

SUCCESS STORY

Project name: “Diagnosis of infertility owing to hormonal imbalance and optimizing fertility through hormonal approaches in dairy animals” (RKVY scheme 4030-C(g)-TVCC-3-O.A.)

Year of start: 2014-15

Name and Department of PI: Dr. Anand Kumar Pandey, TVCC, COVS, LUVAS, Hisar

Background: The per capita availability in Haryana is 720gm (2012-13), itself shows the strength of livestock (specially dairy) sector which contributes about 36% of agricultural GDP with a population of around 35.6 lakh dairy animals (\approx 29 lakh buffalo + 6.6 lakh cattle) and 7040000 ton of milk production (*HLDB, 2012-13*). However, our neighbouring state Punjab with a population of 38.7 lakh dairy animals produces 9714000 ton of milk (*MoA, GoI, 2012-13*). The comparison provides us an opportunity to enhance the milk production per animal by optimal utilization of still underutilized best Murrah germplasm in world. Hence the project was designed to enhance production by improving reproduction.

Work done under the project:

1. Under the project various equipments (ELISA Reader, Washer, Refrigerated centrifuge, deep freezer and CLIA) and instruments (Obstetrical instruments) have been procured and being used for the benefits of the farmers and post-graduate students. There was the extreme need of such kind of the instruments.
2. As far as research is concerned three master degree, M.V.Sc. Thesis title (1). “Comparative study on Ovsynch versus Doublesynch protocol for estrus synchronization during summer and winter season in buffalo” (2). “Evaluation of efficacy of different treatment protocols for estrus induction in buffaloes under field conditions” and (3). “Studies on the induction and synchronization of estrus in anestrus buffaloes using progesterone impregnated self-made intravaginal sponges” have been submitted to the LUVAS, Hisar, under which research work was carried out as per the objective of the project and the financial assistance provided by RKVY has been duly acknowledged.
3. The infertile animals (buffalo/cow) that brought to the TVCC were treated accordingly. By the use of ultrasonography we can detect the reproductive disorders and early pregnancy of the animals so that the animal’s owners get satisfaction with the institute.
4. Different hormones e.g. cortisol, estrogen and progesterones have been measured in the laboratory for the estimation of stress and endocrinology under the M.V.Sc. research work of students of department of Veterinary Gynaecology and Obstetrics, COVS, LUVAS, Hisar. The students are happy with the facilities provided for the research work.

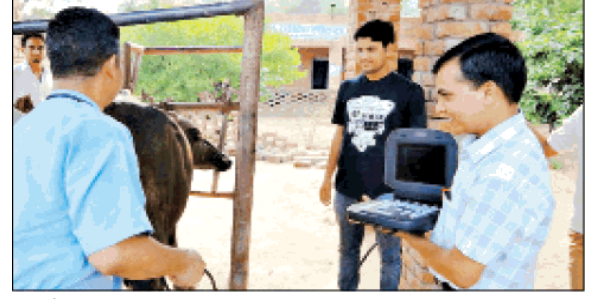
5. Few stories of success of the Project by owners:

- i. A prize winner Murrah buffalo of its 2nd parity was suffering with repeat breeding problem and then farmer name Pawan contacted us and his buffalo got treatment and now calved on June-2016. He is very happy with treatment.
 - ii. Dr. Nainwal (Principal Scientist, CCSHAU, Hisar) also tried so many time to get conceive his buffalo reared under ICAR integrated farming system. However, could not get success. He contacted us to take this buffalo under our project to get conceive and we did it after proper treatment and monitoring.
 - iii. Mr. Sher Singh (Superintendent, comptroller office, LUVAS, Hisar) also brought a quality buffalo of his neighbour for infertility treatment. History revealed that the animal was not getting conceive since one year and the owner was selling this buffalo to the slaughter house. Thereafter, he brought here and got whole treatment regularly. Finally, the animal got conceived and calved.
6. Not only TVCC, LUVAS, Hisar even infertile cattle and buffaloes at State Cattle Breeding Project situated Sector-03, Barwala road Hisar and different villages situated nearby Hisar and Ratia were synchronized for estrus and inseminated. A table is given below:

