



सत्यमेव जयते

संयुक्त सचिव
भारत सरकार

Joint Secretary
Government of India

No. 6887 .. / D.A.H. & V.S.
Dated 02 / 11 / 20 12

RAJNI SEKHRI SIBAL

Phone No. 23387804
Fax No. 23386115

L-3171/ACS/ARD
11/12

भारत सरकार
कृषि मंत्रालय
पशुपालन, डेयरी व
मत्स्य पालन विभाग
कृषि भवन, नई दिल्ली - 110001
Government of India
Ministry of Agriculture
Department of
Animal Husbandry,
Dairying & Fisheries
Krishi Bhawan, New Delhi - 110001

D.O.No.3-26/2012-AHT (NPCBB)

Dated the 21st September, 2012

श्री. नूरुल हाक
11/11/12

Sir, AHT & V.S. Dept. Secy,
Pl. discuss &
put up.
11/11/12

As you may be aware that large proportion of bovines in our country are unproductive and exhibiting poor reproductive efficiency. This is mainly due to poor management of dairy animals. In order to overcome poor reproductive efficiency, this Department has developed an advisory for Veterinarians and farmers titled "Better management of Reproductive Efficiency in Bovines" and is given at Annexure-I.

Calf mortality can be as high as 50% if calves are not managed scientifically. Due to heavy losses of calf crop at an early age desired genetic gain in bovine population is not obtained. There is need to educate farmers and livestock attendants on scientific management of young calves. Department of Animal Husbandry, Dairying & Fisheries has also developed an advisory for farmers and Veterinarians for "Better Management of Dairy Calves", given at Annexure-II.

The country is facing 10% shortage of rainfall and dairy animals are under acute stress due to prevailing heat conditions. Immediate steps to be taken by the States to mitigate stress on dairy animals are given at Annexure-III.

I shall be grateful if you look into the matter personally, and take immediate steps to mitigate stress on milch animals due to prevailing heat conditions and deficient rainfall. Please give wide publicity to the documents enclosed with the letter.

Rajni Sekhri Sibal

Yours sincerely,

Rajni Sibal

(Rajni Sekhri Sibal)

Shri. Noor ul Haq,
Principal Secretary,
Department of ARD,
Government of West Bengal,
Kolkata-700001.

TIPS FOR BETTER MANAGEMENT OF REPRODUCTIVE EFFICIENCY IN BOVINES

Infertility in cattle accounts for major economic losses in dairy farming and dairy industry in India. If dry period is increased by one month the total milk production in the country will decline by 11.25 Million Tonnes (As 79 million animals are in milk). Ideal level of days open (60-90 days), days dry (60 days) and calving interval (400 days) must be maintained.

Major Reasons for infertility:-

Malnutrition and management errors are among the major causes. Poor heat detection and faulty AI also lead to infertility among animals.

Sexual cycle

Both cows and buffaloes have the sexual cycle (oestrus) once in 18-21 days for 18-24 hours. Many a times the estrus is silent. The farmers should closely monitor the animals 4-5 times from early morning to late night. Poor heat detection can cause increased levels of infertility. Considerable skill is needed to detect the animals in heat for visible signs. Farmers who maintain good records and spend more time watching the animals obtain better results.

Tips to avoid infertility

- Breeding should be done during the heat period at the right time of heat. If animal comes into heat in the morning it should be inseminated in the evening and if animal comes into heat in night it should be inseminated in the morning.
- Animals that do not show sign of heat should be checked and treated.
- Deworming once in 6 months should be done for worm infestations to maintain the health status of the animals. A small investment in periodic deworming can bring greater gains in dairying.
- Cattle should be fed with a well balanced diet with energy, protein, minerals and vitamin supplements. This helps in increased conception rate, healthy pregnancy, safe parturition, low incidence of infections and a healthy calf.
- Care of young female calves with good nutrition helps them to attain puberty in time with an optimum body weight of 230-250 kgs, suitable for breeding and thereby better conception.

- In natural service, breeding history of the bull is very important to avoid congenital defects and infections.
- Infections of the uterus can be largely avoided by having cows calved under hygienic conditions and provided with proper bedding during calving.
- After 60-90 days of insemination, the animals should be checked for confirmed pregnancy by qualified veterinarians.
- Unwarranted stress and transportation should be avoided during the all stages of pregnancy.
- The pregnant animal should be housed away from the general herd for better feeding management and parturition care.
- Pregnant animals should be dried of their milk two months before delivery and given adequate nutrition and exercise. This helps in improving the health of the mother, delivery of a healthy calf with average birth weight, low incidence of diseases and early return of sexual cycle.
- Post partum breeding can be started within 60 days after calving to achieve the goal of one calf per year for economic and profitable dairy farming.

TIPS FOR BETTER MANAGEMENT OF DAIRY CALVES

- Calves may die due to under feeding/over feeding and diseases, such as pneumonia, calf scours, navel infections and worm infestations (Ascariasis). Proper management can minimize calf mortality to less than 10% due to these ailments.

CARE OF THE NEW BORN CALVES

- When the calf is born, the mucous and phlegm should be cleaned from the nose and mouth.
- If calf does not breathe, it should be held from the rear legs and lifted from the floor with the head down or alternate compression and relaxation of the chest will often start the calf breathing.
- Navel should be dipped in tincture iodine
- Wipe the calf with clean coarse cloth to hasten drying.
- Remove all the wet bedding from the cow pen and wash cow udder with clean water and dilute potassium permanganate solution.
- If normal it will stand on its leg and suck within 30 minutes. If fails assistance should be given in getting first feeding.
- Normally muconium (dark material that have collected in the intestine of unborn calf) passes within 2 hours after the first feed. If this does not pass in due time enema consisting of one and a half tea spoonful of sodium bicarbonate in a litre of warm water should be given.

HOUSING CALVES

- Calf pens should be well ventilated, well lighted, clean, dry, adequately bedded using soft material.
- It is better to rear calves in individual calf pens. If room for individual pens is not available calves must be tied properly for 15 to 20 minutes after feeding..

FEEDING OF CALVES

- Continue feeding colostrum to the newborn calves through the first 3 days if colostrum is available.

- Feed milk to the calves for first 3 to 4 weeks of life. After that, they can digest vegetable starches and sugars. All liquids should be fed at room or body temperature.
- Thoroughly clean any utensils used to feed calves. Store equipment in a clean and dry place.

Water

- Make clean, fresh water available at all times.

Deworming of calves

- First dose of dewormer should be given within 5 to 6 days of birth and repeat at 45 days intervals.

Calf Growth

- Birth weight of calf is generally 20-35 kg depending upon the breed of the animal.
- Proper feeding of calf along with regular deworming will achieve a growth rate of 10-15 kg/month.

STEPS TO REDUCE IMPACT OF DROUGHT ON DAIRY CATTLE

Short Term measures:

- Conduct fertility camps in the drought-affected areas; identify problems and make interventions.
- Ensure availability of sufficient quantity of cattle feed and fodder.
- Enrichment of straws using urea- molasses treatment in order to meet protein and energy requirements of the animals
- Adopt chaffing of fodder and making silage to improve quality of fodder and to reduce its wastage.
- DADF advisory on availability of feed and fodder. Is available at: www.dahd.nic.in. Funds available under the existing schemes of DADF may be utilized efficiently to increase availability of feed and fodder.
- Adopt ration balancing as per the advice of local veterinarian/university etc.
- Use area specific mineral mixture as per technical advice.

Medium and long term measures:

- Establish fodder bank in the areas which frequently suffer from draught/draught like conditions.