

'Lalima': A cloned calf born at NDRI

03 June 2014 | News | By BioSpectrum Bureau

'Lalima': A cloned calf born at NDRI



The female cloned calf named 'Lalima' produced through the 'Hand-guided Cloning Technique' was born on May 2, 2014. The calf was born by normal parturition, and its weight at the time of birth was around 36 kg. It is a clone of an elite Murrah buffalo (MU-5345) from the National Dairy Research Institute (NDRI) livestock farm. The team of scientists involved in the production of this calf include Dr S K Singla, Dr M S Chauhan, Dr R S Manik, Dr P Palta, Dr Shiv Parsad and Dr Basanti Jyotsana.

As per NDRI, there are two ways in which the cloning technique will be very useful to dairy sector practically, for faster multiplication of superior germplasm-(i) through males by producing a clone of progeny tested bulls and (ii) through females by producing a clone of high yielding lactating females. In the case of Lalima, the donor cell was taken from the ear of an Murrah buffalo, which produced 2,713 kg milk in a standard lactation period of 305 days and 3,494 kg in a total lactation period of 471 days, during her 3rd lactation. It is also interesting to note that the calf went through the standard gestation period and was born through normal parturition without any assistance, and had normal birth weight.

Dr S Ayyappan, secretary, DARE and director general, Indian Council of Agricultural Research (ICAR), New Delhi congratulated the team and said that this new achievement of producing a cloned calf from an adult lactating animal by the "Hand-guided Cloning" technique will facilitate faster multiplication of elite germplasm and help us face the challenges of increasing demand for milk.

Dr A K Srivastava, director, NDRI, emphasized that this technology could go a long way in multiplying the number of high milk yielding buffaloes in India. He said that although the world's largest population of buffaloes is in India, contributing about 55 percent of the total milk production in the country, the number of elite buffaloes is not laudable and there is an urgent need to enhance the population of elite buffaloes.