

# MANURE STATISTICS: National data availability

## Country answers to the questionnaire

30 November 2015, Kigali, Rwanda

**International Workshop**

***Statistics on nitrogen input from livestock manure:  
Estimating availability and use***



Food and Agriculture Organization  
of the United Nations

# Country participants

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Workshop on manure statistics

Country participants



# Country perspectives on manure statistics (1)

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## A. Country overview

- ✓ Name, organization and country
- ✓ Importance of the livestock sector
- ✓ Main manure management system
- ✓ Typical use of manure



# Countries and Institutions of respondents

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	Ministry of the Environment	NSOs	Ministry of Agriculture / Livestock	Other
Benin	X			
Burkina Faso		X	X	
Botswana		X		
Cameroon		X	X	
Ethiopia	X	X	X	
Ghana			X	
Ivory Coast			X	
Rwanda		X		X
Uganda		X	X	



# Countries and Institutions of respondents

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Country	Institutions
7. Ghana	Ministry of Food and Agriculture
8. Ivory Coast	
9. Uganda	Uganda Bureau of Statistics
	Ministry of Agriculture, Animal Industry and Fisheries



# Country overview

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- ✓ In all the selected countries livestock sector a significant part of the **GDP** ;
- ✓ **Cattle, small ruminants, pigs and chicken** important in all countries; **camels and equines** in Ethiopia ;
- ✓ **Only a few countries** reported on management systems:
  - Anaerobic digestion (Burkina Faso ; Rwanda)
  - Traditional management - Daily application (Burkina Faso ; Cameroon)
  - Composting (Burkina Faso)
  - Storage (Benin ; Cameroon ; Rwanda)
- ✓ Main uses :
  - Left on pastures** and Applied to soils / cropland (**all Countries**);
  - Burnt for fuel (Burkina Faso; Ethiopia; Ghana)
  - Bio-gas (Burkina Faso ; Cameroon ; Rwanda )
  - Other (e.g. aquaculture) (Cameroon) and sale (Burkina Faso)

# Country perspectives on manure statistics (2)

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## B. Data availability (at national, regional and local level)

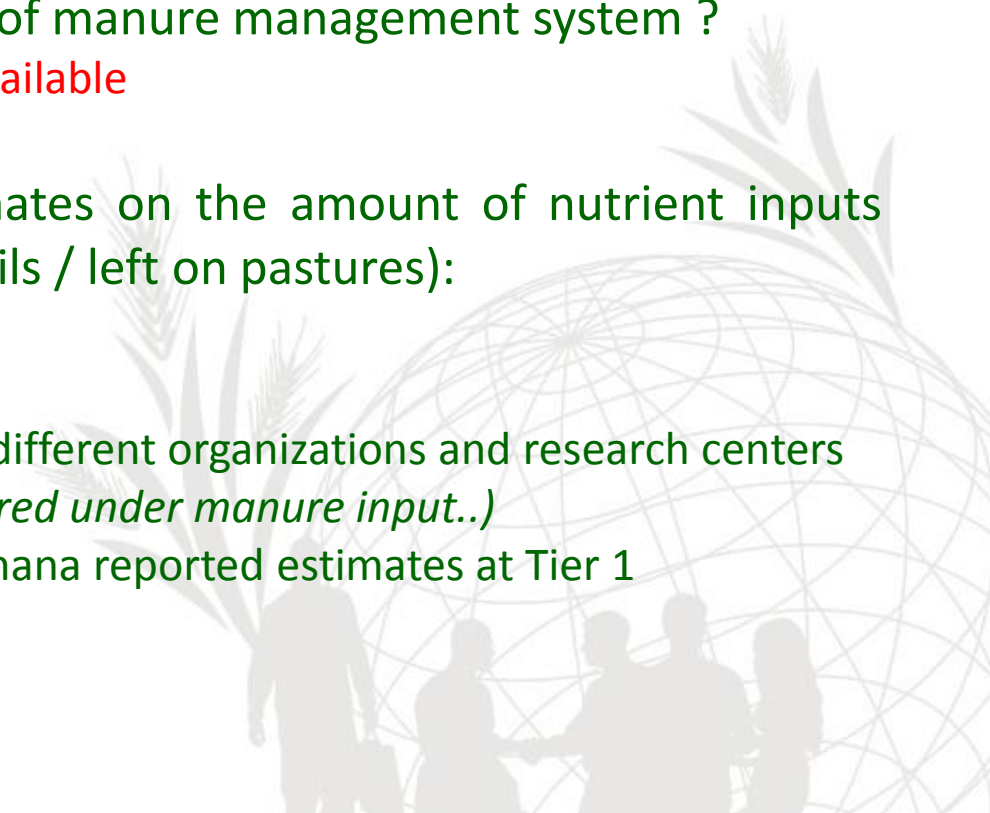
- ✓ Availability of data or estimates on the amount of manure produced;  
**Not available or only partially available**
- ✓ If yes, data available by type of manure management system ?  
**Not available or only partially available**
- ✓ Availability of data or estimates on the amount of nutrient inputs from manure (to cropland soils / left on pastures):

