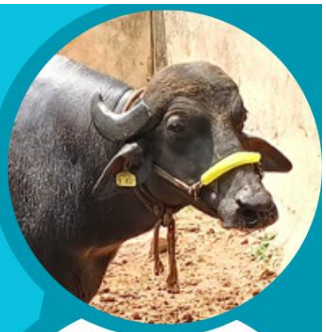
NETWORK PROJECT
ON
BUFFALO IMPROVEMENT

2024 – 2025

ANNUAL REPORT

and

PROJECT COORDINATOR'S OBSERVATION




Central Institute for
Research on Buffaloes,
Hisar, 125001, Haryana

NETWORK PROJECT ON BUFFALO IMPROVEMENT

ANNUAL REPORT 2024- 2025

AND

PROJECT CO-ORDINATOR'S OBSERVATIONS

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Compiled & edited by
Dr. Yaspal, PC(B) & Director, ICAR-CIRB
Dr. R K Sharma, Incharge NPBI
Dr. Sujoy Dhara, Head AGB
Dr. Sanjay Kumar, Sr. Scientist
Dr. Supriya Chhotaray, Scientist
Sh. Ramchander, Sr. Tech. Officer
Miss. Reetu Sharma, Technician

Phone: +91-1662-281630/281602
E mail: director.cirb@icar.org.in
Website: www.cirb.icar.org.in

COORDINATING UNIT

ICAR- CENTRAL INSTITUTE FOR RESEARCH ON BUFFALOES
HISAR – 125 001 (HARYANA)

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NETWORK PROJECT ON BUFFALO IMPROVEMENT

ANNUAL REPORT 2024-25

All India Coordinated Research Project on buffaloes was initiated in the year 1970-71 for genetic evaluation of large and medium size buffaloes which was later on made specific on two important breeds viz. Murrah and Surti in the coordinated program. The main thrust was to test the sires with a view to produce proven bulls for enhancing milk production. The efforts made by scientific manpower through this venture are able to standardize the testing methodology and germplasm evaluation for superior bull production of important breeds of buffaloes. The infrastructure has been created which is capable to generate germplasm in the form of bulls and frozen semen at some of the testing centers.

Network Project on Buffalo Improvement and running at ICAR-Central Institute for Research on Buffalo, Hisar since 1993. This has ensured sustained maintenance and production of improved germplasm on large scale for use in buffalo improvement program and for establishing linkages with institutions. This is the only centre in India where semen from progeny tested proven bulls are available. Progeny testing in Murrah Breed is carried out at six participating institutional /SVU centres viz. CIRB Hisar, NDRI Karnal, IVRI Izatnagar, GADVASU Ludhiana, LUVAS Hisar, ICAR Research Complex for Eastren Region Patna and LRS Mamnoor. Three funded field centers of Murrah were also initiated in 2001 at CIRB Hisar, NDRI Karnal and GADVASU Ludhiana to produce more number of daughters per bull for accurately evaluating the breeding bulls. 16847 artificial inseminations were carried out in 2024-25 at farmer's door in the village to produce daughters. The milk yields of daughters are being recorded for use in sire evaluation.

Around 1140 breedable buffaloes are being maintained at institutional Murrah centres for production of high genetic merit male and female calves to be used for production of future sires. As per technical program for Murrah breed, a set of upto 18-20 pedigreed bulls is selected in each set and it is used for AI in the associated herds (1600 AIs per annum) and field buffaloes (approximately 20000 AIs per annum) for test mating over 18 months duration. Test mating of XXI set was completed in Dec., 2024. Semen of XXII set of Murrah bull started from January 2025 and continue upto 31st June, 2026 is to be used at all the Murrah Centres. There are 16 superior bulls in the XXII set (7 bulls from CIRB Hisar, 3 bulls from GADVASU Ludhiana, 2 bull from LUVAS, Hisar and 4 bull from NDRI Karnal). So far, 305 superior bulls have been testmated in 22 sets.

Data of 882 daughters born from the 17th set of bulls which completed 1st lactation was compiled and bulls were evaluated. Bull no. M-51 from CIRB Hisar and 2594 from GADVASU Ludhiana ranked 1st and 2nd with breeding value 2558 kg and 2533 kg, respectively. The percent superiority by BLUP Model was 6.67 and 5.68, respectively.

Elite herds of Jaffarabadi, Surti, Bhadawari and Nili-Ravi breeds of buffaloes have been established in their respective breeding tracts. Semen freezing laboratories have been established at all the centres. Nili-Ravi and Bhadawari breed centres are functioning as conservation and improvement units and Jaffarabadi and Surti breed centre are concentrating on field progeny testing along with maintaining the elite herd for bull production and testing. A breedable herd of 638 (Nili-Ravi-321, Jaffarabadi-167, Surti-83 and Bhadawari-67) is being maintained at the above four breeds.

During the year 452462 semen doses produced and 413595 semen doses were used for AI's//Exp. or sold. Production and dissemination of Murrah breeing bulls' semen doses was 413332 and 381283 respectively, in other breed 39130 semen doses produced and 32312 disseminated i.e sale/used in farm herd/ field under field progeny testing program.

HEAD-WISE/YEAR-WISE PHASING OF BUDGET OUTLAY FOR NPBI

Centre wise and Headwise allocation and release of funds for Network Project on Buffalo Improvement as per R E for the FY 2024-25

(Rs. In lakh)

Name of the centre	SALARY		General					Capital							TSP		NEH		Total		
	Total Pay	ICAR share	Rec Cont.	ICAR share	ICAR share SCSP	TA	ICAR share	Equi-pment	ICAR share	ICAR share SCSP	Works	ICAR share	Fur. Fixt.	ICAR share	ICAR share Gen.	ICAR share Capt.	ICAR share Gen.	ICAR share Capt.	Net Requir-ement	ICAR Share	State Share
ICAR based centres																					
Coordinating Unit, Hisar	0.00	0.00	20.25	20.25	5.00	0.00	0.00	2.00	2.00	0.50	0.00	0.00	2.00	2.00	0.00	0.00	7.00	0.00	36.75	**36.75**	0.00
CIRB, Hisar, Main Unit	0.00	0.00	31.50	31.50	5.00	0.00	0.00	0.00	0.00	0.00	6.00	6.00	1.50	1.50	0.00	0.00	0.00	0.00	44.00	**44.00**	0.00
NDRI Karnal, Main Unit	0.00	0.00	24.50	24.50	3.00	0.00	0.00	1.02	1.02	0.50	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	30.52	**30.52**	0.00
IVRI, Izatnagar Main Unit	0.00	0.00	23.00	23.00	3.00	0.00	0.00	5.25	5.25	0.50	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	33.25	**33.25**	0.00
IGFRI Jhansi	0.00	0.00	41.50	41.50	3.00	0.00	0.00	3.50	3.50	0.50	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	50.00	**50.00**	0.00
ICAR Res. Comp. ER Patna	0.00	0.00	26.00	26.00	3.00	0.00	0.00	2.50	2.50	0.50	4.00	4.00	1.50	1.50	0.00	0.00	0.00	0.00	37.50	**37.50**	0.00
CIRB Sub Campus, Nabha	0.00	0.00	37.00	37.00	5.00	0.00	0.00	2.48	2.48	0.50	10.00	10.00	1.50	1.50	0.00	0.00	0.00	0.00	56.48	**56.48**	0.00
CIRB, Hisar, FPT	0.00	0.00	22.00	22.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	25.50	**25.50**	0.00
NDRI, Karnal, FPT	0.00	0.00	22.00	22.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	1.50	1.50	0.00	0.00	0.00	0.00	25.50	**25.50**	0.00
SAU's based centres																					
GADVASU, Ludhiana (Murrah)	0.00	0.00	72.00	54.00	4.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	2.00	1.50	0.00	0.00	0.00	0.00	78.50	**60.00**	18.50
GADVASU, Ludhiana (FPT)	0.00	0.00	32.00	24.00	0.00	0.00	0.00	1.00	0.75	0.00	0.00	0.00	2.00	1.50	0.00	0.00	0.00	0.00	35.00	**26.25**	8.75
LUVAS, Hisar	0.00	0.00	68.00	51.00	4.00	0.00	0.00	2.00	1.50	0.50	4.00	3.00	2.00	1.50	0.00	0.00	0.00	0.00	80.50	**61.50**	19.00
Kamdhenu University Gandinagar	0.00	0.00	62.00	46.50	4.00	0.00	0.00	2.00	1.50	0.50	4.00	3.00	2.00	1.50	0.00	0.00	0.00	0.00	74.50	**57.00**	17.50
RAJVASU, Bikaner	0.00	0.00	68.00	51.00	4.00	0.00	0.00	2.00	1.50	0.50	4.00	3.00	2.00	1.50	1.00	0.00	0.00	0.00	81.50	**62.50**	19.00
GADVASU, Ludhiana (Nili Ravi)	0.00	0.00	32.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	3.00	2.00	1.50	0.00	0.00	0.00	0.00	38.00	**28.50**	9.50
PVNRTVU, Hyderabad	0.00	0.00	17.00	12.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	**12.75**	4.25
SDAU, Sardarkrushinagar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00
Total	**0.00**	**0.00**	**598.75**	**511.00**	**43.00**	**0.00**	**0.00**	**27.75**	**26.00**	**5.00**	**36.00**	**32.00**	**26.00**	**23.00**	**1.00**	**0.00**	**7.00**	**96.50**	**744.50**	**648.00**	**96.50**
ICAR Share	**0.00**		**511.00**		**43.00**	**0.00**		**26.00**		**5.00**	**32.00**		**23.00**		**1.00**		**7.00**		**648.00**		
State Share	0.00		87.75			0.00		1.75			4.00		3.00						96.50		

PARTICIPATING CENTRES (As on 31.03.2025)

Coordinating Unit, CIRB, Hisar

Sr No	Name of centre	Breed	Year of start
Agricultural University based centers			
I	GADVASU, Ludhiana	Murrah	1993
II	LUVAS, Hisar	Murrah	1993
III	KU, Junagarh	Jaffarabadi	2001
IV	RAJUVAS, Vallabhnagar	Surti	2001
V	Field Unit GADVASU, Ludhiana	Murrah	2001
VI	GADVASU, Ludhiana	Nili-Ravi	2018
VII	LRS Mamnoor (PVNRTVU, Hyderabad)	Murrah	2024
ICAR Institute based Centres			
I	ICAR-CIRB, Hisar (Main Unit)	Murrah	1993
II	ICAR-NDRI, Karnal (Main Unit)	Murrah	1993
III	ICAR-IVRI, Izatnagar (Main Unit)	Murrah	1993
IV	ICAR- IGFRI, Jhansi	Bhadawari	2001
V	ICAR-CIRB, Sub - Campus Nabha	Nili-Ravi	2001
VI	Field Unit NDRI, Karnal	Murrah	2001
VII	Field Unit CIRB, Hisar	Murrah	2001
VIII	ICAR Res. Comp. ER Patna (Main Unit)	Murrah	2014

*LRS Mamnoor (PVNRTVU, Hyderabad) reinducted as Murrah data recording Unit from 1st April, 2024.

Scientist Meets/ARM	Place	Duration
1st Scientist meet	GAU, Junagarh,	February 10 - 11, 1993
2nd Scientist meet	PAU Ludhiana	April 28 - 29, 1994
3rd Scientist meet	RAU, Udaipur	November 2 - 3, 1995
4th Scientist meet	PAU, Ludhiana	July 28 - 29, 2000
5th Scientist meet	AAU, Khanapara	January 3- 4, 2002
6th Scientist meet	MPKV, Kolhapur	April 5 - 6, 2005
7th Scientist meet	CIRB, Hisar	April 4 - 5, 2007
8th Scientist meet	JAU, Junagadh	March 5 - 6, 2009
Mid-term Review meet	CIRB, Hisar	December 05, 2009
9th Scientist meet	CIRB, Hisar	November 27 - 28, 2010
10th Annual Review Meet	Bhuj, Gujarat	September 2 - 3, 2011
11th Annual Review Meet	NDRI, Karnal	August 24, 2012
12th Annual Review Meet	LRS Vallabhnagar	September 9-10, 2014
13th Annual Review Meet	CIRB, Hisar	September 23-24, 2015
14th Annual Review Meet	GADVASU, Ludhiana	July 04 - 05, 2016
15th Annual Review Meet	ICAR RCER, Patna	July 21 - 22, 2017
16th Annual Review Meet	ICAR-NDRI, Karnal	November 19 - 20, 2018
17th Annual Review Meet	ICAR-NASC Complex, New Delhi	August 27 - 28, 2019
18th Annual Review Meet	Virtual mode by ICAR-CIRB, Hisar	March 19, 2021
19th Annual Review Meet	Virtual mode by ICAR-CIRB, Hisar	July 28, 2022
20th Annual Review Meet	ICAR-CIRB, Hisar	December 8, 2023
21st Annual Review Meet	ICAR-IGFRI, Jhansi	November 12 – 13, 2024

CENTRE WISE PERFORMANCE, RESEARCH ACHIEVEMENTS AND PROJECT COORDINATOR OBSERVATIONS

Mandate of Network Project

To undertake genetic improvement and conservation of important breeds of buffaloes

Objectives:

1. To establish elite nucleus herds of important buffalo breeds for the production of genetically superior young bulls.
2. To evaluate sires through institutional / associated herd/field progeny testing.
3. To produce, test, propagate and conserve high genetic merit male germplasm.

Technical Programme: The technical programme involves establishment of elite herd of 1200 breedable Murrah / 400 Nili-Ravi / 225 Jaffarabadi / 75 Bhadawari /100 Surti buffalo for the production of genetically superior young bulls. For Murrah breed, technical programme includes selection and testing of 12-15 bulls on about 1200 breedable buffaloes at organised farms at GADVASU, Ludhiana; CIRB, Hisar; NDRI, Karnal; IVRI, Izatnagar; LUVAS, Hisar and ICAR Res. Comp. ER Patna in every 18-month's cycle. From each bull 75-80 pregnancies are to be obtained so that 20-25 recorded daughters per bull are available at all the centres for the evaluation of bulls. The bulls will be ranked on the basis of performance of their daughters and 20% of them will be selected as proven bulls from each set. The semen of the proven bulls will be used on elite buffaloes at different centres for the production of future sires and herd replacements.

A. Growth rate targets:

Age group (Months)	Target growth rate (g) per day		Expected body weight at terminal age (kg)	
	Female	Male	Female	Male
Birth - 6	450	450	112	112
6 - 18	500	550	294	312
18 - 24	400	530	367	410
24 - 30	400	450	440	520
30 - 36	300	350	495	584

N.B. Average birth weight, 30kg

B. Reproduction and production targets:

i. Av. age at first service = 24 months (300 kg B. wt.)
ii. Av. age at first calving = 40 months
iii. AV. age for initiating training of bulls = 18 months (350 kg B. wt.)
iv. Av. age at first collection of bulls = 30 months (400 kg B.wt.)
v. Av. service period = 130 days
vi. Calf mortality (0-3 mths) = ≤ 5%
vii. Wet average = ≥ 8.5 kg
viii. Herd average = ≥5.5 kg

Participating Institutional herds of Murrah Breeds

1. ICAR-CIRB Hisar — ICAR based
2. ICAR-NDRI Karnal — ICAR based
3. ICAR-IVRI Izatnagar — ICAR based
4. ICAR Res. Complex for ER Patna — ICAR Based
5. GADVASU Ludhiana — SAU based
6. LUVAS, Hisar — SAU based
7. LRS Mamnoor (PVNRTVU, Hyderabad) — SAU based

ICAR-CENTRAL INSTITUTE FOR RESEARCH ON BUFFALOES, HISAR (MAIN UNIT)

Report Period : 2024-25

1. Name of centre : CIRB, Hisar
2. Project Code :
3. Project Title : Network Project on Buffalo Improvement (Murrah)
4. Date of Start : 1993

5. **Objective:**
   - i. To establish elite herd of 50 to 100 Murrah (at each center) for the production of genetically superior young bulls.
   - ii. To evaluate sires through institutional / associated herd/field progeny testing
   - III. To produce, test, propagate and conserve high genetic merit male germplasm

6. Technical Programme:

- I. Establishment and maintenance of an elite herd of Murrah buffalo with a herd strength of 500 and 300 breedable females.
- II. Selection and testing of minimum 15 bulls of Murrah in every 18 months cycle.
- III. Production of minimum 10,000 frozen semen doses from each test bull.
- IV. Maintain a minimum number of 8000 frozen semen doses until the particular SET gets evaluated.
- V. Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
- VI. Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
- VII. Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days (All breeds) / 1500 kg in Murrah) and Peak yield.
- VIII. Life time productivity traits viz: herd life, productive life, lifetime milk yield, milk yield per day of herd life for buffaloes completed 4th or more lactation.
- IX. Monthly testing of milk constituents (Fat %, SNF % and Protein %) and Somatic Cell Count, wherever feasible, at institutional herds.
- X. Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
- XI. Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. Financial Statement for year: 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure		Balance
Total	ICAR Share		ICAR Share	State Share	
44.00*	44.00*	44.00*	44.00*	0.00	0.00

* Include Rs. 5.00 lakhs under SCSP

8. Staff Position : Redeployment

9. Herd Performance from Table 9.1 to 9.21

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	Female								
1.	Below 3 months	8	82		4	0	0		**21**
2.	3-12 months	58			2	0	2		**55**
3.	1-2 years	57			1	0	1		**64**
	Above 2 years	95			0	1	6		**89**
4.	Buffaloes in Milk	130			2	3	13		**152**
5.	Buffaloes Dry P /NP	43			2	3	16		**36**
	Sub Total	**391**	**82**		**11**	**7**	**38**		**417**
	Males								
1.	Below 3 months	19	84		9		0		**25**
2.	3-12 months	50			4		13		**46**
3.	1-2 years	14			0		28		**36**
	Above 2 years	25			0		5		**22**
4.	Breeding bulls	16		02	1		4		**17**
5.	Bullocks/Teasers/others	0			0		0		**0**
	Sub Total	**124**	**84**	**02**	**14**		**50**		**146**
	Grand Total	**515**	**166**	**02**	**25**	**7**	**88**		**563**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics during the period April 2024 – March 2025

Month	Male	Female	Still Birth	Abortion	Overall
April-2024	--	--	--	--	
May	--	--	--	--	
June	4	7	--	--	11
July	13	10	--	1	24
August	14	12	--	--	26
September	13	14	1	--	28
October	7	7	--	--	14
November	4	4	1	--	9
December	3	7	--	--	10
January-2025	10	11	--	--	21
February	11	6	1	--	18
March	5	4	--	--	9
Overall	**84**	**82**	**3**	1	**170**

Sex ratio Male: Female = 1.0 : 0.97

9.3. Disposal of Animals (1st April 2024 to 31st March 2025)

Female	Primary cause of disposal							
Category	Surplus	Low Producers	Reprod. Problem	Weak & Old	Udder Health	Death	Exptl.	**Total**
Calves								
0 to 3 months	0	0	0	0	0	4		**4**
3-12 months	2	0	0	0	0	2		**4**
Heifers								
1-2 years	1	0	0	0	0	1		**2**
> 2 years	0	0	4	2	0	0		**6**
Buffaloes								
Milch	0	2	4	2	5	2		**15**
Dry	0	4	6	3	3	2		**18**
Sub Total	**3**	**6**	**14**	**7**	**8**	**11**		**49**
Males	Primary cause of disposal							
Calves								
0 to 3 months	0	0	0	0	0	9		**9**
3-12 months	10	3	0	0	0	4		**17**
Young bull								
1-2 years	14	6	4	4	0	0		**28**
>2 years	4	0	1	0	0	0		**5**
Breeding bulls	4	0	0	0	0	1		**5**
Bullock+Teaser etc	0	0	0	0	0	0		**0**
Sub Total	**32**	**9**	**5**	**4**	**0**	**14**		**64**
Grand Total	**35**	**15**	**19**	**11**	**8**	**25**		**113**

9.4 Mortality during the Period 1st April 2024 to 31st March, 2025

Month	**Details**	**Female**						**Male**					**Total (Male + female)**
		0-3 (Month)	**3-6**	**6-12**	**>1yrs**	**>2yrs**	**Overall**	**0-3 (Month)**	**3-6**	**6-12**	**>1yrs**	**Overall**	
April	No	10	39	19	70	253	391	10	26	29	55	118	509
	Died	--	--	--	1	1	2	--	--	--	--	--	2
	%	--	--	--	1.43	0.39	0.51	--	--	--	--	--	0.39
May	No	9	36	15	61	265	386	10	33	23	55	121	507
	Died	--	--	--	--	--	--	--	--	--	--	--	--
	%	--	--	--	--	--	--	--	--	--	--	--	--
June	No	8	39	18	58	252	375	8	30	22	48	108	483
	Died	--	--	--	--	--	--	--	1	--	--	1	1
	%	--	--	--	--	--	--	--	3.33	--	--	0.99	0.21
July	No	15	38	15	51	261	380	18	26	24	54	122	502
	Died	--	1	--	--	1	2	--	--	--	--	--	2
	%	--	2.63	--	--	0.38	0.53	--	--	--	--	--	0.40
August	No	24	35	16	65	265	405	22	24	16	58	120	525
	Died	--	--	--	--	1	1	--	--	--	--	--	1
	%	--	--	--	--	0.38	0.25	--	--	--	--	--	0.19
September	No	28	34	18	55	272	407	24	28	25	65	142	549
	Died	--	--	--	--	--	--	2	--	--	--	2	2
	%	--	--	--	--	--	--	8.33	--	--	--	1.41	0.36
October	No	26	30	16	60	279	411	23	23	23	74	143	554
	Died	3	--	--	--	1	4	4	1	--	--	5	9
	%	11.54	--	--	--	0.36	0.97	17.39	4.35	--	--	3.50	1.62
November	No	22	28	15	69	284	418	22	18	21	82	143	561
	Died	1	--	--	--	--	1	1	--	--	--	--	2
	%	4.54	--	--	--	--	0.24	4.55	--	--	--	--	0.36

December	No	17	25	20	67	268	378	29	12	10	72	131	528
	Died	--	--	--	--	--	--	1	--	--	--	--	1
	%	--	--	--	--	--	--	3.45	--	--	--	--	0.19
January	No	20	26	21	69	268	405	30	15	25	76	146	551
	Died	--	--	--	--	--	--	--	1	--	--	--	1
	%	--	--	--	--	--	--	--	6.67	--	--	--	0.18
February	No	21	28	25	70	268	412	28	18	29	76	151	563
	Died	--	--	1	--	--	--	--	1	--	--	--	2
	%	--	--	4.00	--	--	--	--	5.56	--	--	--	0.36
March	No	21	17	38	64	277	417	25	10	36	73	144	561
	Died	--	--	--	--	--	--	1	--	--	1	--	2
	%	--	--	--	--	--	--	4.00	--	--	1.37	--	0.36

Overall Calf mortality (0-3 months): 6.74 % (13/193)

9.5. Causes of Mortality (qtr. wise) during the period 1st April 2024 to 31st March, 25

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	1	1	4	1	7
Pheumonities	0	2	2	2	6
Peritonitis	2	1	1	1	5
TRP / TP	0	0	0	0	0
Miscellaneous	0	1	5	1	7
Total	**3**	**5**	**12**	**5**	**25**

9.6 Prophylactic Measures undertaken during 2024-25

Disease	**Vaccination: Month / No. of animals**	**No. of animals** Tested / Positive		**Month and No. of animals treated for Parasitism**
FMD	April/562, Sept/509, Feb/550			April/179, May/110, Jun/104, Jul/108, Aug/108, Sept/250, Oct/46, Nov/115, Dec/120, Jan/116, Feb/129, Mar/122
HS	April/562, Sept/509, Feb/550			
BQ	April/562, Feb/550			
Brucellosis	103	74	0	
Mastitis		1008	254	

9.7 Female Conception Rate during the Period January to December 2024

Category →	**Heifers**			**Adult**			**Overall**		
AI ↓	**I**	**C**	**CR%**	**I**	**C**	**CR%**	**I**	**C**	**CR%**
1st	54	33	61.11	139	68	48.92	193	101	52.33
2nd	32	11	34.38	64	29	45.31	96	40	41.67
3rd	9	5	55.56	28	11	39.29	37	16	43.24
4th & above	20	8	40.00	57	16	28.07	77	24	31.17
Overall	115	57	49.57	288	124	43.06	403	181	44.91

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate

Quarter	**No. of A I**	**Pregnancy**	**CR %**
January – March, 2024 ~~Previous year~~	193	101	52.33
April – June, 2024	96	40	41.67
July – September, 2024	37	16	43.24
October- December, 2024	77	24	31.17
Overall	403	181	44.91

9.9. Bull-wise Conception Rate During the period January 2024 to December, 2024

Sr. No.	Bull No.	SET No.	Total AI	Conceived	CR%
1.	5764	21st	41	17	41.46
2.	2979	21st	14	7	50.00
3.	4354 PT	15th	19	5	26.32
4.	5690	21st	18	9	50.00
5.	2990	21st	37	16	43.24
6.	109	21st	36	16	44.44
7.	1053 PT	16th	13	3	23.08
8.	5723	non-set	1	1	100.00
9.	2383 PT	16th	2	2	100.00
10.	112	21st	27	18	66.67
11.	4889	16th	11	3	27.27
12.	7630	21st	28	12	42.86
13.	M 29 PT	16th	10	6	60.00
14.	6044 PT	14th	5	3	60.00
15.	7990	21st	31	15	48.39
16.	3014	21st	18	9	50.00
17.	4592	16th	11	2	18.18
18.	5414	21st	10	5	50.00
19.	2357	14th	17	5	29.41
20.	2979	21st	5	2	40.00
21.	M 51 PT	17th	9	2	22.22
22.	5638	21st	21	9	42.86
23.	297	21st	7	6	85.71
24.	5629	21st	7	7	100.00
25.	3591 PT	11th	3	1	33.33
26.	2383	16th	2	0	0.00
27.					
Overall			**403**	**181**	**44.91**

9.10 Bull Wise Semen Stock

Sr. No.	Bull No	Centre	SET	Dam's Best SLMY/ Peak Yield	Opening balance	Received	Sold	Supp.	Exp.	Balance
1	392	CIRB	I PT	2594	113	0	0	0	0	113
2	3567	NDRI	I PT	2877	250	0	0	0	2	248
3	896	CIRB	I	3003	142	0	0	0	0	142
4	3098	NDRI	I	3164	250	0	0	0	2	248
5	761	CIRB	II PT	2578	276	0	0	0	2	274
6	93	CIRB	II PT	22kg	88	0	0	0	0	88
7	829	CIRB	II PT	2626	250	0	0	0	2	248
8	759	CIRB	II	2650	198	0	0	0	0	198
9	3638	NDRI	II	3278	250	0	0	0	2	248
10	3551	NDRI	II	3898	136	0	0	0	0	136
11	1253	GAD	II	3348	36	0	0	0	0	36
12	1268	GAD	II	2802	265	0	0	0	2	263
13	1290	GAD	II	2628	250	0	0	0	2	248
14	1153	CIRB	III PT	2540	250	0	0	0	0	250
15	1061	CIRB	III	2846	209	0	0	0	0	209
16	1354	GAD	III PT	3088	108	0	0	0	0	108
17	1165	CIRB	III	2627	250	0	0	0	2	248
18	3930	NDRI	III	2912	250	0	0	0	2	248

19	1131	CIRB	III	2827	98	0	0	0	0	98
20	3966	NDRI	III	3700	258	0	0	0	2	256
21	1023	CIRB	III	2710	252	0	0	0	2	250
22	1171	CIRB	III	3007	256	0	0	0	2	254
23	993	CIRB	III	2976	100	0	0	0	0	100
24	1315	GAD	III	2808	266	0	0	0	2	264
25	1084	CIRB	III	3007	98	0	0	0	0	98
26	1506	GAD	IV PT	3018	250	0	0	0	2	248
27	1451	GAD	IV PT	3401	250	0	0	0	2	248
28	1437	GAD	IV	3127	250	0	0	0	2	248
29	1319	CIRB	IV	2538	250	0	0	0	2	248
30	1341	CIRB	IV	2878	83	0	0	0	0	83
31	1538	CIRB	IV	2786	98	0	0	0	0	98
32	1363	CIRB	IV	3031	98	0	0	0	0	98
33	1434	CIRB	IV	2640	6	0	0	0	0	6
34	1360	CIRB	IV	2537	250	0	0	0	2	248
35	1485	CIRB	V	2523	246	0	0	0	0	246
36	4371	NDRI	V PT	3258	253	30	0	30	2	251
37	4245	NDRI	V	3215	250	0	0	0	2	248
38	4395	NDRI	V	3344	116	0	0	0	0	116
39	1798	CIRB	V	2753	250	0	0	0	2	248
40	1641	CIRB	V	2753	34	0	0	0	0	34
41	1536	GAD	V	3786	259	0	0	0	2	257
42	1491	CIRB	V	3148	250	0	0	0	2	248
43	1555	GAD	V	2948	175	0	0	0	0	175
44	1749	CIRB	V	2796	173	0	0	0	0	173
45	1573	GAD	V	2866	279	0	0	0	2	277
46	1717	GAD	VI	2775	68	0	0	0	0	68
47	1153	HAU	VI PT	2675	250	0	0	0	0	250
48	4506	NDRI	VI PT	3512	123	30	0	30	0	123
49	1933	CIRB	VI	2650	250	0	0	0	2	248
50	1944	CIRB	VI	2752	148	0	0	0	0	148
51	1135	CIRB	VI	3250	132	0	0	0	0	132
52	1667	GAD	VI	2988	58	0	0	0	0	58
53	1836	CIRB	VI	2744	133	0	0	0	0	133
54	1922	CIRB	VI	2684	83	0	0	0	0	83
55	2028	CIRB	VI	2689	142	0	0	0	0	142
56	1796	GAD	VII PT	3170	9	0	0	0	0	9
57	2331	CIRB	VII	2664	250	0	0	0	2	248
58	4807	NDRI	VII	3437	68	0	0	0	0	68
59	1749	GAD	VII	3182	68	0	0	0	0	68
60	1727	GAD	VII	3098	47	0	0	0	0	47
61	1419	CIRB	VII	3042	267	0	0	0	2	265
62	2363	CIRB	VII	2654	153	0	0	0	0	153
63	1746	GAD	VII	2718	20	0	0	0	0	20
64	2184	CIRB	VII	2574	188	0	0	0	0	188
65	1875	GAD	VIII PT	2714	42	0	0	0	0	42
66	4813	NDRI	VIII PT	3016(1)	18	0	0	30	0	18
67	2422	CIRB	VIII	3369	250	0	0	0	2	248
68	2522	CIRB	VIII	2567	98	0	0	0	0	98
69	1868	GAD	VIII	2591	160	0	0	0	0	160
70	2308	CIRB	VIII	2655	250	0	0	0	2	248
71	2250	CIRB	VIII	2748	100	0	0	0	0	100
72	5049	NDRI	VIII	2912	68	0	0	0	0	68
73	1867	GAD	VIII	2709(1)	250	0	0	0	2	248
74	1509	CIRB	VIII	3690	112	0	0	0	0	112

75	4865	NDRI	VIII	3392	38	0	0	0	0	38
76	1893	GAD	VIII	2753	150	0	0	0	0	150
77	2479	CIRB	VIII	2519	100	0	0	0	0	100
78	1994	GAD	IX PT	2938	253	0	0	0	2	251
79	5197	NDRI	IX	2831	250	0	0	0	2	248
80	2582	CIRB	IX	2836	111	0	0	0	0	111
81	5112	NDRI	IX	2831	250	0	0	0	0	250
82	2720		IX	2664	162	0	0	0	0	162
83	1903	GAD	IX	2718	136	0	0	0	0	136
84	1575	CIRB	IX	3194	100	0	0	0	0	100
85	2592	CIRB	IX	3336	173	0	0	0	0	173
86	5218	NDRI	IX	3333	170	0	0	0	0	170
87	2910	CIRB	IX	3062	147	0	0	0	0	147
88	1940	GAD	IX	2775	250	0	0	0	2	248
89	1913	GAD	IX	2740	251	0	0	0	2	249
90	1964	GAD	IX	2672	13	0	0	0	0	13
91	333 Golu	Didwadi	IX	22 kg PY	48	0	0	0	0	48
92	2990	CIRB	X	2655	250	0	0	0	2	248
93	3103	CIRB	X	2942	250	0	0	0	2	248
94	1693	CIRB	X PT	3194	230	0	0	0	0	230
95	2045	GAD	X PT	3369	427	0	0	0	4	423
96	507	CIRB	X	2572	250	0	0	0	2	248
97	2062	GAD	X	2672	250	0	0	0	2	248
98	2073	GAD	X	2717	250	0	0	0	2	248
99	2074	GAD	X	3050	250	0	0	0	2	248
100	2083	GAD	X	3063	250	0	0	0	2	248
101	3631	CIRB	X	18 kg PY	250	0	0	0	2	248
102	ND2	NDAUT	X	2583	135	0	0	0	0	135
103	3267	CIRB	XI PT	2489	230	0	0	30	0	230
104	3591	CIRB	XI PT	2598	550	0	0	40	2	508
105	2133	GAD	XI	2844	250	0	0	0	2	248
106	2148	GAD	XI	3008	102	0	0	0	0	102
107	2154	GAD	XI	2593	98	0	0	0	0	98
108	3226	CIRB	XI	2655	250	0	0	0	2	248
109	3255	CIRB	XI	3051	250	0	0	0	2	248
110	12-HAU	CIRB	XI	2858	230	0	0	0	0	230
111	5489	NDRI	XI	3031	250	0	0	0	2	248
112	5496	NDRI	XI	2780	250	0	0	0	2	248
113	5516	NDRI	XI	2765	250	0	0	0	2	248
114	ND6	NDAUT	XI	2702	250	0	0	0	2	248
115	ND8	NDAUT	XI	2702	250	0	0	0	2	248
116	2185	GAD	XII PT	3423	241	0	0	0	0	241
117	183	HAU	XII PT	2824	1263	0	0	20	2	1241
118	2176	GAD	XII	2754	208	0	0	0	0	208
119	2177	GAD	XII	3024	275	0	0	0	2	273
120	3598	CIRB	XII	2655	250	0	0	0	2	248
121	R-10	CIRB	XII	5192	382	0	0	0	2	380
122	R-11	CIRB	XII	4000	594	0	0	0	2	592
123	220	HAU	XII	2631	266	0	0	0	2	264
124	4059	CIRB	XIII	2510	250	0	0	0	2	248
125	3964	CIRB	XIII	3369	250	0	0	0	2	248
126	4440	CIRB	XIII	2850	250	0	0	0	2	248
127	4441	CIRB	XIII	3805	250	0	0	0	2	248
128	4442	CIRB	XIII	2882	250	0	0	0	2	248
129	5943	NDRI	XIII	3232	83	0	0	0	0	83
130	2234	GAD	XIII PT	3114	20	0	0	0	0	20

131	2269	GAD	XIII PT	3617	230	0	0	0	0	230
132	2304	GAD	XIII	3114	96	0	0	0	0	96
133	4439	CIRB	XIV	22 kg PY	1208	0	0	0	2	1206
134	4093	CIRB	XIV	3040	250	0	0	0	2	248
135	4196	CIRB	XIV PT	3304	843	0	0	20	2	821
136	4100	CIRB	XIV	2971	250	0	0	0	2	248
137	6014	NDRI	XIV	3072	250	0	0	0	2	248
138	6044	NDRI	XIVPT	3567	624	0	0	28	2	594
139	6136	NDRI	XIV	4341	1118	0	0	30	0	1088
140	2369	GAD	XIV	3114	250	0	0	0	2	248
141	2357	GAD	XIVPT	3559	794	0	0	30	2	762
142	4354	CIRB	XV	3605	4226	0	6289	112	22	8803
143	4324	CIRB	XV	3528	500	0	0	0	2	498
144	4438	CIRB	XV	3222	500	0	0	0	2	498
145	4363	CIRB	XV	3068	480	0	0	0	2	478
146	4403	CIRB	XV	3059	460	0	0	0	2	458
147	4328	CIRB	XV	3228	542	0	0	30	2	510
148	2371	GAD	XV	3053	495	0	0	0	2	493
149	2412	GAD	XV	2998	566	0	0	0	2	564
150	2417	GAD	XV	3565	538	0	0	0	2	536
151	2429	GAD	XV	3435	540	0	0	0	2	538
152	2459	GAD	XV	4636	789	0	149	0	2	638
153	6007	NDRI	XV	3260	1291	0	0	20	2	1269
154	6139	NDRI	XV	2828	500	0	0	0	2	498
155	6290	NDRI	XV	4341	500	0	0	0	2	498
156	6405	NDRI	XV	2743(1)	520	0	0	0	2	518
100	4889	CIRB	XVI	4120	6240	0	4834	50	2	1354
158	4705	CIRB	XVI	3990	6179	0	5638	0	2	539
159	4592	CIRB	XVI	3528	5855	0	3200	50	2	2603
160	M-29	CIRB	XVI	4600	6346	0	2945	64	30	3307
161	1027	LUVAS	XVI	3763	6926	0	5803	0	4	1119
162	1053	LUVAS	XVI	3559	6412	0	4655	52	10	1695
163	1064	LUVAS	XVI	3579	5816	0	1514	0	2	4300
164	2467	GAD	XVI	3574	1986	0	1300	0	2	684
165	2501	GAD	XVI	3053	2618	0	0	0	2	2616
166	2383	GAD	XVI	4636	1831	0	523	40	2	1266
167	6379	NDRI	XVI	3505	2237	0	1310	0	2	925
168	6409	NDRI	XVI	4090	2187	0	1180	0	2	1005
169	6646	NDRI	XVI	3533	2003	0	1410	0	2	591
170	6753	NDRI	XVI	3389	2508	0	430	0	2	2076
171	M-51	CIRB	XVII	4668	8349	0	1464	259	2	6624
172	4715	CIRB	XVII	3059	5983	0	0	0	2	5981
173	4733	CIRB	XVII	2851	6310	0	1893	0	2	4415
174	4687	CIRB	XVII	3309	3942	0	620	0	2	3320
175	M-53	CIRB	XVII	4100	7920	0	5745	0	2	2173
176	Sikander	PVT	XVII	28.9 kg	3823	0	689	0	2	3132
177	Daara	PVT	XVII	28.9 kg	1635	0	601	0	2	1032
178	2565	GAD	XVII	3287	439	0	0	0	2	437
179	2594	GAD	XVII	3557	849	0	0	180	2	667
180	7010	NDRI	XVII	3068	2180	0	260	0	2	1918
181	4837	CIRB	XVII	3076	7378	0	780	0	2	6596
182	2558	GAD	XVII	3574	1194	0	0	0	2	1192
183	B1-330	CIRB	XVII	4595	7853	0	6400	0	2	1451
184	2607	GAD	XVII	3899	370	0	0	0	2	368
185	1148	LUVAS	XVII	3124	7989	0	3633	0	2	4354
186	6942	NDRI	XVII	3188	2625	0	0	0	2	2623

187	4905	CIRB	XVIII	3371/14.0	8000	0	0	0	2	7998
188	5147	CIRB	XVIII	3057/14.8	8000	0	0	0	2	7998
189	1209	LUVAS	XVIII	3593/17.2	7485	0	0	0	2	7483
190	4995	CIRB	XVIII	3064/15.5	8000	0	0	0	2	7998
191	7094	NDRI	XVIII	3465/17.0	1948	0	0	0	2	1946
192	7227	NDRI	XVIII	3099/16.5	498	0	0	0	2	496
193	7147	NDRI	XVIII	3108/15.5	2248	0	0	0	2	2246
194	2676	GAD	XVIII	3023/15.5	2370	0	0	0	2	2368
195	2677	GAD	XVIII	3135/16.5	2375	0	0	0	2	2373
196	1219	LUVAS	XVIII	3837/17.8	4230	0	0	0	2	4228
197	2689	GAD	XVIII	3151/18.8	737	0	0	0	2	735
198	7263	NDRI	XVIII	3465/17.0	2080	0	0	0	2	2078
199	1208	CIRB	XVIII	3437/15.1	8000	0	0	0	2	7998
200	1150	CIRB	XVIII	3127/15.9	8000	0	0	0	2	7998
201	2645	GAD	XVIII	3394/19.0	1794	0	0	0	2	1792
202	2674	GAD	XIX	3583/23.0	2612	0	0	0	2	2610
203	2737	GAD	XIX	3241/22.8	1060	0	0	0	2	1058
204	2759	GAD	XIX	3340/20.7	2605	0	0	0	2	2603
205	7604	NDRI	XIX	3158/16.0	1345	0	0	0	2	1343
206	1315	LUVAS	XIX	3824/18.4	6467	0	0	0	2	6465
207	5181	CIRB	XIX	3428/17.9	8835	0	0	0	2	8833
208	5246	CIRB	XIX	3124/15.7	9240	0	0	0	2	9238
209	5232	CIRB	XIX	3513/16.3	9635	0	0	0	2	9633
210	5310	CIRB	XIX	4069/20.0	8620	0	39	30	2	8549
211	5320	CIRB	XIX	3340/15.2	7961	0	0	0	2	7959
212	5333	CIRB	XIX	3304/17.6	8213	0	0	0	2	8211
213	5374	CIRB	XIX	3244/17.4	8203	0	0	0	2	8201
214	7584	NDRI	XX	3600/16.5	2090	0	0	0	2	2088
215	7649	NDRI	XX	3203/13.5	2930	0	0	0	2	2928
216	2793	GAD	XX	3339/21.5	445	1650	0	0	2	2093
217	2814	GAD	XX	3430/23.4	580	0	0	0	0	580
218	2831	GAD	XX	4814/28.7	1830	0	0	0	2	1828
219	2838	GAD	XX	3340/22.7	1060	1190	0	0	2	2248
220	2848	GAD	XX	3304/20.5	0	0	0	0	0	0
221	2850	GAD	XX	3683/20.6	1080	400	0	0	2	1478
222	3004	GAD	XX	4716/26.2	950	0	0	0	2	948
223	19	LUVAS	XX	3695/21.6	8010	0	0	0	4	8006
224	1454	LUVAS	XX	3355/17.4	8065	0	0	0	2	8063
225	5427	CIRB	XX	3371/15.3	8090	0	0	0	2	8088
226	5481	CIRB	XX	3332/16.6	8323	0	0	0	0	8323
227	5500	CIRB	XX	3171/16.5	8350	0	0	0	2	8348
228	5505	CIRB	XX	4138/22.0	1688	0	0	30	2	1656
229	5511	CIRB	XX	3356/17.4	6376	0	0	0	0	6376
230	5588	CIRB	XX	4216/20.0	0	0	0	0	0	0
231	5592	CIRB	XX	3242/17.0	0	0	0	0	0	0
232	5414	CIRB	XXI	3321/21.0	8254	0	0	308	20	7926
233	5629	CIRB	XXI	4180/20.2	8836	0	0	590	0	8246
234	5638	CIRB	XXI	3364/19.5	6122	0	0	380	0	7742
235	5647	CIRB	XXI	4045/23.4	1147	0	0	0	0	1147
236	5690	CIRB	XXI	4029/21.0	8377	0	0	1380	0	7997
237	5723	CIRB	XXI	5170/26.8	234	0	0	0	0	234
238	5764	CIRB	XXI	3644/17.5	146	0	0	1857	0	7687
239	2930	GAD	XXI	3590/20.7	0	0	0	0	0	0
240	2979	GAD	XXI	3440/21.6	3020	1200	0	302	0	3918
241	2990	GAD	XXI	3723/21.2	955	1230	0	636	0	1549
242	3014	GAD	XXI	4420/24.56	2025	0	0	136	0	1889

243	7630	NDRI	XXI	3343/15.5	1290	2280	0	1630	0	1940
244	7768	NDRI	XXI	3251/16.5	1880	500	0	570	0	1810
245	7990	NDRI	XXI	3991/18.0	460	2250	0	1191	0	1519
246	297	IVRI	XXI	3407/17.5	4055	0	0	620	0	7935
247	109	LUVAS	XXI	3660/16.3	1743	0	0	1380	0	8363
248	112	LUVAS	XXI	4390/17.2	3961	0	121	580	0	8260
249	5814	CIRB	XXII	4138/22.0	0	0	0	2305	0	3495
250	5912	CIRB	XXII	4350/20.0	0	0	0	2270	0	3730
251	5917	CIRB	XXII	4553/23.0	0	0	0	0	0	733
252	5791	CIRB	XXII	4507/23.5	0	0	0	2305	0	5695
253	5872	CIRB	XXII	3533/16.9	0	0	0	300	0	160
254	3097	GAD	XXII	4824/26.8	0	3315	0	970	0	2345
255	3113	GAD	XXII	4815/28.7	0	2885	0	930	0	1955
256	3126	GAD	XXII	3602/21.1	0	1840	0	710	0	1130
257	8100	NDRI	XXII	3272/16.0	0	500	0	310	0	190
258	8129	NDRI	XXII	3125/14.0	0	500	0	330	0	170
259	8198	NDRI	XXII	3104/14.5	0	500	0	380	0	120
260	306	LUVAS	XXII	3847/18.3	0	0	0	140	0	133
Total					**425236**	**20300**	**63425**	**23715**	**392**	**420228**
	Bull No. (Non-set/Field bulls)				**Opening B.**	**Received**	**Sold**	**Supply**	**Exp.**	**Balance**
1	M-188	GLF	NS	4100	620	0	0	0	0	620
2	5405	CIRB	CIRB	3179/16.1	680	0	0	0	20	660
3	5647	CIRB	CIRB		1147					17
4	Yuvraj	PVT	Field		17	0	0	0	0	50
5	Heera	PVT	Field		50	0	0	0	0	95
6	Dhanna	PVT	Field		95	0	0	0	0	215
7	Ramu	Sirsa	Cow bull		221	0	6	0	0	**1657**
	Total				**2830**	**0**	**6**	**0**	**20**	**3314**
	Overall				**428066**	**20300**	**63431**	**23715**	**412**	**421885**

Summary Report (2024-25)

Sr. No.	Brief Information	2024-25	2023-24	2022-23
1	Opening balance on 1st April	**428066**	353404	325318
2	Semen Production up to March	302418	256978	234133
3	Semen doses received	20300	21585	65698
4	Semen doses supplied NPBI	23715	37612	30906
5	Semen doses sold up to March	299872	162070	101787
6	Semen doses used for Experiment	412	-	18
7	**Closing Balance**	**421885**	**426199**	**353844**

9.11 Average Body weight (kg) since inception (Indicate number of animals in parenthesis)

Year	At birth	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC (After 1st calving)	Adult
Female								
2023-24	36.22 (72)	65.98 (59)	104.85 (34)	190.11 (45)	253.63 (41)	355.04 (53)	547.66 (26)	575.60 (171)
2024-25	**36.49 (75)**	**55.00 (62)**	**102.78 (76)**	**190.30 (64)**	**295.54 (54)**	**398.59 (58)**	**565.53 (47)**	**535.00 (278)**
Male								
2023-24	38.94 (78)	66.04 (55)	104.33 (40)	208.83 (29)	295.00 (12)	433.43 (14)	-	-
2024-25	**39.21 (73)**	**66.36 (66)**	**108.14 (58)**	**207.27 (41)**	**313.66 (32)**	**423.90 (2)**	**-**	**421.00(24)**

9.12 Production Performance during 1st April 2024 to 31st March 2025

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	38	2679.24±79.77	316.82±6.15	2598.47±70.08	13.03±0.19
2nd	28	3235.18±176.66	317.00±11.71	3078.57±115.35	15.68±0.42
3rd	27	3358.07±175.85	329.30±10.31	3174.30±145.39	16.73±0.70
4th	18	3406.50±139.96	320.67±13.35	3276.17±107.15	16.66±0.40
5th & above	18	3295.00±84.01	317.83±10.34	3216.06±72.53	17.40±0.49
Overall	**129**	**3129.39±66.81**	**320.15±4.41**	**3003.94±52.93**	**15.49±0.25**

9.12.1 Production Performance of Buffaloes since Inception of Network

Year	Av. Lact. Yield (Kg)	Av. Lact. Length (days)	305-day Lact. Milk Yield (Kg)	Av. Peak yield (Kg)
1991-92	1761±77 (154)	374±9 (154)	1552±60 (154)	-
1992-93	1804±48 (137)	395±8 (137)	1508±34 (137)	7.46
1993-94	1980±58 (148)	419±7 (148)	1686±46 (148)	8.20
1994-95	1930±37 (206)	334±5 (206)	1787±0 (206)	8.89
1995-96	1936±47 (147)	313±7 (147)	1855±42 (147)	9.40
1996-97	1879±51 (173)	313±7 (173)	1775±45 (173)	-
1997-98	1784±44 (123)	304±6 (123)	1688±37 (123)	-
1998-99	1762±36 (153)	284±16 (153)	1702±33 (153)	-
1999-00	2138±38 (141)	313±4 (141)	2042±31 (141)	-
2000-01	1997±41 (173)	306±9 (173)	1914±36 (173)	9.68
2001-02	1954±40 (152)	290±4 (152)	1898±35 (152)	9.71
2002-03	1987±39 (148)	303 ±5 (148)	1902±32 (148)	9.20
2003-04	1910±37 (148)	299±5 (148)	1837±31 (148)	9.18
2004-05	2017±40 (167)	319±5 (167)	1886±33 (167)	9.33±0.16
2005-06	2047±45 (149)	321±5 (149)	1921± 38 (149)	8.76±0.19
2006-07	1995±37 (170)	322±4 (170)	1882± 32 (170)	9.23±0.15
2007-08	1954±38.02 (127)	299±4.66 (127)	1891± 34.12 (127)	9.72±0.19 (127)
2008-09	2076 (138)	325 (138)	1926 (138)	9.50 (138)
2009-10	2285 (102)	361 (102)	1995 (102)	9.54 (102)
2010-11	2471 (113)	337 (113)	2247 (113)	10.48 (113)
2011-12	2598 (116)	338 (116)	2374 (116)	12.29 (116)
2012-13	2478±54.36 (110)	318±6.14 (110)	2335±45.71 (110)	11.23±0.23 (110)
2013-14	2394±44.16 (98)	333±6.92 (98)	2291±58.25 (98)	11.03±0.19 (98)
2014-15	2501.72±60.17 (110)	313.05±5.57 (110)	2354.65±47.55 (110)	11.26±0.17 (110)
2015-16	2483.11±43.68 (152)	322.19±4.91 (152)	2336.06±33.36 (152)	11.17±0.15 (152)
2016-17	2567.15±49.75 (133)	312.04±4.44 (133)	2457.17±39.61 (133)	12.22±0.15 (133)
2017-18	2480.38±55.06 (140)	294.98±3.62 (140)	2423.79±48.86 (140)	12.74±0.23 (140)
2018-19	2640.56±56.76 (123)	304.63±3.83 (123)	2566.96±49.21 (123)	13.36±0.24 (123)
2019-20	2732.47±59.27 (128)	300.02±4.46 (128)	2648.39±52.53 (128)	13.90±0.21 (128)
2020-21	2843.04±50.25 (148)	307.78±4.27 (148)	2730.30±41.52 (148)	13.32±0.19 (148)
2021-22	2950.29±59.66 (153)	301.40±4.29 (153)	2852.06±48.96 (153)	14.37±0.23 (153)
2022-23	2950.00±59.62 (146)	300.74±4.18 (146)	2861.36±52.78 (146)	15.19±0.26 (146)
2023-24	3056.51±64.09 (146)	306.59±4.19 (146)	2949.46±52.99 (146)	15.30±0.25 (146)
2024-25	**3129.39±66.81 (129)**	**320.15±4.41 (129)**	**3003.94±52.93 (129)**	**15.49±0.25 (129)**

9.13 Average Milk Composition from April 2024 to March 2025

Month	No. of Animals (N)	Fat %	Protein %	SNF %	Lactose %	Total Solid%
April, 24	133	7.51	3.59	9.80	5.37	17.31
May	136	7.44	3.38	9.21	5.00	16.65
June	115	7.53	3.05	8.29	4.50	15.82
July	120	8.11	3.26	8.9	4.87	17.01
August	130	8.2	3.38	9.21	5.02	17.41
September	104	7.68	3.32	9.07	4.95	16.75
October	103	7.08	3.04	8.23	4.42	15.31
November	123	7.19	3.27	8.75	4.62	15.94
December	101	7.15	3.00	8.21	4.45	15.42
January, 25	109	7.08	2.89	7.91	4.3	14.99
February	103	7.06	2.74	7.50	4.1	14.56
March	29	7.16	2.50	7.31	3.9	14.47
Overall	**1306**	**7.43**	**3.12**	**8.54**	**4.66**	**15.92**

9.14: Reproductive Performance during 2024-25

Lactation / Parity	N	AFC (Months)	SP (Days)	DP (Days)	CI (Days)
1st	53	40.25±0.53	--	--	--
2nd	38	--	130.63±11.35	124.87±9.15	437.82±11.49
3rd	22	--	118.41±11.31	114.18±9.98	426.73±11.45
4th	22	--	136.18±12.36	123.23±7.58	446.23±12.22
≥5th	23	--	111.26±15.14	115.00±9.18	422.52±15.04
Over all	**158**	**40.25±0.53 (53)**	**124.99±6.32 (105)**	**120.12±4.64 (105)**	**433.90±6.33 (105)**

9.14.1 Reproduction Performance of Buffaloes Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
1991-92	51.0±0.8 (26)	236±11 (108)	138±6 (74)	502±12 (74)
1992-93	50.7±1.5 (27)	304±15 (96)	132±7 (42)	489±16 (42)
1993-94	59.1±1.6 (48)	312±12 (158)	230±14 (161)	625±1 (161)
1994-95	55.3±1.3 (48)	202±15 (105)	180±12(113)	527 ±10 (116)
1995-96	51.5±1.5 (22)	193±10 (149)	186±7 (149)	501±9 (152)
1996-97	47.6±1.0 (23)	182±10 (149)	204±7 (173)	473±9 (152)
1997-98	45.5±0.5 (49)	175±14 (106)	203±11 (118)	491±10 (118)
1998-99	50.0±0.1 (57)	137±9 (121)	159±14 (126)	455±10 (126)
1999-00	46.2±1.0 (54)	138±9 (104)	142±7 (120)	451±8 (120)
2000-01	46.2±1.2 (45)	146±9 (151)	153±7 (154)	454±9 (154)
2001-02	49.8±0.8 (51)	146±11 (125)	158±8 (135)	456±11 (135)
2002-03	47.83±0.51 (61)	133±9 (126)	143±6 (128)	440±9 (130)
2003-04	50.52±0.84 (77)	151±10 (142)	147±7 (149)	458±10 (151)
2004-05	48.18±0.82 (76)	111±7 (100)	134±6 (100)	426±7 (101)
2005-06	47.89±0.73 (76)	184±12 (112)	168±8 (117)	499±12 (117)
2006-07	46.90±1.06 (43)	183±10.11 (113)	178±8 (116)	495±10 (116)
2007-08	48.27±0.64 (77)	159±11.55 (113)	177±9.26 (117)	482±12.06 (117)
2008-09	47.66±0.97 (44)	171±12.31 (80)	160±10.50 (85)	469±12.20 (85)
2009-10	49.22±0.75 (51)	212±16.64 (77)	170±12.99 (77)	520±16.21 (77)
2010-11	49.92±1.04 (35)	186±13.74 (80)	157±10.47 (83)	492±13.96 (83)
2011-12	51.91±0.98 (37)	181±13.24 (80)	155±8.63 (81)	485±12.65 (81)
2012-13	44.48±1.42 (37)	174±11.53 (72)	153±8.19 (72)	481±11.87 (73)

2013-14	45.62±10.78 (37)	190±11.27 (86)	170±9.77 (85)	495±11.64 (87)
2014-15	42.84±0.79 (61)	168.43±8.31 (88)	149.33±6.46 (88)	472.92±8.45 (88)
2015-16	44.96±1.23 (24)	138.39±7.39 (111)	140.78±5.52 (111)	449.26±7.43 (111)
2016-17	44.91±0.81 (38)	148.75±9.01 (93)	142.52±6.44 (93)	457.83±8.82 (93)
2017-18	43.58±0.67 (67)	167.32±9.82 (101)	162.42±7.54 (101)	477.75±9.87 (101)
2018-19	45.76±0.80 (31)	136.35±6.98 (97)	151.39±6.41 (97)	446.25±7.08 (97)
2019-20	43.62±0.80 (71)	143.19±8.29 (90)	145.73±7.24 (90)	450.71±8.49 (90)
2020-21	42.48±0.73 (71)	126.95±7.29 (100)	126.79±5.61 (100)	436.78±7.43 (100)
2021-22	38.61±0.82 (67)	130.82±8.36 (99)	126.29±5.72 (99)	438.20±8.35 (99)
2022-23	37.72±0.70 (60)	125.89±6.23 (122)	129.84±4.82 (122)	435.11±6.36 (122)
2023-24	38.07±0.59 (55)	135.07±6.72 (99)	136.21±5.17 (99)	445.14±6.76 (99)
2024-25	**40.25±0.53 (53)**	**124.99±6.32 (105)**	**120.12±4.64 (105)**	**433.90±6.33 (105)**

9.15 Month wise Milk Production and Disposal during the Period 01/04/2024 to 31/03/2025

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk Sold	Calf feeding	Expt.
April, 2024	37533.00	30158.00	7375.00	--
May	34065.00	28028.00	6037.00	--
June	26889.00	22247.50	4641.50	--
July	27397.50	22753.00	4644.50	--
August	33368.00	25999.00	7369.00	--
September	37991.00	29659.00	8332.00	--
October	41514.00	32297.00	9217.00	--
November	37809.00	29978.00	7831.00	--
December	39281.00	32008.00	7273.00	--
January, 2025	38502.00	32007.00	6495.00	--
February	39236.00	31667.00	7569.00	
March	44444.00	35686.00	8758.00	
Total	**438029.50**	**352487.5**	**85542.00**	

9.16 Feed and Fodder purchased and offered to animals (April 2024 to March 2025)

Quarter	Type of Fodder	OB	Produced at CIRB	Qty. Purchased	Actually Fed.	Balance
I	Green	-	8065.35	-	8065.35	-
	Dry	2014.00	1217.40	4038.30	1405.00	5864.70
	Silage	-	-	-	-	-
	Sugar beet pulp	614.00	-	-	614.00	-
	Concentrate	-	1611.75	-	1611.75	-
II	Green	-	11396.90	-	11396.90	-
	Dry	5864.70	-	-	1465.00	4399.70
	Silage	-	-	-	-	-
	Sugar beet pulp	-	-	678.05	588.05	90.00
	Concentrate	-	1652.52	-	1652.52	-
III	Green	-	6189.80	-	6189.80	-
	Dry	4399.70	-	-	2030.70	2369.00
	Silage	-	-	-	-	-
	Sugar beet pulp	90.00	-	-	90.00	-
	Concentrate	-	1826.51	-	1826.51	-

IV	Green	-	12798.25	-	12798.25	-
	Dry	2369.00	-	-	1355.00	1014.00
	Silage	-	-	-	-	-
	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	1781.71	-	1781.71	-
Total	Green	-	38450.30	-	38450.30	-
	Dry	2014.00	1217.40	4038.30	6255.70	1014.00
	Silage	-	-	-	-	-
	Sugar beet pulp	614.00	-	678.05	1292.05	-
	Concentrate	-	6872.49	-	6872.49	-

9.17 Milking performance 1st April 2024 to 31st March 2025

Month	Buffaloes in Milk	Dry Buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 2024	125	48	173	72	10.05	7.23
May 2024	115	58	173	67	9.53	6.35
June 2024	105	64	169	62	8.55	5.31
July 2024	102	60	162	63	8.69	5.47
August 2024	107	58	165	65	10.09	6.52
September 2024	121	55	176	69	10.46	7.21
October 2024	134	51	185	73	10.01	7.26
November 2024	132	54	186	71	9.58	6.78
December 2024	129	51	180	72	9.79	7.04
January 2025	121	50	171	71	10.26	7.26
February 2025	135	42	177	76	10.40	7.91
March 2025	148	36	184	81	9.68	7.81
Overall	**123**	**52**	**175**	**70**	**9.78**	**6.86**

9.17.1 Milking performance since inception

Year	Animal in Milk	No. of Animal dry	Total Animal	% in Milk	Wet Av. (kg)	Herd Av. (kg)
1991-92	182	147	329	55.3	4.70	2.61
1992-93	165	111	276	60.60	4.80	2.83
1993-94	153	125	178	55.00	5.65	3.10
1994-95	181	85	266	68.10	6.09	4.15
1995-96	153	82	235	65.19	6.43	4.19
1996-97	122	83	205	59.56	5.62	3.35
1997-98	121	76	197	61.38	6.12	3.75
1998-99	133	73	206	64.52	6.77	4.37
1999-00	137	72	209	65.48	6.85	4.49
2000-01	148	78	226	65.39	6.68	4.37
2001-02	147	70	217	67.70	6.59	4.46
2002-03	143	71	214	67.00	6.27	4.20
2003-04	151	72	223	67.69	6.49	4.39
2004-05	154	69	224	68.97	6.39	4.40
2005-06	151	77	238	66.37	6.57	4.36
2006-07	137	92	229	59.81	6.45	3.86
2007-08	146	71	217	67.32	6.64	4.47
2008-09	133	66	199	66.00	6.50	4.35

2009-10	106	65	171	62.00	7.01	4.35
2010-11	109	64	173	62.97	7.45	4.69
2011-12	110	58	168	65.38	7.83	5.12
2012-13	109	69	178	62.24	7.74	4.76
2013-14	105	65	170	61.78	8.01	4.95
2014-15	116	50	166	69.97	8.25	5.77
2015-16	114	62	176	65.00	8.04	5.21
2016-17	110	57	167	66.08	8.08	5.32
2017-18	115	54	169	67.78	8.71	5.90
2018-19	101	54	155	65.08	8.92	5.80
2019-20	124	48	172	71.86	9.66	6.94
2020-21	130	50	180	72.20	9.91	7.15
2021-22	132	50	182	72.42	10.07	7.29
2022-23	129	51	180	71.60	10.20	7.30
2023-24	120	52	172	69.69	10.20	7.11
2024-25	**123**	**52**	**175**	**70.12**	**9.78**	**6.86**

9.18: Bull wise daughters born during 2024-25

Sr. No.	Bull No.	Set No.	Daughter born
1	109	21	5
2	112	21	5
3	297	21	5
4	2979	21	3
5	2990	21	7
6	3014	21	5
7	5414	21	7
8	5629	21	6
9	5638	21	1
10	5647	Non set	2
11	5690	21	5
12	5723	21	1
13	5764	21	2
14	7630	21	3
15	7768	21	10
16	7990	21	2
17	4889	16	1
18	1053 PT	16	1
19	2383 PT	16	5
20	4354 PT	15	2
21	6044 PT	14	1
22	M-29 PT	16	3
Total			**82**

9.19 Bull wise daughters completing 1st lactation in 2024-25

Sr No	Daughter No	Sire No	Set No	D.O.B.	D.O.C.	AFC (Month	Lact. Length (Days)	SLMY (kg)	TLMY (kg)
1.	5674	4905	18	04-07-2020	19-06-2023	35.51	312	2615	2622
2.	5741	7227	18	24-10-2020	26-06-2023	32.05	305	2623	2623
3.	5624	1150	18	20-01-2020	18-08-2023	42.94	252	2370	2370
4.	5749	183 PT	12	04-11-2020	13-07-2023	32.25	323	2715	2733
5.	5707	2645	18	27-08-2020	20-07-2023	34.75	323	3521	3603

6.	5542	4837	17	05-09-2019	01-09-2023	47.90	280	2748	2748
7.	5681	4995	18	26-07-2020	06-09-2023	37.38	282	2079	2079
8.	5659	1209	18	27-04-2020	14-09-2023	40.60	274	2325	2325
9.	5716	2677	18	17-09-2020	01-08-2023	34.45	325	2745	2819
10.	5698	1150	18	09-08-2020	09-10-2023	38.01	256	2123	2123
11.	5766	183 PT	12	25-11-2020	20-09-2023	33.83	282	2318	2318
12.	5748	1208	18	30-10-2020	21-09-2023	34.72	281	2355	2355
13.	5694	4995	18	06-08-2020	11-09-2023	37.18	298	2744	2744
14.	5675	7094	18	06-07-2020	31-07-2023	36.82	347	2444	2594
15.	5662	2676	18	04-05-2020	10-08-2023	39.22	337	2557	2616
16.	5778	2677	18	27-12-2020	08-08-2023	31.36	346	3082	3300
17.	5635	2234 PT	13	17-02-2020	05-08-2023	41.59	356	2877	3126
18.	5745	7147	18	27-10-2020	27-09-2023	35.01	303	3539	3539
19.	5757	1150	18	14-11-2020	13-08-2023	32.94	362	2327	2511
20.	5645	7147	18	31-03-2020	15-11-2023	43.53	282	2156	2156
21.	5649	7094	18	03-04-2020	22-09-2023	41.65	343	2269	2387
22.	5640	1209	18	06-03-2020	26-11-2023	44.71	278	1652	1652
23.	5742	2269 PT	13	24-10-2020	18-10-2023	35.80	324	2210	2255
24.	5788	1209	18	09-01-2021	05-11-2023	33.86	313	2541	2582
25.	5691	2234 PT	13	04-08-2020	05-10-2023	38.04	351	3062	3287
26.	5759	1219	18	15-11-2020	25-11-2023	36.33	300	2399	2399
27.	5616	2565	17	25-12-2019	14-10-2023	45.67	356	3139	3361
28.	5738	1208	18	21-10-2020	23-11-2023	37.08	316	3247	3275
29.	5696	1150	18	08-08-2020	06-11-2023	38.96	347	3006	3212
30.	5655	2269 PT	13	14-04-2020	27-11-2023	43.46	333	3112	3168
31.	5797	1219	18	06-02-2021	24-11-2023	33.57	350	2135	2208
32.	5782	183 PT	12	02-01-2021	19-10-2023	33.53	393	2344	2718
33.	5734	1208	18	18-10-2020	25-01-2024	39.25	309	2686	2690
34.	5774	2677	18	19-12-2020	26-02-2024	38.27	298	2243	2243
35.	5672	2676	18	22-06-2020	01-03-2024	44.32	294	2307	2307
36.	5719	2645	18	22-09-2020	25-02-2024	41.13	320	2867	2894
37.	5628	4995	18	25-01-2020	21-11-2023	45.90	430	3175	3784
38.	5808	1208	18	28-02-2021	22-06-2024	39.78	258	2085	2085

9.20: Bulls for test mating in 21st Set (Jul. 2023-Dec. 2024)

Sr. No	Bull no.	D.O.B.	Dam No.	Sire No.	Dam's Best Yield / PY (kg)	Parity
1	109 (LUVAS)	17/09/19	1068	53M (XVII)	3660/16.3	2
2	112 (LUVAS)	29/09/19	943	6942 (XVII)	4390/17.2	4
3	2979 (GADVASU)	26/11/20	3083	2689 (XVIII)	3440/21.6	2
4	2990 (GADVASU)	24/12/20	2741 Pur	1219 (XVIII)	3723/21.2	3
5	3014 (GADVASU)	06/10/20	Dhano	Birla (Field)	4420/24.56	PY: 24.56
6	297 (IVRI)	08/08/17	869	4705 (XVI)	3407/17.5	4
7	5414 (CIRB)	03/10/18	4593	4998 (Non Set)	3321/19.0	2
8	5629 (CIRB)	29/01/20	4613	2645 (XVIII)	4180/20.2	4
9	5638 (CIRB)	24/02/20	5223	2234PT (XIII)	3691/19.5	2
10	5690 (CIRB)	02/08/20	5021	4905 (XVIII)	4029/21.0	2
11	5764 (CIRB)	22/11/20	4989	4905 (XVIII)	3616/16.5	2
12	7630 (NDRI)	05/09/18	6852	M-51 (XVII)	3343/15.5	1
13	7768 (NDRI)	04/02/19	6922	2607(XVII)	3323/16.5	3
14	7990 (NDRI)	19/08/20	6626	183 PT(XII)	3991/18.0	2

9.20.1: P T Bulls for nominated mating January 2024 to December 2024

Sr. No	Bull No.	Set No.	D.O.B.	Dam No.	Sire No./ Set No.	Dams' Best yield	Sire Index	Superiority (%)
1	6044 (NDRI)	14	15/01/09	430	4371PT Set V	3567	2479	+2.43*
2	3591 (CIRB)	11	29/05/06 (P)	3590	--	2598	2177	+0.14*
3	M 51 (CIRB)	17	03/02/06	22 P	P 274 Set VII	4668	2529	+6.76*
4	4354 (CIRB)	15	05/09/11	4353 P	Not Known	3528	2589	+1.67*
5	M29 (CIRB)	16	16/10/05	4 P	P274	4600	2579	+3.82*
6	1053 (LUVAS)	16	17/12/13	683	M-29	3559	2567	+3.35*
7	2383 (GADVASU)	16	13/10/10	2489 P	3267PT Set XI	4636	2547	+2.53*

* BLUP Method

9.20.2: Bulls for test mating in 22nd Set

Sr. no.	Bull no.	D.O.B.	Dam No.	Sire No.	Dam's All Lact 305 or less days Milk Yield (kg)	Highest Yield/ Best Peak
1	306 (LUVAS)	13/11/21	1358	5232 XIX	3550/**3847**/3541	3847/18.3
2	317 (LUVAS)	28/12/21	1068	4196 PT XIV	3128/**3660**/3431/3206	3660/16.3
3	374 (IVRI)	18/09/18	1012	4733 XVII	2664/**3270**/3166/2865/2950/ 2520/2969/2334	3270/16.0
4	596 (IVRI)	27/10/21	1012	2677 XVIII	2664/**3270**/3166/2865/2950/ 2520/2969/2334/	3270/16.0
5	3052 (GADVASU)	09/10/21	3180	5232 XIX	2648/**3336**/2605	3336/17.8
6	3097 (GADVASU)	26/07/21	RANI	Sikander XVII	**4824**	4824/26.8
7	3113 (GADVASU)	16/09/22	P2897	Bhisma Field	1577/3049/4025/**4815**/ 3898/1167	4815/28.7
8	3126 (GADVASU)	07/11/22	P2766	102699 HLDB	3074/**3602**/2864/3433	3602/21.1
9	5791 (CIRB)	15/01/21	4817	183 PT XII	2606/4250/4201/4180/**4507**/ In 6th lact	4507/23.5
10	5814 (CIRB)	19/03/21	4251	7094 XVIII	2407/3184/**4138**/3784/2913/ 3904/ in 7th Lact	4138/22.0
11	5872 (CIRB)	09/08/21	4235	6044 PT XIV	2874/3169/**3533**/3009/2940/ Auct	3533/16.9
12	5912 (CIRB)	16/10/21	4899	6044 PT XIV	3505/4216/**4350**/3765/ in 5th lact	4350/20.0
13	5935 (CIRB)	03/12/21	4767	4196 PT XIV	2468/3697/4268/**4308**/4261/ in 6th lact	4308/20.6
14	5950 (CIRB)	11/01/22	5225	7604 XIX	2876/3044/**3356**/ In 4th lact	3356/20.6
15	5864 (CIRB)	29/07/21	4709	6044PT XIV	2673/3259/2921/ **3590**/3258/ Died	3590/21.2
16	5941 (CIRB)	23/12/21	4517	4196PT XIV	2416/2723/3077/3511/**3725**/ 3259/ Dry	3725/21.5

17	8100 (NDRI)	01/08/21	6871	2357 PT XIV	2477/**3272**/2387/2357/1883/ 1200	3272/16.0
18	8129 (NDRI)	20/09/21	7460	7604 XIX	**3125**/979	3125/14.0
19	8185 (NDRI)	27/12/21	6774	2737 XIX	1973/2459/2766/**3466**	3466/19.5
20	8198 (NDRI)	14/02/22	5620	6044 PT XIV	2557/2332/**3104**/2776/2544/ 2120/2056/2958/2101	3104/14.5

9.20.3 Future Breeding bulls (CIRB Unit)

Sr. no.	Bull no.	D.O.B.	Dam no.	Sire no./ Set no.	Dam's All Lact Milk Yield (305 or less days) kg	Highest Yield/ Best Peak Yield
1.	6009	02/07/22	4458	1315 Set 19	3044, 3631, 3571, 4028, 3620, Auct	4028/17.0
2.	6030	04/08/22	5523	5320 Set 19	3145,4169, In 3rd lact	4169/18.0
3.	6035	19/08/22	5021	3591PT Set 11	3573,4029, 3416, 3040	4029/21.0
4.	6054	08/09/22	5096	5232 Set 19	2928, 3505, 3824,3133, Dry	3824/19.0
5.	6060	15/09/22	4692	4354PT Set 15	2795,3261,3578,3637, 4431, Dry	4431/20.0
6.	6100	15/11/22	5162	5427 Set 20	3002,3004,3632,3740, Dry	3740/21.0
7.	6106	23/11/22	4251	6007PT Set 15	2407,3184,4138,3784,2913,3904, In 7th lact	4138/22.0
8.	6117	12/12/22	5175	7584 Set 20	2746,3534,4553, In 4th lact	4553/23.0
9.	6118	14/12/22	5619	7584 Set 20	3275, 3560	3560/17.3
10.	6135	27/01/23	4933	6007PT Set 15	2341,3006,3764,3608, 3296,3673, In 7th lact	3764/20.0
11.	6136	28/01/23	4593	6007PT Set 15	2708,3321,3025,3177, 3183, 3294,Auct	3321/21.0
12.	6140	23/02/23	4893	3004 Set 20	2323, 2673,3009,3479, ---7, Dry	3479/16.8
13.	6144	14/03/23	4767	6007PT Set 15	2468,3697,4268,4308, 4261, In 6th lact	4308/20.6
14.	6146	15/03/23	5049	6007PT Set 15	2817,3414,2842, 2374, 3006	3414/17.5
15.	6156	06/05/23	5303	7584 Set 20	2689,3578, 3268, Dry	3578/18.4
16.	6159	23/05/23	4978	5505 Set 20	3874, 4366, 3685, In 4th lact	4366/18.9
17.	6179	20/07/23	4372	4592 Set 16	2413,2598,2766,2714,3124,3282,3595, 3002, Auct	3595/18.5
18.	6182	27/07/23	5431	5511 Set 20	3082,3748, In 3rd lact	3748/15.2
19.	6186	01/08/23	5103	2831 Set 20	3267,3513,3797,4019, Dry	4019/18.0
20.	6203	26/08/23	5048	3591PT Set 11	3540, 3209, 2446, 2940, Dry	3540/18.2
21.	6210	03/09/23	E182	4592 Set 16	3783, 4149, 4129, Dry	4149/20.5
22.	6226	25/09/23	5080	3591PT Set 11	3127,3655,2944,3077, Auct	3655/19.0
23.	6234	11/10/23	5523	5511 Set 20	3145,4169, In 3rd lact	4169/18.0
24.	6236	12/10/23	5361	5511 Set 20	2509,3359,3116, In 4th lact	3359/25.4
25.	6241	19/10/23	4941	3591PT Set 11	1843, 3053, 3273, 3537, 3450, Dry	3537/19.4
26.	6267	21/11/23	5628	5500 Set 20	3175, Dry	3175/13.7
27.	6277	01/12/23	5509	2850 Set 20	3016, 4520, Dry	4520/20.0
28.	6291	02/02/24	4933	6044PT Set 14	2341,3006,3764,3608, 3296,3673, In 7th lact	3764/20.0

29.	6295	19/02/24	5241	1454 Set 20	2472,3217,3105,3567, Dry	3567/17.0
30.	6304	14/03/24	5426	1454 Set 20	2047,3311, 2885, Dry	3311/16.2
31.	6305	16/03/24	4817	2467 Set 16	2606,4250,4201,4180, 45073414, Dry	4507/23.5
32.	6306	23/03/24	4899	2467 Set 16	3505,4216,4350, 3765, 3275, In 6th lact	4350/20.2
33.	6308	24/03/24	5101	4705 Set 16	2087,2865,3011,3631, 3333, Dry	3631/19.1
34.	6309	27/03/24	5151	2459PT Set 15	3430,4444, 3744	4444/21.0
35.	6312	20/06/24	5357	5647 Non Set	2636,3062,(183d/1437) Auct	3062/15.5
36.	6313	21/06/24	5021	1053 PT Set 16	3573,4029, 3416, 3040	4029/21.0
37.	6318	25/06/24	4989	3014 Set 21	2708,3616,2675,3644, 3598	3644/17.8
38.	6325	11/07/24	5451	5414 Set 21	3174, 3108, In 3rd lact	3174/15.8
39.	6329	15/07/24	4893	297 Set 21	2323, 2673,3009,3479, ---7, Dry	3479/16.8
40.	6330	20/07/24	5303	297 Set 21	2689,3578, 3268, Dry	3578/18.4
41.	6332	20/07/24	5203	M-29PT Set 16	2734,3181,2845,4029, In 5th lact	4029/20.0
42.	6336	24/07/24	4767	1053 PT Set 16	2468,3697,4268,4308, 4261, In 6th lact	4308/20.6
43.	6338	26/07/24	5652	5414 Set 21	3218, Died	3218/15.5
44.	6340	27/07/24	5013	1053 PT Set 16	2661,3240,3821,3160, In 5th lact	3821/20.6
45.	6343	31/07/24	5224	5414 Set 21	2796,3276,2560, In 4th lact	3276/16.3
46.	6348	13/08/24	5092	5414 Set 21	2956,3340,3167, In 4th lact	3340/19.0
47.	6350	16/08/24	4517	2383 PT Set 16	2416,2723,3077,3511, 3725, 3259, In 7th lact	3725/21.5
48.	6353	17/08/24	5335	5414 Set 21	3092,3307, In 3rd lact	3307/15.0
49.	6359	26/08/24	5354	2383 PT Set 16	3256,3197,4065, In 4th lact	4065/17.5
50.	6371	04/09/24	4800	5629 Set 21	2612,3356,3262,2906, 2851, In 6th lact	3356/18.0
51.	6391	27/09/24	5745	7768 Set 21	3539, In 2nd lact	3539/16.7
52.	6396	30/09/24	5223	2383 PT Set 16	3364,3691,3606, In 4th lact	3691/19.5
53.	6413	12/11/24	4934	4354PT Set 15	2888,3171,3271,2772,2587 In 6th lact	3271/17.7
54.	6414	19/11/24	5356	2979 Set 21	2617,3035,3065, In 6th lact	3065/14.0
55.	6418	30/11/24	5778	2990 Set 21	3082, In 2nd lact	3082/12.9
56.	6435	20/01/25	4613	2383 PT Set 16	2475,3501,4043,4180, 3767, 3155, In 7th lact	4180/20.2
57.	6442	25/01/25	5340	112 Set 21	2408, 2948, 3084, In 4th lact	3084/13.2
58.	6445	29/01/25	5264	2383 PT Set 16	3445, 2468, In 3rd lact	3445/16.0
59.	6446	29/01/25	5366	4889 Set 16	3302, 3194, In 3rd lact	3302/17.7
60.	6450	04/02/24	E186	1053 PT Set 16	3018,3643,3235, In 4th lact	3643/17.7
61.	6451	05/02/24	5655	7630 Set 21	3112, In 2nd lact	3112/15.0
62.	6454	08/02/24	4748	2990 Set 21	2082,2885,2877,3088,3121,3325,In 7th lact	3325/17.3
63.	6462	19/02/24	E194	7630 Set 21	2857, 3028, 3415, In 4th lact	3415/16.5
64.	6465	21/02/24	4776	112 Set 21	2535,2626,3354,3249, 3190, In 6th lact	3354/15.8
65.	6472	19/03/25	4899	1053 PT Set 16	3505,4216,4350, 3765, 3275, In 6th lact	4350/20.2
66.	6304	14/03/24	5426	1454 XX	2047,3311, In 3rd lact	3311/16.2
67.	6305	16/03/24	4817	2467 XVI	2606,4250,4201,4180,4507, In 6th lact	4507/23.5

68.	6306	23/03/24	4899	2467 XVI	3505,4216,4350,3765, In 5th lact	4350/20.0
69.	6308	24/03/24	5101	4705 XVI	2087,2865,3011,3631, In 5th lact	3631/19.1
70.	6309	27/03/24	5151	2459 PT XV	3430,4444, In 3rd lact	4444/21.0

9.21 A: No. of Elite animals having 305 DLMY ≥ 3000 kg

Sr. No.	305 DLMY groups	No. of elite buffalo		
		2022-23	2023-24	2024-25
1	3000 to 3500 kg	49	52	48
2	3500 to 4000 kg	25	23	26
3	≥ 4000 kg	15	18	19
Total		**89**	**93**	**93**

9.21: Accomplishment and Targets Achieved

Sr. No.	Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
1	Av. age at first calving (Months)	40.0 months	42.48±0.73 (71)	38.61±0.82 (67)	37.72±0.70 (60)	38.07±0.59 (55)	40.25±0.53 (53)
2	Av. service perio (Days)	130 days	126.95±5.61 (100)	130.82±8.36 (99)	125.89±6.23 (122)	135.07±6.72 (99)	**124.99**±6.32 (105)
3	Calf mortality (0-3 months)	≤ 5 %	2.63 %	3.23 %	3.40 %	4.95 %	6.74 %
4	Wet average (Kg)	≥ 8.50 kg	9.91 kg	10.07 kg	10.20 kg	10.20 Kg	9.78 Kg
5	Herd average (Kg)	≥ 5.50 kg	7.15 kg	7.29 kg	7.30 kg	7.11 Kg	6.86 Kg

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Balance
Total	ICAR Share		ICAR Share	State Share	
44.00*	44.00*	44.00*	44.00*	0.00	0.00

* Include Rs. 5.00 Lakhs for SCSP

Herd Performance

Herd Strength: The overall herd strength of Murrah buffalo in March 2025 was 563, which included 277 breedable buffaloes, 147 suckling calves (< 1 year), 36 young males (1-2 years), 64 young females (1-2 years) and 39 breeding males (>2 years).

