

MANAGEMENT OF SILAGE PIT (FEED OUT) - Level 1

Topic	Training & information Content
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2.4	Fermentation process in silage
2.5	Treatment of straw with Urea
2.6	Making of urea/molasses/mineral lick
2.7	Management of silage pit (feed out)
2.8	Estimating fodder supplies for dry season feeding & planning of feeding management



1. You will learn about (learning objectives):

- Considerations when making pit silage.
- Common mistakes made during silage feed out.
- Management practises before, during and after silage feed out.



2. Introduction

- Majority of feed losses in silage occur during feed out.
- Decision made before, during and after feed out of silage greatly impacts reducing feed losses.



3. Factors to consider when creating a silage pit

- i. Condition of the ground where silage pit/clamp is to be located, for example:
 - Drainage of the ground - Should not be low lying.
 - Slope/elevation of the area - Select a higher level on ground.



3.1 Factors to consider when creating a silage pit Cont'd...

- ii. Location of the silage pit, for example:
 - easily approachable and accessible.
 - away from trees.
- iii. Number of animals.
- iv. Average amount of feed used by the herd on a daily basis (per day).



4. Importance of considering site for silage pit

- i. Reduces chances of spoilage.
- ii. Enables easy feed out.
- iii. Makes the pit filling process easy.
- iv. Decision made can reduce cost of silage making process.



5. Common mistakes relating to silage pit and feed out

- i. Creating an unproportional pit in relation to animal herd size, mostly limiting pit to one.
- ii. Picking silage from different sides of the pit instead of limiting the open face to one side.
- iii. Poor feeding speed - Picking small quantities of silage than needed by the cows.
- iv. Poor removal of silage from the pit face leaving behind loose silage that ends up being spoilt after a while.



6. Management practices to consider at feeding out silage

- i. Feeding speed.
- ii. Ease of silage removal from the pit.
- iii. Method of removing silage from the pit.
- iv. Cleanliness at the surrounding and of the silage face.
- v. When and when not to cover silage face.
- vi. Feeding space.
- vii. Losses during feeding.



7. Feeding speed

- Create the silage pit in accordance with your animal herd size.
- Pit should be shaped like bread and sliced from the shortest side.



Note: On average farmers should work with maintaining a feeding speed of 1.5-2 meters per week.



8. Ease of silage removal

- Ensure that silage can be easily accessed and removed.
- Pit should be closest to the animal feeding area.
- Site for silage pit should also be well spaced.
- Staff should not have difficult time when accessing silage.



9. Method of removing silage from the pit

- Removing silage for feeding necessitates loosening the open side of the silage pit.
- Remove all loose silage materials from the open side of the silage pit face.
- After removing silage ensure the silage pit face is maintained straight and tightly covered.



Tightly cover the silage after feed out

10. Cleanliness around silage face

- Area around the silage pit should be clean and well drained.
- Remove loose and dry materials at the entrance of the open face of silage pit.



11. Covering silage face

- Loose cover will not avoid air from coming in but it can protect against rain. However during warm days the cover may encourage mold and bacteria growth.
- Removing silage everyday helps reduce water infiltration into the silage pit from the silage pit face.

Further reference: Fermentation process in Silage Part I and II.



12. Feeding space

- Provide enough space at the feeding area in a cow house/barn to avoid competition at the feed trough.
- Provide a minimum of 65 cm per cow to ensure high feed intake.



13. Losses during feeding

- Once silage is open feed regularly only what a cow can take within two successive feedings and not in excess.
- Cows should not trample on silage. Keep the open face of the silage pit, feed troughs and alleys clean.
- Feeding high quality feed (silage) reduces wastage.



14. Packaging bags

- Packaging polythene bags/packages are common among Ugandan smallholder dairy farmers making silage.
- Forage maize is harvested and packaged in polythene packages.
- Uses manpower to press silage layer by layer by stumping and sealing/tying tightly with a rope.



14.1 Handling of packaged silage

- Site where packaged silage is place should be clean and free from sharp objects.
- Carefully inspect the packaged silage for holes and seal immediately.
- Stack packaged silage properly.



15. Baled silage is the future!

- The future for farmers and distributors is baled maize silage.
- Bales eases access to silage by farmers with feed shortage or those without capacity to grow and make own maize silage.

