Projet Energies Durables dans le régions d’Agadez et de Tillabéri

European Commission – Energy Facility ACP-EU 10 FED

CRIS n° 264 691

Introducing pellet as animal fodder
Introducing pellet making for fodder production

The same mill and pelletizer used to produce pellets from biomass for energy purposes, can produce fodder, in the form of pellets.

Tests have been carried out in this direction by the project staff, and pellet making for fodder production proved to be a quite interesting idea for Niger.

The pellet making machines transported to Niger by this project, have been the first to be introduced in the country. The use of pellets as a fodder is still largely unknown in the country.

With this innovation, the project aims to enhance the local fodder production and to ameliorate the overall animal nutrition level.

Of course, those two goals are closely linked to rural economy and human nutrition, and as long as fodder production in the form of pellets will expand, rural economy and human nutrition level will ameliorate too.
Some aspects of hay and pellet making

When a plant is harvested and transformed to be preserved, it undergoes a certain loss of its nutritional power. The methods used to transform and preserve this plant have a big influence on those losses.

If an entire plant is harvested and processed into pellets, all of its parts (stalks, leaves, seeds) are converted and transformed, and are preserved into the bags. As there is almost no air inside the single pellets cylinders and a very low quantity inside a bag, among the single parts, no big alterations occur inside the preserved product.

The only disadvantages of pellet making are that to perform it, some machines and some energy are necessary. Traditional hay making is simpler.
Some aspects of hay and pellet making

When a plant is cut, left in the field to dry, to become hay, and then packed and transported, some losses usually occur, starting from those very first phases.

Leafs, where the main quantity of nutrients is, are fragile, and a percentage of them is crushed and then fall on the ground while moving, loading and unloading from carts, and while making the sheaf, or hay bales.

After those first losses, because of the air inside the bales/sheaf, some alterations might occur because of the action of molds and other mushrooms.

Insects and rodents can feed on stored hay, reducing the total available quantity.

Those three factors have to be carefully taken into consideration to minimize losses. In pellet making generally speaking the product is subject to lower losses than hay.
Pelletized fodder has seven times less volume than hay, allowing a more efficient transport and storage.
Pelletized fodder storage is easier as pellets can be preserved in sacks.

Thanks to its higher density, that involves a lower volume, the product is generally kept in storehouses, protected from the sun.

Pelletized fodder better preserves its colour and flavour.
More informations on:
www.energiesdurablesniger.org