19

Tips and traps in managing high grade dairy stock

This chapter presents a series of photographs depicting good and poor management practices on tropical SHD farms

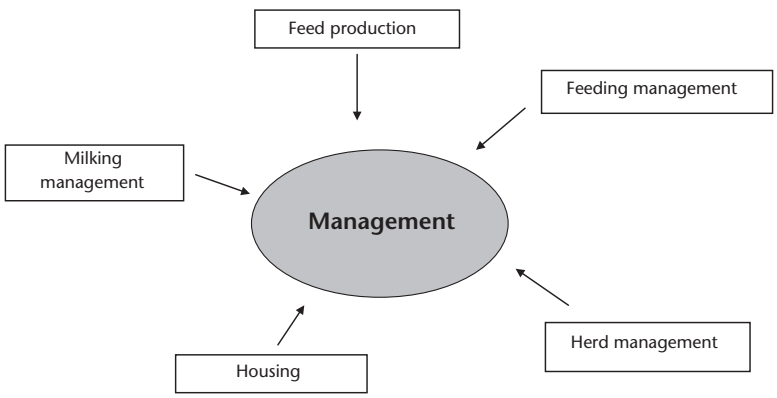


Figure 19.1. The key factors to consider when planning the milking herd's management

This collection of photographs highlight many of the good and poorly managed practices found on SHD farms throughout the world, which will influence the success of schemes to improve farm performance and profits through importing high genetic merit dairy stock.

19.1 Feed production

To optimise forage quality, Napier grass should be harvested at least every 35 to 45 days (Vietnam).

This stand of 100-day-old Napier grass will not be good quality forage (Indonesia).

Guinea grass and Napier grass require different harvesting intervals (Vietnam).

A combination of Leucaena (tree legume) and Napier grass provides an excellent forage mix for milking cows (Indonesia).

Maize (or corn) stover can provide a forage of moderate quality (Indonesia).

Alkali-treated rice straw is not a good milk forage (Indonesia).

Chopped oil palm fronds are a very poor-quality forage (Malaysia).

Banana leaves are a poor-quality forage source (Indonesia).

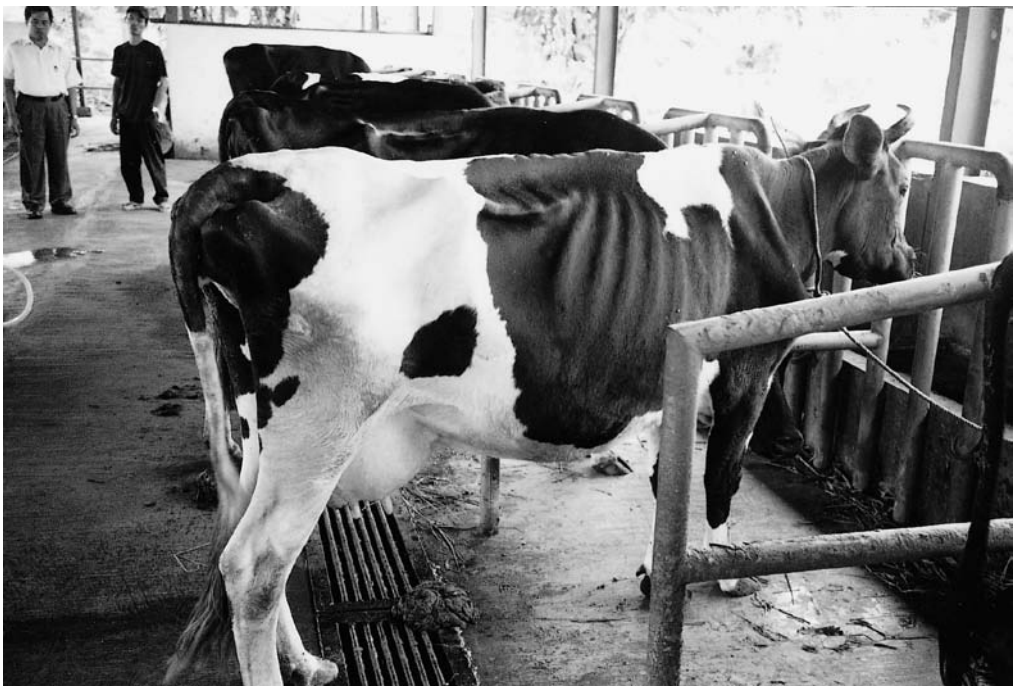
Napier grass requires inorganic fertilisers in addition to cow manure (Vietnam).

A by-product of monosodium glutamate production can provide a relatively cheap source of fertiliser nutrients (Vietnam).

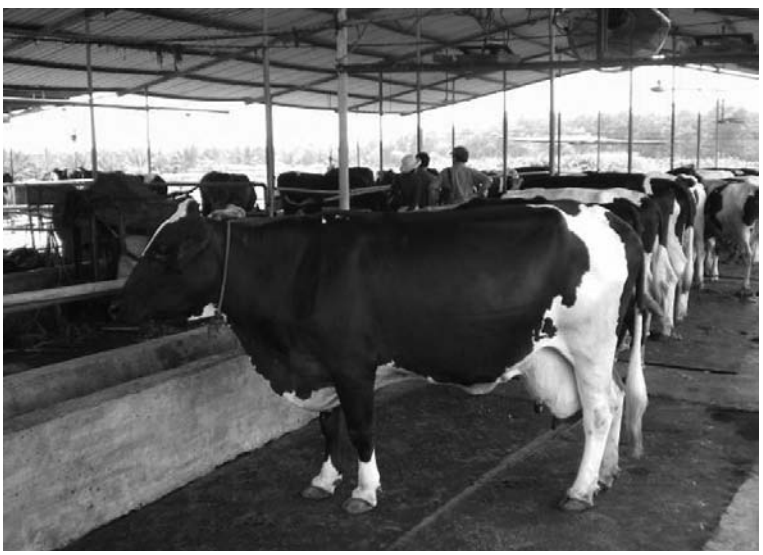
In some places, small holder farmers can purchase forages from a grass auction (Indonesia).

Roadside grass being delivered to small holder farmers in Indonesia, but it has variable quality.

