

Workshop Report

Training on Silage and Haymaking in Morocco



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Introduction

Silage making is not common in Morocco. The reasons for this include; the dominance of an extensive grazing system for small ruminants throughout the year; favourable climate for hay making as a low-cost system and a high proportion of smallholder farmers. Silage making is mainly undertaken by larger dairy farms which incorporate maize or sorghum in their feeding rations and by goat farms which undertake milk production. Nevertheless, there is increasing interest in silage making in Morocco due to changes in the agricultural structure. Farm sizes and herd sizes are increasing and there is a growing tendency towards intensive animal production. The interest in silage making is focused on producing silage from maize and sorghum. However, hay making will tend to remain the most important method of forage conservation for the other forage crops which include alfalfa, forage barley and oat, forage grasses, forage legumes and mixtures.

In collaboration with CECAMA (Moroccan-German Agricultural Advisory Center) three training workshops for silage making of sorghum and maize were organized for interested farmers, agripreneurs and government extension staff.

Course Content

All three trainings/workshops were organized with a theoretical section that included presentations and a practical section that comprised a field visit. The main objective was to impart knowledge on silage making. Specific objectives included to demonstrate differences between sorghum and maize in cultivation and silage making and to demonstrate advantages of producing sorghum silage over maize silage under semi-arid conditions.

Main course contents included both theoretical and practical sessions on the following:

- Optimal harvest date for sorghum and maize.
Harvesting too early or too late has disadvantages to silage making. In Morocco, the harvest date is often too late. This causes insufficient silage compaction which results in silage fermentation.
- Pitfalls of poor fermentation processes:
Poor silage quality results in reduced feed intake by livestock and high energy losses.
- Limited access to field choppers in Morocco. Currently, only bigger farms have their own mechanization for silage making, transportation of silage from the silo and silage distribution in stables and feedlots. Small livestock farmers buy silage in small bags (30-50 kg) for feeding by hand. Pros and cons of limited access to field choppers were discussed.

Training Dates

Training 1

Date: 12 September 2019

Venue: Sidi Slimane in the CECAMA headquarter and at Sidi Kacem on ORBIS farm

Participants (31): 14 farmers, 14 agricultural advisors and scientists, 3 private companies.

Training 2

Date: 2 October 2019

Venue: Merchouch on the ICARDA Experimental and Research Farm

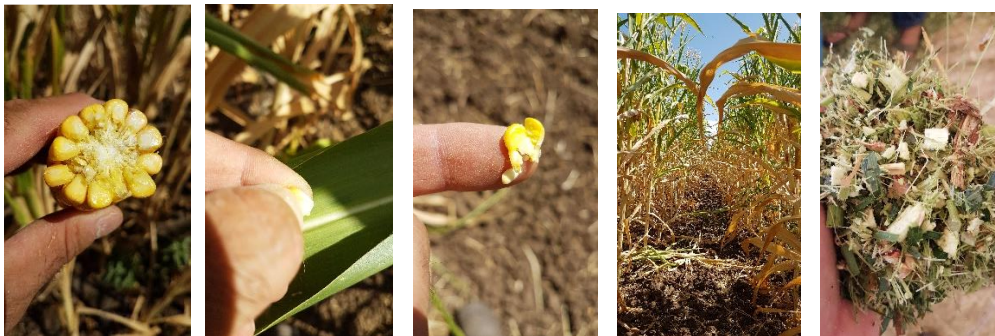
Participants (28): 7 farmers, 20 agricultural advisors and scientists, 1 private company.

Training 3

Date: 5 November 2019

Venue: Meknès National Agricultural School; ENA Experimental and Educational Farm

Participants (59): 3 farmers, 52 agricultural advisors and scientists, 4 private companies.



Outputs

- All participants agreed that the importance of silage making will increase in Morocco in the future, but that this will happen mainly on the bigger dairy farms.
- The focus of silage making will be on maize and sorghum.
- Considering current trends in climate change sorghum will play a more important role in forage farming in Morocco.