### **Only available in:**

Burkina Faso: data collected by different organizations and research centers

Ethiopia: partial data (*area covered under manure input..*)

Burkina Faso, Ivory Coast and Ghana reported estimates at Tier 1



# Country perspectives on manure statistics (3)

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## C. Methodology and Applications

- ✓ Use of relevant statistics:  
Mainly GHG emissions at Tier 1 level
- ✓ Availability of estimates on environmental impacts?  
Used for GHG estimates in Ghana, Burkina Faso, Benin, Ivory Coast;  
Rwanda and Ethiopia (planned)
- ✓ Level of detail for available estimates ;  
Ghana and Ivory Coast: national, regional and local  
Burkina Faso: national and regional

Geospatial analyses rare in all countries





# Country perspectives on manure statistics (4)

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## D. Institutional arrangements

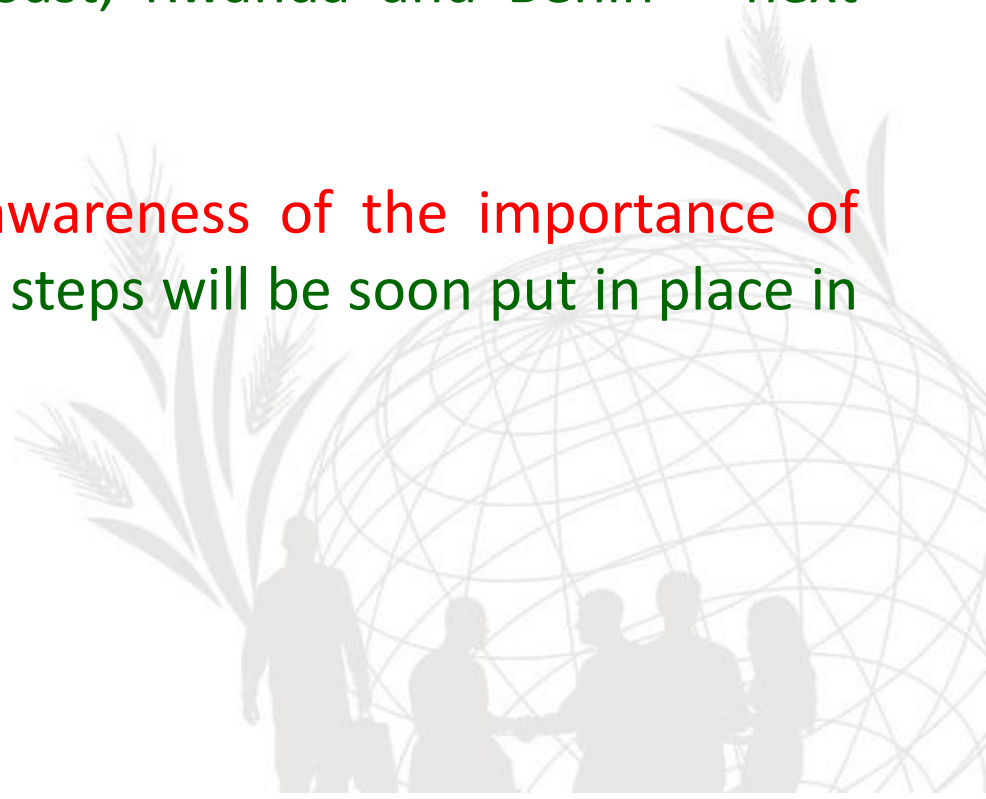
- ✓ Role of respondents institutions in production / analysis of relevant statistics
- ✓ Existing collaborations between institutions (including international organizations) / data providers



# How and which institutions are involved ?

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- Responses suggest that the selected institutions are **rarely involved in the development of manure statistics *per se***
- **Positive signals often associated with specific projects** (e.g. from Burkina Faso, Ivory Coast, Rwanda and Benin – next presentations)
- However there is general **awareness of the importance of these statistics** (e.g. relevant steps will be soon put in place in Cameroon)



