

CHAPTER 1 SELECTION AND CARE

1.3 CARE OF DRAUGHT CATTLE

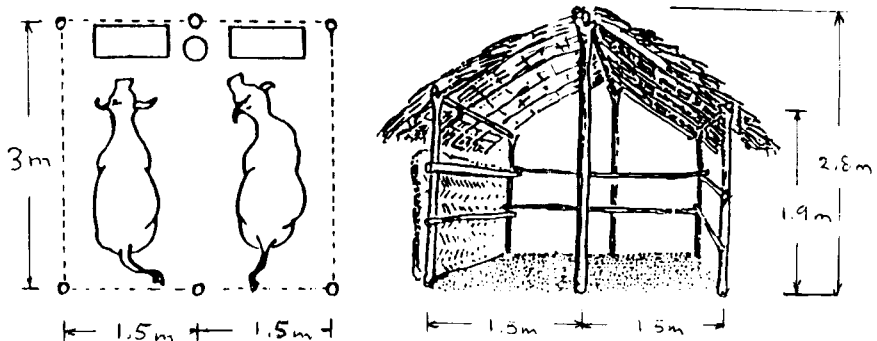
1.3.3 HOUSING FOR WORKING CATTLE

HOUSING

In many traditional farming systems, cattle are kept overnight in open enclosures. Although cattle are hardy, working animals respond well to special treatment. Thus owners of working cattle often construct a special shed for their draught animals. This can be used to house the animals at night and to provide shelter against the sun, rain and wind when they are not out working or grazing. It should be located on a well-drained site. It should be near to any stored feed supplies and close enough to the family dwelling to allow easy access.

The design of the shed should be as simple as possible. Local materials - such as wood, maize stover and mud bricks - can be used to keep costs to a minimum. In warm, and dry environments, a thatched roof supported by four poles may be adequate (Fig. 1). Where temperatures are cooler it may be necessary to construct half or three-quarter side walls to provide greater animal comfort. In the colder highland areas or places where security is a problem, a shed which completely encloses the animals and has a door which can be locked may be required.

The size of the shed will depend on the number and size of the animals being kept. If the sides of the shed are partially or fully closed, leave enough space for an adult person to stand along side the animal when it is tied in the stall. In general, a shed having the dimensions of 2 to 3 square and 2 to 2.5 m high is adequate to house two adult oxen and allow a person easy access.



*Fig. 1 A simple shed for working cattle (with dimensions in meters).
Source: after PROPTA, 1991*

If individual stalls are constructed then they should be wide enough to allow the animals to stand and lie down comfortably. Stalls should be 1.5 to 2 m wide and have a "yoking bar" fixed at a height of 90 to 100 cm from the ground (Fig.3). The yoking bar can be used to tie animals for feeding and watering, during harnessing and when carrying out routine health care, such as removing ticks. If several stalls are constructed in a row they can be separated by a horizontal bar attached between posts at the same height as the yoking bar.

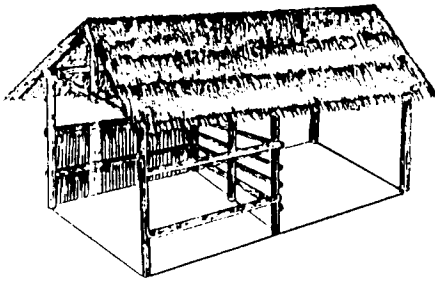


Fig. 2 Simple stall showing equipment area and yoking bar.

Source: after PROPTA, 1991

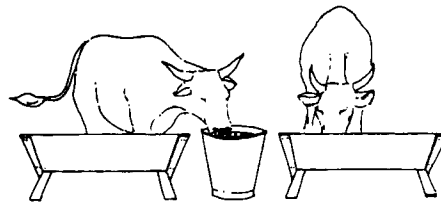


Fig. 3 Working cattle provided with food trough and water.

Source: after PROPTA, 1991

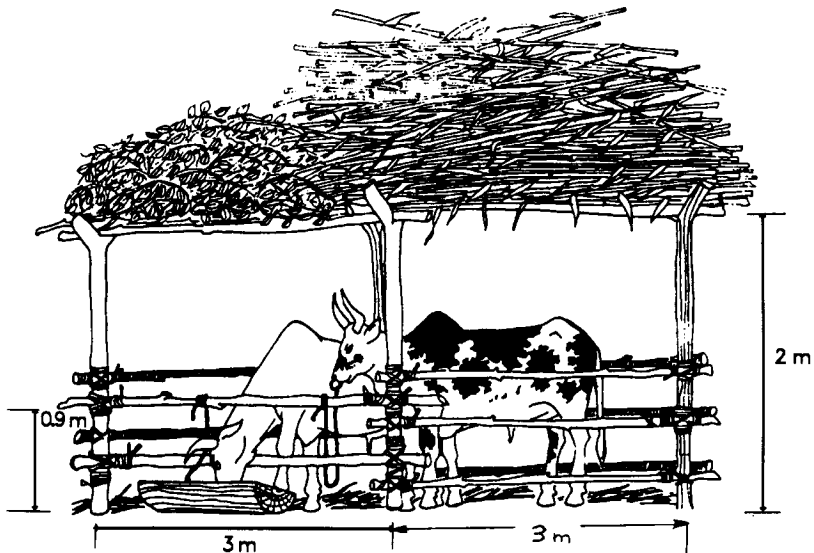
Regardless of the design or size of the shed, it is important that it has good ventilation. The roof should extend about 0.5 m past the base to increase the shade area and reduce the problem of rain blowing inside. A roof made of corrugated iron sheets is likely to be expensive (although it may be quicker and easier to erect and should last longer than thatching). A metal roof will absorb and transmit more heat during the day, thus increasing the temperature inside the shed. This is not generally desirable, except in cooler environments. The temperature stability provided by thatch is usually preferred.

