



What is Livestock Management ?

Healthy livestock makes life on the farm easier and more productive



People do various types of work to sustain themselves. Within farming and the homestead, a major work is keeping livestock. Often, more work and expense goes into livestock than any other task. Cutting and feeding fodder, watering, mucking out, maintaining the stalls and taking out to graze all takes a lot of farmers' time. Often it means there is no time to do other work, or learn, or play. With livestock, we can't say "leave it until tomorrow" for any work. But compared to all the time, work and cost farmers put into their livestock, the production is often too small. And there's often no time to grow vegetables, fruit, crops, keep bees, etc.

In this chapter, we will tell you of simple improvements to traditional livestock management, which can be made by every farmer.

Why manage livestock ?

Nowadays there are many problems with livestock management. Livestock are more sick. There's no fodder on the farm. The people get more sick. But they still have to send their children to school. So in order to get the benefits from livestock, we need to pay attention to this. This chapter offers some suggestions as to how to make livestock management easier and more productive.

Reasons for lack of benefits from livestock

- lack of healthy forests
- lack of good grazing land
- sickness and disease
- poor stall and feeding management
- poor quality breeding stock
- lack of attention to livestock management
- lack of nutritious fodder well suited to the livestock



How to manage livestock ?

In order to keep our livestock healthy and gain more benefits from less work, there are 3 areas to pay attention to. These 3 areas are :-



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1. Stall Management

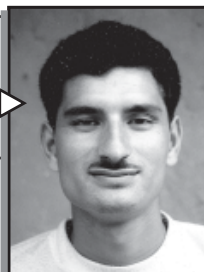
Like people, livestock need dry, clean, light but shaded, and airy places to live. How many farmers keep their livestock in dark, damp, airless sheds ? If the sheds are like this, without sunlight, and dirty, of course livestock will be weaker, and get more disease. If livestock are not happy in their place then this can lead to many problems, some of them big ones. So to get benefits from the livestock, their sheds must be built and managed to be cool in the summer, warm in the winter, dry, airy and clean. The stalls need cleaning every day, and the muck collected properly in one place to make good compost. More information about this is given in the *Compost* chapter.

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2. Diet and Nutrition

(a) The importance of fodder

A balanced diet of grains and fodder is important for livestock. Livestock are more healthy and resist disease better with a mixed diet of grain and fodder, and will be more productive.

What fodder to feed ?

There are many types of fodder. Legume and non legume, tree leaf fodder, and fodder grasses, etc. are the main types. These are best mixed together. Especially, never feed just legume fodder, but mix it with other types so there is not more than 30% legume.



How to feed ?

Straw or dried grass is best cut into short lengths about 2 inches long. This makes it easier to digest for the livestock, so they use less energy. So, less fodder gives the same benefits, or the same amount of fodder gives more benefits. In this way 2 loads of fodder can give the same benefits as 3 loads.

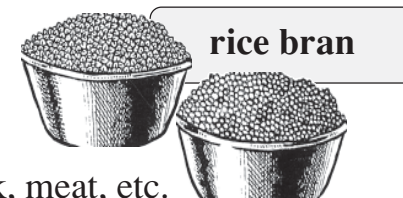
Dried, cut straw etc. should be mixed with green fodder and a little salt to feed to livestock. This mix should be fed in a trough (manger) made of wood or another suitable material. This way the fodder doesn't spill on the floor and go to waste, the livestock eats it all, and it doesn't mix with dirt and muck on the floor. See also the pictures on page 8 for more information.

(b) Balanced Grains

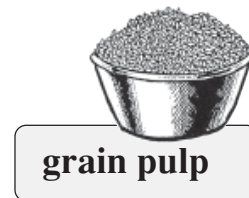
Livestock need nutritious food to grow well, stay healthy and stay productive. To obtain these nutrients they need the right quantities of mixed grains, or balanced grains.

Why feed mixed grains ?

- to increase output of eggs, milk, meat, etc.
- for healthy bones and hair
- to heal wounds and bruises quickly
- to give energy for working animals
- to protect from disease and stay healthy
- for healthy pregnancy and birth of young
- for the young animals to grow well



rice bran

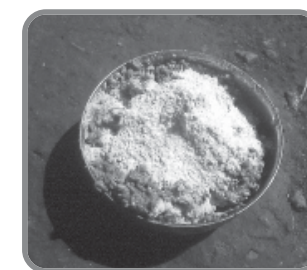


grain pulp

How to prepare ?

