Embryo transfer Technology

Artificial Insemination is being practiced since decades in Madhya Pradesh, intended towards improvement in germplasm of bovine breeds. Breed improvement through artificial insemination is based on principle of maximum utilization of genetically superior sire for breeding purpose by inheritance of good characters (superior genes) from father side i.e 50 % superior germplasm.

Similarly in females it is possible through MOET (multiple ovulation embryo transfer) to get upto 6 to 7 calves from genetically superior female in a single year. This way the calf born through ETT posses superior germplasm, inherited from father as well as mother, hence in this case the inheritance of superior germplasm is 100% hence male calves born through ETT are used for production of quality semen.

ETT lab was established at Bull Mother Farm, Bhadbhada Bhopal, in year 2013, besides conservation of native breeds (Malvi), lab started use of this technology for improvement in milch breeds namely Gir and Sahiwal for production of quality bulls of these breeds for semen station, with ultimate aim of increase in milk production of state and country

Elite cows of Gir and Sahiwal breeds are selected as donors and taken under super ovulation program using hormones, super ovulated cows are then inseminated with semen of elite bull of same breed, the fertilized embryos (average 4 no's) are flushed from uterus of this cow and transferred to non descript cows or cows having inferior germplasm, at the age of 7 day

Using this technique we have successfully conceived 27 females, of which six Gir and one Sahiwal calves (Total 7 calves) are born till the month of Aug 2015