Mortality: During the period April 2024 to March 2025 calf mortality (0-3 month) was reported 6.74 percent.

Milk Production Performance: The overall wet average and herd average were reported 9.78 and 6.86 kg, respectively. The overall 305 days lactation milk yield and total lactation milk yield during April 2024 to March 2025 was reported 3004 and 3129 kg, respectively. During the period under report 129 buffaloes completed their lactation. Av. highest ever Peak yield of 15.49 Kg was recorded during reporting period.

Reproductive Performance: The overall conception rate during January to December 2024 was reported 44.91 %. The other reproductive traits viz. Age at first calving, service period, dry period and calving interval were observed 40.25 months, 125 days, 120 days and 434 days, respectively, for buffaloes calved during April 2024 to March 2025.

Semen Production and Dissemination: A total 3,02,418 semen doses frozen at CIRB Lab during April 2024 to March 2025. A total of 23,806 doses of frozen semen were supply in NPBI and 2,99,872 frozen semen doses sold during the period under report.

Accomplishment and Targets Achieved:

Sr. No.	Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
1	Av. age at first calving (Months)	40.0 months	42.48±0.73 (71)	38.61±0.82 (67)	37.72±0.70 (60)	38.07±0.59 (55)	40.25±0.53 (53)
2	Av. service period (Days)	130 days	126.95±5.61 (100)	130.82±8.36 (99)	125.89±6.23 (122)	135.07±6.72 (99)	124.99±6.32 (105)
3	Calf mortality (0-3 months)	≤ 5 %	2.63 %	3.23 %	3.40 %	4.95 %	6.74 %
4	Wet average (Kg)	≥ 8.50 kg	9.91 kg	10.07 kg	10.20 kg	10.20 Kg	9.78 Kg
5	Herd average (Kg)	≥ 5.50 kg	7.15 kg	7.29 kg	7.30 kg	7.11 Kg	6.86 Kg

Recommendations:

- Production and reproduction parameters such as service period, calving interval, peak yield, SLMY and TLMY improved substancially.
- Significant improvement observed in semen production and dissemination during the year 2024-25 as compared to previous year performance.
- The calf mortality should be controlled and restrict below 5% as project target.

GURU ANGAD DEV VETERINARY AND ANIMAL SCIENCES UNIVERSITY, LUDHIANA, MAIN UNIT (MURRAH)

Report period : 1st April 2024 to 31st March, 2025

1. **Name of Centre** : Guru Angad Dev Veterinary & Animal Sciences University, Ludhiana
2. **Project Code** : F.No. 18(I)2002- ASR- II
3. **Project Title** : Network Project on Buffalo Improvement
4. **Date of Start** : 01/04/1992
5. **Objectives**
   1. To establish elite herds of buffaloes for the production of genetically superior young bulls.
   2. To evaluate sires through continuous associated herds progeny testing using institutional herds.
   3. To conserve male germplasm for long term storage and dissemination.
   4. To document sire summaries and germplasm resource information.
   5. To exchange information and genetic material in the national and international networks.
6. **Technical Programme**

   The GADVASU Centre of the All India Coordinated Research Project on Buffalo Breeding is one of the participating units of the Network Project on Buffalo Improvement from 1.4.1992. Broadly, the technical program involves testing of 12-15 bulls on about 1200 breedable buffaloes at organized farms at GADVASU, Ludhiana; CIRB, Hisar; NDRI, Karnal; IVRI Izatnagar, LUVAS, Hisar and ICAR-RCER, Patna in every 18-month's cycle. From each bull, 75-80 pregnancies are to be obtained so that 20-25 recorded daughters per bull are available at all the centers for the evaluation of bulls. The bulls will be ranked based on the performance of their daughters and 20% of them will be selected as proven bulls from each set. The semen of the proven bulls will be used on elite buffaloes at different centers for the production of future sires and herd replacements.
7. **Financial Statement**: Statement showing budget sanctioned, amount spent and receipt realized for the period 1st April 2024 to 31st March 2025.

	Budget Sanctioned (Rs.)	**ICAR Share**	**State Share**	**Amount Spent (Rs.)**
Pay & Allowances	--			--
T. A.	---			---
Contingencies				
i) Recurring Cont.	72,00,000	54,00,000	18,00,000	72,00,000
SCSP General	4,00,000	4,00,000	0	4,00,000
ii) Non-Recurring Cont.				
Machinery and Equipment	0	0	0	0
Furniture	2,00,000	1,50,000	50,000	2,00,000
Livestock	---			---
SCSP Equipments	50,000	50,000	0	50,000
Total	**78,50,000**	**60,00,000**	**18,50,000**	**78,50,000**

Receipts: The project transferred **193746 kg** of milk to the College of Dairy Sciences, GADVASU for sale after processing. The department sold **17** surplus/breeding animals and **45636 doses** liquid & frozen semen to the progressive dairy farmers and dairy developed agencies.

8. Staff and Infrastructure Build up during the year: Staff in position :

Name & Designation of the person employed on the sanctioned post with pay scale	Date of joining	Date of leaving	Other project (assignment) in the institution besides the project	Total time spent for the project	Transfer or upgrading of the post if any, give details of sanction from the ICAR	Remarks
--	--	--	--	--	--	--

Herd performance: - 9.1 to 9.21

9.1. Herd strength during the period 4/2024 to 3/2025

Sr. No	Category	Addition			Disposal			CB
		OB	B/P	T	D	T	S	
	Female							
1.	Calves 0 – 3 months	**15**	56 / -	-	12	46	-	**13**
2.	Calves >3 – 12 months	**13**	-	46	1	26	-	**32**
3.	Heifers							
	1 – 2 years	**55**	-	26	-	53	-	**28**
	> 2 years	**57**	-	53	4	46	4	**56**
4.	Buffaloes in Milk	**63**	- / 1	46	-	37	1	**72**
5.	Buffaloes Dry P /NP	**40**	-/ 1	37	1	11	29	**37**
	Sub Total	**243**	56 / 2	208	18	219	34	**238**
	Male							
1.	Calves 0 – 3 months	**5**	41 / -	-	10	28	-	**8**
2.	Calves >3 – 12 months	**32**	-	28	7	28	7	**18**
3.	Male above							
	1 – 2 years	**9**	-	28	1	2	8	**26**
	> 2 years	**2**	-	2	-	3	1	**-**
4.	Breeding bulls	**14**	-	3	-	-	1	**16**
5.	Bullocks							
6.	Teasers							
	Sub Total	**62**	41 / -	61	18	61	17	**68**
	Grand Total	**305**	97 / 2	269	36	280	51	**306**

OB = Opening Balance D = Deaths S = Sale B/P = Births/Purchase
T = Transfer CB = Closing Balance

9.2. Calving statistics during the period 4/2024 to 3/2025

Month	Male		Female		Dystokia		Prolapses		Still Birth		Abortion		Overall	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
April, 24	6	15.0	2	3.63	0	0.00	0	0.00	0	0.00	0	0.00	**8**	8.08
May	4	10.0	1	1.81	0	0.00	0	0.00	0	0.00	0	0.00	**5**	5.05
June	4	10.0	4	7.27	0	0.00	0	0.00	0	0.00	0	0.00	**8**	8.08
July	2	5.0	3	5.45	0	0.00	0	0.00	0	0.00	0	0.00	**5**	5.05
August	5	12.5	11	20.0	0	0.00	0	0.00	0	0.00	0	0.00	**16**	16.16
September	4	10.0	7	12.72	0	0.00	0	0.00	1	100.0	0	0.00	**12**	12.12
October	4	10.0	4	7.27	0	0.00	0	0.00	0	0.00	1	100.0	**9**	9.09
November	2	5.0	7	12.72	0	0.00	0	0.00	0	0.00	0	0.00	**9**	9.09
December	4	10.0	2	3.63	0	0.00	0	0.00	0	0.00	0	0.00	**6**	6.06
January,25	2	5.0	8	14.54	0	0.00	0	0.00	0	0.00	0	0.00	**10**	10.10
February	1	2.5	4	7.27	0	0.00	0	0.00	0	0.00	0	0.00	**5**	5.05
March	3	7.3	3	5.3	2	100.0	0	0.00	0	0.00	0	0.00	**6**	6.06
Overall	**41**	100.0	**56**	100.0	**2**	100.0	0	0.00	**1**	100.0	**1**	100.0	**99**	100.0

Sex ratio Male: Female = 0.42: 0.58 or 1.0:1.36

9. 3 Disposal of animals during the period 4/2024 to 3/2025

Sr. No.		Surplus	Rep. Problem	Weak & Old	Death	Experimental purpose	Total
	Female						
1.	Calves 0 – 3 months				12		12
2.	Calves >3 – 12 months				1		1
3.	Heifers 1 – 2 years > 2 years		 4		- 4		- 8
4.	Buffaloes in Milk			1	-		1
5.	Buffaloes Dry P /NP		15	14	1	11	41
	Sub Total		**19**	**15**	**18**	**11**	**63**
	Male						
1.	Calves 0 – 3 months				10		10
2.	Calves >3 – 12 months	7			7		14
3.	Male 1 – 2 years > 2 years	8 1			1 -		9 1
4.	Breeding bulls	1					1
5.	Bullocks						
6.	Teasers						
	Sub Total	**17**			**18**		**35**
	Grand Total	**17**	**19**	**15**	**36**	**11**	**98**

17 Bulls/bull calves sold for breeding purpose.

9.4. Month-wise mortality during the period 4/2024 to 3/2025

		Female						**Male**					
Month		**0-3 (mo)**	**3-6 (mo)**	**6-12 (mo)**	**1-2 yrs**	**Abo. 2 yrs.**	**Overall female**	**0-3 (mo)**	**3-6 (m)**	**6-12 (mo)**	**Above 1 yr.**	**Oveall male**	**Overall Herd**
Apr	No.	10	10	8	56	158	242	9	15	18	24	66	**308**
	Died	1	0.00	0.00	0.00	0.00	1	0.00	0.00	0.00	0.00	0.00	**1**
	%	10.0	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	**0.32**
May	No.	5	13	9	47	149	223	13	8	24	24	69	**292**
	Died	1	0.00	0.00	0.00	0.00	1	0.00	0.00	1	0.00	1	**2**
	%	20.0	0	0	0	0	0.44	0.00	0.00	4.16	0.00	1.44	**0.68**
Jun	No.	6	14	11	41	147	219	16	4	28	25	73	**292**
	Died	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Jul	No.	6	10	16	35	159	226	11	9	26	29	75	**301**
	Died	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Aug	No.	14	5	19	31	165	234	12	12	20	35	79	**313**
	Died	3	0.00	0.00	0.00	0.00	3	2	1	0.00	0.00	3	**6**
	%	21.42	0.00	0.00	0.00	0.00	1.28	16.66	8.33	0.00	0.00	3.79	**1.91**
Sep	No.	18	5	20	27	165	235	10	14	19	36	79	**314**
	Died	0.00	0.00	0.00	1	1	2	2	0.00	1	0.00	3	**5**
	%	0.00	0.00	0.00	3.70	0.60	0.85	20.0	0.00	5.26	0.00	3.79	**1.59**
Oct	No.	16	6	20	24	169	235	9	10	22	39	80	**315**
	Died	4	0.00	0.00	0.00	1	5	3	0.00	0.00	0.00	3	**8**
	%	25.0	0.00	0.00	0.00	0.59	2.13	33.33	0.00	0.00	0.00	3.75	**2.53**
Nov	No.	16	13	18	19	172	238	9	8	13	41	71	**309**
	Died	0.00	0.00	0.00	0.00	2	2	1	0.00	0.00	0.00	1	**3**
	%	0.00	0.00	0.00	0.00	1.16	0.84	11.11	0.00	0.00	0.00	**1.40**	**0.97**
Dec	No.	13	14	19	20	162	228	8	5	11	45	**69**	**297**
	Died	1	0.00	0.00	0.00	0.00	1	2	1	0.00	0.00	**3**	**4**
	%	7.69	0.00	0.00	0.00	0.00	0.43	25.0	20.0	0.00	0.00	**4.34**	**1.34**

Jan	No.	16	16	16	24	162	234	7	6	10	47	**70**	**304**
	Died	0.00	0.00	0.00	0.00	0.00	0.00	0	1	0	0	**1**	**1**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.66	0.00	0.00	**1.42**	**0.32**
Feb	No.	13	17	16	27	165	238	7	6	11	44	**68**	**306**
	Died	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	**0**	**0.00**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**
Mar	No.	13	13	19	27	166	238	7	8	11	42	**68**	**306**
	Died	2	0	0	0	1	3	0.00	0.00	2	1	**3**	**2**
	%	15.38	0.00	0.00	0.00	0.60	1.26	0.00	0.00	18.18	2.38	**4.41**	**0.65**
Total	No.	**12**	**0**	**0**	**1**	**5**	**18**	**10**	**3**	**4**	**1**	**18**	**36**

Note: Calf mortality (0 – 3 months) = 18.80 % (22/117)

9.5. Causes of Mortality (quarter-wise) during the period 4/2024 to 3/2025

Particulars	**1st quarter**	**2ndquarter**	**3rd quarter**	**4th quarter**
A. Respiratory System :				
1. Pheumo-Enteritis		1	3	2
2. Broncho-Pheumonia	2	5	4	3
B. Digestive System :				
1. Enteritis				
2. Septicemia & Toxaemia		2		1
3. Peritonitis			4	1
4. Gastroenteritis				
5. Heoatutus				
6. Haem. Enteritis		1	4	
7. Torsion of Intestine volvulus				
8. Gastritis				
C. Circulatory				
D. Others				
1. Chronic debility				
2. Arthritis				
3. Umbilical Hernia				
4. Accidents				
5. Ectoparasitism				
6. Miscellaneous	1	2		
7.Diarrhoea				
Total	**3**	**11**	**15**	**7**

9.6. Prophylactic measures taken during the period 4/2024 to 3/2025

Vaccination	Animal inoculations Total Inoculations	Screening for Disease	Results	No. of animals treated for Parasitism etc.
FMD and	275	T.B.	All Negative	No clinical case of parasitic infestation was observed during the year. All the animals were dewormed as per normal schedule
HS(Thrice)	258	J,D.	All Negative	
Biovac combined	277			
BQ(Once)	253	Brucellosis	All Negative	
Brucellosis	27			
Calfhood				
Adult Vaccine	-			

9.7. Female conception rate during the period 4/2024 to 3/2025

Month	Heifer									First Calver									Multiparous									Overall		
	1st AI			2nd AI			≥ 3 AI			1st AI			2nd AI			≥ 3 AI			1st AI			2nd AI			≥ 3 AI					
	I	C	CR %	I	C	CR	I	C	CR %	I	C	CR %	I	C	CR	I	C	CR %	I	C	CR %	I	C	CR %	I	C	CR %	I	C	CR %
Jan. 24	5	2	40.00	3	2	66.66	4	1	25.00	2	0	00.00	0	0	00.00	1	0	00.00	6	2	33.33	5	2	40.00	2	1	50.00	**28**	**10**	35.71
Feb.	2	1	50.00	0	0	00.00	0	0	00.00	0	0	00.00	2	1	50.00	1	1	100	6	3	50.00	4	1	25.00	5	3	60.00	**20**	**10**	50.00
March	4	3	75.00	2	0	00.00	2	2	100	1	1	100	0	0	00.00	1	1	100	2	2	100	3	1	33.33	5	2	40.00	**20**	**12**	60.00
April	2	2	100	3	1	33.33	1	0	00.00	3	2	66.66	0	0	00.00	1	1	100	1	1	100	2	1	50.00	4	1	25.00	**17**	**9**	52.94
May	1	0	00.00	1	0	00.00	3	1	33.33	1	1	100	0	0	00.00	0	0	00.00	1	0	00.00	2	0	00.00	3	3	100	**12**	**5**	41.66
June	1	0	00.00	2	0	00.00	2	1	50.00	4	2	50.00	0	0	00.00	0	0	00.00	2	1	50.00	0	0	00.00	4	2	50.00	**15**	**6**	40.00
July	1	0	00.00	0	0	00.00	1	0	00.00	4	3	75.00	1	0	00.00	0	0	00.00	5	2	40.00	0	0	00.00	2	1	50.00	**14**	**6**	42.85
Aug.	2	2	100	2	1	50.00	4	1	25.00	3	0	00.00	2	1	50.00	0	0	00.00	5	5	100	3	1	33.33	3	1	33.33	**24**	**12**	50.00
Sep.	9	5	55.55	1	0	00.00	3	1	33.33	3	0	00.00	3	2	66.66	0	0	00.00	6	3	50.00	1	1	100	1	0	00.00	**27**	**12**	44.44
Oct.	8	5	62.5	2	1	50.00	1	0	00.00	4	0	00.00	2	2	100	3	2	66.66	4	2	50.00	2	0	00.00	4	3	75.00	**30**	**15**	50.00
Nov.	0	0	00.00	1	1	100	2	0	00.00	4	2	50.00	6	5	83.33	0	0	00.00	4	3	75.00	1	1	100	3	2	66.66	**21**	**14**	66.66
Dec. 24	3	1	33.33	1	0	00.00	1	1	100	3	1	33.33	3	2	66.66	1	0	00.00	5	1	20.00	2	1	50.00	0	0	00.00	**19**	**7**	36.84
Total	38	21	55.26	18	6	33.33	24	8	33.33	32	12	37.5	19	13	68.42	8	5	62.5	47	25	53.19	25	9	36.0	36	19	52.77	**247**	**118**	**47.77**

I = No. of animals inseminated C. = No. of animals conceived CR%= Conception rate %

9.8. Bull-wise conception rate during the period 4/2024 to 3/2025

Sr. No.	Bull No.	Set No.	Total Number of AI	Total Conceived	CR%
1.	1053	XVI	12	5	41.66
2.	1693	X	9	3	33.33
3.	2831	XXI	10	3	30.00
4.	2979	XXI	4	3	75.00
5.	3007	XXII (P selectd)	9	0	00.00
6.	3057	XXII (P. selectd)	5	2	40.00
7.	3267	XI	6	2	33.33
8.	3591	XI	8	3	37.50
9.	4196	XIV	9	6	66.66
10.	4328	XV	7	5	71.42
11.	4354	XV	12	7	58.33
12.	4592	XVI	15	6	40.00
13.	4889	XVI	14	6	42.85
14.	5310	XIX	13	8	61.53
15.	5505	XX	14	7	50.00
16.	5638	XXI	17	8	47.05
17.	5764	XXI	17	7	41.17
18.	6007	XV	19	10	52.63
19.	6044	XIV	17	10	58.82
20.	7990	XXI	11	6	54.54
21.	M29	XVI	19	11	57.89
Total			247	118	47.77

9.9. Bull-wise semen stock 4/2024 to 3/2025

Sr. No	Bull No.	Set No	Opening Balance	Semen Prod./ Received	Consumption for AI/Supplies etc						Balance
					Dairy Farm	Field Unit	Other agencies	Sold	Discard	Total Consumption	
1	M 82	6	175	0	0	0	0	0	0	0	175
2	M 156	7	200	0	0	0	0	0	0	0	200
3	M 293	1	200	0	0	0	0	0	0	0	200
4	M 432	8	34	0	0	0	0	0	0	0	34
5	M 458	2	200	0	0	0	0	0	0	0	200
6	M 584	9	200	0	0	0	0	0	0	0	200
7	M 558	3	200	0	0	0	0	6	0	6	194
8	M 675	10	69	0	0	0	0	0	0	0	69
9	M 610	4	200	0	0	0	0	0	0	0	200
10	M 888	5	200	0	0	0	0	0	0	0	200
11	M 1354	NW3	1809	0	0	0	0	6	0	6	1803
12	M 1451	NW4	1016	0	0	0	0	0	0	0	1016
13	M 1437	NW4	1104	0	0	0	0	0	0	0	1104
14	M 1506	NW4	3569	0	0	0	0	0	0	0	3569
15	M 1796	NW7	554	0	0	0	5	10	0	15	539
16	M 1875	NW8	2545	0	0	0	5	14	0	19	2526
17	M 1994	NW9	363	0	0	0	5	176	0	181	182
18	M 1749	NW 7	318	0	0	0	0	0	0	0	318
19	M 2045	NW10	261	0	0	0	5	15	0	20	241
20	M 2073	NW10	221	0	0	0	0	0	0	0	221
21	M 2074	NW10	293	0	0	0	0	0	0	0	293
22	M 2083	NW10	293	0	0	0	0	0	0	0	293
23	M 2133	NW11	344	0	0	0	5	55	0	60	284
24	M 2148	NW11	200	0	0	0	0	0	0	0	200
25	M 2154	NW11	534	0	0	0	0	0	0	0	534
26	M 2176	NW12	2106	0	0	0	0	0	0	0	2106
27	M 2177	NW12	2365	0	0	0	0	10	0	10	2355
28	M 2185	NW12	1394	0	0	0	5	5	0	10	1384
29	M 2234	NW13	30	0	0	0	0	0	0	0	30

30	M 2269	NW13	239	0	0	0	0	25	0	25	214
31	M 2304	NW13	1035	0	0	0	0	0	0	0	1035
32	M 2357	NW14	3844	0	0	0	5	0	0	5	3839
33	M 2369	NW14	245	0	0	0	0	0	0	0	245
34	M 2371	NW15	4401	0	0	0	0	0	0	0	4401
35	M 2412	NW15	1090	0	0	0	0	0	0	0	1090
36	M 2417	NW15	375	0	0	0	0	0	0	0	375
37	M 2429	NW15	4144	0	0	0	0	0	0	0	4144
38	M 2459	NW15	2607	0	0	0	5	423	0	428	2179
39	M 2383	NW16	1771	0	0	0	5	517	0	522	1249
40	M 2467	NW15	5030	0	0	0	0	60	0	60	4970
41	M 2501	NW16	2715	0	0	0	0	410	0	410	2305
42	M 2565	NW17	2566	0	0	0	5	82	0	87	2479
43	M 2588	-	310	0	0	0	0	0	0	0	310
44	M 2607	NW17	4478	6527	0	0	0	4249	1484	4249	6756
45	M 2645	NW18	7426	0	0	0	0	285	0	285	7141
46	M 2676	NW18	6210	0	0	0	0	0	0	0	6210
47	M 2677	NW18	2104	0	0	0	0	0	0	0	2104
48	M 2689	NW18	4364	0	0	0	0	1390	0	1390	2974
49	M 2594	NW17	8729	0	0	0	5	165	0	170	8559
50	M 2558	NW17	13660	0	0	0	0	0	0	0	13660
51	M 2737	NW 19	5783	1115	0	0	0	335	0	335	5448
52	M 2759	NW 19	3744	7305	0	0	0	270	0	270	3474
53	M 2786	-	5145	9752	0	0	0	7391	2394	7391	7506
54	M 2792	-	3534	0	0	0	0	110	0	110	3424
55	M 3004	NW20	1925	6965	10	0	0	5	1920	5	0
56	M 3007	-	8412	9347	0	0	0	128	1350	128	17631
57	M 2674	NW19	1052	0	0	0	0	0	0	0	1052
58	M 3024	Future	3623	7209	0	0	0	2412	419	2412	8420
59	M 2822	Future	600	0	0	0	0	315	0	315	285
60	M 2850	NW20	1340	0	0	0	400	0	0	400	0
61	M 2838		5238	0	0	0	1190	520	0	1710	3528
62	M 2793	NW20	8270	0	0	0	1650	406	0	2056	6214
63	M 2831	NW20	3758	11882	0	0	0	3654	1664	3654	11986
64	M 2991	NW21	0	7543	0	0	0	379	514	379	7164
65	M 2921	-	3930	0	0	0	0	853	0	853	3077
66	M 2918	-	0	2282	0	0	0	10	0	10	2272
67	M 3014	NW21	525	0	0	0	0	0	0	0	525
68	M 2847		7330	0	0	0	0	4567	0	4567	2763
69	M 2979	NW21	340	10811	0	0	1200	1773	922	2973	8178
70	M 2930	-	345	0	0	0	0	0	0	0	345
71	M 2990	NW21	0	5216	0	500	1230	0	667	1730	3486
72	M 3097	NW22	0	6480	0	0	3315	210	95	3525	2955
73	M 3066	-	0	4317	0	0	0	0	604	0	4317
74	M 3113	NW22	0	4367	0	0	2885	130	0	3015	1352
75	M 3126	NW22	0	3185	0	0	1840	0	535	1840	1345
76	M 3057	Future	0	836	0	0	0	0	664	0	836
77	M 3155	Future	86	0	0	0	0	0	0	0	86
Grand Total			**163320**	**89754**	**0**	**500**	**13765**	**31371**	**13232**	**45636**	**204578**

9.10 Body weights since inception of Network

Year	At birth	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC	Adult
Female								
1991-92	32.08	54.53	78.74	143.86	238.40	297.26	433.07	
1992-93	30.64	51.40	87.89	161.61	203.40	293.26	399.31	
1993-94	32.71	61.53	93.14	160.38	222.27	284.25	440.92	
1994-95	30.62	59.92	93.91	165.60	242.29	304.86	435.68	

1995-96	31.11	62.02	87.98	154.51	236.73	322.04	441.69	
1996-97	31.48	65.96	97.06	174.88	242.09	330.71	476.09	
1997-98	29.27	59.87	95.59	168.95	252.98	318.33	455.27	
1998-99	29.13	62.68	92.62	187.02	269.70	343.06	458.21	
1999-00	30.27	60.59	86.46	163.34	277.21	342.58	461.34	
2000-01	31.74	61.32	94.43	159.20	243.10	329.79	490.33	
2001-02	32.44	62.04	94.96	188.23	271.09	341.46	512.25	
2002-03	34.26	62.12	95.02	187.45	287.49	368.89	485.89	
2003-04	32.00	61.57	92.04	160.65	261.52	349.24	461.74	
2004-05	31.67	59.85	90.61	168.47	265.27	354.22	486.85	
2005-06	30.57	70.23	96.21	162.58	235.74	314.75	481.06	
2006-07	30.94	65.11	104.38	169.75	246.33	324.79	516.50	
2007-08	29.47	59.68	91.76	171.21	238.38	322.80	480.07	
2008-09	31.62	62.69	99.45	180.28	274.86	352.00	507.28	
2009-10	30.04	60.49	104.76	194.36	281.54	361.78	500.69	
2010-11	31.35	61.50	101.58	202.80	306.67	380.00	477.14	
2011-12	29.77	65.31	96.40	183.75	267.71	359.11	469.25	
2012-13	31.08	62.63	106.07	222.56	311.48	380.00	492.42	
2013-14	29.35	67.46	110.68	217.78	301.91	376.20	543.75	
2014-15	30.50	65.88	101.73	212.20	289.52	363.59	490.65	
2015-16	29.18(17)	65.44 (18)	102.54 (13)	211.71 (16)	287.76 (22)	358.50 (25)	490.46 (24)	553(120)
2016-17	29.4 (29)	67.26 (24)	99.45 (37)	197.63 (35)	284.30 (32)	374.09 (17)	528.33 (23)	560(101)
2017-18	31.7(27)	68.64 (26)	97.24 (48)	195.2 (21)	294.3 (19)	377.8(23)	547(24)	582(99)
2018-19	31.6	67.9	100.6	200.7	297.7	388.8	552.2	578
2019-20	30.82	68.4	99.7	198.6	296.2	385.3	542.9	589
2020-21	30.34	67.86	98.09	197.2	299.4	381.9	539.7	598
2021-22	30.8	69.07	95.68	195.6	289.23	396.8	559.5	607
2022-23	31.0	66.03	93.25	188.56	278.52	383.0	550.8	617
2023-24	32.83	61.00	94.55	206.94	313.04	438.36	560.38	570
2024-25	**33.23**	**65.73**	**92.52**	**189.09**	**286.16**	**391.77**	**536.95**	**593.51**

Male

Year	At Birth	3 Months	6 Months	12 Months	18 Months	24 Months
1991-92	33.53	57.23	81.76	161.00	246.44	262.75
1992-93	33.04	55.46	83.23	163.29	-	-
1993-94	33.90	63.57	94.64	138.00	250.71	322.63
1994-95	33.60	64.69	96.61	181.27	271.00	325.75
1995-96	32.60	61.45	94.08	145.47	267.00	346.29
1996-97	32.41	72.24	100.29	198.75	312.33	350.43
1997-98	29.88	58.90	105.52	201.59	288.77	384.00
1998-99	30.35	59.73	97.00	206.67	312.00	410.00
1999-00	33.40	65.13	91.69	148.30	318.75	415.00
2000-01	33.40	64.05	97.00	159.25	213.63	340.56
2001-02	33.17	62.53	103.11	187.27	340.00	-
2002-03	34.79	65.00	99.38	205.56	346.88	460.00
2003-04	33.03	64.32	106.94	193.75	284.84	405.62
2004-05	34.36	60.53	105.88	195.25	288.44	408.56
2005-06	31.36	69.37	112.58	204.30	313.18	386.10
2006-07	33.44	70.86	111.81	215.08	335.63	403.75
2007-08	31.25	61.27	101.90	202.81	295.42	402.45
2008-09	32.37	67.50	108.53	211.43	286.11	387.27
2009-10	32.35	60.94	108.89	198.75	308.75	371.67
2010-11	32.73	66.60	98.70	200.00	287.00	398.00
2011-12	32.62	68.70	107.79	209.44	320.00	402.50
2012-13	31.96	63.36	110.88	262.00	370.71	397.50
2013-14	32.32	69.72	120.71	230.42	372.56	430.00
2014-15	30.03	68.53	97.70	201.20	360.00	356.67
2015-16	30.07(29)	67.18(28)	105.04(23)	203.9(14)	348.91(12)	421.25(04)
2016-17	30.82(24)	69.37(19)	103.40(15)	207.13(5)	337.24(9)	490.24(6)
2017-18	33.6(33)	68.5(22)	99.4(14)	224(6)	334(7)	456(5)

2018-19	32.5	66.1	101.0	224.5	335.2	451.3
2019-20	32.04	67.8	99.8	222.3	331.4	438.9
2020-21	33.8	69.6	102.7	219.4	342.2	480.4
2021-22	33.23	71.05	104.2	216.23	364.79	487.3
2022-23	34.2	72.08	103.9	218.1	361.3	485.6
2023-24	34.88	65.5	118.22	231.8	347.62	458.0
2024-25	**34.92**	**67.44**	**114.53**	**219.26**	**329.66**	**399.66**

9.11. Production performance of buffaloes completing their lactation during the period 4/2024 to 3/2025

Lactation No.	No. of Obs.	Av. Lact. Yield (kg)	Av. Lact. Length (days)	305-day Milk Yield (kg)	Av. Peak yield (kg)
1st	14	2461.35±65.08	307.21±8.64	2427.32±56.49	12.72±0.26
2nd	14	2735.18±136.96	302.07±6.52	2710.91±128.85	14.77±0.55
3rd	14	2661.95±122.52	278±6.41	2655.02±118.79	15.17±0.42
4th	1	2187±0	275±0	2187±0	14.6±0
5th & onwards	3	3052.06±417.46	311.33±18.67	2988.8±383.01	15.4±1.38
Overall	**46**	**2638.30±66.87**	**296.32±4.33**	**2614.32±63.31**	**14.31±0.28**

9.12 Production performance of buffaloes (general herd) since inception

Years	No. of Obs.	Av. Lact. Yield (kg)	Av. Lact. Length (days)	305-day Milk Yield (kg)	Av. Peak yield (kg)
1991-92	157	1858	321	1738	10.80
1992-93	138	1894	340	1730	10.81
1993-94	144	2238	370	1948	11.01
1994-95	121	2003	320	1877	12.06
1995-96	126	2248	350	2008	11.86
1996-97	125	2115	334	1948	11.40
1997-98	98	2255	354	1995	11.03
1998-99	125	2411	372	2101	11.50
1999-00	114	2238	375	2041	11.41
2000-01	103	2257	347	2032	11.82
2001-02	112	2419	344	2175	12.95
2002-03	105	2245	304	2144	13.16
2003-04	111	2464	342	2233	12.90
2004-05	106	2501	346	2270	12.74
2005-06	78	2480	322	2327	13.17
2006-07	91	2389	326	2235	12.39
2007-08	67	2362	323	2176	12.62
2008-09	88	2346	329	2141	11.96
2009-10	67	2478	336	2271	12.73
2010-11	81	2836	376	2470	13.28
2011-12	87	2454	322	2306	13.38
2012-13	75	2741	349	2528	13.84
2013-14	55	2789	366	2509	13.63
2014-15	46	2948	353	2674	14.84
2015-16	45	2959	383	2640	14.63
2016-17	53	2924	390	2561	14.60
2017-18	54	2906	338	2707	14.73
2018-19	62	2904	335	2771	15.10
2019-20	73	2936	316	2841	15.43
2020-21	50	2708	311	2614	14.21
2021-22	62	2759	309	2672	14.94
2022-23	31	2643	310	2564	14.78
2023-24	50	2774	313	2718	14.49
2024-25	**46**	**2638.30**	**296.32**	**2614.32**	**14.31**

9.12.1 Production performance of buffaloes (elite) since inception of network project

Year	No. of Obs.	Av. Lact. Yield (kg)	Av. Lact. Length (days)	305-day Milk Yield (kg)	Av. Peak yield
1991-92	16	2798	390	2490	13.20
1992-93	07	2822	433	2371	10.60
1993-94	18	3162	429	2657	14.40
1994-95	13	3060	381	2751	16.07
1995-96	21	3148	409	2630	14.08
1996-97	25	3021	390	2651	14.34
1997-98	18	3296	418	2773	14.27
1998-99	31	3410	440	2778	13.71
1999-00	21	3199	424	2684	13.42
2000-01	23	3133	410	2672	14.01
2001-02	35	3156	377	2815	15.31
2002-03	32	3030	337	2849	15.45
2003-04	39	3183	397	2757	14.58
2004-05	38	3160	380	2793	14.40
2005-06	34	2967	340	2755	14.52
2006-07	39	2893	349	2681	13.68
2007-08	19	3143	383	2752	14.02
2008-09	22	3106	388	2654	13.43
2009-10	25	3000	362	2694	13.71
2010-11	40	3474	404	2941	14.85
2011-12	32	3172	360	2879	15.41
2012-13	38	3188	367	2899	15.46
2013-14	13	3685	406	3186	16.07
2014-15	12	4046	423	3366	17.28
2015-16	10	3846	393	3332	20.07
2016-17	16	3855	407	3267	17.4
2017-18	14	3638	379	3417	17.8
2018-19	15	3693	374	3431	17.8
2019-20	13	3669	351	3497	18.3
2020-21	8	3414	356	3414	20.8
2021-22	12	3791	347	3608	20.25
2022-23	8	3418	309	3343	19.3
2023-24	10	3500	331	3410	16.62
2024-25	**7**	**3517.38**	**317**	**3447.91**	**17.08**

9.13. Average milk components during the period (month-wise) 4/2024 to 3/2025

Month	Number of Observation	Fat %	SNF	Protein	Lactose
April, 2024	69	7.89	9.60	3.98	
May	69	8.19	9.45	3.95	
June	59	7.98	9.62	4.32	
July	66	7.47	9.47	5.03	
August	74	7.38	9.42	4.20	
September	71	7.18	9.32	4.38	
October	73	7.35	9.92	4.13	
November	77	8.29	10.02	4.11	
December	80	8.22	9.80	4.09	
January, 2025	71	7.85	10.01	4.13	
February	69	7.57	9.83	4.40	
March	69	7.56	9.92	4.65	
Overall	70.58	7.74	9.69	4.28	

9.14. Reproduction performance of buffaloes calving during the period 4/2024 to 3/2025

Lactation No	Average Age at Calving (Months)	No. of observation	Average Service Period (Days)	Average Dry Period (days)	Average Calving Interval (Days)
1	37.80±0.86 (36)		-	-	-
2	-	20	116.47±7.93	149.15±9.77	425.97±7.92
3	-	14	115.19±7.19	145.86±8.86	425.01±7.22
4	-	10	114.68±8.43	148.02±10.27	423.44±8.10
5 & Above		8	116.13±8.10	147.24±9.36	425.86±8.09
Overall		**52**	115.19±7.19	145.86±8.86	425.01±7.22

9.14.1. Reproduction performance of buffaloes calving since inception of network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
1991-92	49.2 (73)	169 (93)	187 (101)	493 (101)
1992-93	44.4 (48)	207 (100)	190 (98)	510 (100)
1993-94	46.7 (24)	228 (105)	184 (106)	532 (106)
1994-95	47.5 (37)	206 (96)	182 (96)	512 (96)
1995-96	45.6 (43)	218 (105)	196 (104)	526 (105)
1996-97	49.4 (34)	196 (76)	167 (76)	510 (76)
1997-98	45.0 (45)	248 (94)	203 (94)	553 (94)
1998-99	47.0 (34)	232 (81)	204 (84)	553 (87)
1999-00	42.0 (54)	213 (59)	175 (63)	518 (63)
2000-01	44.4 (27)	197 (81)	170 (82)	511 (82)
2001-02	44.7 (32)	164 (95)	149 (84)	496 (84)
2002-03	40.2 (39)	133 (95)	147 (95)	463 (95)
2003-04	36.8 (23)	160 (107)	153 (93)	455 (93)
2004-05	41.7 (27)	140 (80)	155 (80)	478 (80)
2005-06	43.7 (35)	143 (65)	119 (60)	433 (60)
2006-07	43.3 (20)	166 (69)	115 (61)	438 (61)
2007-08	42.8 (30)	147 (53)	126 (58)	419 (58)
2008-09	42.6 (43)	142 (90)	134 (52)	438 (52)
2009-10	39.3 (29)	151 (76)	174 (72)	492 (72)
2010-11	39.1 (21)	154 (94)	150 (76)	457 (76)
2011-12	37.4 (22)	136 (65)	154 (85)	473 (85)
2012-13	38.9 (34)	151 (53)	136 (59)	435 (59)
2013-14	42.3 (12)	159 (67)	190 (64)	471 (64)
2014-15	38.6 (23)	160 (40)	185 (40)	513 (41)
2015-16	40.1 (24)	162 (26)	119 (25)	458 (25)
2016-17	41.5 (27)	184 (26)	104(26)	472 (26)
2017-18	41.3 (25)	152 (41)	122 (41)	459 (41)
2018-19	40.7 (39)	136 (104)	130 (104)	441 (104)
2019-20	40.4 (23)	125 (82)	133 (82)	436 (82)
2020-21	40.56 (34)	138 (95)	129 (95)	434 (95)
2021-22	40.93 (53)	147 (55)	142 (55)	454 (55)
2022-23	39.28 (31)	128 (66)	162 (66)	437 (66)
2023-24	39.78(30)	124.23(41)	146.56(41)	434.75(41)
2024-25	**37.80 (36)**	**115.19 (52)**	**145.86 (52)**	**425.01 (52)**

Figures in parenthesis indicate number of observations

9.15. Month-wise milk production and disposal during the period 4/2024 to 3/2025

	Production	**Disposal**			
Month	Total milk produced (kg)	Liquid milk (kg)	Calf feeding (kg)	Experimental purposes (kg)	Milk lost in handling (kg)
April, 2024	17138.3	15146	1965	-	27.3
May	16618.6	14735	1858.9	-	24.7
June	16611.0	14702	1887.7	-	21.3
July	15519.4	13629	1864.2	6	20.2
August	16478.6	13942	2509.7	-	26.9
September	17874.5	15176	2675.7	-	22.8
October	20523.9	17615	2883.1	-	25.8
November	20903.7	18133	2741.9	6.5	22.3
December	21843.4	19199	2612.4	5	27
January, 2025	19436.2	17022	2379.7	10	24.5
February	18180.1	16057	2097	5	21.1
March	20775.0	18390	2362.2	-	22.8
Total	**221902.7**	**193746**	**27837.5**	**32.5**	**286.7**

9.16. Feed and fodder purchased and offered (qtls) to animals during the period 4/2024 to 3/2025

Month	**Type of fodder/feed**	**Qty. produced at Farm**	**Qty. Purchased**	**Fed**	**Balance**
April,2024	Green				
	Dry				
	Silage				
	Concentrate		678.750		
May	Green				
	Dry				
	Silage				
	Concentrate		686.750		
June	Green				
	Dry				
	Silage				
	Concentrate		660.750		
July	Green				
	Dry				
	Silage				
	Concentrate		664.250		
August	Green				
	Dry				
	Silage				
	Concentrate		681.500		
September	Green				
	Dry				
	Silage				
	Concentrate		671.750		
October	Green				
	Dry				
	Silage				
	Concentrate		663.000		
November	Green				
	Dry				
	Silage				
	Concentrate		662.500		

December	Green				
	Dry				
	Silage				
	Concentrate		639.500		
January 2025	Green				
	Dry				
	Silage				
	Concentrate		642.250		
February	Green				
	Dry				
	Silage				
	Concentrate		641.500		
March	Green				
	Dry				
	Silage				
	Concentrate		636.000		
Total	Green				
	Dry				
	Silage				
	Concentrate				

9.17. Milking performance during the period 4/2024 to 3/2025

Month	No. of Animal in milk	No. of Animal dry	Total Animal	% in Milk	Wet average (kg)	Herd average (kg)
April, 2024	62	43	105	59.04	9.21	5.44
May	61	37	98	62.24	8.01	4.98
June	61	31	92	66.30	8.64	5.73
July	59	37	96	61.46	8.24	5.06
August	68	37	105	64.76	7.7	5.00
September	71	37	108	65.74	8.35	5.49
October	77	34	111	69.37	8.39	5.82
November	79	32	111	71.17	8.66	6.17
December	72	31	103	69.90	9.78	6.84
January, 2025	69	38	107	64.48	8.98	5.79
February	70	36	106	66.03	9.18	6.06
March	72	37	109	66.05	9.25	6.11
Overall	68	36	104	65.54	8.70	5.71

9.17.1. Milking performance since inception

Years	No. of Animal in milk	No. of Animal dry	Total Animal	% in Milk	Wet average (kg)	Herd average (kg)
1991-92	148	74	222	66.67	5.65	3.79
1992-93	149	77	226	65.93	5.54	3.68
1993-94	115	76	191	60.21	6.20	3.71
1994-95	116	67	183	63.39	6.09	3.86
1995-96	123	66	189	65.08	6.43	4.21
1996-97	112	72	194	60.87	6.17	3.73
1997-98	116	61	177	65.54	6.53	4.30
1998-99	119	65	184	64.67	6.26	4.06
1999-00	109	55	164	66.46	6.26	4.17
2000-01	105	58	163	64.42	6.70	4.36
2001-02	94	48	142	66.20	7.09	4.70
2002-03	109	48	157	69.43	7.22	5.00
2003-04	108	52	160	67.50	7.01	4.80

2004-05	91	45	136	66.91	7.33	5.00
2005-06	74	31	105	70.48	7.36	5.21
2006-07	81	27	108	75.00	7.03	5.27
2007-08	70	29	99	70.35	6.90	4.90
2008-09	78	38	116	67.00	7.07	4.73
2009-10	83	40	123	69.17	7.62	5.15
2010-11	88	47	135	64.93	7.21	4.72
2011-12	88	51	139	63.06	7.56	4.79
2012-13	78	45	123	63.49	7.74	4.90
2013-14	61	43	104	58.29	7.98	4.67
2014-15	54	32	86	62.34	7.97	4.98
2015-16	54	35	89	61.89	8.04	5.01
2016-17	49	25	74	70.00	7.92	5.45
2017-18	49	30	79	64.84	8.03	5.25
2018-19	68	34	102	65.9	8.40	5.38
2019-20	67	38	105	66.46	8.31	5.44
2020-21	64	39	103	62.64	8.22	5.06
2021-22	72	37	109	66.44	8.42	5.58
2022-23	54	35	88	60.84	8.45	5.07
2023-24	58	35	92	62	8.69	5.40
2024-25	**68**	**36**	**104**	**65.54**	**8.70**	**5.71**

9.18. Bull-wise daughters born/daughters reaching A.F.C. and completing 1st lactation records during the period 4/2024 to 3/2025.

Bull No.	Total No. of daughters born	No. of daughters reaching A. F. C.	No. of daughters completing 1st Lactation	Last Lactation
1437	1	-	-	-
#1796	2	-	-	-
*2786	2	-	-	-
*2831	4	-	-	-
*2979	1	-	-	-
*3004	1	-	-	-
*3007	1	-	-	-
3014	5	-	-	-
3591	1	-	-	-
#4354	1	-	-	-
5629	2	-	-	-
5638	4	-	-	-
5764	4	-	-	-
#6007	2	-	-	-
#6044	6	-	-	-
#7630	2	-	-	-
#7649	1	-	-	-
#7768	1	-	-	-
#7990	6	-	-	-
KHAN	2	-	-	-
KOHINOOR	1	-		
PARIKSHIT	4	-		
VEERA	2	-		
1209	-	1		
1994	-	1	-	-
2045	-	1		
*2565	-	2	-	-

*2645	-	2	-	-
2674	-	2	-	-
2676	-	1	-	-
2689	-	1	-	-
2737	-	1	-	-
2759	-	1	-	-
4796	-	1		
*4905	-	1	-	-
5232	-	4	-	-
5246	-	2	-	-
5320	-	1	-	-
6044	-	1	-	-
7263	-	1	-	-
102699	-	1	-	-
M1875	-	1	-	-
PC574	-	1	-	-
PUR	-	9	-	-
*1209	-	-	2	-
#1354	-	-	1	-
#1875			1	
*2565	-	-	2	-
4995	-	-	2	
*7094	-	-	2	-
*7147	-	-	1	-
*7227			1	
PUR	-	-	2	-
Total	**56**	**36**	**14**	

9.19. Bull-wise daughters completing 1st lactation during the period 4/2024 to 3/2025

Sr. No	Bull No.	Daughter No.	Date of birth	Date of calving	1st lactation 305-day milk yield (kg)	Total lactation yield (kg)	Lactation length (days)
1	*1209	3389	3-10-20	12-4-24	2252.9	2252.9	260
2	*1209	3407	24-10-20	30-1-24	2403.9	2492	335
3	#1354	3370	26-7-20	29-12-23	2674.5	2837.3	358
4	#1875	3416	8-12-20	13-2-24	2195	2200.2	310
5	*2565	3415	6-12-20	9-1-24	2208.8	2208.8	280
6	*2565	3442	9-4-21	13-4-24	2228.8	2228.8	261
7	*4995	3390	8-10-20	18-1-24	2355.7	2359.3	306
8	*4995	3406	24-10-20	8-1-24	2394.4	2492.7	348
9	*7094	3354	8-4-20	18-9-23	2398.2	2404.2	310
10	*7094	3343	22-2-20	6-3-24	2407.3	2407.3	301
11	*7147	3366	29-6-20	27-1-24	2952.3	3022.4	336
12	*7227	3383	17-9-20	27-7-23	2563.5	2575.5	310
13	PUR	3412	6-1-20	14-8-23	2327.3	2327.3	260
14	PUR	3396	27-4-20	18-8-23	2607.9	2650.3	326

9.20 List of future breeding/young bulls as on 3/2025

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dam's Highest 305 days or less yield (kg)	Semen doses available
1.	2809	18-8-18	2543	2185	3109	-
2.	2831	11-10-18	2897	VIRAT	4815	11986
3.	2979	26-11-20	3083	2689	3752	8178
4.	2990	24-12-20	2741	1219	3723	3486
5.	2992	02-01-21	3152	2689	3551	-
6.	3052	9-10-21	3180	5232	3336	-
7.	3057	14-11-21	3028	2737	3902	836
8.	3066	27-12-21	2543	PC574	3109	4317
9.	3097	15-6-22	RANI	SIKANDER	4824	2955
10.	3113	16-9-22	2897	BHISMA 104	4815	1352
11.	3126	7-11-22	2766	102699	3602	1345
12.	3143	20-2-23	3283	2383	2741	Training
13.	3153	6-4-23	3326	M188	3310	Training
14.	3155	15-4-23	2992	2831	3501	86
15.	3162	12-6-23	3364	4354	1696	Training
16.	3174	27-7-23	3383	2759	3371	Training
17.	3182	20-8-23	3293	R12	3333	Training
18.	3183	27-8-23	2973	RUSTEM E HIND	3926	Training
19.	3186	14-9-23	2974	RUSTEM E HIND	3411	Training
20.	3187	28-9-23	2859	M188	3344	Training
21.	3191	22-10-23	3077	4354	3020	Training
22.	3196	15-11-23	3188	6007	2710	Training
23.	3202	25-11-23	3426	2607	2160	Training
24.	3205	13-12-23	3259	1506	2865	Training
25.	3209	29-12-23	3370	1796	2682	Training

9.21 Target achieved during the years

S.N	Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
1.	Av. Age at first calving	40 months	40.56 (34)	40.93 (53)	39.28 (31)	39.78 (30)	37.80 (36)
2.	Av. Service period	130 days	138 (95)	147 (55)	128 (66)	124.26(41)	115.19 (52)
3.	Calf mortality (0-3 months)	≤5 %	8.18	13.87	17.43%	9.62%	18.86%
4.	Wet average	≥8.5 kg.	8.22	8.42	8.45	8.69 Kg	8.70 Kg
5.	Herd average	≥5.5 kg.	5.06	5.58	5.07	5.40 Kg	5.70 Kg

10. Salient Research Achievements including survey reports/farmers animals covered in the project:

- Twelve bulls have been presented for proposed 22nd set of the project and six has been selected.
- The average age at 1st calving is achieved to 37.80 months.
- The average age at first collection of the bulls at the institute was 28.6 months.
- The average 305-day yield of the herd was 2614.32 kg and wet average of 8.70 kg and herd average of 5.71 kg during the period 4/2024 to 3/2025.

11. Publications: Nil

12. Expected Socio-economic impact in the tract :

- Supply of high genetic merit frozen semen has helped to increase the production average of animals in the tract
- Farmers are adopting AI as main mean of mating rather than natural service
- Awareness among farmers of rearing animals on scientific lines like making concentrate ration of their own and other managemental practices

13. Constraints if any:

Regular staff like beldars, cattle attendants and milk recorder has been reduced in the strength in the project which is causing working problems in maintaining the herd.

14. Focus of work in the coming year:

Efforts are being made to further improve the reproductive efficiency and herd strength with special focus on increasing elite animals and keeping calf mortality at lower levels.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Receipts (ICAR Share)	Balance
Total	ICAR Share		ICAR Share	State Share		
78.50	55.50+4.50*	60.00*	60.00	18.50	2.08908	+ 2.08908

* SCSP Funds

Herd Performance:

Herd strength at the centre was 306 animals with 165 breedable buffaloes (> 2 year). During the period 91 calving were reported with 41 male and 56 females, and one abortion. The calf mortality (0-3 months) during the period was 18.86 % (22/117). Improvement in AFC at the farm 37.80 months as compared to 39.78 months in 2023-24.

During the report period 89754 semen doses were produced and 32404 semen doses were sold and supplied to field unit/ other Murrah centers and other agencies. In total 204578 frozen semen doses from superior bulls are available at the centre. AFC was improved (37.80 months) as compared to previous year 39.78 months. An improvement in the reproductive performance viz. SP, Dry period and CI of 115 days (52), 146 days (52), and 425 days (52), respectively was observed as compared to last year 124 days (41), 147 days (41), and 435 days (41). The wet average and herd average improved from 8.69 kg and 5.40 kg to 8.70 kg and 5.70 kg during the year.

Accomplishment and Targets Achieved:

S.N	Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
1.	Av. Age at first calving	40 months	40.56 (34)	40.93 (53)	39.28 (31)	39.78 (30)	37.80 (36)
2.	Av. Service period	130 days	138 (95)	147 (55)	128 (66)	124.26 (41)	115.19 (52)
3.	Calf mortality (0-3 months)	≤5 %	8.18	13.87	17.43%	9.62%	18.86%
4.	Wet average	≥8.5 kg.	8.22	8.42	8.45	8.69 Kg	8.70 Kg
5.	Herd average	≥5.5 kg.	5.06	5.58	5.07	5.40 Kg	5.70 Kg

Recommendations:

- All initiatives should be taken to control the high rate of calf mortality in GADVASU Murrah herd.
- Breedable buffalo population of Murrah herd at GADVASU need to be increased.
- Efforts should be made to disseminate a greater number of superior germplasms in the field.

ICAR-NATIONAL DAIRY RESEARCH INSTITUTE, KARNAL

1. Name of Center : **NDRI, Karnal, Main Unit**
2. Project Code : 1010476
3. Project Title : Network project on buffalo improvement-Institute herd
   Lead Division: Animal Genetics & Breeding-ICAR-NDRI, Karnal
   (Coordinating Centre: ICAR-CIRB, Hisar)
   Subproject : Performance recording and improvement of Murrah (NDRI Herd)
4. Date of Start : 1993-1994
   Name of the Project In-charge: Dr. Vikas Vohra (w.e.f. January, 2021) Pr. Scientist and Head (AGB)
5. Objectives :
   1. To establish elite herd of 50 to 100 Murrah for the production of genetically superior young bulls.
   2. To evaluate sires through institutional progeny testing.
   3. To produce, test, propagate and conserve high genetic merit male germplasm.
6. Technical Programme

a) Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500 and 300 breedable females (Murrah).

b) Selection and testing of minimum 15 bulls of Murrah / 4-6 bulls for other breeds in every 18/24-month cycle.

c) Production of minimum 10,000 (Murrah) and 3000 to 5000 (Other breeds) frozen semen doses from each test bull.

d) Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.

e) Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.

f) Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.

g) Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 150 days (All breeds) / 1500 kg in Murrah) and Peak yield, Milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).

h) Monthly testing of milk constituents (Fat%, SNF% and Protein%) and Somatic Cell Count, wherever feasible, at institutional herds.

i) Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.

j) Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. Financial Statement: Financial Statement NBPI/ICAR-NDRI (Main Unit) in Rupees

Head	Head wise budget allocation and utilization; revenue receipts			
	Opening Balance	Equipment	Contingency (including SCSP)	Total
Total funds Received during 2024-25	1225	Rs 3,02,000	Rs 27,50,000	Rs 30,52,000
Expenditure up to 31-03-2025		Rs 3,01,440	Rs 27,49,810	Rs 30,51,250 **(99.98%)**
Closing Balance on 31-03-2025*	Refunded Rs 1225 to CIRB	Rs 1,194	Rs 31	Rs 1,225

*AUC and SOC for FY 2024-25 submitted on 1st May 2025.

8. Staff Position - Staff associated with the project through Redeployment

Discipline	Name of Scientist / Staff	Status PI/Co-PI
AGB	Dr. Vikas Vohra, Principal Scientist (from Jan. 2021) Dr. G. R Gowane, Prinicipal Scientist (from March 21)	PI Co-PI
ARGO	Dr. T. K. Mohanty, Principal Scientist	Co-PI
LPM	Dr. Pawan Singh, Head LPM	Co-PI
Health/Other	Nil	
No. of staff		
Administrative staff and Technical staff -- Nil		
Contractual staff	2 (High Skilled) – 11.5 months 2 (Skilled) – 09 months	

9. Herd Performance Enclosed Tables 9.1 to 9.21

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P*	T/E	D	T/E	S	E	CB
	Female								
1	Below 3 months	3	59		2	57			3
2	3-12 months	34		57	9	41	1		40
3	1-2 years	43		41	1	48			35
	Above 2 years	68		48	-	37	17		62
4	Buffaloes in Milk	87		37	3	22	4		95
5	Buffaloes Dry P /NP	53		22	8	0	23		44
	Sub Total	288	59	205	23	205	45		279
	Males								
1	Below 3 months	13	47		6	47	0		7
2	3-12 months	25		47	8	29	12		23
3	1-2 years	4		29	0	14	14		5
	Above 2 years	-		14	0	13	1		0
4	Breeding bulls	54		13	3	0	7		57
5	Bullocks / Teasers	2							2
	Sub Total	98	47	103	17	103	34		94
	Grand Total	386	106	308	40	308	79		373

OB = Opening Balance; B = Birth; P= Purchase; T = Transfer;
E = Experimental; D = Death; S = Sale; CB = Closing Balance as on 31.03.2025

9.2 Calving Statistics including abnormalities (1st April 24 to 31st March 2025)

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 24	1	-	1	1	-	1	1	5
May	-	1	-	1	-	1	1	4
June	-	2	-	1	-	-	2	5
July	5	6	1	1	-	-	1	14
August	11	16	-	3	-	2	-	32
September	7	11	-	-	-	1	-	19
October	5	8	-	-	-	-	1	14
November	4	3	-	-	-	-	1	8
December	7	4	-	1	1	-	-	13
January 25	4	5	-	-	-	1	-	10
February	1	1	0	1	0	1	0	4
March	2	2	2	0	0	0	0	6
Overall	47	59	4	9	1	7	7	134

Sex ratio Male : Female 0.80:1; SB% = 2.99%; Abortion % = 6.72%

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 25

Female	Primary cause of disposal							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves 0 to 3 months	-	-	-	-	-	2	-	2
3-12 months	-	-	-	-	-	9	-	9
Heifers 1-2 years	-	-	-	-	-	1	-	1
> 2 years	-	8	-	-	-	0	-	8
Buffaloes Milch	-	2	-	-	-	3	-	5
Dry	-	8	-	-	-	8	-	16
Sub Total		**18**				**23**	-	**41**
Males	**Primary cause of disposal**							
Calves 0 to 3 months	-	-	-	-	-	6	-	6
3-12 months	12	0	-	-	-	8	-	20
1 to 2 year	12	2	-	-	-	-	-	14
>2 year	0	1	-	-	-	-	-	1
Breeding bulls	6	1	-	-	-	3	-	10
Bullock+Teaser+Others	-	-	-	-	-	-	-	-
Sub Total	**30**	**4**	-	-	-	**17**	-	**51**
Grand Total	**30**	**22**	-	-	-	**40**	-	**92**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Month	No. Died%	Female						Male					Overall Herd
		0-3 Month	3-12 Month	1-2 Yrs.	> 2 Yrs.	Milk + Dry	Overal l Femal e	0-3 Month	3-12 Month	1 -2 Yrs.	>2 yrs.	Overall Male	
Apr, 23	No.	2	34	44	66	133	279	7	31	4	0	42	321
	Died	0	0	0	0	1	1	1	0	0	0	1	2
	%	0.00	0.00	0.00	0.00	0.75	0.36	14.29	0.00	0.00	0.00	2.38	0.62
May , 23	No.	1	36	41	68	133	279	5	32	4	0	41	320
	Died	0	0	0	0	1	1	0	1	0	0	1	2
	%	0.00	0.00	0.00	0.00	0.75	0.36	0.00	3.13	0.00	0.00	2.44	0.63
Jun, 23	No.	3	35	40	67	134	279	1	36	4	0	41	320
	Died	0	1	0	0	1	2	0	0	0	0	0	2
	%	0.00	2.86	0.00	0.00	0.75	0.72	0.00	0.00	0.00	0.00	0.00	0.63
Jul, 23	No.	9	35	36	62	143	285	5	35	6	0	46	331
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aug, 23	No.	24	26	42	60	155	307	15	18	5	0	38	345
	Died	0	0	0	0	2	2	1	1	0	0	2	4
	%	0.00	0.00	0.00	0.00	1.29	0.65	6.67	5.56	0.00	0.00	5.26	1.16
Sep, 23	No.	32	22	41	52	151	298	21	14	0	0	35	333
	Died	1	0	0	0	3	4	1	0	0	0	1	5
	%	3.13	0.00	0.00	0.00	1.99	1.34	4.76	0.00	0.00	0.00	2.86	1.50
Oct, 23	No.	33	23	38	55	156	305	23	14	3	0	40	345
	Died	1	0	0	0	0	1	0	0	0	0	0	1
	%	3.03	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.29
Nov, 23	No.	20	33	37	61	157	308	16	24	4	0	44	352
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec, 23	No.	14	36	36	65	158	309	15	27	5	0	47	356
	Died	0	2	0	0	1	3	1	3	0	0	4	7
	%	0.00	5.56	0.00	0.00	0.63	0.97	6.67	11.11	0.00	0.00	8.51	1.97
Jan, 24	No.	12	37	34	65	159	307	14	27	8	0	49	356
	Died	0	5	1	0	1	7	0	2	0	0	2	9
	%	0.00	13.51	2.94	0.00	0.63	2.28	0.00	7.41	0.00	0.00	4.08	2.53
Feb, 24	No.	10	37	35	44	159	285	9	30	9	0	48	333
	Died	0	1	0	0	0	1	2	0	0	0	2	3
	%	0.00	2.70	0.00	0.00	0.00	0.35	22.22	0.00	0.00	0.00	4.17	0.90

Mar, 24	No.	8	40	35	62	139	284	7	23	5	0	35	319
	Died	0	0	0	0	1	1	0	1	0	0	1	2
	%	0.00	0.00	0.00	0.00	0.72	0.35	0.00	4.35	0.00	0.00	2.86	0.63
Over all	Died	**2**	**9**	**1**	**0**	**11**	**23**	**6**	**8**	**0**	**0**	**14**	**37**
	%	**1.19**	**2.28**	**0.21**	**0**	**0.61**	**0.65**	**4.34**	**2.57**	**0**	**0**	**2.76**	**0.91**

Female (0-3 months calves) (Opening Balance + Born= 3+59 => 62; calf died =02 (3.2%)
Male (0-3 months calves) (Opening Balance + Born= 13+47 => 60; calf died = 06(10.0%)
Overall (0-3 months calves) (Opening Balance + Born = 16+106 => 122; calf died = 08(6.56%)

9.5. Causes of Mortality (quarter wise) during the period 1st April 24 to 31st March 2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	-	-	-	2	2
Pneumonitis	-	-	4	9	13
Septicemia / Toxemia	-	2	3	-	5
Peritonitis	-	-	-	-	-
JD/TB	-	-	-	-	-
Milk Fever / metabolic diseases	-	-	-	-	-
TRP / TP	-	-	-	-	-
Parasitism	-	-	-	-	-
Sudden death	-	-	-	-	-
Peri-parturient disorders	-	-	-	-	-
General Debility	1	1	-	3	5
Miscellaneous	5	7	2	1	15
Total	6	10	9	15	40

9.6 Prophylactic Measures undertaken during 2024-25

Disease	**Vaccination Date / No. of animals**	**No. of animals Tested / Positive**		**Dates and No. of animals treated for Parasitism**
FMD	April 2024	50	Nil	Deworming done from 04/03/2024 to 07/03/2024 to All Buffaloes
HS	June 2024	50	Nil	
BQ	June 2024	50	Nil	
Brucelloses	Nil			
JD	November, 2024	50	Nil	
TB	November, 2024	50	Nil	
IBR	Nil			
Mastites	April and November, 2024	70	13	

9.7. Female Conception Rate During the Period January to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	29	17	58.62	8	2	25.00	7	3	42.86	5	3	60.00	49	25	51.02
1st calvers	48	25	52.08	16	8	50.00	6	2	33.33	4	0	0.00	74	35	47.30
Multiparous	50	31	62.00	23	9	39.13	17	8	47.06	15	6	40.00	105	54	51.43
Overall	**127**	**73**	**57.48**	**47**	**19**	**40.43**	**30**	**13**	**43.33**	**24**	**9**	**37.50**	**228**	**114**	**50.0**

AIs = No. of animals inseminated; C = No. of animals conceived; CR % = Conception rate%

9.8 Quarter-wise conception rate During the Period January to December 2024

Quarter	No. of A I	Preg. animals	CR %
Jan – Mar	70	33	47.14
Apr- Jun	23	13	56.52
Jul- Sep	32	8	25.00
Oct- Dec	103	60	58.25
Overall	**228**	**114**	**50.0**

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. no.	Bull No.	Set No.	Total Number of AI	Total Conceived	CR%
1.	2459 P	15	1	1	100.0
2.	6007 P	15	4	1	25.0
3.	1053 P	16	11	4	36.36
4.	2383 P	16	13	8	61.54
5.	109 MR	21	23	9	39.13
6.	112 MR	21	23	9	39.13
7.	2990	21	11	7	63.64
8.	3014	21	2	1	50.0
9.	5414	21	2	2	100.0
10.	5629	21	21	15	71.43
11.	5638	21	19	11	57.89
12.	5690	21	5	2	40.0
13.	5764*	21	18	8	44.44
14.	7630	21	4	2	50.0
15.	7768	21	22	12	54.55
16.	7990	21	12	3	25.0
17.	8100	22	14	5	35.71
18.	8129	22	8	3	37.50
19.	8185	22	15	11	73.33
Overall			**228**	**114**	**50.00**

9.10 Bull Wise Semen Stock (April-2024 to March 2025)

S. No.	Bull No.	Centre	Opening balance on date 01.04.2024	Total semen received & produced	Utilization-NPBI				Total utilization	Closing Balance on date 31.03.25
					NDRI, Karnal		CIRB Hissar	Other utilization/ Sale		
					Main Unit	Field Unit				
21st set bull										
1	109	LUVAS	405	520	50	400			450	475
2	112	LUVAS	470		50				50	420
3	297	IVRI	965			450			450	515
4	5414	CIRB	925			400			400	525
5	5629	CIRB	740		50	400			450	290
6	5638	CIRB	690			400			400	290
7	5690	CIRB	370	520		525			525	365
8	5764 *	CIRB	490			50			50	440
9	5723 *	CIRB	260			250			250	10
10	2979 *	GADVASU	655			150			150	505
11	3014	GADVASU	545			300			300	245
12	2990	GADVASU	570			425			425	145

13	7630	NDRI	643	4000		300	1750		2050	2593
14	7990	NDRI	1060	3780		456	1750		2206	2634
15	7768	NDRI	2889	2260		500			500	4649
Proven	M-29	CIRB	0	25		4			4	21
Proven	2459	GADVASU	400		50				50	350
Proven	6007	NDRI	2506		50				50	2456
22nd set bull										
1.	3097	GADVASU		520	25	250			275	245
2.	3113	GADVASU		520	25	250			275	245
3.	3126	GADVASU		260	25	100			125	135
4.	5791	CIRB		520	25	200			225	295
5.	5814	CIRB		520	25	150			175	345
6.	5872	CIRB		100					0	100
7.	5912	CIRB		520	25	100			125	395
8.	8100	NDRI		4140	50	250	500		800	3340
9.	8129	NDRI		3380	50	50	500		600	2780
10.	8185	NDRI		1520	50				50	1470
11.	8198	NDRI		2080	50	100	500		650	1430
Proven	M-51	CIRB	30	25	0	0	0			55
Proven	2594	GADVASU	302	25					0	327
Total			**14915**	**25235**	**600**	**6460**	**5000**	**0**	**12060**	**28090**

**Discontinued their use from set*

9.11 Average Body weight (kg) since 1999 (Indicate number of animals in parenthesis)

Year	Birth	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC
Female							
Since 1999	31.32	65.00	104.62	171.67	251.95	333.05	559.23
Current year	31.62	65.70	107.60	178.37	257.50	348.80	555.40
Male					**Adults**		
Current year	33.40	83.40	107.87	156.25	197.50	388.60	-

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	29	2771.4	362.8	2515.0	13.26
2nd	13	2525.9	339.2	2388.5	13.42
3rd	8	2714.3	326.6	2584.0	13.93
4th	5	2515.9	314.4	2445.7	13.40
5th & above	13	2561.2	351.0	2385.1	13.57
Overall	68	2658.8	348.2	2469.0	13.44

9.12.1 Average production performance of Buffaloes since Inception of Network

Year	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1993-1994	2513.70 (117)	311.00 (117)	2351.80 (137)	-
1994-1995	2382.30 (128)	325.90 (128)	2270.10 (128)	11.70 (128)
1995-1996	2750.90 (106)	323.10 (106)	2576.10 (106)	14.20 (106)
1996-1997	2636.50 (105)	330.00 (105)	2423.10 (105)	13.20 (105)
1997-1998	2336.10 (128)	301.00 (128)	2191.20 (128)	11.80 (128)
1998-1999	2190.00 (112)	328.30 (112)	2032.60 (112)	11.10 (112)
1999-2000	1951.00 (095)	316.80 (095)	1822.40 (102)	11.10 (102)
2000-2001	2075.30 (116)	292.30 (116)	2019.10 (126)	12.00 (126)
2001-2002	2070.80 (085)	315.90 (085)	1963.20 (091)	11.80 (091)
2002-2003	2209.44 (072)	330.07 (072)	2000.67 (081)	12.01 (081)

2003-2004	2009.08 (077)	315.23 (077)	1897.08 (089)	10.93 (092)
2004-2005	2091.94 (080)	317.00 (080)	2025.00 (098)	10.86 (098)
2005-2006	2226.97 (126)	301.25 (126)	2159.06 (142)	12.41 (142)
2006-2007	2143.65 (099)	307.39 (099)	2053.77 (111)	11.80 (111)
2007-2008	2254.75 (112)	322.15 (112)	2094.16(127)	12.50(127)
2008-2009	2419.13 (081)	341.61 (081)	2256.01 (086)	12.43 (086)
2009-2010	2272.54 (077)	313.04 (077)	2221.61 (084)	12.08 (084)
2010-2011	2146.04 (125)	310.69 (125)	2014.70 (130)	11.24 (130)
2011-2012	2344.16 (67)	331.83 (67)	2191.83 (67)	10.67 (67)
2012-2013	2381.05 (78)	304.87 (78)	2255.81 (83)	11.56 (83)
2013-2014	2631.90 (82)	332.68 (82)	2430.91 (82)	11.98 (98)
2014-2015	2486.33 (119)	305.15 (119)	2223.57 (124)	12.86 (124)
2015-2016	2727.78 (118)	329.77 (118)	2523.32 (118)	14.10 (118)
2016-2017	2716.96 (87)	335.97 (87)	2535.51 (87)	13.36 (87)
2017-2018	2523±58.3 (96)	335.3±6.1 (96)	2386.7±44.8 (96)	13.00±0.2 (96)
2018-2019	2390.93 (123)	307.39 (123)	2318.78 (123)	12.10 (123)
2019-2020	2256.1 (106)	296.82 (106)	2184.1 (106)	12.80 (106)
2020-2021	2390±62.55 (90)	346.73±8.3 (90)	2198.75±41.48 (90)	12.21±0.13 (90)
2021-2022	2587.11±71.87 (85)	319.94±8.07 (85)	2435.74±58.10 (85)	13.99±0.19 (85)
2022-2023	2647.33±75.80 (70)	348.40±8.24 (70)	2453.96±55.86 (70)	13.47±0.12 (70)
2023-2024	2746.6±62.57 (64)	354.0±7.55 (64)	2553.4±53.0 (64)	13.81±0.12 (64)
2024-2025	**2658.8±73.92 (68)**	**348.2±7.49 (68)**	**2469.0±50.52 (68)**	**13.44±0.15 (68)**