Balanced grains can be made at home. They can be prepared in the following way :-

- 2 parts rice bran
- 1 part corn, millet, wheat or barley flour
- 1 part oil seed cake or pulses (lentils, soya, etc.)
- mix the ingredients together



1 part oil seed cake or pulses



In this picture balanced grains made at home are fed to the pigs in a wooden trough

How much to feed ?

For cows, buffalos, sheep, goats or pigs the more you can feed mixed grains, the quicker they will grow to give benefits. But of course it's not enough just to give grains - leaf and straw fodder should also be provided.

- cows and buffalos producing milk, or about to calve, should be fed 2 to 4 kilos of balanced grains a day.
- sheep and goats should be fed half to one kilo of balanced grains per day.
- pigs should be fed 1 to 2 kilos of grain per day.



Things to remember :-

- oil seed cake should be baked and ground to a powder before mixing with grains.
- prepared balanced grains should be stored in a dry place in an air tight container
- if there is fungus in the grains, or they have formed lumps, they should not be used.

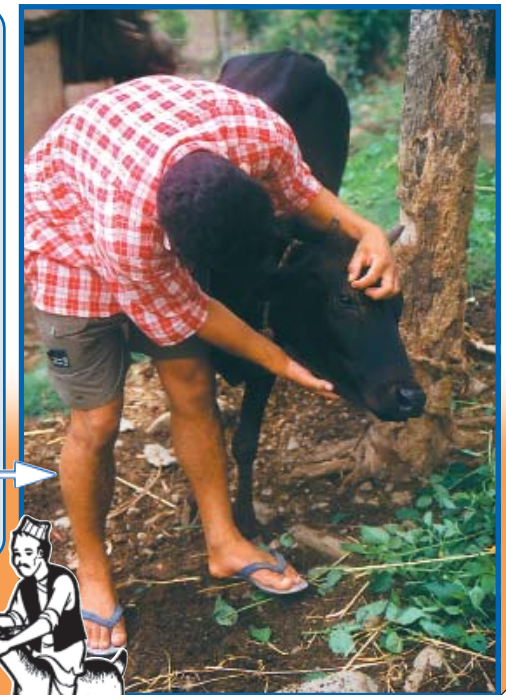
Let's See

How to manage livestock



Goats fed by hanging fodder near their shed

Livestock should be checked regularly for signs of illness, wounds, etc. If found, these should be treated as soon as possible. If treatment is delayed, the cost will increase.





Health problems can result from livestock being fed off the floor.

If fodder is fed from the floor, it may contain dung. If the dung is from diseased livestock, the disease will spread.



Goats fed in a manger

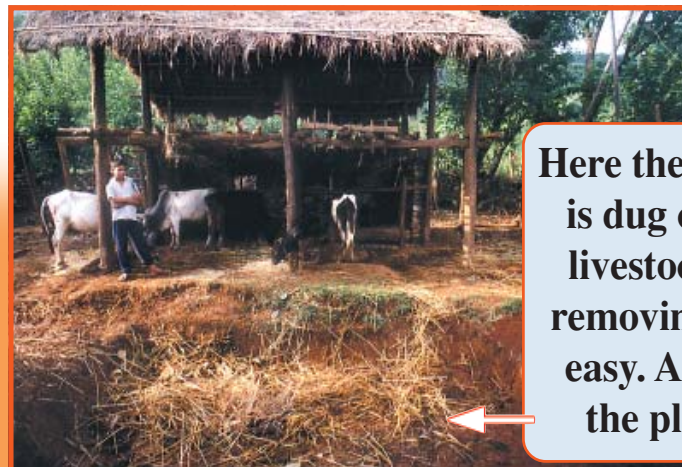
Disease can be prevented if fodder is given in a clean trough, free from dung, mud and dust



When fodder is cut into short pieces, less amount gives more benefits.



For communities, it's worth investing in a large fodder cutting machine



Here the compost pit is dug close to the livestock to make removing the muck easy. And it keeps the place clean.



Salt Lick



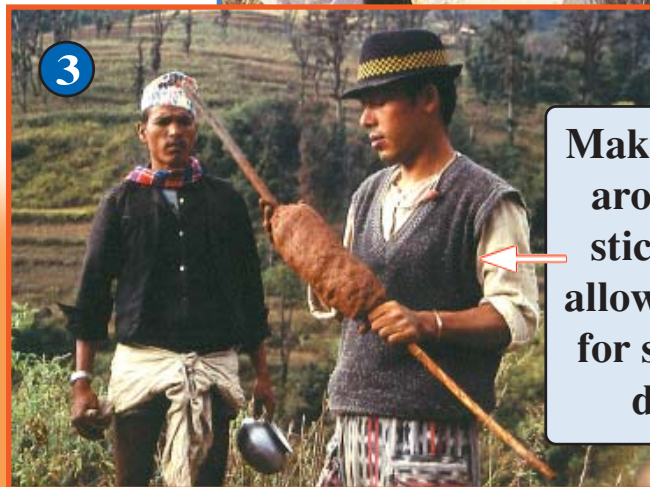
1 Grinding salt to a powder to make a salt lick. This can be mixed with garlic.