19.2 Feeding management



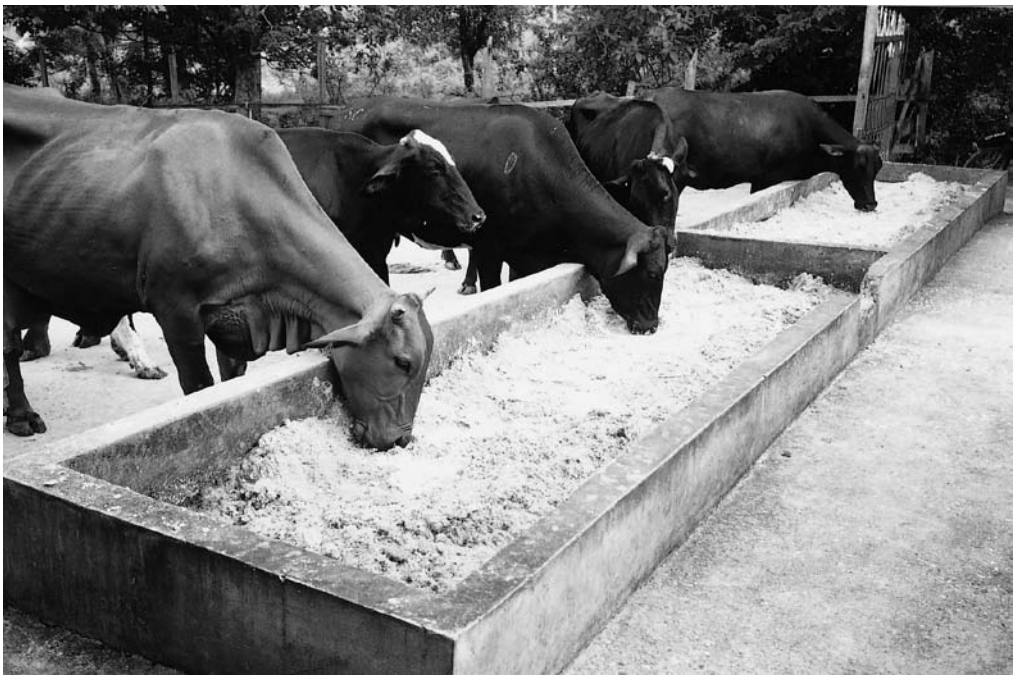
Without sufficient feed nutrients during early lactation, high grade Friesian cows can lose body condition and not cycle as well as reduce their milk production (Indonesia).



Well-managed cows in early lactation (Malaysia).

Cows also require a balanced ration throughout lactation, otherwise induced protein deficiencies can lead to overfat and infertile cows (Malaysia).

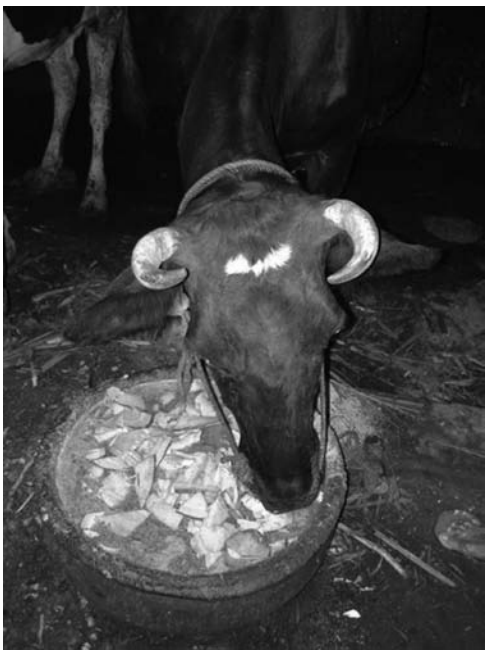
Poorly fed cows are not productive cows (Indonesia).



Supplements in addition to forages are required by milking cows, such as citrus pulp (Malaysia).

Rice straw is a poor forage for milking cows (Indonesia).

Immature Napier grass is an ideal forage source for milking cows (Malaysia).



This cow is being fed a concentrate slurry containing chopped sago palm trunks (Indonesia).

19.3 Herd management

Good young stock management starts at birth by ensuring the calf is born onto a clean area.

Ideally, milk-fed calves should be reared in separate crates to minimise calf contact and allow for individual attention (Vietnam).

Deaths of young stock should not exceed 2–4%, while the incidence of calf sickness, such as with this calf, should not exceed 10%.

It is unlikely that this heifer will ever make a productive milking cow and should be euthanased (Malaysia).

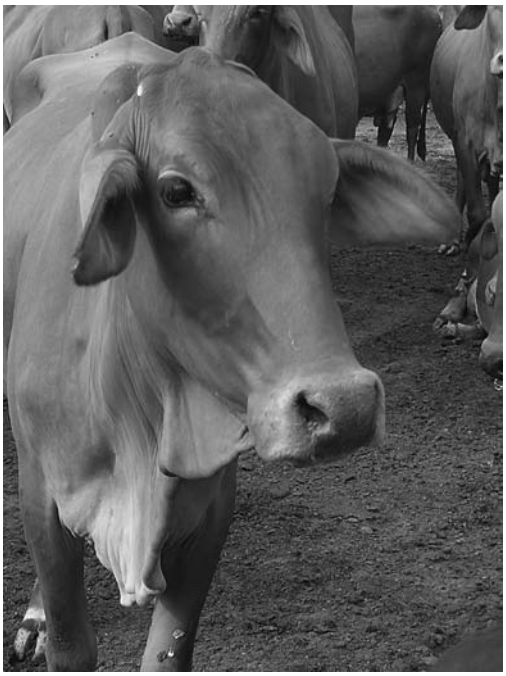
A 24-month-old heifer, 4 months pregnant. The objective of any young stock management program (Vietnam).

Heifers can appear well managed until an inspection of their teeth indicates they are 3 yr of age (Indonesia).

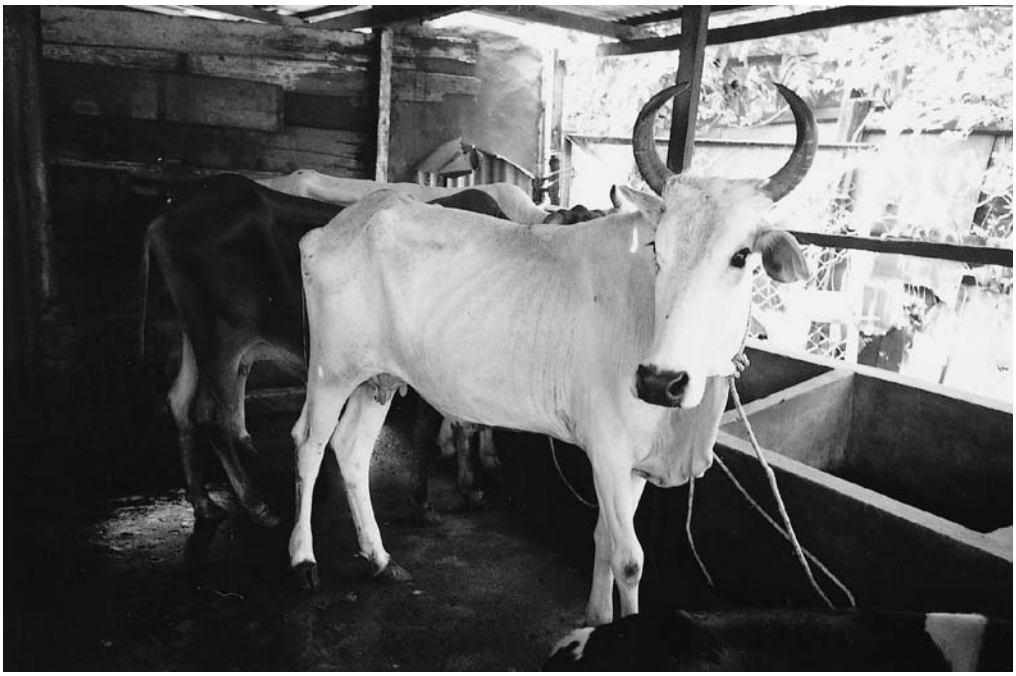
This animal requires urgent veterinary attention (Malaysia).

