

**(PFE-302)**  
**DESIGN AND LAYOUT**  
**OF**  
**SHEEP HOUSING**

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# SHEEP HOUSING

- ❑ Sheep raising is primarily for *wool, meat and skin* and sometimes milk.
- ❑ Sheep are very *susceptible to disease* caused by *insanitary and moist surroundings* and they are sensitive to cold wet weather.
- ❑ Sheep barn should be *located near pastures* and easily accessible from the farm house and farmstead but shouldn't very close to it. (because of objectionable noise and odours)
- ❑ Sheep are very *easily attacked by* jackals and wolves and therefore, enough protection against *wild animals*.

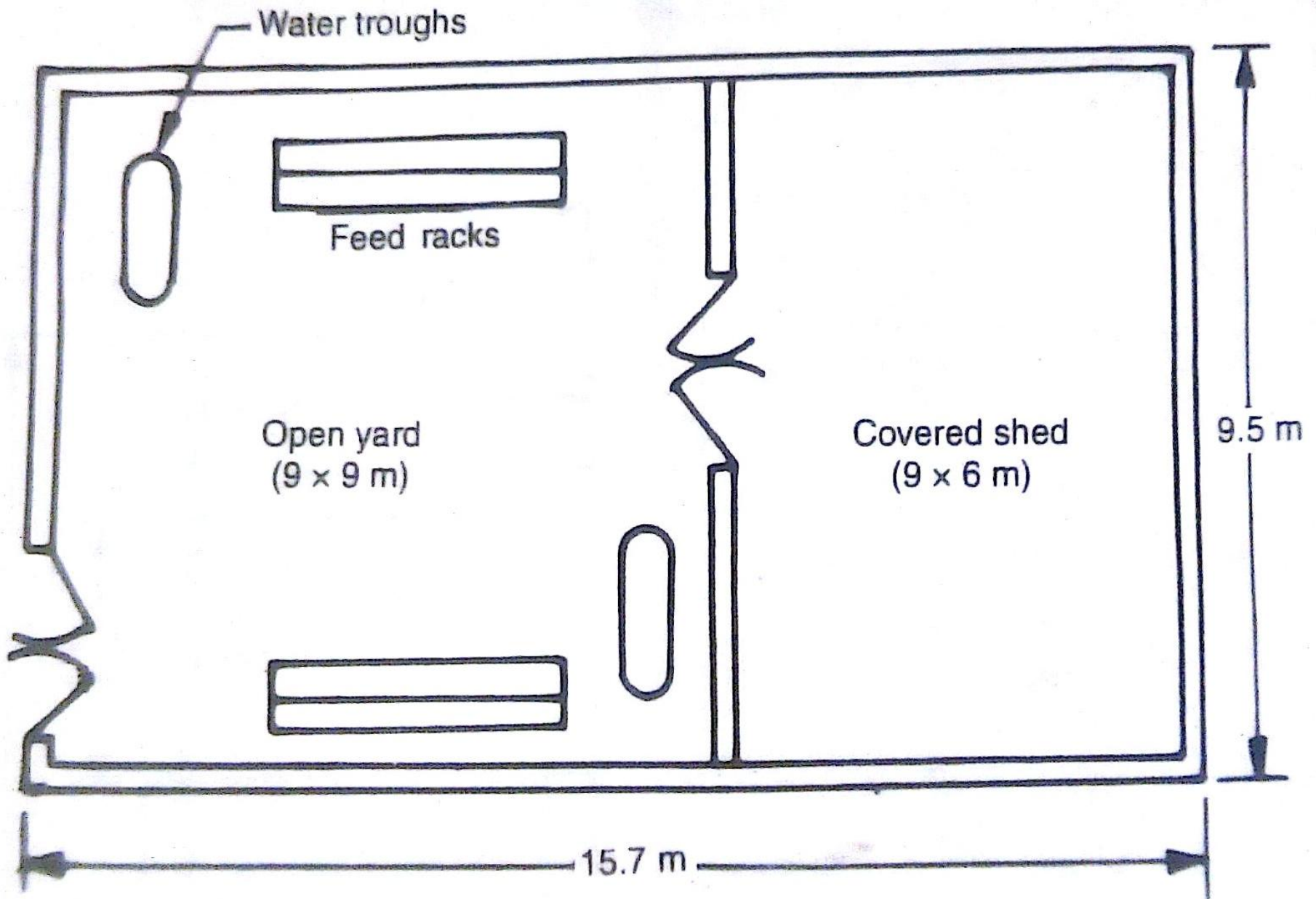
# SHEEP HOUSING (CONTD.)

- ❑ Nowadays, the shepards in India mostly house the sheep in enclosed area with or without sheds.
- ❑ *Enclosures* are generally made of *thorny twigs of babul* or similar types of trees, which keep wild animal off.
- ❑ For an ideal condition, some kind of low roof shelter made of locally available material is quite essential.
- ❑ It should be a properly fenced open yard adjoining the shelter so that the animals may take rest during good weather.
- ❑ Concrete floor keep the shelter clean.