9.12.2 Herd Life Production (up to ≥4th Lactation) during 2023-24

Animal No.	Date of Birth	Date of completion of ≥ 4th lactation	Date of 1st calving	LTMY	HLF Days	HPL Days	PL Days	UNPL Days	MY/ HLF	MY/ HPL
6109	11-09-2009	30-12-2024	21-06-2015	16240.0	5589	3480	2129	1347	2.91	3.84
6477	29-06-2012	20-08-2024	08-04-2016	17040.0	4435	3056	1901	1153	3.84	5.58
6503	10-08-2012	11-09-2024	15-10-2017	16450.0	4415	2523	1933	733	3.73	6.52
6610	25-02-2013	11-07-2024	19-02-2017	11056.0	4154	2699	1648	1142	2.66	4.10
6663	08-06-2008	11-09-2024	08-03-2013	12021.0	5939	4205	1862	1322	2.02	2.86
6682	02-02-2013	11-09-2024	31-12-2016	12258.0	4239	2811	1607	1313	2.89	4.36
6799	20-10-2013	31-10-2024	25-02-2017	18069.0	4029	2805	2122	683	4.48	6.44
6846	23-01-2014	15-05-2024	16-09-2017	14409.0	3765	2433	1746	907	3.83	5.92
6847	26-01-2014	12-10-2024	12-09-2017	15255.5	3912	2587	1918	671	3.90	5.90
6866	24-03-2014	31-10-2024	18-09-2017	9066.5	3874	2600	1233	1445	2.34	3.49
6905	31-05-2014	05-07-2024	28-11-2017	14964.5	3688	2411	1763	736	4.06	6.21
7112	09-07-2015	30-04-2024	17-10-2019	11582.5	3218	1657	1289	503	3.60	6.99
7130	30-07-2015	06-10-2019	06-10-2019	8330.0	3288	1759	1308	536	2.53	4.74
7162	02-09-2015	25-11-2024	26-12-2019	11632.0	3372	2161	1414	847	3.45	5.38
7204	08-06-2013	11-09-2024	06-10-2019	6673.0	4113	1802	907	980	1.62	3.70
7206	08-07-2013	11-09-2024	13-08-2016	9519.0	4083	2951	1366	1658	2.33	3.23
7289	05-08-2016	21-06-2024	10-08-2020	8296.5	2877	1411	1082	408	2.88	5.88
7363	16-05-2011	31-10-2024	16-05-2014	17290.5	4917	3821	2109	811	3.52	4.53
Average				**12786**	**4106**	**2621**	**1630**	**955**	**3.14**	**5.03**
Max				**18069**	**5939**	**4205**	**2129**	**1658**	**4.48**	**6.99**
Min				**6673**	**2877**	**1411**	**907**	**408**	**1.62**	**2.86**

HLF (Herd Life) = Date of birth to date of completion of 4th or more lactations or date of disposal
HPL (Herd Life) = Date of first calving to date of completion of 4th or more lactations or date of disposal
PL (Productive Days) = Total days in milk
UNPLF (Unproductive days) = Total days when buffalo not give milk from the date of first calving

9.13 Average Milk Compositions from 1st April 2024 to 31st March 2025

Month	No. of Animals	Fat (%) (Mean±SE)	SNF (%) (Mean±SE)	Total solids (%)	Protein (%)	Lactose (%)
Apr, 24	93	8.53±0.09	10.01±0.03	18.54	3.66	5.58
May, 24	83	8.35±0.09	10.07±0.03	18.42	3.72	5.65
Jun, 24	81	8.77±0.09	10.08±0.03	18.85	3.74	5.70
Jul, 24	75	7.84±0.10	9.97±0.03	17.81	3.76	5.71
Aug, 24	73	8.49±0.09	10.03±0.03	18.52	3.73	5.67
Sep, 24	63	8.13±0.12	10.13±0.04	18.26	3.80	5.81
Oct, 24	90	8.29±0.09	10.06±0.03	18.35	3.77	5.74
Nov, 24	89	8.15±0.08	10.09±0.03	18.24	3.75	5.70
Dec, 24	85	8.39±0.08	10.09±0.03	18.48	3.76	5.71
Jan, 25	96	8.14±0.08	10.04±0.03	18.18	3.75	5.69
Feb, 25	99	8.26±0.08	9.95±0.04	18.21	3.67	5.62
Mar, 25	105	8.24±0.08	9.91±0.03	18.15	3.61	5.59
Overall	**1032**	**8.30±0.09**	**10.04±0.03**	**18.33**	**3.73**	**5.68**

9.14: Reproductive Performance during the period 1st Apr, 2024 to 31st March 2025

Lactation / Parity	AFC (Months) (N)	SP (Days) (N)	Dry Period (Days) N	Calving Interval CI (Days) N
1	42.0 (44)	123.3 (24)	131.1 (18)	466.8 (18)
2		139.3 (19)	163.6 (6)	409.0 (6)
3		122.5 (6)	118.3 (9)	434.7 (9)
4		102.4 (5)	96.2 (5)	411.8 (5)
5th and above		114.8 (5)	137.1 (9)	455.2 (9)
Over all	**42.0 (44)**	**125.9 (59)**	**130.3 (47)**	**445.2 (47)**

Figures in parenthesis indicate the number (N) of animals

9.14.1 Reproduction Performance Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
1993-1994	45.50 (44)	148.63 (97)	123.26 (98)	428.02 (98)
1994-1995	46.00 (37)	119.70 (70)	103.18 (71)	428.20 (70)
1995-1996	43.84 (27)	114.79 (72)	113.03 (72)	422.64 (72)
1996-1997	46.81 (27)	114.33 (66)	96.06 (66)	423.27 (66)
1997-1998	44.84 (34)	96.80 (59)	93.49 (59)	394.68 (60)
1998-1999	46.24 (54)	118.24 (63)	108.50 (62)	424.40 (62)
1999-2000	42.60 (29)	159.18 (82)	113.94 (52)	435.19 (52)
2000-2001	42.40 (42)	107.10 (53)	111.50 (56)	407.70 (56)
2001-2002	44.03 (34)	123.56(77)	118.65 (43)	428.12 (43)
2002-2003	44.02 (20)	140.87 (59)	82.98 (31)	405.90 (31)
2003-2004	43.87 (62)	131.65 (117)	103.59 (37)	438.58 (37)
2004-2005	43.37 (47)	126.45 (93)	106.03 (35)	427.99 (35)
2005-2006	39.90 (36)	149.06 (68)	109.61 (54)	413.31 (54)
2006-2007	41.42 (50)	131.40 (80)	113.86 (50)	419.02 (50)
2007-2008	41.82 (42)	119.61 (84)	121.95 (55)	441.01 (55)
2008-2009	40.75 (31)	130.58 (61)	102.04 (21)	423.71 (21)
2009-2010	41.08 (25)	145.96 (62)	107.08 (30)	412.54 (30)
2010-2011	41.26 (50)	145.06 (76)	119.36 (44)	442.40 (44)
2011-2012	42.13 (24)	120.66 (87)	110.83 (56)	428.33 (56)

2012-2013	41.58 (29)	123.93 (69)	96.94 (55)	401.96 (55)
2013-2014	41.87 (36)	128.37 (73)	100.73 (48)	423.74 (48)
2014-2015	40.39 (35)	134.71 (71)	111.45 (40)	420.97 (40)
2015-2016	39.29 (24)	134.03 (92)	130.75 (92)	429.99 (92)
2016-2017	43.21 (29)	132.20 (54)	110.81 (27)	428.44 (27)
2017-2018	42.29 (35)	138.20 (49)	127.4 (33)	432.4 (33)
2018-2019	44.39 (41)	139.00 (77)	154.00 (77)	446.0 (77)
2019-2020	44.52 (37)	133.50 (60)	162.63 (60)	443.6 (60)
2020-2021	45.1 (26)	140.3 (39)	127.4 (39)	440.1 (39)
2021-2022	58.7 (35)	142.7 (27)	141.6 (27)	452.0 (27)
2022-2023	42.2 (40)	118.5 (28)	111.4 (28)	426.8 (28)
2023-2024	43.97 (38)	143.05 (17)	107.1 (17)	444.1 (17)
2024-2025	**42.0 (44)**	**125.9 (59)**	**130.3 (47)**	**445.2 (47)**

9.15 Milk Production and Disposal during the period Apr, 2024 - Mar, 2025

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April 2024	18540.5	Total milk produced was supplied to the milk plant, NDRI, Karnal		
May	15610.0			
June	13427.5			
July	12470.0			
August	12674.0			
September	18651.0			
October	22585.5			
November	21406.0			
December	25482.5			
January 2025	26684.5			
February	22646.5			
March	23373.0			
Total	233551.0			

9.16 Feed and fodder (Quintals) availability:

Months	Green fodder produced at Farm	Green fodder Purchased	Total
April, 24	12732.6	-	12732.6
May	10019.8	-	10019.8
June	9452.1	-	9452.1
July	11028.5	-	11028.5
August	12056.8	-	12056.8
September	11340.9	-	11340.9
October	8419.2	-	8419.2
November	7435.2	-	7435.2
December	6849.14	-	6849.14
January, 25	5106.94	-	5106.94
February	8165.92	-	8165.92
March	9356.11	-	9356.11
Total Green	**111963.21**	**-**	**111963.21**
Silage	1689.23	-	1689.23
Dry	7557.59		7557.59
Concentrate	9114.70		9114.70

9.17: Milk performance during during the period Apr, 2024- Mar, 2025

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 2024	87	53	140	62.14	7.9	4.9
May	83	50	133	62.41	8.6	4.6
June	75	58	133	56.49	8.7	3.8
July	73	61	134	54.48	8.0	3.3
August	76	67	143	53.15	7.7	3
September	83	72	155	53.55	7.3	3
October	94	57	151	62.25	7.3	3.9
November	89	67	156	57.05	7.9	4.8
December	87	70	157	55.41	7.0	4.6
January 2025	95	63	158	60.13	6.7	5.3
February	103	56	159	64.78	7.2	5.4
March	96	63	159	60.38	7.4	5.1
Total	**95**	**44**	**139**	**59.03**	**7.6 (68)**	**4.9 (139)**

9.17.1 Milking performance since inception

Year	No. of Animals in Milk	No. of Animals in Dry	Total No. of Animals	% in Milk	Wet Av. (kg)	Herd Av. (kg)
1993-1994	115	45	160	72.15	7.80	5.60
1994-1995	114	54	168	68.02	8.39	5.72
1995-1996	109	51	160	68.12	8.03	5.50
1996-1997	103	43	146	70.55	7.90	5.60
1997-1998	119	47	166	71.98	7.40	5.30
1998-1999	100	68	168	59.40	5.93	3.52
1999-2000	094	71	165	75.53	6.60	3.90
2000-2001	104	59	163	63.56	6.65	4.23
2001-2002	090	53	143	62.69	6.26	3.93
2002-2003	073	34	106	68.48	6.23	4.27
2003-2004	080	37	117	68.38	6.36	4.31
2004-2005	111	46	157	70.50	7.39	5.23
2005-2006	107	65	172	62.14	7.05	4.38
2006-2007	100	78	178	56.18	6.70	3.75
2007-2008	104	69	173	60.00	6.80	4.00
2008-2009	064	65	130	50.25	7.09	3.49
2009-2010	091	65	156	58.33	7.32	4.25
2010-2011	096	109	205	46.82	5.83	2.75
2011-2012	066	81	147	44.89	6.79	3.03
2012-2013	090	51	141	63.69	7.35	4.63
2013-2014	101	65	166	60.84	7.80	4.70
2014-2015	115	82	197	58.05	8.05	5.10
2015-2016	132	107	239	55.44	8.43	4.13
2016-2017	105	90	195	53.73	8.39	4.52
2017-2018	99	110	209	47.36	8.23	4.21
2018-2019	112	102	214	52.30	7.4	3.9
2019-2020	118	105	220	52.12	6.7	3.5
2020-2021	86	111	197	43.65	6.6	3.0
2021-2022	85	80	165	51.52	7.7	4.0
2022-2023	87	68	155	56.10	7.8	4.7
2023-2024	77	55	132	58.19	7.6	4.4
2024-2025	**95**	**44**	**139**	**59.03**	**7.6 (68)**	**4.9 (149)**

9.18: Bull wise daughters born (only numbers) during the period Apr, 2024- Mar, 2025

Set No.	Centre	Bull No.	Daughters born	Daughters Calved	Daughters completing 1st Lactation
15	NDRI	6007 P	1	-	-
16	CIRB	M-29 P	1	-	-
16	LUVAS	1053 P	6	-	-
16	GADVASU	2383 P	4	-	-
21	GADVASU	2930	1	-	-
21	GADVASU	2979	1	-	-
21	GADVASU	3014	5	-	-
21	CIRB	5414	4	-	-
21	CIRB	5629	5	-	-
21	CIRB	5638	9	-	-
21	CIRB	5690	8	-	-
21	NDRI	7630	1	-	-
21	NDRI	7768	10	-	-
21	NDRI	7990	3	-	-
		Total	**59**		

9.19 Bull wise daughters completing 1st lactation during the Period April 2024 to March 2025

Bull No.	Daughter No.	Date of birth	Date of calving	AFC (month)	Lact. Length (days)	TLMY (kg)	SLMY (kg)
4837(17)	7826	26-07-2019	09-10-2023	50.5	321	2187.5	2187.5
2565(17)	7844	22-08-2019	16-09-2023	48.8	362	2911.5	2758.0
2558(17)	7845	22-08-2019	01-12-2023	51.3	295	2009.5	2009.5
NK	7846	22-08-2019	20-03-2023	42.9	422	3623.0	2890.5
6942(17)	7851	28-08-2019	12-08-2023	47.5	384	2955.0	2726.5
6942(17)	7866	12-09-2019	20-02-2024	53.3	405	2978.0	2462.5
3267P(11)	7871	22-09-2019	20-08-2023	46.9	358	3012.0	2797.5
4733(17)	7887	10-10-2019	19-09-2023	47.3	359	2285.5	2100.0
7010(17)	7896	24-10-2019	01-09-2023	46.3	420	3098.5	2793.5
7010(17)	7898	26-10-2019	20-08-2023	45.8	438	2951.5	2344.5
2558(17)	7899	26-10-2019	05-12-2023	49.3	331	2383.0	2332.0
4995(18)	7916	14-12-2019	08-11-2023	46.8	477	3738.0	2947.0
4733(17)	7920	19-12-2019	22-07-2023	43.1	418	3264.0	2860.5
7094(18)	7921	20-12-2019	16-10-2023	45.9	500	3709.0	2846.5
7094(18)	7922	23-12-2019	30-08-2023	44.2	252	2114.5	2114.5
7094(18)	7923	23-12-2019	26-12-2023	48.1	430	3448.5	3016.0
7094(18)	7924	24-12-2019	11-08-2023	43.6	366	3641.0	3190.5
4733(17)	7965	24-01-2020	04-11-2023	45.4	313	2291.5	2291.5
183(12)	7971	05-03-2020	16-11-2023	44.4	410	3324.0	2957.0
183(12)	7972	08-03-2020	01-10-2023	42.8	365	3336.0	2966.5
7094(18)	7976	07-05-2020	17-07-2023	38.3	364	3362.0	2991.5
1150(18)	7978	07-06-2020	28-08-2023	38.7	363	2164.5	2026.0
4995(18)	7983	05-07-2020	29-08-2023	37.8	308	2729.5	2729.5
7094(18)	7985	10-08-2020	16-11-2023	39.2	270	1649.5	1649.5
1209(18)	7995	24-08-2020	27-09-2023	37.1	320	2596.0	2569.5
1209(18)	8007	07-09-2020	20-10-2023	37.4	328	2378.5	2373.5
7227(18)	8010	14-09-2020	21-01-2024	40.2	370	2479.5	2255.0
2689(18)	8020	10-10-2020	27-12-2023	38.6	293	1790.5	1790.5

2689(18)	8032	26-10-2020	26-03-2024	41.0	279	1960.5	1960.5
Average				**44.2 ± 0.83**	**362.7 ± 11.37**	**2771.4 ± 115.1**	**2515.1 ± 77.83**

Out of 29 bulls used, daughters of 22 bulls had given SLMY greater than 2700 kg in NDRI herd

9.20 Breeding bulls Selected for current set (22nd) during the period January, 2025- March, 2025

Sr. No.	Bull No.	Date of Birth	Sire No.	Dam No.	Dam's best SLMY
NDRI					
1	8100	01-08-2021	2357 PT	6871	3272/16.0
2	8129	20-09-2021	7604	7460	3125/14.0
3	8185	27-12-2021	2737	6774	3466/19.5
4	8198	14-02-2022	6044 PT	5620	3104/14.5

Breeding bulls Selected for current set (21st) during the period April 2024- December 2025

Sr. No.	Bull No.	Date of Birth	Sire No.	Dam No.	Dam's best SLMY
NDRI					
1	7630	05-09-2011	M-51	6852	3343 / 15.5
2	7768	01-02-2019	2607	6922	3323 / 16.5
3	7990	19-08-2020	183	6626	3991 / 18.0

9.20.1 PT Bulls for nominated mating during the period April 2024 to March 2025

Bull No.	Set No.	Centre	Dams' Best yield	Sire index/ Breeding Value	% Superiority
2459	15	GADVASU	4636	2587	1.58
6007	15	NDRI	3260	2588	1.61
1053	16	LUVAS	3559	2567	3.35
2383	16	GADVASU	4636	2547	2.53

9.20.2 List of breeding bulls as on 31.3.2025

Sr. No	Bull No.	DOB	Sire No.	Dam No.	Dam's best SLMY	Semen doses available
1.	6822	13-12-2013	2422	490	4187/305	3075
2.	6942	23-08-2014	4439	6627	3533/305	13481
3.	7094	08-04-2015	NK	6625	3465/305	8069
4.	7147	14-08-2015	NK	6631	3018/305	9844
5.	7227	04-01-2016	6044	5851	3099/305	1500
6.	7263	28-05-2016	6290	6625	3465/305	5488
7.	7450	14-05-2017	6409	6116	3570/305	-
8.	7465	08-08-2017	6646	6852	3343/305	937
9.	7524	28-11-2017	1053	6905	3518/305	-
10.	7542	27-12-2017	2133	5620	3104/305	-
11.	7584	30-07-2018	6253	6147	3600/305	3770
12.	7586	08-04-2018	2501	6946	3091/305	1158
13.	7590	17-04-2018	3591	6122	3590/305	-
14.	7604	18-06-2018	7010	6477	3158/305	-
15.	7630	05-09-2018	51	6852	3343/305	2593
16.	7649	15-10-2018	2558	6735	3203/305	5346
17.	7759	18-01-2019	2565	7251	3188/305	276
18.	7768	04-02-2019	2607	6922	3251/305	4649
19.	7784	17-03-2019	6942	6722	3234/305	1894
20.	7895	23-10-2019	2558	6795	3076/305	595
21.	7911	27-11-2019	7094	6478	2996/305	12

22.	7973	15-03-2020	183	6477	3158/305	-
23.	7990	19-08-2020	183	6626	3991/305	2634
24.	8049	24-11-2020	7147	7359	3085/305	112
25.	8054	25-11-2020	1219	6780	3006/305	-
26.	8080	04-04-2021	3591	6843	3050/305	195
27.	8082	25-02-2021	4905	7046	3228/305	285
28.	8092	27-09-2021	7604	6895	3177/305	130
29.	8100	01-08-2021	2357	6871	3272/305	3340
30.	8129	20-09-2021	7604	7460	3125/305	2780
31.	8149	10-10-2021	7604	6478	3243/305	440
32.	8150	12-10-2021	5246	7437	2966/305	320
33.	8159	02-11-2021	7604	7423	2880/305	589
34.	8164	05-11-2021	2357	6477	3158/305	320
35.	8185	27-12-2021	2737	6774	3466/305	1470
36.	8198	14-02-2022	6044	5620	3104/305	1430
37.	8200	25-02-2022	6044	7352	3015/305	-
38.	8249	04-09-2022	2759	6895	3177/305	-
39.	8295	18-11-2022	6007	7162	3011/305	-
40.	8311	13-01-2023	3004	7838	3029/305	-
41.	8318	18-02-2023	2848	7020	3055/305	-
42.	8319	23-02-2023	2848	7437	2966/305	-
43.	8343	30-03-2023	5427	7863	2988/305	-
44.	8344	31-03-2023	5427	7112	2998/305	-
45.	8358	22-07-2023	7649	7920	2861/305	-
46.	8362	10-08-2023	4354	6477	3158/305	-
47.	8363	11-08-2023	7584	7924	3191/305	-
48.	8364	12-08-2023	7584	7851	2727/305	-
49.	8392	15-09-2023	5427	7438	3013/305	-
50.	8393	16-09-2023	7584	7844	2758/305	-
51.	8400	27-09-2023	7649	7995	2570/305	-
52.	8402	01-10-2023	7584	7942	2967/305	-
53.	8411	20-10-2023	7584	8007	2374/305	-
54.	8416	08-11-2023	7649	7916	2947/305	-
55.	8425	02-12-2023	7584	7787	3005/305	-
56.	8435	26-12-2023	2850	7923	3005/305	-
57.	8438	05-01-2024	2850	7991	2994/305	-

9.21 Target achieved during the year during the period April 2024 to March 2025

Trait	Target	Achieved (2024-25)
Average Age at first calving (months)	40.0	42.0 (44)
Average Service period (days)	130.0	126 (59)
Calf mortality (0-3 months) in %	≤ 5 %	6.56 %
Wet average (kg)	≥8.5 kg	7.6 (68)
Herd average (kg)	≥5.5 kg	4.9 (139)

10. Salient Research Achievements:

Activity carried out during the period: The NDRI center is involved for genetic improvement of Murrah Buffalo breed along with other centers under Network Project on Buffalo Improvement

i) **Technical Programme:** The breeding programme in the Murrah herd was followed for test mating of 21st and 22nd set of bulls. Thirteen bulls from 21st set and three bulls from 22nd set were used till March 2025. Semen was received/collected from 3 bulls of 21st set and 9 bulls of 22nd set. Two bulls each of proven bulls from 15th set (bull #2459, 6007) and 16th set (bull # 1053, 2383) were used, in NDRI herd. The best total lactation yield ranged from 1548 to 4273 kg and 305-day milk yield of NDRI buffaloes ranged from 1548 to 3369 kg, at NDRI herd. The dam's best lactation 305-day milk yield of 2 bulls of NDRI under 21stset had ranged from 3323 to 3991 kg. Whereas, the dam's best lactation 305-day milk yield of 4 bulls of NDRI under 22nd set had ranged from 3104 to 3466 kg.

ii) Targets and Achievements: The herd strength of breedable buffaloes was 201 in 2024-25. Average age at first calving of buffaloes was 42.0 months. The average service period of buffaloes has been estimated as 126 days. The overall female conception rate in the herd was 50% for the buffaloes inseminated during Jan-Dec, 2023. The overall mortality (0-3 months) during the year was only 6.56%. The wet and herd average was 7.60 and 4.9 kg, respectively. The average Milk Fat, SNF, Total Solid, Protein and Lactose were estimated (n=1032) as 8.30±0.09, 10.04±0.03, 18.33, 3.73 and 5.58%, respectively. No. of Elite Murrah having 305 DLMY ≥ 2400 kg at NDRI herd as on 31.03.2025. Total 2,33,551 kg milk was produced by average 95 milch animals during the year.

Selection of bulls: At NDRI center a total of 21 young bulls with their dam's best 305 days' lactation milk yield of ranged from 3006 kg in any lactation to 3466 kg was reserved on the basis of Expected Predicted Difference and dam's best 305 day or less lactation milk yield, breed characteristics and physical conformity for selection of young male calves. Finally, 04 elite Murrah male calves were Selected during the period (2024-25) based on the recommendation of Bull Selection Committee constituted for the 22nd set.

Progeny Test Evaluation – Set-wise: The information on 305 days' milk yield of daughters completing first lactation during 2024-25 were collected and compiled for genetic evaluation of Murrah bulls. On the basis of 16th set evaluation out of 3 top ranking bulls, selected for nominated mating from 1st January 2025.

Technologies developed / Success story(s)

Supply of Quality germplasm: The NDRI Centre has produced a total 21160 doses of frozen semen, out of which 4075 doses from the bulls of 21st set and 22nd set were procured / produced during the period. The NDRI unit has supplied 7060 doses of frozen semen to the lead center and field units, out of which 6460 doses were supplied to its Field unit. A total of 12060 FSD were utilized for 21st set & 22nd set of bulls. In addition, doses of semen were supplied from ABRC for research purpose in the institute, through on counter sale to farmers, and to other dairy development organizations. The germplasm of genetically superior progeny tested proven bulls are being used on elite cows in organized herds for production of high-pedigreed bulls for further multiplication and production of superior germplasm and establishment of elite herds. Superior semen of proven and high-pedigreed bulls of NDRI center is being used by various dairy development agencies and dairy farmers for bringing genetic improvement of Murrah buffaloes.

Bulls for elite mating: The breeding programme in the herd was followed for nominated mating using semen of four proven Murrah Bulls. About 23 Murrah buffaloes were identified as elite animals, and the proven bulls were used on these elite buffaloes. The average best lactation milk yield of elite Murrah buffaloes was 2904 kg which was 17.59% higher than the herd average. The best lactation 305-day milk yield of elite Murrah buffaloes was 3368.5 kg. Forty-seven daughters and 59 male calves were born in the herd, out of which five females and three males were born to elite dams and proven sires.

11. Gaps/ Constraints, if any

a) The list of equipment under the capital funds may be provided in the beginning of the FY 2025-26 for its efficient utilization of the budget by the NDRI unit.
b) There is a noticeable lack of interest among young farmers in pursuing buffalo farming as a viable livelihood option.

12. Future programme

The efforts will continue to further improving the wet and herd average performance of buffaloes for achieving the targets specified in the project.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Closing Balance
Total	ICAR Share		ICAR Share	State Share	
30.52*	30.52*	30.52*	30.51250	0.00	(+) 0.00750

* Includes Rs. 3.50 lakh under SCSP

Herd Performance

Herd strength was 373 out of which 201 were breedable buffaloes (>2year). During the period 106 calving took place consisting of 47 males, 59 females, 4 still births and 09 abortions. The calf mortality (0-3 months) was reduced to 6.56%, in 2024-25 as compared to previous year (8.25%). Female conception rate was 50.00 percent. During the report period 25235 semen doses were produced and 12060 frozen semen doses were disseminated (supply to NPBI/sold/FPT unit). Closing balance of frozen semen doses from superior bulls at the centre 28090 are available.

Average total lactation milk production decreased from 2747 kg (64) to 2659 (68); 305 days or less days average milk yield decreased 2554 kg (64) to 2469 (68), Lactation length was 348 days (68) decreased as compared to previous year 354 days (64). Age at first calving was 42 months (44) as compare to previous year 43.97 months (38). Average service period iproved from 143 days (17) to 126 (59); average dry period increased from 107 days (17) to 130 days (47) and average calving Interval increased from 444 days (17) to 445 days (47). Wet average and herd average of buffaloes was 7.6 kg (68) and 4.9 kg (149) in 2024-25. During the report period 59.03 percent animals were in milk as compared to 58.19 percent in 2023-24.

Accomplishment and Targets Achieved:

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	45.10 (26)	58.7 (35)	42.2 (40)	43.97 (38)	42.00 (44)
Av. Service period (days)	130	140.3 (39)	142.7 (27)	118.5 (28)	143.05(17)	126 (59)
Calf mortality (0-3 months)	≤ 5%	4.07	7.44	3.77	8.25 %	6.56 %
Wet average (kg)	≥8.5 kg	6.60	7.70	7.80	7.60 kg	7.60 kg
Herd average (kg)	≥5.5 kg	3.00	4.00	4.70	4.40 kg	4.90 kg

Recommendations:

- Murrah herd strength should be increased at NDRI Unit so that considerable no. of breedable population can be maintained.
- Continuous efforts are needed to improve the milk production performance of buffaloes of NDRI Murrah herd.
- Emphasis should be given to disseminate more no. of semen doses from centre.

ICAR- INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR
Report Period: 2024-25

1. **Name of centre** : I.C.A.R.-I.V.R.I., Izatnagar
2. **Project Code** : OXX00185
3. **Project Title** : Network Project on Buffalo Improvement
   Subproject : Performance recording and improvement of Murrah buffalo
4. **Date of Start** : 01.07.1993
5. **Objectives** :

   i. To establish elite herd of 150 Murrah for the production of genetically superior young bulls.
   ii. To evaluate sires through institutional / associated herd progeny testing scheme
   III. To produce, test, propagate and conserve high genetic merit male germplasm.

6. **Technical Programme:**
   a) Establishment and maintenance of an elite herd of Murrah buffalo breed with a herd strength of 150 breedable females
   b) Selection and testing of minimum 15 bulls of Murrah breed in every 18 / 24 months cycle.
   c) Production of minimum 10,000 (Murrah) frozen semen doses from each test bull.
   d) Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.
   e) Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
   f) Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
   g) Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 210 days & 1500 kg in Murrah) and Peak yield, milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).
   h) Monthly testing of milk constituents (Fat%, SNF% and Protein%) and Somatic Cell Count, wherever feasible, at institutional herds.
   i) Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
   j) Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records.

7. **Staff associated with the project:**

Discipline	**Name of Scientist / Staff**	**Status PI/Co-PI/ Associated)**
AGB	Dr. A.K.S. Tomar, Pr. Scientist	Principal Investigator
	Dr. G.K. Gaur, Pr. Scientist	Project Associate (w.e.f. 2023-24 to 2024-25)
	Dr. A.K. Pandey, Pr. Scientist	Project Associate (w.e.f. 2022-23 to 2024-25)
	Dr. Anuj Chauhan, Sr. Scientist	Project Associate (w.e.f. 2024-25)
ARGO	Dr. S. K. Ghosh, Pr. Scientist	Project Associate
	Dr. M.K. Patra, Scientist	Project Associate (w.e.f. 2017-18 to 2024-25)
	Dr. Brijesh Kumar, Sr. Scientist	Project Associate (w.e.f. 2024-25)
ANFT	Dr. Narayan Dutta, Pr. Scientist	Project Associate
LPM	Dr. Triveni Dutt, Director	Project Associate
	Dr. H.O. Pandey, Sci. (LPM)	Project Associate (w.e.f. 2017-18)
Health / Others	Dr. (Er.) Mukesh Singh, Pr. Scientist (FMP)	Project Associate
	Dr. Devender Kumar, Sr. Scientist (LPT)	Project Associate (w.e.f. 2022-23)
	Dr. K. Mahendran, Scientist (Medicine)	Project Associate (w.e.f. 2021-22)
	Scientist - Division of Surgery (Rotational arrangement)	Project Associate

No. of staff	
Administrative staff	None
Technical staff	None
Contractual staff (~~RA / SRF~~ / YP-I, ~~YP-II~~)	One YP-1

8. Financial Statement: Head wise budget allocation and utilization; revenue receipts

Financial Year	Head wise Budget allocated (lakh Rs.)			Utilization (Lakh Rs.)			Revenue Generated (Lakh Rs.)
	Recurring contingency	Non-recurring (Equipment)	Total	Recurring contingency	Non-recurring (Equipment)	Total	
2024-25	26.00	7.25	33.25	25.84782	6.52076	32.36858	76.65000*
							12.05000**
Grand Total	**16.00**	**2.25**	**18.25**	15.48985	2.24898	**17.73883**	1.90000***

* Through sale of 153300 kg milk; ** Sale of 30 buffaloes *** Sale of 9500 frozen semen doses of Murrah buffalo by GP center

9.1 Herd Strength (2024-25)

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	Female								
1.	Below 3 months	7	45+9**	-	7	51*	-	-	3
2.	3-12 months	35	-	51*	3	43*	-	-	40
3.	1-2 years	39	-	43*	-	39*	-	-	43
	Above 2 years	42	-	39*	1	24*	-	-	56
4.	Buffaloes in Milk	82	20**	24*	4	39*	1	-	82
5.	Buffaloes Dry P /NP	54	-	39*	2	-	10	-	81
	Sub Total	**259**	**45+29**=74**	**250***	**17**	**250***	**11**	**-**	**305**
	Males								
1.	Below 3 months	7	48+11**		9	44*	-	-	13
2.	3-12 months	38	-	44*	1	40*	-	6	35
3.	1-2 years	19	-	40*	-	5*	6	13	35
	Above 2 years	8	-	5*	-	9*	-	-	4
4.	Breeding bulls	15	-	9*	-	2*	8	-	14
5.	Bullocks / Teasers /others	2	-	2*	-	-	-	-	4
	Sub Total	**89**	**48+11**=59**	**100***	**10**	**100***	**14**	**19**	**105**
	Grand Total	**348**	**93+40**=133**	**350***	**27**	**350***	**25**	**19**	**410**

OB = Opening Balance as on 1st April 21 D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T/* = Internal Transfer ** Purchased CB = Closing Balance as on 31st March

9.2 Calving statistics including abnormalities (2024-25)

Month	Male	Female	Still Birth	Abortion	ROP	Prolapse	Dystokia
April 24	2*	1+4*	-	-	-	-	-
May	-	-	-	-	-	-	-
June	1	1	-	-	-	-	-
July	6	9	-	2	-	-	-
August	7	8	-	1	-	-	-
September	6	6	-	-	-	-	-
October	9+4*	9+3*	-	1	-	-	-
November	4	1	-	-	-	--	-
December	4	6	-	-	-	-	-
January 25	11	4	1	-	-	-	-
February	-	-	1	-	-	-	-
March	5*	2*	-	1	-	-	-
Overall	48+11**=59	45+9**=54	2	5	-	-	-

Sex ratio (Male : Female)= 1.06 : 1.00

9.3. Disposal of Animals (2024-25)

Female	**Primary cause of disposal**							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves								
0 to 3 months	-	-	-	-	-	7	-	7
3-12 months	-	-	-	-	-	3	-	3
Heifers								
1-2 years	-	-	-	-	-		-	
> 2 years	-	-	-	-	-	1	-	1
Buffaloes								
Milch	-	-	1	-	-	2	-	3
Dry	-	2	8	-	-	4	-	14
Sub Total		**2**	**9**			**17**		**28**
Males	**Primary cause of disposal**							
Calves								
0 to 3 months	-	-	-	-	-	9	-	9
3-12 months	-	-	-	-	-	1	6	7
1 to 2 year	6	-	-	-	-	-	13	19
>2 year	-	-	-	-	-	-	-	-
Breeding bulls	8	-	-	-	-	-	-	8
Bullock/Teaser/ Others	-	-	-	-	-	-	-	-
Sub Total	**14**	**-**	**-**	**-**	**-**	**10**	**19**	**43**
Grand Total	**14**	**2**	**9**	**-**	**-**	**27**	**19**	**71**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Sex	**Female**						**Male**					**Overall Herd**
Class	**0-3 m**	**3-12 m**	**1-2 yr**	**> 2 yr**	**Milk + Dry**	**Overall Female**	**0-3 m**	**3-12 m**	**1 -2 Yr**	**>2 yr**	**Overall Male**	
No.	61	86	82	81	219	333	66	82	59	41	148	481
Died	7	3	-	1	6	17	9	1	-	-	10	27
%	**11.47**	**3.48**	**-**	**1.23**	**2.73**	**5.10**	**13.63**	**1.21**	**-**	**-**	**6.75**	**5.61**

Percent calf Mortality = 12.60% (16*100)/127

9.5. Causes of Mortality (quarter wise) during the period (2024-25)

Particulars	**1st quarter**	**2nd quarter**	**3rd quarter**	**4th quarter**	**Total**
Haemorrhagic Enteritis and Fibrinons Enteritis	1	1	1	4	7
Fungal Pneumonia, Pneumonia & Septicaemia	-	2	2	4	8
Rumen Ringer, Septicaemia	-	1	-	-	1
Still birth / NSD/bacterial infection/Premature birth/NSD	1	-	1	1	3
Autoyzed	-	-	2	-	2
P.M report not available	-	1	1	1	3
Anaplasmosis	-	1	-	-	1
Navefill	-	1	-	-	1
Nephritist cyshits	-	1	-	-	1
Pyclone Phrivlts	1	-	-	-	1
Pyothorax	-	1	-	-	1
Ganagrenouns Mastites	-	-	1	-	1
Total	**3**	**9**	**8**	**10**	**30**

9.6 Prophylactic measures undertaken (2024-25)

Vaccination	No. of animals		Screen-ing	No. of animals		No of animals treated for Parasitism etc.
	Available	Inoculated		Tested	Result	
F.M.D.	-	1070	Feacal	30	0 2 samples positive for Strongyle OVA and 01 positive for bacterial culture and sensitivity	Posnatal Coverage:110
H.S.	-	335	Blood Sample	33	Positive for anaplasma SPS-17, Positive for Babesia SPS-03	Coccidiostat:193
Brucella	-	31	Serum Biochemical test	7	LFT/KFT/Mineral profile	Ectoparasites: 321
LSD		304	LSD/ buffalo pox	1	No positive	Endoparasites: 588 Feed supplement: 135
			Milk sample	5	Positive for bacterial growth-03	Liq. Vitamin: 66
			Test for MAT/ Leptospirosis	1	Negative	
			Urine analysis/ Urine culture	1	Positive for bacterial growth	
			Tuberculosis test	1	Positive-01	
			Paratuberculosis test	1	Negative	

9.7. Female Conception Rate During the Period April 2024 to March 2025

AI No.→	1st			2nd			3rd			4th			5th & above			Overall		
Parity↓	**AIs**	**C**	**CR%**	**AIs**	**C**	**CR%**	**AIs**	**C**	**CR%**	**AIs**	**C**	**CR%**	**AIs**	**C**	**CR%**	**AIs**	**C**	**CR%**
Heifers	28	19	67.86	9	5	55.55	4	2	50	1	1	100	1	1	100	43	28	65.12
Adults	85	48	56.47	34	21	61.76	21	11	52.38	9	3	33.33	7	2	28.57	156	85	54.49
Overall	**113**	**67**	**59.29**	**43**	**26**	**60.47**	**25**	**13**	**52.00**	**10**	**4**	**40.00**	**8**	**3**	**37.50**	**199**	**113**	**56.78**

AIs = No. of animals inseminated; C = No. of animals conceived; CR % = Conception rate%

9.8 Quarter-wise conception rate (2024-25)

Quarter	No. of A I	Preg. animals	CR %
April – June 2024	09	03	33.33
July – September 2024	32	18	56.25
October- December 2024	86	54	62.79
January- March 2025	72	38	52.78
Overall	**199**	**113**	**56.78**

9.9. Bull wise conception rate (inseminated during April, 2024 to March 2025)

Sl. No	Bull No.	Set No.	Total No of AI	Total Conceived	CR %
1.	B-19	20th	3	2	66.67
2.	M-51	17th (PT)	5	1	20.00
3.	1053	17th (PT)	4	2	50.00
4.	1454	20th	6	4	66.67
5.	109	17th (PT)	16	12	75.00
6.	2793	20th	5	3	60.00
7.	112	20th	16	11	68.75
8.	297	20th	14	9	64.29
9.	2594	21st	2	1	50.00

10.	3014	21st	4	3	75.00
11.	2690	21st	3	1	33.33
12.	2990	20th	12	8	66.67
13.	5500	20th	12	7	58.33
14.	5505	20th	4	2	50.00
15.	5511	20th	4	3	75.00
16.	5638	21st	10	7	70.00
17.	5690	21st	14	6	42.86
18.	5723	21st	15	11	73.33
19.	5764	21st	13	6	46.15
20.	7584	20th	3	1	33.33
21.	5741	21st	1	0	00.00
22.	7768	21st	6	2	33.33
23.	7990	21st	12	7	58.33
24.	5791	22nd	6	1	16.67
25.	5872	22nd	4	1	25.00
26.	5912	22nd	5	2	40.00
Over all			**199**	**113**	**56.78**
No. of services per conception			**1.05 (199/113)**		

9.10 Bull Wise Semen Stock (April, 2024 to March, 2025)

Sl. No.	Set No.	Bull No	Opening balance (1st April, 2024	Semen Doses received	Doses used / Consumption	Balance (as on 31/03/2025)
1.	20th	B 1454	60		40	20
2.	20th	B 2793	51		37	14
3.	21st	B 297	-	100	85	15
4.	21st	B 2990	96		96	00
5.	20th	B 5481	30		20	10 (Discarded)
6.	20th	B 5500	34		25	09
7.	20th	B 5511	68		00	Discarded
8.	21st	B 5638	100		100	00
9.	21st	B 5690	80		67	13
10.	21st	B109	-	100	85	15
11.	21st	B112	-	100	100	00
12.	20th	B-19	50		20	30
13.	20th	B-2814	11		11	00
14.	20th	B-2850	45		25	20
15.	21st	B5723	86		82	04
16.	21st	B5764	80		80	00
17.	20th	B-7584	14		00	14
18.	20th	B7649	67		17	50
19.	21st	B7990	60		60	00
20.	22nd	M-3097	-	50	18	32
21.	22nd	M-3126	-	50	22	28.0
22.	22nd	M-3131	-	50	45	5.0
23.	22nd	M-5791	-	75	42	33
24.	22nd	M-5814	-	75	30	45
25.	22nd	M-5872	-	50	40	10
26.	22nd	M-5912	-	50	38	12
27.	**PT 17**	**M-51**	-	25	25	00
28.	**PT 17**	**M-2594**	-	25	25	00
Grand Total			**932**	**750**	**1235**	**379**

9.11.1 Average body weight (kg) since inception

Year	Birth	3 m	6 m	12 m	18 m	24 m	At AFC
Female							
1997-98	24.84±0.59 (19)	92.50±1.77 (18)	123.75±0.71 (12)	229.29±2.09 (14)	254.50±0.26 (10)	366.25±0.50 (8)	-
2002-03	29.10±0.98 (09)	80.00±7.35 (04)	107.08±7.22 (12)	195.62±10.32 (16)	277.14±10.53 (07)	347.27±13.71 (11)	-
2003-04	31.44±0.98 (17)	54.50±2.26 (10)	98.43±6.43 (16)	190.00±12.32 (11)	297.69±10.38 (13)	342.81±10.38 (16)	-
2004-05	30.44±1.06 (34)	59.00±3.13 (15)	95.00±8.05 (10)	175.00±11.30 (06)	271.66±12.91 (12)	381.00±13.24 (10)	-
2005-06	30.75±0.83 (29)	57.66±1.99 (15)	85.71±10.09 (21)	173.42±9.82 (19)	280.38±12.42 (13)	355.45±11.81 (11)	-
2006-07	31.39±0.89 (28)	59.44±2.69 (18)	94.33±4.84 (15)	180.76±9.53 (13)	268.68±9.59 (19)	355.75±10.10 (20)	-
2007-08	30.30±0.92 (29)	66.50±1.79 (30)	107.86±4.83 (28)	179.04±6.33 (26)	245.67±8.75 (15)	313.64±7.99 (11)	475.38±21.28 (13)
2008-09	30.45±0.58 (33)	63.40±2.06 (25)	100.00±3.41 (23)	178.25±8.03 (20)	241.11±10.11 (27)	319.29±11.42 (21)	477.81±18.97 (16)
2009-10	30.59±0.75 (37)	77.11±2.32 (26)	123.80±6.20 (21)	186.31±9.09 (19)	263.69±1176 (23)	343.75±14.64 (20)	509.00±18.49 (15)
2010-11	29.52±5.31 (34)	84.43±7.75 (16)	122.81±7.75 (16)	230.43±6.46 (23)	292.10±5.03 (38)	344.44±7.31 (18)	483.75±16.70 (20)
2011-12	32.09±0.96 (23)	58.18±2.94 (19)	114.69±4.97 (16)	223.06±9.42 (18)	311.25±7.65 (16)	377.90±6.53 (24)	498.44±16.72 (16)
2012-13	33.63±0.78 (24)	69.96±2.46 (24)	126.30±4.82 (23)	233.53±13.84 (17)	334.62±8.98 (13)	391.25±8.84 (16)	535.71±25.87 (07)
2013-14	32.83±1.13 (23)	65.41±2.79 (22)	121.96±4.38 (23)	253.04±10.54 (23)	330.45±8.49 (22)	409.69±10.64 (16)	539.58±23.83 (12)
2014-15	34.75±0.72 (29)	76.44±3.96 (27)	108.33±4.27 (15)	227.38±7.63 (21)	342.86±5.52 (21)	412.80±6.67 (25)	530.56±20.14 (18)
2015-16	30.69±1.30 (26)	63.11±2.13 (18)	96.14±2.94 (22)	205.54±7.78 (28)	311.46±11.05 (24)	411.50±8.44 (20)	505.56±27.33 (09)
2016-17	36.38±0.94 (29)	75.95±2.71 (22)	108.68±3.58 (19)	206.58±9.51 (19)	303.25±7.77 (20)	378.04±9.90 (28)	546.58±9.88 (19)
2017-18	33.46±0.99 (24)	76.42±1.80 (31)	111.55±2.94 (29)	200.00±5.43 (28)	295.23±10.43 (22)	378.89±10.57(18)	320.91±10.30 (23)
2018-19	33.71±0.66 (28)	72.46±2.79 (13)	118.20±2.58 (25)	215.00±6.42 (22)	303.97±5.18 (29)	392.14±6.58 (28)	647.06±14.97 (17)
2019-20	33.52±0.61 (29)	61.22±2.11 (32)	115.56±4.21 (27)	219.17±4.81 (30)	282.40±7.67 (25)	378.86±6.47 (22)	595.50±19.72 (20)
2020-21	34.04±0.95 (27)	81.96±2.94 (23)	120.33±2.93 (30)	181.61±5.11 (28)	273.15±5.95 (27)	340.69±7.15 (29)	565.43±14.92 (23)
2021-22	34.59±0.78 (29)	72.63±1.51 (27)	122.07±2.67 (29)	216.52±3.72 (27)	282.00±4.00 (30)	350.89±5.95 (28)	583.91±14.56 (23)
2022-23	34.33±0.64 (46)	69.26±1.50 (34)	108.79±3.03 (33)	209.04±5.44 (26)	275.36±6.75 (28)	350.37±5.77 (27)	590.22±11.58 (23)
2023-24	32.25±0.83 (44)	66.37±1.91 (41)	118.79±2.30 (39)	204.87±4.83 (39)	258.66±10.99 (32)	337.31±6.73 (26)	550.67±19.07 (15)
2024-25	32.07±0.62(45)	51.13±1.31 (39)	108.00±2.83 (46)	187.67±4.31 (43)	267.05±5.47 (39)	313.29±6.07 (38)	542.50±16.64 (20)
Male					**Adults**		
2002-03	29.00±0.80 (5)	82.00±8.77 (5)	-	-	-	-	
2003-04	31.89±0.84 (23)	62.50±2.53 (8)	99.06±6.43 (16)	203.33±23.60 (3)	355.00±21.61 (3)	390.00 (1)	
2004-05	34.60±1.17 (28)	62.20±2.43 (25)	100.33±6.57 (15)	200.83±11.30 (6)	-	355.00 (1)	
2005-06	32.64±0.77 (34)	58.23±1.87 (17)	107.61±10.09 (21)	199.61±11.87 (13)	280.38±12.42 (13)	383.00±17.52 (5)	
2006-07	32.56±1.01 (22)	68.12±2.86 (16)	102.27±5.66 (11)	210.71±12.99 (7)	290.00±29.57 (02)	360.00 (1)	
2007-08	30.71±0.85 (34)	68.97±1.57 (39)	116.54±4.09 (39)	214.67±8.33 (15)	314.00±15.15 (05)	390.00±11.86 (5)	
2008-09	31.70±0.53 (40)	61.61±1.85 (31)	103.15±3.14 (27)	185.79±8.24 (19)	230.00±21.45 (06)	392.50±37.01 (2)	
2009-10	30.70±0.83 (30)	70.00±2.65 (20)	101.47±6.89 (17)	189.16±8.09 (24)	275.31±14.11 (16)	319.00±29.28 (5)	
2010-11	31.15±5.39 (33)	73.00±6.46 (23)	123.87±5.57 (31)	220.66±8.00 (15)	292.22±7.31 (18)	360.00±13.87 (5)	
2011-12	33.42±0.83 (31)	69.23±2.61 (24)	132.77±4.68 (18)	230.00±14.13 (8)	305.00±21.63 (2)	-	
2012-13	37.53±0.71 (29)	68.91±2.52 (23)	126.95±5.30 (19)	235.00±52.18 (8)	-	-	
2013-14	33.91±0.93 (34)	76.55±2.35 (31)	128.33±4.28 (24)	241.50±15.98 (10)	290.00±23.01 (3)	-	
2014-15	38.12±0.74 (34)	78.39±1.89 (23)	111.52±4.08 (23)	219.55±12.60 (11)	-	340.00±65.00 (2)	
2015-16	33.70±0.99 (33)	71.73±2.16 (26)	104.48±3.75 (29)	248.33±11.33 (18)	383.33±44.10 (3)	-	
2016-17	37.11±1.09 (28)	73.35±2.74 (23)	117.41±4.10 (27)	238.64±8.18 (11)	389.55±9.08 (11)	437.50±12.50 (2)	
2017-18	32.05±1.70 (22)	79.30±2.70 (23)	113.10±4.33 (21)	191.32±8.14 (19)	291.00±9.71 (10)	367.50±17.50 (5)	
2018-19	35.90±0.81 (31)	77.23±2.33 (13)	127.50±3.24 (26)	225.71±9.97 (7)	320.00 (2)	-	
2019-20	34.71±0.82 (34)	66.16±2.40 (38)	111.91±3.15 (34)	201.17±5.91 (23)	298.00±9.70 (5)	-	

2020-21	35.02±0.62 (50)	76.53±1.80 (47)	118.06±2.85 (36)	194.81±6.73 (27)	282.00±11.89 (5)		
2021-22	36.55±0.92 (40)	77.58±1.59 (33)	121.42±2.40 (43)	210.03±4.10 (40)	271.33±10.62 (15)	-	-
2022-23	34.00±0.77 (38)	71.28±2.16 (29)	117.58±3.15 (38)	228.86±5.34 (35)	290.83±12.68 (6)	385.00±24.66 (3)	
2023-24	35.10±0.88 (48)	69.85±2.32 (41)	115.05±2.00 (42)	206.85±7.06 (27)	325.00±16.50 (12)	429.29±18.37 (7)	-
2024-25	33.42±0.94 (48)	52.93±1.68 (40)	115.21±2.77 (38)	203.63±4.78 (40)	271.58±10.17 (19)	388.33±31.14 (3)	
Overall Body Weight (in kg) at							
Year	**At Birth**	**3 Months**	**6 Months**	**12 Months**	**18 Months**	**24 Months**	**At AFC**
1992-93	26.30 (30)	60.78 (11)	120.30 (11)	201.43 (11)	265.31 (08)	350.41 (10)	-
1993-94	25.81±1.51 (16)	63.95±8.00 (19)	102.67±10.13 (15)	170.59±13.06 (17)	263.82±24.35 (17)	319.47±27.86 (09)	-
1994-95	25.97±0.71 (31)	51.52±2.39 (04)	77.12±1.39 (26)	148.82±3.66 (34)	217.00±7.88 (15)	284.05±7.32 (16)	-
1995-96	24.25±0.88 (08)	56.67±1.67 (03)	105.00 (01)	165.00±5.00 (05)	180.33±6.14 (15)	286.25±4.31 (24)	-
1996-97	24.38 (16)	86.67 (03)	117.50 (04)	217.50 (02)	248.15 (04)	368.00 (04)	-
1997-98	24.84 (19)	92.50 (18)	123.75 (12)	224.29 (14)	254.50 (10)	366.25 (08)	-
1998-99	26.98 (20)	89.50 (21)	125.41 (13)	220.00 (06)	240.30 (07)	350.81 (08)	-
1999-00	23.60±0.36 (20)	43.60±1.37 (10)	80.46±4.74 (11)	153.33±7.91 (09)	245.00±14.72 (07)	310.67±9.33 (15)	-
2000-01	24.36±0.39 (33)	50.55±3.71 (11)	99.28±3.14 (14)	195.00±5.44 (10)	261.50±8.43 (10)	342.50±9.40 (08)	-
2001-02	26.73±1.03 (11)	59.37±2.85 (08)	59.37±4.08 (09)	183.63±9.06 (11)	284.23±12.70 (13)	359.44±10.69 (09)	-
2002-03	29.10±0.98 (09)	80.00±7.35 (04)	107.08±7.22 (12)	195.62±10.32 (16)	277.14±10.53 (07)	347.27±13.71 (11)	-
2003-04	31.66 (40)	58.50 (18)	98.75 (32)	196.66 (14)	326.34 (16)	366.40 (17)	-
2004-05	32.52 (62)	60.60 (40)	97.66 (25)	187.91 (12)	271.66 (12)	368.00 (11)	501.50± (10)
2005-06	31.77 (63)	57.96 (32)	96.66 (42)	186.51 (32)	300.19 (20)	369.22 (16)	600.50± (10)
2006-07	31.98±0.67 (50)	63.78±1.96 (34)	98.30±3.72 (26)	195.74±8.05 (20)	279.34±15.54 (21)	357.87±23.15 (21)	588.37±15.69 (52)
2007-08	30.53±0.62 (63)	67.74±1.19 (69)	112.19±3.17 (67)	196.85±5.23 (41)	279.83±8.75 (20)	351.82±7.15 (16)	617.89±14.28 (57)
2008-09	31.07±0.39 (73)	62.51±1.38 (56)	101.57±2.32 (50)	182.02±5.75 (39)	235.56±11.86 (33)	355.89±19.37 (23)	477.81±18.97 (16)
2009-10	30.64±0.56 (67)	73.55±1.76 (46)	112.64±4.64 (38)	187.74±6.08 (43)	269.50±9.18 (39)	331.37±16.36 (25)	509.00±18.49 (15)
2010-11	30.34±3.79 (67)	78.71±5.04 (39)	123.34±4.77 (46)	225.55±5.14 (38)	292.16±4.43 (56)	352.22±7.84 (23)	483.75±16.70 (20)
2011-12	32.75±0.63 (54)	63.40±1.95 (43)	123.73±3.41 (34)	226.53±7.84 (26)	308.13±7.21 (18)	377.90±6.53 (24)	498.44±16.72 (16)
2012-13	35.58±0.53 (53)	69.43±1.76 (47)	126.63±3.57 (42)	234.26±11.42 (25)	334.62±8.98 (13)	391.25±8.84 (16)	535.71±25.87 (7)
2013-14	33.37±0.72 (57)	70.98±1.79 (53)	125.15±3.06 (47)	247.27±8.80 (33)	330.45±7.97 (25)	409.69±10.64 (16)	539.58±23.83 (12)
2014-15	36.57±0.56 (63)	77.34±2.29 (50)	110.26±2.96 (38)	224.69±6.53 (32)	342.86±5.52 (21)	407.41±8.00 (27)	530.56±20.14 (18)
2015-16	32.37±0.81 (59)	68.20±1.66 (44)	100.88±2.53 (51)	222.28±7.13 (46)	319.44±11.50 (27)	411.50±8.44 (20)	505.56±27.33 (9)
2016-17	36.74±0.71 (57)	74.62±1.91 (45)	113.80±2.87 (46)	218.33±7.23 (30)	333.87±9.55 (31)	382.00±9.65 (30)	546.58±9.88 (19)
2017-18	32.78± 0.96 (46)	77.65± 1.54 (54)	112.20± 2.47 (50)	196.49± 4.60 (47)	293.91± 7.71 (32)	377.75± 9.60 (20)	527.35±17.99 (23)
2018-19	34.86±0.54 (59)	74.85±1.84 (26)	122.94±2.16 (51)	217.59±5.42 (29)	305.01±4.89 (31)	392.14±6.58 (28)	647.06±14.97 (17)
2019-20	34.16±0.52 (63)	63.90±1.64 (70)	113.52±2.55 (61)	211.36±3.90 (53)	285.00±6.63 (30)	378.86±6.47 (22)	595.50±19.72 (20)
2020-21	34.68±0.52 (77)	78.31±1.57 (70)	119.09±2.04 (66)	188.09±4.26 (55)	274.53±5.32 (32)	340.69±7.15 (29)	565.43±14.92 (23)
2021-22	35.72±0.63 (69)	75.35±1.14 (60)	121.68±1.78 (72)	212.64±2.88 (67)	278.44±4.42 (45)	350.89±5.95 (28)	583.91±14.56 (23)
2022-23	34.18±0.49 (84)	70.19±1.28 (63)	113.49±2.24 (71)	220.41±4.02 (61)	278.09±6.00 (34)	353.83±5.90 (30)	590.22±11.58 (23)
2023-24	33.74±0.62 (92)	68.11±1.50 (82)	116.85±1.52 (81)	205.68±4.03 (66)	276.75±10.13 (44)	356.82±9.24 (33)	-
2024-25	32.76±0.57 (93)	52.04±1.07 (79)	111.26±2.02 (84)	195.36±3.31 (83)	268.53±4.92 (58)	318.78±6.68 (41)	542.50±16.64 (20)

9.12 Average Production Performance of Buffaloes Completing their Lactation (2024-25)

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	12	2241.13±81.68	389.33±11.26	1988.50±119.85	7.91±0.31
2nd	13	2211.30±89.42	327.15±12.01	2088.95±60.04	9.95±0.28
3rd	7	2397.30±134.81	323.86±20.85	2262.89±128.24	10.69±0.50
4th	7	2138.80±74.70	325.14±16.31	2065.80±68.13	9.09±0.42
5th & above	13	2247.55±127.51	322.77±17.21	2047.20±58.74	9.45±0.30
Overall	**52**	**2242.52±47.24**	**339.69±7.61**	**2075.63±39.95**	**9.34±0.19**

9.12.1 Average production performance of Buffaloes since Inception of Network

Year	Lact. Length (days)	TLMY (Kg)*	SLMY (kg)*	Peak yield (kg)
1992-93	297.91±9.24 (34)	1502.60±57.03 (34)	1457.72±48.65 (34)	07.88±0.35 (26)
1993-94	276.32±8.46 (28)	1557.30±57.07 (28)	1537.17±49.53 (28)	09.05±0.33 (30)
1994-95	259.25±6.62 (32)	1546.66±51.03 (32)	1535.94±40.61 (32)	09.58±0.30 (35)
1995-96	323.15±7.65 (27)	1522.72±55.66 (27)	1456.50±51.77 (27)	07.40±0.39 (21)
1996-97	341.10±13.41 (20)	1738.33±94.52 (20)	1629.27±76.30 (20)	07.91±0.38 (23)
1997-98	320.35±19.41 (23)	1830.99±119.31 (23)	1714.57±95.93 (23)	08.34±0.39 (22)
1998-99	320.05±12.09 (22)	1980.32±97.68 (22)	1980.32±97.68 (22)	08.45±0.39 (21)
1999-00	309.94±11.65 (18)	2106.83±107.58 (18)	2025.83±98.47 (18)	09.78±0.35 (26)
2000-01	277.15±27.11 (20)	2011.15±169.51 (20)	1897.80±147.16 (20)	10.56±0.39 (22)
2001-02	317.42±9.75 (28)	2090.67±78.93 (28)	2101.89±75.21 (19)	10.12±0.36 (28)
2002-03	298.55±9.95 (05)	1999.43±88.39 (55)	2043.49±66.45 (55)	10.73±0.45 (55)
2003-04	306.51±14.68 (26)	2070.94±98.94 (26)	2103.31±118.1 (26)	10.99±0.68 (26)
2004-05	299.05±8.98 (31)	2182.47±92.90 (31)	2216.03±86.06 (31)	11.25±0.47 (31)
2005-06	307.66±9.70 (45)	2166.92±92.42 (45)	2217.55±89.44 (32)	09.96±0.62 (45)
2006-07	319.85±6.96 (43)	2338.20±89.28 (43)	2412.86±88.60 (27)	11.00±0.43 (43)
2007-08	296.51±3.93 (56)	2379.09±66.65 (56)	2525.47±109.09 (28)	11.89±0.33 (56)
2008-09	291.89±4.87 (43)	2257.76±49.49 (43)	2208.95±106.07 (16)	11.00±0.28 (43)
2009-10	298.50±6.77 (51)	2418.25±77.48 (51)	2570.48±91.81 (26)	11.82±0.35 (51)
2010-11	286.40±4.89 (56)	2157.78±64.94 (56)	2136.48±63.14 (56)	11.16±0.38(56)
2011-12	308.75±7.72 (49)	2208.41±70.08 (49)	2276.82±82.85 (27)	11.54±0.37(49)
2012-13	316.43±8.41(38)	2249.40±8.46 (38)	2242.31±108.05(20)	11.01±0.34(38)
2013-14	304.27±7.95 (47)	2113.36±56.07 (47)	2037.79±62.44 (47)	11.52±0.25 (47)
2014-15	288.81±8.02 (53)	2188.82±55.81 (53)	2135.85±51.77 (53)	10.89±0.31 (53)
2015-16	298.47±8.99 (51)	2382.24±74.18 (51)	2301.49±65.44 (51)	12.30±0.35 (51)
2016-17	305.09±8.04 (55)	2280.66±80.82 (55)	2194.19±72.83 (55)	10.96±0.34 (55)
2017-18	320.76±11.12 (50)	2178.88±82.43 (50)	2128.58±56.25 (45)	10.14±0.30 (50)
2018-19	344.43±15.43 (40)	2387.44±84.17 (40)	2204.67±68.49 (40)	10.54±0.28 (40)
2019-20	325.92±8.43 (63)	2404.94±65.15 (63)	2307.40±50.75 (60)	11.04±0.24(63)
2020-21	349.51±10.77 (57)	2410.76±50.44 (57)	2224.41±37.11 (57)	10.63±0.24 (57)
2021-22	339.53±7.99 (59)	2420.25±58.80 (59)	2272.70±44.35 (59)	11.01±0.34 (59)
2022-23	351.96±8.76 (80)	2414.00±56.86 (80)	2220.75±41.52 (80)	10.58±0.24 (80)
2023-24	333.09±7.36 (65)	2365.26±55.95 (65)	2269.79±45.51 (65)	11.23±0.24 (65)
2024-25	339.69±7.61 (52)	2242.52±47.24 (52)	2075.63±39.95 (52)	9.34±0.19 (52)

9.12.2 Herd Life Production (up to 4th Lactation) during 2024-25

Period	LTMY (kg)	Productive Life (d)	Productive Days (d)	Unproductive Days (d)	MY/day of HFL (kg/d)	Herd Life (d)	MY/day of Productive Life (kg/d)
2017-18	12853.87	2599.74	1719.32	880.42	3.33	3874.26	5.14
2018-19	13721.90	2680.92	1805.25	875.67	3.50	3895.50	5.21
2019-20	13804.73	2707.04	1864.44	842.60	3.53	3904.96	5.28
2020-21	12408.70	2516.67	1715.00	801.58	3.30	3688.88	4.99
2021-22	12761.10	2474.68	1733.00	741.77	3.46	3666.91	5.16
2022-23	12861.92	2471.15	1726.92	744.23	3.42	3693.73	5.20
2023-24	12301.90	2424.68	1659.00	765.53	3.31	3654.18	5.14
2024-25	12211.40	2548.62	1710.00	838.31	3.17	3787.38	4.80

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. or date of disposal); Productive Days (date of first calving to total days in milk), Unproductive days (total days when buffalo not give milk from the date of first calving)

9.13 Average Milk Composition from April 2024 to March 2025

Month	No. of Samples	% Fat	SNF (%)	Total Solids (%)
April, 2024	67	7.22	9.48	16.33
May, 2024	56	6.91	9.5	16.46
June, 2024				
July, 2024	47	6.69	9.8	15.88
August, 2024				
Sept., 2024	48	6.92	9.26	16.18
October, 2024				
Nov., 2024	20	6.94	9.36	16.3
Dec., 2024				
January, 2025				
February, 2025	54	6.56	9.21	15.77
March, 2025	0	0	0	0
Overall	**292**	**6.87**	**9.33**	**16.15**

9.14 Reproductive Performance (2024-25)

Lactation / Parity	AFC (m)	N →	SP (days)	DP (days)	CI (days)
1	41.09±1.20 (20)	-	-	-	-
2	-	11	142.73±19.92	281.45±47.29	440.73±21.69
3	-	13	161.00±18.65	162.46±21.53	466.54±18.56
4	-	7	120.57±26.39	146.57±19.63	429.57±25.97
5	-	14	114.79±14.75	171.93±23.67	418.86±15.78
≥6		15	151.20±21.49	170.47±26.49	451.47±25.20
Overall	41.09±1.20 (20)	60	**139.70±8.94**	**186.63±14.15**	**442.60±9.66**

9.14.1 Reproduction Performance Since inception of Network

Years	AFC (m)	Service Period (d)	Dry Period (d)	Calving Interval (d)
1992-93	33.61±1.72 (10)	119.67±33.72 (08)	129.86±10.63 (07)	403.63±21.77 (08)
1993-94	39.38±2.99 (07)	100.90±16.01 (10)	133.15±12.72 (13)	406.08±16.77 (12)
1994-95	38.27±1.70 (10)	77.33±05.56 (09)	129.10±09.72 (20)	377.00±08.00 (20)
1995-96	37.90±1.08 (14)	100.00±11.78 (06)	118.71±11.77 (07)	401.14±16.55 (07)

1996-97	42.08±3.38 (04)	125.14±11.23 (07)	146.00±38.31 (08)	424.00±23.55 (07)
1997-98	40.14±3.38 (06)	82.55±06.54 (11)	101.73±25.10 (11)	391.55±13.11 (11)
1998-99	43.42±2.28 (08)	152.50±25.80 (11)	12.58±08.87 (10)	437.83±15.33 (10)
1999-00	48.80±7.03 (06)	189.82±28.65 (16)	110.36±13.67 (11)	422.46±21.47 (11)
2000-01	42.37±2.81 (04)	164.94±22.66 (17)	126.66±10.74 (09)	410.78±13.05 (09)
2001-02	44.35±2.58 (11)	134.25±24.63 (12)	134.00±15.33 (12)	440.52±23.81 (12)
2002-03	41.20±2.90 (04)	404.60±96.25 (05)	310.77±54.92 (09)	585.50±69.01 (04)
2003-04	41.82±3.19 (08)	108.36±15.51 (19)	256.81±35.81 (29)	553.20±36.24 (29)
2004-05	42.55±1.75 (08)	149.71±15.59 (30)	212.75±29.94 (37)	480.71±28.12 (37)
2005-06	42.25±2.43 (10)	179.91±28.47 (54)	204.41±41.40 (38)	477.45±42.50 (37)
2006-07	41.87±2.26 (10)	139.01±15.40 (40)	171.09±21.44 (28)	452.42±21.30 (30)
2007-08	45.84±0.96 (28)	114.97±07.56 (62)	150.33±19.04 (43)	443.24±21.39 (43)
2008-09	39.73±1.79 (48)	152.44±11.71 (48)	167.02±10.70 (48)	451.51±10.57 (48)
2009-10	41.32±4.73 (15)	121.77±11.25 (59)	154.69±14.01 (63)	444.64±13.01 (63)
2010-11	39.59±1.16 (25)	175.27±16.26 (26)	183.24±21.07 (60)	449.08±15.74 (60)
2011-12	45.61±3.21 (20)	152.91±20.66 (29)	207.38±22.22 (39)	460.89±17.90 (39)
2012-13	39.69±2.79 (07)	213.49±26.37 (30)	232.93±21.36 (31)	479.29±22.88 (31)
2013-14	38.20±2.15 (18)	140.07±12.79 (39)	170.63±11.86 (39)	470.87±14.03 (39)
2014-15	37.64±1.33 (18)	123.84±10.72 (55)	162.27±16.31 (44)	439.48±15.97 (44)
2015-16	40.23±2.64 (09)	142.02±14.76 (51)	148.24±11.26 (49)	447.37±15.72 (49)
2016-17	38.99±1.15 (19)	145.85±9.53 (52)	171.45±13.54 (40)	457.65±15.02 (40)
2017-18	38.64±1.16 (14)	140.77±15.44 (35)	158.53±11.18 (40)	482.80±19.53 (35)
2018-19	38.62±1.05 (16)	169.22±15.96 (46)	181.47±13.70 (36)	495.83±18.93 (36)
2019-20	39.24±2.11 (20)	172.68±19.55 (47)	169.11±14.95 (47)	448.70±12.77 (47)
2020-21	39.03±0.84 (23)	137.24±11.09 (50)	154.76±11.14 (50)	434.22±11.67 (50)
2021-22	39.38±1.30 (23)	140.78±11.24 (46)	131.87±5.72 (46)	443.07±9.28 (46)
2022-23	39.15±1.23 (23)	140.15±10.29 (46)	139.28±09.07 (46)	456.17±11.73 (46)
2023-24	40.57±1.12 (15)	140.02±11.34 (48)	125.27±6.48 (48)	448.46±10.92 (48)
2024-25	41.09±1.20 (20)	139.70±8.94 (60)	186.63±14.15 (60)	442.60±9.66 (60)

9.15 Milk Production and Disposal (2024-25)

Month	**Total milk produced (kg)**	**Disposal (Kg)**		
		Milk sold	**Calf feeding**	**Expt.**
April, 2024	12422.0	The whole milk was given to DT Section (LPT) for disposal		
May, 2024	10755.0			
June, 2024	9009.0			
July, 2024	9110.0			
August, 2024	10004.0			
Sept., 2024	10306.0			
October, 2024	13485.0			
Nov., 2024	14237.0			
Dec., 2024	15230.0			
January, 2025	17173.0			
February, 2025	15629.0			
March, 2025	15940.0			
Total	**153300.0**			

9.16 Feed and fodder (Quintals) availability (2024-25)

Quarter	Type of fodder	Qty. produced at Farm	Qty.* Purchased	Actually fed (Qtls)*	Balance
I	Green /Semi Dry	-	-	2966.0	-
	Dry	-	-	555.4	-
	Silage	-	-	-	-
	Concentrate	-	-	584.1	-
II	Green /Semi Dry	-	-	5095.7	-
	Dry	-	-	393.8	-
	Silage	-	-	-	-
	Concentrate	-	-	362.4	-
III	Green /Semi Dry	-	-	4225.7	-
	Dry	-	-	616.4	-
	Silage	-	-	-	-
	Concentrate	-	-	644.6	-
IV	Green /Semi Dry	-	-	6490.9	-
	Dry	-	-	847.3	-
	Silage	-	-	-	-
	Concentrate	-	-	714.9	-
Total	**Green /Semi Dry**	**-**	**-**	**18778.3**	**-**
	Dry	**-**	**-**	**2412.9**	**-**
	Silage	**-**	**-**	**-**	**-**
	Concentrate	**-**	**-**	**2306.0**	**-**

*Concentrate mixture supplied/purchased by F.T. Unit of Institute

Table 9.17 Milk performance during (April 2024- March 2025)

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April, 2024	85.07	52.90	140.00	60.90	4.87	2.96
May, 2024	70.13	60.90	131.00	53.50	4.96	2.65
June, 2024	59.63	70.50	130.13	45.82	5.03	2.30
July, 2024	62.39	69.30	132.00	47.40	4.71	2.23
August, 2024	70.03	65.40	135.00	51.70	4.62	2.38
Sept., 2024	73.37	64.83	138.00	53.09	4.69	2.49
October, 2024	85.13	58.30	144.00	59.30	5.10	3.02
Nov., 2024	88.07	62.70	150.73	58.40	5.39	3.15
Dec., 2024	76.71	77.10	151.32	50.69	6.41	3.25
January, 2025	89.58	68.23	155.61	57.57	6.19	3.56
February, 2025	89.64	65.03	157.00	57.10	6.23	3.56
March, 2025	89.38	75.63	162.58	54.98	5.75	3.16
Overall	**78.26**	**65.90**	**143.95**	**54.20**	**5.33**	**2.89**

9.17.1 Milking performance since inception

Year	No. of Animal in Milk	No. of Animal Dry	Total Animal	% in Milk	Wet Ave. * (kg)	Herd Ave. * (kg)
1992-93	22.44	13.56	36	62.33	4.31	2.68
1993-94	38.15	25.85	64	59.60	4.62	2.75
1994-95	38.62	44.38	83	46.53	3.90	1.81
1995-96	29.17	41.83	71	41.08	3.63	1.49
1996-97	28.20	31.80	60	47.00	4.19	1.96
1997-98	26.67	23.33	50	53.34	4.84	2.58
1998-99	20.30	22.70	43	47.20	5.79	2.73
1999-00	22.64	11.36	31.70	71.41	4.77	4.17

2000-01	26.97	10.03	38.73	69.63	5.42	3.80
2001-02	32.61	19.17	51.78	59.80	5.82	3.64
2002-03	33.64	29.98	63.62	51.75	4.94	2.47
2003-04	36.82	54.79	91.61	39.67	5.94	2.46
2004-05	37.68	53.90	91.58	40.95	5.99	2.53
2005-06	45.64	53.22	98.87	46.16	6.14	3.07
2006-07	41.42	35.33	76.75	53.96	6.15	3.42
2007-08	62.03	33.16	93.23	66.53	5.98	4.05
2008-09	53.45	31.23	84.69	63.12	6.69	4.27
2009-10	45.28	41.66	86.94	52.08	6.68	3.34
2010-11	46.67	43.33	90.00	51.85	5.88	3.14
2011-12	40.68	31.56	72.27	57.44	5.82	3.39
2012-13	39.16	23.08	62.25	62.92	5.66	3.59
2013-14	44.94	22.84	67.78	65.97	5.85	3.91
2014-15	42.93	23.36	66.05	65.15	6.80	4.49
2015-16	43.61	21.88	65.47	66.49	6.48	4.33
2016-17	46.02	27.42	73.25	62.85	6.00	3.77
2017-18	50.51	27.73	78.34	64.52	5.77	3.72
2018-19	49.95	22.98	72.42	67.64	6.43	4.40
2019-20	62.99	34.96	98.15	63.96	5.95	3.81
2020-21	67.88	36.38	104.99	65.14	5.84	3.88
2021-22	71.67	38.66	110.38	64.76	5.86	3.84
2022-23	70.99	42.28	113.30	62.71	5.99	3.76
2023-24	75.95	47.85	123.55	61.20	5.45	3.34
2024-25	**78.26**	**65.90**	**143.95**	**54.20**	**5.33**	**2.89**

9.18 Bull wise daughters born (only numbers)

Bull No.	Set No	Daughters born	Daughters Calved	Daughters completing 1st Lactation
19	20	817 (1)	-	-
2629	--	819 (1)	-	-
5481	20	822,902 (2)	-	-
7680	--	823 (1)	-	-
3014	21	824,832,872* (3)	-	-
2979	21	826,833,844,851,854 (5)	-	-
3014	21	828,862,867 (3)	-	-
7630	21	829*,852,857,863,868 (5)	-	-
5505	20	834 (1)	-	-
5629	21	837,839,845,846,874 (5)	-	-
2630	-	840 (1)	-	-
5414	21	842,848,861 (3)	-	-
7768	21	858,869,892,893 (4)	-	-
1053	16	898 (1)	-	-
1454	20	899 (1)	-	-
7584	20	901 (1)		
5500	20	903*,904 (2)		
7990	21	905,910 (2)		
5723	21	916* (1)		
5764	21	921*,923 (2)		

* Died

9.19 Bull wise daughters completing 1st lactation

Sl. No.	Bull No.	Daughter number	Date of Birth	Date of Calving	AFC (days)	Lact. ength (d)	TLMY (kg)	SLMY (kg)	Remarks
1.	B1-330	460/19	7/11/2019	29/11/2023	1483	147	719.3	-	Died on 21/10/24
2.	B1-330	437/19	09/09/2019	14/11/2023	1527	351	1731.6	1649.9	
3.	7094	556/21	01/04/2021	27/03/2024	1091	28	-	-	
4.	M-53	432/19	22/08/2019	27/07/2023	1435	335	1698.1	1680.9	
5.	4715	465/19	17/11/2019	25/09/2023	1408	275	1773.9	-	
6.	4715	454/19	20/10/2019	09/10/2023	1450	387	2674.2	2370.7	
7.	1053	343/18	14/07/2018	20/07/2023	1832	387	2466.5	2246.8	
8.	1150	546/20	25/12/2020	21/11/2023	1061	294	1684.7	-	
9.	1150	545/20	19/02/2020	02/07/2024	1594	263	1643.8	-	
10.	2645	503/20	08/09/2020	06/08/2024	1428	44	76.3	-	
11.	2645	528/20	13/11/2020	02/12/2023	1114	349	2108.3	2011.7	
12.	4905	476/19	21/12/2019	21/09/2023	1370	384	2185.2	2066.3	
13.	4905	574/21	18/08/2021	28/08/2024	1106	42	165.8	-	
14.	4905	551/21	12/01/2021	02/03/2024	1145	347	2310.9	2226.5	
15.	4905	550/21	03/01/2021	29/10/2024	1395	144	873.3	-	
16.	2994	425/19	31/07/2019	14/10/2023	1536	372	1825.5	1722.7	
17.	2607	453/19	18/10/2019	15/07/2023	1366	476	2191.2	1821.3	
18.	2607	448/19	06/10/2019	08/09/2023	1433	418	2231.7	1942.3	
19.	4995	539/20	10/12/2020	24/09/2023	1018	402	1909.1	1604.9	
20.	1219	529/20	14/11/2020	17/10/2023	1077	369	1998.2	1821.6	
21.	5147	489/20	16/07/2020	19/01/2024	1282	285	1508.7	-	
22.	5147	505/20	08/09/2020	06/10/2024	1489	40	68.0	-	
23.	2594	427/19	02/08/2019	18/11/2023	1569	378	2331.5	2113.0	
24.	2269	498/20	22/08/2020	12/09/2023	1116	456	2730.5	2170.5	
25.	4733	446/19	07/02/2022	23/12/2024	1461	434	2550.5	2175.3	
26.	2674	623/22	07/02/2022	23/12/2024	1050	33	135.9	-	
27.	2677	568/21	09/08/2021	21/01/2025	1261	50	83.0	-	

9.20 Breeding bulls selected for current set (22nd set)

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dam's best SLMY/PY
1	374	18/09/2018	1012	4733 Set - 16	3270/16.0
2	596	27/10/2021	1012	2677 Set – 18	3270/16.0

9.20.1 PT Bulls for nominated mating

Bull No.	Set No.	Centre	Dams' Best yield	Rank	Breeding Value	% Superiority
M-51	Proven (17th set)	-	-	-	-	-
M-2594	Proven (17th set)	-	-	-	-	-

9.20.2 List of Future breeding bulls (as on 31.03.2025)

Sr. No.	Bull No.	Date of birth	Dam No.	Sire No.	Dams best SLMY (kg) / Parity	Semen doses available	Expected predicted Difference (EPD)
1.	235/2016	24/05/2016	1012	4363	3270.0/II	-	-
2.	374/2018	18/09/2018	1012	4733	3270.0/II	-	-
3.	456/2019	02/11/2019	720	183	3267.5/II	-	-
4.	499/2020	24/08/2020	1088	2269	3242.6/II	-	-
5.	532/2020	18.11.2020	1091	2671	3034.5/II	-	-
6.	536/2020	03.12.2020	128/14	1219	3075.6/I	-	-
7.	555/2021	30.03.2021	132/14	5147	3445.1/III	-	-
8.	596/2021	27.10.2021	1012	2677	3275.0/II	-	-

9.	633/2022	08.06.2022	132/14	7604	3445.1/III		
10.	683/2022	11.12.2022	293/17	7584	3376.2/I		
11.	729/2023	30.7.2023	1012	1454	3275.0/II		
12.	775/2023	30.102023	128/14	2793	3075.6/I		

9.21 Target achieved during the year 2024-25

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	39.03± 0.84 (23)	39.38± 1.30 (23)	39.15± 1.23 (23)	40.57 ±1.12 (15)	41.09±1.20 (20)
Av. Service period (days)	90/130	137.24±11.09 (50)	140.78±11.24 (46)	140.15±10.29 (46)	140.02±11.34 (48)	139.70±8.94 (60)
Calf mortality	≤ 5 %	0.00 %	2.63 %	9.68 %	7.08 %	12.60
Wet average (kg)	≥8.5 kg	5.84 kg	5.86 kg	5.99 kg	5.45 kg	5.33 kg
Herd average (kg)	≥5.5 kg	3.88 kg	3.84 kg	3.76 kg	3.34 kg	2.89 kg

10. Salient Research Achievements:

(a) Herd Strength: The opening balance (herd strength) of Murrah buffaloes as on 01/04/2024 was 348 (89 males and 259 females). Additions in the herd were due to birth of 45 female and 48 male calves (93 calves), in addition to, purchase of 20 adult buffaloes (along with 9 female and 11 suckling male calves). Deletions from the herd were due to death of 27 buffaloes (17 females and 10 males), external transfer of 19 males and auction/sale of 25 buffaloes (11 females and 14 males). In all, 52 animals were deleted from the herd due to various reasons, whereas 133 animals were added due to new births and purchase. The new calvings showed a peak of 18 calvings during October, 2025. There were no calvings during May, 2024, February and March, 2025. The male: female ratio of new calvings was 1.06:1.00. The closing balance of the buffalo herd as on 31/03/2025 was 410 buffaloes (305 females and 105 males, Table 9.1 and 9.2).