For animal welfare reasons, this animal should be euthanased (Indonesia).

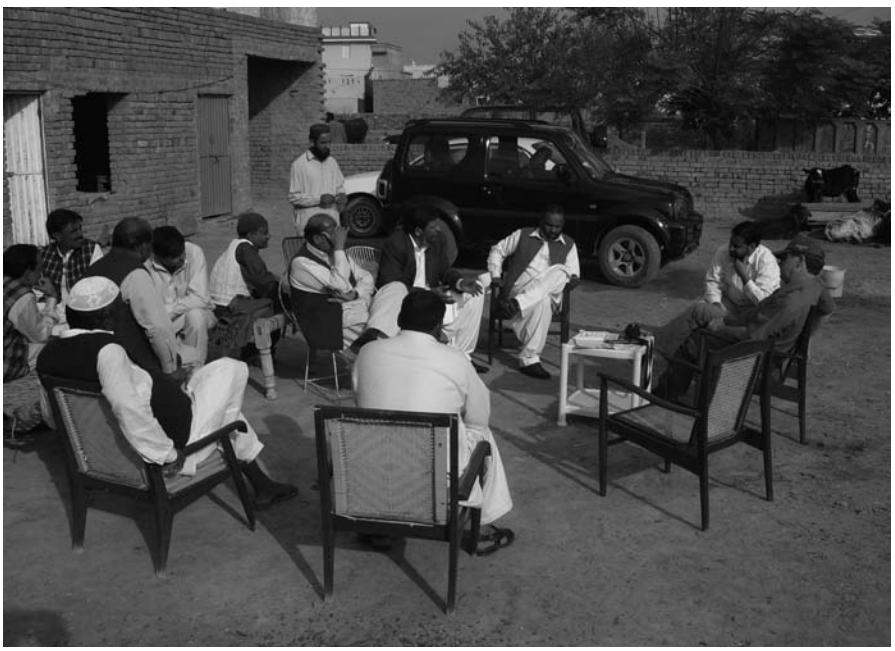
This calf has been dead for at least 24 hr, clearly indicating a breakdown in farm management (Malaysia).



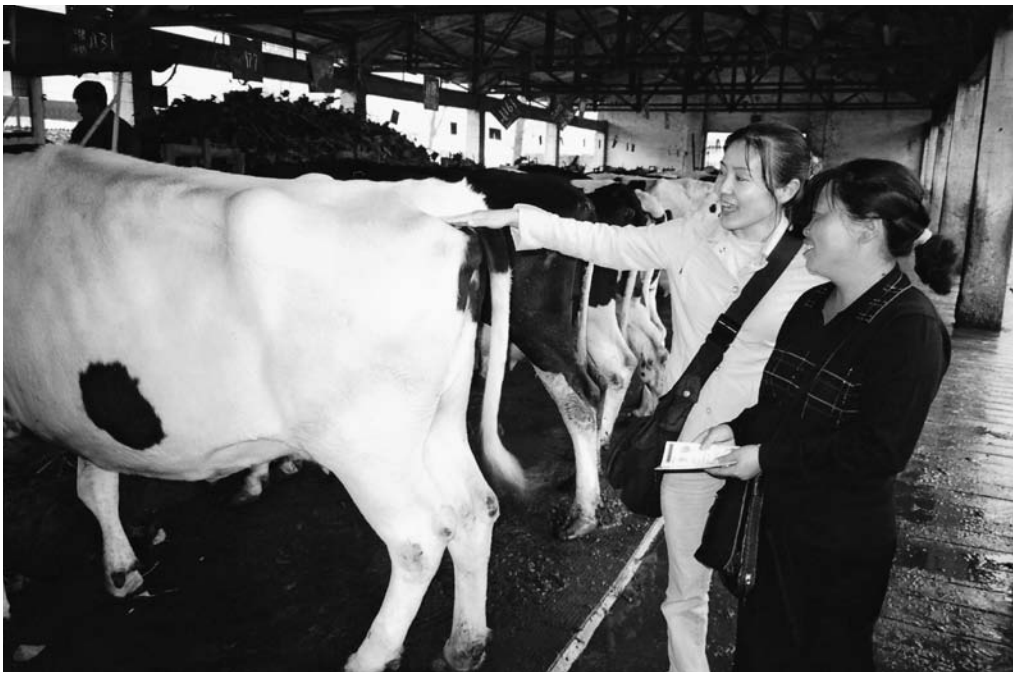
Sahiwals are a tropically adapted and productive dairy breed (Pakistan).



A local Indian dairy cow that is not very productive (Malaysia).



One problem in some countries is that women undertake much of the farm work but are excluded from farmer meetings (Pakistan).



Monitoring changes in body condition is a useful tool for planning feeding programs (China).

Measuring cow live weights from their chest girths is another useful tool in planning feeding programs (Malaysia).

This cow is tied up all day in a darkened shed and fed a poorly balanced ration with limited forages and expected to produce more than 15 kg/day of milk (Indonesia).

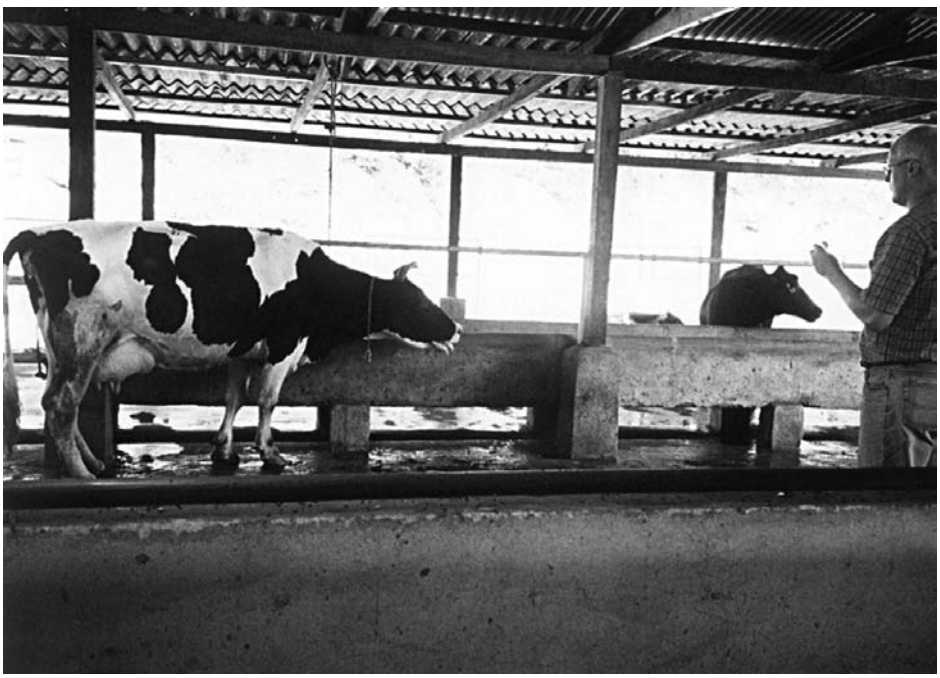
19.4 Housing

Lack of shade and a forage diet based on wheat straw will severely limit the performance of these milking buffalo (Pakistan).