# SPACE REQUIREMENTS, FEEDING AND FEEDERS

- ❑ Sheep are mostly allowed to graze in pastures, but provision is also made for stall feeding of the animals.
- ❑ About 2 kg of roughage and 225 gm of concentrate is given per animal.
- ❑ Considering all requirements *1.12 sq.mt. floor area per animal* is needed, if they are housed together.
- ❑ In special requirement (lambing pen) nearly *1.5 sq.mt. floor area* may be allowed.
- ❑ They are fed in either *movable feed racks* or built-in feed trough. About 30 cm length is provided per sheep for the feeding purposes.
- ❑ Water trough should be properly placed in barn so that spilled water may not make area muddy.
- ❑ When a large no. of sheep are raised on a farm, an efficient drafting yard is required for handling and separating the lambs and ewes into several groups.

- ❑ Silage is a superior quality animal feed as compared to hay. Hence big bale silage may be considered as a convenient feed for large size herd on farm.
  - ✓ For dairy cow = 20 kg silage /day.
  - ✓ For young stock = 12.5 kg/ day (weighing 25 kg)
  - ✓ Sheep and goats = 3.5 kg /day.
- ❑ Feeding trough must be designed properly that the animals can be fed conveniently with minimum risk of injury and feed wastages.
- ❑ *Designs of feeders* for small sheep and goats are shown in Fig. 12.14 (a) and (b). It should be modified accordingly as per local animal breeds.
- ❑ Free standing feeders of simple design made from locally available materials are in use on Indian dairy farms.
- ❑ However improved design would be satisfactory to ensure feeding and least wastages.