Add the salt to powdered clay, add water and mix well



3



Make a ball around a stick and allow to dry for several days



4

Hung in the stalls, the salt lick can be used any time it is needed

(c) Salt Lick

Like people, livestock need to eat salt. It's often traditional to feed salt once a week or even once a month, so livestock cannot eat salt as they want it. The health of livestock can be seriously affected if they are not able to eat salt when they need it. They will start to eat less fodder and grains, and drink less water. They become thin, and as a result of being weak can suffer from diseases, and have less strength. Females do not seek males to mate with, and other problems can start to appear. But too much salt can also cause problems. This is why it is good to make a salt lick.



How to make ?

Take half a kilo of clay, half a kilo of salt, 5 egg shells, and grind to a powder. Add a little water and mix well. When the mixture is like stiff dough, make into a ball around a stick. Dry in the shade for 2 days and then in the sun for 7 days. When it is well dried, hang the ball in a place where the livestock can reach it easily. They may need to be taught to use it at first, but when they develop the habit, they will lick it whenever they need salt. The salt lick helps to keep the livestock healthy and free from disease.

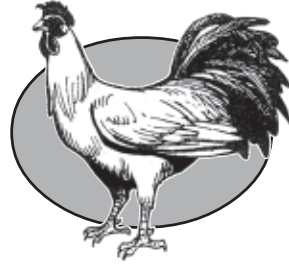
3. Breed Improvement

What is it ?

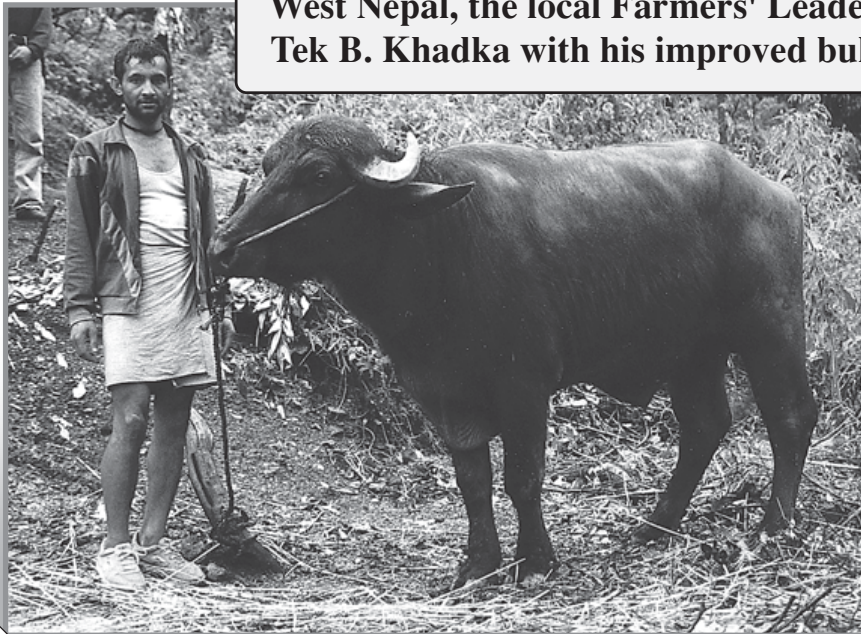
To produce better offspring of any species, a male and female with very good qualities are mated together. This method of increasing output through the production of better offspring can be called breed improvement.

Qualities of the male :-

- the right weight and height according to age and breed.
- must have the characteristics of the species or variety.
- have a strong, vibrant and healthy body.
- a male goat is best chosen from a mother which has had many kids.



In Pokhora village, Jajarkot district of West Nepal, the local Farmers' Leader Tek B. Khadka with his improved bull



Qualities of a good female :-

- have a strong, vibrant and healthy body.
- goats or pigs should have the ability to bear many young.
- the right weight and height according to age and breed.
- for cows/buffalos, the blood vessels should be large; in pigs there should be many teats.
- thin skin and fine hair.
- broad pelvises and rear end.
- the habit of seeking males at regular times.

Ways of Breed Improvement

(a) cross-breeding between relatives

Breeding between male and females which are close relatives (within 6 generations) is called **interbreeding**. For example, breeding between brothers & sisters of the same mother, or crossing father and sons with mothers and daughters.