Out of total 25 animals culled/sold during the current year, Table 9.1 and 9.3), all buffaloes were sold/auctioned due to surplus/low production/reproductive problems (Table 9.3).

(b) Mortality (Detailed): The overall mortality percent during the current year was 5.61%. The overall female and male group mortality percents were 5.10 and 6.75%, respectively (Table 9.4). A total of 27 deaths (17 females and 10 males) were were recorded in IVRI buffalo herd during the current year. The major causes of mortality are presented in Table 9.5.

Prophylaxis: The prophylaxis measures taken in the Murrah Buffaloes have been presented in Table 9.6.

(c) Reproductive Performance: The overall conception rate was 56.78% (Table 9.7). The respective figures in heifer and adult groups were 62.15 and 54.49 %, respectively. The overall calving abnormalities were 7 (2 stillbirths, 5 abortions, Table 9.2). The quarter wise and bull wise conception rates are presented in Table 9.8 and 9.9. Bull wise semen stock position during the report period is presented in Table 9.10.

The means for age at first calving, service period, dry period and calving interval were 41.09±1.20 months, 139.70±8.94 days, 186.63±14.15 days and 442.60±9.66 days, respectively (Table 9.14 and 9.14.1).

Bull wise daughters born, bull wise daughters completing first lactation, breeding bulls selected for current set, PT bulls for nominated matings and list of future breeding bulls as on 31/03/2025 are presented in Table 9.18 to 9.20.2, respectively.

(d) Growth performance: The means for overall live body weights at birth, 3, 6, 12, 18 and 24 months

of age were 32.76±0.57, 52.04±1.07, 111.26±2.02, 195.36±3.31, 268.53±4.92 and 318.78±6.68 kg, respectively. The respective values for females and males were 32.07±0.62, 51.13±1.31, 108.00±2.83, 187.67±4.31, 267.05±5.47 and 313.29±6.07 and 33.42±0.94, 52.93±1.68, 115.21±2.77, 203.63±4.78, 271.58±10.17 and 388.33±31.14 kg, respectively. The weight at first calving during the current year was 542.50±16.64 kg (Table 9.11.1).

(e) Milk Production Performance: Buffaloes produced 153300.0 kg milk during the period under report (Table 9.15). Means for overall wet and herd averages were 5.33 and 2.89 kg, respectively (Table 9.17 and 9.17.1). On an average, 54.20% of the total adult females were in the milk during this period (Table 9.17).

The means for total lactation milk yield, average lactation length, standard lactation milk yield and peak yield were 2242.52±47.24 kg, 339.69±7.61 days, 2075.63±39.95 kg and 9.34±0.19 kg, respectively (Table 9.12 and Table 9.12.1). The values for LTMY, productive life, productive days, unproductive days, MY/day of HFL, herd life and MY/day of productive life were 12211.4 kg, 2548.62 days, 1710.00 days, 838.31 days, 3.17 kg/d, 3787.38 days and 4.80 kg/day, respectively (Table 9.12.2).

The means for fat, SNF and total solids % were 6.87, 9.33 and 16.15%, respectively (based on 292 samples, Table 9.13).

The analysis for lactational traits was done for animals expressing total lactation milk yield ≥ 1800 kg and/or LL≥150 (based on test day milk yield data).

(f) Feeds and Fodder Availability: The feeds and fodder supplied to the buffaloes of the project are presented in Table 9.16.

11. Publications/Presentations: <u>List of Publications:</u>

(i)	**Papers in research journals (national/international)**	**:**	**7**
(ii)	**Technical bulletins/Books/Book Chapters**	**:**	**None**
(iii)	**Scientific/Teaching reviews**	**:**	-Nil-
(iv)	**Presentations in Conferences/Symposia/Seminars/Other Form**	**:**	**05**
(v)	**Contributions made in compilation/documentation**	**:**	**07**
(vi)	**Any other (please specify):**		
	(a) Training Programm Organized	**:**	**02**
	(b) Thesis guided (as Chairman, SAC)	**:**	**04**
	(c) Invited Lectures	**:**	**03**

12. Expected Socio-economic impact in the tract: Surplus Murrah buffaloes along with breeding males have been sold in the public auction to the local dairy farmers. It will not only improve the milk and meat production in the field in the form of Murrah/graded Murrah progenies but will also uplift the socioeconomic status of the dairy farmers of northern India.

13. **Constraints (if any):** Paucity of project staff

14. Focus of the work in the coming year:

i. To increase the number of elite buffaloes in the herd.
ii. To carry out the envisaged technical programme for fulfillment of laid down objectives.
iii. To distribute superior germ-plasm to the buffalo farmers in field.
iv. To establish a high yielding nucleus herd of Murrah buffaloes at IVRI Izatnagar.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Balance
Total	ICAR Share		ICAR Share	State Share	
33.25	33.25	33.25	32.36858	0.00	(+) 0.88142

Herd Performance:

Herd strength at the centre was 410 animals including 219 breedable buffaloes (>2 year). During the period 113 calving were reported consisting of 59 males and 54 females, 4 abortions. The calf mortality (0-3 months) was 12.60 % higher from the target. Conception rate was almost same 56.78 % during the year as 54.29% in 2023-24.

The average total lactation milk yield and 305 days or less day milk yield decreased 2365 kg and 2270 kg in 2023-24 to 2243 kg and 2076 kg during the year, respectively. Reproductive performance viz. AFC, SP and DP were 41.09 months, 140 days and 187 days, respectively. Wet and herd averages decreased from 5.45 kg and 3.34 kg respectively in 2023-24 to 5.33 kg and 2.89 kg during the year. An average of 54.20 percent animals were in milk as compare to previous year 61.20 percent.

Accomplishment and Targets Achieved:

Trait	Target	2020-21*	2021-22*	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	39.03± 0.84 (23)	39.38± 1.30 (23)	39.15± 1.23 (23)	40.57 ±1.12 (15)	41.09 ±1.20 (20)
Av. Service period (days)	90/130	137.24±11.09 (50)	140.78±11.24 (46)	140.15±10.29 (46)	140.02±11.34 (48)	139.70±8.94 (60)
Calf mortality	≤ 5 %	0.00 %	2.63 %	9.68 %	7.08 %	12.60 %
Wet average (kg)	≥8.5 kg	5.84 kg	5.86 kg	5.99 kg	5.45 kg	5.33 kg
Herd average (kg)	≥5.5 kg	3.88 kg	3.84 kg	3.76 kg	3.34 kg	2.89 kg

Recommendations:

- Milk production parameters such as SLMY, TLMY, WA, HA and % of animals in milk needs to be improved.
- Av. Peak yield of buffaloes at the centre is low which is a matter of concern.
- Continuous efforts should be made to control the calf mortality through proper care and management.

NETWORK PROJECT ON MURRAH BUFFALO IMPROVEMENT
LUVAS UNIT, HISAR

1. **Name of Centre**: Buffalo Research Centre
Department of Livestock Production Management,
Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar

2. Project Code 5508 C(b) LPM-3 ICAR

3. Project Title Network Project on Buffalo Improvement (Murrah)

Subproject Performance recording and improvement of Murrah/ Nili Ravi/ Bhadawari/ Surti/ Jaffarabadi buffalo/ Progeny testing of Murrah/ Surti/ Jaffarabadi bulls under field condition

4. **Date of start:** 1993

5. Objectives:

- To establish elite herd of 50 to 100 Murrah (at each center) ~~/Nili Ravi /50 Bhadawari / 50 Surti / 70 Jaffarabadi~~ for the production of genetically superior young bulls.
- To evaluate sires through institutional / associated herd/field progeny testing.
- To produce, test, propagate and conserve high genetic merit male germplasm

6. Technical Program:

I. Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500 and 300 breedable females (Murrah).

II. Selection and testing of minimum 15 bulls of Murrah / 4-6 bulls for other breeds in every 18/ 24 months cycle.

III. Production of minimum 10,000 (Murrah) and 3000 to 5000 (Other breeds) frozen semen doses from each test bull.

IV. Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.

V. Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.

VI. Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.

VII. Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days (All breeds) / 1500 kg in Murrah) and Peak yield, Milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).

VIII. Monthly testing of milk constituents (Fat%, SNF% and Protein%) and Somatic Cell Count, wherever feasible, at institutional herds.

IX. Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.

X. Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. Staff associated with the project:

Discipline	Name of Scientist / Staff	Status PI/Co-PI/ Associated)
LPM	Dr. Dipin Chander Yadav Dr. Man Singh	PI Co-PI
AGB	Dr. Poonam Ratwan	Associated
VGO	-	As per requirement
ANN	-	As per requirement
VCC / Others	-	As and when required

Administrative staff	Nil
Technical staff	Nil
Contractual staff (RA / SRF / YP-I, YP-II)	Nil

8. Financial Statement: Head wise budget allocation and utilization (Rs. In Lakhs)

SOE	Remittance (ICAR Share)	Total Expenditure	Expenditure (ICAR Share)
M&S(General)	51,00,000	50,99,640	360
M&S(SCSP)	4,00,000	3,80,470	19,530
M&E(General)	1,50,000	1,49,729	271
M&E(SCSP)	50,000	49,420	580
TA/DA	-	-	-
POL	-	-	-
OE(O)	1,50,000	1,49,565	435
OC	-	-	-
Works	3,00,000	3,00,000	0
Total	**61,50,000**	**61,28,824**	**21,176**

9. Herd performance: In tables from 9.1 to 9.21.

9.1 Herd Strength during the Period 4/2024 to 3/2025

Category		Addition			Disposal				
S. N.		**OB**	**B/P**	**T**	**D**	**T**	**S**	**E**	**CB**
Female									
1.	Calves 0 – 3 months	6	38		7	-34	-	-	3
2.	Calves >3 – 12 months	37		**+34**	8	-38	2	-	23
3.	Heifers 1 – 2 years	41		**+38**	4	-39	-	1	35
	> 2 years	55		**+39**	4	-31	8	-	51
4.	Buffaloes in Milk	81		**+31**	3	-33	16	-	60
5.	Buffaloes Dry P /NP	61		**+33**	5	-	42	-	47
	Sub Total	**281**	**38**		**31**		**68**	**1**	**219**
Male									
1.	Calves 0 – 3 months	6	45		3	-42	3		3
2.	Calves >3 – 12 months	37		+42	8	-41	2		28
3.	1 – 2 years	39		+41	6	-16	23		35
	> 2 years	33		+16	2	-3	22		22
4.	Breeding bulls	-		+3	-	-3	-		-
5.	Bullocks/Teaser/Other	3		+3	-	-	4		2
	Sub Total	**118**	**45**		**19**		**54**		**90**
	Grand Total	**399**	**83**		**50**		**122**	**1**	**309**

OB = Opening Balance D = Death S= Sale E= Experimental
T = Transfer CB = Closing Balance B= Birth

9.2 Calving Statistics during the Period 4/2024 to 3/2025

Month	Male		Female		Dystokia		Prolepses		Still Birth		Abortion		Overall	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
April, 24	4	50	4	50	0	0	0	0	0	0	3	27.27	11	10.18
May	6	66.66	3	33.33	0	0	0	0	0	0	5	35.71	14	12.96
June	8	53.33	7	46.66	0	0	0	0	0	0	2	11.76	17	15.74
July	3	37.5	5	62.5	0	0	0	0	0	0	1	11.11	9	8.33

August	6	50	6	50	0	0	0	0	1	6.66	2	13.33	15	13.88
September	9	60	6	40	0	0	0	0	0	0	4	21.05	19	17.59
October	5	100	0	0	0	0	0	0	1	16.66	0	0	6	5.55
November	0	0	2	100	0	0	0	0	0	0	1	33.33	3	2.77
December	1	33.33	2	66.66	0	0	0	0	0	0	2	40	5	4.62
January,25	2	66.66	1	33.33	0	0	0	0	0	0	1	25	4	3.70
February	1	100	0	0	0	0	0	0	1	33.33	1	33.33	3	2.77
March	0	0	2	100	0	0	0	0	0	0	0	0	2	1.85
Overall	45	54.21	38	45.78	0	0	0	0	3	2.77	22	20.37	108	100

Sex ratio Male: Female **(1.18: 1)**, SB% = 2.77 %, Abortion % = 20.37%

9.3 Disposal of Animals during the Period 4/2024 to 3/2025

Female	**Primary cause of disposal**							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves								
0 to 3 months	0	-	-	-	-	7	-	7
3-12 months	2	-	-	-	-	8	-	10
Heifers								
1-2 years	-	-	-	-	-	4	1	5
> 2 years	-	-	5	3	-	4	-	12
Buffaloes								
Milch	-	4	4	6	2	3	-	19
Dry	-	14	19	8	1	5	-	47
Sub Total	2	18	28	17	3	31	1	100
Males	**Primary cause of disposal**							
Calves								
0 to 3 months	3	-	-	-	-	3	-	6
3-12 months	2	-	-	-	-	8	-	10
1 to 2 year	23	-	-	-	-	6	-	29
. >2 year	22	-	-	-	-	2	-	24
Breeding bulls	-	-	-	-	-	-	-	-
Bullock+Teaser +Others	4	-	-	-	-	-	-	4
Sub Total	54	0	0	0	0	19	0	73
Grand Total	**56**	**18**	**28**	**17**	**3**	**50**	**1**	**173**

9.4 Month-wise Mortality during the Period 4/2024 to 3/2025

	Female						**Male**					**Overall Herd**
Month	**0-3 Month**	**3-12 Month**	**1-2 Yrs.**	**Above 2 Yrs.**	**Milk + Dry**	**Overall Female**	**0-3 Month**	**3-12 Month**	**1 -2 Yrs.**	**>2 yrs.**	**Overall Male**	
No. Died	7	8	4	4	3+5	31	3	8	6	2	19	50
%												

Calves (0-3) Mortality =10.52% (10/95)

9.5 Causes of Mortality (quarter-wise) During the Period 4/2024 to 3/2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	-	4	2	2	8
Pneumonities	2	-	8	2	12
Septicamia / Toxaemia	1	2	3	-	6
Peritonitis	-	1	1	1	3
JD/TB	-	-	-	1	1
Milk Fever/metabolic diseases	-	-	-	-	-
TRP / TP	-	-	-	-	-
Parasitism	-	-	-	-	-
Accidental death	-	-	-	-	-
Peri-parturient disorders	-	-	-	-	-
Miscellaneous	3	6	7	4	20
Total	**6**	**13**	**21**	**10**	**50**

9.6 Prophylactic Measures undertaken

Disease	Vaccination Date / No. of animals	No. of animals Tested / Positive		Dates and No. of animals treated for Parasitism
FMD	Whole herd (twice a year)	-	-	All calves upto the age of 1 year at regular interval
HS	Whole herd (twice a year)	-	-	
BQ	-	-	-	
Brucellosis	Calf-hood vaccination (Regular interval)	-	-	
JD	Screening done	-	-	
TB	Screening done	-	-	
IBR	-	-	-	
Mastitis	Milch herd (Once a year)	-	-	

9.7 Female conception rate during January 2024 to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	12	2	16.6	11	2	18.1	0	0	0	10	2	20	33	6	18.2
Adults	61	20	32.8	30	4	13.3	74	15	20.3	74	30	40.5	239	69	28.9
Overall	73	22	30.1	41	6	14.6	74	15	20.3	84	32	38.1	272	75	**27.6**

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate (1.1.2024 to 31.12.24)

Quarter	No. of A I	Preg. animals	CR %
January – March (Previous Year)	73	22	30.1
April - June	41	6	14.6
July - September	74	15	20.3
October- December	84	32	38.1
Overall	**272**	**75**	**27.6**

9.9 Bull-wise Conception Rate During the Period January 2024 to December 2024

Sr. No.	Bull No.	SET No.	Total Number of AI	Total Conceived	CR%
1.	2990	SET 21	21	4	19.0
2.	7630	SET 21	26	7	26.9
3.	1053	SET 16	14	6	42.8

4.	7990	SET 21	28	9	32.1
5.	4354	SET 15	2	1	50
6	297	SET 21	25	8	32
7	M-29	SET 16	4	1	25
8	112	SET 21	41	10	24.4
9	5764	SET 21	33	8	24.2
10	5723	SET 21	13	2	15.4
11	109	SET 21	31	10	32.3
12	5638	SET 21	1	1	100
13	5414	SET 21	5	1	20
14	3014	SET 21	4	-	0
15	7768	SET 21	9	3	33.3
16	5629	SET 21	14	4	28.6
17	2383	SET 16	1	-	0
Overall			**272**	**75**	**27.6**
No. of services per conception = 3.6:1					

9.10 Bull Wise Semen Stock

Bull No.	Set no.	Opening balance	Semen produced /Received	Consumption for AI/ Supplied/sold/Exp.			Balance
				Supply	Sold	Exp.	
4354	XV	3	-	3	-	-	-
1053	XVI	6	6	12	-	-	-
109	XXI	70	50	120	-	-	-
112	XXI	60	50	110	-	-	-
5723	XXI	50	-	50	-	-	-
5764	XXI	45	40	85	-	-	-
297	XXI	-	30	30	-	-	-
2990	XXI	-	30	30	-	-	-
3014	XXI	-	20	20	-	-	-
5414	XXI	-	20	20	-	-	-
5629	XXI	-	50	50	-	-	-
7630	XXI	-	30	30	-	-	-
7768	XXI	-	30	30	-	-	-
7990	XXI	-	30	30		-	-
M-29	XVI	-	10	10	-	-	-
2383	XVI	-	10	10		-	-
3126	XXII	-	60	60	-	-	-
5912	XXII	-	50	50	-	-	-
5814	XXII	-	50	50	-	-	-
3113	XXII	-	60	60	-	-	-
3097	XXII	-	60	60	-	-	-
5791	XXII	-	50	50	-	-	-
M-51	XVII	-	40	25	-	-	15
2594	XVII	-	30	22	-	-	08
8100	XXII	-	50	50	-	-	-
8129	XXII	-	60	10	-	-	50
8198	XXII	-	60	-	-	-	60
306	XXII	-	50	-	-	-	50

9.11 Body Weights since Inception of Network Project

Year	Birth (n)	3 Months (n)	6 Months (n)	12 Months (n)	18 Months (n)	24 Months (n)	At AFC (n)
Female							
1994-95	34.0	62.8	97.1	150.7	203.2	262.5	470.03
1995-96	36.48	51.20	77.89	106.75	138.79	191.28	448.08
1996-97	35.26	53.7	90.5	118.65	146.59	206.49	423.18
1997-98	36.65	55.7	94.25	123.75	148.42	217.1	439.53
1998-99	36.87	55.94	94.4	112.31	149.94	217.1	439.53
1999-00	35.43	57.11	102.1	139.27	163.66	241.97	417.74
2000-01	39.49 (71)	59.52 (40)	104.76 (37)	134.0 (32)	164.69 (31)	237.38 (30)	494.59 (27)
2001-02	37.6 (56)	50.85 (41)	84.69 (32)	167.9 (27)	238.6 (35)	300.9 (35)	470.1 (11)
2002-03	37.3 (87)	74.8 (88)	105.9 (77)	177.0 (49)	259.6 (40)	-	457.4 (40)
2003-04	37.2 (87)	74.8 (88)	105.9 (77)	177.0 (49)	259.6 (40)	345.1 (36)	457.4 (40)
2004-05	36.7 (85)	74.8 (85)	105.4 (75)	183.7 (68)	260.6 (48)	341.0 (39)	459.2 (26)
2005-06	35.8 (81)	64.3 (53)	89.9(23)	140.1 (25)	190.6 (20)	295.6 (16)	463.8 (12)
2006-07	36.8 (87)	71.2 (73)	103.2 (61)	141.5 (41)	181.9 (29)	262.5 (38)	467.4 (21)
2007-08	36.6 (85)	66.2 (78)	105.8 (63)	201.6 (50)	249.0 (36)	302.7 (34)	463.2 (24)
2008-09	36.3 (65)	66.4 (37)	94.5 (43)	146.7 (26)	184.2 (87)	246.6 (57)	459.4 (267)
2009-10	36.6 (71)	70.8 (70)	105.0(52)	154.4(43)	199.8 (49)	244.2 (38)	502.5 (24)
2010-11	35.8 (75)	72.3 (75)	108.0(52)	166.4(62)	209.3 (50)	287.9 (46)	522.9 (33)
2011-12	35.0 (71)	68.5 (63)	101.6(49)	175.6(40)	269.6 (46)	311.6 (34)	512.6 (23)
2012-13	36.4 (86)	68.2 (64)	105.1(51)	189.2(38)	278.4 (46)	302.8 (31)	528.7 (39)
2013-14	36.1 (83)	76.2 (41)	122.7(13)	185.5(43)	280.5 (30)	326.0 (19)	521.4 (32)
2014-15	37.2 (75)	63.8 (60)	84.9 (57)	174.5(25)	247.6 (26)	325.9 (25)	511.0 (17)
2015-16	35.7 (96)	54.4 (60)	92.3 (30)	189.7(30)	249.5 (30)	300.0 (30)	485.8 (27)
2016-17	36.2 (57)	65.6 (55)	98.7 (27)	174 (22)	250.6 (15)	302.0 (3)	447.5 (36)
2017-18	34.6±0.18 (48)	57.0±0.79 (44)	89.0±1.6 (38)	154.3±2.8 (44)	207.3±6.3 (26)	300.1±12.3 (4)	461.4±7.3 (27)
2018-19	34.4±0.4 (42)	52.7±0.5 (100)	84.2±1.2 (82)	149.6±3.0 (49)	223.5±4.4 (24)	291.0±10.9 (5)	462±5.4 (21)
2019-20	35.0±0.2 (46)	52.9±1.0 (41)	83.7±1.7 (33)	146.6±2.4 (36)	198.7±9.7 (15)	317.8±19.3 (12)	460.1±5.8 (24)
2020-21	35.0±0.4 (43)	50.9±0.9 (38)	90.4±1.3 (28)	143.9±3.1 (32)	198.6±8.5 (19)	258.3±2.6 (12)	411.6±7.1 (22)
2021-22	34.0 ±0.3 (48)	57.6±0.5 (68)	84.8±1.07 (61)	138.5±3.3 (41)	207.8±3.81 (44)	270.4±4.01 (25)	403.6±5.03 (33)
2022-23	35.6 ±0.4 (48)	57.9±0.68 (35)	80.3±1.35 (21)	136.7±1.33 (35)	221 ±55.2 (16)	281±3.18 (17)	420±8.81 (40)
2023-24	32.6±0.9 (50)	62.6±1.5 (37)	92.8±2.8 (28)	143.8±10.7 (09)	218.05±54.5 (23)	300.09±4.0 (24)	391±5.9 (27)
2024-25	**33.6±0.44 (38)**	**60.2±1.05 (27)**	**83.8±1.85 (24)**	**154.2±2.70 (21)**	**210.3±52.5 (17)**	**276.0±5.4 (15)**	**387.6±2.87 (31)**
Male							
2016-17	36.4 (59)	60.7 (50)	90.3 (28)	170.9 (17)	282 (6)	-	-
2017-18	35.3±0.16(29)	58.9±1.01 (32)	87.6±1.7 (44)	153.7±2.8 (46)	219.9±6.8 (14)	318.7±5.8 (3)	-
2018-19	35.1±0.3 (44)	56.7±0.6 (68)	87.1±1.3 (58)	156±2.7 (32)	218.2±3.8 (14)	285±0 (1)	-
2019-20	35.4±0.2 (45)	55.9±1.1 (34)	83.2±2.0 (30)	136.3±4.8 (7)	247.6±2.6 (8)	310.4±7.4 (5)	-
2020-21	36.4±0.3 (45)	58.6±0.8 (33)	95.5±1.1 (29)	163.3±3.7 (12)	203.1±2.6 (11)	272.0±2.3 (10)	-
2021-22	35.0±0.19 (53)	58.8±0.59 (80)	89.5±1.1 (65)	159.2±2.46 (40)	236.3±5.35 (29)	286.7±5.59 (12)	-

2022-23	35.2±0.4 (56)	68±0.67 (38)	86±0.98 (25)	145.6±3.67 (37)	242±3.12 (16)	326±6.8 (22)	-
2023-24	35.8±0.6 (48)	66.6±1.2 (38)	96.9±2.2 (30)	164.3±1.4 (22)	223.4±55.8 (26)	304.3±7.4 (23)	-
2024-25	**34.9±0.61 (45)**	**62.3±1.24 (32)**	**90.0±2.1 (29)**	**153.2±1.96 ((24)**	**219.0±54.7 (18)**	**303.0±4.63 (16)**	**-**

9.12 Average Production Performance During the Period 4/204 to 3/2025

Lact. No.	No. of obs.	Av. Lact. Yield (kg)	Av. Lact. Length (days)	305-day Milk Yield (kg)	Av. Peak yield
1st	16	2243.5	308	2129.1	10.3
2nd	31	2547.1	301	2487.9	11.7
3rd	11	3031	311	2923	13.4
4th	10	2828.8	293	2810	14.3
5th& above	17	2761	277	2695	13.7
Overall	**85**	**2628.52±64.0**	**298±5.08**	**2555.96±53.9**	**12.35±0.29**

Figures in parenthesis indicate number of observations

9.12.1 Average Production Performance since Inception of Network Project

Year	Av. Lactation Yield in kg (N)	Av. Lactation Length in days (N)	Av. 305 or less day Milk Yield in kg (N)	Av. Peak yield (N)
1995-96	2033.0 (70)	285.0 (70)	1987.5 (70)	10.8 (70)
1996-97	1896.5 (75)	269.4 (75)	1880.8 (75)	10.0 (75)
1997-98	2150.3 (83)	297.2 (83)	2103.7 (83)	10.9 (83)
1998-99	1815.0 (51)	302.6 (51)	1964.7 (51)	10.2 (51)
1999-00	1798.1 (64)	311.5 (64)	1688.7 (64)	10.0 (64)
2000-01	2226.4 (42)	305.0 (42)	2183.1 (42)	11.0 (34)
2001-02	2205.4 (50)	307.2 (50)	2119.4 (50)	11.0 (50)
2002-03	2659.0 (46)	329.7 (46)	2522.3 (46)	12.7 (46)
2003-04	2115.5 (75)	293.6 (75)	2061.9 (75)	11.5 (75)
2004-05	2215.8 (61)	311.13 (61)	2134.4 (61)	11.3 (61)
2005-06	2346.9 (77)	307.8 (77)	2251.9 (77)	11.2 (89)
2006-07	2407.9 (75)	325.2 (75)	2261.4 (75)	11.4 (75)
2007-08	2199.2 (80)	286.0 (80)	2129.6 (80)	11.2 (80)
2008-09	2124.8 (76)	295.1 (76)	2040.6 (76)	10.5 (76)
2009-10	1885.5 (84)	288.2 (84)	1857.6 (84)	9.97 (84)
2010-11	2158.8 (66)	309.7 (66)	2041.8 (66)	9.9 (66)
2011-12	2544.4 (54)	332.4 (54)	2377.7 (54)	11.1 (54)
2012-13	3010.3 (55)	319.3 (55)	2879.8 (55)	13.5 (55)
2013-14	2966.7 (65)	318.3 (65)	2808.3(65)	13.3 (65)
2014-15	2653.4 (62)	300.2 (62)	2584.4 (62)	12.9 (62)
2015-16	2664.9±63.71 (78)	304.5±6.5 (78)	2576.8±56.9 (78)	13.0±1.8 (78)
2016-17	3138.4±76.27 (60)	328.0±7.48 (60)	2967.0±64.1 (60)	13.8±3.25 (60)
2017-18	3373.4±94.83 (69)	354±8.52 (69)	3050±72.7 (69)	14.2±2.93 (69)
2018-19	3193.6±91.4 (66)	313.9±6.1 (66)	3067.3±84.1 (66)	15.1±0.3 (66)
2019-20	3107.0±54.2 (60)	301.4±3.0 (60)	3090.4±54.1 (60)	14.6±0.3 (60)
2020-21	3147.9±76.3 (65)	322.0±5.4 (65)	2976.3±52.4 (65)	13.5±0.3 (65)
2021-22	2902±56.12 (101)	311.9±4.36 (101)	2793.0±49.91(101)	13.6±0.22 (101)
2022-23	3059±62.62 (92)	317.0±4.6 (92)	2957.0±49.4 (92)	13.2±0.22 (92)
2023-24	2725.2±103.4(102)	287.2±6.9(102)	2658.1±102.4(102)	13.1±0.3(102)
2024-25	**2628.52±64.0 (85)**	**298±5.08 (85)**	**2555.96±53.9 (85)**	**12.35±0.29 (85)**

Figures in parenthesis indicate number of observations.

9.12.2 Herd Life Production (up to 4th Lactation) during 2024-25

Sr. No.	Traits	2020-21		2022-23		2023-24		2024-25	
		No.	Average	No.	Average	No.	Average	No.	Average
1.	Herd Life (days)	26	3348	21	3306	32	3446	17	3176
2.	Productive Days	26	1554.6	21	1500.9	32	1643.9	17	1300.1
3.	Unproductive days	26	467.3	21	521.6	32	555.0	17	545.5
4.	Productive Life (days)	26	2021.9	21	2022.5	32	2198.9	17	2210.2
5.	Life time milk Yield (kg)	26	15054.15	21	15385.6	32	16194.6	17	12998.9
6.	Milk yield / day HLF (kg)	26	4.5	21	4.6	32	4.7	17	4.1
7.	Milk yield / day PLF (kg)	26	7.4	21	7.6	32	7.4	17	5.9
8.	Milk Yield / day productive day	26	9.7	21	10.2	32	9.8	17	10.0

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. Or date of disposal) Productive Days (date of first calving to total days in milk), Unproductive days (total days when buffalo not give milk from the date of first calving)

9.13. Average Milk Fat Component during the period 4/2024 to 3/2025

Month	Animal in milk (N)	Av. Fat	SNF	Protein	Lactose	Total Solids	Freezing Point	No. of Samples
April, 2024	84	7.06	-	-	-	-	-	-
May	78	6.84	-	-	-	-	-	-
June	72	6.54	-	-	-	-	-	-
July	72	6.33	-	-	-	-	-	-
August	75	6.20	9.78	3.95	4.81	16.18	-0.540	N=50
September	82	6.19	9.46	3.47	5.16	15.78	-0.550	N=49
October	86	6.33	9.66	3.45	5.06	15.72	-0.560	N=46
November	77	5.85	9.64	3.67	5.05	15.51	-0.550	N=36
December	76	6.50	9.56	4.05	4.76	17.54	-0.560	N=47
January, 25	64	6.80	9.55	3.93	4.85	16.40	-0.550	N=41
February	57	7.09	9.68	3.90	4.90	16.78	-0.570	N=46
March	58	7.39	9.75	4.03	4.84	17.78	-0.560	N=42
Overall	**73**	**6.60**	**9.64**	**3.81**	**4.93**	**16.46**	**-0.560**	

9.14 Reproduction Performance during the Period 4/2024 to 3/2025

Lactation / Parity	AFC (Months) (N)	N →	SP (Days)	DP (Days)	CI (Days)
1	40.28	31	-	-	-
2	-	21	187.3±24.02	164.48±18.41	475.80±22.27
3	-	16	142.56±27.88	137.06±27.86	440.63±29.20
4	-	12	115.08±21.47	112.00±16.51	416.75±19.49
5th and above	-	20	104.6±16.62	126.35±18.34	393.40±20.03
Over all	**40.28±1.06 (31)**	**100**	**140.39±11.98 (69)**	**137.94±10.51 (69)**	**433.49±12.12 (69)**

9.14.1 Reproduction Performance since Inception of Network Project

Year	AFC (Days/ months)	Average Service Period (days)	Average Dry Period (days)	Average Calving Interval (days)
1993-94	1570.2	107.5	-	-
1994-95	1560.6	163.1	132.7	459.5
1995-96	1575.8 (26)	135.0 (54)	161.0 (36)	456.0 (40)
1996-97	1438.2 (44)	107.0 (63)	109.7 (31)	408.5 (76)
1997-98	1480.4 (28)	107.7 (55)	143.1 (55)	389.2 (55)
1998-99	1439.5 (22)	108.7 (47)	156.0 (38)	417.2 (46)
1999-00	1502.0 (15)	148.3 (49)	148.6 (49)	459.0 (49)
2000-01	1540.0 (17)	146.0 (25)	137.0 (25)	479.6 (25)
2001-02	1400.1 (14)	147.0 (31)	128.0 (31)	457.0 (31)
2002-03	47.01 months (27)	165.3 (47)	156.4 (47)	472.1 (47)
2003-04	40.4 (40)	87.6 (42)	115.9 (42)	396.4 (42)
2004-05	40.0 (26)	95.8 (52)	128.0 (52)	402.2 (52)
2005-06	41.0 (31)	147.8 (128)	156.2 (26)	454.8 (128)
2006-07	41.8 (15)	165.2 (60)	162.6 (64)	472.5 (60)
2007-08	44.4 (30)	164.9 (57)	147.1 (57)	467.2 (57)
2008-09	48.4 (54)	139.1 (54)	146.0 (54)	444.0 (54)
2009-10	45.7 (27)	156.86 (68)	163.6 (68)	459.3 (68)
2010-11	45.8(33)	155.38 (38)	160.3 (38)	461.8 (38)
2011-12	46.0 (23)	154.0 (47)	147.8 (47)	462.8 (47)
2012-13	46 (39)	112.1 (36)	100.8 (36)	411 (36)
2013-14	43.6 (33)	118.0 (39)	119.8 (39)	423 (39)
2014-15	45.9 (17)	116.8 (52)	135.6 (52)	425 (52)
2015-16	41.7±1.28 (27)	127.5±10.2 (58)	126.1±6.6 (58)	434.2±10.48 (58)
2016-17	42.0±7.08 (34)	129±9.6 (43)	120±8.85 (43)	434.6±10.07 (43)
2017-18	42.2±0.87 (27)	135.43±12.51 (46)	113.29±5.98 (46)	444.59±12.41 (46)
2018-19	42.5±0.83 (21)	144.9±10.7 (60)	111.4±7.0 (60)	454.1±11.1 (60)
2019-20	43.5±0.49 (22)	122.6±7.5 (64)	111.7±6.0 (64)	430.5±7.9 (64)
2020-21	43.1±0.8 (27)	127.3±9.2(67)	128.5±7.5 (67)	437.3±9.2 (67)
2021-22	46.5±0.8 (33)	117.9±12.11 (68)	114.45±6.28 (68)	419.9±8.91 (68)
2022-23	44.8±0.9 (40)	144.8±8.7 (64)	133±7.1 (64)	454±8.9 (64)
2023-24	39.9±1.1 (27)	135.9±25.5 (96)	105.3±20.1 (96)	426.0 ± 23.5 (96)
2024-25	**40.28±1.06 (31)**	**140.39±11.98 (69)**	**137.94±10.51 (69)**	**433.49±12.12 (69)**

Figures in parenthesis indicate number of observations

9.15 Milk Production and Disposal during the Period 4/2024 to 3/2025

Month	Total milk produced (kg)	Disposal		
		Liquid Milk	Calf feeding	Expt.
April, 24	18376	18042	334	-
May	18252	17606	646	-
June	17928	17018	910	-
July	19238	18322	916	-
August	19162	18504	658	-
September	18333	17419	914	-
October	18588	17810	778	-
November	15034	14614	420	-
December	15021	14761	260	-
January, 25	16162	16032	130	-
February	13082	12988	94	-

March	13865	13757	108	-
Total	**203041**	**196873**	**6168**	**-**

9.16 Feed & Fodder (Qtls.) during the Period 4/2024 to 3/2025

Quarter/month	Type of fodder/Feed	Opening balance (qtl.)	Quantity produced at Farm (qtl.)	Quantity Purchased (qtl.)	Actually fed (qtl.0	Balance (qtl.)
1st Quarter (April-June)	Green	-	4596	-	4596	-
	Silage	-	-	-	-	-
	Dry	-	913	-	913	-
	Concentrate	-	831.60	-	831.60	-
2nd Quarter (July-September)	Green	-	4723	-	4723	-
	Silage	-	-	-	-	-
	Dry	-	911	-	911	-
	Concentrate	-	573.25	-	573.25	-
3rd Quarter (October-December)	Green	-	4330	-	4330	-
	Silage	-	-	-	-	-
	Dry	-	879	-	879	-
	Concentrate	-	475.52	-	475.52	-
4th Quarter (January-March)	Green	-	6333	-	6333	-
	Silage	-	-	-	-	-
	Dry	-	675	-	675	-
	Concentrate	-	534.45	-	534.45	-
Total	Green	-	19982	-	19982	-
	Silage	-	-	-	-	-
	Dry	-	3378	-	3378	-
	Concentrate	-	2414.82	-	2414.82	-

9.17 Milking Performance during the Period 4/2024 to 3/2025

Month	**No. of Animal in Milk**	**No. of Animal dry**	**Total Animal**	**% in Milk**	**Wet Av. (kg)**	**Herd Av. (kg)**
April, 24	84	63	147	57.1	7.9	4.5
May	78	72	150	52.0	8.2	4.3
June	72	83	155	46.4	9.0	4.2
July	72	86	158	45.6	9.6	4.4
August	75	88	163	46.0	9.5	4.3
September	82	85	167	49.1	8.5	4.2
October	86	25	111	77.4	8.0	6.3
November	77	33	110	70.0	7.6	5.3
December	76	32	108	70.3	7.5	5.2
January, 25	64	42	106	60.4	9.1	5.6
February	57	49	106	53.7	9.3	5.0
March	58	49	107	54.2	8.5	4.6
Overall	**73**	**59**	**132**	**56.8**	**8.6**	**5.8**

9.17.1 Milking Performance since Inception of Network Project

Month	**No. of animals (in milk)**	**No. of animals (Dry)**	**Total animals**	**Animals in milk (%)**	**Wet Average (kg)**	**Herd Average (kg)**
1993-94	42	43	85	49.0	6.3	3.8
1994-95	49	39	88	55.7	7.2	3.4
1995-96	53	39	92	57.1	7.3	4.0
1996-97	76	46	122	62.4	7.0	4.3

1997-98	68	36	104	65.4	6.5	3.7
1998-99	71	27	98	70.0	6.2	4.2
1999-00	60	23	83	72.5	5.2	3.8
2000-01	55	17	72	75.8	6.7	5.1
2001-02	48	22	70	68.6	7.5	5.2
2002-03	47	25	72	65.3	7.5	5.0
2003-04	68	29	97	70.0	7.3	5.1
2004-05	68	36	104	65.4	7.7	5.0
2005-06	63	32	95	66.5	7.7	5.2
2006-07	65	31	96	68.0	7.8	5.3
2207-08	66	34	100	66.0	7.6	5.1
2008-09	62	33	95	66.0	7.1	4.7
2009-10	69	41	110	62.7	6.8	4.3
2010-11	64	30	94	68.1	7.3	5.0
2011-12	58	24	82	71.5	8.5	6.1
2012-13	58	30	88	65.1	10.0	6.6
2013-14	61.0	35.0	96.5	64.1	9.4	6.0
2014-15	64	36	100	64.3	8.7	5.6
2015-16	72	42	114	63	9.9	6.2
2016-17	80	41	121	66.1	9.7	6.6
2017-18	81	28	109	74.3	10.3	7.6
2018-19	76	29	104	73.2	11.0	8.0
2019-20	78	26	104	75.1	10.4	7.7
2020-21	73	36	109	67	9.6	6.3
2021-22	81.5	35	116	68.8	9.25	6.5
2022-23	85	37	122	69.2	9.4	6.6
2023-24	89	49	139	64.4	8.6	5.6
2024-25	**73**	**59**	**132**	**56.8**	**8.6**	**5.8**

9.18 Bull-wise Daughters Performance (1st lactation) During the Period 4/2024 to 3/2025

Bull No.	Set No	Total No. of daughters born	No. of daughters reaching A.F.C.	No. of daughters completing 1st Lactation
5505	20	2	-	-
2930	21	2	-	-
5481	20	1	-	-
019	20	1	-	-
5629	21	3	-	-
2279	21	2	-	-
5414	21	4	-	-
3014	21	3	-	-
2979	21	1	-	-
6007	15	2	-	-
297	21	2	-	-
5690	21	5	-	-
7768	21	1	-	-
5638	21	2	-	-
2990	21	1	-	-
7630	21	3	-	-
1053	16	1	-	-
112	21	1	-	-
5723	21	1	-	-
1208	18	-	4	3

4995	18	-	3	3
7227	18	-	1	1
2269	13	-	1	-
2185	12	-	1	2
7094	18	-	1	-
1209	18	-	1	-
7263	18	-	5	-
2645	18	-	2	-
5232	19	-	2	-
6044	14	-	1	-
7147	18	-	2	-
5181	19	-	2	-
2676	18	-	1	1
5374	19	-	1	1
6942	17	-	1	1
5246	19	-	1	-
1219	18	-	1	2
2234	13	-	-	1
183	12	-	-	1
4687	17	-	-	1
UK	-	-	-	1
1150	18	-	-	2
7147	18	-	-	1
Total		**38**	**31**	**21**

9.19 Bull-wise Daughters Completing 1st Lactation during the Period 4/2024 to 3/2025

Bull No.	Daughter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)
6942	124	13.11.19	05.08.23	44.7	265	2088	2088
1219	182	29.08.20	06.08.23	35.2	254	1191	1191
2234	190	19.09.20	17.06.23	33.0	330	1584	1550
4995	162	24.07.20	01.07.23	35.2	317	1783	1760
183	147	08.06.20	14.07.23	37.2	306	2618	2615
4687	37	30.01.19	04.08.23	40.1	318	2613	2583
UK	180	16.07.20	23.08.23	37.2	301	2264	2264
2185	175	13.08.20	27.08.23	36.4	297	2336	2336
1150	135	09.02.20	09.09.23	43.0	319	2441	2400
1219	177	15.08.20	06.10.23	37.7	290	2223	2223
4995	166	02.08.20	07.10.23	38.2	284	1270	1270
1150	144	19.05.20	03.12.23	42.4	272	237	2307
2185	169	03.08.20	16.10.23	38.4	473	4052	2624
2676	202	20.10.20	25.02.24	40.1	339	2731	2459
1208	232	15.02.21	02.04.24	37.6	287	1726	1726
4995	153	10.07.20	14.04.24	45.1	273	1690	1690
1208	230	31.01.21	15.04.24	38.5	273	1759	1759
7227	249	08.05.21	16.04.24	35.2	272	1682	1682
7147	272	25.07.21	18.08.24	37.0	143	900	900
5374	316	28.12.21	09.09.24	32.5	140	832	832
1208	248	27.04.21	10.09.24	40.5	142	638	638

9.20 List of Breeding bulls selected for current set (22nd)

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dam's best lact.305 or days less yield (kg)
1	306	13.11.21	1358	5232	3847/18.3
2	317	28.12.21	1068	1496	3660/16.3

9.20.1 PT bulls for nominated mating

Bull No.	Set No.	Centre	Dams' Best yield	Sire Index	Breeding Value	% Superiority
M-29	16Set	CIRB	4600	I	2578.94	3.82
1053	16Set	LUVAS	3559	II	2567.15	3.35
2383	16Set	GADVASU	4636	III	2546.77	2.53
M-51	17Set	CIRB	4668	I	2558.57	6.76
2594	17Set	GADVASU	3557	II	2532.78	5.68

9.20.2 List of Future breeding bulls

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dams best SLMY (kg) / Parity	Semen doses available	Expected predicted Difference (EPD)
1	334	25.3.22	899	2359	3707/18.6	-	-
2	348	13.5.22	1288	2674	3388/10.7	-	-
3	367	24.7.22	1130	2357	3237/14.2	-	-
4	382	26.8.22	1379	1315	3205/14.5	-	-
5	389	8.9.22	878	4196	3371/10.2	-	-
6	396	20.9.22	1244	6044	3340/13.7	-	-

9.21 Targets Achieved during the year 2024-25

Sr. No.	Trait	Target Fixed	2020-21	2021-22	2022-23	2023-24	2024-25
1	Av. Age at first Ist. Calving (months)	40.0	43.1±0.8 (27)	46.5±0.8 (33)	44.8±0.9 (40)	39.9±1.1 (27)	**40.28±1.06 (31)**
2	Av. Service Period. (days)	130	127±9.2 (67)	118±12.1 (68)	144.8±8.7 (64)	135.9±25.5 (96)	**140.39±11.98 (69)**
3	Calf Mortality (0-3 months)	≤ 5 %	1.85 %	5.22 %	3.20 %	3.7 %	**10.52%**
4	Wet Average (kg)	≥ 8.5 kg	9.6 kg	9.25 kg	9.40 kg	8.6 Kg	**8.6 Kg**
5	Herd Average (kg)	≥ 5.5 kg	6.3 kg	6.50 kg	6.60 kg	5.6 Kg	**5.8 Kg**

10. Salient Research Achievements (example):

The LUVAS Murrah Centre has been making steady progress in meeting out the objectives of the Network Project which are reflected in the Annual Progress Report. Some of the salient findings:

I. Overall Wet average and Herd average were 8.6 kg and 5.8 kg, respectively.
II. Average age at first calving (months) is 40.28
III. Service period and calving interval during the period was observed 140 days and 433 days, respectively.

11. Publication

12. Socioeconomic impact / Success stories:

Organized Three "Pashupalak Gosthis" on the theme of "Skill Development on Dairy Farming for SC Beneficiaries" under SCSP.

13. Constraints if any

14. Focus of work in the coming year: Improving the performance of herd and as per the guidelines of Network Project on Buffalo (Murrah) improvement**.**

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024 -25		Released ICAR Share as per R E	Intrest thereon (Rs.)	Detail as per PUC 2024-25	
Total	ICAR Share			Expenditure (ICAR Share)	Balance (ICAR Share)
80.50*	61.50*	61.50*	0.28282	61.28824	0.49458

* Includes 4.50 lakhs for SCSP

Herd Performance

Herd strength at the centre was 309 heads with 158 breedable buffaloes (>2 year). A total of 83 calves were added due to birth. During the reporting period, calf mortality rate (0-3 months) was 10.52% which was higher than the project target. Conception rate is continuously decreasing as 48.26 % in 2022-23, 35.48 % in 2023-24 and 27.6% in 2024-25.

Average lactation yield decreased from 2725 kg (102) in 2023-24 to 2629 kg (85) in 2024-25. Similarly, 305 or less day average milkyield also decreased from 2658 kg (102) to 2526 kg (85). The age at first calving reduced from 44.8 months (40) in last year to 40.28 months (31) in 2024-25. Other reproductive traits such as dry period, service period and calving interval did not improve during this period, as it increased from 105 days (96), 136 days (96) and 426 days (96) during 2023-24 to 138 days (69), 140 days (69) and 433 days (69) respectively, in 2024-25. Wet and herd averages was 8.6 kg and 5.6 kg during 2023-24 and 8.6 kg and 5.8 kg during 2024-25, respectively. During the reporting period 56.8 percent animals were in milk as compared to 64.4 percent in 2023-24.

Accomplishment and Targets Achieved:

Sr. No.	Trait	Target Fixed	2020-21	2021-22	2022-23	2023-24	2024-25
1	Av. Age at first Ist. Calving (months)	40.0	43.1±0.8 (27)	46.5±0.8 (33)	44.8±0.9 (40)	39.9±1.1 (27)	40.28±1.06 (31)
2	Av. Service Period. (days)	130	127±9.2 (67)	118±12.1 (68)	144.8±8.7 (64)	135.9±25.5 (96)	140.39±11.98 (69)
3	Calf Mortality (0-3 months)	≤ 5%	1.85 %	5.22 %	3.20 %	3.7 %	10.52%
4	Wet Average (kg)	≥ 8.5 kg	9.6 kg	9.25 kg	9.40 kg	8.6 Kg	8.6 Kg
5	Herd Average (kg)	≥ 5.5 kg	6.3 kg	6.50 kg	6.60 kg	5.6 Kg	5.8 Kg

Recommendations:

- The production performance of the LUVAS herd has been declining for the last two years, which requires immediate attention for improvement.
- Conception rate of Buffaloes in LUVAS herd is continuously decreasing from last two years which is alarming.
- More efforts should be made to reduce the buffalo calf mortality.

ICAR RESEARCH COMPLEX FOR EASTERN REGION, PATNA (BIHAR)

Report Period 2024-25

1. **Name of centre** : ICAR Research Complex Eastern Region Patna
2. **Project Code**
3. **Project Title** : Network Project on Murrah Buffaloes
   Subproject : Performance recording and improvement of … Murrah / Nili Ravi / Bhadawari / Surti / Jaffarabadi buffalo / Progeny testing of Murrah/ Surti / Jaffarabadi bulls under field conditions
4. **Date of Start** : July 2014
5. **Objectives** :
   I. To establish elite herd of 50 to 100 Murrah (at each center) / Nili Ravi / 50 Bhadawari / 50 Surti / 70 Jaffarabadi for the production of genetically superior young bulls.
   II. To evaluate sires through institutional / associated herd/field progeny testing
   III. To produce, test, propagate and conserve high genetic merit male germplasm
6. **Technical Programme:**
   - Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500 and 300 breedable females (Murrah).
   - Selection and testing of minimum 15 bulls of Murrah / 4-6 bulls for other breeds in every 18/24 months cycle.
   - Production of minimum 10,000 (Murrah) and 3000 to 5000 (Other breeds) frozen semen doses from each test bull.
   - Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.
   - Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
   - Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
   - Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days (All breeds) / 1500 kg in Murrah) and Peak yield, Milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation). New Table
   - Monthly testing of milk constituents (Fat%, SNF% and Protein%) and Somatic Cell Count, wherever feasible, at institutional herds.
   - Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
   - Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. **Staff associated with the project:**

Discipline	Name of Scientist / Staff	Status PI/Co-PI/ Associated)
AGB	Dr PC Chandran, Sr. Sci. Dr Rakesh Kumar, Sci.	Principal Investigator Co- Principal Investigator
Veterinary Medicine	Dr Pankaj Kumar, Sr. Sci.	Co- Principal Investigator
Animal Biotechnology	Dr Rajni Kumari, Sr. Sci.	Co- Principal Investigator
ARGO	Dr Chandra Sekar Azad, Asst. Professor	Co- Principal Investigator
Vety. Surgery	Dr RK Tiwari, Asst. Prof.	Co- Principal Investigator
Administrative staff/ Technical staff / Contractual staff (RA/SRF/YP's)		Nil

8. Financial Statement : Head wise budget allocation and utilization; revenue receipts

Fund utilization in Network Project for 2023-24 (Amount in Lakhs)											
Heads	**Capital**						**Salary**	**General**			
	Works	**Equip.**	**Library**	**Livestock**	**Furniture**	**Others**		**TA**	**HRD**	**Contingency**	**Total**
Fund released	4.00	2.50	0.00	0.00	1.50	3.50	0.00	0.00	0.00	26.00	37.50
Fund utilized	3.43	0.99	0.00	0.00	1.42	2.95	0.00	0.00	0.00	25.95	34.75

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	**B / P**	**T**	**D**	**T**	**S**	**E**	**CB**
	Female								
1.	Below 3 months	0	10	-	-	5	-	-	5
2.	3-12 months	18		5	1	18	-	-	4
3.	1-2 years	11		18	-	6	-	-	23
	Above 2 years	18		6	1	7			16
4.	Buffaloes in Milk	25		15	-	18	-	-	22
5.	Buffaloes Dry P /NP	06		18	-	8	9	-	7
	Sub Total	78	10	62	2	62	9	-	77
	Males								
1.	Below 3 months	4	6	-	-	8	-	-	2
2.	3-12 months	4		8	2	4	-	-	6
3.	1-2 years	2		4		2	-	-	4
	Above 2 years	1		2		1			2
4.	Breeding bulls						-	-	-
5.	Bullocks / Teasers	1		1			-	-	2
	Sub Total	12	6	15	2	15	-	-	16
	Grand Total	**90**	**16**	**77**	**4**	**77**	**9**	**-**	**93**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics including abnormalities

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April, 2024	-	-						-
May	-	-						-
June	-	-						-
July	-	-		1				1
August	1	-						1
September	1	-						1
October	-	2						2
November	-	-		1				1
December	2	3						5
January, 2025	-	-		1				1
February	1	1					1	3
March	1	4						5
Overall	**6**	**10**		**3**			**1**	**20**

Sex ratio Male : Female (1:1.67)

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 25

Female	Primary cause of disposal							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves								
0 to 3 months	-	-	-	-	-	-	-	-
3-12 months	-	-	-	-	-	-	-	-
Heifers								
1-2 years	-	-	-	-	-	-	-	-
> 2 years	-	-	-	-	-	-	-	-
Buffaloes								
Milch	-	-	-	-	-	-	-	-
Dry	3	-	-	2	4	-	-	9
Sub Total	**3**	**-**	**-**	**2**	**4**	**-**	**-**	**9**
Males	**Primary cause of disposal**							
Calves								
0 to 3 months	-	-	-	-	-	-	-	-
3-12 months	-	-	-	-	-	-	-	-
1 to 2 year	-	-	-	-	-	-	-	-
. >2 year	-	-	-	-	-	-	-	-
Breeding bulls	-	-	-	-	-	-	-	-
Bullock+Teaser +Others	-	-	-	-	-	-	-	-
Sub Total	-	-	-	-	-	-	-	-
Grand Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Female						Male				Overall Herd
	0-3 Month	3-12 Month	1-2 Yrs.	Above 2 Yrs.	Milk + Dry	0-3 Month	3-12 Month	1 -2 Yrs.	>2 yrs.	
No.	10	23	23	16	38	10	12	4	4	102
Died	0	1	0	1	0	0	2	0	0	4
%	0.00	4.35	0.00	6.25	0.00	0.00	16.67	0.00	0.00	3.92

Calf mortality (0 to 3 months) = 0.00 % (0/20)

9.5. Causes of Mortality (quarter wise) during the period April 2024 to March 2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	-	1	-	-	1
Pneumonitis	-	1		1	2
Septicaemia/ Toxaemia	-	-	-	-	-
Peritonitis	-	-	-	-	-
JD/TB	-	-	-	-	-
Milk Fever / metabolic disorders	-	-	-	-	-
TRP / TP	-	-	-	-	-
Parasitism	-	-	-	-	-
Accidental death	-	-	1	-	1
Peri-parturient disorders	-	-	-	-	-
Misc. (Snake bite)	-	-	-	-	-
Total	0	2	1	1	4

9.6 Prophylactic Measures undertaken

Disease	**Vaccination Date / No. of animals**	**No. of animals** Tested / Positive		**Dates and No. of animals treated for Parasitism**
FMD	15/10/2024	-	-	Calves are dewormed once in two months; And the adult animals are dewormed once in six months
HS	10/03/2025	-	-	
BQ		-	-	
Brucellosis	-	-	-	
JD	-	-	-	
TB	-	-	-	
IBR	-	-	-	
Mastitis	-	-	-	

9.7. Female Conception Rate during the Period January to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	05	03	60.0	02	01	50.0	02	01	50.0	1	0	0	10	05	50.0
Adults	14	07	50.0	12	05	41.7	10	03	30.0	05	2	40.0	41	17	41.5
Overall	19	10	52.6	14	06	42.9	12	04	33.3	06	2	33.3	51	22	43.1

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate

Quarter	No. of A I	Preg. animals	CR %
January – March Previous year	06	02	33.3
April – June	08	03	37.5
July – September	17	08	47.1
October- December	20	09	45.0
Overall	**51**	**22**	**43.1**

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. No.	Bull No.	SET No.	Total Number of AI	Total Conceived	CR%
1	2979	XXI	03	01	33.33
2	3014	XXI	03	01	33.33
3	5629	XXI	03	01	33.33
4	5414	XXI	03	02	66.67
5	7630	XXI	03	01	33.33
6	7768	XXI	04	02	25.00
7	2930	XXI	02	01	50.00
8	109	XXI	04	02	50.00
9	112	XXI	05	02	40.00
10	297	XXI	03	01	33.33
11	2990	XXI	03	02	66.67
12	5638	XXI	03	02	66.67
13	5690	XXI	03	01	33.33
14	5794	XXI	05	02	40.00
15	7990	XXI	04	02	50.00
Overall			**51**	**22**	**43.10**
No. of services per conception					**2.34**

9.10 Bull Wise Semen Stock

Sr. No	Set No	Bull No	OB	Doses produced / received	Doses used /disseminated			Balance
					Supply	Sold	Exp.	
1.	XXI	2979	53	--	12	--	2	39
2.	XXI	3014	54	--	14	--	3	37
3	XXI	5629	54	--	15	--	2	37
4	XXI	5414	50	--	10	--	4	36
5	XXI	7630	51	--	12	--	2	37
6	XXI	7768	53	--	10	--	2	41
7	XXI	109	50	--	9	--	2	39
8	XXI	112	50	--	12	--	3	35
9	XXI	297	50	--	10	--	2	38
10	XXI	2990	50	--	11	--	5	34
11	XXI	5638	50	--	12	--	4	34
12	XXI	5690	50	--	12	--	3	35
13	XXI	5764	50	--	10	--	2	38
14	XXI	7790	50	--	10	--	2	38
15	XXI	7990	0	50	12		5	33
Grand Total			**715**	**50**	**171**	**0**	**43**	**551**

9.11.1 Average body weight (kg) since inception (Indicate number of animals in parenthesis):

Body weight was not taken as the balance is under repairing.

Year	Birth Wt.	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC
Female							
Current year	29.75±0.29	57.23±0.60	85.24±1.15	140.06±1.58	179.73±1.18	219.84±1.15	475.53±11.63
Male							
Current year	30.90±0.31	64.98±0.65	91.13±2.47	147.90±2.05	191.77±3.15	232.70±1.41	--

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	7	1841.27±67.99	313.00±7.37	1748.40±62.52	9.21±0.35
2nd	4	2542.10±73.79	325.75±7.96	2384.15±34.56	12.78±0.44
3rd	4	2744.18±91.38	347.25±5.98	2482.48±73.11	13.73±0.57
4th	4	2800.10±72.73	337.75±2.63	2693.43±45.84	13.88±0.40
5th & above	7	2738.71±99.64	346.29±5.19	2579.87±100.33	13.56±0.63
Overall	**26**	**2477.13±88.48**	**333.00±4.00**	**2328.39±79.39**	**12.34±0.44**

9.12.1 Average production performance of Buffaloes Since Inception of Network

Year	Lact. Length (days)	TLMY (kg)	SLMY (kg)	Peak yield (kg)
2014-15	421.21±8.56 (13)	2176.98±89.23 (13)	1827.22±46.22 (13)	9.72±0.32 (13)
2015-16	329.04±6.35 (18)	2018.9±60.35 (18)	1865.60±36.75 (18)	9.06±0.28 (18)
2016-17	351.80±10.65 (19)	1932.25±18.12 (19)	1736.04±21.48 (19)	9.27±0.28 (19)
2017-18	405.42±35.15 (12)	2404.76±203.77 (12)	1996.65±122.6 (12)	12.34±0.48 (12)
2018-19	370.27±23.5 (16)	2356.17±147.22 (16)	1984.85±135.23 (16)	13.08±0.38 (16)

2019-20	329.38±12.15 (20)	2127.44±18.50 (20)	2088.45±19.16 (20)	12.75±2.11 (20)
2020-21	336.31±18.19 (31)	2166.04±89.10 (31)	1824.42±63.04 (31)	9.93±0.43 (31)
2021-22	335.01±21.16 (25)	2135.44±89.10 (25)	1944.40±78.37 (25)	10.21±0.43 (25)
2022-23	374.47±12.77 (19)	2688.62±134.72 (19)	2373.76±88.54 (19)	14.31±1.52 (19)
2023-24	347.45±21.43 (25)	2467.32±140.55 (25)	2239.02±114.14 (25)	12.13±1.58 (25)
2024-25	**333.00±4.00 (26)**	**2477.13±88.48 (26)**	**2328.39±79.39 (26)**	**12.34±0.44 (26)**

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	Fat	SNF	Protein	Lactose	SCC
April	60	7.24	8.78			
May	60	7.36	9.02			
June	80	7.32	9.11			
July	80	7.54	9.58			
August	80	7.52	9.53			
September	80	7.65	9.47			
October	80	7.32	9.08			
November	80	7.29	8.83			
December	80	7.25	8.91			
January	80	7.44	9.03			
February	80	7.15	9.28			
March	80	7.31	9.22			
Overall	**920**	**7.37**	**9.15**			

9.14: Reproductive Performance

Lactation / Parity	AFC (Months)	N →	SP (Days)	DP (Days)	CI (Days)
1	47.65±1.22	4	--	--	--
2		6	121.50±4.93	108.33±5.19	424.83±4.15
3		5	134.40±5.24	98.60±4.69	438.60±4.92
4		5	137.40±2.20	127.20±5.57	451.80±2.41
5th and above		9	142.33±3.57	116.67±2.87	446.44±3.24
Over all	**47.65±1.22**	**25**	**134.76±2.63**	**113.16±2.90**	**440.76±2.73**

9.14.1 Reproduction Performance Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
2014-15		146.3±8.98 (9)	124.9±5.91 (9)	569.4±14.54 (9)
2015-16		139.86±4.76 (12)	94.17±1.70 (12)	424.90±1.42 (12)
2016-17		183.1±6.25 (14)	122.2±3.13 (14)	481.2±6.56 (14)
2017-18		195.3±8.21 (12)	110.4±6.58 (12)	515.2±7.12 (12)
2018-19		157.22±9.28 (18)	92.25±10.47 (18)	463.12±22.17 (18)
2019-20		130.92±12.55 (20)	91.97±13.22 (20)	425.91±40.62 (20)
2020-21	48.34±5.26 (3)	130.45±11.47 (31)	99.90±12.62 (31)	467.82±23.74 (31)
2021-22	51.35±12.44 (3)	123.31±12.44 (25)	110.55±16.15 (25)	445.59±24.18 (25)
2022-23	54.00 (1)	131.54±14.63 (25)	114.02±20.92 (25)	437.69±24.37 (25)
2023-24	51.28±7.18 (3)	129.07±22.54 (18)	113.18±27.34 (18)	434.35±28.16 (18)
2024-25	**47.65±1.22 (4)**	**134.76±2.63 (25)**	**113.16±2.90 (25)**	**440.76±2.73 (25)**

9.15 Milk Production and Disposal

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April 2024	5696.4	4872.4	814	10
May	4902	4192	700	10
June	4691.6	4010.6	670	10

July	4506.4	3852.4	644	10
August	3636.7	3106.7	519	10
September	3161.3	2699.3	452	10
October	3470.1	2950.1	510	10
November	3829.3	3272.3	547	10
December	3778	3243	525	10
January 2025	4105.9	3508.9	586	10
February	3155.6	2694.6	451	10
March	4427.4	3784.4	632	10
Total	**49360.7**	**42186.7**	**7050**	**120**

9.16 Feed and fodder (Quintals) availability

Months	Green fodder produced at Farm	Green fodder Purchased	Total
April 2024	63.0	-	63.0
May	127.72	-	127.72
June	115.50	-	115.50
July	130.51	-	130.51
August	141.20	-	141.20
September	142.80	-	142.80
October	131.22	-	131.22
November	85.50	-	85.50
December	92.10	-	92.10
January 2025	121.60	-	121.60
February	127.40	-	127.40
March	91.45	-	91.45
Total Green	**1370.0**	**-**	**1370.0**
Silage	**-**	**-**	**-**
Dry	**430**	**1920**	**2350**
Concentrate	**-**	**1320**	**1320**

9.17: Milk performance during April 24 to March 25

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 24	25	6	31	80.65	7.60	6.13
May	25	6	31	80.65	6.54	5.27
June	25	6	31	80.65	6.26	5.04
July	24	7	31	77.42	6.26	4.85
August	22	6	28	78.57	5.51	4.33
September	22	6	28	78.57	4.79	3.76
October	22	7	29	75.86	5.26	3.99
November	21	7	28	75.00	6.08	4.56
December	21	5	26	80.77	6.00	4.84
January 25	21	5	26	80.77	6.52	5.26
February	20	7	27	74.07	5.26	3.90
March	20	7	27	74.07	7.38	5.47
Overall	22.33	6.25	28.58	78.09	6.12	4.78

9.17.1 Milking performance since inception

Year	No. of Animals in Milk	No. of Animals dry	Total Animals	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2014-15	8.17	10.83	19	42.98	3.98	1.71
2015-16	13.5	11.0	61	51.83	7.45	3.91
2016-17	19.1	9.4	68.1	66.1	6.39	4.51
2017-18	16.92	8.42	77.8	68.37	4.30	2.93
2018-19	14.75	10.67	25.33	58.01	4.85	3.08
2019-20	27.42	16.5	43.92	52.12	5.12	3.25
2020-21	27.25	19.17	46.41	58.75	4.42	2.58
2021-22	26.42	21.08	47.50	55.46	5.44	3.02
2022-23	27.08	22.08	49.17	55.08	6.77	3.73
2023-24	29.17	9.50	38.6	75.69	6.48	4.93
2024-25	22.33	6.25	28.58	78.09	6.12	4.78

9.18: Bull wise daughters born (only numbers)

Bull No.	Set No.	Daughters born	Daughters Calved	Daughters completing 1st Lactation
B-851	XIII	2	2	2
4324	XIV	3	3	3
4328	XIV	1	1	1
4354	XIV	2	2	2
4363	XIV	1	1	1
4438	XIV	3	3	3
2565	XV	1	1	1
2594	XV	1	1	1
2607	XV	2	2	2
4733	XV	1	1	1
M51	XV	2	2	2
4705	XVI	2	2	1
4889	XVI	1	1	1
2467	XVI	2	2	2
4905	XVIII	1		
1150	XVIII	2	1	
1209	XVIII	3	1	
1219	XVIII	2		
4995	XVIII	2		
1315	XIX	2		
5320	XIX	2		
5310	XIX	2		
2759	XIX	1		
2737	XIX	2		
2674	XIX	1		
5181	XIX	1		
5232	XIX	1		
5246	XIX	1		
7604	XIX	1		
5427	XX	2		
7584	XX	2		
2831	XX	2		
5481	XX	1		
5588	XX	2		
1454	XX	1		
7649	XX	1		

2793	XX	2		
2814	XX	2		
2848	XX	1		
2850	XX	1		
3004	XX	2		
2838	XX	1		
5500	XX	2		
19	XX	2		

9.19 Bull wise daughters completing 1st lactation

Bull No.	Daughter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)
B-851	40	20.03.2015	07.01.2020	55	368	2045	1745
4438	78	10.05.2016	07.07.2019	33	399	1527	1316
4328	81	09.07.2016	26.10.2020	51	340	1639	1350
B-851	42	15.05.2015	16.11.2020	65	278	1524	1524
4438	48	15.01.2016	16.11.2020	57	325	1730	1685
4324	75	16.03.2016	15.03.2019	33	251	1440	1440
4324	87	09.09.2016	16.12.2020	51	323	1668	1598
4354	86	26.08.2016	23.01.2021	52	291	1526	1526
4705	102	15.10.2017	21.06.2022	57	295	1733	1733
4889	98	03.05.2017	10.02.2022	58	448	2727	2126
4705	102	15.10.2017	21.06.2022	57	295	1733	1733
2467	103	06.11.2017	19.08.2022	58	305	1876	1876
2467	115	08.01.2018	09.07.2022	55	313	2076	2047

9.20 Breeding bulls Selected for current set : Nil
9.20.1 PT Bulls for nominated mating : Nil
9.20.2 List of Future breeding bulls : Nil

9.21 Target achieved during the year

Trait	**Target**	2020-21	2021-22	2022-23	2023-24	**2024-25**
Av. Age at first calving (months)	40	48.34±5.26 (3)	51.35±12.44 (3)	54.00 (1)	51.28±7.18 (3)	47.65±1.22 (4)
Av. Service period (days)	130	130±11.47 (31)	123±12.44 (25)	132±14.63 (25)	129.07±22.54 (21)	134.76±2.63
Calf mortality (0-3 months)	≤ 5 %	0.0	4.16 % (1/24)	7.32% (3/41)	2.86% (1/35)	0.00 (0/20)
Wet average (kg)	≥8.5 kg	4.42	5.44	6.77	6.48	6.12
Herd average (kg)	≥5.5 kg	2.58	3.02	3.73	4.93	4.78

Socioeconomic impact / Success stories:
Simultaneously, an Animal Health Camp was also organized in which 23 ailing cattle and buffaloes were given therapeutic interventions. At the end of the programme, the farmers were given balanced cattle feed, milk can, umbrella, mineral mixture and tarpaulin as welfare

Constraints if any:
Shortage of land for farming and fodder cultivation.

Focus of work in the coming year:
Continue focus on reproduction performances of buffaloes.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR	Expenditure as per AUC		Balance
Total	ICAR Share	Share as per R E	ICAR Share	State Share	(ICAR Share)
37.50*	33.50+4.00*	37.50*	34,75,157	--	2,74,843

* Includes Rs. 4.00 lakhs for SCSP

Herd Performance

The buffalo herd strength of Patna Centre was 93 as on March 2025, comprising 45 breedable buffaloes. 16 calves added due to birth during the year. The calf mortality (0-3 months) was zero as no calf died during 2024-25. The Conception rate decreased from 45.8 percent in 2023-24 to 43.1 percent in 2024-25.

Average TLMY, SLMY and Peak yield were slightly improved from 2467 kg (25), 2239 kg (25) and 12.13 kg (25) in 2023-24 to 2477 kg (26), 2328 kg (26) and 12.34 kg (26) in 2024-25, respectively. The average lactation length was 333 days during the year. The wet average and herd average decreased from 6.48 kg/d to 6.12 kg/d and from 4.93 kg/d to 4.78 kg/d, respectively during the year. The service period, dry period and calving interval were 135 days (25), 113 days (25) and 441 days (25) during the period. The AFC was 47.65 (4) months during 2024-25.

A. Accomplishment and Targets Achieved:

Trait	**Target**	2020-21	2021-22	2022-23	2023-24	**2024-25**
Av. Age at first calving (months)	40	48.34±5.26 (3)	51.35±12.44 (3)	54.00 (1)	51.28±7.18 (3)	47.65±1.22 (4)
Av. Service period (days)	130	130±11.47 (31)	123±12.44 (25)	132±14.63 (25)	129.07±22.54 (21)	134.76±2.63
% Calf mortality (0-3 months)	≤ 3 %	0.0	4.16 % (1/24)	7.32% (3/41)	2.86% (1/35)	0.00 (0/20)
Wet average (kg)	≥8.5 kg	4.42	5.44	6.77	6.48	6.12
Herd average (kg)	≥5.5 kg	2.58	3.02	3.73	4.93	4.78

Recommendations:

- Conception rate is declined, more efforts should be made for improvement.
- Continuous efforts are required to reduce the AFC as per project target.

