#### Theme 3: Animal Nutrition and Feeding

# MANURE SCORING AND EVALUATION

## Level 1

Topic	Training & information Content
3.1	Estimating feeding value of fodder & feed on dairy farms
3.2	Sampling feeds & forages/analysis interpretation
3.3	Estimating Dry Matter intake for various breeds/age categories of dairy cattle in the tropics
3.4	Reviewing feed intake, rumen fill, Body Condition Scoring (BCS)
3.5	Life weight estimation of cows
3.6	Rumen fermentation
3.7	Mineral & vitamin requirement, guidelines
3.8	Manure scoring and evaluation
3.9	Guidelines for ration calculations for various breeds, heifers, lactation stage (Rumen8)
3.10	Use of Rumen8 software for ration calculation
3.11	Optimization of ration with Rumen8
3.12	Feeding management guidelines
3.13	Feeding management of dry cows/close up
3.14	Feeding systems
3.15	Metabolic disorders
3.16	Scoring locomotion and hoof condition
3.17	Mycotoxin in dairy cattle nutrition
3.18	Heat stress in dairy cattle nutrition
3.19	Monitoring feeding management, using KPIs (based on Rumen8)



# 1. You will learn about (learning objectives):

- ☐ Impact of feeding on the cow's manure
- ☐ Manure as a health characteristic
- ☐ How to use the cow's manure as a management tool



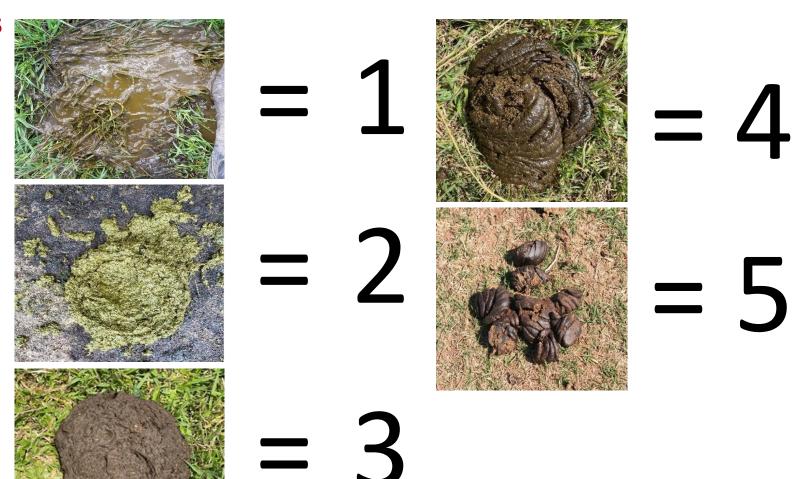
#### 2. Background

- Cow manure is seen as a useless waste product
- It is an indispensable aid for optimizing (milk) production
- The manure can give a lot of information related to health of the cow



### 3. Manure (Dung) Scores

Scores range from 1 to 5



#### 3.2 Manure (Dung) Scores Cont'd...

 To produce milk optimally, a cow's manure should not score 1 or 5.
Score 3 is the most ideal.



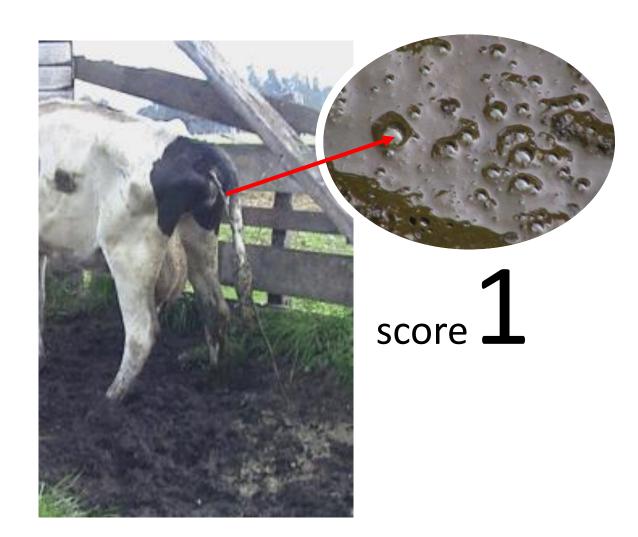








• Score 1: Represents watery diarrhea and is common in cows with an infectious disease



 Score 2: is often associated with lush pasture (more likely at the start of the wet season) or a ration imbalance

 High producing cows with a high level of concentrates in the ration have this score



 Score 3: Is the <u>ideal score</u> for lactating cows with proper ration





- Score 4: Is common in heifers and dry cows, but implies an improper ration for lactating cows
- Possible reasons include:
  - High fibre
  - Too low energy
  - Too low protein
  - Lack of water







Score 5: Is usually representative of a ration imbalance and is seen in dry cows and heifers, quite often in combination with poor asses to water. Cows have difficulties with defecating manure