A good shade structure for these milking buffaloes (Pakistan).

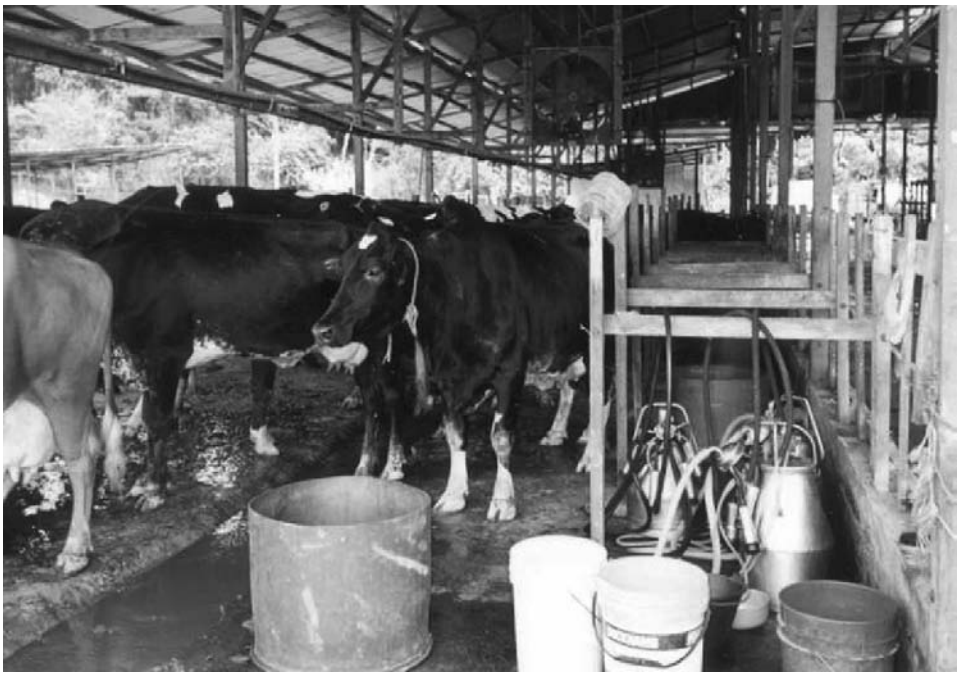
These milking buffalo live in a dark shed for some reason not fully explained to me (Pakistan).

This cow has insufficient space to comfortably lie down (Sri Lanka).

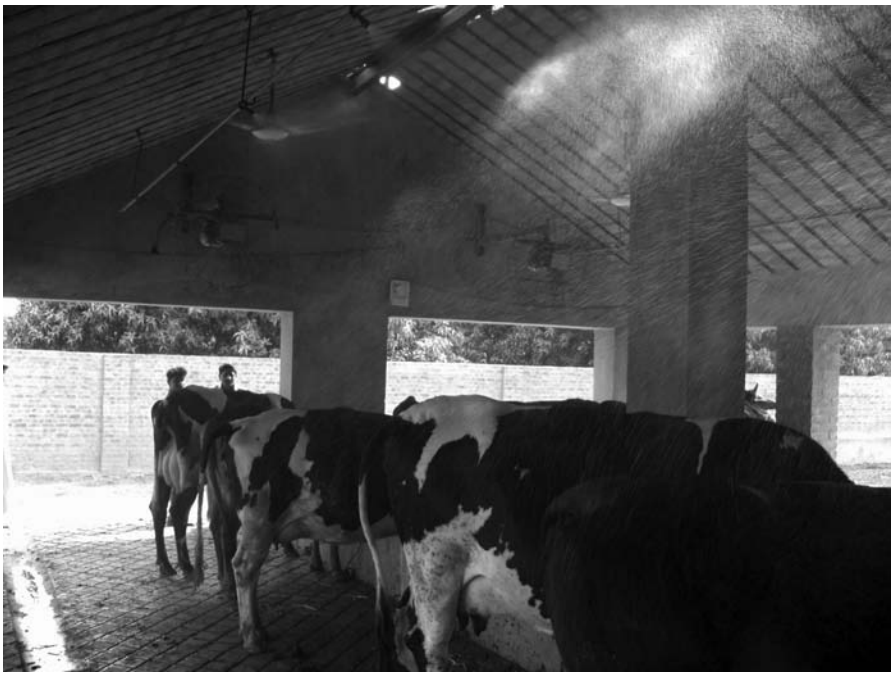


Counting the respiration rates of milking cows can indicate the level of heat stress (Malaysia).

Hosing down a cow can reduce heat stress (Malaysia).



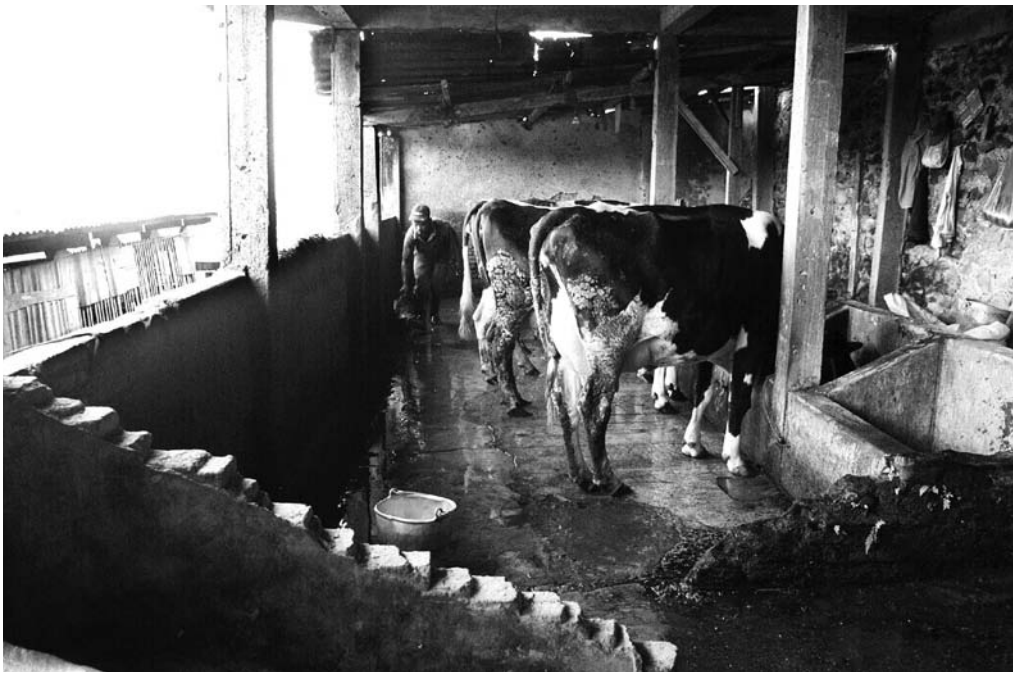
Despite the use of fans, cow performance in this overcrowded shed is severely restricted by heat stress (Malaysia).



