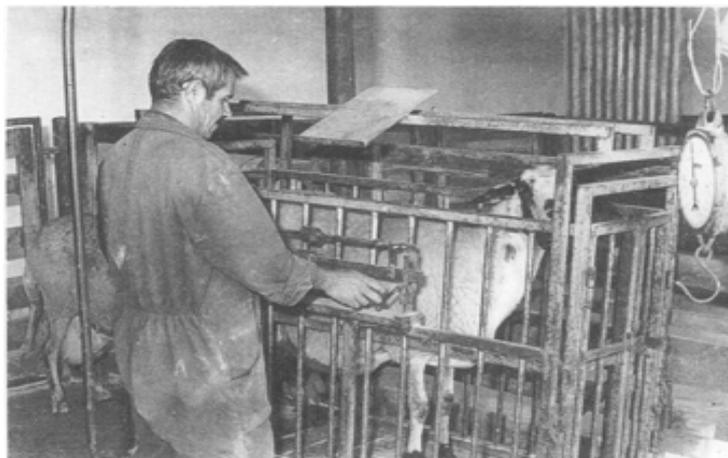


4.4 Management of ewes and suckling lambs from birth to weaning

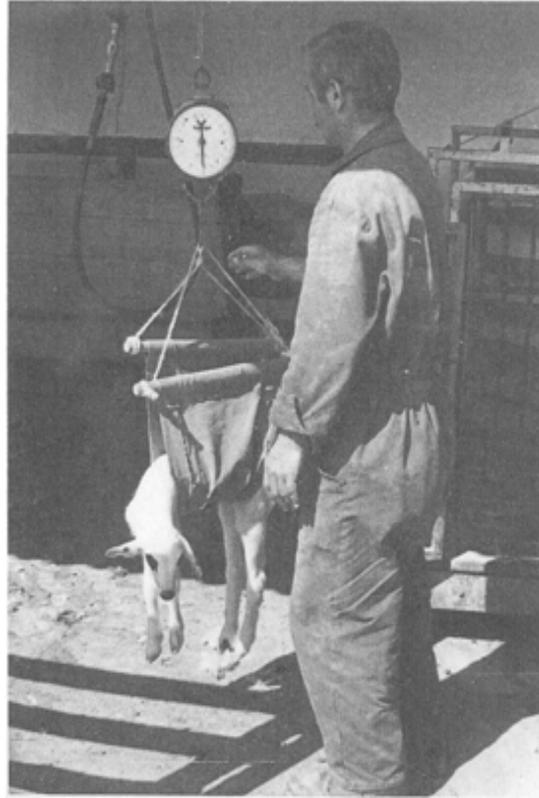
Ewes are moved the last ten days before lambing in smaller group pens with open yards. They are allowed to lamb and just after lambing are transferred to lambing pens (Figure 19). After the expulsion of the placenta the ewes and lambs are taken to a group pen where they are weighed (Photographs 8-11), lambs are ear-tagged (Photograph 11) and in addition to birth weights, the sex of the lambs is recorded. The hooves of the ewes are trimmed, the wool on the tail and hindquarters is sheared and the udder, water bag and legs are cleaned with water. The teats of the ewes are checked as to whether they are functional. Any surplus colostrum left after the lambs have suckled is milked by hand and either fed to other lambs, the mothers of which did not produce an adequate quantity of colostrum, or stored in a deep freeze for future use.



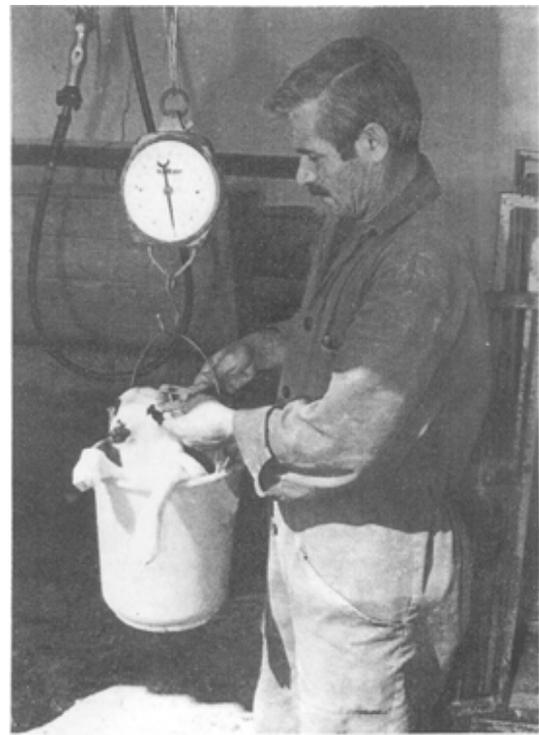
8. Recording of ewes' weight after lambing