Network Projct on buffalo improvement, LRS Mamnoor, Warangal (Telangana)
Annual Report 2024-25

Report Period : 2024-25

1. Name of centre : LRS Mamnoor, Warangal
2. Project Code :
3. Project Title : Network Project on Buffalo Improvement (Murrah)
4. Date of Start : April 2024

   Subproject : Performance recording and improvement of … Murrah / ~~Nili Ravi / Bhadawari / Surti / Jaffarabadi buffalo~~ / ~~Progeny testing of Murrah / Surti / Jaffarabadi bulls under field conditions~~
5. Objectives : Not yet communicated
6. Technical Programme : Not yet communicated

7. Financial Statement for year: 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure		Balance
Total	ICAR Share		ICAR Share	State Share	
17.00	12.75	12.75	12.75	4.25	0.00

8. Staff Position with the project:

Discipline	Name of Scientist / Staff	Status (PI/Co-PI/ Associated)
AGB	Dr P Amareswari, Pr. Sci.	Principal Investigator
Poultry Science	Dr K Prashanth, Sci.	Co- Principal Investigator
Administrative staff	One Senior Assistant; One Junior Assistant	
Technical staff	Nil	
Contractual staff (RA / SRF / YP-I, YP-II)	Nil	

9. Herd Performance from Table 9.1 to 9.21

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	Female								
1.	Below 3 months	2	14	-	2	13	-	-	1
2.	3-12 months	10	-	13	2	10		-	11
3.	1-2 years	11	-	10	-	9	0	-	12
	Above 2 years	38	-	9	-	7	5	-	35
4.	Buffaloes in Milk	22	-	33	-	29	2	-	24
5.	Buffaloes Dry P /NP	19	-	29	1	26	5	-	16
	Sub Total	102	14	94	5	94	12	-	99

	Males								
1.	Below 3 months	3	12	-	2	9	-	-	4
2.	3-12 months	4	-	9	-	6	-	-	7
3.	1-2 years	10	-	6	-	6	4	-	6
	Above 2 years	11	-	6	-	0	11	-	6
4.	Breeding bulls	-	-	-	-	9	0	-	0
5.	Bullocks/Teasers/others	2	-	-	-	6	0	-	2
	Sub Total	30	12	21	2	**36**	15	-	25
	Grand Total	132	26	115	7	**130**	27	-	124

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics during the period April 2024 – March 2025

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April-2024	-	-	-	-	-	-	-	0
May	2	-	-	-	-	-	-	2
June	-	-	-	-	-	-	-	0
July	-	-	-	3	-	-	-	-3
August	-	-	-	2	-	-	-	-2
September	3	7	-	-	-	-	-	10
October	2	1	-	-	-	-	-	3
November	1	4	-	-	-	-	-	5
December	-	1	1	1	-	-	-	-1
January-2024	2	1	-	1	-	-	-	2
February	2	-	-	-	-	-	-	2
March	-	-	-	-	-	-	-	0
Overall	**12**	**14**	**1**	**7**	**0**	**0**	**0**	**18**

Sex ratio Male: Female = 1.0 :1.2

9.3. Disposal of Animals (1st April 2024 to 31st March 2025)

Female	Primary cause of disposal							
Category	Surplus	Low Producers	Reprod. Problem	Weak & Old	Udder Health	Death	Exptl.	**Total**
Calves								
0 to 3 months	-	-	-	-	-	2	-	2
3-12 months	-	-	-	-	-	2	-	2
Heifers								
1-2 years	-	-	-	-	-	-	-	-
> 2 years	5	-	-	-	-	-	-	5
Buffaloes								
Milch	-	-	-	1	1	-	-	2
Dry	-	2	1	2	-	1	-	6
Sub Total	**5**	**2**	**1**	**3**	**1**	**5**	**-**	**17**

Males	Primary cause of disposal							
Calves 0 to 3 months	-	-	-	-	-	2	-	2
3-12 months	-	-	-	-	-	-	-	-
Young bull								
1-2 years	4	-	-	-	-	-	-	4
>2 years	11	-	-	-	-	-	-	11
Breeding bulls	-	-	-	-	-	-	-	-
Bullock+Teaser etc	-	-	-	-	-	-	-	-
Sub Total	15	-	-	-	-	2	-	17
Grand Total								

9.4 Mortality during the Period 1st April 2024 to 31st March, 2025

Female						Male				Closing balance
	0-3 Months	3-12 Months	1-2 Yrs.	Above 2 Yrs	Milk + Dry	0-3 Months	3-12 Months	1-2 Yrs.	>2 yrs.	
No.	16	23	21	47	62	15	13	16	17	230
Died	2	2	0	0	1	2	0	0	0	7
%	12	8	0	0	2	13	0	0	0	3

Overall Calf mortality (0-3 months): 12.90 % (4/31)

9.5. Causes of Mortality (qtr. wise) during the period 1st April 2024 to 31st March, 25

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	2	-	-	-	**2**
Pneumonitis	1	-	1	-	**2**
Septicaemia/ Toxaemia	1	1	-	-	**2**
Peritonitis	-	-	-	-	**-**
JD/TB	-	-	-	-	**-**
Milk Fever / metabolic disorders	-	-	-	-	**-**
TRP / TP	-	-	-	-	**-**
Parasitism	-	-	-	-	**-**
Accidental death	-	-	-	-	**-**
Peri-parturient disorders	-	-	-	-	**-**
Misc. (Snake bite)	-	-	-	-	**-**
Total	**4**	**1**	**1**	**0**	**6**

9.6 Prophylactic Measures undertaken during 2024-25

Disease	**Vaccination: Month / No. of animals**	**No. of animals** Tested / Positive		**Month and No. of animals treated for Parasitism**
FMD	24.04.2024/119	-	-	Calves are dewormed in alternate months. Whereas the adults are dewormed once in six months.
HS	24.02.2025/99	-	-	
BQ	-	-	-	
Brucellosis	-	-	-	
JD	-	-	-	
TB	-	-	-	
IBR	-	-	-	
Mastitis	-	-	-	

9.7 Female Conception Rate during the Period January to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	11	9	82	2	2	100	-	-	-	-	-	-	13	11	85
Adults	14	12	86	-	-	-	-	-	-	-	-	-	14	12	86
Overall	25	21	84	2	2	100	-	-	-	-	-	-	27	23	85

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate

Quarter	No. of A I	Pregnancy	CR %
January – March, 2024	10	9	90
April – June, 2024	8	7	88
July – September, 2024	7	5	71
October- December, 2024	2	2	100
Overall	27	23	85

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. No.	Bull No.	SET No.	Total AI	Conceived	CR%
1.	5912	22	8	8	100
2.	M-3126	22	3	2	67
3.	M-3097	22	4	3	75
Overall			15	13	87
No. of services per conception					**1.2**

9.10 Bull Wise Semen Stock

Sr. No.	Bull No	Centre	SET	Dam's Best SLMY/ Peak Yield	Opening balance	Received	Sold	Supp.	Exp.	Balance
1	5791	CIRB	22	4507/23.5	20	0	0	8	0	12
2	5814	CIRB	22	4138/22.0	20	0	0	0	0	20
3	5872	CIRB	22	3533/16.9	20	0	0	0	0	20
4	5912	CIRB	22	4350/20.0	20	0	0	0	0	20
5	M-51	CIRB	PT-17	4668	20	0	0	0	0	20
6	M-3097	GADVASU	22	4824/22kg	20	0	0	4	0	16
7	M-3113	GADVASU	22	2626	20	0	0	0	0	20
8	M-3126	GADVASU	22	3602	20	0	0	3	0	17
9	306	LUVAS	22	3847/18.3	20	0	0	0	0	20
			Total		**180**	**0**	**0**	**15**	**0**	165

9.11 Average Body weight (kg) (Indicate number of animals in parenthesis)

Year	At birth	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC (After 1st calving)	Adult
Female								
2023-24	31.38± 0.34 (16)	51.20 ± 0.51 (10)	84.54 ± 8.96 (13)	167.00±1.56 (9)	202.78 ± 2.41 (9)	243.13 ± 3.64 (8)	280.43 ± 39.87 (6)	-
2024-25	32 ± 1.21 (16)	61 ± 2.23 (11)	78 ± 3.45 (13)	120 ± 2.68 (8)	158 ± 7.28 (12)	205 ± 10.44 (9)	405 ± 30.14 (4)	-
Male								
2023-24	31.33 ± 0.31 (9)	55.0 ± 2.41 (5)	84.5 ± 1.49 (10)	139.82 ± 1.35 (11)	186.27±6.29 (11)	247.13±3.85 (8)	--	-

2024-25	32 ± 1.21 (15)	21 ± 2.23 (11)	78 ± 3.45 (10)	113 ± 8.28 (4)	171 ± 13.72 (8)	256 ± 168.3 (7)	--	-

9.12 Production Performance during 1st April 2024 to 31st March 2025

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	6	1960 ± 52.74	301 ± 15.67	1868 ± 91.58	8 ± 0.48
2nd	3	2072 ± 96.33	263 ± 26.67	2236 ± 85.81	9 ± 0.33
3rd	1	1901	294	1920	8
4th	2	2183	310	2172	10
5th & above	7	1907 ± 10.32	317 ± 20.03	1862 ± 68.08	9 ± 0.81
Overall	**19**	**1979 ± 40.56**	**301 ± 10.07**	**1959 ± 54.28**	**9 ± 0.39**

9.12.1 Production Performance of Buffaloes since Inception of Network

Year	Av. Lact. Yield (Kg)	Av. Lact. Length (days)	305-day Lact. Milk Yield (Kg)	Av. Peak yield (Kg)
2023-24	342 ± 14.96 (22)	2023 ± 69.21 (22)	1873 ± 43.98 (22)	9 ± 0.21 (22)
2024-25	301 ± 10.07 (19)	1979 ± 40.56 (19)	1959 ± 54.28 (19)	9 ± 0.39 (19)

9.12.2 Herd Life Production (up to 4th Lactation) during 2024-2025

Animal No.	DOB	Date of completion of 4th or more lact. or disposal	HLF (days) up to 4th or more lactation or disposal (d)	LTMY (kg)	Productive Days	Unproductive Days	MY/day HLF
601	20-02-2011	30-07-2020	3448	7237	1179	574	2.10
627	23-04-2014	01-10-2024	3814	10262	1629	1084	2.69
433	11-09-2013	03-10-2023	3674	7484	1304	403	2.04
673	18-08-2015	30-08-2022	2569	7241	1023	403	2.82
669	21-08-2016	12-11-2024	3005	7234	1317	875	2.41
687	03-02-2016	12-11-2024	3205	7234	1317	875	2.26

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. Or date of disposal) Productive Days (date of first calving to total days in milk), Unproductive days (total days when buffalo not give milk from the date of first calving)

9.13 Average Milk Composition from April 2024 to March 2025

Month	No. of Animals (N)	Fat %	Protein %	SNF %	Lactose %	Total Solid%
April, 24	22	6.92	-	8.5	-	-
May	20	6.31	-	8.5	-	-
June	17	6.37	-	8.5	-	-
July	15	6.49	-	8.5	-	-
August	13	6.51	-	8.5	-	-
September	18	6.61	-	8.5	-	-
October	19	6.08	-	8.5	-	-
November	22	6.47	-	8.5	-	-
December	21	6.15	-	8.5	-	-
January, 25	22	6.25	-	8.5	-	-
February	22	6.40	-	8.5	-	-

March	21	5.96	-	8.5	-	-
Overall	**232**	**6.39**	-	**8.5**	-	-

9.14: Reproductive Performance 2024-25

Lactation / Parity	N	AFC (Months)	SP (Days)	DP (Days)	CI (Days)
1st	4	49 ± 15.67	-	-	-
2nd	5	-	159 ± 111.41	162 ± 41.24	464 ± 49.67
3rd	7	-	228 ± 67.75	251 ± 38.39	533 ± 57.96
4th	1	-	55	63	357
≥5th	3	-	199	184	503
Over all	**20**	**49 ± 15.67**	**190 ± 33.44**	**199 ± 25.10**	**495 ± 33.52**

9.14.1 Reproduction Performance of Buffaloes Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
2023- 24	51 ± 3.93 (9)	256 ± 31.38 (16)	233 ± 28.25 (16)	561 ± 29.44 (16)
2024-25	49 ± 15.67 (4)	190 ± 33.44 (16)	199 ± 25.10 (16)	495 ± 33.52 (16)

9.15 Month wise Milk Production and Disposal during the Period 01/04/2024 to 31/03/2025

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk Sold	Calf feeding	Expt.
April, 2024	3532	2822	710	-
May	2958	2483	475	-
June	2542	2214	328	-
July	2190	1868	322	-
August	1733	1495	238	-
September	2407	1569	838	-
October	4288	2053	1995	240
November	4806	2057	2389	360
December	4811	2049	2390	372
January, 2025	4240	2173	1695	372
February	3379	1851	1192	336
March	3268	2005	891	372
Total	**40154**	**24639**	**13463**	**2052**

9.16 Feed and Fodder availability (April 2024 to March 2025)

Quarter	Type of Fodder	OB	Produced	Qty. Purchased	Actually Fed.	Balance
I	Green	-	364	-	-	-
	Dry	-	45	-	-	-
	Silage	-	-	-	-	-
	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	-	-		
II	Green	-	364	-	-	-
	Dry	-	39	-	-	-
	Silage	-	-	-	-	-
	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	-	-		-
III	Green	-	366	-	-	-
	Dry	-	36	-	-	-
	Silage	-	-	-	-	-

	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	-	-	-	-
IV	Green	-	345	-	-	-
	Dry	-	26.4	-	-	-
	Silage	-	-	-	-	-
	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	-	-	-	-
Total	Green	-	1439	-	-	-
	Dry	-	146.4	-	-	-
	Silage	-	50	-	-	-
	Sugar beet pulp	-	-	-	-	-
	Concentrate	-	93	-	-	-

9.17 Milking performance 1st April 2024 to 31st March 2025

Month	Buffaloes in Milk	Dry Buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 2024	22	19	41	54	5.4	2.9
May 2024	20	20	40	50	4.8	2.4
June 2024	17	23	40	43	5.0	2.1
July 2024	15	22	37	41	4.7	1.9
August 2024	13	23	36	36	4.3	1.6
September 2024	18	19	37	49	4.5	2.2
October 2024	19	18	37	51	7.3	3.7
November 2024	22	17	39	56	7.3	4.1
December 2024	21	19	40	53	7.4	3.9
January 2025	22	20	42	52	6.2	3.3
February 2025	22	18	40	55	5.5	3.0
March 2025	21	19	40	33	5.0	2.6
Overall	**19**	**20**	**39**	**49**	**5.6**	**2.8**

9.17.1 Milking performance since inception

Year	Animal in Milk	No. of Animal dry	Total Animal	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2023-24	20	19	39	51	6.1	3.2
2024-25	**19**	**20**	**39**	**49**	**5.6**	**2.8**

9.18: Bull wise daughters born during 2024-25: Nil
9.19 Bull wise daughters completing 1st lactation in 2024-25: Nil
9.20: Breeding Bulls Selected for current set: Nil
9.20.1: P T Bulls for nominated mating: Nil
9.20.2: List of Future breeding bulls: Nil

9.21: Accomplishment and Targets Achieved

Sr. No.	Trait	Target	2023-24	2024-25
1	Av. age at first calving (Months)	40.0 months	51	49
2	Av. service period (Days)	130 days	205	190
3	Calf mortality (0-3 months)	≤ 5 %	11	12.90
4	Wet average (Kg)	≥ 8.50 kg	6.1	5.6
5	Herd average (Kg)	≥ 5.50 kg	3.2	2.8

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Balance
Total	ICAR Share		ICAR Share	State Share	
17.00	12.75	12.75	12.75	4.25	0.00

Herd Performance

Herd Strength: The overall herd strength of Murrah buffalo in March 2025 was 124, which included 75 breedable buffaloes and 25 males.

Mortality: During the period April 2024 to March 2025 calf mortality (0-3 month) was reported 12.90 percent.

Milk Production Performance: The overall wet average and herd average were reported 5.6 and 2.8 kg, respectively. The overall 305 days lactation milk yield and total lactation milk yield during April 2024 to March 2025 was reported 1959 and 1979 kg, respectively. During the period under report 19 buffaloes completed their lactation. Av. Peak yield of 9.0 Kg was recorded during reporting period.

Reproductive Performance: The reproductive traits viz. Age at first calving, service period and calving interval were observed 49.0 months, 190 days and 495 days, respectively, during 2024 - 25.

Accomplishment and Targets Achieved:

Sr. No.	Trait	Target	2023-24	2024-25
1	Av. age at first calving (Months)	40.0 months	51	49
2	Av. service period (Days)	130 days	205	190
3	Calf mortality (0-3 months)	≤ 5 %	11	12.90
4	Wet average (Kg)	≥ 8.50 kg	6.1	5.6
5	Herd average (Kg)	≥ 5.50 kg	3.2	2.8

Recommendations:

- To compete with other Murrah centres, there is a need to improve the reproductive parameters such as service period, calving interval and AFC.
- Production traits such as TLMY, SLMY, WA, Herd average and Peak yield need enormous improvement.
- Calf mortality needs to be controlled and restricted under 5% through proper care and management practices.

ICAR-CIRB SUB CAMPUS, NABHA

1. **Name of the center** : Central Institute for Research on Buffaloes, Sub campus, Nabha
2. **Project Code** :
3. **Project title** : Genetic improvement of Nili-Ravi buffaloes
4. **Date of Start** : 2001-02
5. **Objectives:**

I. To establish elite herd of 200-300 Nili-Ravi Buffaloes for the production of genetically superior young bulls.
II. To evaluate sires through progeny testing
III. To produce, test, propagate and conserve high genetic merit male germplasm.

6.Technical Programme:

I. A set of young bulls (6-9) produced using the elite dams and sires are put under test.
II. Adequate number of semen doses per test bull are collected and used for insemination in Institute herd. The daughters of each bull are raised and their first lactation milk yield is recorded.
III. Bulls are ranked on percent superiority of its daughters (based on average milk yield) over the population average.
IV. Top 2 progeny tested bulls are selected and used for nominated mating with elite buffaloes to produce the next generation of young bulls.
V. The young bulls are again put to test and the cycle is repeated.

7. Financial Statement

8. **Staff Position**: Through redeployment

9. Herd performance: As stated below in table 9.1 to 9.21.

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition				Disposal				CB
		OB	**B/P**	**P**	**T**	**D**	**T**	**S**	**Sold to Farmer**	**CB**
	Female									
1.	Below 3 months	16	73			07	68	02		12
2.	3-12 months	31			134	02	110			53
3.	1-2 years Above 2 years	52 121			44 190	 01	52 199	 17		44 94
4.	Buffaloes in Milk	110			153	04	112	23		124
5.	Buffaloes Dry P /NP	56			117	02	97	37	1	36
	Sub Total	**386**	**73**		**638**	**16**	**638**	**79**	**1**	**363**
	Male									
1.	Below 3 months	18	75			03	75	03	-	12
2.	3-12 months	39			140	02	111	06	02	58
3.	1-2 years Above 2 years	36 24			46 15	- 01	10 11	52 04	17 09	03 14
4.	Breeding bulls	08			04				04	08
5.	Bullocks/Teasers / others	01			01			01		01
	Sub Total	**126**	**75**		**206**	**06**	**207**	**66**	**32**	**96**
	Grand Total	**512**	**148**		**843**	**22**	**844**	**145**	**33**	**459**

OB = Opening Balance as on 1st April 2024 D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March 2025

9.2 Calving Statistics including abnormalities

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 24	08	03	-	-	-	-	-	11
May	03	05	-	-	-	-	-	08
June	01	03	02	-	-	-	-	06
July	04	12	-	-	-	-	-	16
August	06	07	-	-	-	-	-	13
September	10	11	-	-	-	-	-	21
October	15	05	01	-	-	-	-	21
November	05	05		05	-	-	-	15
December	10	09		-	-	-	-	19
January 2025	07	04		-	-	-	-	11
February	02	06		-	-	-	-	8
March	4	3		03	-	-	-	10
Overall	**75**	**73**	**03**	**08**	**-**	**-**	**-**	**159**

Sex ratio Male: Female (75: 73)

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 25

Female	Primary cause of disposal							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Exp. purposes	Total
Calves								
0 to 3 months	02	-	-	-	-	07	-	09
3-12 months	-	-	-	-	-	02	-	02
Heifers								
1-2 years	-	-	-	-	-	-	-	-
> 2 years	17	-	-	-	-	01	-	18
Buffaloes Milch/ Dry	60	01	-	-	-	06		67
Sub Total	**79**	**01**	**-**	**-**	**-**	**16**		**96**
Males	**Primary cause of disposal**							
Calves								
0 to 3 months	03	-	-	-	-	03	-	03
3-12 months	05	03	-	-	-	02	-	10
1 to 2 year	52	17	-	-	-	-	-	69
. >2 year	04	09	--	--	--	01	--	14
Breeding bulls	-	04	-	-	-	-	-	04
Bullock+Teaser+Others	01	-	-	-	-	-	-	01
Sub Total	65	33	-	-	-	06		101
Grand Total	**144**	**34**	**-**	**-**	**-**	**22**	**-**	**197**

9.4. Mortality during the Period 1st April 24 to 31st March, 2025

		Females						Males						
Month		0-3	3-6	6-12	>1yr	>2yrs	All	0-3	3-6	6-12	>1yr	>2yrs	All	Total
Apr-24	No	13	11	23	52	265	364	18	15	27	27	30	117	481
	Died	01	-	-	-	-	01	-	01	-	-	-	01	02
	%	7.69	-	-	-	-	0.27	-	6.66	-	-	-	0.85	0.42
May	No	11	14	25	53	264	367	13	17	33	27	30	120	487
	Died	01	-	-	-	01	02	-	-	-	-	-	-	02
	%	9.09	-	-	-	0.38	0.54	-	-	-	-	-		0.41
Jun	No	10	14	26	54	264	368	12	16	35	28	30	121	489
	Died	01	-	-	-	01	02	-	-	-	-	-	-	02
	%	10.0	-	-	-	0.38	0.54	-	-	-	-	-	-	0.41
Jul	No	19	12	28	55	264	378	08	17	36	33	28	122	500
	Died	-	01	-	-	01	02	-	01	-	-	01	02	04
	%	-	8.33	-	-	0.8	0.53	-	5.88	-	-	3.57	1.64	0.80
Aug	No	22	10	32	42	278	384	11	13	35	36	27	122	506
	Died	-	-	-	-	01	01	-	-	-	-	-	-	01
	%	-	-	-	-	0.36	0.26	-	-	-	-	-	-	0.20
Sep	No	30	10	29	38	274	381	20	12	28	10	24	94	475
	Died	-	-	-	-	01	01	-	-	-	-	-	-	01
	%	-	-	-	-	0.36	0.26	-	-	-	-	-	-	0.21
Oct	No	21	19	22	44	278	384	31	08	31	14	21	105	489
	Died	02	-	-	-	-	02	-	-	-	-	-	-	02
	%	9.52	-	-	-	-	0.52	-	-	-	-	-	-	0.41
Nov	No	20	20	23	42	283	388	29	11	28	16	25	109	497
	Died	01	-	-	-	-	01	01	-	-	-	-	01	02
	%	5.0	-	-	-	-	0.26	3.45	-	-	-	-	0.92	0.40
Dec	No	16	28	23	42	286	395	30	20	27	16	27	120	515
	Died	01	-	-	-	-	01	-	-	-	-	-	-	01
	%	6.25	-	-	-	-	0.25	-	-	-	-	-	-	0.19
Jan-25	No	16	20	31	42	289	398	23	30	25	22	27	127	525
	Died	-	-	-	-	01	01	-	-	-	-	-	-	01
	%	-	-	-	-	0.35	0.25	-	-	-	-	-	-	0.19
Feb-25	No	15	19	30	45	250	359	18	29	21	03	23	94	453
	Died	-	01	-	-	01	02	01	-	-	-	-	01	03
	%	-	5.26	-	-	0.40	0.56	5.55	-	-	-	-	1.06	0.66
March-25	No	12	16	37	44	254	363	12	27	31	03	23	96	459
	Died	-	-	-	-	-	-	01	-	-	-	-	01	01
	%	-	-	-	-	-	-	8.33	-	-	-	-	1.04	0.22
Overall	No	89	16	15	52	311	436	93	93	85	82	40	171	607
	Died	07	02	-	-	07	16	03	02	-	-	01	06	22
	%	7.86	12.5	-	-	2.25	3.67	3.22	2.15	-	-	2.5	3.51	3.62

Note: calf mortality 5.49% (10/182)

9.5. Causes of Mortality (quarter wise) during the period April 2024 to March 25

Particulars	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
1. Penumonitis	0	0	0	1	1
2. Tympanitis	0	0	1	0	1
3. Prolapse	0	1	0	0	1
4. Metritis	0	0	1	0	1
5. Premature birth	0	0	2	1	3
6. Accident	0	1	1	0	2
7. Neurological disorder	1	1	0	0	2
8. Babesiosis / Anaplasma / Trypanosoma	4	3	1	2	10
9. Miscellaneous	1	0	0	0	1
Total	**6**	**06**	**06**	**04**	**22**

9.6 Prophylactic Measures undertaken 2024-2025

Vaccination	*No. of animals*		*Screening*	*No of animals*		*No of animals treated for Parasitism*
	Available	*Inoculated*		*Tested*	*Results*	
FMD	900	900	TB *	150	0 +ve	258(0-6 months) 406 (>6 months)
HS	900	900	JD*	150	0 +ve	
Brucellosis (calfhood vaccination)	74	74	Brucellosis**	40	0 +ve	
			Mastitis***	40	12 +ve	
			Campylobacteriois	0	0 +ve	
			Trypanosmias	500	93	

$Vaccination done twice in the year; * Based on Intradermal Tuberculin PPD/Johnin PPD
** Based on RBPT/SAT; ***Based on CMT; #Based on report provided by NRDDL, Jalandhar

9.7. Female Conception Rate During the Period January 2024 to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR%	AIs	C	CR%	AIs	C	CR%	AIs	C	CR %	AIs	C	CR%
Heifers	75	27	36.00	47	23	48.94	25	6	24.00	40	13	32.50	187	69	36.90
Adults	145	68	46.90	94	44	46.81	44	20	50.50	55	24	43.64	338	156	46.15
Overall	220	95	43.18	141	67	47.52	69	26	37.68	95	37	38.95	525	225	**42.86**

AIs = No. of animals inseminated; C = No. of animals conceived; CR % = Conception rate per cent

9.8 Month wise conception rate during the period January 2024 to December 2024

Month.	**Total AI**	**Total Conceived**	**CR%**
Jan, 24	44	20	45.45
Feb	61	26	42.62
Mar	34	13	38.24
Apr	19	8	42.11
May	21	11	52.38
June	16	5	31.25
July	19	5	26.32
Aug	13	6	46.15
Sep	43	10	23.26
Oct	93	43	46.24
Nov	88	40	45.45
Dec, 24	74	38	51.35
TOTAL	**525**	**225**	**42.86**

9.8.1: Quarter-wise conception rate

Quarter	**No. of AI**	**Pregnant animals**	**CR %**
January – March (Previous year)	139	59	42.45
April - June	56	24	42.86
July - September	75	21	28.00
October- December	255	121	47.45
Overall	**525**	**225**	**42.86**

9.9. Bull-wise Conception Rate During the period January 2024 to December, 2024

Sr. No.	Bull No.	SET No.	Total Number of AI	Total Conceived	CR%
1.	27	5th	4	-	-
2.	252	6th	8	6	75.00
3.	254	6th	17	7	41.18
4.	312	7th	46	21	45.65
5.	352	7th	34	15	44.12
6.	728	10th	24	7	29.17
7.	753	10th	68	39	57.35
8.	773	10th	18	3	16.67
9.	782	10th	35	14	40.00
10.	800	10th	27	12	44.44
11.	852	10th	82	24	29.27
12.	858	10th	99	43	43.43
13.	856	10th	12	6	50.50
14.	865	10th	3	-	-
15.	912	10th	17	10	58.82
16.	968	10th	28	16	57.14
17.	3081	10th	2	2	100.00
18.	981	10th	1	-	-
			525	**225**	**42.86**

9.10 Bull Wise Semen Stock

Sr. No	Bull No.	Set No.	O.B.	Doses produced / received	Doses used /disseminated		Balance
					Consumption for AI/Testing	Sold.	
1	411	1st	545				545
2	464		602				602
3	473		642				642
4	479		619				619
5	523	2nd	669			131	538
6	524		1358				1358
7	525		503				503
8	535		723			10	713
9	562		894				894
10	577		1146				1146
11	596	3rd	800				800
12	674		1105			474	631
13	702		793			125	668
14	716		1150				1150
15	719		996				996
16	771		566				566
17	791		1066				1066
18	802		946				946
19	806	4th	1450				1450
20	878		2000			100	1900
21	881		713			190	523
22	891		927			205	722
23	900		936			95	841
24	902		1041				1041
25	905		1297			314	983
26	916		1463			79	1384
27	930		1245			208	1037

28	941		1230				1230
29	991	5th	2104			50	2054
30	3		520			88	432
31	25		2015			104	1911
32	27		2753		35	302	2416
33	63		3144			40	3104
34	113		1791			150	1641
35	168	6th	538			10	528
36	181		919				919
37	245		2432			10	2422
38	252		538		12	126	400
39	254		2096		50	40	2006
40	298	7th	1944			116	1828
41	308		667				667
42	312		680		46	50	584
43	336		212			10	202
44	342		2800				2800
45	352		2136		50	269	1817
46	359		2359			140	2219
47	435	8th	1336				1336
48	480		1521			48	1473
49	487		8978			590	8388
50	501		2501			50	2451
51	507		3739			280	3459
52	511		1192			10	1182
53	516		2957			30	2927
54	543		5176			135	5041
55	551	9th	5025			145	4880
56	556		4901			30	4871
57	561		140			10	130
58	565		126				126
59	579		1429				1429
60	674		3607				3607
61	705		2661		135	30	2496
62	710		108				108
63	728	10^{th}	2466		80	74	2312
64	753		266	566	140	105	587
65	773		201		50	10	141
66	800		1042	10	115	180	757
67	852		1705		110	214	1381
68	856		168	90	20	178	60
69	782		543		40	13	490
70	865		882		45	15	822
71	858		1352		105	100	1147
72	905	11^{th}		348	10		338
73	912			532	17	53	462
74	917			20	5	10	5
75	968			1139	28	73	1038
76	975			460	15	88	357
77	981			35	1		34
78	994			171			171
79	3087			10	2		8
Total			**111095**	**3381**	**1111**	**5907**	**107458**

Summary Report (2024-25)			
Brief Information	2024-25	**2023-24**	**2022-23**
Opening balance on 1st April	111095	107149	107205
Semen Production up to March	3381	7894	7062
Semen doses supplied NPBI	1111	1612	1327
Semen doses sold up to March	5907	6101	3165
Semen doses used for Experiment	-	-	
Closing Balance	107458	**107330**	**109774**

9.10.1: Month Wise Semen Stock during the Period (April 2024 to March 2025)

Semen Prod.	Opening Balance	Prod./ Received	issued AI/Test.	Sale/ GADVASU	Closing balance
Apr.2024	111095	0	38	505	110552
May.24	110552	0	44	203	110305
Jun.24	110305	0	32	310	109963
July.24	109963	0	40	314	109609
Aug.24	109609	0	36	934	108639
Sep.24	108639	250	88	333	108468
Oct.24	108468	1015	206	455	108822
Nov.24	108822	0	148	592	108082
Dec.24	108082	717	170	359	108270
Jan.25	108270	249	104	693	107722
Feb.25	107722	490	120	584	107508
Mar.25	107508	660	85	625	107458
Total		**3381**	**1111**	**5907**	

9.11 Average Body weight (kg) since inception: Information not available

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	Av. Lactation Yield(kg)	Av. Lactation length (days)	305-days yield (kg)	Av. Peak Yield (kg)
1st	32	2432±97.38	330±6.11	2323±84.69	11.2±0.59
2nd	30	2646±107.73	304±9.43	2577±90.80	13.3±0.32
3rd	16	2797±151.90	284±9.43	2780±147.31	16.1±0.85
4th	08	2865±163.13	308±13.02	2833±151.78	15.1±0.84
5th & above	18	2840±140.08	307±9.31	2793±132.31	14.4±0.75
Overall	**104**	**2654±57.51 (104)**	**310±4.28 (104)**	**2587±53.11 (104)**	**13.4±0.32 (104)**

9.12.1 Average production performance of Buffaloes Since Inception of Network

Year	Lact. Length (days)	TLMY (kg)	SLMY (kg)	Peak yield (kg)
1991-92	373 (68)	2017 (68)	1813 (68)	
1992-93	309 (105)	1974 (105)	1921 (105)	
1993-94	328 (70)	1776 (70)	1744 (70)	
1994-95	350 (77)	2043 (77)	1944 (77)	
1995-96	354 (70)	2049 (70)	1894 (70)	
1996-97	392 (81)	2092 (81)	1807 (81)	
1997-98	354 (67)	2126 (67)	2056 (67)	
1998-99	341 (97)	2153 (97)	2056 (97)	

1999-00	337 (99)	1968 (99)	1874 (99)	
2000-01	305 (89)	1890 (89)	1812 (89)	
2001-02	296 (86)	1926 (86)	1885 (86)	10.00 (86)
2002-03	293 (105)	2007 (105)	1941 (105)	10.49 (105)
2003-04	307 (93)	1968 (93)	1895 (93)	10.49 (93)
2004-05	315 (116)	1974 (116)	1848 (116)	8.00 (116)
2005-06	306 (102)	2190 (102)	2090 (102)	10.0 (102)
2006-07	304 (118)	1921 (118)	1795 (118)	9.00 (118)
2007-08	302 (122)	1787 (122)	1629 (122)	9.10 (122)
2008-09	289 (108)	2036 (108)	1929 (108)	9.94 (108)
2009-10	302 (146)	1927 (146)	1822 (146)	9.40 (146)
2010-11	292 (115)	2042 (115)	1972 (115)	10.54 (115)
2011-12	279 (88)	2045 (88)	1998 (88)	10.60 (88)
2012-13	264 (123)	2048 (123)	2017 (123)	11.14 (123)
2013-14	285(109)	2297(109)	2241(109)	12.20 (109)
2014-15	303(115)	2464(115)	2384(115)	12.38 (115)
2015-16	305(110)	2564(110)	2471(110)	12.4 (110)
2016-17	298(136)	2452(136)	2377(136)	12.3 (136)
2017-18	282± 4.80 (110)	2363± 60.83 (110)	2321± 55.25 (110)	12.7± 0.28 (110)
2018-19	311± 5.18 (111)	2797± 63.94 (111)	2679± 52.63 (111)	13.7± 0.29 (111)
2019-20	304±4.68 (105)	2688±63.44 (105)	2597±54.68 (105)	13.38±0.26 (105)
2020-21	300±4.39 (114)	2647±61.43 (114)	2594±58.69 (114)	13.78±0.27 (114)
2021-22	294±4.62 (130)	2609.41±66.62(130)	2535.42±57.06 (130)	14.0±0.30 (130)
2022-23	309±4.85 (113)	2715±61.21 (113)	2624±53.92 (113)	14.25±0.30 (113)
2023-24	327±5.03 (98)	2860±65.99 (98)	2720±59.74 (98)	13.29±0.33 (98)
2024-25	**310±4.28 (104)**	**2654±57.51 (104)**	**2587±53.11 (104)**	**13.4±0.32 (104**

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	% Fat	Solid not fat	Protein	Lactose	Total Solids
April 24	62	7.6	9.6	3.60	5.40	17.20
May	58	7.8	9.5	3.50	5.51	17.30
June	-	-	-	-	-	-
July	63	8.0	9.3	3.48	5.28	17.30
August	-	-	-	-	-	-
September	140	8.1	9.5	3.53	5.05	17.60
October	155	7.8	9.8	3.72	5.28	17.60
November	-	-	-	-	-	-
December	160	8.0	9.5	3.77	5.13	17.50
January 2025	144	7.7	9.8	3.53	5.29	17.50
February	136	7.8	9.8	3.55	5.34	17.60
March	124	7.6	9.7	3.51	5.28	17.30
Overall	**1042**	**7.82**	**9.61**	**3.57**	**5.28**	**17.43**

9.14: Reproductive Performance 2024-25

	AFC (Months) (N)	N →	Service period (Days)	Dry period (Days)	Calving interval (Days)
1	42.82±0.67 (46)				
2		21	169±16.4	151±13.0	475±15.4
3		21	131±14.2	134±10.9	438±14.4
4		13	109±14.21	146±20.13	421±14.23
5th and above		18	140±13.40	151±16.20	450±13.6
Over all		**73**	**140±7.74**	**145±7.14**	**449±7.585**

9.14.1 Reproduction Performance Since inception of Network.

Years	AFC (days)	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
1988-89	1273±44 (27)	41.88	205±14.0 (69)	211 (76)	518±16.0 (72)
1989-90	1301±35 (16)	42.80	186±29.0 (58)	177 (58)	511±36.0 (58)
1990-91	1297±40 (20)	42.66	276±22.0 (56)	197 (56)	517±25.0 (56)
1991-92	1411±24 (39)	37.53	312±24.0 (58)	243 (58)	622±25.0 (58)
1992-93	1438±37 (28)	47.30	207±17.0 (68)	180 (67)	490±16.0 (67)
1993-94	1356±39 (28)	44.60	211±22.0(58)	176 (58)	513±22.0 (58)
1994-95	1476±31 (29)	48.55	232±21.0 (63)	207 (63)	527±19.0 (63)
1995-96	1529±48 (24)	50.29	243±20.0 (52)	199 (52)	539±19.0 (52)
1996-97	1371±30 (31)	45.10	260±14.0 (69)	176 (89)	561±15.0 (69)
1997-98	1262±23 (32)	41.51	246±51.0 (60)	183 (60)	550±53.0 (59)
1998-99	1230±35 (26)	40.46	170±29.0 (89)	150 (89)	481±30.0 (89)
1999-00	1197±16 (22)	39.38	134±09.0 (91)	134 (91)	467±10.0 (91)
2000-01	1213±14 (45)	39.90	143±10.0 (80)	131 (80)	443±11.0 (80)
2001-02	1266±18 (31)	41.64	137±09.0 (83)	133 (83)	445±09.0 (83)
2002-03	1277±19 (58)	42.00	132±08.0 (90)	132 (90)	440±08.0 (90)
2003-04	1266±17 (59)	41.64	138±09.0 (78)	136 (78)	443±09.0 (78)
2004-05	1306±28 (39)	42.96	155±10.1(89)	146 (89)	463±10.2 (89)
2005-06	1294±27 (58)	42.57	167±10.9 (72)	157 (72)	474±10.6 (72)
2006-07	1214±29 (57)	39.93	165±14.7 (58)	160 (58)	478±14.3 (58)
2007-08	1241±22 (43)	40.82	165±11.2 (74)	150 (74)	458±11.1 (74)
2008-09	1206±18 (69)	39.67	172±11.8 (70)	172 (70)	489±16.3 (70)
2009-10	1249±24 (52)	41.09	170±14.0 (76)	163 (76)	478±14.1 (76)
2010-11	1250±19 (47)	41.12	191±13.7 (71)	170 (71)	500±13.7 (71)
2011-12	1207±18 (43)	39.70	136±20.2 (48)	150 (48)	464±23.0 (48)
2012-13	1205±18 (52)	39.64	126±10.8 (75)	151 (75)	436±10.9 (75)
2013-14	1210±25 (42)	39.80	127±10.6 (67)	159 (67)	447±8.53 (97)
2014-15	1213±20 (36)	39.90	112±7.89 (88)	138 (88)	420±8.09 (88)
2015-16	1217±19 (56)	40.03	145.3±9.20 (88)	150 (88)	453.3±9.20 (88)
2016-17	1260±19 (28)	41.45	140.4±7.00 (118)	147 (118)	448±7.07 (118)
2017-18	1248±17 (49)	41.05±0.56	135±8.46 (95)	157± 5.56 (95)	444±8.44 (95)
2018-19	1235±19 (55)	40.61±0.63	129±8.55 ((77)	148± 5.93 (77)	438±8.54 (77)
2019-20	1270±13.93 (42)	41.78±0.78	157±7.27 (94)	157±15.27(94)	466±7.29 (94)
2020-21	1357±16.34 (39)	44.66±0.54 (39)	136±7.1 (106)	144±5.85 (106)	444±7.25 (106)
2021-22	1325±13.00 (51)	43.62±0.42 (51)	116±7.26 (85)	130±6.42 (85)	419±7.30 (85)
2022-23	1324±15.54 (51)	43.54±0.51 (51)	134±8.95 (86)	151±7.30 (86)	441±8.83 (86)
2023-24	1335±20.49 (29)	43.92±0.67 (29)	144±8.83 (73)	143±6.73 (73)	451±8.71 (73)
2024-25	**1302±16.30 (46)**	**42.82±0.54 (46)**	**140±7.74 (73)**	**145±7.14 (73)**	**449±7.58 (73)**

9.15 Milk Production and Disposal durin 2024-25

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April 24	25888.90	19366.50	5766.35	2.00
May	26340.80	19692.50	5878.59	2.50
June	24251.50	18206.00	5337.15	2.00
July	23513.90	18369.50	4457.53	2.00
August	23513.70	18184.00	4642.33	2.50
September	23010.30	18298.00	4040.09	2.00
October	27519.10	22524.00	4191.57	2.00
November	29442.90	23523.50	5059.34	2.50
December	31570.00	25209.00	5439.49	2.00
January 25	34418.00	27643.50	5769.53	2.50
February	32368.50	26189.50	5234.23	2.00
March	33896.10	26135.00	6771.83	2.00
Total	**335733.70**	**263341.00**	**62588.03**	**26.00**

9.16 Feed and Fodder purchased and offered to animals (April 2024 to March 2025)

Quarter	Fodder of Fodder	OB (Q)	Produced at CIRB	Purchased	Total	Actually Fed (Q)	Closing Balance
I	Green	-	7876	-	7876	7876	-
	DRY	254	3305.5	-	3559.5	245.5	3314
	Silage	-	-	-	-	-	-
	Concentrate	-	-	-	1020.39	1020.39	-
II	Green	-	12428	-	12428	12428	-
	DRY	3314	-	-	3314	528	2786
	Silage	-	-	-	-	-	-
	Concentrate	-	-	-	1349.52	1349.52	-
III	Green	-	10513	-	10513	10513	-
	DRY	2786	-	-	2786	1629	1157
	Silage	-	-	-	-	-	-
	Concentrate	-	-	-	1361.66	1361.66	-
IV	Green	-	11942	-	11942	-	-
	DRY	1157	-	50 Q	1207	1172	35
	Silage	-	-	-	-		-
	Concentrate	-	-	-	1371.57	1371.57	-
Total	**Green**	**-**	**42759**	**-**	**42759**	**30817**	**-**
	DRY	**-**	**3305.5**	**-**	**3609.5**	**3574.5**	**35**
	Silage	**-**	**-**	**-**	**-**	**-**	**-**
	Concentrate	**-**	**-**	**-**	**-**	**5103.14**	**-**

9.17: Milk performance during April 2024 to March 2025

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 24	111	54	165	67	7.77	5.21
May	108	48	156	69	7.83	5.43
June	102	57	158	65	7.89	5.10
July	97	64	161	60	7.80	4.71
Aug	101	65	166	61	7.46	4.58
Sep	101	65	166	61	7.62	4.62
Oct	113	57	170	67	7.81	5.21
Nov	122	53	175	70	8.07	5.63
Dec	126	53	180	70	8.07	5.67
Jan 25	133	51	184	72	8.32	5.23
February	129	44	173	74	8.82	5.35
March	120	36	156	77	9.22	7.09
Overall	**114**	**54**	**168**	**68**	**8.06**	**5.64**

9.17.1 Milking performance since inception

Year	**No. of Animals in Milk**	**No. of dry Animals**	**Total Animals**	**% in Milk**	**Wet Av. (kg)**	**Herd Av. (kg)**
1992-93	98	53	151	64	5.86	3.42
1993-94	81	58	139	58	5.75	3.39
1994-95	92	44	136	67	6.01	4.18
995-96	86	35	121	71	5.61	3.99
1996-97	81	52	133	61	5.71	3.49
1997-98	113	40	153	74	6.03	4.45
1998-99	104	42	146	72	6.13	4.26
1999-00	85	39	124	68	6.01	4.23
2000-01	96	33	129	74	6.31	4.69
2001-02	86	38	124	69	6.85	4.82
2002-03	106	38	144	73	6.56	4.83
2003-04	106	37	143	74	6.35	4.70
2004-05	100	47	147	67	6.86	4.65
2005-06	114	46	160	71	6.85	4.84
2006-07	119	48	167	71	6.20	4.40
2007-08	102	54	156	65	6.73	4.46
2008-09	122	44	166	73	6.91	5.03
2009-10	110	58	168	65	7.00	4.66
2010-11	98	43	141	70	7.11	4.93
2011-12	84	40	124	68	7.74	5.30
2012-13	90	49	139	65	8.26	5.34
2013-14	94	52	146	64	8.25	5.32
2014-15	99	41	140	71	8.48	5.98
2015-16	110	41	151	72	8.51	6.22
2016-17	102	53	155	65	7.96	5.23
2017-18	97	45	142	68	8.52	5.84
2018-19	109	38	147	74	8.82	6.54
2019-20	104	50	154	68	9.18	6.25
2020-21	101	44	145	70	9.03	6.38
2021-22	102	49	151	67	8.78	5.96
2022-23	106	51	157	67	8.25	5.56
2023-24	98	52	149	65	8.39	5.50
2024-25	**114**	**54**	**168**	**68**	**8.06**	**5.64**

9.18: Bull wise daughters born (only numbers)

Bull No.	Set No.	Daughters born
252	6th	4
254	6th	2
728	10th	6
753	10th	12
800	10th	13
852	10th	15
856	10th	14
782	10th	02
858	10th	05
Total		**73**

9.18.1: Bull wise daughters calved and completed 1st lactation (only numbers) 2024-25

Bull No.	Set No.	Daughters Calved during 2024-25	Daughters completing 1st Lactation during 2024-25
473	1st PT	01	02
535	2nd PT	02	01
674	3rd PT	02	02
905	4th PT	02	01
916	4th PT		01
359	7th	-	03
352	7th	-	03
435	8th	03	02
480	8th	10	01
487	8th	06	01
501	8th	10	03
507	8th	03	02
511	8th	07	06
516	8th	04	02
543	8th	05	06
551	9th	01	-
579	9th	01	-
705	9th	04	-
Bullet		-	01
Arjun		-	01
Total		**61**	**38**

9.19 Bull wise daughters completing 1st lactation April 2024 to March 2025

Sr. No.	Bull No.	Daughter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)	PY (Kg)
1	Bullet	809	06-08-2019	28-04-2023	44.77	357	1912	1852	9.2
2	Arjun	755	05-11-2018	18-11-2023	44.87	251	1725	1725	9.0
3	501	881	28-08-2020	05-02-2024	41.32	291	1950	1950	8.7
4		835	21-11-2019	27-12-2024	49.57	356	2800	2661	12.5
5		857	14-04-2020	02-03-2024	46.64	343	2343	2333	9.4
6	507	887	19-12-2020	20-02-2024	41.12	311	2848	2832	11.2

7		861	09-07-2020	27-01-2024	42.66	362	4683	43.38	27.1
8	511	831	26-11-2019	12-04-2023	40.56	373	1970	1901	8.1
9		892	16-09-2020	22-02-2024	41.25	323	1974	1913	8.5
10		860	11-05-2020	27-05-2024	48.59	235	1370	1370	9.0
11		911	27-10-2020	20-02-2024	39.84	346	2565	2428	9.9
12		899	28-09-2020	17-04-2024	42.66	303	2037	2037	9.0
13		870	10-08-2020	11-02-2024	42.11	407	2967	2423	10.0
14	535	859	01-05-2020	13-02-2024	45.49	353	1484	1349	7.6
15	543	898	23-09-2020	20-02-2024	40.95	283	2289	2289	10.5
16		901	29-09-2020	15-02-2024	40.59	288	1791	1791	9.4
17		921	12-12-2020	12-04-2021	40.03	266	1712	1712	9.2
18		825	02-10-2019	23-02-2024	52.80	329	2654	2571	13.5
19		858	17-04-2020	02-03-2024	46.55	363	2232	1981	10.1
20		902	30-09-2020	31-03-2024	42.04	348	2865	2675	12.0
21	674	808	05-08-2019	12-06-2023	46.28	334	2431	2405	10.6
22		804	21-07-2019	17-08-2023	48.95	295	2125	2125	11.2
23	359	783	05-04-2019	27-08-2023	52.80	285	1915	1915	10.2
24		780	23-03-2019	20-10-2023	55.00	314	2511	2511	13.2
25		769	11-01-2019	15-08-2023	5516	402	2992	2406	10.4
26	352	791	27-04-2019	29-08-2023	52.11	325	1809	1766	9.6
27		794	27-05-2019	17-09-2023	51.78	327	2318	2179	8.9
28		801	15-07-2019	01-11-2023	51.64	302	2707	2707	15.0
29	473	853	22-02-2020	23-01-2024	47.07	339	2703	2591	10.8
30		906	19-10-2020	14-03-2024	40.86	382	2673	2314	11.5
31	480	832	28-10-2019	06-09-2023	46.35	303	1995	1995	11.0
32	487	862	02-07-2020	5-5-2024	46.15	299	2545	2545	12.8
33	516	840	23-12-2019	17-09-2023	44.87	313	1738	1727	9.3
34		824	28-09-2019	13-12-2023	50.56	338	2800	2661	12.9
35	435	830	24-10-2019	26-10-2023	48.13	302	1523	1523	8.5
36		938	19-04-2021	23-02-2024	34.21	356	2227	2050	12.0
37	905	884	7-9-2020	25-2-2024	41.64	278	2210	2210	10.4
38	916	866	31-07-2020	27-01-2024	41.94	300	1975	1975	9.4

9.20 Bull used for test mating – 11th set current set

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dams best SLMY(kg)/ Parity	Semen doses available	Expected predicted Difference (EPD)
1	905	24.12.19	272	916	3556/III	338	
2	912	11.02.20	605	501	3631/I	462	
3	917	14.03.20	614	507	5102/III	5	
4	957	03.10.20	362	487	4770/VII	0	
5	968	07.12.20	423	543	3392/V	1038	
6	975	26.01.21	646	543	3363/I	357	
7	981	02.03.21	593	435	3849/III	34	
8	994	30.06.21	366	501	3277/III	171	
9	3087 (GADVASU)	28.08.21	378	487	3533/I	8	

9.20.1 PT bulls for nominated mating

Bull No.	Set No.	Centre	Dams' Best yield	Sire Index	% Superiority
411	1st	CIRB Nabha	2352	2315	25.07
473	1st	CIRB Nabha	2324	1962	10.01
523	2nd	CIRB Nabha	2390	2059	11.24
535	2rd	CIRB Nabha	3208	2062	10.85
674	3rd	CIRB Nabha	3350	2389	9.39
702	3rd	CIRB Nabha	3421	2377	8.88
905	4th	CIRB Nabha	3639	2561	15.29
916	4th	CIRB Nabha	2961	2425	9.99
27	5th	CIRB Nabha	3979	2488	6.79
03	5th	CIRB Nabha	2866	2401	4.47
252	6th	CIRB Nabha	3469	2617	5.93
254	6th	CIRB Nabha	2811	2579	4.42
298	7th	CIRB Nabha	3979	2460	6.99
312	7th	CIRB Nabha	3317	2461	7.05
352	7th	CIRB Nabha	4050	2472	7.53

9.20.2 Future Breeding bulls

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dams best SLMY (kg)	Highest Yield/ Best Peak Yield
1	997	26.07.21	605	543	3631-2143-3205	3631/17.5
2	1102	16.08.21	461	435	3205-3209-2072-2311-3339	3339/18.0
3	1120	11.10.21	287	579	3089-3207-4247-3305-678-3443	4247/21.5
4	1126	1.11.21	587	705	2769-2756-3487-2248	3487/22.8
5	1130	11.12.21	615	705	2730-3766-797	3766/18.9
6	1136	27.12.21	169	705	2849-3505-2235-2345-3107-1777	3505/17.3
7	1160	24.01.22	534	579	2823-3448-2741	3448/17.5
8	1194	08.08.22	294	674	3063-3138-3441-2394-3771-2138	3771/17.4
9	1211	29.08.22	450	674	3517-4202-3967-2236-1417-411	4202/23.8
10	1251	23.10.22	362	27	2310-2761-3217-3379-3775-4021-4770-3835	4770/23.0
11	1255	02.11.22	596	27	2590-3440-2748-3544	3544/22.6
12	1259	07.11.22	428	674	2394-2902-3301-2843-2653-3278	3301/19.2
13	1261	10.11.22	587	561	2769-2756-3487-2248	3487/22.8
14	1266	14.11.22	561	710	3345-3022-1227	3345/19.7
15	1283	16.12.22	787	705	3580	3580/17.2
16	1285	25.12.22	488	674	3140-3542-3232-2970-3573	3573/19.5

Table 9.21 No. of Elite animals having 305 DLMY ≥ 3000 kg

Sr. No.	**305 DLMY groups**	**No. of elite buffalo**
1	≥ 4000 kg	8
2	3500 to 4000 kg	20
3	3000 to 3500 kg	28
	Total	56

9.21 Target achieved during the years

Traits	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. AFC (Months)	40.0	44.66 (39)	43.62 (51)	43.54 (51)	43.92 (29)	42.82±0.54 (46)
Av. service period (Days)	130	136 (106)	116 (85)	134 (86)	144 (73)	140±7.74 (73)
Calf mortality (0-3 months)	≤ 5 %	8.72 %	5.42%	3.50%	7.14%	5.49%
Wet average (Kg)	≥ 8.50 kg	9.03 Kg	8.78 Kg	8.25 Kg	8.39 Kg	8.06 Kg
Herd average (Kg)	≥ 5.50 kg	6.38 Kg	5.96 Kg	5.56 Kg	5.50 Kg	5.64 Kg

11. Achievements and summary:

Herd Strength: The overall herd strength of Nili-Ravi buffalo in March 2025 was 459, which included 254 breedable buffaloes, 135 suckling calves (< 1 year), 44 young females (1-2 years) and 22 breeding males (>2.5 years).

Mortality: During the period April 2024 to March 2025 calf mortality (0-3 month) was reported 5.49 percent.

Milk Production Performance: The overall wet average and herd average were reported 8.06 and 5.64 kg, respectively. The overall 305 days lactation milk yield and total lactation milk yield during April 2024 to March 2025 was reported 2587 and 2654 kg, respectively. Peak yield of 13.4 Kg was recorded during reporting period.

Reproductive Performance: The overall conception rate during January to December 2024 was reported 42.86 %. The other reproductive traits viz. Age at first calving, service period and calving interval were observed 42.82 months, 140 days and 449 days, respectively for buffaloes calved during April 2024 to March 2025.

Semen Production and Dissemination: A total 3381 semen doses frozen at CIRB Lab during April 2024 to March 2025. A total of 1111 doses of frozen semen were supply in NPBI and 5907 frozen semen doses sold during the period under report.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR	Expenditure as per AUC		Balance
Total	ICAR Share	Share as per R E	ICAR Share	State Share	ICAR Share
56.48*	50.98+5.50*	56.48*	56.48	0.00	0.00

* Includes Rs. 5.50 lakhs for SCSP

Herd Performance

Herd strength was 459 out of which 254 were breedable buffaloes (>2year). During the period 148 calving took place consisting of 75 males, 73 females. The calf mortality (0-3 months) was 5.49% during the year. Conception rate was improved to 42.86 %, as compared to last year 41.65 %. Total 3381 semen doses produced during 2024-25 and the centre has used/ disseminated 7018 doses for AI/Exp. purpose. A total 107458 frozen semen doses were in stock as on 31 March 2025.

Average lactation milk yield (kg) and 305 or less day lactation milk yield was 2654 kg (104) and 2587 kg (104) decreased from last year (2023-24) 2860 kg (98) and 2720 kg (98) respectively. Average lactation length reported 310 days (104). Reproductive performance viz. Age at first calving, Service Period, Dry Period and Calving Interval were 42.87 (46) months, 140 (73) days, 145 (73) days and 449 (73) days, respectively. During the reporting period the wet averages and herd average were 8.06 kg and 5.64 kg, respectively. Total 68% animals remained in milk during the year 2024-25.

Accomplishment and Targets Achieved

Traits	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. AFC (Months)	40.0	44.66 (39)	43.62 (51)	43.54 (51)	43.92 (29)	42.82±0.54 (46)
Av. service period (Days)	130	136 (106)	116 (85)	134 (86)	144 (73)	140±7.74 (73)
Calf mortality (0-3 months)	≤ 5 %	8.72 %	5.42%	3.50%	7.14%	5.49%
Wet average (Kg)	≥ 8.50 kg	9.03	8.78	8.25	8.39 Kg	8.06 Kg
Herd average (Kg)	≥ 5.50 kg	6.38	5.96	5.56	5.50 Kg	5.64 Kg

Recommendations

- The milk production traits such as wet average, herd average, TLMY and SLMY need to be improved.
- More efforts are needed to increase the dissemination of frozen semen doses of Nili-Ravi bulls to farmers level.

KAMDHENU UNIVERSITY, JUNAGADH (GUJARAT)

1. Name of center : Cattle Breeding Farm, Kamdhenu University, Junagadh
2. Project Code : 18-3 / 97-ASR - II dt. 29 / 03 / 2001
3. **Project Title** : **Network Project on Buffalo Improvement (Jaffarabadi)**
Subproject : Performance recording and improvement of Jaffarabadi buffalo/Progeny testing of Jaffarabadi bulls under field conditions
4. **Date of Start** : 01/ 04 / 2005

5. **Objectives**:

i. To establish elite herd of 50 - 100 Jaffarabadi buffaloes for the production of genetically superior young bulls.
ii. To evaluate sires through institutional / associated herd/field progeny testing
iii. To produce, test, propagate and conserve high genetic merit male germplasm

6. **Technical Programme:**

I. Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500 and 300 breedable females (Murrah).
II. Selection and testing of minimum 15 bulls of Murrah / 4-6 bulls for other breeds in every 18 / 24 months cycle.
III. Production of minimum 10,000 (Murrah) and 3000 to 5000 (Other breeds) frozen semen doses from each test bull.
IV. Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.
V. Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
VI. Application of proven bull's semen on elite buffaloes for the production of future sires and replacement of heifers.
VII. Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days (All breeds) / 1500 kg in Murrah) and Peak yield, Milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).
VIII. Monthly testing of milk constituents (Fat %, SNF % and Protein %) and Somatic Cell Count, wherever feasible, at institutional herds.
IX. Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
X. Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records.

7. **Staff associated with the project:**

Discipline	Name of Scientist / Staff	Status PI/Co-PI/ Associated)
Nil		
Administrative staff	-	
Technical staff	-	
Contractual staff (RA / SRF / YP-I, YP-II)	-	

7.1 Staff Associated with the project (From Other Budget)

Name of Scientist / Staff	Discipline	Status PI/Co-PI/ Associated)
Dr. M. D. Odedra	LPM	Project Incharge
Dr. S. S. Parikh	Animal Repro. Gyn. & Obst.	Co - PI
Dr. J. K. Chaudhary	Animal Repro. Gyn. & Obst.	Associated
Dr. P. M. Gamit	LPM	Associated
Dr. V. K. Karangiya	Animal Nutrition	Associated
Dr. M. Y. Bhavsar	Animal Nutrition	Associated
Shree N. L. Joshi	Livestock Inspector	Associated
Shree J. R. Bhut	Livestock Inspector	Associated

8. Financial Statement: Head wise budget allocation and utilization; revenue receipts

Financial Statement : Budget head:**2305/03 (0306050112) for Year: 2024-25**

Item / Head	Grant (Rs.)		
	Allotted	Expenditure	Balance
A. Recurring			
Pay & Allowances			
TA			
Contingency	62,00,000	61,72,182	27,818
Anim. Purch.			
Total	**62,00,000**	**61,72,182**	**27,818**
B. Non-recurring	8,00,000	7,42,430	57,570
Total	**8,00,000**	**7,42,430**	**57,570**
SCSP	4,50,000	1,41,216	3,08,784
Total (A+B)	**70,00,000**	**69,14,612**	**85,388**

ICAR SHARE 75%	**57,00,000**	**STATE SHARE 25 %**	**17,50,000**

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	Female								
1.	Below 3 months	10	9		4	11			4
2.	3-12 months	22		11	2	28			3
3.	1-2 years	37		28	1	41			23
	Above 2 years	85		41	1	4	8		113
4.	Buffaloes in Milk	37		21		33			25
5.	Buffaloes Dry P /NP	32		33	4	17	15		29
	Sub Total	**223**	**9**	**134**	**12**	**134**	**23**		**197**
	Males								
1.	Below 3 months	7	12		4	15			0
2.	3-12 months	17		15		23			9
3.	1-2 years	20		23	3	20			20
	Above 2 years	5		20		5	2		18
4.	Breeding bulls	7	3	3	1				12
5.	Bullocks / Teasers / others	0		2					2
	Sub Total	**56**	**15**	**63**	**8**	**63**	**2**		**61**
	Grand Total	**279**	**24**	**197**	**20**	**197**	**25**		**258**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics including abnormalities

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 2024	2	0	0	0	0	0	0	2
May	0	0	0	0	0	0	0	0
June	4	1	0	0	0	0	0	5
July	0	1	0	0	0	0	0	1
August	2	1	0	0	0	0	0	3
September	2	0	0	0	0	0	0	2
October	1	1	0	0	0	0	0	2
November	1	1	0	0	0	0	0	2
December	0	0	0	0	0	0	0	0
January 25	0	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0	0
March	0	4	0	0	0	0	0	4
Overall	12	9	0	0	0	0	0	21

Sex ratio Male : Female (57.1 : 42.9) SB% = -- Abortion % = --

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 2025

Female	Primary cause of disposal							
Category	Surplus	Below farm prod. standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves								
0 to 3 months						04		04
3-12 months						02		02
Heifers								
1-2 years						01		01
> 2 years	8					01		09
Buffaloes								
Milch								
Dry	15					04		19
Sub Total	**23**					**12**		**35**
Males	**Primary cause of disposal**							
Calves								
0 to 3 months						04		04
3-12 months								
1 to 2 year						03		03
. >2 year	02							02
Breeding bulls						01		01
Bullock+Teaser+ Others								
Sub Total	**02**					**08**		**10**
Grand Total	**25**					**20**		**45**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Month		Female						Male					Overall Herd
		0-3 Month	3-12 Month	1-2 Yrs.	Above 2 Yrs.	Milk + Dry	Overall Female	0-3 Month	3-12 Month	1 -2 Yrs.	>2 yrs.	Overall Male	
April	No.	6	20	44	84	69	223	6	16	25	17	64	287
	Died					1	1					0	1
	%	0.0	0.0	0.0	0.0	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.3
May	No.	3	20	45	93	68	229	4	17	25	17	63	292
	Died	1				1	2	1				1	3
	%	33.3	0.0	0.0	0.0	1.5	0.9	25.0	0.0	0.0	0.0	1.6	1.0
June	No.	1	23	44	94	62	224	6	19	25	17	67	291
	Died	1					1					0	1
	%	100.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
July	No.	2	18	45	97	62	224	4	19	27	17	67	291
	Died		1				1					0	1
	%	0.0	5.6	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
Aug.	No.	3	18	39	100	65	225	5	17	27	19	68	293
	Died						0	1			1	2	2
	%	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	5.3	2.9	0.7
Sep.	No.	2	14	38	106	64	224	4	19	27	20	70	294
	Died					1	1			1		1	2
	%	0.0	0.0	0.0	0.0	1.6	0.4	0.0	0.0	3.7	0.0	1.4	0.7
Oct.	No.	1	12	32	114	64	223	3	15	26	25	69	292
	Died	1				1	2	2				2	4
	%	100.0	0.0	0.0	0.0	1.6	0.9	66.7	0.0	0.0	0.0	2.9	1.4
Nov.	No.	2	11	26	120	64	223	2	14	26	26	68	291
	Died			1			1			2		2	3
	%	0.0	0.0	3.8	0.0	0.0	0.4	0.0	0.0	7.7	0.0	2.9	1.0
Dec.	No.	2	8	25	124	64	223	2	11	23	32	68	291
	Died		1				1					0	1
	%	0.0	12.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
Jan.	No.	1	7	25	126	64	223	1	11	19	32	63	286
	Died	1					1					0	1
	%	100.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.3
Feb.	No.	0	3	23	111	60	197	0	9	21	33	63	260
	Died	0			1		1					0	1
	%		0.0	0.0	0.9	0.0	0.5		0.0	0.0	0.0	0.0	0.4
March	No.	4	3	23	113	54	197	0	9	20	32	61	258
	Died						0					0	0
	%	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Overall Av.	No.	**27**	**13**	**34**	**107**	**63**	**244**	**37**	**15**	**24**	**24**	**100**	**344**
	Died	**4**	**2**	**1**	**1**	**4**	**12**	**4**	**0**	**3**	**1**	**8**	**20**
	%	**14.8**	**15.3**	**2.9**	**0.9**	**6.3**	**4.9**	**10.8**	**0.0**	**12.4**	**4.2**	**8.0**	**5.8**

% calf mortalitu (0 to 3 months) = 21.05% (8/38)*100

9.5. Causes of Mortality (quarter wise) during the period April 2024 to March 2025

Particulars	**1st quarter (April-June)**	**2nd quarter (July-Sept)**	**3rd quarter (Oct-Dec.)**	**4th quarter (Jan.-March)**	**Total**
Enteritis			3	1	4
Pheumonities		1	1		2
Septicamia / Toxaemia	1	2	1		4
Peritonitis					
JD/TB					
Milk Fever / metabolic diseases					

TRP / TP					
Parasitism					
Accidental death	2			1	3
Peri-parturient disorders					
Miscellaneous			2		2
Old Age Senility	1	1	1		3
Thaileriosis	1	1			2
Server Bloat / Tympany					
Weak & Debility					
Total	**5**	**5**	**8**	**2**	**20**

9.6 Prophylactic Measures undertaken

Disease	**Vaccination Date / No. of animals**	**No. of animals** Tested / Positive		**Dates and No. of animals treated for Parasitism**
FMD	Dec. 2024-Janu. 2025: 296	-	-	Deworming and treatment given- 118
HS	May-June, 2024: 348	-	-	
BQ and LSD		-	-	
Brucellosis	September, 2024: 07 female calves The remaining animals were vaccinated in April, 2025	June, 2024: 34 December-January (2024-25): 296	-	
JD	-	December, 2024: 296	-	
TB	-	December, 2024: 296	-	
IBR	-	-	-	
Mastitis	-	9 animals treated	-	

9.7 Female Conception Rate During the Period 2024-25

AI No.→	**1st**			**2nd**			**3rd**			**4th & above**			**Over all**		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR%	AIs	C	CR %
Heifers	16	12	75.0	10	4	40.0	6	2	33.3	0	0	0.0	**32**	**18**	**56.3**
Adults	28	20	71.4	10	6	60.0	15	7	46.7	12	6	50.0	**65**	**39**	**60.0**
Overall	44	32	72.7	20	10	50.0	21	9	42.9	12	6	50.0	**97**	**57**	**58.8**

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate

Quarter	**No. of A I**	**Preg. animals**	**CR %**
April – June	10	4	40.0
July – September	8	5	62.5
October- December	22	15	68.2
January – March	57	33	57.9
Overall	**97**	**57**	**58.8**

9.9. Bull-wise Conception Rate During the period 2024-25

Sr. No.	Bull No.	SET No.	Total Number of AI	Total Conceived	CR%
1	Badal	IV	4	2	50.0
2	Balo	IV	4	2	50.0
3	Yuvraj	V	3	1	33.3
4	Bakul	V	39	22	56.4
5	Jagmal	V	20	13	65.0
6	Bhimo	V	3	1	33.3
7	Harpal	V	12	8	66.7
8	Ranmal	V	12	8	66.7
Overall			**97**	**57**	**58.8**

No. of services per conception: 1.70

9.10 Bull Wise Semen Stock 2024-25

Sr. No	Set No	Bull No	O.B.	Doses produced / received	Doses used /disseminated				Balance
					Supply		Sold	Exp.	
					field	farm			
1.	I	Nagraj	3259	0	0	0	0	0	**3259**
2.	I	Bhagro	6845	0	0	0	0	0	**6845**
3.	I	Laxman	3417	0	0	0	0	0	**3417**
4.	II	Haresh	1790	0	0	0	0	0	**1790**
5.	II	Moti	7728	0	0	0	0	0	**7728**
6.	II	Raja	5785	0	0	0	0	0	**5785**
7.	II	Sunder	3014	0	0	0	0	0	**3014**
8.	II	Dhinglo	7191	0	0	0	0	0	**7191**
9.	II	Bholenath	1839	0	0	0	0	0	**1839**
10.	III	Nayan	6517	0	0	0	27	0	**6490**
11.	III	Madhav	6689	0	0	0	27	0	**6662**
12.	III	Abhijeet	5916	0	0	0	0	0	**5916**
13.	III	Alok	9580	0	0	0	0	0	**9580**
14.	III	Ronak	5140	0	0	0	0	0	**5140**
15.	III	Girish	4556	0	0	0	27	0	**4529**
16.	III	Raghu	4597	0	0	0	27	0	**4570**
17.	III	Chaman	14095	0	0	0	1230	0	**12865**
18.	IV	Badal	6805	0	0	5	27	0	**6773**
19.	IV	Kamlesh	1655	0	0	0	0	0	**1655**
20.	IV	Mayur	780	0	0	0	0	0	**780**
21.	IV	Balo	9900	0	0	10	25	0	**9865**
22.	IV	Janak	6190	0	0	5	27	0	**6158**
23.	IV	Hamir	9620	0	0	0	0	0	**9620**
24.	IV	Sango	2125	0	0	0	0	0	**2125**
25.	IV	Nayak	5385	0	0	5	0	0	**5380**
26.	IV	Samrat	7175	0	0	0	0	0	**7175**
27.	V	Yuvraj	1570	0	860	60	0	0	**650**
28.	V	Ranmal	455	1895	1250	50	0	0	**1050**
29.	V	Harpal	0	2885	540	35	0	0	**2310**
30.	V	Bakul	0	2485	0	200	0	0	**2285**
31.	V	Jagmal	0	905	0	55	0	0	**850**
32.	V	Bhimo	0	755	0	10	0	0	**745**
Grand Total			**149618**	**8925**	**2650**	**435**	**1417**	**0**	**154041**

9.11 Average Body weight (kg) since inception…. (Indicate number of animals in parenthesis)

Year	Birth	3 Month	6 Month	12 Month	18 Month	24 Month	Heifer	Adult
Female								
2004-05	29.69	70.53	112.38	161.55	215.69	258.64		457.23
2005-06	32.01	69.40	106.28	155.30	216.57	260.35		458.40
2006-07	33.60	70.72	105.70	154.10	217.24	259.69		449.89
2007-08	32.23	71.70	110.80	169.85	229.80	288.40		566.78
2008-09	30.74	69.25	107.35	166.20	228.69	290.84		559.17
2009-10	29.61	68.20	105.40	164.80	230.70	294.51		555.17
2010-11	29.65	68.90	106.25	232.17	-	443.89		592.45
2011-12	33.60	82.00	142.00	237.40	308.70	444.50		586.00
2012-13	31.80	67.60	100.20	158.10	268.60	362.20		565.40
2013-14	32.40	73.40	122.4	172.1	266.90	314.33		---
2014-15	33.60	87.75	118.20	200.00	269.78	315.14		650.00
2015-16	33.12	87.75	117.45	197.66	269.80	316.17	396.50	649.70
2016-17	29.03	78.00	118.04	180.85	270.59	316.80	380.01	651.28
2017-18	34.85	95.18	115.08	180.08	272.05	388.10	419.50	640.30
2018-19	31.90	74.05	117.81	173.00	265.00	353.00	383.00	480.00
2019-20	32.54	75.92	123.39	177.63	271.12	367.40	384.72	504.10
2020-21	33.71	78.90	130.40	181.60	275.16	370.23	401.70	507.60
2021-22	34.60	81.30	132.40	183.70	278.20	378.70	409.90	511.50
2022-23	32.94	89.44	127.90	159.71	256.23	314.87	397.80	509.11
2023-24	36.90	82.50	134.70	181.30	265.00	367.00	445.00	502.30
2024-25	**35.8**	**63.0**	**94.3**	**166.7**	**224.8**	**362.1**	**445.3**	**614.3**
Male						**Adults**		
2004-05	31.90	71.24	109.54	164.12	225.14	272.80		--
2005-06	34.71	72.61	106.61	152.57	223.47	269.62		--
2006-07	33.98	71.72	107.05	156.70	222.29	265.23		--
2007-08	36.62	73.14	114.00	171.60	234.50	289.35		--
2008-09	32.51	70.10	110.58	169.30	236.72	295.32		--
2009-10	32.59	70.75	109.52	170.10	238.89	297.32		--
2010-11	29.97	69.93	139.00	285.40	360.00	412.33		--
2011-12	30.90	85.00	178.00	255.30	357.00	409.00		--
2012-13	33.00	79.80	120.90	158.60	289.40	375.80		--
2013-14	33.60	78.00	118.40	160.00	234.60	329.75		--
2014-15	33.47	86.00	108.90	171.50	232.83	331.90		--
2015-16	32.30	85.17	111.90	172.40	231.00	332.00		769.79
2016-17	30.09	78.20	114.00	180.06	223.72	273.72		684.25
2017-18	32.91	91.75	114.26	182.41	235.50	281.45		655.30
2018-19	32.20	76.05	119.05	183.71	272.00	372.00		605.00
2019-20	34.64	78.06	121.22	188.57	283.17	393.63		630.00
2020-21	34.86	79.10	132.90	191.70	286.41	389.64		626.81
2021-22	35.70	80.90	133.80	193.30	291.30	387.80		621.70
2022-23	34.00	88.10	123.25	154.60	281.12	368.70		618.19
2023-24	39.20	78.70	124.20	189.40	289.30	371.60		596.20
2024-25	**36.60**	**77.80**	**135.25**	**180.50**	**255.75**	**337.50**		**773.00**

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	12	2745.3 ± 304.3	468.2 ± 49.9	2072.7 ± 102.9	11.6 ± 0.5
2nd	9	2522.2 ± 73.4	400.3 ± 17.4	2198.4 ± 59.7	12.1 ± 0.3
3rd	4	2627.9 ± 543.9	367.3 ± 21.4	2415.5 ± 436.3	14.9 ±1.2
4th	2	2007.9 ± 26.6	317.0 ± 6.0	1953.1 ± 49.2	11.4 ± 0.1
5th & above	6	2547.6 ± 272.5	398.5 ± 21.7	2269.6 ± 234.9	12.2 ± 1.2
Overall	**33**	**2589.6 ± 135.6**	**415.6 ± 20.3**	**2177.1 ± 76.1**	**12.2 ± 0.4**

9.12.1 Average production performance of Buffaloes Since Inception of Network

Year	Lact. Length (days)	TLMY (kg)	SLMY (kg)	Peak yield (kg)
2001-02	303.29 (38)	1945.58 (38)	1813.72 (38)	12.77 (38)
2002-03	358.46 (39)	2028.18 (39)	1793.85 (39)	09.32 (39)
2003-04	406.00 (41)	2534.80 (41)	2069.10 (41)	11.30 (41)
2004-05	316.00 (36)	2122.40 (36)	2020.80 (36)	11.80 (36)
2005-06	311.00 (41)	1957.57 (41)	1771.96 (41)	10.34 (41)
2006-07	343.00 (38)	1953.42 (38)	1695.00 (38)	10.20 (38)
2007-08	338.00 (39)	2026.88 (39)	1807.05 (39)	10.53 (39)
2008-09	318.28 (29)	2009.28 (29)	1769.90 (29)	11.26 (29)
2009-10	382.72 (46)	1837.65 (46)	1779.61 (46)	11.43 (46)
2010-11	317.70 (44)	2134.70 (44)	2098.30 (44)	11.36 (44)
2011-12	332.20 (30)	2383.08 (30)	2083.92 (30)	12.23 (30)
2012-13	352.00 (39)	2007.00 (39)	1737.0 (39)	9.70 (39)
2013-14	305.2 (33)	1709.3 (33)	1629.2 (33)	10.30 (33)
2014-15	379.1 (37)	2396.7 (37)	2095.7 (37)	11.80 (37)
2015-16	322.1±12.3 (48)	2187.0±86.9 (48)	2008.7±72.0 (48)	13.1±0.4 (48)
2016-17	323.2±9.8 (45)	2119.6±102.7 (45)	1985.4±80.6 (45)	12.8±0.4 (45)
2017-18	383.2±12.1 (47)	2242.8±108.8 (47)	1907.3±89.3 (47)	11.4±0.4 (47)
2018-19	317.3±7.6 (57)	2500.6±99.2 (57)	2359.8±85.1 (57)	14.7±0.5 (57)
2019-20	315.6±14.4 (56)	2408.5±105.7 (56)	2245.1±76.3 (56)	14.3±0.3 (56)
2020-21	359.6±10.5 (56)	2794.2±113.7 (56)	2499.9±78.7 (56)	14.4±0.3 (56)
2021-22	298.5±9.1 (60)	2452.0±110.2 (60)	2375.1±101.2 (60)	14.8±0.5 (60)
2022-23	306.3±7.0 (66)	2628.8±89.4 (66)	2524.6±74.4 (66)	15.3±0.4 (66)
2023-24	350.9±9.6 (74)	2519.8 ±84.5 (74)	2306.9 ±62.5 (74)	13.0±0.3 (74)
2024-25	**415.6 + 20.3(33)**	**2589.6 + 135.6(33)**	**2177.1 + 76.1(33)**	**12.2 + 0.4(33)**

9.12.2 Herd Life Production (up to 4th Lactation) during 2024-25

Animal No.	DOB	Date of completion of 4th or more lact. or disposal	HLF (days) up to 4th or more lactation or disposal (d)	LTMY (kg)	Productive Days	Unproduc-tive Days	MY/day HLF
27/09	26/08/2009	14/06/2024	5406	25964	2734	2672	4.8
49/09	03/10/2009	01/03/2025	5628	25185	2888	2740	4.5
18/09	26/07/2009	14/10/2023	5193	13339	1675	3518	2.6
23/09	15/08/2009	01/05/2024	5373	23131	2522	2851	4.3
41/11	28/09/2011	01/01/2022	3748	5485	696	3052	1.5