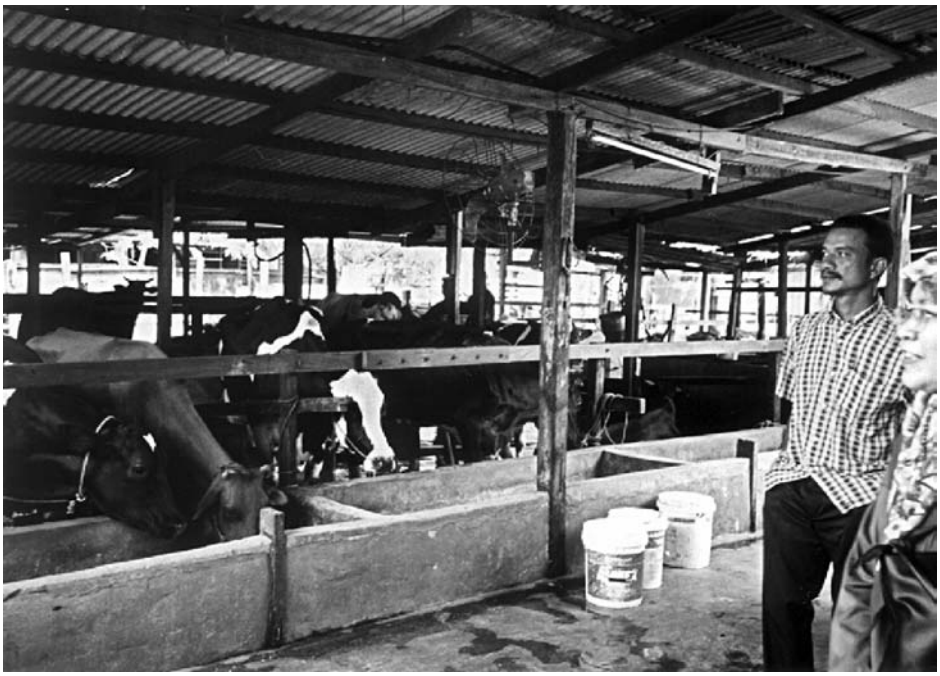
Sprinklers in combination with fans can alleviate heat stress in milking cows (Pakistan).

Hygiene can be greatly improved in this shed (Malaysia).

The roof in this shed is too low to allow adequate ventilation (Malaysia).



Hygiene can be greatly improved in this shed (Indonesia).

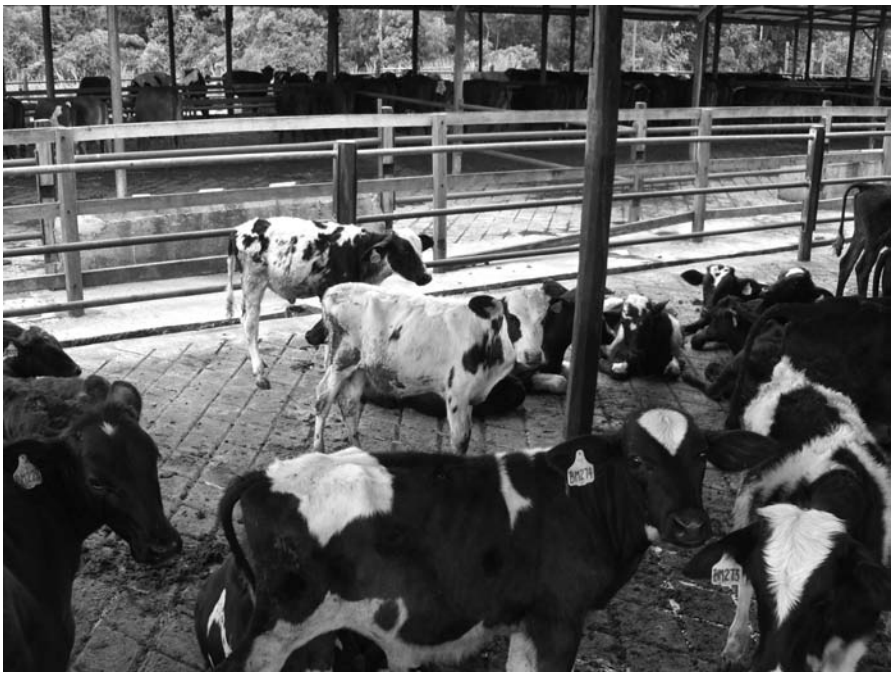


This shed is a converted piggery and clearly the roof is too low (Malaysia).

For some reason, this curtain was installed to reduce cold stress in coastal Pakistan.

This is the shed for which the curtain was installed (Pakistan).

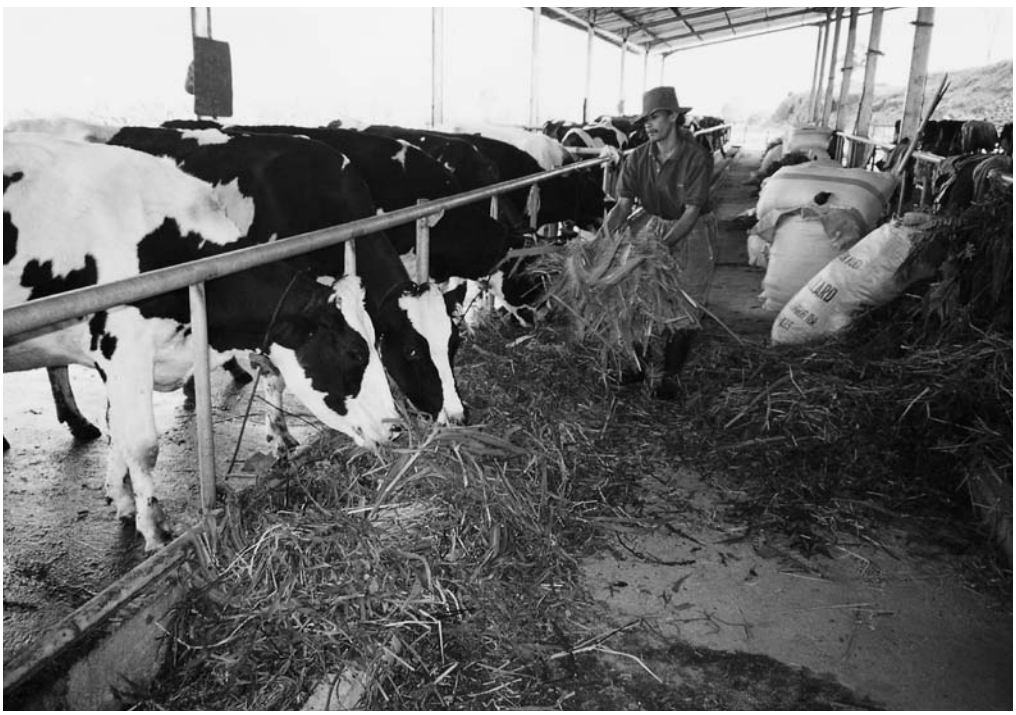
A well-designed small holder shed in Indonesia.



