

Dr. A.K. Srivastava, Director, N.D.R.I., informed that another cloned male Buffalo calf named 'Shresth**', was born at N.D.R.I., Karnal during early Hours of August 26, 2010, through the new and advanced 'Hand-guided Cloning Technique'. This cloned buffalo calf is different from the earlier clone Calves as, in this case, (I) the foster mother was provided opportunity for Normal delivery. However, earlier two calves were born through caesarian Operation, (II) the cloned calf was from ear somatic cell of 2 week old Buffalo calf; however, the earlier two calves were produced by using cells From foetus and embryonic stem cell, respectively. Furthermore, (III) the Embryo which led to successful pregnancy and normal delivery had remained Frozen at -196C for one week in liquid nitrogen and brought back to active Life upon thawing at room temperature.



The jubilant scientists are of the opinion that the cryopreservation of embryos will need to be made as part of technique, so that the embryos could be transported and used at several places.

This cloned calf weighing 41 kg was born through normal delivery with slight assistance carried out by a team of doctors.

Earlier NDRI has produced the world's first cloned buffalo calf on 6th

February, 2009 followed by on June 6, 2009 and August 22, 2010. The Hand-guided cloning technique developed at NDRI, is an advanced modification of the "Conventional Cloning Technique".

Dr S. Ayyappan, Secretary DARE and Director General, Indian Council of Agricultural Research wished good luck and congratulated the team and said That the new technology of "Hand-guided Cloning" of buffaloes may lead a new Era in faster multiplication of elite germplasm to face the challenges of increasing demands of milk in view of the ever growing human population. Dr. K. M. L Pathak, Deputy Director General (Animal Sciences) and Dr. C. S. Prasad, ADG(AS) ICAR also congratulated the team and praised the efforts by NDRI, Karnal.