*Fig. 12.14. Plan of sheep shelter for 60 animals*



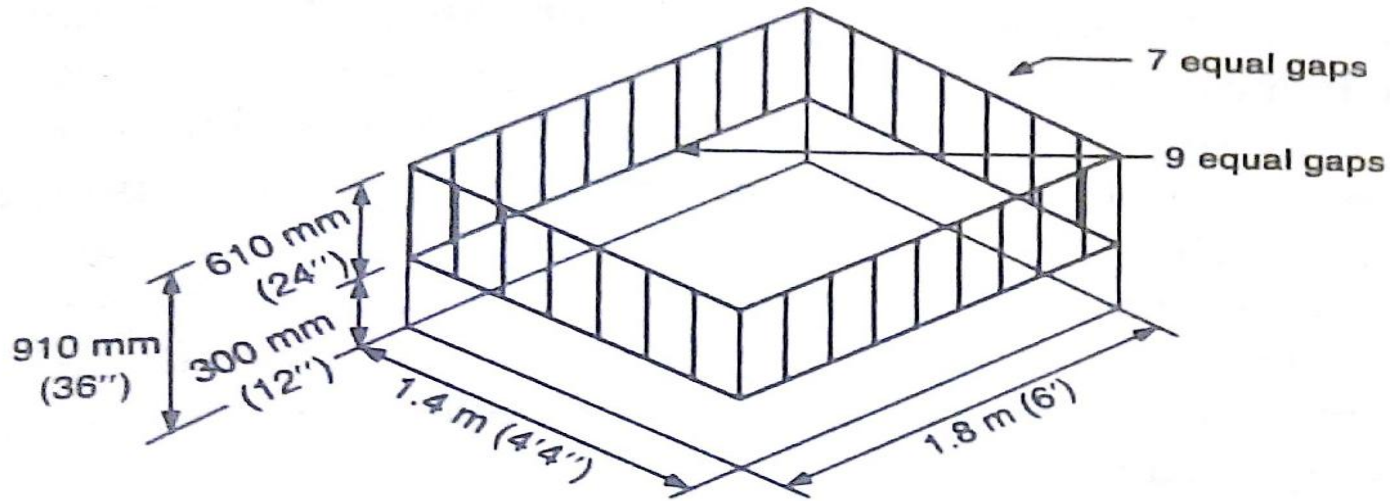


Fig. 12.14 (a). Feeder without floor

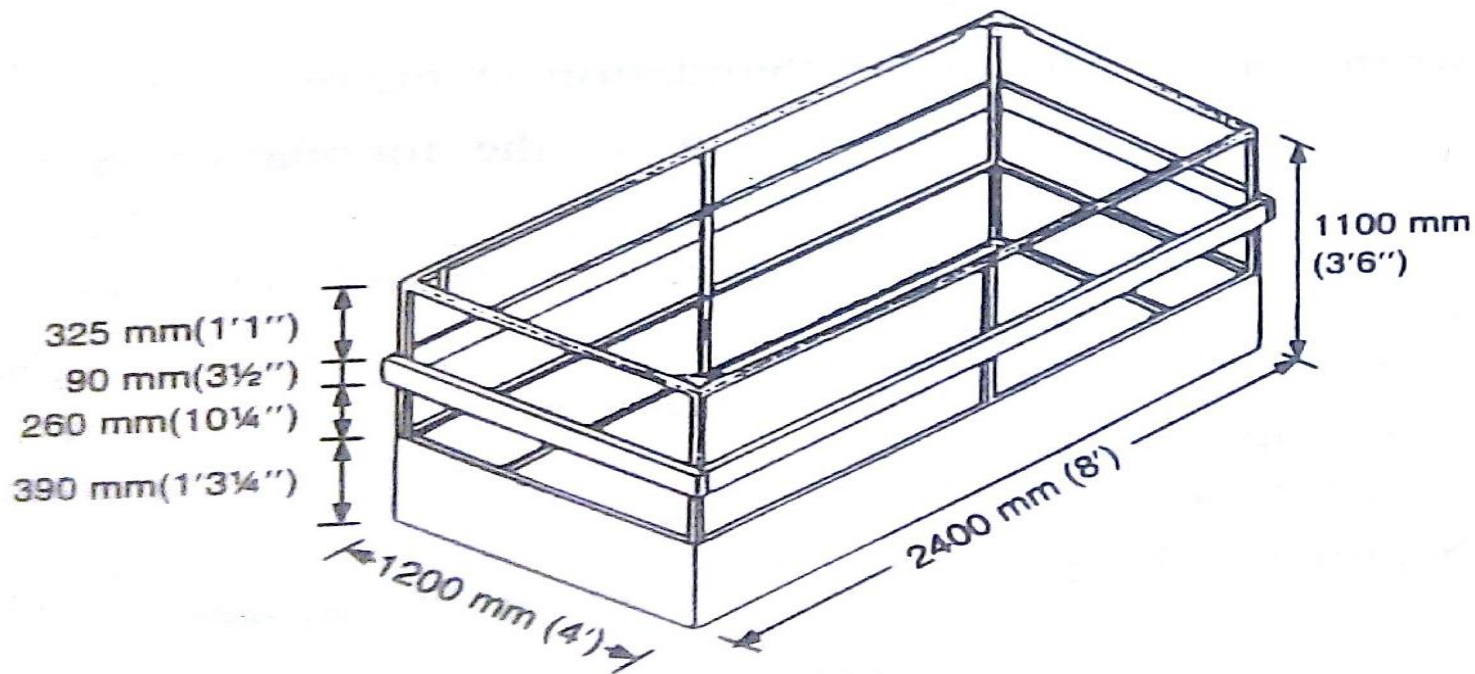


Fig. 12.14 (b). Feeder without sheep











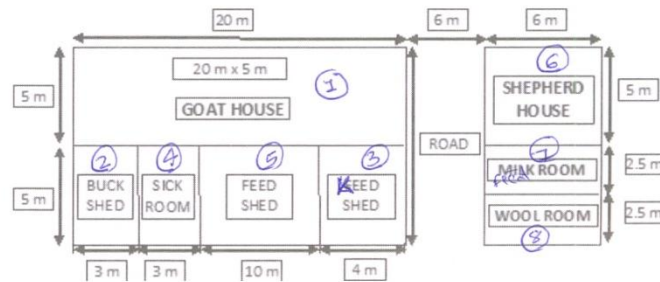


**Problem 1 :** Draw a plan and layout for a goat house for the following requirement

1. Number of goats = 100
2. Number of bucks = 4
3. Number of kids = 50

**Solution**

Location : Dry, elevated and well drained place with natural shed



**Space requirement**

- ① • Flock sheds for goats =  $20 \times 5 \times 3$  m
  - ② • Buck shed =  $5 \times 3 \times 3$  m
  - ③ • Kid shed =  $5 \times 4 \times 3$  m
  - ④ • Sick goat shed =  $5 \times 3 \times 3$  m
  - ⑤ • Wool shearing & storage =  $6 \times 2.5 \times 3$  m
  - ⑦ • Feed store =  $6 \times 2.5 \times 3$  m
    - Milk room =  $3 \times 2 \times 3$  m
  - ⑥ • Shepherd house =  $6 \times 5 \times 3$  m
- ⑤ Feed/milking shed  $10 \times 5 \times 3$  m

Total space requirement =  $200 \text{ m}^2$  for goat house

Size =  $20 \text{ m} \times 10 \text{ m}$

Goat house size =  $20 \times 10 \times 3$  m and

Shepherd's house size =  $10 \times 6 \times 3$  m

$$\begin{aligned} \therefore \text{Total space requirement} &= (20 \times 10) + (10 \times 6) \\ &= 200 + 60 \\ &= 260 \text{ sq. m} \end{aligned}$$





Thank You