This shed has too many heifers in it with some animals showing traumatic injuries from overcrowding (Malaysia).

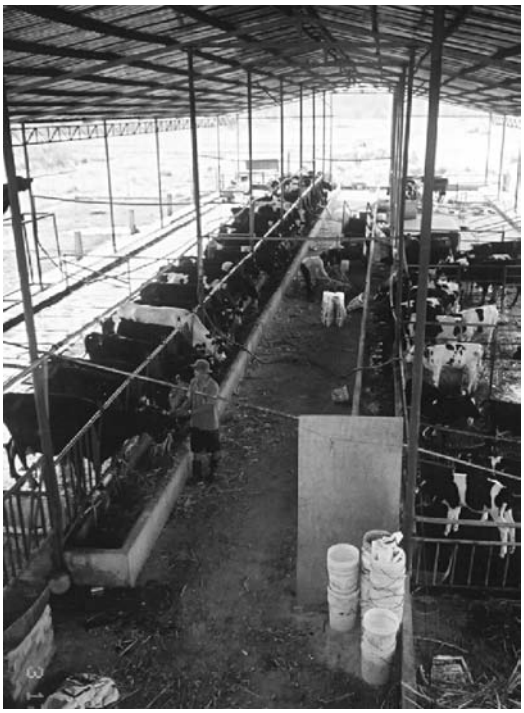
A well-constructed cow colony shed in which many farmers house their small herds (Indonesia).

Inside the cow colony shed (Indonesia).

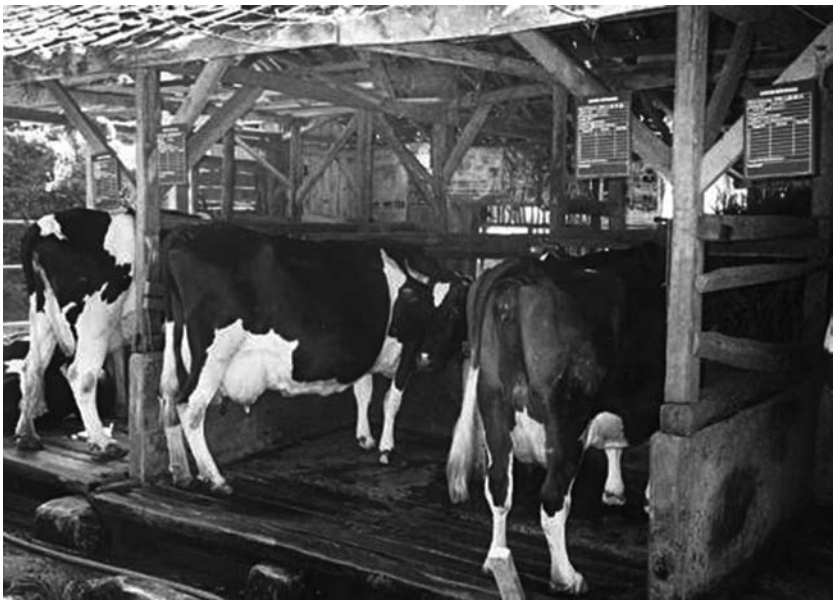


An individual farmer feeding his cows in the cow colony shed (Indonesia).

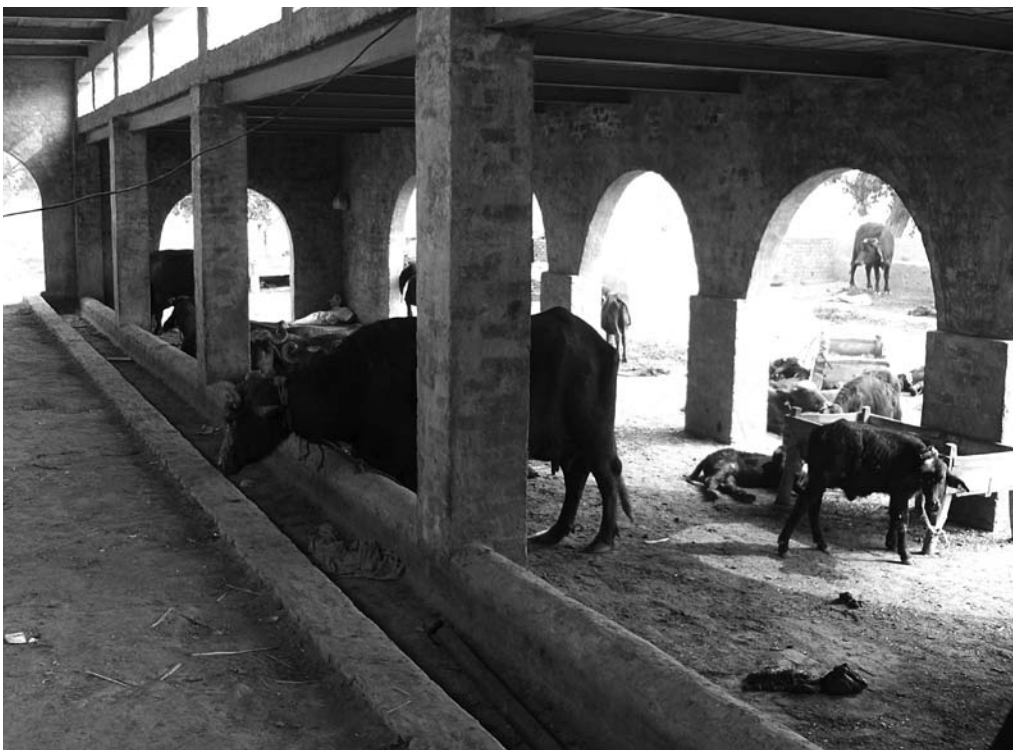
Shed management should be improved before this farmer is sold imported dairy heifers (Indonesia).



A well-constructed shed in Vietnam providing the manager a good overview of the stock from his office.

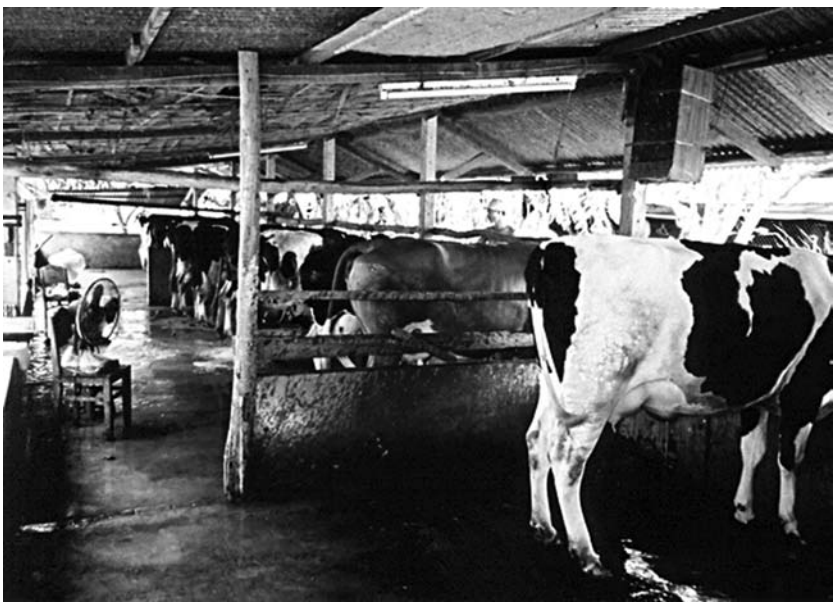


The stalls could have been made longer for these cows (Indonesia).