9. A portable weighing scale



10. Recording of birth weight of lambs. The sling can also be used for larger lambs



11. Eartagging of lamb at birth together with weighing in a bucket

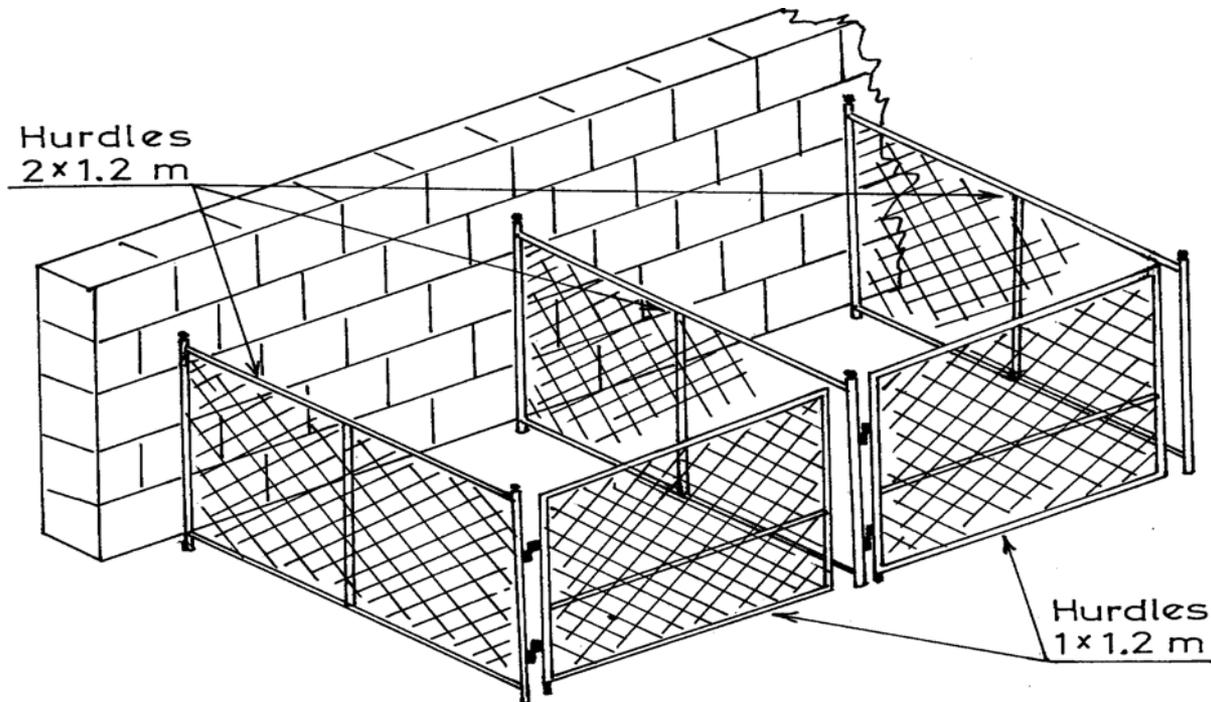


Figure 19 - Lambing pens. Prepared from movable hurdles. Side walls of 2 metres. Front doors of 1.2 metres. Height 1 metre.

Normal lambing should occur within 30-45 minutes after the rupture of the water bag. If it does not occur the ewe should be examined. Supervision during lambing is necessary to minimize lamb and ewe losses resulting from dystocia. Many of these losses can be avoided by giving timely assistance to relieve the dystocia. Immediately after birth membranes and mucus must be removed from the head of the lamb. Gentle pressure is applied on the ribs and blowing into the mouth of the lamb helps to stimulate breathing. The coat of the lamb is dried off and if chilly, heat is provided. The navel should be clipped with a pair of scissors and disinfected with a 7 percent iodine solution or any other appropriate disinfectant (Photograph 12).