This is not good breeding because :-

- Bad characteristics can be passed on and increased.
- Strength, stamina and ability to resist disease is reduced.
- Breeding ability is reduced.
- Offspring can be deformed or mutated.
- Production, such as milk, will gradually decrease.



(b) breeding between non-relatives within a variety

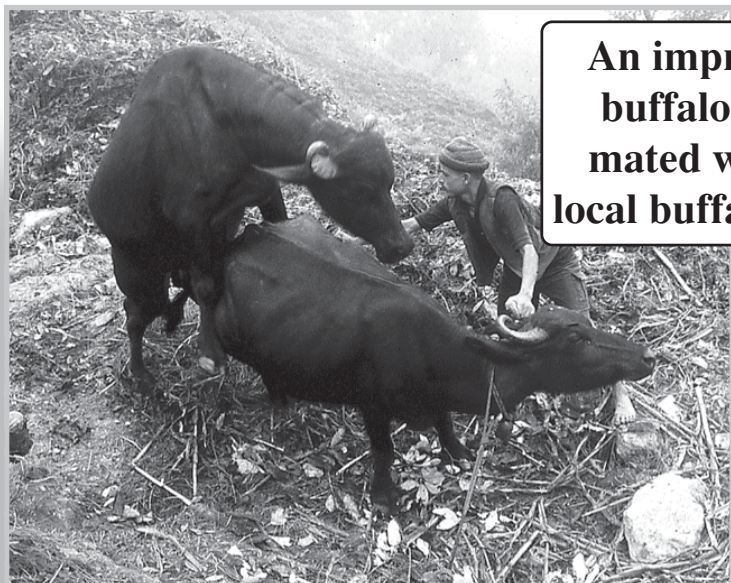
It is better to breed between males and females which are not related. For example, breeds that are the same but which have no relations over several generations. With this method, there are no disadvantages, but often there is little breed improvement.

(c) breeding between different varieties

This is when a local variety is crossed with a different, often improved variety, for example crossing a local cow with a Jersey bull, or a crossing a local goat with an improved billy.

Benefits of crossing between male and female of different varieties :-

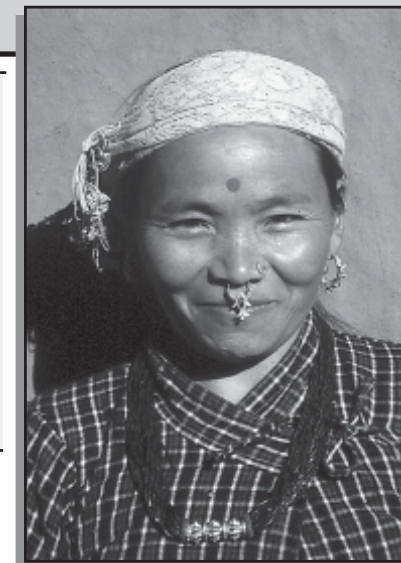
- the offspring can have the best characteristics of the parents.
- resistance to disease increases.
- a low productivity variety can gradually improve its production



An improved buffalo bull mated with a local buffalo cow

Farmers' Experience

Mrs Dhanmaya Gyami



Mrs Dhanmaya Gyami

From Nepal, Surkhet district, Lekh Pharsa -2, Purano Gaun village, and a member of "Creative Women's Group" Mrs Dhanmaya Gyami has learnt improved methods to manage her livestock . Now let's hear about her experience.

“ At first we had to go to the forest a lot. We had to go to watch the grazing livestock. There was no time to do the work at home. The livestock (our cows, buffalo, sheep and goats) were also not so strong. Also, we didn't give the livestock regular check-ups. And we had to go far to bring fodder. Now, the fodder from trees in the fields is enough. There's much more spare time than before and we have started to attend non-formal education classes. We check the livestock regularly, and now they are fat, strong and healthy. I also teach others that they should check regularly and treat their animals quickly if they are sick. It's better to spend a little on this to prevent disease rather than being greedy over 10-20 rupees, then find you lose a buffalo worth 10,000 rupees. The people in our village now have good experience about this. ”

Read On !



Subjects Related to Livestock Management

Good benefits can be had from the information in this book about livestock management. However, this information is also linked to other methods. For extra benefits let's read, learn and practice from other related chapters.

Agroforestry chapter

Fodder is a very important resource for livestock. This chapter gives information on how to create good tree fodder and leaf litter production close to the home.



Compost chapter

Livestock eat at one end, and at the other produce compost. Information is given in this chapter about how to make good quality compost quickly and easily.



Living Fence chapter

By planting a fence made of trees producing fodder and bedding for livestock, these essential resources can be increased locally. This chapter gives information about this.