A well-designed shed under construction in Pakistan.

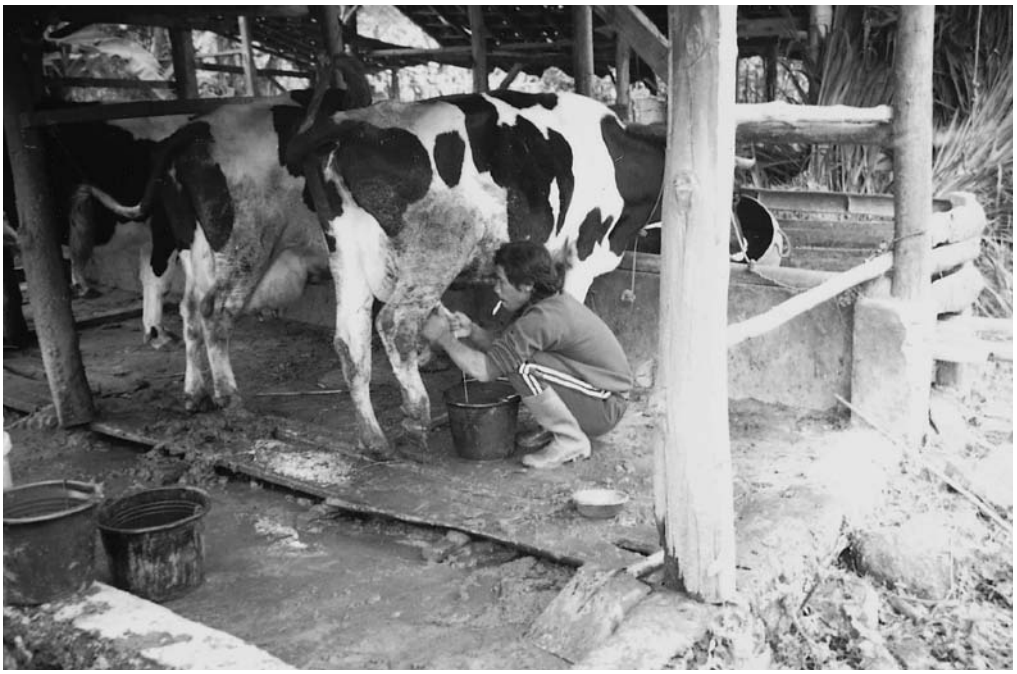
A well-planned free stall shed in Malaysia.



An attempt to improve ventilation, using a table fan, in a low-roofed shed in Vietnam.

An all too common problem of slippery floors due to poor hygiene in a shed in Malaysia.

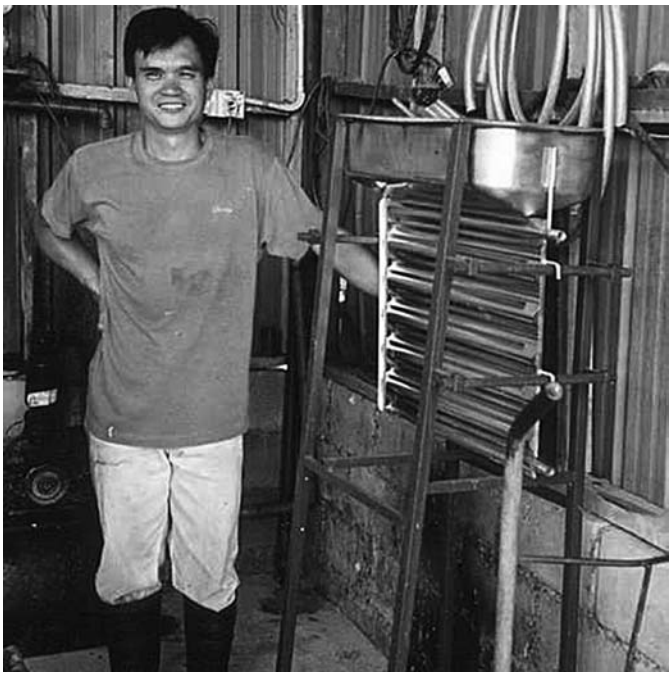
19.5 Milking management



Poor milking hygiene will reduce unit returns for this small holder farmer (Indonesia).

The milk bucket used by this farmer will be difficult to sterilise (Indonesia).

This cow requires the presence of a calf for milk let-down (Malaysia).

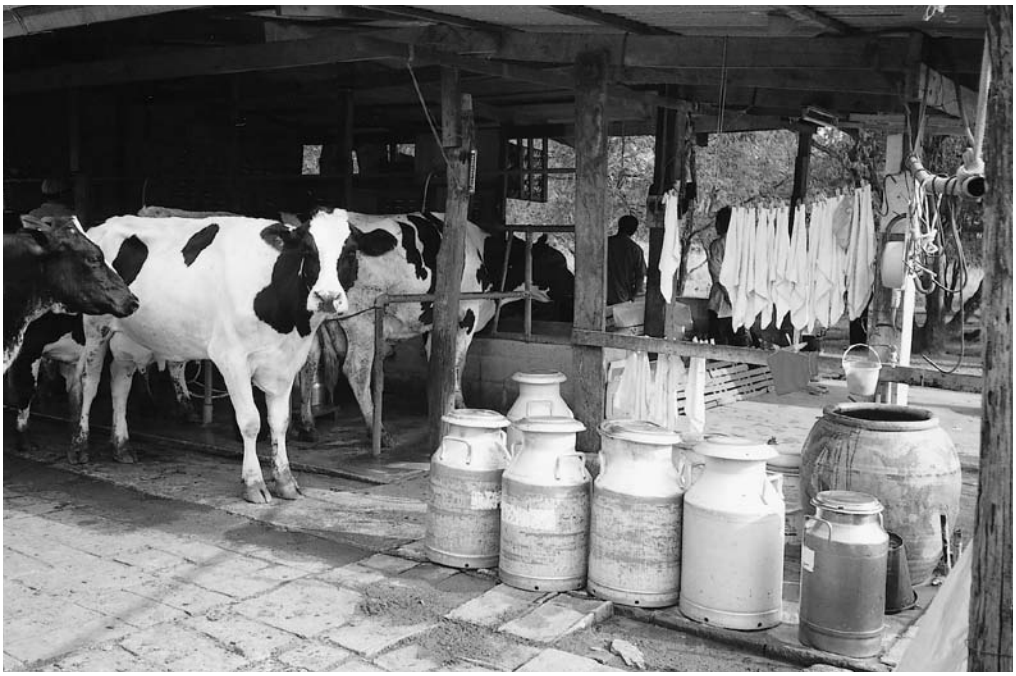


A simple plate cooler for rapidly cooling milk (Malaysia).