12. Disinfection of lamb's navel

Lambs should be encouraged to nurse the ewe as soon as possible. The teats of the ewe should be checked to see that the teat canal is open or that the shape of the teat is suitable for easy suckling. Weak lambs may need assistance in nursing or it may be necessary to provide supplemental colostrum or milk (Photograph 13). The safest method of feeding a weak lamb is by a stomach tube (0.5-0.75 cm diameter) which can be inserted into the stomach and milk administered with a syringe through the tube.



13. Assisting lamb in suckling colostrum

The lambs should receive colostrum immediately after birth for three reasons:

- it contains immune antibodies and protects them from diseases;
- it is high in protein and energy and is vital for their survival under adverse climatic conditions; and
- it is laxative and aids in the excretion of the meconium lining of the digestive tract.

The effectiveness of the transfer of antibodies from the colostrum depends on its antibody concentration, the level of intake by the lamb and the timing of consumption in relation to birth. A large quantity of colostrum (about 200-300 ml) should be consumed within 6-15 hours after birth because the ability of the lamb to absorb antibodies diminishes rapidly after the first 12 hours of life. Lambs which are very small or weak or the dams of which produce inadequate colostrum are bottle-fed supplemental colostrum. Frozen natural colostrum or frozen cow colostrum is thawed and warmed to body temperature and offered to the lambs. Colostrum deprivation can result in reduced performance and higher mortality under normal conditions.

A sufficient number of lambing pens is necessary. Ewes and lambs are penned for one or more days after lambing to ensure sound ewe-lamb pairings. Each lambing pen should have an area of 2-2.5 square metres and should have a solid floor and access to feed and water. These pens are movable and made from hurdles (Figure 20). Their number depends on the number of the ewes lambing at each time and the concentration of lambings (1 pen for 4-10 ewes). Orphans or lambs from multiple births or disowned lambs are fostered by ewes that have lost their lambs or put onto those with a single lamb. Fostering is more successful if the ewe and lamb are put in close confinement soon after the ewe is lambled.