21/11	10/08/2011	01/10/2023	4435	9159	1785	2650	2.1
22/12	05/08/2012	11/03/2024	4236	12733	1924	2312	3.0
45/11	27/10/2011	17/11/2024	4770	14042	2109	2661	2.9
36/11	02/09/2011	23/03/2024	4586	12338	1614	2972	2.7
32/13	10/09/2013	23/06/2024	3939	7529	1142	2797	1.9
48/13	08/10/2013	09/03/2025	4170	11851	1836	2334	2.8
17/13	25/08/2013	16/08/2022	3278	12640	1152	2126	3.9
30/13	10/09/2013	01/08/2023	3612	14208	1490	2122	3.9
31/13	10/09/2013	29/04/2024	3884	12608	1596	2288	3.2
15/13	22/08/2013	01/04/2023	3509	12015	1436	2073	3.4
29/13	07/09/2013	01/08/2023	3615	13827	1661	1954	3.8
38/13	21/09/2013	24/09/2022	3290	4312	681	2609	1.3
10/13	16/08/2013	26/05/2024	3936	10582	1551	2385	2.7
38/14	18/12/2014	21/02/2024	3352	11652	1388	1964	3.5
11/14	12/07/2014	28/09/2023	3365	7463	1299	2066	2.2
01/15	01/01/2015	29/02/2024	3346	10466	1383	1963	3.1
09/15	13/02/2015	08/01/2024	3251	13353	1287	1964	4.1
45/12	15/11/2012	28/09/2023	3969	10160	1427	2542	2.6
07/16	21/01/2016	06/01/2024	2907	3718	891	2016	1.3
26/14	07/11/2014	06/04/2024	3438	10662	1406	2032	3.1
20/14	05/10/2014	24/11/2023	3337	11977	1256	2081	3.6
18/13	27/08/2013	02/03/2024	3840	10583	1393	2447	2.8
55/15	14/11/2015	31/12/2023	2969	12789	1278	1691	4.3
50/15	02/11/2015	01/06/2024	3134	5909	984	2150	1.9
42/16	27/07/2016	04/02/2025	3114	6956	1183	1931	2.2
29/15	31/07/2015	28/07/2024	3285	10319	1297	1988	3.1
16/16	04/03/2016	05/04/2024	2954	6064	1056	1898	2.1
57/16	07/10/2016	16/08/2024	2870	9056	1180	1690	3.2

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. Or date of disposal) **Productive Days** (date of first calving to total days in milk), **Unproductive days** (total days when buffalo not give milk from the date of first calving)

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	Fat	SNF	Protein	Lactose	SCC
April 2024	38	7.9	9.6	3.9	5.1	---
May	34	8.1	9.8	3.6	5.7	---
June	36	8.0	9.4	4.3	5.6	---
July	37	7.9	9.6	4.4	5.3	---
August	39	8.2	9.2	4.1	5.8	---
September	37	8.3	8.9	3.9	5.7	---
October	36	8.2	10.2	4.2	6.1	---
November	36	8.0	9.7	3.9	5.9	---
December	31	8.4	10.1	4.1	5.8	---
January 2025	27	8.3	9.8	4.4	6.1	---
February	22	8.3	9.6	4.3	5.9	---
March	25	9.4	9.8	4.5	6.1	---
Overall	**33**	**8.3**	**9.6**	**4.1**	**5.8**	---

9.14: Reproductive Performance

Lactation / Parity	AFC (Months) (N)	N →	SP (Days)	DP (Days)	CI (Days)
1	51.8±1.8 (05)				
2		1	226	152	541
3		3	117.3 ± 14.3	111.0 ± 11.5	428.3 ± 12.1
4		11	137.2 ± 13.4	161.9 ± 10.5	448.5 ± 13.6
5th& above		1	166	204	482
Over all	**51.8±1.8 (05)**	**16**	**140.8 ± 11.3**	**154.4 ± 9.5**	**452.6 ± 11.5**

9.14.1 Reproduction Performance Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
2001-02	46.84 (13)	159.41 (33)	166.50 (33)	496.36 (33)
2002-03	47.02 (15)	155.12 (33)	179.66 (33)	465.79 (33)
2003-04	57.71 (3)	205.00 (23)	213.00 (23)	513.00 (23)
2004-05	59.44 (12)	225.00 (34)	195.00 (33)	539.00 (34)
2005-06	59.97 (16)	194.00 (45)	218.00 (45)	459.00 (45)
2006-07	55.57 (11)	188.00 (32)	267.00 (35)	499.00 (32)
2007-08	59.53 (07)	263.08 (24)	238.83 (24)	568.33 (24)
2008-09	59.52 (11)	302.69 (41)	249.62 (41)	543.67 (41)
2009-10	54.28 (20)	149.52 (45)	194.20 (45)	463.35 (45)
2010-11	52.66 (11)	127.40 (35)	168.70 (35)	436.80 (35)
2011-12	49.28 (06)	186.09 (23)	161.83 (23)	484.48 (23)
2012-13	49.31 (10)	174.00 (42)	464.58 (42)	217.16 (42)
2013-14	48.00 (24)	144.67 (33)	206.51 (43)	523.16 (43)
2014-15	46.60 (5)	140.43 (30)	176.53 (30)	450.43 (30)
2015-16	47.82 (11)	158.40 (42)	163.40 (42)	468.40 (42)
2016-17	49.80 (12)	190.00 (33)	184.70 (33)	492.70 (33)
2017-18	54.05 (21)	149.85 (48)	244.77 (48)	530.94 (48)
2018-19	49.90 (22)	180.4 (35)	213.4 (35)	471.2 (35)
2019-20	46.1±1.4(24)	164.6±18.6 (43)	192.0±14.8 (43)	477.3±18.7 (43)
2020-21	47.81±0.86 (10)	143.79±11.70 (38)	181.03±16.06 (38)	453.79±11.70 (38)
2021-22	46.90±1.82 (20)	160.5±12.89 (41)	196.1±17.06 (41)	470.51±12.89 (41)
2022-23	47.9±1.27 (29)	165.4±12.78 (80)	205.90±13.79 (80)	470.25±13.86 (80)
2023-24	48.94±1.45 (07)	181.1 ± 22.7(42)	245.7 ± 25.3(42)	491.1 ± 22.7(42)
2024-25	**51.8 ± 1.8 (05)**	**140.8 + 11.3(16)**	**154.4 + 9.5(16)**	**452.6 + 11.5(16)**

9.15 Milk Production and Disposal during April, 24 to March, 25

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April-2024	9011.5	8993.5	18.0	
May	8527.0	8527.0	0.0	
June	7118.5	7093.5	25.0	
July	8068.0	8061.0	7.0	
August	7113.0	7091.0	22.0	
September	7108.5	7096.5	12.0	

October	7023.5	7011.5	12.0	
November	6460.0	6448.0	12.0	
December	6137.0	6137.0	0.0	
January-2025	5458.5	5458.5	0.0	
February	4066.0	4066.0	0.0	
March	4025.0	4006.0	19.0	
Total	**80116.5**	**79989.5**	**127**	

9.16.1 Feed and fodder (Quintals) availability 2024-25

Quarter	Feeds and Fooder	Qty. Produced at Farm (kg)	Qty. Purchased (kg)	Actually fed (Quintals)	Balance (Kg)
I (April – June)	Green	8494.5	0	8494.5	0
	Dry	372	1	46	327
	Silage	0	0	0	0
	Concentrate	83	6	36	53
II (July – September)	Green	7722.0	0	7722.0	0
	Dry	233	0	47	186
	Silage	0	0	0	0
	Concentrate	20	32	33	19
III (October –December)	Green	8386.0	0	8386.0	0
	Dry	123	14	30	107
	Silage	0	0	0	0
	Concentrate	37	43	37	43
IV (January-March)	Green	6269.0	0	6269.0	0
	Dry	96	60	26	130
	Silage	0	0	0	0
	Concentrate	44	37	32	49
Total	**Green**	**30871.5**	**0**	**30871.5**	**0**
	Dry	**824**	**75**	**149**	**750**
	Silage	**0**	**0**	**0**	**0**
	Concentrate	**184**	**118**	**138**	**164**

9.17: Milk performance during April 24 to March 25

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April -2024	38	31	69	55.1	7.9	4.4
May	34	34	68	50.0	8.1	4.0
June	36	17	53	67.9	6.6	4.5
July	37	16	53	69.8	7.0	4.9
August	39	17	56	69.6	5.9	4.1
September	37	18	55	67.3	6.4	4.3
October	36	18	54	66.7	6.3	4.2
November	36	18	54	66.7	6.0	4.0
December	31	23	54	57.4	6.4	3.7
January-2025	27	27	54	50.0	6.5	3.3
February	22	32	54	40.7	6.6	2.7
March	25	29	54	46.3	5.2	2.4
Overall	**62.3**	**37.8**	**100**	**62.3**	**6.5**	**3.9**

9.17.1 Milking performance since inception

Year	No. of Animals in Milk	No. of dry Animal	Total Animals	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2001-02	40.00	31.00	71.00	56.19	5.44	3.01
2002-03	32.00	34.00	66.00	48.89	7.19	3.55
2003-04	26.00	35.00	61.00	41.26	8.03	3.30
2004-05	32.00	34.83	66.89	44.65	7.91	3.96
2005-06	33.00	46.58	79.58	41.80	7.45	3.08
2006-07	34.00	44.92	78.92	42.27	7.31	3.11
2007-08	30.75	40.58	71.42	42.87	7.52	3.21
2008-09	25.25	43.12	69.41	39.05	6.81	2.44
2009-10	37.63	47.93	85.56	43.85	6.46	2.85
2010-11	35.14	33.92	69.06	50.32	7.27	3.62
2011-12	27.67	20.08	47.75	58.03	6.91	4.06
2012-13	34.00	51.33	85.33	39.78	6.73	2.67
2013-14	34.00	47.42	81.42	40.64	6.90	2.83
2014-15	33.00	48.75	81.75	40.22	7.38	3.01
2015-16	37.0	47.30	84.30	43.90	8.10	3.50
2016-17	42.0	55.0	97.0	43.65	7.4	3.2
2017-18	42.0	49.0	91.0	45.1	6.7	3.0
2018-19	65.10	43.50	108.60	60.40	5.80	3.60
2019-20	64.40	62.20	126.60	50.90	6.30	3.20
2020-21	60.10	57.80	117.90	51.10	6.60	3.40
2021-22	58.1	38.0	96.1	60.0	7.6	4.5
2022-23	70.4	51.3	121.7	57.7	7.8	3.8
2023-24	62.3	37.8	100.0	62.3	6.5	3.9
2024-25	**33.0**	**23.0**	**56.0**	**58.7**	**6.6**	**3.9**

9.18 Bull wise daughters born (only numbers)

Bull No.	Set No.	Daughters born	Daughters Calved	Daughters completing 1st Lactation
Gajanan				
Khemlo				
Bhagaro	I			
Raja	II			
Rana				
Nagraj	I			
Moti	II			
Sundar	II			
Ashok				
Laxman	I			
Bholenath	II			
Haresh	II			
Dhingalo	II			
Nayan	III			
Madhav	III		2	3
Ronak	III			
Alok	III			1
Abhijit	III			
Raghu	III		1	3
Chaman	III		1	2
Girish	III			1
Babar	III			2

Badal	IV	2		
Kamlesh	IV			
Mayur	IV	1		
Balo	IV	4		
Janak	IV	1		
Hamir	IV			
Sango	IV			
Nayak	IV	1		
Samrat	IV			
Nakul	IV			
Total		**9**	**4**	**12**

9.19 Bull wise daughters completing 1st lactation 2024-25

Bull No.	Daug-hter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)	Peak Yield
Alok	52/19	10/09/2019	17/09/2023	48.3	469	1926.9	1621.9	9.6
Madhav	47/19	25/08/2019	04/04/2024	55.4	320	1793.7	1747.2	9.4
Raghu	74/18	12/10/2018	04/07/2023	56.8	332	1855.2	1786.9	12.0
Raghu	49/19	26/08/2019	12/09/2023	48.6	388	2171.7	1872.7	10.2
Chaman	05/20	23/01/2020	15/12/2023	46.8	419	2304.0	1886.2	12.5
Chaman	59/19	15/10/2019	03/09/2023	46.7	503	2588.3	1889.8	9.6
Babar	77/18	18/10/2018	02/11/2023	60.6	444	2327.5	2009.1	13.1
Babar	49/18	18/03/2018	23/03/2024	72.3	257	2143.0	2107.7	11.3
Girish	67/18	20/09/2018	13/09/2022	47.8	891	5320.6	2216.3	11.4
Raghu	54/18	15/08/2018	31/10/2022	50.6	699	3996.0	2327.9	12.4
Madhav	19/19	06/05/2019	22/03/2023	46.6	461	3099.3	2626.7	14.8
Madhav	391602	26/08/2019	24/03/2023	43.0	435	3417.5	2780.5	12.7
Average				**51.9**	**468.2**	**2745.3**	**2072.7**	**11.6**
SE				**2.4**	**49.9**	**304.3**	**102.9**	**0.5**

9.20 Breeding bulls Selected for current set

Sr. No.	Set	Bull Name	Bull No	Date of Birth	Sire No.	Dam No.	Dam's best SLMY	Remarks
1	V	Yuvraj	391566	29/08/2017	Girish	Mausami (A8-11)	3789	2023-24
2	V	Ranmal	31355	Purchased	--	--	>3500	2023-24
3	V	Harpal	31395	Purchased	--	--	21 lit/d.	
4	V	Bakul	31400	Purchased	--	--	>3500	
5	V	Jagmal	31392	Purchased	--	--	21 lit/d.	
6	V	Bhimo	31399	Purchased	--	--	18 lit/d.	

9.20.1 PT Bulls for nominated mating

Bull No.	Set No.	Centre	Dams' Best yield (kg)	Sire Index	Breeding Value	% Superiority
Laxman	I	Junagadh	3738.0	2732.07	±9.05	
Moti	II	Junagadh	>3000	2730.36	±8.38	
Bhagaro	I	Junagadh	>3000	2672.21	±6.26	

9.20.2 List of breeding bulls for set – IV

Sr. No.	Bull Name	Bull No.	Date of Birth	Dam No.	Sire No.	Dams best SLMY (kg) / Parity	Semen doses available	Expected predicted Difference (EPD)
1	Badal	3665	Purchased	--	--	>3000	6950	
2	Mayur	27/15	17/07/2015	Mina (AM 2/11)	Haresh	3181	1270	
3	Hamir	37/15	05/09/2015	Hedi (AM 4/11)	Bholenath	3616	7780	
4	Balo	43/15	29/09/2015	Babli (53/09)	Nayan	3201	9990	
5	Kamlesh	11081	Purchased	--	--	>3000	1745	
6	Janak	11084	Purchased	--	--	>3000	6402	
7	Sango	19100	Purchased	--	--	>3000	2245	
8	Samrat	11086	Purchased	--	--	>3000	4320	
9	Nayak	11087	Purchased	--	--	>3000	2144	

9.20.3 List of breeding / young bulls as on 31-3-2025

Sr. No.	Set	Name	Date of birth	Dam	Sire	Dams best lact.300days or less yield (kg)	Remarks
1	I	Bhagro	Purchased	---	---	20 lit/d	CBF
2	I	Laxman	16-10-03	Laxmi	Subiraj	3738.0	CBF
3	I	Nagraj	18-12-02	Nagari	Rupnath	2957	CBF

Sr. No.	Set	Name	Date of Birth	Dam	Sire	Dams best lact. 300days or less yield (kg)	Remarks
1	II	Haresh	08-02-04	Hitad	Hemalo	2884.0	2009-10
2	II	Moti	Purchased	--	--	>3000 litter	2010-11
3	II	Sunder	13-07-05	Sundari	Lailano	2732.0	2012-13
4	II	Raja	08-05-04	Ranjita	Subiraj	2948.0	2012-13
5	II	Dhingalo	Purchased	--	--	>3000 litter	2013-14
6	II	Bholenath	Purchased	--	--	>3000 litter	2013-14

Sr. No.	Set	Name	Date of Birth	Dam	Sire	Dams best lact.300days or less yield (kg)	Remarks
1	III	Nayan (07/10)	12-06-2010	Mira	Nagraj	3824 litter	2014-15
2	III	Abhijit (A1/10)	Purchased	Hedi		3616	2015-16
3	III	Madhav (37/10)	19-09-2010	Manisha	Nagraj	3648	2015-16

4	III	Alok	Purchased			>3500	2016-19
5	III	Ronak (09/11)	10-07-2011	Rita	Gajanan	3200	2015-16
6	III	Girish (11/13)	18-08-2013	Grishma	Dhingalo	3028.0	2015-17
7	III	Chaman	Purchased	--	--	>3500	2017-18
8	III	Raghu	Purchased	--	--	>3000	2016-18
9	III	Babar	Purchased	--	--	>3000	2016-19

Sr. No.	Set	Name	No.	Date of Birth	Dam	Sire	Dams best lact.300days or less yield (kg)	Remarks
1	IV	Badal	3665	Purchased	--	--	>3000	2018-19
2	IV	Mayur	27/15	17/07/2015	Mina (AM 2/11)	Haresh	3181	2020-21
3	IV	Hamir	37/15	05/09/2015	Hedi (AM 4/11)	Bholenath	3616	2019-20
4	IV	Balo	43/15	29/09/2015	Babli (53/09)	Nayan	3201	2019-21
5	IV	Kamlesh	11081	Purchased	--	--	>3000	2018-20
6	IV	Janak	11084	Purchased	--	--	>3000	2018-19
7	IV	Sango	19100	Purchased	--	--	>3000	2019-20
8	IV	Samrat	11086	Purchased	--	--	>3000	2020-21
9	IV	Nayak	11087	Purchased	--	--	>3000	2019-20

Sr. No.	Set	Name of Bull	Brand / Tag No.	Date of Birth	Dam	Sire	Dam's Max. 300-d yield	Remarks
1	V	Yuvraj	391566	29/08/2017	Mausami (A8-11)	Girish	3789	2023-24
2	V	Ranmal	31355	Purchased	--	--	>3500	2023-24
3	V	Harpal	31395	Purchased	--	--	21 lit/d.	
4	V	Bakul	31400	Purchased	--	--	>3500	
5	V	Jagmal	31392	Purchased	--	--	21 lit/d.	
6	V	Bhimo	31399	Purchased	--	--	18 lit/d.	

9.21 Target achieved during the years

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	47.81±0.86 (10)	46.90±1.82 (20)	47.90±1.27 (29)	48.94±1.45 (07)	51.8 ± 1.8 (05)
Av. Service period (days)	130	144±11.70 (38)	161±12.89 (41)	165±12.78 (80)	181.1±22.7 (42)	140.8 + 11.3(16)
Calf mortality (0-3 months)	≤ 5 %	11.11	10.58	23.26	8.82	21.05
Wet average (kg)	≥8.5 kg	6.6	7.6	7.8	6.5	6.6
Herd average (kg)	≥5.5 kg	3.4	4.5	3.8	3.9	3.9

10. Salient Research Achievements (example):

11. Publications:

1. Padodara, R. J., Vijyeta, H. P., Vasava, A. A., **Parikh, S. S.,** Sharma, A. K. and Ramoliya, U. B. (2024). Studies on salivary fern pattern during estrous cycle in Gir cow and Jaffrabadi buffalo. *The Indian Journal of Veterinary Sciences and Biotechnology,* **20** (6): 70-74.
2. Devmurari, Y. J., Vala, K. B., **Parikh, S. S.,** Vijyeta, H. P., Dhami, A. J. and Solanki, J. Z. (2024). Comparative efficacy of PAG-based rapid strip test kit, ultrasonography and per rectal palpation for early pregnancy diagnosis in cattle and buffaloes. *The Indian Journal of Veterinary Sciences and Biotechnology,* **21** (2): 13-17.

12. Socioeconomic impact / Success stories:

13. Constraints if any

- Allocated funds are insufficient for the project implementation satisfactorily.
- Building / Buffalo sheds needs urgent renovations.
- Separate Milking Parlour for Buffaloes is required.
- Semen Freezing Laboratory needs renovation and extension to meet Minimum Standard.

12. Focus of work in the coming year

- Efforts will be concentrated on improving reproductive performance of Jaffrabadi herd.
- Semen Freezing Laboratory will be strengthened.

Performance of Kamdhenu University, Junagadh (Field Units)

F 1. Herd Strength of Registered Females at Different Field Centres during 2024-2025

Sr No.	Centres/ Village	OB	Addition			Deduction		
			New Reg.	Birth	Purchase	Sold	Death	CB
1	Loej	7131	0	80	0	0	0	7211
2	Surva	2551	0	34	0	0	0	2585
3	Mand likpur	3187	0	23	0	0	0	3210
4	Khorasa	2749	0	31	0	0	0	2780
5	Gondal	2897	0	3	0	0	0	2900
6	Ranpur	6170	0	0	0	0	0	6170
7	Ratang	2001	0	0	0	0	0	2001
8	Matiyana	2009	0	0	0	0	0	2009
9	Ghusiya	1670	0	0	0	0	0	1670
10	Bamnasa	1480	0	0	0	0	0	1480
11	Dhanshusar	1630	0	0	0	0	0	1630
	Total	**33475**	**0**	**171**	**0**	**0**	**0**	**33646**

F 2. Status of Breedable Females at Different Field Unit Centres during 2024-2025

Centres/ Village	Heifers > 3 years		Buffalo	
	Total	Pregnant	In Milk	Dry
Shedhaya	0	0	0	0
Pipali	0	0	0	102
Loej	589	0	14	384
Surva	201	0	11	31
Movana	0	0	0	16

Mand likpur	251	0	9	75
Hadmdiya	0	0	0	13
Sherdi	0	0	0	11
Khorasa	168	0	9	0
Odadar	0	0	0	63
Gondal	55	0	7	0
Total	**1264**	**0**	**50**	**695**

F 3. Monthly AI at Different Field Unit Centres during Period 4/2024 to 3/2025

Month	TOTAL													
	SHEDHAVA	**PIPALI**	**HARMADIYA**	**LOEJ**	**SURVA**	**MANDLIKPUR**	**KHORASA**	**GONDAL**	**RATANG**	**RANPUR**	**MATIYANA**	**BAMNASA**	**GHUSIYA**	Total
April, 24	12	15	10	39	6	8	15	5	0	0	0	0	0	**110**
May	12	15	7	42	3	8	14	4	0	0	0	0	0	**105**
June	11	15	9	32	2	4	15	4	0	0	0	0	0	**92**
July	0	0	0	30	2	9	14	5	0	0	0	0	0	**60**
August	0	0	0	14	10	20	15	3	0	0	0	0	0	**62**
September	0	0	0	38	22	31	15	4	22	90	0	0	0	**222**
October	0	0	0	35	13	17	23	4	21	90	0	0	0	**203**
November	0	0	0	42	12	24	23	3	22	90	0	0	0	**216**
December	0	0	0	36	24	32	22	8	27	60	0	0	0	**209**
January, 25	0	0	0	42	19	22	15	6	23	60	16	0	0	**203**
February	0	0	0	36	12	24	15	14	18	40	42	0	0	**201**
March	0	0	0	41	15	32	22	12	18	22	29	8	10	**209**
TOTAL	**35**	**45**	**26**	**427**	**140**	**231**	**208**	**72**	**151**	**452**	**87**	**8**	**10**	**1892**

F 4. Bull-wise AI at Different Field Unit Centres during the Period 4/2024 to 3/2025

Months	**Nayak**	**Janak**	**Ranmal**	**Yuvraj**	**Harpal**	**Total**
April, 24	11	8	0	91	0	110
May	4	0	0	101	0	105
June	4	0	0	88	0	92
July	0	0	0	60	0	60
August	0	0	0	62	0	62
September	0	0	0	222	0	222
October	0	0	166	37	0	203
November	0	0	216	0	0	216
December	0	0	209	0	0	209
January, 25	0	0	203	0	0	203
February	0	0	129	0	72	201
March	0	0	0	0	209	209
Total	**19**	**8**	**923**	**661**	**281**	**1892**

F 5. Month wise Conception at Different Field Unit Centres during the Period 4/2024 to 3/2025

Month	Village / Centre									
	Shedhaya		Pipali		Hadmadiya		Loej		Surva	
	P	E	P	E	P	E	P	E	P	E
April, 24	7	5	12	14	5	4	0	0	7	3
May	4	3	8	14	5	3	9	13	7	5
June	7	5	8	13	6	5	15	23	9	6
July	0	0	0	0	0	0	12	27	4	2
August	0	0	0	0	0	0	14	28	3	2
September	0	0	0	0	0	0	15	17	1	1
October	0	0	0	0	0	0	7	23	6	4
November	0	0	0	0	0	0	7	7	13	9
December	0	0	0	0	0	0	12	26	7	6
January, 25	0	0	0	0	0	0	13	22	8	4
February	0	0	0	0	0	0	18	23	13	11
March	0	0	0	0	0	0	16	20	9	9
Total	**18**	**13**	**28**	**41**	**16**	**12**	**138**	**229**	**87**	**62**

Cont..

Month	Village / Centre											
	Mandlikpur		Khorasa		Gondal		Ratang		Ranpur		Total	
	P	E	P	E	P	E	P	E	P	E	P	E
April, 23	17	13	6	8	2	3	0	0	0	0	**56**	**50**
May	7	11	7	8	2	3	0	0	0	0	**49**	**60**
June	7	6	7	8	3	2	0	0	0	0	**62**	**68**
July	4	4	6	9	1	4	0	0	0	0	**27**	**46**
August	3	5	6	8	3	1	0	0	0	0	**29**	**44**
September	3	1	7	8	2	2	0	0	0	0	**28**	**29**
October	4	5	7	7	2	3	0	0	0	0	**26**	**42**
November	10	10	7	8	2	1	0	0	0	0	**39**	**35**
December	14	17	6	9	3	1	10	12	43	47	**95**	**118**
January,24	9	8	11	12	2	2	11	10	40	50	**94**	**108**
February	13	11	11	12	0	3	11	11	58	32	**124**	**103**
March	17	15	11	11	4	4	15	12	38	22	**110**	**93**
Total	**108**	**106**	**92**	**108**	**26**	**29**	**47**	**45**	**179**	**151**	**739**	**796**

F 6. Month wise Calving at Different Field Unit Centres during the Period 4/2024 to 3/2025

Months	Village / Centre																	
	Shedhaya		Pipali		Hadmadiya		Loej		Surva		Mandlikpur		Khorasa		Gondal		**Total**	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
April, 24	2	3	3	3	2	3	8	5	1	2	3	1	2	3	1	0	**22**	**20**
May	3	1	4	3	1	4	6	6	2	2	0	1	2	2	0	0	**18**	**19**
June	5	2	5	4	3	3	7	10	3	3	3	1	2	2	1	0	**29**	**25**
July	0	0	0	0	0	0	6	7	5	5	5	1	2	2	1	0	**19**	**15**
August	0	0	0	0	0	0	2	4	1	1	2	2	3	2	1	0	**9**	**9**
September	0	0	0	0	0	0	6	6	2	2	0	0	1	3	1	0	**10**	**11**
October	0	0	0	0	0	0	4	7	6	7	12	6	2	2	1	1	**25**	**23**
November	0	0	0	0	0	0	6	4	4	3	6	4	3	3	1	1	**20**	**15**
December	0	0	0	0	0	0	4	10	4	2	2	3	4	3	2	0	**16**	**18**
January,25	0	0	0	0	0	0	6	6	3	4	2	2	3	4	2	0	**16**	**16**

February	0	0	0	0	0	0	6	8	2	2	2	2	4	2	1	0	**15**	**14**
March	0	0	0	0	0	0	8	7	1	1	2	0	3	3	2	1	**16**	**12**
Total	**10**	**6**	**12**	**10**	**6**	**10**	**69**	**80**	**34**	**34**	**39**	**23**	**31**	**31**	**14**	**3**	**215**	**197**

M= Male F= Female

F 7. Bull-wise Conception at Different Field Unit Centres during the Period 4/2024 to 3/2025

Month	Bull No										Total	
	Nayak		**Janak**		**Mayur**		**Yuvraj**		**Ranmal**			
	P	E	P	E	P	E	P	E	P	E	P	E
April, 24	30	24	0	0	26	26	0	0	0	0	**56**	**50**
May	25	29	7	11	17	20	0	0	0	0	**49**	**60**
June	34	39	7	6	0	0	21	23	0	0	**62**	**68**
July	5	6	4	4	0	0	18	36	0	0	**27**	**46**
August	3	1	0	0	0	0	26	43	0	0	**29**	**44**
September	2	2	0	0	0	0	26	27	0	0	**28**	**29**
October	0	0	0	0	0	0	26	42	0	0	**26**	**42**
November	0	0	0	0	0	0	39	35	0	0	**36**	**35**
December	0	0	0	0	0	0	95	118	0	0	**95**	**118**
January, 25	0	0	0	0	0	0	13	11	81	97	**94**	**108**
February	0	0	0	0	0	0	0	0	124	103	**124**	**103**
March	0	0	0	0	0	0	0	0	110	93	**110**	**93**
Total	**99**	**101**	**18**	**21**	**43**	**46**	**264**	**335**	**315**	**293**	**739**	**796**

F 8. Bull-wise Calving at Different Field Unit Centres during the Period 4/2024 to 3/2025

Month	**Bull Name**											
	Mayur		**Nayak**		**Janak**		**Badal**		**Yuvraj**		**Total**	
	M	F	M	F	M	F	M	F				
April, 24	13	14	0	0	9	6	0	0	0	0	22	20
May	12	12	0	0	6	7	0	0	0	0	18	19
June	26	24	0	0	3	1	0	0	0	0	29	25
July	9	8	2	3	5	1	3	3	0	0	19	15
August	5	3	2	4	2	2	0	0	0	0	9	9
September	2	3	8	8	0	0	0	0	0	0	10	11
October	9	6	10	14	6	3	0	0	0	0	25	23
November	1	1	13	10	6	4	0	0	0	0	20	15
December	0	0	14	15	2	3	0	0	0	0	16	18
January,25	0	0	8	8	2	2	0	0	6	6	16	16
February	0	0	3	2	2	2	0	0	10	10	15	14
March	0	0	2	1	0	0	0	0	14	11	16	12
Total	77	71	62	65	43	31	3	3	30	27	215	197

F 9. Bull-wise Live Female Progeny at Different Field Unit Centres (0-6 month) as on 3/2025

Centres	**Mayur**	**Nayak**	**Janak**	**Badal**	**Yuvraj**	**Total**
Shedhaya	6	0	0	0	0	6
Pipali	10	0	0	0	0	10
Hadmdiya	10	0	0	0	0	10
Loej	11	13	11	3	0	38
Surva	13	2	0	0	0	15
Mandlimpur	0	0	6	0	0	6
Khorasa	14	0	0	0	0	14
Gonadal	0	0	0	0	0	0
Total	64	15	17	3	0	99

F 10. Bull-wise Live Female Progeny at Different Field Unit Centres (6-12 month) as on 3/2025

Centres	Mayur	Nayak	Janak	Badal	Yuvraj	Total
Shedhaya	0	0	0	0	0	0
Pipali	0	0	0	0	0	0
Hadmdiya	0	0	0	0	0	0
Loej	0	21	0	0	21	42
Surva	0	18	0	0	1	19
Mandlimpur	3	0	14	0	0	17
Khorasa	2	10	0	0	5	17
Gonadal	2	1	0	0	0	3
Total	7	50	14	0	27	98

F 11. Bull-wise Live Female Progeny at Different Field Unit Centres (1-3 years) as on 3/2025

Centres	Sango	Nayak	Janak	Samrat	Badal	Total
Shedhaya	1	12	20	5	0	38
Pipali	14	34	17	39	0	104
Hadmdiya	7	16	22	18	0	63
Loej	31	81	64	46	3	225
Surva	11	27	45	19	0	102
Mandlimpur	5	23	18	8	0	54
Oddar	8	26	19	14	0	67
Khorasa	2	16	13	8	0	39
Gonadal	2	2	4	1	0	9
Total	81	237	222	158	3	701

F 12. Bull-wise Live Female Progeny at Different Field Unit Centres (> 3years) as on 3/2025

Centres	Nayan	Abhijeet	Ronak	Girish	Alok	Madhav	Babar	Raghu	Chaman	Total
Set - III										
Shedhaya	14	8	15	4	9	0	0	0	0	**50**
Pipali	15	5	19	19	20	17	19	19	16	**149**
Hadmdiya	13	3	16	10	14	3	7	9	9	**84**
Loej	19	22	43	48	53	20	86	67	0	**358**
Surva	0	0	0	0	12	0	4	7	38	**61**
Mandlimpur	9	1	14	20	14	6	17	32	15	**128**
Khorasa	16	7	15	18	7	7	25	13	8	**116**
Gonadal	0	0	1	6	4	0	3	7	6	**27**
Total	**86**	**46**	**123**	**125**	**133**	**53**	**161**	**154**	**92**	**973**

Set - IV

Centres	Badal	Hamir	Kamlesh	Balo	Mayur	Sango	Total
Shedhaya	3	8	0	2	11	1	25
Pipali	21	25	16	16	16	12	106
Hadmdiya	16	24	7	14	11	8	80
Loej	41	103	34	51	46	25	300
Surva	19	25	21	40	11	11	127
Mandlimpur	24	38	21	19	7	1	110
Khorasa	12	14	9	10	10	6	61
Gonadal	3	7	12	5		2	29
Total	139	244	120	157	112	66	838

F 13. Bull-wise AI, Conception, Calving and Daughters Retained till Completion of Milk Recording during the Year

S.N.	CENTRE	DAUGHTER TAG NO.	DATE OF BIRTH	SIRE NAME	SET	D.O.C	AFC	AV.M.P.	D.O.D.
1	MANDLIKPUR	A3401/ 100143802402	14/12/2019	HAMIR	IV	2/9/2023	34.3	8.8	1/7/2024
2	MANDLIKPUR	G345 / 100143819546	18/09/2017	RAGHU	III	3/1/2024	65.3	8.7	1/11/2024
3	PIPALI	A326	3/8/2019	HAMIR	IV	7/7/2023	37	6.5	2/5/2024
4	LOEJ	1733	1/9/2018	BADAL	IV	3/2/2024	54.7	10.2	3/12/2024
5	LOEJ	1471	12/2/2018	BABAR	III	5/1/2023	48.3	12.2	5/1/2024
6	LOEJ	31539	15/09/2018	BADAL	IV	8/11/2023	51.8	10.4	8/9/2024
7	LOEJ	31541	28/09/2018	BADAL	IV	7/12/2023	52.2	11.6	8/10/2024
8	LOEJ	413	11/10/2017	RAGHU	III	8/3/2023	54.4	12.6	10/1/2024
9	LOEJ	31536	6/9/2018	BADAL	IV	9/6/2023	46.6	11.9	10/4/2024
10	MANDLIKPUR	A3109/ 340167906880	29/03/2019	KAMLESH	IV	9/8/2023	42	10.1	10/6/2024
11	LOEJ	A0423	28/09/2018	BADAL	IV	9/11/2023	51.4	10.1	10/9/2024
12	LOEJ	31523	21/10/2018	BADAL	IV	8/12/2023	51.4	10.9	10/10/2024
13	PIPALI	A379	29/05/2019	KAMLESH	IV	26/07/2023	39.9	7.1	15/05/2024
14	PIPALI	A2103	15/10/2018	BADAL	IV	8/8/2023	47.5	7	18/05/2024
15	LOEJ	1.00294E+11	20/11/2018	BADAL	IV	18/07/2023	45.6	12.4	20/05/2024
16	LOEJ	31543	1/10/2018	BADAL	IV	21/11/2023	51.4	11.3	21/09/2024
17	PIPALI	A395	11/2/2019	ALOK	III	18/06/2023	42	6.7	26/04/2024
18	LOEJ	1737	2/3/2019	KAMLESH	IV	28/09/2023	44.6	12	30/07/2024
19	LOEJ	31515	17/10/2018	BADAL	IV	2/1/2024	52.1	11.2	30/10/2024
20	LOEJ	31537	27/09/2018	BADAL	IV	30/12/2023	53	11.1	30/10/2024

F 14. Bull-wise AI, Conception, Calving and Daughters Retained Till Completion of Milk Recording during the Year

Bull Name	Set No.	Total AI		Conception		Calving				Daughters Retained Up to				
						Total		Female		1 year	2 year	3 year	Calving	Complete Recording
		Pro.	Cur.year (22-23)	Pro.	Cur.year (22-23)	Pro.	Cur.year (22-23)	Pro.	Cur.year (22-23)					
Ranjeet	I	243		108(179)		72		34						
Rupesh	I	777		429(661)		251		116						
Ashok	I	2120		732(1217)		715		346						
Manek	I	741		376(558)		376		182						
Bhagro	I	4747		1902(3830)		1840		877					45	45
Gajanan 4/02	I	929		502(781)		486		245						
Nagraj	I	4016		1822(2452)		799		768					44	44
Laxman	I	5343		2735(4556)		2735		1349					85	85
A		**18916**		**8606(14234)**		**7274**		**3917**					**174**	**174**
Haresh	II	1245		660(1082)		437		211					37	37
Moti	II	2459		1041(2129)		1007		472					50	50
Sunder	II	719		377(702)		329		151					27	27
Raja	II	1443		724(1378)		594		277					48	48
Dhinglo	II	1089		552(1064)		552		259					25	25
Bholenath	II	2557		1235(1988)		843		404					80	80
B		**9512**		**4589(8343)**		**3762**		**1774**					**267**	**267**
Nayan (07/10)	III	1061	19	503(1000)		391		164					29	29
Abhijit (A1/10)	III	619		279(619)		254		98					12	12
Madhav (37/10)	III	692		295(639)		239		105					21	21
Alok	III	1169		475(1162)		433		202					34	34
Ronak (09/11)	III	1737		752(1736)		670		386					32	32
Girish	III	1601		612(1565)		464		210					36	36
Babar	III	1520		609(1380)		431		187					48	48

Raghu	III	1312		491(1163)		427		191					15	10
Chaman	III	870		352(836)		263		110					12	7
C		**10581**	**19**	**4368(10100)**		**3572**		**1653**					**239**	**229**
Badal	IV	963		408(1028)		376		159				146		
Kamalesh	IV	836		331(836)		304		138			55	83		
Hamir	IV	1418		593(1366)		571		266			266			
Balo	IV	1143		475(1156)		418		187		134	53			
Mayur	IV	783		344(787)		300		130		130				
Sango	IV	757		340(795)		163	157	80	81	80				
Nayak	IV	1354	45	345(779)	252(579)	0	529	0	292					
Samrat	IV		732		326(749)		98		49					
Janak	IV		1028		262(565)									
D		**7254**	**1805**	**2836(6747)**	**840(1893)**	**2132**	**784**	**960**	**422**	**344**	**374**	**229**		
Gr.Total (A±B±C±D)		**46263**	**1805**	**20399(39424)**	**840(1893)**	**16740**	**784**	**8304**	**422**	**344**	**374**	**308**	**656**	**616**

F 15 Performance of FPT Programme since Inception

Duration	AI	Pregnancies	CR%	Calvings	Females Born	Daughters Recorded	Av. AFC (mth)	Av. Milk Yield (kg/day)	Daughters Available for Recording
2005-06	15					-	-	-	-
2006-07	966					-	-	-	-
2007-08	2169	1196(1907)	62.72	468	223	-	-	-	-
2008-09	2961	1141(2065)	55.25	944	455	-	-	-	-
2009-10	3070	1563(2676)	58.41	1429	694				
2010-11	3457	1613(2651)	60.84	1333	666				
2011-12	3738	1603(2918)	54.93	1538	729				
2012-13	4067	1776(3627)	48.97	1684	810				
2013-14	4121	1957(4021)	48.70	1688	801				
2014-15	4781	2150(4271)	50.34	1564	731	1	46.5	8.9	
2015-16	3375	1719(3691)	46.57	1892	867	15	50.2	9.3	
2016-17	2971	1228(3041)	40.38	1256	537	74	49.3	9.1	
2017-18	2462	1032(2436)	42.36	815	365	72	53.6	8.9	
2018-19	2013	840(1971)	42.62	803	347	89	51.6	8.7	
2019-20	1962	776(1894)	40.97	712	308	86	52.8	9.1	
2020-21	2139	928(1273)	42.1	800	374	76	52.1	9.0	
2021-22	1931	842(1910)	44.1	766	344	99	52.6	9.1	
2022-23	1805	840(1893)	44.4	784	422	104	52.9	9.2	
2023-24	1531	728(1629)	44.7	700	331	57	52.7	9.2	
2024-25	1892	739(1535)	48.1	412	197	22	52.8	9.3	
Overall	**51426**	**22671(45409)**	**48.7**	**19588**	**9201**	**695**	**51.6**	**9.1**	

AI, Conception, Calving and Daughters Retained (Set wise)

Set No	AI	Pregnancies	Daughters Born	Daughters Calved
Set - I	18916	8606	3917	175
Set - II	9512	4589	1774	267
Set - III	10600	4368	1653	229
Set - IV	10551	4564	1883	27
Set - V	1912	579	27	--

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Allocation as per R E 2024–25		Released	Expenditure as per AUC		Closing Balance (Rs. In lakhs)
Total	ICAR Share	ICAR Share	ICAR Share	State Share	
74.50*	52.50+4.50*	52.50+4.50*	53.27175*	17.28653	3.72825

* Includes SCSP Fund

Herd Performance

Herd strength was 258 out of which 167 were breedable buffaloes (>2year). During the period 21 calving took place consisting of 12 males and 09 females. The calf mortality (0-3 months) was recorded at 21.05 %, very high as compared to fixed target of NPBI ≤ 5 %. Conception rate was considerably improved to 58.80 % from last year (51.16 %). During the year 8925 semen doses produced and 4502 frozen semen doses used/ disseminated by the centre. As on 31st March 2025, 154041 frozen semen doses are available at the centre.

Production performances such as 305 day or less day milk yield and peak yield (kg) decrease from 2177 kg (33) and 12.2 kg to 2307 kg (33) and 13.0 kg, respectively. The reproductive traits viz. AFC, SP, DP and calving interval were 51.80 months (05), 141 days (16), 154 days (16) and 453 days (16), compared to previous year (2023-24) 48.94 months (07), 181 days (42), 246 days (42) and 491 days (42), respectively. During the report period the wet average and herd average was 6.60 kg/d and 3.9 kg/d, respectively.

Accomplishment and Targets Achieved:

Trait	Target	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Av. Age at first calving (months)	40	47.81±0.86 (10)	46.90±1.82 (20)	47.90±1.27 (29)	48.94±1.45 (07)	51.8±1.8 (05)
Av. Service period (days)	130	144±11.70 (38)	161±12.89 (41)	165±12.78 (80)	181±22.7 (42)	140.8 + 11.3
Calf mortality (0-3 months)	≤ 5 %	11.11%	10.58%	23.26%	8.82%	21.05%
Wet average (kg)	≥8.5 kg	6.6	7.6	7.8	6.5	6.6
Herd average (kg)	≥5.5 kg	3.4	4.5	3.8	3.9	3.9

Field Unit:

No. of AIs in the field increased (1892) during the reporting period as compared to 1531 AI in 2023-24. Five test bull of set IV were used during the report period. A total 739 conceptions reported with conception rate of 48.1%, 197 female progenies born, 22 daughters completed lactation in 2024-25.

Recommendations:

- More emphasis required to daughter's 1st lactation milk yield recording.
- Test bulls should be used simultaneously for achieving equal no of AIs.

LIVESTOCK RESEARCH STATION, VALLABHNAGAR
Report Period: 2024-25

1. **Name of center** : Livestock Research Station, Vallabhnagar RAJUVAS, Bikaner
2. **Project Code** :
3. **Project Title** : Network Project on Buffalo Improvement
   Subproject : Performance recording and improvement of Surti buffalo
   Progeny testing of Surti bulls under field conditions
4. **Date of start** : 01-04-2001
5. **Objectives** :

I. To establish elite herd of 50 Surti for the production of genetically superior young bulls.
II. To evaluate sires through institutional/field progeny testing
III. To produce, test, propagate and conserve high genetic merit male germplasm

6. **Technical Programme:**

- Establishment and maintenance of an elite herd of Surti with herd strength of 120.
- Selection and testing of minimum 4-6 bulls in every 24 months cycle.
- Production of minimum 3000 frozen semen doses from each test bull.
- Maintain a minimum number of 2000 frozen semen doses until the particular SET gets evaluated.
- Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
- Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
- Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days) and peak yield, milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).
- Monthly testing of milk constituents (Fat%, SNF% and Protein %) and Somatic Cell Count, wherever feasible, at institutional herds.
- Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
- Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. Staff associated with the project

Discipline	**Name of Scientist / Staff**	**Status (PI/Co-PI/ Associated)**
AGB	-	-
ARGO/VGO	**Dr Mitesh Gaur**	Project Incharge
ANFT	-	-
LPM	-	-
Health / Others	-	-
No. of staff		
Technical staff	-	
Administrative staff	-	
Contractual staff (RA / SRF / YP-I, YP-II)	One contractual clerk, Two contractual LSAs, one SRF	

8.**Financial Statement:** Head wise budget allocation and utilization; revenue receipts(**Rs. In Lac.)**

Head	**Allocation for the year (ICAR ± State)**	**ICAR share 75% of expenditure**	**State Share 25% of expenditure**	**Total Expenditure**
A. **Recurring**		F		
1. Pay & Allow.	-	-	-	-
2. T.A.	-	-	-	-
3. Recurring cont.	68,00,000.00	50,96,439.00	16,98,813.00	6795252.00
4. Recurring cont **(SCSP)**	4,00,000.00	4,00,000.00	-	4,00,000.00
5. Recurring cont **(TSP)**	1,00,000.00	1,00,000.00	-	1,00,000.00
6. HRD	-	-	-	0.00
Total	**73,00,000.00**	**55,96,439.00**	**16,98,813.00**	**72,95,252.00**
B. **Non-recurring Conti**.				
1. Equipment **(SCSP)**	50,000.00	50,000.00	-	50,000.00
2. Equipments	4,00,000.00	3,00,000.00	1,00,000.00	4,00,000.00
3. Works	4,00,000.00	3,00,000.00	1,00,000.00	4,00,000.00
Total	**8,50,000.00**	**6,50,000.00**	**2,00,000.00**	**8,50,000.00**
G. Total	**81,50,000.00**	**62,46,439.00**	**18,98,513.00**	**81,45,252.00**

Revenue generated (Rs.)

S. No.	**Source**	**Income**
1	Milk sale	19,54,299
2	Animal Sale	20,000
3	FYM sale	-
	Total Income	**19,74,299**

Institutional herd performance: Enclosed Table 9.1 to 9.21.

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	**Addition**			**Disposal**				**CB**
		OB	**B / P**	**T**	**D**	**T**	**S**	**E**	
	Female								
1.	Below 3 months	0	20	0	14	5	0	0	**1**
2.	3-12 months	7	0	5	3	5	0	0	**4**
3.	1-2 years	7	0	5	2	7	0	0	**3**
	Above 2 years	33	0	7	3	11	0	0	**26**
4.	Buffaloes in Milk	14	0	14	0	0	0	0	**28**
5.	Buffaloes Dry P /NP	25	0	0	3	3	0	0	**19**
	Sub Total	**86**	**20**	**31**	**25**	**31**	**0**	**0**	**81**
	Males								
1.	Below 3 months	0	18	0	7	8	0	0	**3**
2.	3-12 months	6	0	8	3	5	0	0	**6**
3.	1-2 years	15	0	5	5	14	0	0	**1**
	Above 2 years	11	0	14	1	3		0	**21**
4.	Breeding bulls	7	0	3	0	0	1	0	**9**
5.	Bullocks / Teasers / others	1	0	0	0	0	0	0	**1**
	Sub Total	**40**	**18**	**30**	**16**	**30**	**1**	**0**	**41**
	Grand Total	**126**	**38**	**61**	**41**	**61**	**1**	**0**	**122**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics including abnormalities

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 24	0	0	-	-	-	-	-	0
May	0	3	-		-	-	-	3
June	0	0	1	1	-	-	-	2
July	3	3	-	-	-	-	-	6
August	2	1	1	-	-	-	-	4
September	5	7	-	-	-	-	-	12
October	3	3	1	-	-	-	-	7
November	1	0	2	-	-	-	-	3
December	2	2	-	-	-	-	-	4
January 25	2	0	-	-	-	-	-	2
February	0	1	1	-	-	-	-	2
March	0	0	-	-	-	-	-	0
Overall	**18**	**20**	**6**	**1**	**0**	**0**	**0**	**45**

Sex ratio **Male : Female (0.9:1.0);** Abortion % = 2.22 %; Still birth % = 13.3 %

9.3. Disposal of Animals during the Period 1st April 2024 to 31st March, 2025

Category	Surplus	Below farm production	Repd. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Female								
Calves 0-3 m	0	0	0	0	0	14	0	14
Calves 3-12 m	0	0	0	0	0	3	0	3
Heifer 1-2 year	0	0	0	0	0	2	0	2
Heifer >2 year	0	0	0	0	0	3	0	3
Buffalo Milch	0	0	0	0	0	0	0	0
Buffalo Dry	0	0	0	0	0	3	0	3
Sub Total	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**25**
MALE								
Calves 0-3 m	0	0	0	0	0	**7**	0	7
Calves 3-12 m	0	0	0	0	0	3	0	3
Young Male 1-2 yr	0	0	0	0	0	5	0	5
Male >2 year	0	0	0	0	0	1	0	1
Breeding Bull	1	0	0	0	0	0	0	1
Bullock +Teaser	0	0	0	0	0	0	0	0
Sub Total	**1**	**0**	**0**	**0**	**0**	**16**	**0**	**17**
TOTAL	**1**	**0**	**0**	**0**	**0**	**41**	**0**	**42**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Female							**Male**					**Overall Herd**
	0-3 m	3-12 m	1-2 Yrs.	Above 2 Yrs.	Milk ± Dry	Overall Female	0-3 m	3-12 m	1 -2 Yrs.	>2 yrs.	Overall Male	
No.	20	12	12	40	53	137	18	14	20	36	88	225
Died	14	3	2	3	3	25	7	3	5	1	16	41
%	**70.0**	**25.0**	**16.7**	**7.5**	**5.7**	**18.25**	**38.9**	**21.4**	**25.0**	**2.8**	**18.18**	**18.22**

Overall Calf Mortality = (21/38)*100 =55.26% Overall Mortality =(41/164)*100= 25.0%

9.5. Causes of Mortality (quarter wise) during the period April 2024 to March 2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	**Total**
Enteritis	-	1	2	1	**4**
Pneumonitis	1	4	1	1	**7**
Septicemia / Toxemia	1	3	9	-	**13**
Peritonitis	-	-	-	-	**0**
JD/TB	-	-	-	-	**0**
Milk Fever/metabolic diseases	-	-	-	-	**0**
TRP / TP	-	-	-	-	**0**
Parasitism	-	-	-	-	**0**
Accidental death	-	-	-	-	**0**
Peri-parturient disorders	-	-	-	-	**0**
Miscellaneous	1	4	9	3	**17**
Total	**3**	**12**	**21**	**5**	**41**

9.6 Prophylactic Measures undertaken

Disease	**Vaccination Date**	**No. of animals**	**No. of animals Tested / Positive**		**Month and no. of animals treated for Parasitism**	
FMD	16.09.24, 17.01.25	19, 95			April 24	30
HS	16.09.24, 17.01.25	19, 95			June	146
BQ	16.09.24, 17.01.25	19, 95			August	10
Brucellosis					October	124
JD			4	0		
TB			4	0		
IBR			-	-		

9.7. Female Conception Rate During the Period January to December 2024

AI No.→	**1st**			**2nd**			**3rd**			**4th & above**			**Over all**		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	7	4	57.14	2	0	0.00	1	1	100.00	0	0		10	5	50.00
Adults	31	21	67.74	6	4	66.67	3	1	33.33	3	3	100.00	43	29	67.44
Overall	**38**	**25**	**65.79**	**8**	**4**	**50.00**	**4**	**2**	**50.00**	**3**	**3**	**100.00**	**53**	**34**	**64.15**

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8 Quarter-wise conception rate

Quarter	**No. of A I**	**Preg. animals**	**CR %**
January – March	8	8	**100.00**
April - June	8	3	**37.50**
July - September	4	1	**25.00**
October- December	33	22	**66.67**
Overall	**53**	**34**	**64.15**

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. No.	Bull No.	SET No.	Total Number of AI	Total Conceived	CR%
1.	1956	3	3	3	100.00
2.	1961	3	2	2	100.00
3.	1963	4	1	1	100.00
4.	1968	4	2	1	50.00
5.	4299	6	7	5	71.43
6.	4302	6	5	1	20.00
7.	4392	7	1	0	0.00
8.	4429	7	1	1	100.00
9.	4712	10	4	0	0.00
10.	4728	10	5	4	80.00
11.	4764	10	6	4	66.67
12.	4765	10	4	3	75.00
13.	4768	10	5	4	80.00
14.	4772	10	7	5	71.43
Over all			**53**	**34**	**64.15**
No. of services per conception					**1.56**

9.10Bull Wise Semen Stock

Set No	Bull No	OB	Doses produced / received	Consumption for AI/supplied					Balance
				Inst herd	Field unit	NPBI centres	Sold	Total supply	
I	1948	149	0	0	0	0	0	0	149
I	1949	2	0	0	0	0	0	0	2
II	1950	193	0	0	0	0	0	0	193
II	1951	15	0	0	0	0	0	0	15
II	1952	143	0	0	0	0	0	0	143
II	1953	95	0	0	0	0	0	0	95
III	1955	433	0	0	0	0	0	0	433
III	1956	530	0	0	0	0	0	0	530
III	1957	876	0	0	0	0	0	0	876
III	1958	163	0	0	0	0	0	0	163
III	1959	0	0	0	0	0	0	0	0
III	1961	381	0	2	0	0	0	2	379
IV	1962	85	0	0	0	0	0	0	85
IV	1963	842	0	0	0	0	0	0	842
IV	1964	498	0	0	0	0	0	0	498
IV	1965	350	0	0	0	0	0	0	350
IV	1966	1088	0	0	0	0	0	0	1088
IV	1967	2373	0	0	0	0	0	0	2373
IV	1968	1538	0	4	0	0	0	4	1534
IV	1969	1630	0	0	0	0	0	0	1630
IV	1970	5	0	0	0	0	0	0	5
V	1971	1111	0	0	0	0	0	0	1111
V	1972	573	0	0	0	0	0	0	573
V	1973	1451	0	0	0	0	0	0	1451
V	1974	1137	0	0	0	0	0	0	1137
V	1975	741	0	0	0	0	0	0	741
V	1976	1342	0	0	0	0	0	0	1342
V	1977	1871	0	0	0	0	0	0	1871

V	1978	70	0	0	0	0	0	0	70
VI	4203	268	0	0	0	0	0	0	268
VI	4229	3627	0	0	0	0	0	0	3627
VI	4264	2281	0	0	0	0	0	0	2281
VI	4299	5665	0	10	20	0	0	30	5635
VI	4302	160	0	16	0	0	0	16	144
VI	4321	124	0	0	0	0	0	0	124
VI	4323	99	0	0	0	0	0	0	99
VI	25	248	0	0	0	0	0	0	248
VI	8	565	0	0	0	0	0	0	565
VII	4373	1746	0	0	0	0	0	0	1746
VII	4403	3063	0	0	0	0	0	0	3063
VII	4392	1996	0	2	0	0	0	2	1994
VII	4429	2391	0	2	0	0	0	2	2389
VII	4413	1164	0	0	0	0	0	0	1164
VII	4458	123	0	0	0	0	0	0	123
VIII	4464	1525	0	0	0	0	0	0	1525
VIII	4529	1946	0	0	0	0	0	0	1946
VIII	4542	2832	0	0	0	0	0	0	2832
VIII	4548	1508	0	0	0	0	0	0	1508
VIII	4567	1758	0	0	0	0	0	0	1758
VIII	4578	2275	0	0	0	0	0	0	2275
IX	4611	5123	0	0	100	0	0	100	5023
IX	4612	239	0	0	50	0	0	50	189
IX	4633	6929	0	0	160	0	0	160	6769
IX	4647	2605	0	0	0	0	0	0	2605
IX	4648	9139	0	0	1205	0	0	1205	7934
X	4712	3542	0	12	55	0	0	67	3475
X	4728	3565	0	14	0	0	0	14	3551
X	4764	2459	0	16	0	0	0	16	2443
X	4765	1183	1244	20	0	0	0	20	2407
X	4768	1214	1236	18	0	0	0	18	2432
X	4772	2164	1179	18	0	0	0	18	3325
XI	4791	0	620	0	0	0	0	0	620
Total		**93,211**	**4279**	**134**	**1590**	**0**	**0**	**1724**	**95,766**

9.11 Average Body weight (kg) since inception

Year	N	Birth	N	3 Months	N	6 Months	N	12 Months	N	18 Months	N	24 Months	N	At AFC
Female														
2001-02	14	26.86±1.04	9	62.44±3.88		-		-		-		-		-
2002-03	16	27.78±0.77	13	60.23±2.84	13	99.54±2.99	6	183.33±7.69	1	244.00±NE		-		-
2003-04	11	27.73±1.39	12	58.62±2.03	13	89.88±3.22	12	160.08±5.26	9	232.50±8.88	8	277.29±8.34		-
2004-05	20	27.82±0.75	18	60.85±1.90	26	89.07±3.60	24	165.37±3.06	16	237.75±5.93	8	299.12±9.43	9	405.33±8.08
2005-06	25	27.88±0.64	19	54.80±1.33	17	85.43±2.15	16	129.40±4.08	14	191.45±3.33	16	224.25±4.62	16	415.71±14.98
2006-07	25	28.52±0.54	24	55.00±0.77	24	76.10±1.50	16	119.55±1.61	13	166.14±1.93	14	217.13±3.21		426.57±7.68
2007-08	19	28.89±0.72	14	58.71±2.41	19	83.68±2.74	14	116.43±4.77	13	159.77±2.57	15	208.40±4.35	15	430.47±10.81
2008-09	18	28.56±0.37	15	59.80±1.85	13	84.77±3.62	14	120.64±6.25	12	162.58±4.15	14	210.21±4.17	12	435.83±6.41
2009-10	14	27.71±0.58	16	60.09±3.11	19	85.25±4.54	12	131.50±5.32	13	181.91±4.82	15	209.43±3.83	5	434.23±8.12
2010-11	12	27.54±0.76	12	59.84±3.45	9	72.91±3.96	10	109.09±4.58	11	163.19±5.09	13	205.43±4.16	4	427.67±9.15
2011-12	11	26.84±0.86	11	58.46±2.45	15	74.45±4.23	8	108.37±5.37	9	162.82±7.34	10	208.64±4.64	5	426.54±14.21
2012-13	12	26.80±0.82	16	59.45±2.47	22	75.95±4.25	10	110.40±5.32	8	165.50±7.30	10	212.65±4.75	4	429.50±14.40
2013-14	12	24.13±0.30	5	60.34±2.46	8	77.13±6.26	8	100.67±1.70	6	161.72±12.81	5	209.63±16.76	4	462.50±23.58
2014-15	16	21.66±0.64	11	49.41±2.33	8	64.13±3.44	4	106.5±13.92	2	214.00±4.71	5	239.25±7.27	12	440.75±15.24
2015-16	9	22.80±0.35	5	54.50±1.43	4	70.50±2.68	10	101.50±2.11	6	161.25±11.22	4	217.00±6.05	11	413.90±11.74
2016-17	15	25.20±0.31	6	59.67±1.66	3	73.00±1.89	6	104.67±2.04	8	177.50±8.23	8	214.00±3.58	32	426.47±7.90
2017-18	20	25.21±0.74	8	52.38±3.08	13	73.46±1.71	11	106.55±5.12	6	164.33±2.65	7	193.14±25.42	2	410.50±2.50
2018-19	18	24.43±0.50	11	55.45±1.55	10	70.10±3.37	9	109.56±2.72	15	153.67±3.87	8	197.25±7.64	-	
2019-20	11	24.55±0.37	7	52.04±1.91	10	67.79±1.70	10	115.37±4.88	10	169.14±4.32	12	214.73±4.06	5	443.20±17.36
2020-21	15	23.45±0.33	12	55.29±1.46	7	71.71±2.84	5	119.50±4.82	7	170.36±4.83	11	202.32±3.20	-	-
2021-22	19	25.43±0.15	20	52.94±1.11	11	71.72±1.38	12	119.12±2.85	7	171.82±4.36	12	206.27±3.83	8	325.75±7.67
2022-23	5	25.04±0.55	12	42.94±1.02	4	60.85±7.97	5	114.27±3.77	5	166.20±3.58	16	201.63±24.26	1	330.00
2023-24	10	23.92±0.33	9	40.01±2.68	12	49.33±2.68	22	68.15±3.06	6	119.17±3.59	4	195.75±3.59	3	307.67±6.49
2024-25	**20**	**22.1 ± 0.25**	**10**	**36.84 ± 1.70**	**9**	**45.09 ± 2.02**	**7**	**61.73 ± 4.69**					**5**	**295.10 ± 7.72**
Male														
2001-02	14	28.71±1.15	12	65.17±3.14	5	99.80±1.74		-		-		-		-
2002-03	11	30.18±3.57	7	63.43±5.66	8	100.38±2.34	8	164.60±3.04	4	239.75±14.92		-		-
2003-04	12	28.21±0.91	13	59.46±3.61	5	88.80±5.16	2	168.00±7.80	3	241.00±7.65	11	338.91±16.86	8	417.62±8.23
2004-05	23	27.76±0.76	17	58.39±1.70	22	90.96±1.87	14	165.33±9.56	6	239.50±7.50	9	335.31±14.21	7	479.25±75.65
2005-06	20	29.45±0.85	15	60.21±2.27	20	86.62±3.49	7	121.71±10.04	4	179.67±21.26	2	260.5±16.5	8	440.0±29.67
2006-07	13	29.85±0.80	14	55.54±1.20	14	83.73±2.10	11	116.40±0.82	9	169.13±10.09	5	214.40±15.86		440.0 29.67
2007-08	19	29.58±0.62	14	60.23±2.30	11	86.00±5.79	12	112.75±6.25	10	171.20±8.86	5	221.20±18.04	8	444.75±6.58
2008-09	18	29.33±0.45	17	61.47±1.80	12	89.42±2.64	12	118.50±5.27	12	176.36±3.90	7	225.71± 6.57	8	441.38±11.54
2009-10	9	27.85±0.57	9	65.86±3.39	17	91.50±4.07	10	132.50±16.6	12	183.88±8.01	5	226.74±9.34	10	439.41±16.48
2010-11	19	28.03±0.54	19	76.71±3.17	17	69.92±3.36	25	109.70±14.86	23	166.28± 6.54	21	214.49±10.91	12	436.37±17.69
2011-12	24	28.37±1.02	23	61.87±4.72	19	79.43±3.66	14	124.97±5.72	14	164.64±445	12	224.54±14.75	9	438.64±31.42
2012-13	26	28.55±1.05	28	62.80±4.75	31	80.35±3.65	22	125.45±5.25	10	170.5±4.50	8	225.75±14.80	8	445.74±31.38
2013-14	13	24.31±0.49	11	60.74±3.36	10	76.00±12.96	7	107.33±10.35	10	166.54±10.35	9	215.59±14.21	10	455.80±65.67
2014-15	19	22.38±0.65	10	52.3±2.28	8	67.81±4.70	5	153.5±14.24	2	184.00±2.83	5	224.5±10.76	10	452.60±28.64
2015-16	12	22.96±0.39	2	51.00±2.12	4	75.25±3.71	6	118.42±2.25	4	181.25±5.69	4	226.25±7.28	9	411.44±22.37
2016-17	12	25.08±0.47	4	62.50±1.03	3	91.33±5.46	5	126.40±1.51	8	202.13±5.31	5	227.60±5.14	6	446.33±20.43
2017-18	10	26.21±1.32	6	53.83±5.62	1	66.00±0.00	2	106.00±3.00	5	150.40±10.99	5	214.00±4.29	-	-
2018-19	14	24.81±0.74	10	56.60±1.65	15	70.33±1.62	4	105.00±4.95	4	158.50±4.41	2	207.50±1.50	-	-
2019-20	24	25.30±0.29	12	51.02±1.50	10	67.79±1.70	12	115.83±2.89	9	164.81±3.72	6	207.45±3.02	-	-
2020-21	16	24.31±0.24	18	53.83±1.29	4	71.75±2.69	14	119.04±2.78	7	169.07±6.86	11	205.00±4.40	-	-
2021-22	17	24.35±0.37	15	55.44±1.17	7	71.34±2.84	7	120.20±3.27	9	171.82±4.36	13	203.60±2.58		
2022-23	17	24.80±0.25	22	41.04±1.64	17	59.65±3.43	4	116.18±10.85	4	134.25±5.12	11	170.09±4.75		
2023-24	14	23.70±0.26	9	32.29±1.83	19	49.81±2.12	28	91.45±6.10	19	122.34±4.91	4	145.30±12.66	2	351.00±21.00
2024-25	**18**	**23.17 ± 0.37**	**11**	**33.95 ± 2.23**	**13**	**48.65 ± 2.85**	**9**	**72.06 ± 10.40**	**3**	**163.10 ± 8.56**				

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	N	TLMY (kg)	Lact Length (days)	SLMY (kg)	Peak Yield (kg)
1st	8	1231.35 ± 80.31	290.75 ± 28.15	1191.93 ± 56.72	7.95 ± 0.49
2nd	3	1307.40 ± 120.57	233.00 ± 17.78	1307.40 ± 120.57	8.00 ± 0.46
3rd	3	1174.70 ± 13.22	276.50 ± 16.62	1174.70 ± 13.22	8.00 ± 0.92
4th	4	1818.00 ± 22.05	332.00 ± 17.68	1755.00 ± 40.59	11.00 ± 1.77
5th & above	10	1741.43 ± 122.36	355.50 ± 13.47	1599.80 ± 84.75	8.70 ± 0.21
Overall	**28**	**1458.04** ± 83.46	**300.19** ± 13.98	**1397.31** ± 67.69	**8.61** ± 0.39

9.12.1 Average production performance of Buffaloes since Inception of Network

Year	N	Av. Lact. Yield (kg)	Av. Lact. Length (days)	305 day Milk Yield (kg)	Av. Peak yield
2001-02	16	1687.42±110.73	315.00±20.88	1606.00±95.38	9.08±0.40
2002-03	28	1859.21±70.84	304.68±11.87	1792.70±62.60	10.23±0.17
2003-04	34	1653.11±42.43	278.10±5.80	1645.78±41.11	10.59±0.18
2004-05	36	1661.63±49.10	299.10±7.87	1633.26±39.73	11.13±0.23
2005-06	34	1721.07±72.95	292.32±9.97	1667.20±62.32	11.32±0.27
2006-07	41	1684.73±52.55	293.03±5.24	1661.06 ±50.04	10.89±0.31
2007-08	32	1726.25±72.56	303.53±8.26	1649.06 ±45.70	11.17±0.21
2008-09	35	1598.69±51.34	337.62±7.81	1491.37 ±44.77	9.75±0.24
2009-10	30	1600.89±64.93	328.28±16.09	1551.11±49.56	9.69±0.38
2010-11	16	1433.91±72.22	319.00±17.74	1348.87±72.00	9.0±0.28
2011-12	21	1428.65±45.49	318.76±9.91	1386.12±47.16	8.82±0.22
2012-13	27	1432.7±50.59	296.48±9.01	1390.57±41.29	9.70±0.21
2013-14	24	1526.74±49.26	294.30±9.79	1480.64±38.21	9.58±0.18
2014-15	41	1493.40±53.85	294.00±7.69	1443.99±60.65	9.71±0.25
2015-16	20	1623.90±77.97	344.85±15.06	1477.38±58.40	8.78±0.33
2016-17	23	1670.73±80.06	309.96±11.28	1582.82±68.74	9.68±0.29
2017-18	23	1617.70±72.01	282.81±11.02	1586.06±72.01	9.75±0.24
2018-19	22	1649.38±85.81	313.32±15.74	1565.95±64.94	9.60±0.29
2019-20	25	1604.18±117.29	291.65±17.89	1558.62±103.17	9.49±0.49
2020-21	24	1633.00±55.51	327.46±14.12	1557.53±41.34	9.56±0.31
2021-22	32	1662.62±54.61	335.28±12.35	1557.38±40.83	9.86±0.26
2022-23	24	1591.53±67.56	355.79±18.66	1463.00±58.54	8.23±0.37
2023-24	19	1589.02 ± 57.84	364.37 ± 9.61	1433.03 ± 46.59	8.18 ± 1.17
2024-25	**28**	**1458.04 ± 83.46**	**300.19 ± 13.98**	**1397.31 ± 67.69**	**8.61 ± 0.39**

9.12.2 Herd Life Production (up to 4th Lactation) during 2023-24

Ani. No.	DOB	Date of completion of 4th or more lact. or disposal	HLF (days) up to 4th or more lactation or disposal (d)	LTMY (kg)	Productive Days	Unproductive Days	MY/ day HLF
4494	10-04-2009	20-01-2014	30-11-2023	11431.6	2384.0	1217	2.14
4501	02-08-2009	21-11-2013	23-06-2024	14425.8	2803.0	1064	2.65
4513	25-09-2009	09-08-2014	18-10-2024	10212.5	2209.0	1514	1.86
4537	22-08-2010	25-05-2014	03-06-2024	12713.4	2352.0	1310	2.53
4582	29-09-2011	31-08-2015	07-03-2025	10799.3	1963.0	1513	2.20
4600	28-08-2012	28-07-2018	18-07-2024	7274.4	1476.0	706	1.68
4616	25-10-2012	31-07-2017	03-09-2024	7871.1	1494.0	1097	1.82
4625	24-12-2012	12-08-2016	21-11-2023	9578.5	1944.0	713	2.40
4634	26-08-2013	26-10-2018	08-11-2024	5273.5	1339.0	866	1.29
4659	07-02-2014	25-07-2018	21-11-2023	5021.8	1220.0	725.0	1.41
4672	09-07-2014	05-09-2018	31-10-2023	6390.2	1411.0	471	1.88
4676	11-08-2014	24-07-2019	11-02-2025	5699.5	1265.0	764	1.49
4697	21-08-2015	03-12-2019	20-03-2025	5757.5	1063.0	871	1.65

4698	25-08-2015	22-08-2019	21-11-2024	4936.3	1182.0	736	1.46
4700	31-08-2015	01-09-2019	31-12-2024	4875.5	1220.0	728	1.43
4748	15-07-2017	18-09-2020	30-09-2024	2944.7	893.0	580	1.12

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. or date of disposal), Productive Days (date of first calving to total days in milk), Unproductive days (total days when buffalo not give milk from the date of first calving)

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	Fat	SNF	Protein	Lactose	SCC
April 24	12	7.43	10.63	4.01	5.03	
May	10	8.80	10.46	3.42	-	
June	9	6.62	10.60	3.46	-	
July	11	5.90	10.97	3.57	-	
August	16	6.50	-	-	-	
September	14	6.80	-	-	-	
October	-	-	-	-	-	
November	-	-	-	-	-	
December	16	6.50	-	-	-	
January 25	15	6.80	-	-	-	
February	18	6.90	-	-	-	
March	20	6.90	-	-	-	
Overall		**6.92**	**10.67**	**3.62**	**5.03**	

9.14: Reproductive Performance

Parity	AFC (Months) (N)	SP (Days)	DP (Days)	CI (Days)
1	60.00 ± 4.67 (11)	123.57 ± 9.19 (10)		
2		117.25 ± 43.19 (6)	162.00 ± 8.56 (5)	486.67 ± 31.70 (5)
3		136.00 ± 7.69 (7)	200.00 ± 15.92 (13)	460.75 ± 29.43 (13)
4		156.25 ± 14.58 (5)	168.50 ± 56.92 (5)	439.00 ± 36.06 (5)
5th& above		137.45 ± 10.49 (15)	184.71 ± 18.80 (11)	483.86 ± 26.48 (11)
Over all	**60.00 ± 4.67 (11)**	**133.90 ± 5.60 (43)**	**184.67 ± 10.87 (34)**	**470.55 ± 16.49 (34)**

9.14.1 Reproduction Performance Since inception of Network.

Years	AFC (Days/ Months)	AFC months	Service Period (days)	Dry Period (days)	Calving Interval (days)
2001-02	-	-	243.92±42.12	250.08±23.75	556.17±24.96
2002-03	-	-	195.00±22.93	204.45±25.71	489.95±24.01
2003-04	1517.34±50.82	49.75	146.13±14.32	177.35±12.01	454.71±14.45
2004-05	1370.64±86.23	44.94	153.55±11.10	179.37±9.84	462.79±11.33
2005-06	1366.23±31.93	44.79	145.87±18.50	171.83±16.20	451.63±18.03
2006-07	1367.69±29.27	44.84	148.68±13.13	163.32±11.69	450.27±14.29
2007-08	1431.62±22.36	46.94	150.57±13.02	162.03±23.45	456.11±11.48
2008-09	1565.62±41.18	51.33	118.27±16.96	172.88±15.90	480.25±16.10
2009-10	1489.18±29.65	48.83	203.10±22.39	169.57±11.58	453.30±16.06
2010-11	1391.67±88.97 (8)	45.63	108.68±19.01 (34)	193.57±9.64 (30)	503.24±22.75 (30)
2011-12	1461.00±98.49 (5)	47.90	97.11±5.15 (18)	141.19±1.18 (23)	425.90±33.77 (23)
2012-13	1448.00±69.58 (8)	47.47	108.6±14.82 (17)	164.08±1.72 (26)	441.73±22.99 (26)
2013-14	45.47±2.62 (8)	45.47	119.63±1.84 (25)	135.60±7.83 (16)	401.06±11.50 (16)
2014-15	47.01±2.49 (10)	47.01	162.28±8.74 (18)	177.2±35.07 (10)	445.9±33.71 (10)
2015-16	46.29 (1)	46.29	169.29±7.39 (19)	192.47±9.78 (19)	483.74±21.03 (19)
2016-17	46.21±1.11 (4)	46.21	141.07±5.25 (33)	222.75±3.27 (23)	482.63±32.26 (23)
2017-18	50.97±6.08 (2)	50.97	82.94±5.80 (30)	193.3±13.47 (31)	456.44±21.45 (31)
2018-19	42.41±2.71 (7)	42.41	91.60±4.64 (30)	181.62±18.46 (26)	423.69±16.31 (26)
2019-20	45.29±4.66 (8)	45.29	109.77±8.86 (27)	159.38±15.81 (29)	417.43±13.06 (31)

2020-21	46.07±4.10 (4)	46.07	145.26±11.13 (29)	154.83±8.93 (28)	431.92±9.90 (28)
2021-22	50.86±2.11 (10)	50.86	124.41±11.20 (27)	151.71±11.10 (26)	431.71±18.30 (26)
2022-23	53.89±7.65 (4)	53.89	143.14±13.66 (30)	153.16±9.08 (29)	441.42±18.91 (29)
2023-24	59.48±4.83 (3)	59.84	129.09±10.92 (12)	203.54±19.81(16)	483.50±32.87 (16)
2024-25	**60.00 ± 4.67 (11)**	**60.00**	**133.90 ± 5.60 (43)**	**184.67 ± 10.87 (34)**	**470.55 ± 16.49 (34)**

9.15 Milk Production and Disposal

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April 24	1483.90	1482.90	0.00	1.00
May	1401.70	1304.20	87.00	1.00
June	1343.30	1070.90	267.00	0.50
July	1882.60	1368.10	471.00	1.00
August	2863.30	2080.80	765.00	0.00
September	3801.60	2661.30	1084.50	1.50
October	5577.30	4125.20	1410.00	0.00
November	5403.30	4401.50	993.00	0.00
December	4879.40	4158.90	705.00	0.00
January 25	4890.30	4079.90	799.00	0.00
February	4364.70	3435.20	924.00	0.00
March	4102.20	3420.20	682.00	0.00
Total	**41993.60**	**33589.10**	**8187.50**	**5.00**

9.16 Feed and fodder (Quintals) availability

Quarter	Type of fodder /feed	Qty produced at farm	Qty. Purchased	Actually fed	Balance (Qt)
I (April - June)	Green	0.0	0.0	0.0	0.0
	Dry	0.0	500.0	447.0	53.0
	Silage	0.0	0.0	0.0	0.0
	Concentrate	0.0	181.5	136.5	45.0
II (July - September)	Green	0.0	0.0	0.0	0.0
	Dry	0.0	293.0	460.0	-167.0
	Silage	0.0	0.0	0.0	0.0
	Concentrate	0.0	369.7	204.0	165.7
III (October – Dec.)	Green	0.0	0.0	0.0	0.0
	Dry	0.0	900.0	499.2	400.8
	Silage	0.0	0.0	0.0	0.0
	Concentrate	0.0	259.0	306.5	-47.5
IV (January - March)	Green	0.0	43.2	43.2	0.0
	Dry	0.0	177.6	506.6	-329.0
	Silage	0.0	0.0	0.0	0.0
	Concentrate	0.0	121.9	333.7	-211.8
TOTAL	**Green**	**0.0**	**43.2**	**43.2**	**0.0**
	Dry	**0.0**	**1870.6**	**1912.8**	**-42.2**
	Silage	**0.0**	**0.0**	**0.0**	**0.0**
	Concentrate	**0.0**	**932.1**	**980.7**	**-48.6**

9.17: Milk performance during April 2024 to March 2025

Month	**Buffaloes in milk**	**Buffaloes dry**	**Total**	**% in milk**	**Wt. Avg.(kg)**	**Herd Avg.(kg)**
April 24	378	792	1170	32.31	3.93	1.27
May	409	804.00	1213	33.72	3.4	1.2

June	327	873	1200	27.25	4.11	1.12
July	340	905	1245	27.31	5.54	1.51
August	429	801	1230	34.88	6.67	2.33
September	648	585	1233	52.55	5.87	3.08
October	964	467	1431	67.37	5.79	3.90
November	994	408	1402	70.90	5.44	3.85
December	1081	345	1426	75.81	4.51	3.42
January 25	1109	317	1426	77.77	4.41	3.43
February	1032	284	1316	78.42	4.23	3.32
March	982	475	1457	67.40	4.18	2.82
Overall	**8693**	**7056**	**15749**	**55.20**	**4.8**	**2.7**

9.17.1 Milking performance since inception

Year	No. of Animal in Milk	No. of Animal dry	Total Animal	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2001-02	4298	6652	10950	39.25	6.92	2.72
2002-03	7946	4190	12136	65.47	5.9	3.86
2003-04	10560	4946	15506	68.1	5.99	4.08
2004-05	8731	4717	13448	64.92	6.19	4.02
2005-06	12536	7623	20159	61.69	5.66	3.49
2006-07	12299	8306	20605	59.69	5.64	3.37
2007-08	10057	7717	17774	56.58	5.7	3.23
2008-09	8975	7124	16099	55.75	5.48	3.06
2009-10	10119	7668	17787	56.55	4.27	2.42.
2010-11	9072	6836	15908	58.39	4.48	2.73
2011-12	8501	5212	13713	63.29	4.66	3.02
2012-13	8281	4412	12693	65.24	5.15	3.36
2013-14	8181	4701	12882	63.51	5.11	3.25
2014-15	10214	4639	14853	68.77	4.69	3.22
2015-16	6422 (21)	6986 (16)	13408 (39)	47.9	5.13	2.43
2016-17	7057 (25)	5936 (13)	12993 (38)	54.31	5.22	2.83
2017-18	8138 (48)	4784 (42)	12922 (39)	62.98	5.55	3.43
2018-19	8771 (55)	5046 (33)	13817 (41)	63.48	5.38	3.42
2019-20	8750 (63)	5183	13933	62.80	5.11	3.21
2020-21	8347 (68)	6187 (29)	14534 (45)	57.43	5.14	2.95
2021-22	9147 (73)	6503 (32)	15650 (61)	58.45	5.20	3.04
2022-23	9297 (60)	6472 (24)	15769 (48)	58.96	4.05	2.39
2023-24	8249 (46)	6145 (44)	14394 (47)	57.31	3.96	2.27
2024-25	**8693**	**7056**	**15749**	**55.20**	**4.8**	**2.7**

9.18: Bull wise daughters born (only numbers) 2024-25

Bull No.	Set No.	Daughters born	Daughters Calved	Daughters completing 1st Lactation
1948	1	-	2	2
1950	2	1	1	-
1952	2	1	1	1
1955	3	1	2	1
1956	3	2	1	-
1961	3	1	2	1
1963	4	2		-
1968	4	2	1	1
1976	-	1	-	-

1977	-	2	-	-
4203	6	-	-	-
4299	-	2	-	-
4302	-	1	-	-
4712	-	1	-	-
4765	-	3	-	-
4529	8	-	-	1
UK(Purchased)	-	-	1	-
Total		**20**	**11**	**7**

9.19 Bull wise daughters completing 1st lactation 2024-25

S. No.	Bull No.	Daughters number	Date of birth	Date of calving	AFC (months)	Lactation length day	TLMY (kg)	SLMY (kg)
1	4529	4801	26-10-2018	13-09-2023	58.46	285	1216	1216
2	1968	4787	21-08-2018	09-09-2023	60.49	307	1251.3	1248.2
3	1948	4761	23-09-2017	24-11-2023	73.87	364	1455.5	1300.9
4	1952	4737	03-11-2016	24-07-2024	92.46	207	1002.6	1002.6
5	1948	4796	18-09-2018	19-09-2024	71.90	155	330.7	330.7
6	1955	4784	14-08-2018	06-10-2024	73.61	149	558.1	558.1
7	1961	4870	26-12-2020	31-01-2025	49.08	35	91.8	91.8

9.19.1 Bull wise daughters completing 1st lactation (since inception)

S. No.	Bull No.	Daughters number	Date of birth	Date of calving	AFC (months)	Lactation lengt	TLMY (kg)	SLMY (kg)
1	1955	4784	14-08-18	06-10-24	73.61	149	558.1	558.1
2	1961	4870	26-12-20	31-01-25	49.08	35	91.8	91.8
3	4529	B-1892	12-05-17	02-12-23	78.52	305	-	1764.6
	4529	B-1896	02-07-17	12-10-23	75.18	305	-	1599.95
	4529	B-1930	06-01-18	12-04-23	63.02	305	-	1364.2
	4529	B-2081	19-08-20	05-09-23	36.46	305	-	1533.85
	4529	B-1920	20-11-17	07-11-23	71.41	305	-	1737
	4529	A-1338	03-06-17	21-09-23	75.44	305	-	1465.6
	4529	H-182	30-08-17	03-05-23	67.93	305	-	1518.6
	4529	H-299	05-10-20	10-07-23	33.05	305	-	1556.45
	4529	H-316	28-07-21	19-12-23	28.66	305	-	1494.55
	4529	4801	26-10-18	13-09-23	58.46	285	1216	1216
4	4542	C-1538	03-11-19	22-12-23	49.51	305		1636.9
	4542	C-1539	06-11-19	05-07-23	43.84	305		1271.95
	4542	B-1963	21-10-18	22-11-23	60.92	271		1485.75
	4542	B-2030	03-12-19	10-10-23	46.13	305		1972.15
	4542	B-2034	11-12-19	12-08-23	43.93	305		1427.35
	4542	B-1986	05-05-19	18-04-24	59.34	305		2080.55
	4542	B-1989	20-05-19	10-05-24	59.57	305		618.85
	4542	H-269	01-11-19	05-11-23	48.03	305		1233
	4542	H-273	10-12-19	05-01-24	48.75	305		1525.65
	4542	H-274	14-12-19	25-09-23	45.28	305		1661.45
5	4548	C-1512	06-10-18	07-02-24	63.93	305		1661.2
	4548	C-1514	00-01-00	12-11-23	1483.34	305		1370.9
	4548	C-1528	04-08-19	31-12-23	52.79	305		1475.85
	4548	C-1530	15-08-19	22-12-23	52.13	305		1454.55
	4548	B-1916	28-10-17	22-10-23	71.64	305		1485.5
	4548	B-1966	15-11-18	13-11-23	59.80	305		1462.8
	4548	B-1996	28-06-19	14-12-23	53.44	305		1902.2
	4548	B-1965	25-10-18	16-04-24	65.57	305		1216.375
	4548	A-1453	03-09-19	27-09-23	48.69	305		1382.65
	4548	A-1417	01-11-18	12-10-23	59.21	305		1605.4
	4548	A-1398	10-09-18	29-11-23	62.49	305		5685.95
	4548	H-189	21-10-17	13-01-24	74.59	305		1766.6
	4548	H-213	21-07-18	15-12-23	64.69	305		1605.55
	4548	H-250	10-08-19	14-04-23	44.03	305		1109.55
	4548	H-252	23-08-19	10-04-23	43.48	305		1477.6

6	4567	C-1517	24-12-18	27-11-23	58.98	305		1141.3
	4567	C-1518	14-01-19	02-05-24	63.44	305		1576.05
	4567	D-894	14-06-21	12-08-23	25.87	305		1520.45
	4567	B-2020	09-10-19	13-11-23	49.05	305		1358.85
	4567	B-1951	26-07-18	23-12-23	64.79	305		1786.55
	4567	B-2003	26-07-19	01-09-23	49.11	305		1335.4
	4567	B-1975	09-12-18	19-09-23	57.21	305		1688.7
	4567	A-1423	24-11-18	09-08-23	56.36	305		2127.2
	4567	A-1433	20-01-19	05-12-23	58.36	305		1265
	4567	H-185	10-09-17	15-08-23	70.98	305		1637.6
	4567	H-227	12-10-18	18-02-24	64.10	305		1335.65
	4567	H-240	30-05-19	24-07-23	49.70	305		1346.2
7	4578	H-209	05-07-18	22-10-22	51.48	305	-	1572.4
	4578	C-1503	30-06-18	22-10-23	63.61	305		1510.9
	4578	D-886	01-10-20	29-06-23	32.82	305		1996
	4578	B-2061	11-06-20	06-04-23	33.74	305		1474.8
	4578	B-1948	11-07-18	13-10-23	62.95	296		1221.95
	4578	B-1983	11-03-19	12-10-23	54.95	297		1823.8
	4578	B-2008	07-08-19	12-12-23	52.07	305		1340.5
	4578	A-1346	26-07-17	20-10-23	74.66	291		1162.75
	4578	H-202	04-06-18	23-08-23	62.49	305		1722.85

9.20.1 PT Bulls for nominated mating

Bull No.	Set No.	Centre	Dams' Best 305 day milk yield	Sire Index	Breeding Value	% Superiority
4299	6	Livestock Research Station, Vallabhnagar	1869.7	2	1578.87	2.51
4302	6		1866.6	1	1627.65	9.22
4392	7		1800.5	1	1658.98	6.48
4429	7		1790.5	2	1629.98	5.44

9.21 Target achieved during the year

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	46.07±4.10 (4)	50.86±2.11 (10)	53.89±7.65 (4)	59.48±4.83 (3)	**60.00 ±4.67 (11)**
Av. Service period (days)	130	145 ±11.13 (29)	124 ±11.20 (27)	143 ±13.66 (30)	129 ±10.92 (12)	**133.90 ±5.60 (43)**
Calf mortality (0-3 months)	≤ 5 %	2.5 %	24.5 %	15.00 %	16.67 %	**55.26%**
Wet average (kg)	≥6.5 kg	5.14	5.20	4.05	3.96 Kg	**4.8 Kg**
Herd average (kg)	≥4.5 kg	2.95	3.04	2.39	2.27 Kg	**2.7 Kg**

10. Salient Research Achievements:

Seven Set of bulls **completely** evaluated with **17,203** doses of Proven Surti Bulls. Test mating from IX set completed. Test mating of X set underway. Collection of bulls for XI set started.