# Manure statistics produced collaboratively?

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- Benin, Burkina Faso, Cameroon report more mature institutional processes and collaboration in places

Important signals / outcome of regional initiatives

- Collaborative processes stronger when specific projects in place

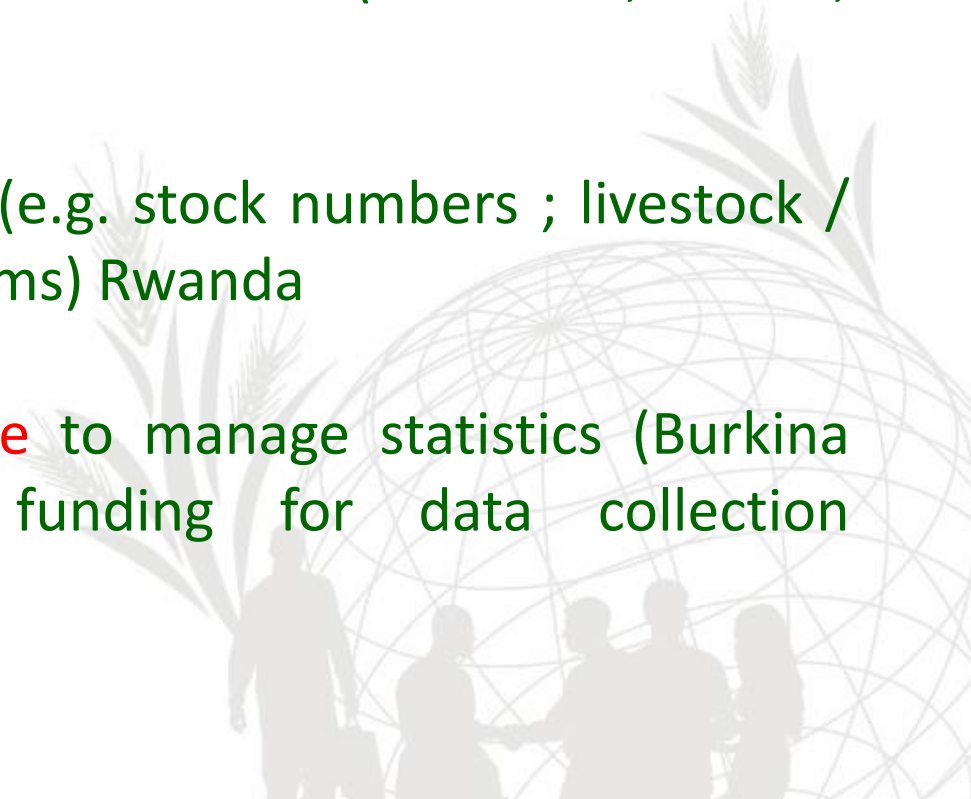
Scaling-up ?



# Technical Challenges for manure statistics (5)

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- **Missing specific competences** (Burkina Faso, Ethiopia, Benin, Ghana)
- **Missing specific emission factors** (Botswana, Benin, Burkina Faso)
- **Gaps in underlying data** (e.g. stock numbers ; livestock / manure production systems) Rwanda
- **Missing suitable software** to manage statistics (Burkina Faso) and **adequate funding** for data collection (Cameroon)



# Institutional Challenges for manure statistics (5)

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- ✓ Limited funding for data collection and development of competencies (Ethiopia, Benin, Ivory Coast) and of the livestock sector (Rwanda)
  - ✓ Limited synergies and communication between the main data producers (Ministries Agriculture, Environment, Statistics and academia)(Benin, Burkina Faso, Ghana) and access to data (Cameroon, Ivory Coast)
  - ✓ Missing appropriate policies in place (Rwanda)
  - ✓ Inadequate linkages research and extension and farmers on manure management / importance (Rwanda, Ghana)
  - ✓ Limited harmonization in methods and data reporting (Cameroon)
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## Suggested steps (6)

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**Improve/increase collaboration** between data producers ;  
harmonize methods ; monitoring (Burkina Faso, Cameroon,  
Ethiopia, Ghana, Rwanda)

**Increase financial support** (Ghana, Burkina Faso, Cameroon,  
Ethiopia, Ivory Coast)

**Develop national capacities** (Benin, Burkina Faso, Cameroon,  
Ethiopia)



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# Thank you!

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<http://www.fao.org/economic/ess/environment/en>