S.No.	Place/Village	Name of protocol of Estrous synchronization (n)	Total no. of animal treated in infertility camp	Result in terms of conception rate
1	Cattle Breeding Project, Farm, GLF, Barwala Road, Hisar	Doublesynch Protocol (n=17) vs Estradoublesynch (n=22) vs Heatsynch (n=24)	-	(n=13; 76.5%) (n=10; 45.5%) (n=13; 54.2%)
2	Ratia and Surrounding villages	5d (n=19) vs 7d (n=16) COSYNCH plus CIDR protocol	39	(n=10; 52.6%) (n=7; 43.8%)
3	Village: Thuian, Distt. Fatehabad	5d (n=38) vs 7d (n=38) COSYNCH plus CIDR protocol	76	(n=25; 65.8%) (n=20; 52.6%)
4	Village: Lali	5d (n=25) vs 7d (n=24) COSYNCH plus CIDR protocol	49	(n=20; 80.0%) (n=14; 58.3%)
5	Village: Ghiraai	5d (n=14) vs 7d (n=13) COSYNCH plus CIDR protocol	53	(n=6; 42.8%) (n=5; 38.5%)
6	Sach Dairy Farm, Dera Sachcha Sauda, Sirsa	Modified Doublesynch (n=14) vs Doublesynch (n=12)	33	(n=10; 71.4%) (n=5; 50.0%)
7	Village: Kirmara	COSYNCH (n=12) vs COSYNCH plus (n=12)	24	(n=5; 41.6%) (n=7; 58.3%)
8	Village: Hindwaan	COSYNCH (n=13) vs Double PG protocol (n=21)	34	(n=7; 53.8%) (n=14; 66.6%)
9	Ratia	COSYNCH (n=11) vs COSYNCH plus (n=11)	24	(n=5; 45.5%) (n=6; 54.5%)
10	Village: Sisaai	Repeat breeder and cystic ovarian degeneration cases were treated.	25	

Conclusion: As per the camps organized in the field level, it was found that the buffalo especially during summer season remains in anestrus. If, animal come into estrus and bred either natural or artificial insemination, chances of conception were low. Therefore, there is the need of such kind of the projects and funding so that the expertise services can be extended to the farmers and animal's owners get satisfied with the services.

पशुओं में बांझपन दूर करने के लिए गांव ठुईयां में लगाया शिविर



बांझ भैंस का उपचार करते चिकित्सक।

जागरण

जागरण संवाददाता, फतेहाबाद : पशुपालन एवं डेयरी विभाग और लाला लाजपत राय विश्वविद्यालय के संयुक्त तत्वाधान में गांव ठुईयां में पशुओं में बांझपन और इसका निवारण के लिए शिविर आयोजित किया गया। इसमें लुवास के सहायक प्रवक्ता डॉ. आनंद पांडेय और पशु अस्पताल ठुईयां इंचार्ज डॉ. सुनील देव द्वारा 76 पशुओं का आधुनिक अल्ट्रा सोनोग्राफिक तकनीक और हार्मोन तकनीक द्वारा इलाज किया गया।

डॉ. पांडेय ने बताया कि इन पशुओं को 5 दिन मॉनिटर करने के पश्चात कृत्रिम गर्भाधान तकनीक से गर्भित किया जायेगा। इस अवसर पर पशुपालन विभाग के उपनिदेशक डॉ. काशीराम ने पशुओं को बांझपन से बचाने में खनिज मिश्रण के महत्व पर प्रकाश डाला और पशुपालकों को पशुओं के चारे में खनिज मिश्रण नियमित रूप से डालने की सलाह दी। इसके साथ उन्होंने पशु पालन विभाग की विभिन्न स्कीमों की भी जानकारी दी। इस अवसर पर उनके साथ उपमंडल अधिकारी डॉ. पवन वर्मा, डॉ. सुमित, डॉ. लोकेश और पशुधन विकास सहायक रामचन्द्र आदि उपस्थित थे।