11. Publications:

12. Socioeconomic impact / Success stories:

The supply of high pedigreed test bulls as well as semen of test bulls and progeny tested bulls has helped in improving the scenario of Dairy Farming in the region. Farmers of the region are showing interest towards buffalo rearing for milk production as evident from positive growth rate of buffaloes in comparison to cattle in addition; Buffalo contributed more than 90% of total income from livestock, indicating importance of buffalo in socio economy of farmers in the region

13. Constraints if any: For strengthening of field testing programme:

- Recurring contingency is short to meet out the increased cost of feed and fodder, labour, medicine and liquid nitrogen.
- Training programmes may be organized for the buffalo keepers with the provision of sufficient fund for the same.
- Provision for 6 posts of inseminators on fixed wages of Rs. 8000 pm. (Rs.5.76 Lacs/year)
- Dedicated funds for incentives to the registered farmers in terms of vaccination, deworming, mineral mixture supply and organizing treatment camps and events e.g. animal fare.
- Provision of 2 motorcycles for efficient supervision of field unit centers costing Rs. 2.0 lacs

14. Focus of work in the coming year

Field unit

- Strengthen progeny testing programme in the field.
- Identify elite buffaloes in farmers herd for nominated mating.
- Treatment camps and animal competition will be organised at all the field centres to get better cooperation of farmers.
- Procure male calves born from nominated mating at farmers herd.
- Survey of socio-economic parameters of registered farmers will be under taken seasonally.
- Increasing the foot-print of the project by opening new centers.

Institutional herd

- Preserve required number of doses of **XI set** of bulls.
- Efforts will be made to further increase reproductive and productive efficiency of herd.
- Conduct studies

Field Unit, Surti (RAJUVAS)

F 1. Herd Strength of Registered Females at Field Unit Centers during 4/2024 to 3/2025

F 2. Status of Breedable Females at Different Field Unit Centers during 4/2024 to 3/25

F 3. Monthly AI (Center-wise) at Different Field Unit Centers during 4/2024 to 3/2025

Month	Centre					Total
	Menar	Rundera	Navania	Tarawat	Dhamania	
Apr-24	22	5	5	3	3	**38**
May-24	17	6	8	3	5	**39**
Jun-24	12	7	16	4	9	**48**
Jul-24	20	47	28	4	18	**117**
Aug-24	26	38	41	12	26	**143**
Sep-24	34	56	43	16	31	**180**
Oct-24	39	70	34	21	31	**195**
Nov-24	40	72	47	18	28	**205**
Dec-24	34	78	38	7	36	**193**
Jan-25	38	72	25	5	24	**164**
Feb-25	17	52	12	4	13	**98**
Mar-25	25	32	14	5	5	**81**
Total	**324**	**535**	**311**	**102**	**229**	**1501**

F 4. Bull-wise AI at Different Field Unit Centers during the Period 4/2024 to 3/2025

Month	Bull No.						
	4611	4612	4633	4647	4648	4712	Total
Apr-24	8	5	22	3	0	0	**38**
May-24	23	0	13	3	0	0	**39**
Jun-24	28	16	0	4	0	0	**48**
Jul-24	85	0	32	0	0	0	**117**
Aug-24	64	0	79	0	0	0	**143**
Sep-24	4	0	13	0	163	0	**180**
Oct-24	0	0	0	0	195	0	**195**
Nov-24	0	0	0	0	205	0	**205**
Dec-24	0	0	0	0	193	0	**193**
Jan-25	0	0	0	0	164	0	**164**
Feb-25	0	0	0	0	98	0	**98**
Mar-25	0	0	0	0	62	19	**81**
Total	**212**	**21**	**159**	**10**	**1080**	**19**	**1501**

F 5. Month-wise Conception at Field Unit Centres during 2024

Month	Centre					Total
	Menar	Rundera	Navania	Tarawat	Dhamania	
Apr-24	15	14	23	2	17	**71**
May-24	6	12	11	1	12	**42**
Jun-24	10	8	10	1	16	**45**
Jul-24	8	2	2	1	2	**15**
Aug-24	6	2	4	1	2	**15**

Sep-24	4	3	8	2	5	**22**
Oct-24	7	14	15	2	11	**49**
Nov-24	9	10	21	4	11	**55**
Dec-24	9	16	13	4	13	**55**
Jan-25	11	20	15	6	11	**63**
Feb-25	13	18	22	6	10	**69**
Mar-25	9	18	20	4	13	**64**
Total	**107**	**137**	**164**	**34**	**123**	**565**

F 6. Month-wise Calving at Different Field Unit Centres during the Period 4/2024 to 3/2025

Month	Centre										**Total**	
	Menar		Rundera		Navania		Tarawat		Dhamania			
	M	F	M	F	M	F	M	F	M	F	**M**	**F**
Apr-24	2	2	2	3	2	1	1	0	2	1	**9**	**7**
May-24	3	2	6	4	4	2	2	1	1	4	**16**	**13**
Jun-24	5	4	7	6	8	4	2	1	11	5	**33**	**20**
Jul-24	11	6	7	5	10	10	5	2	14	12	**47**	**35**
Aug-24	8	7	6	5	13	7	3	2	10	6	**40**	**27**
Sep-24	3	2	5	3	8	6	3	2	8	8	**27**	**21**
Oct-24	5	5	6	5	16	11	1	1	13	10	**41**	**32**
Nov-24	7	6	11	9	8	10	1	1	13	5	**40**	**31**
Dec-24	4	3	7	8	6	4	1	0	10	4	**28**	**19**
Jan-25	3	4	3	4	5	4	1	0	9	8	**21**	**20**
Feb-25	4	4	1	1	1	2	2	0	1	1	**9**	**8**
Mar-25	3	1	1	1	3	1	1	0	1	1	**9**	**4**
Total	**58**	**46**	**62**	**54**	**84**	**62**	**23**	**10**	**93**	**65**	**320**	**237**

F 7. Bull-wise Conception at Different Field Unit Centres during 2024

Month	**Bull No.**					**Total**
	4611	**4612**	**4633**	**4647**	**4648**	
Jan-24	16	0	55	0	0	**71**
Feb-24	13	0	17	0	12	**42**
Mar-24	19	0	20	0	6	**45**
Apr-24	4	2	8	1	0	**15**
May-24	8	4	2	1	0	**15**
Jun-24	12	8	0	2	0	**22**
Jul-24	32	0	17	0	0	**49**
Aug-24	19	0	36	0	0	**55**
Sep-24	0	0	3	0	52	**55**
Oct-24	0	0	0	0	63	**63**
Nov-24	0	0	0	0	69	**69**
Dec-24	0	0	0	0	64	**64**
Total	**123**	**14**	**158**	**4**	**266**	**565**

F 8. Bull-wise Calving at Different Field Unit Centres during the period 4/2024 to 3/2025

Bull no	**4611**		**4612**		**4633**		**4647**		**4648**		**Total**	
Month	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Apr-24	4	3	4	4	0	0	0	0	1	0	**9**	**7**
May-24	3	2	13	11	0	0	0	0	0	0	**16**	**13**
Jun-24	7	3	26	17	0	0	0	0	0	0	**33**	**20**

Jul-24	38	30	9	5	0	0	0	0	0	0	**47**	**35**
Aug-24	11	9	29	18	0	0	0	0	0	0	**40**	**27**
Sep-24	3	2	21	17	3	2	0	0	0	0	**27**	**21**
Oct-24	1	0	24	20	16	12	0	0	0	0	**41**	**32**
Nov-24	6	5	6	5	28	21	0	0	0	0	**40**	**31**
Dec-24	1	0	7	8	10	7	3	0	7	4	**28**	**19**
Jan-25	4	4	0	0	8	8	9	8	0	0	**21**	**20**
Feb-25	7	5	1	2	0	0	0	0	1	1	**9**	**8**
Mar-25	2	2	2	0	4	2	1	0	0	0	**9**	**4**
Total	**87**	**65**	**142**	**107**	**69**	**52**	**13**	**8**	**9**	**5**	**320**	**237**

F 9. Bull-wise Live Female Progeny at Different Field Unit Centres (0-6M) as on 3/2025

Centre	**Bull No.**					**Total**
	4611	**4612**	**4633**	**4647**	**4648**	
Menar	-	-	23	-	-	**23**
Rundera	17	14	-	-	-	**31**
Navania	-	12	20	-	-	**32**
Tarawat	1	-	-	-	-	**1**
Dhamania	3	5	6	-	6	**20**
Total	**21**	**31**	**49**	**0**	**6**	**107**

F 10. Bull-wise Live Female Progeny at Different Field Unit Centres (6-12M) as on 3/2025

Centre	**Bull No.**					**Total**
	4611	**4612**	**4633**	**4647**	**4648**	
Menar	7	9	1	0	0	**17**
Rundera	9	16	0	0	0	**25**
Navania	10	16	0	0	0	**26**
Tarawat	2	2	0	0	0	**4**
Dhamania	13	22	0	0	0	**35**
Total	**41**	**65**	**1**	**0**	**0**	**107**

F 11. Bull-wise Live Female Progeny at Different Field Unit Centres (1-3 yrs) as on 3/2025

Center	Bull No.											Total
	4464	4529	4542	4548	4567	4578	4611	4612	4633	4647	4648	
Menar	0	0	0	0	0	0	2	11	3	9	17	42
Rundera	9	9	9	2	7	15	33	14	0	0	27	125
Navania	0	0	0	0	0	0	22	8	2	1	9	42
Tarawat	0	1	0	0	2	0	4	1	0	8	4	20
Dhamania	0	0	0	0	0	0	24	10	5	4	8	51
Total	9	10	9	2	9	15	85	44	10	22	65	280

F 12. Bull-wise Live Female Progeny at Different Field Unit Centres (>3 yrs) as on 3/2025

	Bull No.											
	4464	**4529**	**4542**	**4548**	**4567**	**4578**	**4611**	**4612**	**4633**	**4647**	**4648**	**Total**
Menar	3	6	7	0	7	6	0	0	2	0	3	**34**
Rundera	10	46	5	3	8	53	0	0	0	0	0	**125**
Navania	4	7	4	10	9	6	0	0	4	0	5	**49**
Tarawat	0	2	0		2	5	0	0	0	0	0	**9**
Dhamania	5	11	2	1	3	1	0	0	3	0	3	**29**
Total	**22**	**72**	**18**	**14**	**29**	**71**	**0**	**0**	**9**	**0**	**11**	**246**

F 12.1. Center and Age-wise Live female Progeny as on 3/2025

Center	Age				Total
	0-6M	6-12M	1-3yr	>3yr	
Menar	23	17	42	34	**116**
Rundera	31	25	125	125	**306**
Navania	32	26	42	49	**149**
Tarawat	1	4	20	9	**34**
Dhamania	20	35	51	29	**135**
Total	**107**	**107**	**280**	**246**	**740**

F 13. Bull-wise Daughters Calved at Different Field Unit Centers during 2024-25

Bull No.	Center					Total
	Menar	Rundera	Navania	Tarawat	Dhamania	
4373	0	1	0	0	0	**1**
4464	1	2	2	0	1	**6**
4529	1	1	0	1	5	**8**
4542	1	6	3	0	0	**10**
4548	1	1	3	0	2	**7**
4567	5	1	3	2	2	**13**
4578	1	3	2	2	1	**9**
Total	**10**	**15**	**13**	**5**	**11**	**54**

F 14. Bull-wise Daughters Recorded at Different Field Unit Centres during 2023-24

Name of village	Bull no.	Daughter no.	Date of birth		Monthly milk recorded										
					1	2	3	4	5	6	7	8	9	10	
Menar	4542	C-1538	03-11-19	DOR	10-01-24	17-02-24	15-03-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	20-09-24	12-10-24	
				M	3	3.1	3.2	3.3	3.4	3	2.9	2.7	2	1.5	
				E	2.5	2.9	3.1	3.2	3	2.9	2.5	2.0	1.5	1	
	4542	C-1539	06-11-19	DOR	16-07-23	15-08-23	19-09-23	16-10-23	18-11-23	15-12-23	16-01-24	17-02-24	15-03-24	15-04-24	
				M	2.5	3	3.2	3.3	3	2.8	2.3	2	1.5	1.2	
				E	2.2	2.9	3	3	2.5	2	1.5	0.0	0	0	
	4548	C-1512	06-10-18	DOR	20-02-24	15-03-24	16-04-24	15-05-24	12-06-24	14-07-24	15-08-24	20-09-24	12-10-24	15-11-24	
				M	3	3.1	3.4	3.7	4.1	3.5	3.2	2.5	2.5	2	
				E	2.5	2.6	2.9	3	3.5	3	2.9	2.4	1.5	0	
	4548	C-1514	18-10-18	DOR	15-12-23	16-01-24	17-02-24	15-06-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	12-09-24	
				M	3	3.1	3.4	3.6	3.8	3	2.8	2.1	2		
				E	2.5	2.8	3	3.2	3	2.5	2	1.5	1.2		
	4548	C-1528	04-08-19	DOR	15-01-24	17-02-24	15-03-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	20-09-24	12-10-24	
				M	2.5	2.9	3	3.5	3.4	3.1	2.5	2	1.5	1	
				E	2	2.5	3	3.1	3.2	3	2.4	1.8	1.3	0.8	
	4548	C-1530	15-08-19	DOR	10-01-24	17-02-24	15-03-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	20-09-24	12-10-24	
				M	2.5	3	3.1	3.2	3.4	3	2.5	2	1.9	1.5	
				E	2	2.5	3	3	2.9	2.5	2	1.5	1	0.5	
	4567	C-1517	24-12-18	DOR	15-12-23	16-01-24	17-02-24	15-03-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	20-09-24	
				M	1.5	2.2	2.5	3	3.1	3	2.5	2	1.5	1.5	
				E	1	1.5	2	2.5	2.7	2	1.5	1.0	0.5	0	
	4567	C-1518	14-01-19	DOR	15-05-24	17-06-24	15-07-24	19-08-24	14-09-24	17-10-24	15-11-24	19-12-24	15-01-25	16-02-25	
				M	3.3	3.4	3.6	3.6	3.4	3	2.8	2.5	2	1.5	
				E	3	3.2	3.4	3.4	3.1	2.5	2	1.8	0		
	4578	C-1503	30-06-18	DOR	10-11-23	15-12-23	16-01-24	17-02-24	15-03-24	20-04-24	15-05-24	12-06-24	14-07-24	15-08-24	
				M	2	2.5	3	3.2	3.4	3	2.9	2.5	2.1	2	
Tarawat				E	1.8	2	2.5	3.1	3.1	2.9	2.5	2.1	1.5	1.4	
	4529	D-881	15-07-20	DOR	15-06-23	17-07-23	12-08-23	14-09-23	15-10-23	16-11-23	10-12-23	13-01-24	12-02-24	15-03-24	
				M	3.5	3.7	3.8	3.8	3.6	3.5	3.1	3	2.5	2	
				E	2.5	2.5	2.7	2.8	2.6	2.2	2	2.0	1.8	0	
	4567	D-894	14-06-21	DOR	25-08-23	14-09-23	15-10-23	16-11-23	10-12-23	13-01-24	12-02-24	15-03-24	14-04-24	15-05-24	
				M	2	3.2	3.7	3.8	3.8	3.5	3.2	3	2.8	2	
				E	1.8	2	2.2	2.5	2.8	2.7	2.1	2.0	1.8	0	
	4578	D-886	01-10-20	DOR	10-07-23	12-08-23	14-09-23	15-10-23	16-11-23	10-12-23	13-01-24	12-02-24	15-03-24	14-04-24	
				M	2.5	2.9	3.1	3.8	4	3.4	3.5	3	2.5	2	
				E	3	3.5	3.9	4.1	4.5	4	3.6	3.2	2.8	2.1	
Rundera	4529	B-1892	12-05-17	DOR	20-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24	12-09-24	
				M	2.7	3.1	3.3	3.7	4.1	3.9	3.4	2.9	2.5	2.1	
				E	2.1	2.5	2.7	3	3.2	3.4	3	2.5	2.1	1.8	
	4529	B-1896	02-07-17	DOR	25-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	
				M	2.2	2.5	2.8	3.1	3.7	3.2	3.1	2.8	2.9	2.4	
				E	1.5	1.9	2.2	2.8	3.2	3.1	2.9	2.5	2.2	1.5	
	4529	B-1930	20-11-17	DOR	10-05-23	12-06-23	15-07-23	18-08-23	12-09-23	13-10-23	15-11-23	12-12-23	12-01-24	13-02-24	

				M	2.5	2.8	3.5	4.1	4.4	3.9	3.5	3.2	2.8	2.5
				E	2.1	2.5	2.8	3.4	3.7	3.1	2.8	2.6	2.1	1.8
	4529	B-2081	19-08-20	DOR	25-09-23	13-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24
				M	2.4	2.7	2.9	3.5	4.2	3.8	3.4	3.1	2.5	2.1
				E	2.1	2.2	2.5	2.8	2.7	2.5	2.2	2.2	1	0
	4529	B-1920	20-11-17	DOR	25-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24
				M	2.6	2.7	3	3.5	4	4.1	3.5	3.1	2.5	2.2
				E	2.2	2.5	2.7	3	3.1	3.5	3.1	2.5	2	1.5
Rundera	4542	B-1963	21-10-18	DOR	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24	
				M	2.1	2.4	3	3.5	4	4.1	3.9	2.5	2.1	Dry
				E	2	2.1	2.4	2.7	3.1	2.9	2.5	2.5	1	Dry
	4542	B-2030	03-12-19	DOR	25-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24
				M	2	2.5	2.8	3.1	3.9	4.1	3.8	3.5	3	2.8
				E	2.1	2.7	2.9	3.2	4	4.3	4	3.8	3.2	2.7
				Total	4.1	5.2	5.7	6.3	7.9	8.4	7.8	7.3	6.2	5.5
	4542	B-2034	11-12-19	DOR	25-08-23	12-09-23	13-10-23	15-11-23	12-12-23	12-01-24	13-02-24	13-03-24	14-04-24	15-05-24
				M	1.5	2	2.2	2.8	3.2	3.4	3	2.6	2.3	2
				E	1.2	1.5	1.9	2.3	2.8	3	2.9	2.5	2	1.5
	4548	B-1916	28-10-17	DOR	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24
				M	2	2.5	2.8	3	3.5	3.7	3.2	2.8	2.5	2.2
				E	1.5	1.7	2.1	2.5	2.6	3	2.5	2.0	1.5	1
	4548	B-1966	15-11-18	DOR	25-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24
				M	2.8	3	3.1	3.2	3.4	3.8	3.1	2.7	2.1	1.5
				E	2	2.2	2.5	2.7	3.1	3.2	2.5	1.5	1.1	0
	4548	B-1996	28-06-19	DOR	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24	12-09-24	15-10-24
				M	3	3.1	3.2	3.5	4	4.2	3.5	3.2	3.1	2.5
				E	2.5	2.6	2.8	3	3.5	3.6	3.2	2.9	2.5	2
	4567	B-2020	09-10-19	DOR	12-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24
				M	1.5	1.7	1.9	2.5	3.1	3.5	2.9	2.8	2.5	2.3
				E	1.2	1.5	1.8	2.1	2.5	2.6	2.2	2.1	1.8	1.5
	4567	B-1951	26-07-18	DOR	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24	12-09-24	15-10-24
				M	2	2.5	2.7	3.5	4.1	4.5	4.1	3.5	3.1	2.9
				E	1.5	1.9	2.5	3.1	3.5	3.3	3.1	2.6	2.4	2.1
	4567	B-2003	26-07-19	DOR	25-09-23	13-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24
				M	2.1	2.3	2.5	3	3.2	3	2.8	2.3	2	1.5
				E	1.8	2.1	2.4	2.7	3	2.8	2	1.5	1	0
	4567	B-1975	09-12-18	DOR	13-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24
				M	2.5	2.7	3.1	3.5	3.9	3.5	3.2	3	2.8	2.5
				E	2.1	2.3	2.5	2.8	3	3.1	2.8	2.2	2	1.7
	4578	B-2061	11-06-20	DOR	25-04-23	10-05-23	12-06-23	15-07-23	18-08-23	12-09-23	13-10-23	15-11-23	12-12-23	12-01-24
				M	3	3.1	3.3	3.7	4.1	3.5	2.2	1.9	1.1	1
				E	2.7	2.9	3.1	3.4	3.5	2.8	2.2	1.1	0.8	0
	4578	B-1948	11-07-18	DOR	25-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24
				M	1.5	1.9	2.5	2.7	3	3.1	2.7	2.5	2	1.5
				E	1	1.5	2	2.5	2.8	2.5	2	1.5	1	0.8
	4578	B-1983	11-03-19	DOR	25-10-23	15-11-23	12-12-23	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24
				M	2.7	2.8	3.1	3.5	4	4.5	4.1	3.5	3.1	2.6
				E	2	2.1	2.5	2.7	3.1	3.5	3.7	3.1	2.5	2
	4578	B-2008	07-08-19	DOR	12-01-24	13-02-24	15-03-24	14-04-24	15-05-24	12-06-24	13-07-24	18-08-24	12-09-24	15-10-24
				M	2.2	2.7	3	3.5	3.6	3.1	2.5	2.1	1.5	1
				E	2	2.1	2.3	2.5	2.3	2	1.9	1.0	0.8	0
	4373	B-1848	02-08-16	DOR	20-04-24	02-05-24	04-06-24	04-07-24	04-08-24	02-09-24	02-10-24	03-11-24	04-12-24	05-01-25
				M	2	3	4	4.2	4.2	3.5	3.5	3	3	2.5
				E	1	2.5	3.5	3.5	3.6	3	3	3.0	3	2.2
	4548	B-1965	25-10-18	DOR	15-05-24	15-06-24	15-07-24	16-08-24	16-09-24	16-10-24	17-11-24	17-12-24	17-01-25	17-02-25
				M	2.1	2.5	3	2.85	2.2	2.2	2	2	1.5	1.5
				E	1.1	2	2.5	2	2	2	2	2.0	1	0.8
	4542	B-1986	05-05-19	DOR	09-05-24	10-06-24	10-07-24	11-08-24	11-09-24	11-10-24	17-11-24	10-12-24	10-01-25	10-02-25
				M	2.2	3.5	3.6	4.2	4.5	4.5	4.7	4	3.5	3
				E	1.1	2.5	3	3.5	3.7	3.7	3.9	3.5	3.2	3
	4542	B-1989	20-05-19	DOR	20-06-24	16-07-24	19-08-24	15-09-24	14-10-24	15-11-24	15-12-24	15-01-25	15-02-25	15-03-25
				M	1.1	1.3	1.4	1.6	1.5	1.3	1	0.8	0.5	0.5
				E	1	1.1	1.3	1.4	1.2	1	0.8	0.4	0	0
Navania	4529	A-1338	03-06-17	DOR	10-10-23	15-11-23	13-12-23	15-01-24	16-02-24	14-03-24	18-04-24	14-05-24	17-06-24	15-07-24
				M	2.5	2.8	3.1	3.1	3	2.8	2.5	2.2	2	1.8
				E	2.1	2.4	2.7	2.9	2.7	2.7	2.2	2.0	1.5	0
	4548	A-1453	03-09-19	DOR	15-10-23	17-11-23	15-12-23	10-01-24	15-02-24	20-03-24	15-04-24	16-05-24	14-06-24	15-07-24
				M	2.5	2.7	2.9	3	3.4	3	2.8	2.5	2	1.5
				E	1.9	2.1	2.2	2.3	2.4	2.5	2	1.5	1	0.8
	4548	A-1417	01-11-18	DOR	10-11-23	15-12-23	14-01-24	15-02-24	16-03-24	14-04-24	15-05-24	15-06-24	20-07-24	10-08-24
				M	2.7	2.9	3.1	3.5	3.4	3.1	2.9	2.5	2.1	1.8
				E	2	2.3	2.5	3.1	3.1	2.8	2.5	2.1	2	1
	4548	A-1398	10-09-18	DOR	10-12-23	15-01-02	12-02-24	15-03-24	17-04-24	15-05-24	10-06-24	17-07-24	20-08-24	15-09-24
				M	2	2.3	2.5	3	3.1	2.9	2.4	2.2	2	1.5
				E	1.5	2	2.1	2.5	2.6	2.2	1.9	1.5	1	0
	4567	A-1423	24-11-18	DOR	10-09-23	15-10-23	14-11-23	15-12-23	10-01-24	15-02-24	17-03-24	15-04-24	15-05-24	10-06-24
				M	2.5	2.8	3	3.1	3.2	2.9	2.5	2.2	1.5	1
				E	2	23.5	2.8	3	3.1	2.5	1.5	1.5	1	0.8
	4567	A-1433	20-01-19	DOR	20-12-23	15-01-24	14-02-24	17-03-24	15-04-24	10-05-24	15-06-24	20-07-24	14-08-24	12-09-24
				M	1.5	2	2.1	2.8	3	3.5	3	3.5	2	1.9
				E	1	1.5	2	2.2	2.5	2.2	2	1.9	1.1	0
	4578	A-1346	26-07-17	DOR	10-11-23	15-12-23	12-01-24	14-02-24	17-03-24	18-04-24	20-05-24	17-06-24	15-07-24	
				M	1.5	1.8	2.2	2.9	3	2.7	2.5	2.1	1.5	Dry
				E	1.2	1.5	1.8	2	2.5	2.4	2	1.8	1	Dry
Dhamania	4529	H-182	30-08-17	DOR	19-05-23	15-06-23	12-07-23	15-08-23	15-09-23	20-10-23	10-11-23	12-12-23	15-01-24	17-02-24
				M	2.5	2.8	3	3.1	3.3	3.2	2.8	2.5	2	1.7
				E	2.3	2.5	3	3	3.1	2.5	2.2	1.8	1.5	1.1
	4529	H-299	05-10-20	DOR	20-07-23	15-08-23	16-09-23	20-10-23	15-11-23	12-12-23	15-01-24	16-02-24	12-03-24	15-04-24
				M	3	3.1	3.3	3.4	3.4	3	2.8	2.4	2	1.9

			E	2.4	2.8	3	3	3.1	2.5	2.3	2.0	1.5	1
4529	H-316	28-07-21	DOR	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24	12-09-24	12-10-24
			M	2.9	3	3.4	4	3.7	2.4	2.1	2	1.6	1
			E	2.5	3	3.1	3.4	3	2	2	1.5	1	0
4542	H-269	01-11-19	DOR	20-11-23	16-12-23	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24
			M	1.5	2.5	3.1	3.2	3	2.5	2.1	2	1.5	1
			E	1	2	2.5	2.7	2.5	2	1.9	1.8	1	0.8
4542	H-273	10-12-19	DOR	20-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24	12-09-24	15-10-24
			M	3	3.1	3.7	4	4.2	3	2.5	2	1.6	1.2
			E	2.5	2.7	3	3.2	3.2	2.5	2	1.5	1	1
4542	H-274	14-12-19	DOR	15-10-23	12-11-23	16-12-23	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24
			M	2.4	3	3.5	3.7	4	3.5	3.1	2.5	2.1	2
			E	2	2.5	2.8	3.5	3.2	3	2.5	2.0	1.5	1.2
4548	H-189	21-10-17	DOR	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24	12-09-24	15/10/224	17-11-24
			M	3.5	3.7	3.9	4	3.5	3	2.5	2.4	2.3	2
			E	3	3.2	3	3.5	3	2.5	2	2.0	1.9	1.5
4548	H-213	21-07-18	DOR	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24	12-09-24	15-10-24
			M	2.5	2.7	3	3.5	4	3.5	3	2.6	2	1.9
			E	2	2.5	2.6	3	3.2	3	2.5	2.1	1.5	1
4548	H-250	10-08-19	DOR	15-05-23	14-06-23	17-07-23	15-08-23	10-09-23	11-10-23	15-11-23	16-12-23	17-01-24	15-02-24
			M	1.5	1.7	2	2.5	2.5	2.4	2.4	2.3	2	1.5
			E	1	1.5	1.7	2	2.1	2	1.8	1.5	1	0.9
4548	H-252	23-08-19	DOR	21-04-23	15-05-23	17-06-23	14-07-23	15-08-23	10-09-23	11-10-23	15-11-23	16-12-23	17-01-24
			M	2.5	2.8	3	3.1	4	2.7	2.5	2.5	2.3	2
			E	2	2.3	2.5	2.8	2.8	2.5	2	1.7	1.5	1.5
4567	H-185	10-09-17	DOR	15-09-23	12-10-23	15-11-23	16-12-23	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24
			M	2.6	3.1	3.3	3.4	3.5	3.1	2.8	2.5	2	1.5
			E	2.1	2.8	3	3.3	3.3	2.9	2.5	2.0	1.7	1
4567	H-227	12-10-18	DOR	10-03-24	20-04-24	15-05-24	12-06-24	15-07-24	15-08-24	16-09-24	20-10-24	17-11-24	15-12-24
			M	2.5	3	3.2	3.5	3	2.7	2.4	2	1.5	1.4
			E	2	2.5	2.7	3	2.8	2.1	2	1.5	1	1
4567	H-240	30-05-19	DOR	15-08-23	15-09-23	12-10-23	12-11-23	15-12-23	12-01-24	15-02-24	16-03-24	20-04-24	17-05-24
			M	2	2.4	2.9	3.1	3.4	3.2	2.9	2.4	2	2
			E	1.5	2	2.2	2.5	2.2	2	1.8	1.5	1	0.8
4578	H-202	04-06-18	DOR	15-09-23	15-10-23	12-11-23	16-12-23	10-01-24	15-02-24	17-03-24	20-04-24	15-05-24	12-06-24
			M	2.8	3	3.2	3.4	3.7	3.5	3	2.8	2.5	2
			E	2	2.5	2.9	3.1	3.5	3.1	3	2.5	2	1.5

F 15. Bull wise AI, Conception, Calving and Daughters Retained till completion of milk recording during the year

Bull No. / Set No.	Total AI	Conception	Calving		Daughters retained up to				
			Total	Female	1 year	2 years	3 years	Calving	recording
1946/I	-	-	-	-	-	-	-	7	7*
1947/I	-	-	-	-	-	-	-	6	8*
1948/I	43	5	38	16	0	0	0	7	13*
1949/I	0	-	1	0	0	0	0	2	4*
1950/II	2	-	31	10	0	0	0	5	3*
1951/II	87	23	51	23	0	0	0	10	6
1952/II	58	12	91	36	0	0	0	6	5
1953/II	50	13	86	35	0	0	0	12	6
1954/II	65	9	41	17	0	0	0	3	1
1955/III	499	109	156	65	0	0	0	21	18
1956/III	523	123	153	58	0	0	0	14	14
1957/III	952	204	199	80	0	0	0	14	13
1958/III	572	137	141	59	0	0	0	12	9
1959/III	573	121	112	58	0	0	0	11	10
1960/III	15	6	1	0	0	0	0	0	0
1961/III	705	156	142	59	0	0	0	17	17
1962/III	88	13	9	5	0	0	0	2	2
1963/IV	842	223	168	70	0	0	0	10	10
1964/IV	489	145	119	55	0	0	0	10	10
1965/IV	578	152	120	49	0	0	0	9	9
1966/IV	373	80	72	36	0	0	0	9	8
1967/IV	423	112	77	33	0	0	0	6	6
1968/IV	752	220	180	80	0	0	0	13	13
1969/IV	950	270	221	86	0	0	0	11	11

1970/IV	130	34	28	15	0	0	0	4	3
1971/V	336	93	77	31	25	20	15	3	3
1972/V	363	117	90	37	35	28	18	5	4
1973/V	388	122	108	43	37	33	28	7	7
1974/V	902	295	230	94	68	60	53	18	17
1975/V	978	297	236	106	86	76	75	18	15
1976/V	1326	401	329	135	114	92	75	16	13
1977/V	1491	469	379	157	121	103	88	24	21
1978/V	1821	634	507	222	187	160	127	35	27
4203/VI	935	322	247	101	85	78	46	18	17
4229/VI	1776	571	423	185	164	139	120	27	26
4264/VI	1579	515	396	174	149	125	116	29	24
4299/VI	1477	466	343	153	127	105	84	26	21
4302/VI	543	177	129	57	49	46	35	6	5
4321/VI	226	67	49	22	18	16	12	2	2
4323/VI	359	95	89	38	32	28	19	3	3
4373/VII	587	195	148	59	42	22	16	17	13
4392/VII	623	189	148	58	39	31	25	14	14
4403/VII	1130	362	267	92	65	44	37	24	24
4413/VII	889	289	227	91	75	45	34	23	22
4429/VII	640	197	148	66	54	44	35	29	26
4458/VII	574	170	134	51	43	30	21	17	17
4497/VII	451	126	88	33	28	20	14	9	8
4464/VIII	871	256	204	91	67	37	24	12	5
4529/VIII	2028	654	471	199	161	82	39	29	21
4542/VIII	927	272	266	120	90	48	22	26	18
4548/VIII	1021	330	294	130	103	52	26	35	23
4567/VIII	1554	480	423	192	151	86	40	47	27
4578/VIII	1668	544	433	196	156	89	38	28	17
4611/IX	1497	511	390	172	0	0	0	0	0
4612/IX	1227	347	398	171	0	0	0	0	0
4633/IX	979	486	225	97	30	14	6	0	0
4647/IX	435	159	97	47	0	0	0	0	0
4648/IX	1869	469	216	93	8	4	0	0	0
4712/X	19	0	0	0	0	0	0	0	0
TOTAL	**42258**	**12844**	**10446**	**4458**	**2409**	**1757**	**1288**	**768**	**646**

*** Daughters recorded during adhoc project duration (1997-2001)**

Performance of FPT Programme since Inception

Duration	AI	Pregnancies	CR%	Calvings	Females Born	Daughters Recorded	Av. AFC (months)	Av. Milk Yield (kg/day)	Daughters Due for Recording
Pre-2001						62	67.03	4.45	0
2001-02	2256	480	21.28	482	191	35	74.74	3.97	0
2002-03	1850	421	22.76	403	171	35	71.25	3.9	0
2003-04	1980	473	23.89	359	156	37	67.58	4.06	0
2004-05	1861	550	29.55	351	168	26	65	4.3	0
2005-06	1717	536	31.22	470	195	29	62.88	4.49	0
2006-07	1691	504	29.80	426	163	35	58.77	4.69	0
2007-08	1811	542	29.93	418	167	22	61.85	4.66	0
2008-09	1804	609	33.76	429	186	17	54.5	4.27	0

2009-10	1975	672	34.03	503	218	24	54.72	5.14	0
2010-11	2038	628	30.81	526	223	25	58.84	5.3	0
2011-12	2023	568	28.08	451	198	30	55.03	5.25	0
2012-13	1897	583	30.73	487	235	27	58.91	4.97	0
2013-14	1591	555	34.88	495	197	37	60.08	5.11	0
2014-15	1534	455	29.66	409	156	45	59.11	5.97	0
2015-16	1986	556	28.00	345	145	45	54.32	5.59	0
2016-17	1979	622	31.43	466	178	42	57.53	5.35	1
2017-18	1478	506	34.24	453	188	34	55.89	5.38	11
2018-19	1719	485	28.21	397	173	29	46.51	4.8	25
2019-20	1538	539	35.05	409	183	8	34.44	5.06	70
2020-21	1678	456	27.18	409	177	2	27.26	4.94	134
2021-22	1480	540	36.49	402	185	-	-	-	122
2022-23	1237	425	34.36	394	187	-	-	-	151
2023-24	1634	574	35.13	405	181	-	-	-	212
2024-25	1501	565	37.64	557	237				14
Overall	**42,258**	**12,844**	**30.39**	**10,446**	**4,458**	**646**	**60.33**	**4.85**	**740**

AI, Conception, Calvings and Daughters Retained (Set wise) 1st set

Particular	Bull No				
	1946	**1947**	**1948**	**1949**	**Total**
AI	**-**	-	43	0	**43**
Pregnancies	-	-	5		**5**
Daughters Born	-	-	16	0	**16**
Daughters Calved	7	6	7	2	**22**
Complete Recording	7	8	13	4	**32**
Daughters Available	-	-	-	-	-

AI, Conception, Calvings and Daughters Retained (Set wise) 2nd set

Particulars	**Bull No.**					**Total**
	1950	**1951**	**1952**	**1953**	**1954**	
AI	2	87	58	50	65	**262**
Pregnancies	-	23	12	13	9	**57**
Daughters Born	10	23	36	35	17	**121**
Daughters Calved	5	10	6	12	3	**36**
Complete Recording	3	6	5	6	1	**21**
Daughters Available	-	-	-	-	-	**-**

AI, Conception, Calvings and Daughters Retained –3nd Set

Particular	**Bull No**								
	1955	**1956**	**1957**	**1958**	**1959**	**1960**	**1961**	**1962**	**Total**
AI	499	523	952	572	573	15	705	88	**3927**
Pregnancies	109	123	204	137	121	6	156	13	**869**
Daughters Born	65	58	80	59	58	0	59	5	**384**
Daughters Calved	21	14	14	12	11	0	17	2	**91**
Complete Recording	18	14	13	9	10	0	17	2	**83**
Daughters Available	-	-	-	-	-	-	-	-	**-**

AI, Conception, Calvings and Daughters Retained –4th Set

Particular	Bull No								
	1963	**1964**	**1965**	**1966**	**1967**	**1968**	**1969**	**1970**	**Total**
AI	842	489	578	373	423	752	950	130	**4537**
Pregnancies	223	145	152	80	112	220	270	34	**1236**
Daughters Born	70	55	49	36	33	80	86	15	**424**
Daughters Calved	10	10	9	9	6	13	11	4	**72**
Complete Recording	10	10	9	8	6	13	11	3	**70**
Daughters Available	-	-	-	-	-	-	-	-	-

AI, Conception, Calvings and Daughters Retained –5th Set

Particular	Bull No								
	1971	**1972**	**1973**	**1974**	**1975**	**1976**	**1977**	**1978**	**Total**
AI	336	363	388	902	978	1326	1491	1821	**7605**
Pregnancies	93	117	122	295	297	401	469	634	**2428**
Daughters Born	31	37	43	94	106	135	157	222	**825**
Daughters Calved	3	5	7	18	18	16	24	35	**126**
Complete Recording	3	4	7	17	15	13	21	27	**107**
Daughters Available	-	-	-	-	-	-	-	-	-

AI, Conception, Calvings and Daughters Retained –6th Set

Particular	Bull No							Total
	4203	**4229**	**4264**	**4299**	**4302**	**4321**	**4323**	
	VI	**VI**	**VI**	**VI**	**VI**	**VI**	**VI**	
AI	935	1776	1579	1477	543	226	359	**6895**
Pregnancies	322	571	515	466	177	67	95	**2213**
Daughters Born	101	185	174	153	57	22	38	**730**
Daughters Calved	18	27	29	26	6	2	3	**111**
Complete Recording	17	26	24	21	5	2	3	**98**
Daughters Available	-	-	-	-	-	-	-	-

AI, Conception, Calvings and Daughters Retained –7th Set

Particular	Bull No							Total
	4373	**4392**	**4403**	**4413**	**4429**	**4458**	**4497**	
AI	587	623	1130	889	640	574	451	**4894**
Pregnancies	195	189	362	289	197	170	126	**1528**
Daughters Born	59	58	92	91	66	51	33	**450**
Daughters Calved	16	14	24	23	29	17	9	**132**
Complete Recording	12	14	24	22	26	17	8	**123**
Daughters Available	1	0	0	0	0	0	0	**1**

AI, Conception, Calvings and Daughters Retained –8th Set

Particulars	Bull No.						Total
	4464	**4529**	**4542**	**4548**	**4567**	**4578**	
AI	871	2028	927	1085	1554	1604	**8069**
Pregnancies	256	654	272	330	480	544	**2536**
Daughters Born	91	199	120	130	192	196	**928**
Daughters Calved	12	29	26	35	47	28	**177**
Complete Recording	5	21	18	23	27	17	**111**
Daughters Available	31	82	27	16	38	86	**280**

AI, Conception, Calvings and Daughters Retained –9th Set

Particulars	Bull No.					
	4611	**4612**	**4633**	**4647**	**4648**	**Total**
AI	1497	1227	979	435	1869	**6007**
Pregnancies	511	347	486	159	469	**1972**
Daughters Born	172	171	97	47	93	**580**
Daughters Calved	0	0	0	0	0	**0**
Complete Recording	0	0	0	0	0	**0**
Daughters Available	147	140	69	22	82	**460**

AI, Conception, Calvings and Daughters Retained –10th Set

	Bull No.						
	4712	4728	4764	4765	4768	4772	
Particulars	X	X	X	X	X	X	Total
AI	19	0	0	0	0	0	19
Pregnancies	0	0	0	0	0	0	0
Daughters Born	0	0	0	0	0	0	0
Daughters Calved	0	0	0	0	0	0	0
Complete Recording	0	0	0	0	0	0	0
Daughters Available	0	0	0	0	0	0	0

Set wise AI, Conception and daughters retained

Set No.	No. of Bulls	AI	Preg	Calving		Daughters Retained						
				Total	Female	Up to 1Year	Up to 2 Year	Up to 3 Year	Daughters Recorded	Av. AFC (month)	Av. Milk Yield (kg/day)	Daughters to be Recorded
1	4	**43**	5	**39**	**16**	0	0	0	32	83.32	4.53	0
2	5	**262**	57	**300**	**121**	0	0	0	21	64.7	4.31	0
3	8	**3927**	869	**913**	**384**	0	0	0	83	71.57	4.07	0
4	8	**4537**	1236	**985**	**424**	0	0	0	70	64.97	4.17	0
5	8	**7605**	2428	**1956**	**825**	673	572	479	107	58.99	4.64	0
6	7	**6895**	2213	**1676**	**730**	624	537	432	98	58.06	5.13	0
7	7	**4894**	1528	**1160**	**450**	346	236	182	124	57.04	5.61	0
8	6	**8069**	2536	**2091**	**928**	728	394	189	111	52.45	5.21	**280**
9	5	**6007**	1972	**1326**	**580**	38	18	6	0	-	-	460
10	6	**19**	0	**0**	**0**	0	0	0	0	0	0	0

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Allocation as per R E 2024 – 25		Released	Expenditure as AUC		Closing Balance
Total	ICAR Share	ICAR Share	ICAR Share	State Share	(ICAR Share)
81.50*	57.50+5.0*	57.50±5.0*	62.46439	18.98513	0.04748

***Including SCSP Funds**

Herd Performance

Herd strength declined from 126 to 122, out of which 73 were breedable buffaloes (>2year). During the period 38 calving took place consisting of 18 males, 20 females, 6 still birth and 1 abortion. The calf mortality (0-3 months) was 55.26 % (21/38) much higher than the target of NPBI $\leq$ 5%. Conception rate increased 64.15% as compared to last year 36.73% (2023-24). During the report period 4279 semen doses were produced, 1724 doses were used in centre and field. A total of 95766 frozen semen doses are available in stock.

During the year the production performances traits in terms of average lactation milk yield and 305 days or less milk yield decreased from 1589 kg (19) and 1433 kg (19) to 1458 kg (28) and 1397 kg (28), respectively. The wet and herd average was 4.80 and 2.70 kg during the year. Overall 55 percent buffaloes were in milk. The reproductive traits viz. AFC, SP, DP and calving interval were 60.0 months (11), 134 days (43), 185 days (34) and 417 days (31), respectively.

Accomplishment and Targets Achieved:

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	46.07±4.10 (4)	50.86±2.11 (10)	53.89±7.65 (4)	59.48±4.83 (3)	**60.00 ±4.67 (11)**
Av. Service period (days)	130	145 ±11.13 (29)	124 ±11.20 (27)	143 ±13.66 (30)	129 ±10.92 (12)	**133.90 ±5.60 (43)**
Calf mortality (0-3 months)	≤ 5 %	2.5 %	24.5 %	15.00 %	16.67 %	**55.26%**
Wet average (kg)	≥6.5 kg	5.14	5.20	4.05	3.96 Kg	**4.8 Kg**
Herd average (kg)	≥4.5 kg	2.95	3.04	2.39	2.27 Kg	**2.7 Kg**

Field Unit:

A total of 1501 AIs were performed in the year 2024-25 as compared to 1634 AI in 2023-24. During the year 565 conceptions were reported with conception rate of 37.64 %, 237 female progenies born out of 557 calving. 740 live progenis of different age standing in the field for future recording.

Recommendations:

- More emphasis should be to given increase the no. of AIs in the field.
- Test bulls should be used simultaneously for achieving equal no of AIs.

ICAR-INDIAN GRASSLAND AND FODDER RESEARCH INSTITUTE, JHANSI

1. **Name of Centre** : IGFRI, Jhansi
2. **Project Code** : 17810170002
3. **Project Title** : Network Project on Buffalo Improvement
   Subproject : Performance recording and improvement of Bhadawari Buffaloes
4. **Date of Start** : 01.04.2001

5. **Objectives** :
   - To establish elite herd of 50 to 100 Murrah (at each center) / Nili Ravi / 50 Bhadawari / 50 Surti / 70 Jaffarabadi for the production of genetically superior young bulls.
   - To evaluate sires through institutional / associated herd/field progeny testing
   - To produce, test, propagate and conserve high genetic merit male germplasm

6. **Technical Programme**:
   I. Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500 and 300 breedable females (Murrah).
   II. Selection and testing of minimum 15 bulls of Murrah / 4-6 bulls for other breeds in every 18 / 24 months' cycle.
   III. Production of minimum 10,000 (Murrah) and 3000 to 5000 (Other breeds) frozen semen doses from each test bull.
   IV. Maintain a minimum number of 8000 (Murrah) and 2000 (other breeds) frozen semen doses until the particular SET gets evaluated.
   V. Evaluation and ranking of bulls on the basis of their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
   VI. Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
   VII. Minimum weekly recording of milk yield of individual daughters/ buffaloes at institutional herd / monthly recording in field units over complete lactation(s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, SLMY (305 days or less, up to minimum of 240 days (All breeds) / 1500 kg in Murrah) and Peak yield, Milk yield per day of herd life (total milk produced from date of birth till completion of 4th or more lactation).
   VIII. Monthly testing of milk constituents (Fat%, SNF% and Protein%) and Somatic Cell Count, wherever feasible, at institutional herds.
   IX. Recording of reproductive traits viz., AFC, Service period, Days open, Calving interval, Number of services per conception, Conception rate and Calving abnormalities.
   X. Health management including udder health, vaccination, de-worming, disease screening, mortality and periodic body weight records

7. **Staff associated with the project**:

Discipline	**Name of Scientist / Staff**	**Status PI/Co-PI/ Associated)**
AGB	Dr. B P Kushwaha	PI
ANFT	Dr. Sultan Singh	Co-PI
LPM	Dr. Deepak Upadhyay	Co-PI (Since November 2018)
LPM	Dr. Pooja Tamboli	Co-PI (Since July 2023)
No. of staff		
Contractual staff (RA / SRF / YP-I, YP-II)	1 (SRF)	

8. **Financial Statement** : Head wise budget allocation and utilization; revenue receipts

Expenditure head		Budget allotted	Expenditure incurred during financial year 2023-24	Balance
A) Recurring				
General		41.50	41.39334	0.10666
SCSP		3.00	2.94466	0.05534
Sub Total		44.50	44.33800	0.16200
B) Non-recurring				
	Equipment	3.50	2.13590	1.36410
	Furniture	1.50	1.47474	0.02526
	SCSP	0.50	0.49060	0.00940
Sub Total		5.50	4.10124	1.39876
Grand Total		50.00	48.43924 (Rupees Forty eight lakhs Forty Three thousand nine hundred Twenty four only)	1.56076

Revenue generation during 2024-25

S.No.	Item	Revenue generated (Rs.)
1	Animal sale	256000
2	Milk Sale	1401655.80
3	Semen sale	--
	Total	**1657655.80**

9.1 Herd Strength during the Period 1st April 2023 to 31st March, 2024

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	Female								
1.	Below 3 months	3	10		2	11			-
2.	3-12 months	9		11		12			8
3.	1-2 years	12		12		12			12
	Above 2 years	20		12		12			19
4.	Buffaloes in Milk	32		12	1	15	1		28
5.	Buffaloes Dry P /NP	10		15	2		3		20
	Sub Total	86	10	62	5	62	4		87
	Males								
1.	Below 3 months	5	12		2	14			1
2.	3-12 months	15		14		10			9
3.	1-2 years	-		20	1		1		19
	Above 2 years	3							2
4.	Breeding bulls	4			1				3
5.	Bullocks / Teasers / others	1							1
	Sub Total	28	12	24	4	24	1		35
	Grand Total	**114**	**22**	**86**	**9**		**5**		**122**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March

9.2 Calving Statistics including abnormalities during 1st April 24 to 31st March 25

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 24	1							1
May								
June								
July	1							1
August	1							1
September	1	2	1					4
October		2						2
November	3	1	1					5
December	4	5						9
January 25	1							1
February								
March								
Overall	**12**	**10**	**2**					**24**

Sex ratio Male: Female (59:41) SB% = 0.00 Abortion % = 0.0

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 25

Female								
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves 0 to 3 months 3-12 months						2		2
Heifers 1-2 years > 2 years							1	1
Buffaloes Milch Dry						1 2	 3	1 5
Sub Total						5	4	9
Males								
Calves 0 to 3 months 3-12 months						2		2
1 to 2 year							1	1
. >2 year						1		1
Breeding bulls						1		1
Bullock±Teaser±Others								
Sub Total						4	1	5
Grand Total						9	5	14

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

Female							Male					Overall Herd
	0-3 Month	3-12 Month	1-2 Yrs.	Above 2 Yrs.	Milk ± Dry	Overall Female	0-3 Month	3-12 Month	1 – 2 Yrs.	>2 yrs.	Overall Male	
No.	13				69	158	17			8	64	222
Died	2				3	5	2			2	4	9
%	15				4.34	3.16	11.7			25	6.25	4.05

% Calf mortality (0-3 months) 13.3% (4/30), Overall Mortality (%)- 6.61 (9/136)

9.5. Causes of Mortality (quarter wise) during the period April 2024 to March 2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis			1	1	2
Pheumonities				1	1
Septicamia / Toxaemia			1		1
Peritonitis					
JD/TB		1			
Milk Fever/ metabolic diseases				1	1
TRP / TP					
Accidental death					
Miscellaneous		1	1	1	3
Total		2	3	4	9

9.6 Prophylactic Measures undertaken

Disease	**Vaccination Date / No. of animals**	**No. of animals** Tested / Positive		**Dates and No. of animals treated for Parasitism**
FMD	14/06/24-115 no			7/05/24-22 no 22/05/24-14 no 26/09/24-18 no 21/11/24-22 no 14/02/25-16 no 17/02/25-34 no
HS	14/06/24-115 no			
BQ	14/06/24-115 no			
Brucellosis		21	2	
JD		21		
TB		21		
IBR		21	4	
Mastitis				

9.7. Female Conception Rate During the Period January to December 2024

AI No.→	1st			2nd			3rd			4th & above			Over all		
Parity↓	AIs	C	CR %	AIs	C	CR %	AIs	C	CR%	AIs	C	CR %	AIs	C	CR %
Heifers	5	3	60.0	2	1	50.0	1	1	100				8	5	62.5
Adults	30	16	50.0	9	5	55.5	1	1	100				40	22	55.0
Overall	35	19	51.3	11	6	54.5	2	2	100				48	27	56.2

AIs = No. of animals inseminated C = No. of animals conceived CR % = Conception rate%

9.8. Quarter-wise conception rate

Quarter	No. of A I	Preg. animals	CR %
January – March Previous year	22	13	59.0
April - June	3	1	33.3
July - September	5	2	40.0
October- December	18	11	61.0
Overall	48	27	56.2

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. No.	Bull No.	Total Number of AI	Total Conceived	CR%
1.	331	8	5	62.5
2.	354	10	5	50.0
3.	452	13	8	61.5
4.	524	8	4	50.0
	535	9	5	55.5
	No. of service per conception: 1.8			**56.2**

9.10 Bull Wise Semen Stock as on 31.03.2025

Sr.No	Bull No	O.B.	Doses produced / received	Doses used /disseminated			Balance
				Supply	Sold	Exp.	
1.	B138	364					364
2.	B122	292					292
3.	B143	400					400
4.	B150	169					169
5.	B167	275					275
6.	B170	254					254
7.	B182	339					339
8.	B184	291					291
9.	B228	1397					1397
10	B240	872					872
11	B244	1105					1105
12	B331	9051		10			9041
13	B333	944					944
14	B354	1588		15			1573
15	B366	1983					1983
16	B393	13397	390	1800			11987
17	B428	643					643
18	B452	6246	370	1947			4669
19	B481	850	790				1640
20	B524	-	790	14			776
21	B535	-	60	12			48
Grand Total		**40460**	**2400**	**3798**			**39062**

9.11.1 Average Body weight (kg) since inception (Indicate number of animals in parenthesis)

Year	Birth	3 Months	6 Months	12 Months	18 Months	24 Months	At AFC (n)
Females							
2003-04	24.8 (7)	46.4(12)	67.5(9)	118.8(11)	163.8 (8)		
2004-05	24.1(13)	46.1(12)	64.8(5)	106.7(7)	173.40(15)		
2005-06	27.3(13)	44.3(10)	63.2(8)	110.8(12)	183.3(11)	225.1	
2006-07	26.3(11)	44.4(5)	65.0(7)	107.2(8)	166.5(11)	210.4(12)	420 (6)
2007-08	24.7(13)	40.5(16)	62.0(13)	104.1(11)	167.2(5)	230.8(7)	346 (7)
2008-09	26.5(10)	40.9(10)	62.7(11)	108.7(17)	168.2(13)	232.1(14)	327 (6)
2009-10	26.8(18)	41.5(19)	64.8(16)	115.1(16)	169.3(19)	228.0(20)	363 (10)
2010-11	24.5(18)	40.8(13)	60.4(15)	104.8(16)	154.8(13)	206.2(9)	334 (6)
2011-12	26.0(2)	42.6(6)	57.9(11)	108.3(11)	156.9(10)	196.0(10)	336 (7)
2012-13	24.8(9)	43.5(6)	58.0(3)	112.4 (2)	160.0 (4)	201.4(8)	335 (2)
2013-14	25.4(11)	43.7(7)	67.4(7)	106.8(5)	161.2(4)	192.5(2)	387 (6)
2014-15	24.5(12)	48.7(12)	66.8(11)	105.6(11)	155.8(11)	211.4(6)	356 (15)
2015-16	25.6(15)	51.8 (11)	79.2(9)	110.5(11)	143.7(8)	205.5(10)	373 (3)
2016-17	24.7 (7)	53.5 (5)	74.6 (6)	116.9 (10)	164.0 (11)	202 (10)	335 (3)
2017-18	23.6 (11)	52.0 (9)	80.0 (7)	114.5 (7)	170.0 (6)	223 (6)	352 (6)
2018-19	22.06 (12)	51.6 (12)	78.0 (15)	130.4 (10)	180.0 (10)	230 (7)	360 (12)
2019-20	24.8 (10)	56.0 (9)	95.3 (8)	137.1 (9)	183.7 (10)	252.4 (10)	354 (3)
2020-21	27.6 (9)	64.4 (13)	95.1(12)	143.1 (9)	203.2 (6)	265.5 (9)	395.7 (8)
2021-22	24.3 (13)	59.0 (10)	92.0 (17)	151.0 (17)	197.0 (16)	248.0 (9)	386 (15)
2022-23	26.4 (14)	59.4 (9)	81.2 (14)	120.6 (13)	172.0 (5)	229.8 (7)	373 (5)
2023-24	27.9 (15)	52.5 (11)	75.9 (14)	113.2 (22)	150.6 (16)	195.2 (20)	387 (9)
2024-25	24.7 (10)	49.6 (8)	70.0 (13)	119.2 (16)	152.0 (13)	181.8 (14)	362 (2)
Males							**Adults**
2003-04	26.9 (16)	49.2 (14)	74.8 (10)	133.2 (10)			431 (5)
2004-05	24.6 (12)	47.0 (11)	68.4 (7)	115.7 (11)			501 (4)
2005-06	27.9 (25)	46.9 (20)	68.6 (16)	123.5 (10)	203.6 (10)	258.0	445 (9)
2006-07	27.3 (18)	45.0 (17)	70.4 (17)	115.5 (17)	179.7 (16)	234.3 (10)	460 (9)
2007-08	27.7 (20)	42.5 (20)	67.9 (21)	114.1 (19)	178.2 (14)	234.5 (12)	413 (15)
2008-09	27.3 (10)	43.0 (10)	67.8 (11)	114.3 (18)	180.0 (15)	242.5 (6)	420 (15)
2009-10	27.3 (20)	44.2 (22)	68.3 (19)	116.0 (12)	175.0 (10)	236.0 (11)	423 (9)

2010-11	26.2 (9)	41.9 (11)	65.0 (12)	112.7 (11)	160.4 (5)	224.5 (4)	416 (10)
2011-12	27.4 (5)	42.7 (6)	60.6 (8)	112.0 (3)	165.0 (1)	-	425 (5)
2012-13	25.9 (13)	43.6 (14)	60.5 (10)	116.0 (4)	175.0	235.0 (3)	457 (3)
2013-14	25.8 (13)	45.2 (9)	70.8 (10)	108.3 (10)	157.3(6)	195.0 (3)	446 (2)
2014-15	26.3 (18)	50.5 (14)	63.6 (13)	105.1 (6)	158.7(4)	261.0 (2)	436 (4)
2015-16	26.8 (12)	46.1 (9)	71.6 (6)	122 (8)	155.5(8)	230 (8)	470 (4)
2016-17	26.6 (15)	56.6 (9)	73.9 (17)	114.7 (6)	186.4(3)	221 (3)	459 (6)
2017-18	23.8 (10)	54.0 (9)	81.0 (9)	117.0 (6)	182.0 (2)	258.0 (2)	492 (4)
2018-19	24.3 (10)	53.1 (10)	82.3 (11)	134.0 (4)	198.0 (5)	250.0 (2)	184 (5)
2019-20	25.7 (7)	59.6 (5)	94.8 (7)	139.6 (5)	198.2 (5)	-	476 (6)
2020-21	26.4 (10)	63.7 (10)	99.2 (8)	143.5 (4)	218.5 (4)	249.8 (4)	474 (4)
2021-22	27.3 (22)	64.0 (12)	98.0 (18)	144.0 (9)	217.0 (9)	251.0 (4)	480 (6)
2022-23	29.4 (11)	62 (12)	87.5 (20)	127.8 (15)	178.4 (5)	237.3 (3)	460 (4)
2023-24	29.2 (22)	51.6 (12)	76.7 (7)	122.4(4)	155.5 (6)	230.8 (5)	470 (4)
2024-25	27.5 (12)	50.2 (14)	72.2 (16)	119.0 (20)	158.0 (7)	200.2 (4)	440 (4)

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	5	1262.3±112.5	352.6±27.7	1188.2±86.3	7.50±0.20
2nd	7	1478.9±107.1	335.4±23.7	1338.10±70.1	7.97±0.3
3rd	3	1926.3±133.7	383.3±16.7	1437.3±69.6	9.10±0.6
4th	5	1389.0±60.6	315.8±7.3	1158.5±37	7.12±0.03
5th & above	5	1497.8±62.1	321.0±17.7	1347.8±28.5	8.40±0.3
Overall	**25**	**1475.0±69.3**	**327.8±12.3**	**1287.0±38.1**	**7.94±0.2**

9.12.1 Average production performance of Buffaloes Since Inception of Network

Year	Lactation Length (days)	TLMY (kg)	SLMY (kg)	Peak yield(kg)
2003-04	296 (24)	1067.95	1029.41	6.6
2004-05	245 (29)	997.96	958.96	6.7
2005-06	236.53 (17)	891.81	891.81	6.30
2006-07	304.49 (35)	1294.65	1159.22	6.83
2007-08	279.29 (24)	1201.33	1188.92	6.61
2008-09	344 (31)	1561.11	1433.48	7.41
2009-10	294.7 (26)	1331.47	1286.50	7.5
2010-11	311.0 (34)	1381.44	1310.00	7.22
2011-12	293.76 (13)	1276.65	1214.78	6.19
2012-13	334 (8)	1587.76	1494.9	8.19
2013-14	294.5 (21)	1416.3	1385.9	7.50
2014-15	367 (21)	1638.8	1478.3	7.33
2015-16	330 (25)	1406.64	1321.8	7.36
2016-17	299 (26)	1430.3	1368.2	8.35
2017-18	316.5 (19)	1478.4	1402.5	7.69
2018-19	332 (17)	1373.9	1224.4	6.70
2019-20	357 (18)	1466.88	1285.57	6.73
2020-21	354 (10)	1733.5	1558.1	8.10
2021-22	356.4 (23)	1889.7	1631.8	8.19
2022-23	316.1 (24)	1562.08	1491.09	8.30
2023-24	352.8 (35)	1657.4 (35)	1496.9 (35)	8.08 (35)
2024-25	**337.8 (25)**	**1475.0 (25)**	**1287.0 (25)**	**7.94 (25)**

*Within parenthesis are number of observations

9.12.2 Herd Life Production (up to 4th Lactation) during 2024-25

Animal No.	DOB	Date of completion of 4th or more lact. or disposal	HLF (days) up to 4th or more lactation or disposal (d)	LTMY (kg)	Productive Days	Unproductive Days	MY/day HLF
B248	15.07.08	03.03.23	5344	8264	1777	3567	1.54
B258	20.09.08	6.08.24	5799	12403.6	2622	3177	2.14
B287	14.10.09	29.09.23	5098	11162	2521	2577	2.18
B293	10.12.09	13.01.25	5513	13464	2885	2628	2.44
B295	17.12.09	12.01.25	5505	12256	2612	2893	2.22
B308	22.08.10	28.10.24	5181	10047	2335	2846	1.94
B346	03.09.12	02.05.24	4232	13454	2011	2221	3.17
B364	27.08.18	03.07.24	3943	7997.7	1620	2323	2.03
B380	03.11.17	03.07.24	3765	5238.9	1336	2429	1.40
B415	09.08.15	10.03.25	3501	7814	1767	1734	2.23
B416	14.08.15	07.12.24	3403	8165.1	1432	1971	2.39
B418	23.08.15	10.09.22	2575	5195.2	1268	1307	2.02
B423	10.09.15	31.03.25	3481	4866.7	1321	2160	1.39
B424	23.09.15	20.10.24	3315	6022.3	1334	1971	1.82
B457	18.01.17	31.03.25	2994	6334.1	1398	1596	2.11

Note: HLF (Herd Life- Date of birth to date of completion of 4th or more lact. Or date of disposal)
Productive Days (date of first calving to total days in milk), Unproductive days (total days when buffalo not give milk from the date of first calving)

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	Fat	SNF	TS	Protein	Lactose
October 24	18	8.82	9.4	18.22	3.28	5.30
December 24	18	9.13	9.85	18.98	3.37	5.69
January 25	22	9.33	10.09	19.42	3.50	5.60
February 25	38	8.17	9.19	17.36	3.24	5.12
March 25	34	8.09	8.95	17.05	3.13	4.99
Overall	130	8.64±0.22	9.46±0.10	18.26±0.31	3.30±0.03	5.30±0.07

9.14: Reproductive Performance

Lactation / Parity	AFC (Months) (N)	N →	Service Period (Days)	DP (Days)	CI (Days)
1st	50.70±1.24(2)				
2nd		6	188.7±25.3	152.0±19.9	485.0±25.3
3rd		6	176.3±32.5	183.8±14.3	474.5±26.1
4th		3	172.5±2.0	171.5±2.9	475.0±29.1
5th & above		7	160.0±14.7	177.6±37.1	455.6±13.5
Over all	50.70±1.24	22	174.3±15.0	172.4±12.9	473.6±13.5

*Service Period (days)= Date of 1 st AI – Date of last calving

9.14.1 Reproduction Performance Since inception of Network.

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
2003-04	-	137.90 (16)	220.25 (16)	444.5 (16)
2004-05	-	230.33 (24)	269.29 (24)	535.8 (24)
2005-06	-	156.25 (28)	218.46 (28)	463.57 (28)
2006-07	44.60 (5)	166.33 (21)	203.29 (21)	467.33 (21)
2007-08	43.20 (7)	226.73 (26)	216.13 (26)	530.80 (26)

2008-09	51.20 (6)	148.60 (15)	206.8 (15)	499.6 (15)
2009-10	53.22 (10)	167.84 (24)	202.75 (24)	525.79 (24)
2010-11	49.11 (7)	160.00 (20)	222.75 (20)	516.95 (20)
2011-12	49.00 (2)	179.28 (13)	187.92 (13)	497.20 (13)
2012-13	51.32 (12)	153.75 (8)	202.62 (8)	513.25 (8)
2013-14	50.13 (6)	174.90 (11)	214.2 (11)	520.10 (11)
2014-15	53.97 (15)	182.3 (15)	216.4 (15)	534.0 (15)
2015-16	47.25 (5)	212.3 (24)	192.08 (24)	523 (24)
2016-17	50.6 (4)	176.2 (18)	163.6 (18)	478.3 (18)
2017-18	46.26±0.7 (7)	190.5±31.8 (15)	177.3±24.3 (14)	493.3±31.7 (15)
2018-19	47.28±1.6 (13)	181.7±39.3 (9)	173.1±30.4 (9)	486.8±42.7 (9)
2019-20	48.23±2.9 (3)	189.1±39.0 (11)	171.8±24.3 (11)	490.5±40.4 (11)
2020-21	52.23±2.26 (8)	203.0±46.0 (12)	174.2±28.9 (12)	499.7±52.5 (12)
2021-22	48.2±2.4 (15)	228.1±31.9 (17)	170.8±25.6 (17)	523.1±32.2 (17)
2022-23	51.9±4.5 (6)	171.0±18.9 (16)	177.0±29.4 (16)	465.2±20.32 (16)
2023-24	45.67±1.30 (8)	168.0±12.91 (24)	158.2±12.46 (24)	467.0±12.8 (24)
2024-25	**50.70±1.24 (2)**	**174.3±15.0 (22)**	**172.4.4±20.0 (22)**	**473.6±13.5 (22)**

9.15 Milk Production and Disposal

Month	Total milk produced (kg)	Disposal (Kg)		
		Milk sold	Calf feeding	Expt.
April 24	3673.6	2677	996.6	
May	3203.2	2410.2	793	
June	3007.9	2292.3	715.6	
July	2901.7	2146.4	755.3	
August	2867.4	2213.8	653.6	
September	2607.6	1931.1	676.5	
October	2469.4	1950.4	519	
November	2472.9	1801.7	671.2	
December	3155.1	2087.8	1067.3	
January 25	3761.2	2689.6	1071.6	
February	3814.5	2757.9	1056.6	
March	3504.7	2586.9	917.8	
Total	**37439.2**	**27545.1**	**9894.1**	

Note: Mention sale price of milk (range during the year): Rs. 50 per kg (upto 13.02.2025) and Rs. 56 per kg w.e.f.14.02.25

9.16 Feed and fodder (Quintals) availabilityApril 2024 to March 2025

Quarter		Qty. Produced at Farm (Qt.)	Qty. Purchased (Qt.	Actually fed (Qt)	Balance (Qt.)
I (April – June)	Green	300		300	
	Dry	348		348	
	Silage	0		0	
	Concentrate	53	38*	53	-15
II (July – September)	Green	822		822	
	Dry	349		349	
	Silage	0		0	
	Concentrate	43.5	-	43.5	-58.5
III (October – December)	Green	1078.25		1078.25	
	Dry	355		355	
	Silage	0		0	
	Concentrate	55.25	220	55.25	106.25

IV (January-March)	Green	1209.05		1209.05	
	Dry	365		365	
	Silage	0		0	
	Concentrate	60.05	275	60.05	321.2
Total	Green	3409.3		3409.3	
	Dry	1417.0		1417.0	
	Silage	0		0	
	Concentrate	211.8	533	211.8	321.2

*Balance from previous year

9.17: Milk performance during April 2024 to March 2025

Month	Buffaloes in milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April, 24	31	9	42	73.8	4.08	2.92
May	30	13	43	69.8	3.68	2.40
June	28	15	43	65.12	3.59	2.33
July	28	14	42	64.3	3.80	2.23
August	27	16	43	62.8	3.9	2.15
September	27	16	43	62.8	3.7	2.02
October	25	18	43	58.14	3.42	1.85
November	25	22	47	53.2	3.53	1.75
December	35	12	47	74.5	3.5	2.2
January, 25	34	14	48	70.8	3.9	2.53
February	30	18	48	62.5	4.7	2.83
March	28	20	48	58.3	4.22	2.36
Overall	**29**	**16**	**45**	**64.7**	**3.84**	**2.30**

9.17.1 Milking performance since inception

Year	No. of Animal in Milk	No. of Animal dry	Total Animal	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2002-03	19	23	42	46.03	3.30	1.35
2003-04	18	22	40	44.74	3.44	1.35
2004-05	23	16	38	59.44	3.75	1.97
2005-06	22	20	42	51.43	3.74	1.80
2006-07	27	20	47	57.67	3.56	1.86
2007-08	27	19	46	58.69	4.67	2.57
2008-09	29	18	47	62.9	4.35	2.49
2009-10	27	23	50	54.5	4.64	2.37
2010-11	27	21	48	56.90	3.95	2.02
2011-12	12.5	20.92	33.41	37.41	4.65	1.58
2012-13	14	19.75	34	41.17	4.57	1.75
2013-14	21	19	40	52.50	4.72	2.24
2014-15	28	16	44	63.6	4.22	2.50
2015-16	27.58	15	42.58	64.77	4.49	2.64
2016-17	22.5	10.16	32.7	70.85	4.62	2.97
2017-18	17.83	10.33	28.16	64.02	4.16	2.39
2018-19	20.8	9.08	29.9	70.07	3.67	2.34
2019-20	15.8	14.5	30.3	52.42	4.44	2.10
2020-21	20.25	14.08	34.33	58.53	5.06	2.84
2021-22	25.9	13.4	39.1	65.9	4.66	2.79
2022-23	30.9	15.3	46.3	66.2	4.86	3.07
2023-24	29.1	14.9	44	67	4.55	2.92
2024-25	29	16	45	64.7	3.84	2.30

9.18: Bull wise daughters born (only numbers)

Bull No.	Set No.	Daughters born	Daughters Calved	Daughters completing 1st Lactation
B1	-	7	7	7
B44	-	13	9	9
B45	-	4	4	4
B46	1	10	8	8
B76	1	4	3	3
B78	1	5	5	5
B79	1	7	4	4
B84	1	12	8	6
B87	1	7	4	4
B89	1	5	1	1
B138	1	16	6	6
B143	2	2	1	1
B147	2	2		
B170	2	7	6	5
B182	2	3	1	1
B184	2	8	4	4
B228	3	5	5	4
B240	3	19	15	15
B244	3	15	11	9
B331	3	29	15	13
B333	3	16	6	4
B354	3	31	8	6
B366	3	5	2	2
B428	3	4	-	-
B452	3	4	-	-
B524	-	2	-	-
B535	-	5	-	-

9.19 Bull wise daughters completing 1st lactation

Sire No.	Daughter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)
B-366	B-517	13-10-2019	11-01-2024	50.9	112	477.5	477.5
B-366	B-522	12-01-2020	03-10-2023	44.7	308	835.0	830.0
B-331	B-447	29-08-2016	20-10-2023	85.7	324	1471.6	1435.0
B-331	B-539	13-11-2020	09-11-2024	47.9	35	154.0	154.0
B-354	B-525	25-02-2020	13-12-2023	45.6	397	994.8	890.0
B-354	B-526	02-07-2020	08-01-2024	42.2	371	1128.6	1046.0
B-354	B-520	02-01-2020	03-01-2024	48.0	453	1360.3	1030.0

9.20 Breeding bulls/young bull

Sr. No.	Bull No.	Date of Birth	Dam No.	Sire No.	Dam's best SLMY
1	B-481	03/02/2018	195	331	1927
2	B-524	20/02/2020	258	354	1715
3	B-535	10/10/2020	435	240	1756
4	B-558	23.10.2021	472	354	1855
5	B-576	23/02/2022	364	393	1970
6	B-612	19-08-2023	364	333	1970
7	B-643	22-07-2024	472	452	1885
8	B-639	26-01-2024	293	333	1875

9.21 Target achieved during the years

Trait	Target	Achieved				
		2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at 1st calving (months)	40	52.23±2.26 (8)	48.2±2.4 (15)	51.9±4.5 (6)	45.67±1.30 (8)	50.70±1.24 (2)
Av. Service period (days)	130	181.3±407 (12)	199.2±33.3 (17)	127.8±15.5 (16)	168.0±12.91 (24)	174.3±15.0 (22)
Calf mortality (0-3 months)	≤ 5 %	4.00	5.55	10.81	2.38	13.3
Wet average (kg)	≥5 kg	5.06	4.66	4.86	4.55	3.84
Herd average (kg)	≥3 kg	2.84	2.79	3.07	2.92	2.30

Conservation in the breeding Tract

a) Germ Plasm Dissemination (during 2024-25)

- 1 Breeding bull and 4 buffaloes sold to Rani Laxmi Bai Central Agriculture University (RLBCAU), Jhansi Banda, to establish a Bhadawari herd.
- 2000 frozen semen doses supplied to AI center Morena, Department of AH, Madhya Pradesh
- 1000 frozen semen doses supplied to AI center Bhind, Department of AH, Madhya Pradesh.
- 725 frozen semen doses supplied in Etawah.

b) Artificial Insemination in field (2024-25)

Month	No. of AI
April 24	22
May	30
July	40
August	125
September	310
October	392
November	537
December	765
January 25	568
February	163
March	142
TOTAL	**3094**

c) **Activities under SCSP program:**

1. A one-day training on "scientific buffalo rearing" was organized, 49 farmers attended the training.
2. Bajra Napier Hybrid (BN Hybrid) root slip were distributed among the farmers.
3. Silage bags were distributed among the farmers.

