement sustainable farm production systems, increasing farmers' incomes while minimizing negative environmental damage.

Improved manure statistics will be discussed within the context of the System of Environmental-Economic Accounting (SEEA), in connection with possible mechanisms useful to monitor post-2015 specific targets of the Sustainable Development Goals (SDGs).

Methodology

The need to produce estimates as robust as possible within the data and resources constraints in member countries will be highlighted, and methodological options will be discussed.

This entails a phased approach, as currently being developed under the System of Environmental-Economic Accounting (SEEA), with methodological and data availability explored at various levels, from official country data communicated to FAOSTAT (Tier 1) to more detailed national approaches (Tiers 2 and 3).

Participants will review the methodology, coefficients and data of the FAOSTAT database with respect to estimating N inputs from livestock manure, with practical examples including use for estimation of greenhouse gas emissions. A simple yet robust Tier 1 approach, as well as a more sophisticated Tier 2 method, will be presented. Attendees will further be encouraged to present and discuss their experiences on data and methodologies, highlight institutional arrangements and national data collection processes. Opportunities and limitations of each methodology presented will be analyzed, in an attempt to identify specific data needs and challenges and chart a way forward.