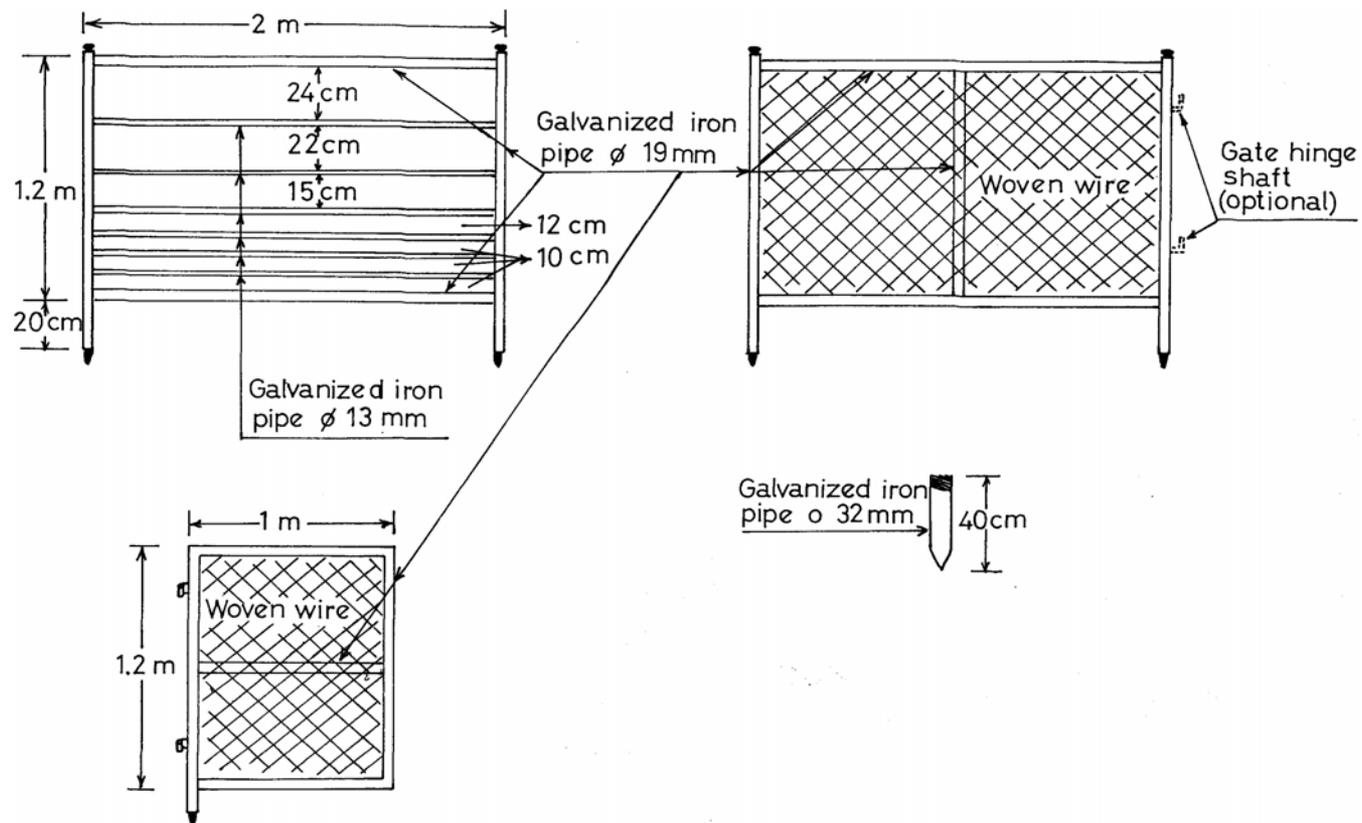


Figure 20 - Hurdles. Prepared from galvanized iron pipes (left), usually for large animals, or frame from galvanized iron pipes, and woven or chain link wire (right). Movable doors (bottom left). Hurdles are placed in

the ground (bottom right) with the legs of the hurdles placed inside.

Ewes and lambs after the colostrum feeding period are moved from the lambing area to other barns, older ewes suckling single lambs being kept separately from ewes suckling twins and separately from first lambing yearlings. There is a close association between the yield of milk by the ewe in early lactation and the growth of the lamb. During this period one unit of lamb liveweight will result from five units of milk consumed. The lamb becomes progressively less dependent on the ewe's milk as its solid feed increases.

4.5 Weaning

The weaning age of lambs may vary from four weeks to four months. However, when meat and milk are the primary objectives of sheep production, efforts should be directed to increasing both the commercial milk yield and the lamb carcass per ewe. In order to increase the milk yield, age at weaning should be reduced in association with a reduction in milk consumption by the lamb.

The advantages of an early weaning system are the following:

- the saving of expensive roughage for breeding ewes and the relief of grazing pressure on pastures;
- an increase in commercial milk yield of ewes and carcass output per ewe by intensive rearing of lambs;
- reduction of parasitism in the lambs pastured with ewes;
- reduction of losses of lambs from predators;
- ewes alone can more easily be given proper management than ewes and lambs together;
- ewes early weaned can be rebred more easily;
- feed efficiency of growing early-weaned lambs is high;
- an increase in the profitability of the sheep breeding/fattening enterprise.

A system of weaning at 42 days of age may be applied. After the colostrum feeding period lambs are allowed to suck their dams at will until four weeks old. From the second week onwards roughage of excellent quality (alfalfa or other legume hay), a pelleted concentrate mixture containing 16 percent crude protein (as fed), and water are made available to lambs in separate troughs in the creep feeding area into which ewes cannot enter because of their size (Photograph 14). Barley grain and soyabean meal are the basic ingredients of the creep feed.



14. Lambs start on solid feed

Solid feed intake is very low until four weeks when the lambs are suckling at will. After the fourth week lambs are allowed restricted suckling for 8-10 hours daily. The lambs are separated from their dams in the afternoon and the following morning the ewes are milked first and then ewes and lambs are joined during the day. Solid feed intake is strongly influenced by milk intake and restriction of milk causes an early acceleration in solid feed consumption. By the time of weaning feed intake is adequate for maintenance and the growth of lambs.

Restricted suckling is applied to groups of lambs with eight days difference in age. When restricted suckling begins the age of lambs may range from 24 to 32 days and at weaning from 38 to 46 days. During the first four weeks ewes are checked once daily and surplus milk is removed by hand. After the fourth week the morning milking of ewes is carried out by hand or by milking machine. When hand milking is practised, milking can be done in the barns or in the milking parlour where machine milking is also practised. Though lambs will not consume significant amounts of feed until the fourth week of age, the small amounts consumed at an earlier age are critical for establishing both rumen function and the habit of eating. An antibiotic (aureomycin) may be included in the creep feed (35-40 g/ton of finished feed).