Bovine infertility in Kerala- An overview

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The livestock population of Kerala is dominated by a bovine population of 3.7 million of which 91 percent are cattle and the rest buffaloes. Cattle keeping provides the major source of secondary occupation and a source of supplementing household income.

The term 'fertility' as applied to the cow denotes the desire and ability to mate, the capacity to conceive and nourish the embryo and finally the power to expel a normal calf and foetal membranes. Healthy cattle give expression to normal fertility by producing one viable calf per year. 'Sterility' means an absolute inability to reproduce whereas 'infertility' denotes a degree of reduced fertility which results in failure to produce or delay in producing the annual live calf. In the dairy cow, not only does this interfere with the transition from one generation to the other but it has an effect on efficient production of milk since pregnancy and parturition are necessary for the initiation and maintenance of lactation.

Introduction of crossbreeding of indigenous cattle with exotic breeds has resulted in the production of high yielding animals in Kerala. Presently more than 50 per cent of the breedable cattle in Kerala are cross-breds. Eventhough crossbreeding has become popular in Kerala, the reproductive performance of crossbred cows under rural management conditions are far behind the optimum. Although non-specific infections due to opportunist pathogens are still important, by far the greatest cause of infertility is poor management due to the lack of scientific knowledge in livestock management coupled with the non-availability of required facilities. Most of the subject experts are of the opinion that true anoestrum is the most common infertility condition encountered in the field. According to them, eventhough non-specific infections of the uterus, cervix and vagina are important, improper management of artificial insemination work also contribute to infertility.

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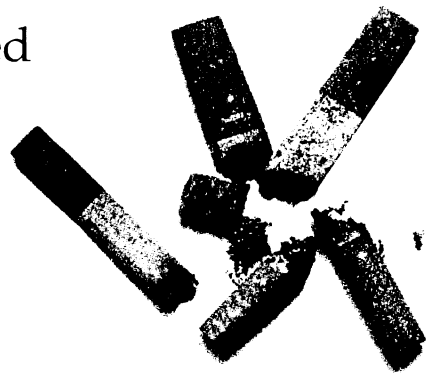
Maintenance of stationary conditions in the management of animals and adequate feeding round the year are major measures that can be adopted to tackle infertility conditions. Imparting training to personnels involved in animal breeding to impress upon the importance of hygienic and aseptic conditions in the conduct of artificial in-

seminations is also important.

Extension work on the need for adequate feeding and management of the animals is the most important measure presently adopted to reduce the incidence of infertility in cross-bred cows. The Kerala State Animal Husbandry Department and other institutions/organisations like Kerala Agricultural University are trying to impart timely and appropriate measures to tackle infertility conditions among cross-bred cattle. The major difficulty associated with the implementation of various programmes to tackle infertility is that most of the farmers who keep cattle are not financially sound to provide stationary conditions in feeding and management. Most of them are without land for cultivation of fodder. Most of the persons involved in artificial insemination work are not having the appropriate know-how and the centres are also deficient in facilities. Prohibitive cost of medicines and hormonal preparations is an important factor. Stationary infertility clinics have to be established throughout the state to reduce the incidence of infertility among farm animals by providing adequate veterinary assistance. Further, periodic conduct of infertility camps in strategic locations will also help to reduce the incidence of infertility.

Falling prey to the evil weed



TOBACCO came to India in the 17th century with the Portuguese and today, the plant is grown over as much as half a million hectares in the country.

India was one of the first countries in the world to report the adverse health effects of tobacco use. In 1902, the India Medical Gazette reported about a third of all cancer admissions to Madras general hospital were cancer of the cheek, which is associated with tobacco chewing. In 1992, there were an estimated 2,18,100 new cases of tobacco-related cancers in India-34 per cent of all cancer cases in the country.

Data collected by the Indian Council of Medical Research indicate that if all forms of tobacco use are taken into account, 30-70 per cent of all men and 15-50 per cent of all women consume tobacco. However, a 1987-88 survey by the Sample Survey Organisation showed that on a national basis, average tobacco use prevalence is 36 per cent in men and 12 per cent in women. Mortality rate in tobacco users is 1.4 to 11.6 times higher than in non-users. Thus, about 800,00 deaths a year can be attributed to tobacco use.

It is a cheaper to prevent tobacco-related diseases than to treat them. On an average, a cancer patient spends Rs 4,000 before diagnosis, and another Rs 7,000 on treatment, even when income loss because of illness is not taken into account.