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Popular Article

Care and Management Practices of Pregnant Cows

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Abstract

In female life cycle, pregnancy is the most active state. All pregnant animals should be looked carefully. For a healthy calf and mother proper nutrition and other management practices ensures better production. A well-balanced ration during this period necessary for their maintenance, growth of foetus, production of colostrum, sufficient reserves of nutrients in the body for ensuring lactation.

Keywords: pregnancy, management, feeding, steaming up and challenge feeding

Introduction

A healthy delivery of a calf is the most important and priority for a farmer. The care and management before, during and after parturition is really necessary for better production and health of dam and fetus. The growth starts from embryo so careful from initial stage required. Any ignorance led to many reproductive problems, abortion, still birth, underweight etc.

A farmer should know the signs of heat, time and date of insemination or natural mating. He should maintain records of date of insemination and all other data like sire no, straw no, no of A.I. required to conceive. So that he knows the estimate date of delivery (gestation period of cow is in range from 270-290 days (average 282 days) and prepared for delivery and for all future care of dam and foetus. Usual signs of pregnancy are: cessation of oestrus, alteration in temperament, easily induced fatigue, physical limitations due to enlargement of abdomen, increase weight of uterus and its contents, enlargement of mammary glands. Once positive that cow is pregnant proper care and management



starts for better health, parturition and production. To prevent pregnant cow start separating these from the general herd to avoid any incidence. These may keep in other pen to prevent from mounting by heat cows or bulls, avoids fighting due to the fear of causing damage to the foetus, from injury by crowding. To keep pregnant animals safe, healthy and comfortable the following management practices may be undertaken: -

1. Check surrounding, manger, housing material for presence of any sharp objects, nails etc and if any removed immediately in order to prevent any injury.
2. Trim off the over growth in hoofs for proper walking and standing on floor.
3. Cow dung and urine must be cleaned out once voided and maintain hygienic condition to avoid infection.
4. Do not tire them by making to walk long distances especially over uneven surfaces.
5. Slippery conditions must be avoided to prevent from falls, injury, fracture etc.
6. Timely disinfection and cleaning of sheds, drainage and other equipments related to pregnant animals.
7. Proper storage of feed free from any dust and microorganism and pets.
8. Ensure adequate physical movement and grazing time.
9. Comfortable housing to protect from harsh environment conditions.
10. Avoid any fighting with or chased by other animals and humans/children.
11. Water should be provided round the clock to pregnant animals with a minimum of 75-80 litres of fresh and clean drinking water daily
12. Do not allow them to mix with others that have aborted or that are suffering from or carriers of diseases like brucellosis.
13. Proper screening and testing of various kinds of known diseases.
14. Do not mix with pregnant cow of other herds and if required after proper quarantine period.
15. During the gestation period, cow should be checked up by an experienced veterinary doctor and should follow his/her guidance without any negligence.
16. Keep pregnant animal in calm and silent environment away from disturbance.
17. Pregnant animals need suitable ration to reduce the possibility of diseases like milk fever and ketosis at the time of calving and also to ensure adequate milk production.



Floor space requirement

Covered area (Sq mtr.)	Open paddock (Sq mtr.)	Maximum number of animals per pen	Height of shed (cm) at eaves	Manger space (mtr.)	
8.5-10.0	15.0-20.0	1	175 in medium and heavy rainfall & 220 in semi-arid	1.0-1.2	NABARD
12	12	1		60-75 cm	ISI STANDARDS

Feeding: - the requirements of nutrient changes according to the stages or trimester of gestation period. Consult a veterinarian for balanced ration, Supplements, vitamins, minerals and other feed to be fed during different stages of pregnancy as per the requirement.

There is no special feeding or management requirement during the first trimester of pregnancy as the foetus are of very small size not required any nutrient from mother for development and growth. In emaciated cows there is chance of improper growth rate, oestrus cycle and difficulty in gestation period. Such animals should be fed properly with extra allowances and supplements in order to improve their condition.

milk laxative, palatable & nutritious kinds of feed is to be provided in pregnancy phase in which minimum DCP & TDN of ration must be 16-18% & 70% respectively. Feeds which most likely suitable: -Wheat bran, oats, and linseed oil seeds. Sterilized bone meal & 40 gm common salt may be added to grains.

0.5 to 1 kg extra concentrate mixture depending on the condition of the animals should be given from fourth month of pregnancy onwards for meeting the demands of developing foetus, building up body reserves during preparation for the ensuring lactation and growth. Therefore, animals which are going to calved for first time should be fed extra ration for growth in addition to other requirements. Add 0.45kg SE & 0.15kg DCP to the cow's ratio during pregnancy is also recommended in some places. Good quality leguminous fodders are also provided for better results & production. Milk secretion has to be dried off during the last trimester by reducing concentrate allocation or by



increasing milking intervals. High producing animals need extra concentrate approx 1 kg after drying off to recover and store proper reserves or further production and lactation apart from ad libitum supply of high-quality green fodder and clean drinking water. Average to low producer do not required as such extra concentrate because these animals don't lose much weight during lactation and only good pasture or green will required to recondition them.

DAILY FEED REQUIREMENTS OF A PREGNANT ANIMAL

Green Fodder	15-20 kg
Dry Fodder	4-5 kg
Compound Cattle Feed	2-3 kg
Oil Cake	1 kg
Mineral Mixture	50 g
Salt	30 g

In preparation for better calving or parturition with healthy calf and dam with increase production steaming up or challenge feeding is done for better health, increase milk production , increase weight gain , improve butter fat percentage and lengthens lactation period.

Steaming up: - Rising plane of nutrition usual start with 1.5-2 kg concentrate/day from 6-8 weeks before parturition.

Challenge feeding: - This feeding practice mainly done in high yielders 2 weeks before and 2 weeks after parturition by increasing daily concentrate ration with 500g to challenge them to reach at maximum milk production.

Pregnant cows should be transferred into a quite comfortable, hygienic and well bedded maternity pens 2-3 weeks before the expected date of calving and should be kept on a light, laxative diet and clean drinking water is always available.

The number of pens is about 5% of the number of breed able females. For proper and better observation these maternity pens should be located nearer to living quarters of farmer milking barn. Separate manger and a water trough should be there in each pen. The dimensions of each calving pen shall be about 3×4 m for covered area and another 3×4 m for the open paddock.



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