Conservation of nutrients in animal manures

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Why should manure be managed properly?

Sound management of animal manures plays a crucial role in reducing nutrient losses, particularly nitrogen. Manure is not simply a “problem” which needs to be disposed of as cheaply as possible but a valuable resource that can be used to replenish nutrients removed from the soil by crops.

High nutrient losses occur when the manure is exposed to direct sunlight and rain. Most cattle bomas have sunken floors that retain excessive water, a condition that encourages nutrient losses through gaseous emission and leaching. Bomas on sloppy grounds promote nutrient losses through runoff.

- Nutrient losses through gaseous emission occurs if water is allowed to accumulate in a boma
- Nutrient losses through leaching occurs if manure is exposed to rain
- Nutrient losses through runoff occurs if Boma is on sloppy ground
• Build a boma on a gentle ground to prevent nutrient losses through runoff

• Remove manure from the Boma at more frequent intervals and stockpile it under a shade

• Frequent removal ensures that the manure will not be mixed with much soil through trampling. Add crop residues to the stock pile to improve the quality of the manure

Cover the manure heap with dry grass or with any other suitable materials to prevent excessive drying and to conserve nutrients
Allow manure to decompose properly for 2-3 months. During the decomposition process, most pathogens, insect larvae and weed seeds typically found in manure are eliminated.