

## Improved Animal Shelter for Comfort and Higher Productivity of Livestock



- In traditional production systems adequate attention has not been given to animal housing.
- Studies indicate that proper housing increases productivity of livestock.
- A low cost eco-friendly animal shelter has been developed at the institute which improves production of animals.

## **Advantages**

- Use of low cost local material.
- Manages extremes of hot and cold weather to create a comfortable environment.
- Helps to improve milk production 22 per cent in goats and 10 per cent in cows & buffaloes.
- Body weight gain improved by 20 per cent in growing kids/lambs
- Maintains hygienic conditions inside housing structure resulting in lesser occurrence of diseases and reduction in mortality

## **Key parameters**

- Improved animal shelter is of 60 feet length, oriented in east-west direction with long axis on south and north direction.
- $\bullet \quad \text{Insulation with false ceiling made from \ four inch thick that chipanels under the asbestos \ roof.}$
- IAS orientation allows air flow inside, keeping it cool in summer and maintains dry conditions during rainy and winter days.
- South long axis of shelter provides advantage of larger amount of solar radiation during winters and open space of north axis covered by plastic curtains helps to minimise the entry of cold winds during winter.



IAS with east-west orientation ideal for both summer and winter season



Thick thatched panel under the asbestos roof reduces thermal stress



East-west orientation long axis on south side provides plenty of sunlight inside shelter during winter



Plastic sheet used on north long axis protect animals from cold winds during winter season

Contributor: A.K. Patel and N.V. Patil

ICAR-Central Arid Zone Research Institute

Jodhpur 342 003 (India)

www.cazri.res.in

CAZRI Factsheet: 2021

