

AICRP-FIELD PROGENY TESTING(FPT)

Objectives

1. Cattle improvement in the field with a view to enhance farmers' income through dairy farming
2. To study the reproductive and production performance of crossbreed cattle under field conditions
3. To test Frieswal crossbreed bulls under field conditions.

Presently, project is operational in 8 clusters of U.S.Nagar and Nainital districts, covering a total of 313 villages and 7,013 house-holds maintaining 8,280 Frieswal Progenies.

1. Significant Achievements:

1. **Frozen Semen:** Under the project frozen semen from test bulls is made available by CIRC, Meerut at an interval of about 15 months to carry out test insemination in the identified crossbred cattle (dams) population in the test mating area of U.S. Nagar and Nainital districts. The first consignment was made available on 13.01.2010. Till Nov.2018, a total of 49,304 doses from 96 bulls of six sets were received for carrying out test A.I. Inseminated dams were diagnosed for pregnancy and pregnant ones were followed for calving, which resulted into the birth of progenies. The birth of female progenies and their constant follow up are important for estimating breeding value of respective sires.
 2. **Performance:** Till Dec.2018, a total of 29,075 A.I. were carried out, 16,001 P.D. confirmed (C.R. 55%), 5,382 female progenies born, 995 progenies calved, among them 709 progenies completed their first lactation with an average 305-day first lactation milk yield (FLMY) of 2871 ± 35.3 kg.
- ❖ During the year 2018 a total of 5,030 A.I. were carried out and 3041 P.D. were confirmed leading to 58% CR. A Total of 1206 female progenies born and 200 progenies came in lactation. An overall first 305-day FLMY based on 219 progenies was 3276 ± 43.4 kg with $3.47 \pm 0.03\%$ fat which is higher than the base population average 305-day FLMY of 2214.2 ± 102.3 kg.

Consolidation activities (Extension, Inputs, Trainings and Animal welfare Camps etc.)

- ❖ **Visibility:** As per the mandate of the project, it was felt necessary to create awareness in the project's area first. For this purpose fifteen prescribed display boards are placed at appropriate places in the area of operation to makes the farmers aware about the program.



Display boards in field



Feeding inputs

❖ **Maintaining health status of Heifers in project area:** Inputs play a great role in the implementation of any field based program. Various Inputs like, calf starter feed (15 kg BAG), plastic feeding bowl, Mineral mixture and anthelmintics, etc. per progeny have been regularly provided to beneficiaries as motivation to rear

improved progenies scientifically. For repeat breeder heifers Animal Welfare Camps are being organized from time to time. So far as a total of 7 such camps have been organized in different villages of project area in which more than 200 heifers were treated.



Expert's Advice



Identification by Ear-Tagging



De-worming



Body Measurement



Pregnancy Diagnosis



Animal Health Camp

❖ **Farmers Training:** Training is important segment of inputs and necessary for imbibing the concepts and familiarize them with the project's requirement. Thus it was considered proper to impart training/ exposure to farmer's beneficiaries. Hence, Trainings were organized in field as well as at

Institutional level in order to enable more farmers take advantage to expertise in related fields. So far as total 40 trainings were performed in field and at Institutional level in which 3,252 beneficiaries were trained.



Refresher Training Programme



Paipura (Khamaria A.I.Center) 01.11.2017



Dohaniya (Kotabagh A.I. Center) 25.09.2018



Pindari ashok (Bara A.I. Center) 27.09.2018



Mangatpur (Khamaria A.I. Center) 28.09.2018

Year	No. of beneficiaries trained		
	In field	At Pantnagar	Total
2011	815	-	815
2012	101	264	365
2013	408	284	692
2014	250	-	250
2015	422	-	422
2016	296	-	296
2017	224	-	224
2018	188	-	188
	Grand Total		3,252

❖ **Heifers shows cum farmers Training:**As program is growing faster and female progenies (heifers) are being born in the project area, it was considered to convert the simple framers training/ exposures into Heifers show-cum farmers training for more effective adoption of practices. So far as, a total of 10 Heifers show have been organized in different villages of project area. Simultaneously, the Inseminator cum data Recorder, who happened to be the key persons in the project, also needed orientation and training to optimally utilize their skills. So far as a total of 3 Refresher courses for Inseminator cum Data Recorders have been organized.



Heifers Shows Amritnagar (Gadarpur A.I. Center) 14.12.2017

2. Research Publications:

Research papers

- i. Devi, L.S., Singh, D.V. and Kour, S. (2015). Morphological traits of pubertal and pregnant Frieswal heifers under field conditions. *J. Anim. Res.* 5(4):903-908.
- ii. Minj, S.K.; Singh, D.V.; Singh, C.B.; Shiv Prasad; Kumar, S. and Kumar, A. (2016). Non-genetics factors affecting reproduction traits of Frieswal crossbred heifers/ cows under field conditions. *Indian J. Anim. Prod. Mgmt.* 32(3-4):166-173.
- iii. Devi, L.S., Singh, D.V., Kour, S. and Tiwari, H. (2017). Factors affecting early reproduction traits of Frieswal heifers under field conditions. *J. Anim. Res.* 7(2):333-338.
- iv. Minj, S.K.; Singh, D.V.; Singh, C.B.; Shiv Prasad; Kumar, S. and Kumar, A. (2018). First lactation traits of Frieswal crossbred heifers/ cows under field conditions. *Indian J. Anim. Prod. Mgmt.* 33(3-4):99-105.

3. Theses Research:

- i. Kaur, S. (2013), "Farmers profile and morphometric studies of Frieswal progeny testing program". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
- ii. Devi, S.B. (2013) "Studies on early reproductive traits of female Frieswal progeny under field condition". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.
- iii. Minj, S. (2016) "Effect of various non-genetic factors on first lactation traits of Frieswal cows under field conditions". MVSc. (LPM) Thesis, GBPUA&T, Pantnagar.

4. Future Thrusts:

- ❖ Management and health interventions to continue.
- ❖ Study of Reproductive and productive performance of crossbred cattle (progenies) to continue.
- ❖ To assess the economic impact of the project.