The shed should open into a paddock to permit the animals to exercise (Fig. 5). The opening from the shed into the paddock should be wide enough to allow an animal to pass easily without rubbing itself against any objects. It is important that there are no exposed sharp edges - for example splintered or broken rails or nails - inside the shed or paddock which could injure the animals. Planting a tree in the paddock will provide additional shade in which the animals may lie. A simple crush may be built for holding the animals when being sprayed or treated by veterinary personnel. The paddock should be well-drained. Mud and manure should not be allowed to accumulate.

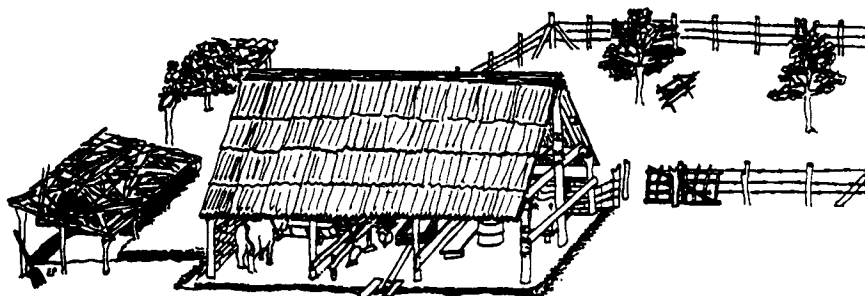
FEED STORAGE

To make the feeding of supplements easy, an additional room may be constructed for storing feed supplies, such as concentrates and mineral supplements. An alternative is to make a "lean to" by extending the roof towards the ground on the side least exposed to the elements. Hay and crop residues should be properly stacked outside near the shed. In some countries these reserves are stored in or on the roof of the cattle shed, or on separate platforms (Fig. 4). This prevents them being eaten by goats. Stored feeds should be kept clean and dry as mouldy feeds can cause digestive problems and make the animals sick.

A feeding trough can be made from a metal drum cut in half or sometimes it is cheaper to make it from wood. A drum cut in half can also be used for storing water. Both can be placed in front of the animals behind the yoking bar. The trough can be used to feed concentrates or hay and crop residues. A feeding rack can also be used. If the trough or feeding rack are located in the paddock they should be firmly anchored so the animals cannot knock them over. The trough and feeding rack should be readily accessible for daily cleaning.



*Fig. 4 Simple stall showing feed trough and food storage on roof.
Source: after CMDT, 1990*

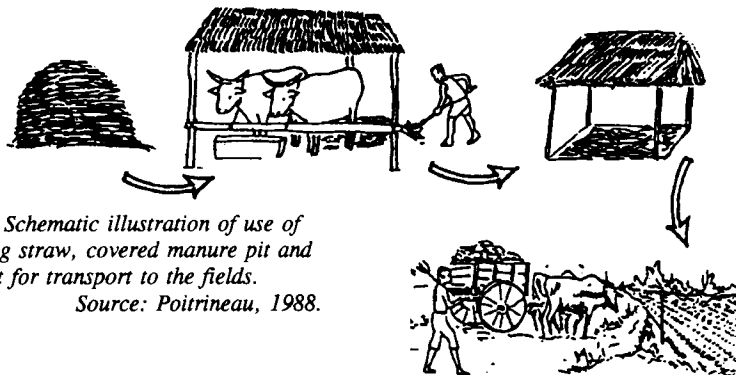


*Fig. 5 Impression of simple shed with paddock, manure pit and food storage.
Source: Poitrineau, 1988*

MANURE DISPOSAL

The shed should be cleaned daily and the manure piled outside to be distributed on the fields at a later date. The longer the manure lies out in the open the quicker the nitrogen is lost. This can be partially overcome by making a pile about 1.5 m high and keeping it covered and moist (Fig. 6). If flies become a problem, the manure should be removed from the area of the shed.

Where there are large supplies of straw, an alternative practice is to distribute clean bedding in the shed daily. The animal manure mixed with bedding is allowed to accumulate and is only cleaned out occasionally, depending on the supply of clean bedding and the acceptable depth of the resulting compost. This makes good compost, but if large quantities accumulate, it is heavy to clean it out. When availability of clean straw becomes scarce, the stall should be scraped clean daily to keep the floor dry for the animals to lie on and to prevent build-up of ammonia.



*Fig.6 Schematic illustration of use of bedding straw, covered manure pit and ox cart for transport to the fields.
Source: Poitrineau, 1988.*