

Technology Fact Sheet for Adaptation

HAY PRESERVATIONⁱ

5. HAY PRESERVATION	
Introduction	Hay making is the process of turning green, perishable forage into a product that can be safely stored and easily transported without danger of spoilage while keeping the nutrient loss to a minimum. Hay making is one of the best ways to increase the year-round carrying capacity of the farm as forage is harvested during the periods of rapid, excess growth and undamaged by weather. In dry areas, it is relatively easier to make hay compared to other forage. Due to hay making, livestock farmers can feed cattle and other animals for 365 days. The purpose of hay making is to conserve excess forage during rainy season for use during the dry season when forage is scarce and secondly, to produce a cost effective, nutritive livestock feed. It is easier to make hay in dry areas such as Eastern, North Eastern and parts of Coast Province.
Technology Characteristics	Hay can be made from a number of crops:- Maize, Sorghum, Incerne, Desmodium, Napier grass, Rhodes grass and oats. The process of making hay involves drying the green crop. This involves reducing the moisture content of green forages so that they can be stored without spoilage or further nutrient loss. Hay can be made from any amount of grass. Hay requires heat to dry. So heat in the dry areas is good for hay making. Some of the characteristics include: green in colour; pleasant smell; not easily broken; has more leaves than stem and animals like it. Grasses for fodder should be harvested or cut at the pre-flowering stage because after flowering and seeding, grasses contain less nutrients. Hay can be made from planted or natural pastures. It is usually best at the end of rains when there is plenty of sunshine and plenty of forage.
Country Specific Applicability	The practice of hay making is widespread in the country for both small operators and large scale operators. For small scale operations, the grass is cut with a sickle just before flowing. The cut grass is then spread on the field to dry turning it once a day for 3 days. The dried grass is finally baled using a simple box with dimensions of 3 ft x 11/2ft x 2ft. The box is filled with dry grass then tightly packed and tied with strings on both ends. For large operations, grass is mowed, tedded, raked and baled and stored. In Kenya, KARI Embu Station developed a low cost and farmer friendly hay baling box. The technology has been adopted and is being used by several farmers routinely in the country.
Status of the Technology in the Country	The technology has been adopted and is being used by some livestock farmers in dry areas.

ⁱ **This fact sheet has been extracted from TNA Report – Technology Needs Assessment Reports For Climate Change Adaptation – Kenya. You can access the complete report from the TNA project website <http://tech-action.org/>**