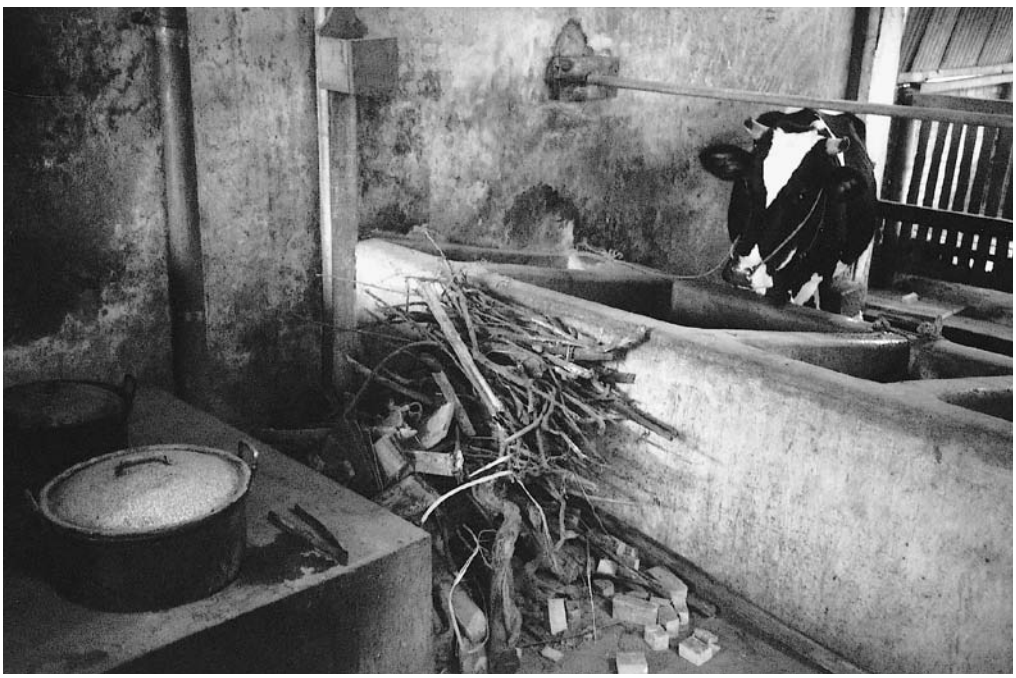
Very poor cleaning of milk cans; note the flies (Pakistan).

Lengthy soaking of milk clusters is not a good sterilising practice (Malaysia).

Excellent storage of milking machine equipment following use (Thailand).



Good milking hygiene practice, with separate cleaning towels for each cow (Thailand).

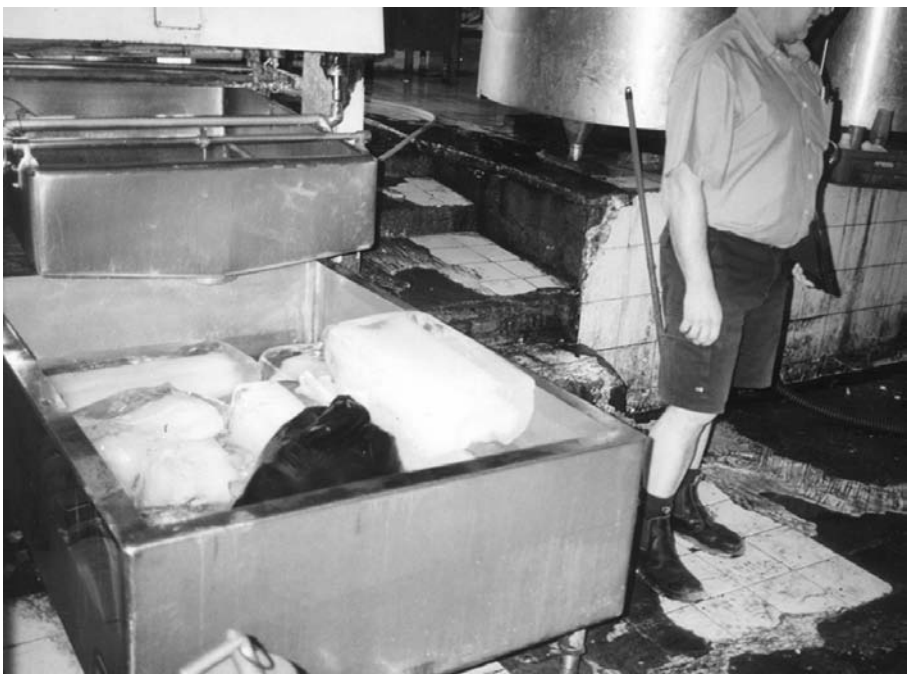


A simple practice such as ensuring hot water in the dairy can improve milk quality (Indonesia).

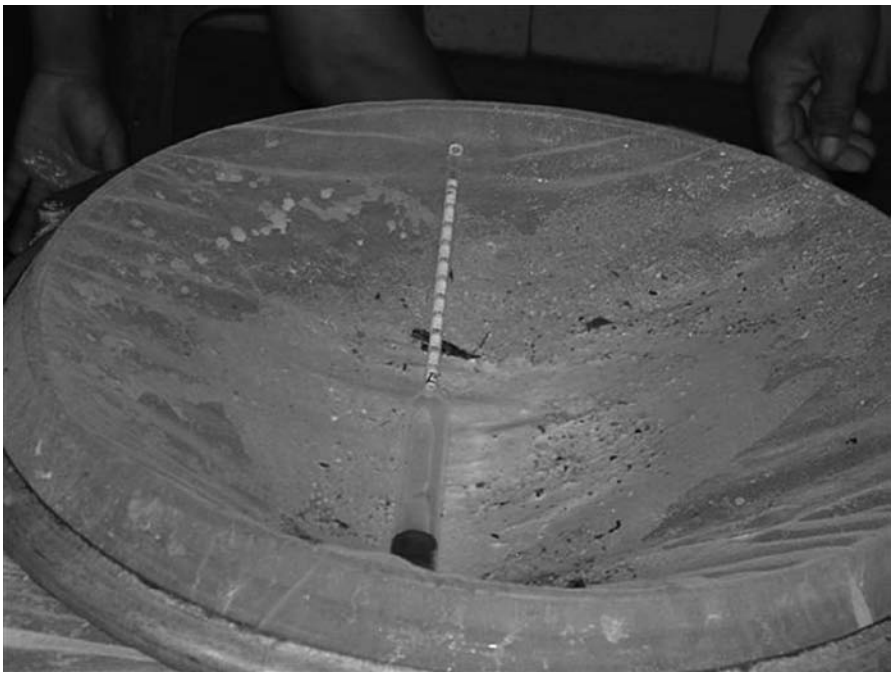
A simple gas water heater for ensuring hot water for cleaning empty milk cans at a milk collection centre (Indonesia).

Adding value to milk through making mozzarella cheese (Indonesia).

Maturing the mozzarella cheese in a cool room for 10 days (Indonesia).



Ice will not chill the milk sufficiently during power shortages at this milk collection centre (Indonesia).



Contamination of raw milk with dirt (Indonesia).