10. Salient Research Achievements:

- Average lactation milk yield, 305 days or less milk yield and wet average and herd average were recorded as 1475.0 kg, 1287.0 kg, 3.84 kg and 2.30 kg, respectively.
- Average age at first calving, average service period and conception rate were 50.7 months, 174 days and 56.2 percent, respectively.
- Artificial insemination in the Bhadawari breeding tract was continued during the year 2024-25. A total of 3094 artificial inseminations were performed. Field AI work in Bhind and Morena district (MP) was done with the help of state animal husbandry department.
- Kishan gosthy, exhibition in kishan mela and meeting with the farmers were held in the breeding tract to motivate farmers for keeping Bhadawari buffaloes.

11. Publication

Research Papers

Badri Prasad Kushwaha, Sultan Singh, Krishna Kunwar Singh, Deepak Upadhyay, Pooja Tamboli, Ajoy Mandal (2025) . Genetic parameter estimates of milk yield and composition of Bhadawari buffalo in India. Tropical Animal Health and Production (2025) 57:238, https://doi.org/10.1007/s11250-025-04491-8

Book chapters:

1. Upadhyay, D., Tamboli, P., Kumar, A., Kushwaha, B.P., Singh, S., Sharma, P., Singh, S., and Das M.M. 2024. Livestock Farming in India: Exploring Economic Prospects and Addressing Challenges. In book: Fodder Technology Innovations for Sustainable Livestock Production. Biotech books, chapter 1, ISBN 978-81-7622-593-9.

2. Tamboli, P., Upadhyay, D., Kumar, A., Singh, K.K., Kushwaha, B.P., Sharma, P., Singh, S., and Das M.M., 2024. Sustainable Livestock Farming for Livelihood Security with a Focus on India's Bundelkhand Region. In book: Futuristic Trends in Agriculture Engineering & Food Sciences. IIP Series, Volume 3, Book 23, Chapter 10, e-ISBN: 978-93-5747-995-0.

Abstract

Badri Prasad Kushwaha*, Sultan Singh, Deepak Upadhyay, Pooja Tamboli & Krishna Kunwar Singh; Bhadawari Buffalo: Current status. National Symposium on Technological Advancement and Their Application for Management of Native Animal Genetic Resources (AnGR), January 21-22, 2025, Bengaluru.

21st ARM (NPBI)

21st Annual Review meet of Network project on buffalo improvement was organized on 12 and 13 November 2024 at ICAR-IGFRI, Jhansi.

(B P Kushwaha, PI)

(Sultan Singh, Co-PI)

(Deepak Upadhyay, Co-PI)

(Pooja Tamboli, Co-PI)

Book chapters	:	2
Conferences/symposia	:	1
Abstract	:	2
Publication in News paper	:	1
Publication of Extension Leaflets/ Folders	:	5
Participation in Conference	:	1

12. Constraints if any: Nil

13. Focus of work in the coming year: Breed activities shall be continued through semen freezing and artificial insemination in the Bhadawari breeding tract. Efforts will be made to disseminate Bhadawari germplasm through sale of frozen semen/breeding bulls to various agencies for their use in the field. Demonstration, radiotalk and kishan gosthies shall be organized to motivate farmers for rearing of Bhadawari buffaloes.

21st Annual Review meet of Network project on buffalo improvement, 12 and 13 November 2024, ICAR-IGFRI, Jhansi.

Farmers training on “Scientific Buffalo Rearing”

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Closing balance
Total	ICAR Share		ICAR Share	State Share	
50.00*	46.50±3.50*	50.0*	48.43924	0.00	1.56076

* Includes 3.50 lakhs for SCSP

Herd Performance

The Herd strength was 122, which comprises of 67 breeding buffaloes (>2.0 years). During the year 22 calving took place, out of which 12 were male and 10 were female. The calf mortality (0-3-month) was high 13.30 % as compared to 2.38 % in 2023-24. Conception rate was 56.20% in 2024-25. A total of 2400 doses of frozen semen were produced and 3798 doses were used/supplied for AI in the field. As on 31st March, 2025, 39062 frozen semen doses were in the stock.

Average TLMY and SLMY were decreased from 1657 kg (35) and 1497 kg (35) to 1475 kg (25) and 1287 kg (25), respectively during the year. Wet and herd averages was drastically decreased from 4.55 kg and 2.92 kg to 3.84 kg and 2.30 kg, respectively during the report period. Age at first calving, service period, dry period and calving interval was 50.70 months (2), 174 days (22), 172 days (22) and 474 days (22), respectively. Overall, 65% animals were in the milk during the year. A total of 3094 AI were performed in the field during 2024-25 as compared to 2531 in 2023-24.

Accomplishment and Targets Achieved:

Trait	**Target**	**Achieved**				
		2020-21	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Av. Age at 1st calving (months)	40	52.23±2.26 (8)	48.2±2.4 (15)	51.9±4.5 (6)	45.67±1.30 (8)	50.70±1.24 (2)
Av. Service period (days)	130	181.3±407 (12)	199.2±33.3 (17)	127.8±15.5 (16)	168.0±12.91 (24)	174.3±15.0 (22)
Calf mortality (0-3 months)	≤ 5 %	4.00 %	5.55 %	10.81 %	2.38 %	13.30 %
Wet average (kg)	≥5 kg	5.06 Kg	4.66 Kg	4.86 Kg	4.55 Kg	3.84 Kg
Herd average (kg)	≥3 kg	2.84 Kg	2.79 Kg	3.07 Kg	2.92 Kg	2.30 Kg

Recommendations:

- Milk production traits such as TLMY, SLMY, Peak yield, Wet. average and Herd average is continuously decreasing from last two years, more efforts are needed to improve it.
- Efforts should also be made to improve reproductive traits such as AFC, service period, dry period and calving interval.
- Managemental care should be taken to control the calf mortality within the 5% target of NPBI.

NETWORK PROJECT ON BUFFALO IMPROVEMENT (NILI-RAVI, GADVASU)

1. Name of centre : GADVASU, Ludhiana
2. Project Code : AS-12/7/2017-AI-I
3. Project Title : Network Project on Buffalo Improvement
Sub-project **:** Performance recording and improvement of Nili-Ravi buffalo
4. Date of Start : 17 November, 2017

5. Objectives :

I. To establish elite herd of 50 to 100 Nili-Ravi (at each center) for the production of genetically superior young bulls.
II. To evaluate sires through institutional / associated herd/ field progeny testing
III. To produce, test, propagate and conserve high genetic merit male germplasm

6. Technical Programme:

- Establishment and maintenance of an elite herd of buffalo breed with a herd strength of 500, comprising 300 breedable females.
- Selection and testing of minimum 4-6 bulls in every 18/24 months cycle.
- Production of a minimum 3000 to 5000 frozen semen doses from each test bull.
- Maintain a minimum number of 2000 frozen semen doses until the particular SET gets evaluated.
- Evaluation and ranking of bulls based on their progeny performance (first lactation) for selection of top 20-25% as proven bulls from each set.
- Application of proven bull's semen on elite buffaloes for the production of future sires and replacement heifers.
- Minimum weekly recording of milk yield of individual daughters/buffaloes at institutional herd over complete lactation (s) with wet average, herd average, percent in milk, lactation length, dry period, TLMY, and Peak yield.
- Monthly testing of milk constituents (Fat%, SNF% and Protein %) and Somatic Cell Count, wherever feasible, at institutional herds.
- Recording of reproductive traits viz., AFC, Service period, Calving interval, Number of services per conception, Conception rate, and Calving abnormalities.
- Health management including udder health, vaccination, de-worming, disease screening, mortality, and periodic body weight records.

Name of PI : Dr. Ravi Kant Gupta

8. Financial Statement: Head wise budget allocation

Account Head	Budget Allotted	Expenses made	Balance
Recurring Contingencies	24,00,000.00	28,00,000.00	0
Non-Recurring Contigencies			
Works	3,00,000.00	3,00,000.00	0
Furniture	1,50,000.00	1,50,000.00	0
Total	**28,50,000.00**	**28,50,000.00**	**0**

9.1 Herd Strength during the Period 1st April 2024 to 31st March, 2025

Sr. No.	Category	Addition			Disposal				CB
		OB	B / P	T	D	T	S	E	CB
	FEMALE								
1.	Below 3 months	3	16/-	-	-	16	-	-	3
2.	3-12 months	8		16	1	10	-	-	13
3.	1-2 years	16		10	-	17	-	-	9
	Above 2 years	24		17	-	14	2	-	25
4.	Buffaloes in Milk	27	-/ 1	14	-	13	1	-	28
5.	Buffaloes Dry P /NP	20	-/ 1	13	1	-	10	9	14
	Sub Total	**98**	**16/ 2**	**70**	**2**	**70**	**13**	**9**	**92**
	MALE								
1.	Below 0- 3 months	2	23	-	1	22	-	-	2
2.	3-12 months	14	-	22	1	16	4	-	15
3.	1-2 years	2	-/ 1	16	1	8	5	-	5
	Above 2 years	4	-/ 2	8	-	13	1	-	-
4.	Breeding bulls	2		13			1	6	8
5.	Bullocks / Teasers / others								
	Sub Total	24	23/ 3	59	3	59	11	6	30
	Grand Total	**122**	**39/ 5**	**129**	**5**	**129**	**24**	**15**	**122**

OB = Opening Balance as on 1st April D = Deaths S = Sale E = Experimental
B / P = Birth / Purchase T = Transfer CB = Closing Balance as on 31st March 2024

9.2 Calving Statistics including abnormalities

Month	Male	Female	Still Birth	Abortion	Dystokia	ROP	Prolapse	Overall
April 24	3	1	0	0	0	0	0	**4**
May	1	3	0	0	0	0	0	**4**
June	4	0	0	0	0	0	0	**4**
July	0	1	0	0	0	0	0	**1**
August	5	4	0	0	0	0	0	**9**
September	1	2	0	0	0	0	0	**3**
October	1	0	0	0	0	0	0	**1**
November	3	1	0	0	0	0	0	**4**
December	3	1	0	1	0	0	0	**5**
January 25	0	2	0	0	0	0	0	**2**
February	0	0	0	0	0	0	0	**0**
March	2	1	0	0	0	0	0	**3**
Overall	**23**	**16**	**0**	**1**	**0**	**0**	**0**	**40**

Sex ratio Male: Female 1.43:1 SB% = Nil Abortion = 2.5%

9.3. Disposal of Animals during the Period 1st April 24 to 31st March 25

Female	**Primary cause of disposal**							
Category	Surplus	Below farm production standard	Reprod. Problem	Weak & Old	Udder Health	Death	Experimental purposes	Total
Calves 0 to 3 months	-	-	-	-	-	-	-	-
3-12 months	-	-	-	-	-	1	-	1
Heifers 1-2 years	-	-	-	-	-	-	-	-
> 2 years	-	-	1	1	-	-	-	2
Buffaloes Milch	-	-	-	1	-	-	-	1
Dry	-	5	5	-	0	1	9	20
Sub Total	**-**	**5**	**6**	**2**	**0**	**2**	**9**	**24**

Males								
Calves 0 to 3 months		-	-	-	-	1	-	1
3-12 months	4	-	-	-	-	1	-	5
1 to 2 year	5	-	-	-	-	**1**	-	6
.>2 year	1	-	-	-	-	**-**	-	1
Breeding bulls	1	-	-	-	-	**-**	6	7
Bullock+Teaser+Others	-	-	-	-	-	**-**	-	-
Sub Total	11	-	-	-	-	3	6	20
Grand Total	**11**	**5**	6	**2**	0	**5**	**15**	**44**

9.4. Mortality during the Period 1st April 2024 to 31st March, 2025

		Female						Male					
Month	**Detail**	**0-3 (mo)**	**3-6 (mo)**	**6-12 (mo)**	**1-2 yrs**	**Above 2 yrs.**	**Overall female**	**0-3 (mo)**	**3-6 (mo)**	**6-12 (mo)**	**Above 1 yr.**	**Over all male**	**Overall Herd**
April	**No.**	3	2	5	16	72	98	5	5	8	8	26	**124**
	Died	0	0	0	0	0	0	0	0	0	0	0	**0**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	**No.**	4	2	5	13	68	92	3	4	11	8	26	**118**
	Died	0	1	0	0	0	1	0	0	0	0	0	**1**
	%	0.00	50.0	0.00	0.00	0.00	1.08	0.00	0.00	0.00	0.00	0.00	**0.84**
June	No.	4	2	5	12	68	91	7	3	10	8	28	**119**
	Died	0	0	0	0	0	0	1	0	1	0	2	**2**
	%	0.00	0.00	0.00	0.00	0.00	0.00	14.28	0.00	10.0	0.00	7.14	**1.68**
July	**No.**	4	2	5	12	69	92	5	3	9	11	28	**120**
	Died	0	0	0	0	0	0	0	0	0	0	0	**0**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
August	**No.**	5	4	5	13	69	96	7	5	7	14	33	**129**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sept.	**No.**	7	4	3	14	70	98	6	7	8	13	34	**132**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
October	**No.**	6	4	4	12	73	99	7	5	7	17	36	**135**
	Died	0	0	0	0	0	0	0	0	0	1	1	**1**
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88	2.77	**0.74**
Nov.	**No.**	3	5	6	10	70	94	5	10	3	16	34	**128**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec.	**No.**	2	7	6	10	66	91	7	6	8	13	**34**	**125**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
January	**No.**	4	6	6	11	66	93	6	7	8	12	**33**	**126**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb.	**No.**	3	3	9	11	66	92	4	4	7	13	**28**	**120**
	Died	0	0	0	0	0	0	0	0	0	0	0	0
	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
March	**No.**	3	2	11	9	67	92	2	7	8	13	**30**	**122**
	Died	0	0	0	0	1	1	0	0	0	0	**0**	**1**
	%	0.00	0.00	0.00	0.00	1.49	1.08	0.00	0.00	0.00	0.00	0.00	**0.81**
Total	**Died**	**0**	**1**	**0**	**0**	**1**	**2**	**1**		**1**	**1**	**3**	**5**

Calf mortality (0 to 3 months) = 02.27 % (1/44)

9.5. Causes of Mortality (quarter wise) during the period April 24 to March 2025

Particulars	1st quarter (April-June)	2nd quarter (July-Sept)	3rd quarter (Oct-Dec.)	4th quarter (Jan.-March)	Total
Enteritis	1	-	-	-	1
Haem. Enteritis	-	-	-	-	-
Pheumo Enteritis	-	-	-	-	-
Broncho-Pheumonia	-	-	-	-	-
Septicamia / Toxaemia	-	-	-	-	-
Peritonitis	2	-	1	-	3
JD/TB	-	-	-	-	-
Milk Fever / metabolic diseases	-	-	-	-	-
TRP/TP	-	-	-	-	-
Parasitism	-	-	-	-	-
Accidental death	-	-	-	-	-
Peri-parturient disorders	-	-	-	-	-
Miscellaneous	-	-	-	1	1
Total	**3**	**0**	**1**	**1**	**5**

9.6 Prophylactic Measures undertaken

Disease	**Vaccination No. of animals**	**No. of animals** Tested	Positive	**Dates and No. of animals treated for Parasitism**
FMD±HS (Thrice)	110,123,110		All negative	No clinical case of parasitic infestation was observed during the year.
BQ (Once)	106		All negative	
Brucelloses • Calf Hood • Adult	 9 -		 All negative All negative	
JD	-		All negative	
TB	-		All negative	

9.7. Female Conception Rate during the Period January 2024 to December 2025

AI →	1st			2ND			3RD			4TH & above			Over all		
Parity↓	AI	C	CR %	AI	C	CR %	AI	C	CR%	AI	C	CR %	AI	C	CR %
Heifers	8	2	25.00	9	3	33.33	9	3	33.33	13	7	53.84	39	15	38.46
Adults	31	15	48.38	22	10	45.45	8	1	12.50	25	13	52.00	86	39	45.34
Overall	**39**	**17**	**43.58**	**31**	**13**	**41.93**	**17**	**4**	**23.52**	**38**	**20**	**52.63**	**125**	**54**	**43.20**

Ais = No. of animals inseminated; C = No. of animals conceived; CR % = Conception rate %

9.8 Quarter-wise conception rate:

Quarter	**No. of A I**	**Preg. Animals**	**CR %**
January – March	26	13	50.00
April – June	21	7	33.33
July – September	43	13	30.23
October- December	35	21	60.00
Overall	125	54	**43.20**

9.9. Bull-wise Conception Rate During the period January to December, 2024

Sr. No.	Bull No.	Total Number of AI	Total Conceived	CR%
1.	27	5	3	60.00
2.	252	6	4	66.66
3.	254	6	1	16.60
4.	312	3	1	33.33
5.	352	7	4	57.14
6.	507	5	1	20.00
7.	565	2	2	100.00
8.	753	1	0	0.00
9	773	8	1	12.50
10	782	4	1	25.00
11	800	9	3	33.33
12	852	6	3	50.00
13	856	11	4	36.36
14	865	8	3	37.50
15	905	7	3	42.85
16	916	10	3	30.00
17	968	6	3	50.00
18	975	7	4	57.14
19	3087	14	10	71.42
Total		**125**	**54**	**43.20%**

9.10 Bull Wise Semen Stock: -

Sr. No	Bull No	O.B.	Doses produced/ received	Doses used /disseminated				Total Supply	Balance
				Dairy Farm	Sold	Exp.	Disc.		
1.	NR 507	978	6834	30	7047	-	979	7077	753
2.	NR3087	2680	8290	80	6984	-	1400	7054	3906
3.	NR 2976	0	1334	0	994	-	0	994	340
4.	NR 3039	0	1340	0	0	-	618	0	1340
5.	NR 856	0	739	0	55	-	1119	55	684
6.	NR 753	0	1608	0	80	-	265	80	1528
Total		**3658**	**20145**	**110**	**15160**	**-**	**4381**	**15260**	**8533**

9.11. Average Body weight (kg) (Indicate number of animals in parenthesis)

Year	**Birth**	**3 Months**	**6 Months**	**12 Months**	**18 Months**	**24 Months**	**WFC**
Female							
2017-18	36.30 (25)	57.00 (17)	92.00 (15)	168.00 (16)	310.00 (24)	385.00 (21)	595.00 (18)
2018-19	34.12 (23)	67.38 (11)	110.63 (11)	193.22 (18)	313.25 (9)	406.00 (14)	605.62 (16)
2019-20	32.34 (25)	63.37 (20)	104.99 (17)	181.17 (16)	309.96 (16)	397.81 (22	561.64 (16)
2020-21	31.80 (25)	61.80 (18)	110.30 (16)	169.00 (14)	298.40 (19)	370.00 (27)	549.54 (12)
2021-22	31.20 (24)	63.79 (15)	110.30 (14)	167.00 (19)	304.00 (17)	344.00 (23)	547.00 (21)
2022-23	35.29 (17)	60.45 (14)	107.50 (4)	184.50 (15)	302.80 (11)	399.80 (14)	550.40 (14)
2023-24	32.56 (15)	45.60 (10)	90.08 (15)	189.50 (16)	305.40 (15)	364.22 (22)	591.00 (12)
2024-25	32.94(16)	68.16(11)	121.16(12)	212.75(16)	294.11(19)	357.38(21)	543.33(3)

Male							Adults
2017-18	34.70 (26)	70 (19)	110(15)	190 (8)	330 (4)	480.00 (2)	-
2018-19	34.87 (29)	70.06 (12	110.00 (7)	231.00 (5)	354.20 (5)	490.00 (4)	-
2019-20	34.13 (24)	69.45 (12)	113.81 (9)	235.24 (5)	350.0	540.09 (2)	-
2020-21	34.07 (26)	72.00 (11)	120.40 (6)	210.60 (8)	335.80 (5)	590.40 (5)	-
2021-22	33.20 (27)	70. 80 (5)	114.00 (6)	238.00 (4)	380.00 (3)	690.00 (4)	-
2022-23	32.28 (18)	68.80 (10)	119.00 (8)	210.00 (6)	360.70 (3)	575.0 (3)	-
2023-24	33.46(19)	54.00 (8)	103 (8)	200.14 (7)	290.0 (4)	381.0 (4)	-
2024-25	33.28(23)	72.43(16)	93.11(9)	193.5(12)	260.0(1)	614.1(3)	-

9.12 Average Production Performance of Buffaloes Completing their Lactation

Lact. No.	No. of obs.	TLMY (kg)	Lact. Length (days)	SLMY (kg)	Peak yield (kg)
1st	7	2491.34±91.01	310.85±8.34	2464.62±83.43	12.92±0.23
2nd	6	2614.98±159.45	275.33±6.41	2614.81±159.31	14.91±0.75
3rd	3	3418.9±108.03	303.66±15.23	3396.43±129.77	18.7±2.18
4th	0	-	-	-	-
5th & above	5	2699.44±81.93	310.2±17.25	2581.78±74.21	13.88±0.91
Overall	**21**	**2692.05±87.79**	**299.52±6.27**	**2668.54±87.29**	**14.54±0.57**

9.12.1 Average production performance of Buffaloes since Inception of Network

Year	N	Lact. Length (days)	TLMY (kg)	SLMY (kg)	Peak yield (kg)
2017-18	36	278	2248.77	2187.60	12.36
2018-19	39	300	2543	2458	13.54
2019-20	44	302	2549	2478	13.71
2020-21	29	281	2511	2473	13.4
2021-22	32	299.18	2552.0	2485.43	13.94
2022-23	25	292.56	2198.43	2168.95	12.53
2023-24	25	310.2	2702.62	2623.26	14.52
2024-25	21	299.52	2692.05	2668.54	14.54

9.12.2 Average production performance of Buffaloes (elite) since Inception of Network

Year	No. of Animals	Av. 305-day Yield (Kg)	Av. Lactation Length (days)	Average Complete Lactation Yield (kg)	Average Peak Yield (kg)
2017-18	3	2810	355	2941	16.03
2018-19	6	3206	342	3452	17.57
2019-20	11	2907	348	3090	14.91
2020-21	6	2900	291	2922	15.6
2021-22	6	3092	329	3185	16.75
2022-23	4	2940	306	2970	15.12
2023-24	8	3197	353	3429	16.20
2024-25	4	3367	301	3384.1	18.67

9.13 Average Milk Composition from April 2024 to March 2025

Month	N	Fat	SNF	Protein	Lactose
April 24	32	8.02	9.67	3.99	4.1
May	33	8.04	9.48	3.92	4.6
June	27	7.66	9.54	3.93	4.1
July	26	7.11	9.37	3.92	4.4
August	27	7.09	9.26	3.52	4.2
September	28	7.26	9.35	4.01	4.3
October	28	7.37	9.94	4.13	4.0
November	26	8.06	9.91	4.14	4.2
December	31	8.19	9.73	4.07	3.9
January 25	31	7.74	9.97	4.17	4.2
February	29	7.32	9.83	4.45	4.4
March	27	7.60	9.87	4.60	4.1
Overall	**29**	**7.62**	**9.66**	**4.07**	**4.2**

9.14: Reproductive Performance during the year 4/2024 to 3/2025

Lactation / Parity	N	AFC (Months)	SP (Days)	DP (Days)	CI (Days)
1	8	37.90±1.94	-	-	-
2	8	-	109.25±32.30	131.75±26.43	417.5±31.61
3	7	-	117.71±23.46	145.57±17.18	428±23.63
4	3	-	85.0±13.79	90±7.93	394±15.37
5th and above	5	-	123.2±30.94	275.2±86.02	432.4±29.72
Overall	**31**	**37.90±1.94**	**111.69±14.40**	**161.69±23.88**	**420.86±14.18**

9.14.1 Reproduction Performance Since inception of Network

Years	AFC (Months)	Service Period (days)	Dry Period (days)	Calving Interval (days)
2017-18	42.43 (18)	180.15 (34)	215.09 (34)	486.82 (34)
2018-19	40.27±1.80 (15)	168.02±30.10 (40)	238.37±33.20 (40)	475.57±30.31 (40)
2019-20	40.9±1.21 (18)	150.4±11.8 (53)	217±20.29 (53)	452.31±12.79 (53)
2020-21	40.3±2.2 (12)	109.6±10.9 (45)	183.6±5.9 (45)	417.9±3.8 (45)
2021-22	41.14±0.86 (21)	123.20±14.66 (45)	138.79±9.69 (45)	426.25±14.75 (45)
2022-23	40.54±1.15 (15)	120.87±12.69 (15)	209.87±22.13 (15)	429.13±11.89 (15)
2023-24	40.39±1.18 (12)	119.67±16.37 (15)	161.27±21.52 (15)	432.20±17.83 (15)
2024-25	**37.90±1.94**	**111.69±14.40**	**161.69±23.88**	**420.86±14.18**

9.15. Month-wise milk production and disposal during the period 4/2024 to 3/2025

Month	Production	Disposal			
	Total milk produced (kg)	Liquid milk (kg)	Calf feeding (kg)	Experimental purposes (kg)	Milk lost in handling (kg)
April 2024	6846.2	6209	615	-	22.2
May	6559.2	5883	656.5	-	19.7
June	7019.5	5692	1301	-	26.5
July	6023.6	4782	1218	-	23.6
August	6054.9	4785	1246.4	-	23.5
September	7437.6	5988	1427	-	22.6
October	7680.5	6146	1509.7	-	24.8
November	7248	6268	952.7	-	27.3
December	7588.4	6563	1000.7	-	24.7
January 2025	7362.9	6189	1151.2	-	22.7
February	6591.5	5778	792	-	21.4
March	7377	6960	390.7	-	26.3
Total	**83789.3**	**71243**	**12260.9**	**0**	**285.3**

9.15.1 Milk production and disposal during the period 4/2024 to 3/2025

Years	**Production**	**Disposal**			
	Total milk produced (kg)	Liquid milk (kg)	Calf feeding (kg)	Experimental purposes (kg)	Milk lost in handling (kg)
2017-18	88913.10	76025.0	12576.6	-	311.5
2018-19	97106.80	84574.0	12213.4	-	319.4
2019-20	85304.6	72319.0	12659.0	-	326.7
2020-21	100586.4	84412.0	15848.9	-	325.5
2021-22	80695.80	69312.0	11051.8	-	332.0
2022-23	78664.90	70117.0	8228.5	-	319.4
2023-24	85586.40	75048	10260.2	-	278.2
2024-25	83789.30	71243.00	12260.90	-	285.3

9.16 Feed and Fodder (Quintals) availability April 2024 – March 2025

Quarter	**Feed/fodder**	**Quantity produced at farm**	**Quantity purchased**	**Actually, fed to Nilli-Ravi buffaloes**
I (April – June)	Green	3109.30		3109.30
	Dry		302.04	302.04
	Silage		712.8	712.80
	Concentrate		784.0	784.00
II (July – September)	Green	3407.47		3407.47
	Dry		326.78	326.78
	Silage		636.93	636.93
	Concentrate		766.75	766.75
III (October –December)	Green	2357.41		2357.41
	Dry		330.93	330.93
	Silage		703.89	703.89
	Concentrate		788.25	788.25
IV (January-March)	Green	2047.77		2047.77
	Dry		306.80	306.80
	Silage		665.28	665.28
	Concentrate		752.25	752.25
Total	Green	**10921.95**		**10921.95**
	Dry		**1266.55**	**1266.55**
	Silage		**2718.90**	**2718.90**
	Concentrate		**3091.25**	**3091.25**

9.17: Milk performance during April 24 to March 2025

Month	Buffaloes in Milk	Dry buffaloes	Total	% in Milk	Wet Av. (kg)	Herd Av. (kg)
April 2024	31	18	49	63.26	7.33	4.63
May	30	15	45	66.66	6.81	4.54
June	26	20	46	56.52	8.84	4.99
July	22	25	47	46.80	8.83	4.13
August	27	22	49	55.10	7.23	4.00
September	28	22	50	56.00	8.85	4.95
October	28	23	51	54.90	8.84	4.85
November	28	19	47	59.57	8.63	5.14
December	29	14	43	67.44	8.44	5.69
January 2025	28	16	44	63.63	8.27	5.26
February	26	17	43	60.46	8.83	5.33
March	28	14	42	66.66	8.35	5.57
Overall	**27**	**19**	**46**	**59.75**	**8.27**	**4.92**

9.17.1 Milking performance since inception

Year	No. of Animals in Milk	No. of Animals dry	Total Animals	% in Milk	Wet Av. (kg)	Herd Av. (kg)
2017-18	35	27.50	62.08	55.50	7.85	4.2
2018-19	33	32	65	50.69	7.97	4.12
2019-20	34	31	65	52.15	7.99	4.06
2020-21	37	20	57	66.33	7.49	4.98
2021-22	28	17	45	62.79	8.21	4.95
2022-23	26	20	46	56.06	8.26	4.64
2023-24	27	19	46	58.42	8.39	4.95
2024-25	27	19	46	59.75	8.27	4.92

9.18: Bull wise daughters born (only numbers)

Bull No.	Daughters born	Daughters Calved (1st calver)	Daughters Calved	Daughters completing 1st Lactation
252	2	-	-	-
254	1	-	-	-
728	2	-	-	-
773	1	-	-	-
800	2	-	-	-
852	1	-	-	-
856	1	-	-	-
3002	1	-	-	-
3005	2	-	-	-
SHENSHAH	2	-	-	-
PUR	1	-	-	1
352	-	-	1	-
516	-	-	1	-
NAAG-2 (702)	-	-	2	1
905	-	-	1	-
BAKSH	-	-	1	-
NAAG	-	-	1	-
NR113	-	-	1	-
507	-	-		4
1359	-	-		1
OVERALL	**16**	-	8	7

9.19 Bull wise daughters completing 1ST lactation

Bull No.	Daughter No.	Date of birth	Date of calving	AFC (months)	Lact. Length (days)	TLMY (kg)	SLMY (kg)
507	3401	14-10-20	26-06-2023	32.30	341	2811.2	2703.9
507	3379	05-09-20	15-09-2023	36.23	278	2635.4	2635.4
507	3365	17-06-20	13-09-2023	38.79	307	2432.3	2431.3
507	3375	21-08-20	3-12-2023	39.31	325	2431.8	2406.6
702	3294	26-10-19	30-06-2023	44.03	312	2653	2638.2
1359	3277	19-08-19	14-07-2023	46.72	325	2415.6	2376.9
PUR	3361	05-06-20	18-Aug-2023	38.33	288	2060.1	2060.1

9.20 Breeding bulls Selected for current set

Sr. No	Bull No.	Date of Birth	Dam No.	Sire No.	Dam's best SLMY
1	3087 (935)	08-08-21	378	NR487	3533

9.20.1 PT Bulls for nominated mating

Bull No	Set No	Centre	Dams' best Yield	Sire Index	% Superiority
312	7th	CIRB, Nabha	3317	2461.12	5.93
352	7th	CIRB, Nabha	4050	2472.28	4.42

9.21 Target achieved during the year

Trait	Target	2020-21	2021-22	2022-23	2023-24	2024-25
Av. Age at first calving (months)	40	40.3 (12)	41.14 (21)	40.54 (15)	40.39 (12)	37.90 (8)
Av. Service period (days)	130	110 (45)	123 (45)	121 (15)	119.67 (15)	111.69 (23)
Calf mortality (0-3 months)	≤ 5 %	7.69%	17.54 %	18.75 %	11.63%	2.08 %
Wet average (kg)	≥8.5 kg	7.49	8.21	8.26	8.39 Kg	8.27 Kg
Herd average (kg)	≥5.5 kg	4.98	4.95	4.64	4.95 Kg	4.92 Kg

10. Salient Research Achievements:

A considerable progress has been made in achieving the targets of reduction in AFC, Service Period, and the Calf mortality.

11. Publications: - Nil

12. Constraints if any:

- Very limited availability of true to breed quality animals.
- Short lactation in animals.

13. Focus of work in the coming year:

Enhance the herd strength of elite animals by introducing superior germplasm, effective disease control, improve production and reproduction, and production of superior germplasm.

Project Co-ordinator's observations on centre performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC		Closing balance
Total	ICAR Share		ICAR Share	State Share	
38.00	28.50	28.50	28.50	9.50	Nil

Herd Performance

The herd strength of Nili-Ravi was 122, included 67 breedable buffaloes (> 2 years). A total 39 calves (23 male and 16 female) and 01 abortion reported during 2024-25. The calf mortality (0-3 months) controlled to 2.27 % during reporting period. Conception rate of 43.20 percent was almost same as last year. During the report period 20145 frozen semen doses produced/received and 15260 doses disseminated. The closing balance of frozen semen doses as on 31-03-2024 was 8533.

Annual average of total lactation milk yield, 305 or less day lactation milk yield and Peak Yield was 2692 kg (21), 2669 kg (21) and 14.54 Kg, respectively. The wet average and herd average decreased from 8.39 kg and 4.95 kg to 8.27 kg and 4.92 kg, respectively. Overall, 59.75 % buffaloes remained in milk during the year 2024-25. The reproductive traits viz: age at first calving, service period, dry period and calving interval was 37.90 months (08), 112 days (23), 162 days (23) and 421 days (23), respectively.

Accomplishment and Targets Achieved

Trait	**Target**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	**2024-25**
Av. Age at first calving (months)	40	40.3 (12)	41.14 (21)	40.54 (15)	40.39 (12)	37.90 (8)
Av. Service period (days)	130	110 (45)	123 (45)	121 (15)	119.67 (15)	111.69 (23)
Calf mortality (0-3 months)	≤ 5 %	7.69%	17.54 %	18.75 %	11.63%	2.08 %
Wet average (kg)	≥8.5 kg	7.49	8.21	8.26	8.39 Kg	8.27 Kg
Herd average (kg)	≥5.5 kg	4.98	4.95	4.64	4.95 Kg	4.92 Kg

Recommendations:

- Conception rate of Nili-Ravi GADVASU herd need to be improved.
- More efforts are required to improve the production traits of Nili-ravi herd at the centre.

NETWORK PROJECT ON BUFFALO IMPROVEMENT (FIELD UNITS)

Participating Units : **1. CIRB, Hisar**
2. GADVASU, Ludhiana
3. NDRI, Karnal

Date of start : 2001

INTRODUCTION:

Murrah is most important breed among milch buffaloes which draws maximum demand of its germplasm in the country. But the problem of non-availability of genetically superior and progeny tested bulls is acute to meet ever increasing demand for improvement of the country buffaloes. It is, therefore, essential to develop superior germplasm and test them efficiently on large organized herds as well as the ones available with the farmers. Progeny testing under institutional and field conditions besides providing superior bulls for use in developmental programme, helps in developing elite breeding herds. Buffalo herds available with various research institutions and those managed by the state/central government developmental agencies are too small in size to independently implement a worthwhile progeny testing programme for even a moderately accurate evaluation of bulls. It is more desirable to evaluate the bulls on the basis of their progeny performance raised in different environments at various associated organized as well as at the farmers herds.

OBJECTIVES:

To strengthen the ongoing sire evaluation programme of associated herd progeny testing by including field performance recording of the daughters of test bulls.

FIELD UNIT: CIRB HISAR

Name of the Institute : Central Institute for Research on Buffaloes, Hisar
Title of the project : Progeny testing of bulls under field conditions (FPT)
Principal Investigator : Dr. Sanjay Kumar, Sr Scientist

Technical programme: The use of semen of test bulls under Network Project on Buffalo Improvement on buffaloes in ten adopted villages of CIRB Hisar is undertaken. This has to be followed by pregnancy diagnosis, calving records, tagging and follow up of progenies till the completion of first lactation for milk records on the basis of monthly test day recording. Data on different aspects to be recorded as per specified format.

Report of the Project (April 2024– March 2025): Under field progeny testing program (FPT) semen of test bulls is used for artificial insemination in the field, followed by pregnancy diagnosis, calving records and follow up of progenies till the completion of first lactation for milk records on the basis of monthly test day recording. During the period from April 2024 to March 2025: - 4912 artificial inseminations were performed using test bulls of 21st and 22nd set. The use 21st set was initiated from July 2023 to December 2024 and 22nd set was initiated from January 2025. The conception rate in the field was worked out

to be 50.81%. In this period 1908* (AI 3755: April 24 to Dec 24) pregnancies were confirmed and 1566 calving (males 816, females 750) were recorded. Besides, 209 daughters (01 of 17th, 84 of 18th and 124 of 19th set) with an average age at first calving of 40.30 months were also calved, out of which 167 completed the lactation and rest were sold before completion of lactation. The physical identification using ear tagging has been done in all female progenies born in the field till Nov 2024 and being done for progenies born thereafter. As on 31st March 2025, 1269 female progenies of 18th to 21st set of different age are standing at various field unit centres for future recordings.

F 3. Month-wise AI at Different Field Unit Centres during 4/2024 to 3/25

	Centre/ Village												
	Beed	**Juglan**	**Dhiktana**	**Kheri**	**Jewra**	**Kirara/ Syamsukh**	**Sarsod**	**Bichpari**	**Bado**	**Bugana**	**Dabri**	**Bhirani**	**Total**
April 24	14	19	16	16	20	17	25	18	18	14	-	-	**177**
May	16	31	20	14	20	20	45	24	17	15	-	-	**222**
June	20	26	19	18	25	17	48	30	21	15	-	-	**239**
July	15	36	35	23	37	20	51	31	28	16	-	-	**292**
Aug	25	53	34	28	57	16	38	32	31	18	-	-	**332**
Sept	32	75	36	31	53	47	48	48	36	25	74	22	**527**
Oct	48	102	36	35	86	48	81	48	44	35	107	32	**702**
Nov	48	90	51	33	88	43	73	43	53	35	80	50	**687**
Dec	50	66	36	38	59	48	66	55	50	38	49	22	**577**
Jan 25	29	69	37	30	51	31	67	37	42	43	47	13	**496**
Feb	20	34	36	32	41	22	41	28	37	34	27	11	**363**
March	21	33	38	22	27	19	35	30	27	22	18	6	**298**
Total	**338**	**634**	**394**	**320**	**564**	**348**	**618**	**424**	**404**	**310**	**402**	**156**	**4912**

F 4. Bull-wise AI at Different Field Unit Centres during the Period 4/2024 to 3/2025

Months				**Bull No.**									
	109 XXI	**112 XXI**	**297 XXI**	**2979 XXI**	**2990 XXI**	**5414 XXI**	**5629 XXI**	**5638 XXI**	**5690 XXI**	**5764 XXI**	**7630 XXI**	**7768 XXI**	**7990 XXI**
Apr 24	2	115	50	-	-	-	-	-	-	-	-	-	10
May	73	17	54	-	-	-	-	-	-	69	9	-	-
Jun	66	-	-	-	42	-	-	-	-	-	131	-	-
Jul	11	-	-	-	88	-	-	-	-	-	193	-	-
Aug	47	-	-	-	-	-	-	-	186	99	-	-	-
Sep	117	109	33	-	48	-	129	-	88	3	-	-	-
Oct	-	1	126	149	82	106	99	-	-	-	139	-	-
Nov	3	1	1	6	-	27	75	158	128	147	4	-	137
Dec	99	102	133	-	-	-	-	-	38	-	95	110	-
Jan 25	-	-	3	-	-	-	-	-	-	-	-	5	-
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-
Mar	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**418**	**345**	**400**	**155**	**260**	**133**	**303**	**158**	**440**	**318**	**571**	**115**	**147**

Cont. F 4.

Month	3097 XXII	3126 XXII	5791 XXII	5814 XXII	5912 XXII	8100 XXII	Total
Apr 24	-	-	-	-	-	-	**177**
May	-	-	-	-	-	-	**222**
June	-	-	-	-	-	-	**239**
July	-	-	-	-	-	-	**292**
Aug	-	-	-	-	-	-	**332**
Sept	-	-	-	-	-	-	**527**
Oct	-	-	-	-	-	-	**702**
Nov	-	-	-	-	-	-	**687**
Dec	-	-	-	-	-	-	**577**
Jan 25	-	-	134	274	80	-	**496**
Feb	132	-	-	5	198	28	**363**
Mar	1	3	134	-	39	121	**298**
Total	133	3	268	279	317	149	**4912**

F 5. Month-wise Conception at Different Field Unit Centres during 4/2024-3/2025

Month	Centre/ Village												Total
	Beed	Juglan	Dhiktana	Kheri	Jewra	Kirara Syamsukh	Sarsod	Bichpari	Baado	Bugana	Dabri	Bhirani	
Apr 24	14	30	21	22	16	15	25	19	22	8	-	-	**192**
May	19	25	14	15	14	12	26	16	17	6	-	-	**164**
Jun	17	21	8	14	10	11	22	9	16	5	-	-	**133**
Jul	9	11	7	9	9	8	13	8	10	8	-	-	**92**
Aug	8	16	9	8	9	9	20	12	10	7	-	-	**108**
Sep	12	14	7	11	13	9	26	18	13	7	-	-	**130**
Oct	9	19	17	13	17	9	24	18	15	7	-	-	**148**
Nov	14	27	23	15	28	8	20	17	15	9	-	-	**176**
Dec	21	41	20	18	28	21	27	29	20	15	29	8	**277**
Jan 25	21	45	18	21	37	20	47	27	27	18	49	11	**341**
Feb	20	37	28	20	37	22	40	24	32	18	41	25	**344**
Mar	25	25	18	26	28	21	38	28	31	19	23	10	**292**
Total	**189**	**311**	**190**	**192**	**246**	**165**	**328**	**225**	**228**	**127**	**142**	**54**	**2397**

F 6. Bull-wise Conception at Different Field Unit Centres during the Period 4/2024 to 3/2025

Months	Bull No.														Total
	109 XXI	112 XXI	297 XXI	2979 XXI	2990 XXI	3014 XXI	5414 XXI	5629 XXI	5638 XXI	5690 XXI	5764 XXI	7630 XXI	7768 XXI	7990 XXI	
Apr 24	-	-	22	-	4	80	-	-	-	-	-	24	-	62	**192**
May	79	7	57	-	-	-	-	-	-	-	-	-	-	21	**164**
Jun	9	74	16	-	-	-	-	-	-	-	-	-	-	34	**133**
Jul	01	61	25	-	-	-	-	-	-	-	-	-	-	05	**92**
Aug	37	10	28	-	-	-	-	-	-	-	29	04	-	-	**108**
Sep	38	-	-	-	23	-	-	-	-	-	-	69	-	-	**130**
Oct	4	-	-	-	49	-	-	-	-	-	95	-	-	-	**148**
Nov	24	-	-	-	-	-	-	-	-	101	51	-	-	-	**176**
Dec	62	55	18	-	22	-	-	69	-	48	03	-	-	-	**277**
Jan 25	-	-	61	68	35	-	55	51	-	-	-	71	-	-	**341**
Feb	1	-	-	4	-	-	14	39	80	67	62	3	-	74	**344**
Mar	46	54	68	-	-	-	-	-	-	18	-	49	57	-	**292**
Total	**301**	**261**	**295**	**72**	**133**	**80**	**69**	**159**	**80**	**234**	**240**	**220**	**57**	**196**	**2397**

F 7. Month-wise Calving at Different Field Unit Centres during 2024-25

Month									Centre/Village																Total	
	Beed		Juglan		Dhiktna		Kheri		Jewra		Kirara Syamsukh		Sarsod		Bichpari		Bado		Bugana		Dabri		Bhirani			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Apr 24	6	5	10	5	0	0	4	4	2	5	4	2	7	6	5	5	6	3	0	0	-	-	-	-	**44**	**35**
May	3	4	8	6	5	3	4	5	7	7	4	4	7	7	4	4	4	5	2	3	-	-	-	-	**48**	**48**
Jun	8	5	9	9	4	6	5	3	6	7	5	4	8	5	6	5	5	6	7	4	-	-	-	-	**63**	**54**
July	11	13	22	13	8	4	6	4	10	9	4	4	14	10	10	9	4	5	6	4	-	-	-	-	**95**	**75**
Aug	13	12	14	16	11	8	5	4	9	9	5	6	12	15	11	9	7	7	7	4	-	-	-	-	**94**	**90**
Sep	15	13	15	18	14	11	9	9	7	8	4	5	14	14	15	10	10	8	5	3	-	-	-	-	**108**	**99**
Oct	10	10	8	16	10	6	5	8	10	11	6	6	18	11	12	8	8	9	6	7	-	-	-	-	**93**	**92**
Nov	6	7	15	11	7	10	7	8	8	7	7	5	8	9	6	7	9	9	4	3	-	-	-	-	**77**	**76**
Dec	7	7	11	11	5	6	7	5	5	7	6	4	11	10	7	5	7	7	3	2	-	-	-	-	**69**	**64**
Jan 25	6	1	6	4	4	3	6	6	4	5	5	4	5	8	3	4	6	8	1	2	-	-	-	-	**46**	**45**
Feb	5	3	5	2	3	3	3	3	4	4	3	4	6	6	3	3	3	4	4	3	-	-	-	-	**39**	**35**
Mar	4	2	7	3	3	3	3	3	2	5	3	4	7	7	3	4	4	4	4	2	-	-	-	-	**40**	**37**
Total	**94**	**82**	**130**	**114**	**74**	**63**	**64**	**62**	**74**	**84**	**56**	**52**	**117**	**108**	**85**	**73**	**73**	**75**	**49**	**37**	**-**	**-**	**-**	**-**	**816**	**750**

F 8. Bull-wise Calving at Different Field Unit Centres during the Period 4/2024 to 3/2025

Months	Bull No.																													
	19 XX		1454 XX		2793 XX		2831 XX		2838 XX		2850 XX		3004 XX		5427 XX		5481 XX		5500 XX		5505 XX		5511 XX		5588 XX		7584 XX		7649 XX	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
April 24	0	2	-	-	0	1	-	-	-	-	-	-	-	-	1	1	18	10	-	-	-	-	25	20	-	-	0	1	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	4	1	0	-	-	2	0	-	-	4	6	-	-
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sept	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jan 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Feb	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**0**	**2**			**0**	**1**									**1**	**1**	**21**	**14**	**1**	**0**			**27**	**20**			**4**	**7**		

Months	Bull No.																												Total	
	109 XXI		112 XXI		297 XXI		2979 XXI		2990 XXI		3014 XXI		5414 XXI		5629 XXI		5638 XXI		5690 XXI		5764 XXI		7630 XXI		7768 XXI		7990 XXI			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Apr 24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**44**	**35**
May	-	-	-	-	-	-	-	-	-	-	10	15	-	-	28	23	-	-	-	-	-	-	-	-	-	-	-	-	**48**	**48**
Jun	-	-	-	-	-	-	-	-	-	-	13	13	22	13	-	-	-	-	-	-	-	-	-	-	28	28	-	-	**63**	**54**
Jul	-	-	-	-	-	-	21	19	-	-	-	-	8	7	24	24	5	0	-	-	-	-	-	-	37	25	-	-	**95**	**75**
Aug	-	-	-	-	-	-	23	27	-	-	-	-	28	31	-	-	43	32	-	-	-	-	-	-	-	-	-	-	**94**	**90**
Sep	-	-	-	-	-	-	10	6	-	-	26	29	-	-	-	-	13	17	28	20	-	-	-	-	31	27	-	-	**108**	**99**
Oct	-	-	-	-	-	-	-	-	31	28	15	15	4	3	-	-	27	27	-	-	-	-	16	19	-	-	-	-	**93**	**92**
Nov	-	-	-	-	11	7	-	-	3	1	30	33	-	-	-	-	-	-	-	-	-	-	9	10	-	-	24	25	**77**	**76**
Dec	29	35	4	2	24	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	5	**69**	**64**
Jan 25	4	3	24	25	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	14	**46**	**45**
Feb	0	1	28	20	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	4	**39**	**35**
Mar	13	14	4	4	14	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	10	1	1	-	-	-	-	**40**	**37**
Total	**46**	**53**	**60**	**51**	**66**	**50**	**54**	**52**	**34**	**29**	**94**	**105**	**62**	**54**	**52**	**47**	**88**	**76**	**28**	**20**	**8**	**10**	**26**	**30**	**96**	**80**	**48**	**48**	**816**	**750**

F 9. Bull-wise Live Female Progeny at Different Field Unit Centers (0-6month) as on 3/2025

Bull No. Centres	109 XXI	112 XXI	297 XXI	2990 XXI	3014 XXI	5414 XXI	5638 XXI	5764 XXI	7630 XXI	7990 XXI	Total
Beed	3	2	1	1	2	-	2	-	1	3	**15**
Juglan	6	5	4	2	3	-	1	1	2	4	**28**
Dhiktana	2	2	3	1	1	-	2	-	-	1	**12**
Kheri	3	4	4	1	2	-	1	-	2	1	**18**
Jewra	4	3	2	4	3	1	1	1	1	4	**24**
Kirara	2	3	2	1	1	-	2	-	-	2	**13**
Sarsod	6	5	5	3	4	1	3	2	3	5	**37**
Bichpari	2	3	4	1	3	-	1	-	4	5	**23**
Bado Patti	2	-	1	1	4	-	1	1	3	2	**15**
Bugana	-	1	-	1	4	-	1	1	2	1	**11**
Total	**30**	**28**	**26**	**16**	**27**	**2**	**15**	**6**	**18**	**28**	**196**

F 10. Bull-wise Live Female Progeny at Different Field Unit Centers (6-12month) as on 3/2025

Bull No. Centres	19 XX	2793 XX	5481 XX	5511 XX	7584 XX	297 XXI	2979 XXI	3014 XXI	5414 XXI	5629 XXI	5638 XXI	5690 XXI	7768 XXI	7990 XXI	Total
Beed	-	-	1	1	1	-	3	1	4	4	1	2	5	-	**23**
Juglan	-	-	1	1	-	-	6	3	3	5	-	3	7	-	**29**
Dhiktana	-	1	-	-	-	-	2	-	4	3	5	-	6	-	**21**
Kheri	-	-	-	4	-	-	2	2	2	3	3	-	4	-	**20**
Jewra	-	-	-	2	3	1	3	1	3	-	5	-	5	1	**24**
Kirara	-	-	-	1	1	-	1	1	1	1	4	-	4	-	**14**
Sarsod	1	-	3	1	-	-	3	3	11	3	5	1	5	-	**36**
Bichpari	-	-	2	-	-	-	3	1	5	3	-	4	4	-	**22**
Bado Patti	-	-	1	3	-	-	3	2	5	5	1	-	3	-	**23**
Bugana	-	-	-	-	-	-	1	1	4	2	-	-	4	-	**12**
Total	**1**	**1**	**8**	**13**	**5**	**1**	**27**	**15**	**42**	**29**	**24**	**10**	**47**	**1**	**224**

F 11. Bull-wise Live Female Progeny at Different Field Unit Centers (1-3 years) as on 3/2025

Bull No. Centres	1315 XIX	2674 XIX	2737 XIX	5181 XIX	5246 XIX	5310 XIX	5320 XIX	5333 XIX	5374 XIX	7604 XIX	Total
Beed	6	3	1	-	1	-	1	7	1	-	**20**
Juglan	2	3	1	1	2	-	4	4	2	4	**23**
Dhiktana	2	-	4	2	-	1	1	1	1	-	**12**
Kheri	6	-	2	1	1	-	-	3	-	2	**15**
Jewra	4	-	2	1	2	4	5	5	4	6	**33**
Kirara	3	-	-	-	1	-	1	2	2	3	**12**
Sarsod	4	3	3	3	1	1	3	6	2	7	**33**
Bichpari	6	1	2	-	3	1	3	2	1	7	**26**
Bado Patti	2	3	3	-	1	1	1	-	-	2	**13**
Bugana	1	-	-	-	1	-	-	-	-	1	**3**
Total	**36**	**13**	**18**	**8**	**13**	**8**	**19**	**30**	**13**	**32**	**190**

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Bull No. Centres	19 XX	1454 XX	2793 XX	2831 XX	2838 XX	2848 XX	2850 XX	3004 XX	5427 XX	5481 XX	5500 XX	5505 XX	5511 XX	5588 XX	7584 XX	7649 XX	Total
Beed	4	2	3	7	2	1	5	2	5	6	7	8	2	1	9	4	**68**
Juglan	7	5	4	5	3	1	5	3	6	7	7	8	1	2	4	5	**73**
Dhiktana	-	5	5	1	9	1	5	4	4	3	4	5	1	2	1	2	**52**
Kheri	4	4	1	6	-	-	9	4	9	2	-	2	4	-	-	6	**51**
Jewra	1	9	3	-	3	1	-	4	3	3	6	5	2	2	6	3	**51**
Kirara	2	2	2	-	3	-	1	3	2	3	8	1	3	2	2	2	**36**
Sarsod	6	5	4	8	6	4	3	4	6	8	8	4	7	2	3	4	**82**
Bichpari	5	7	3	7	8	3	4	8	5	9	1	5	3	1	3	2	**74**
Bado Patti	2	3	1	4	1	-	6	3	4	2	6	3	1	1	-	5	**42**
Bugana	1	3	3	1	1	1	2	2	-	-	2	4	1	-	1	3	**25**
Total	**32**	**45**	**29**	**39**	**36**	**12**	**40**	**37**	**44**	**43**	**49**	**45**	**25**	**13**	**29**	**36**	**554**

F 12. Bull-wise Live Female Progeny at Different Field Unit Centers (> 3 years) as on 3/2025

Bull No. Centres	1150 XVIII	1208 XVIII	4905 XVIII	7147 XVIII	7227 XVIII	2674 XIX	2737 XIX	2759 XIX	5181 XIX	5232 XIX	5246 XIX	5310 XIX	5320 XIX	5333 XIX	5374 XIX	7604 XIX	**Total**
Beed	1	2	1	-	-	-	-	4	-	1	2	1	1	-	4	-	**17**
Juglan	-	-	-	-	-	-	-	6	1	-	-	2	1	1	2	-	**13**
Dhiktana	-	-	-	-	-	-	1	-	-	1	-	1	-	-	-	-	**3**
Kheri	-	-	-	-	-	-	-	2	-	1	-	-	-	2	-	-	**5**
Jewra	-	1	-	1	1	1	2	1	2	3	1	-	3	3	7	2	**28**
Kirara	-	-	-	-	-	-	-	2	-	2	-	1	-	1	1	-	**7**
Sarsod	-	-	-	-	-	-	4	3	-	-	2	2	-	1	-	-	**12**
Bichpari	-	-	-	-	-	-	1	3	2	1	-	2	2	3	3	-	**17**
Bado Patti	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	**1**
Bugana	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	**2**
Total	**1**	**3**	**1**	**1**	**1**	**1**	**8**	**22**	**5**	**9**	**5**	**9**	**8**	**11**	**18**	**2**	**105**

F 13. Bull-wise Daughters Calved at Different Field Units during 2024-2025

Bull No. Centres	**2674 XIX**	**2737 XIX**	**2759 XIX**	**5181 XIX**	**5232 XIX**	**5246 XIX**	**5310 XIX**	**5320 XIX**	**5333 XIX**	**5374 XIX**	**7604 XIX**	**Total**
Beed	-	2	-	-	3	5	1	-	1	-	-	**12**
Juglan	1	4	3	1	8	2	2	-	-	1	-	**22**
Dhiktana	1	2	-	1	-	-	-	1	-	-	-	**5**
Kheri	2	1	2	2	-	-	1	2	2	1	-	**13**
Jewra	1	1	2	2	3	1	-	-	-	1	1	**12**
Kirara	1	1	-	1	-	1	1	-	-	-	-	**5**
Sarsod	2	2	-	2	3	4	1	2	-	2	-	**18**
Bichpari	1	3	-	2	3	3	3	2	-	-	1	**18**
Bado Patti	-	3	2	2	1	2	2	-	2	-	1	**15**
Bugana	1	-	-	-	1	1	-	1	-	-	-	**4**
Total	**10**	**19**	**9**	**13**	**22**	**19**	**11**	**8**	**5**	**5**	**3**	**124**

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Bull No. / Centres	Dara XVII	1150 XVIII	1208 XVIII	1209 XVIII	1219 XVIII	2645 XVIII	2676 XVIII	2677 XVIII	2689 XVIII	4905 XVIII	4995 XVIII	5147 XVIII	7094 XVIII	7147 XVIII	7227 XVIII	7263 XVIII	**Total**
Beed	1	1	2	-	2	-	-	-	2	3	3	1	1	1	3	-	**20**
Juglan	-	-	3	-	-	-	1	-	-	-	-	2	1	-	1	-	**8**
Dhiktana	-	-	1	-	-	1	-	1	1	-	-	-	1	-	-	-	**5**
Kheri	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	**2**
Jewra	-	-	2	-	2	1	1	1	1	-		-	-	2	1	-	**11**
Kirara	-	1	-	-	-	-	-	-	1	1	1	-	1	-	-	-	**5**
Sarsod	-	-	1	-	2	3	-	2	-	-	2	1	-	-	4	-	**15**
Bichpari	-	1	-	1	4	1	2	1	-	-	1	1	1	-	-	-	**13**
Bado Patti	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	**3**
Bugana	-	-	1	-	-	-	-	-	1	-	-	-	-	1	-	-	**3**
Total	**1**	**3**	**10**	**1**	**10**	**7**	**4**	**5**	**6**	**5**	**7**	**5**	**5**	**6**	**9**	**1**	**85**

F 14. Bull-wise Daughters Recorded at Different Field Units Centres during the Period 4/2024 to 3/2025

Field Units	Bull No.	Dgtr No.	Date of Birth	Date of Calving	Monthly Milk Records																	
					I		II		III		IV		V		VI		VII		VIII		IX		X	
					M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E	M	E
Beed																								
	330 XVII	908	22/03/19	24/06/23	4.0	4.0	4.3	4.2	4.5	4.5	4.5	4.5	4.0	4.0	3.8	3.7	3.0	3.0	5.0	0.0	4.0	0.0	4.0	0.0
	4995 XVIII	1100	29/09/20	25/06/23	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.7	3.0	2.0	5.5	0.0	3.0	0.0	3.0	0.0
	7010 XVII	953	24/08/19	02/08/23	3.5	3.5	4.0	4.0	4.8	4.7	4.5	4.5	4.0	4.0	3.8	3.7	3.5	3.0	3.0	3.0	5.0	0.0	3.0	0.0
	7094 XVIII	1023	06/01/20	08/08/23	4.0	4.0	4.5	4.5	5.0	5.0	4.8	4.7	4.3	4.2	3.5	3.5	3.0	3.0	2.5	2.5	2.0	2.0	3.0	0.0
	2645 XVIII	1044	25/04/20	26/08/23	4.8	4.7	5.3	5.2	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	Sold	x	x	x	x	x
	Siknder XVII	976	25/09/19	06/09/23	4.5	4.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.0	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	5.0	0.0
	330 XVII	916	25/04/19	08/09/23	3.8	3.7	4.0	4.0	4.0	4.0	4.3	4.2	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.7	3.0	3.0	4.0	0.0
	2645 XVIII	1032	05/02/20	02/10/23	3.5	3.5	4.5	4.5	4.8	4.7	5.0	5.0	4.8	4.7	4.5	4.5	4.3	4.2	3.8	3.7	3.0	3.0	2.5	2.5
	1219 XVIII	1071	12/08/20	02/10/23	4.0	4.0	4.5	4.5	4.5	4.5	5.3	5.2	5.0	5.0	5.0	5.0	4.8	4.7	4.0	4.0	3.5	3.0	3.0	3.0
	1209 XVIII	1042	02/04/20	25/10/23	3.8	3.7	4.5	4.5	5.0	5.0	4.3	4.2	4.0	4.0	4.0	4.0	3.8	3.7	3.0	3.0	5.0	0.0	4.0	0.0
	4995 XVIII	1109	04/10/20	06/11/23	4.0	4.0	5.0	5.0	5.5	5.5	5.3	5.2	5.0	5.0	4.8	4.7	4.3	4.2	4.0	4.0	3.5	3.5	5.0	0.0
	Dara XVII	947	01/08/19	09/11/23	3.3	3.2	4.0	4.0	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	4.0	4.0	3.5	3.7	3.0	3.0	Dry	x
	2676 XVIII	1088	12/09/20	05/12/23	3.5	3.5	4.3	4.2	4.5	4.5	5.0	5.0	5.3	5.2	4.3	4.2	4.0	4.0	4.0	4.0	3.0	3.0	2.0	1.0
	2558 XVII	972	17/09/19	03/02/24	3.5	3.5	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	3.0	2.0	4.0	0.0	3.0	0.0	3.0	0.0
	2677 XVIII	1060	05/07/20	18/02/24	4.0	4.0	6.0	6.0	4.5	4.5	7.0	7.0	6.0	6.0	6.0	6.0	5.5	5.0	4.0	4.0	7.0	0.0	5.0	0.0
	2677XVIII	1158	25/12/20	16/03/24	3.5	3.5	4.3	4.2	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	4.0	4.0	3.5	3.5	3.0	3.0	Dry	x
	5246 XIX	1193	20/06/21	16/04/24	4.0	4.0	5.0	5.0	6.0	6.0	5.5	5.5	5.0	5.0	4.8	4.7	4.5	4.5	4.3	4.2	4.0	4.0	Sold	x
	7227 XVIII	1130	22/10/20	24/04/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	Dara XVII	985	18/10/19	28/05/24	3.5	3.5	4.8	4.7	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	5.2	4.2	4.8	4.1	4.2	4.4
	1219 XVIII	1176	24/03/21	07/06/24	3.0	3.0	4.0	4.0	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5	3.2	2.4	3.4	2.1	3.2	2.2
	7094 XVIII	1067	14/07/20	25/06/24	3.5	3.5	4.0	4.0	4.3	4.2	4.0	4.0	4.5	4.5	4.3	4.2	3.7	2.4	3.5	2.4	2.5	3.1		
	1208 XVIII	1152	10/12/20	25/06/24	4.0	4.0	4.5	4.5	4.8	4.7	4.5	4.5	4.0	4.0	3.8	3.7	3.4	2.3	3.4	2.2	3.1	2.2		
	5147 XVIII	1056	03/07/20	28/06/24	4.0	4.0	4.3	4.2	4.5	4.5	4.3	4.2	3.8	3.7	3.5	3.5	2.2	1.9	2.4	1.9	2.3	1.9		
	5246 XIX	1208	18/07/21	30/06/24	3.5	3.5	4.0	4.0	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	Sold	x	x	x	x	x	x	x
	4905 XVIII	1010	25/11/19	06/07/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	7147 XVIII	1091	20/09/20	11/07/24	4.0	4.0	4.5	4.5	5.0	5.0	4.8	4.7	5.0	5.0	4.5	4.5	3.2	2.2	3.3	2.1	3.2	2.1		

	7227 XVIII	1116	22/10/20	18/07/24	3.5	3.5	4.0	4.0	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	Sold	x	x	x	x	x	x	x
	4995 XVIII	1113	12/10/20	28/07/24	3.5	3.5	4.0	4.0	5.0	5.0	5.0	5.0	5.5	5.0	4.6	4.1	4.4	4.1	4.2	4.1				
	2737 XIX	1231	20/08/21	02/08/24	4.0	4.0	5.0	5.0	6.0	6.0	5.5	5.5	5.0	5.0	4.2	3.9	4.4	4.1	4.2	4.1				
	4995 XVIII	1098	28/09/20	06/08/24	3.5	3.5	4.0	4.0	4.5	4.5	5.0	5.0	4.5	4.5	Sold	x	x	x	x	x	x	x	x	x
	4905 XVIII	1164	06/01/21	15/08/24	3.0	3.0	4.0	4.0	4.8	4.7	5.3	5.2	5.0	5.0	4.4	3.3	4.5	4.1	4.4	4.1				
	5232 XIX	1195	30/06/21	26/08/24	3.8	3.7	4.5	4.5	5.0	5.0	4.5	4.5	4.5	3.4	4.6	3.5	4.5	3.6						
	1219 XVIII	1178	28/03/21	02/09/24	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	4.2	3.9	4.3	4.1	4.2	4.1						
	5232 XIX	1234	19/08/21	02/09/24	3.5	3.5	4.0	4.0	4.0	4.0	4.5	4.5	Sold	x	x	x	x	x	x	x	x	x	x	x
	2737 XIX	1255	27/09/21	06/09/24	4.0	4.0	5.0	5.0	5.0	5.0	4.8	4.7	5.8	4.7	5.6	4.5	5.5	4.2						
	2689 XVIII	1186	03/05/21	10/09/24	3.8	3.7	4.5	4.5	4.8	4.7	4.5	4.5	4.3	4.1	4.4	4.1	4.4	4.1						
	4905 XVIII	1011	23/11/19	14/09/24	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.1	4.8	4.3	4.7	4.4						
	1150 XVIII	1137	14/11/19	14/09/24	3.5	3.5	4.0	4.0	4.3	4.2	4.0	4.0	5.1	4.3	4.7	4.4	4.7	4.4						
	5246 XIX	1211	20/07/21	28/09/24	4.0	4.0	4.5	4.5	4.8	4.7	5.7	5.1	5.6	5.1	5.3	5.1								
	4995 XVIII	1108	03/10/20	02/10/24	3.8	3.7	4.5	4.5	5.0	5.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x
	5246 XIX	1217	03/08/21	06/10/24	3.5	3.5	4.0	4.0	4.5	4.5	5.4	4.3	5.5	4.6	5.4	4.4								
	7227 XVIII	1069	22/07/20	11/10/24	3.8	3.7	4.0	4.0	4.3	4.2	5.2	4.3	5.4	4.4	5.3	4.2								
	5232 XIX	1215	26/07/21	20/10/24	3.5	3.5	4.0	4.0	4.3	4.2	5.3	4.4	5.6	4.5	5.5	4.6								
	5246 XIX	1206	18/07/21	26/10/24	3.0	3.0	4.0	4.0	5.2	4.2	5.4	4.4	5.2	4.4										
	1208 XVIII	1163	06/12/20	28/10/24	4.0	4.0	5.0	5.0	5.9	4.8	5.7	4.4	5.5	4.3										
	2689 XVIII	1139	17/11/20	17/11/24	3.5	3.5	3.5	3.5	5.8	4.3	5.7	4.2	5.7	4.4										
	5310 XIX	1268	23/10/21	24/11/24	4.0	4.5	4.2	3.6	4.6	3.5	4.3	4.1												
	5333 XIX	1312	03/04/22	10/12/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Juglan																								
	1148 XVII	1489	05/03/19	03/07/23	4.0	4.0	5.5	5.5	5.5	5.5	6.0	6.0	5.5	5.5	5.0	5.0	4.3	4.2	4.0	4.0	3.5	3.5	4.0	0.0
	4733 XVII	1533	06/08/19	15/07/23	3.5	3.5	4.3	4.2	4.5	4.5	5.0	5.0	4.8	4.7	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	4.5	0.0
	2558 XVII	1554	13/09/19	27/07/23	4.0	4.0	5.0	5.0	5.5	5.5	5.0	5.0	4.5	4.5	4.3	4.2	4.0	4.0	3.5	3.5	2.5	2.5	4.0	0.0
	2676 XVIII	1690	06/09/20	03/08/23	3.5	3.5	4.0	4.0	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	3.5	3.0	3.0	3.0	5.0	0.0	4.0	0.0
	1219 XVIII	1638	04/05/20	11/08/23	4.0	4.0	4.8	4.7	5.0	5.0	5.3	5.2	5.0	5.0	4.8	4.7	3.8	3.7	3.3	3.2	3.0	3.0	3.0	2.0
	7094 XVIII	1657	08/07/20	18/08/23	4.3	4.2	5.0	5.0	6.0	6.0	6.0	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.3	3.2	3.0	3.0
	2645 XVIII	1631	25/04/20	25/08/23	4.0	4.0	5.0	5.0	5.8	5.7	5.5	5.5	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	3.3	3.2	4.0	0.0
	1219 XVIII	1649	15/06/20	30/08/23	4.0	4.0	5.0	5.0	5.3	5.2	5.5	5.5	5.0	5.0	4.5	4.5	4.5	4.5	4.3	4.2	3.5	3.5	3.0	2.0
	4995 XVIII	1704	08/10/20	30/08/23	3.5	3.5	5.3	5.2	5.5	5.5	5.3	5.2	4.8	4.7	4.5	4.5	4.3	4.2	3.8	3.7	3.3	3.2	3.0	3.0
	4995 XVIII	1651	24/06/20	03/09/23	3.8	3.7	4.0	4.0	4.8	4.7	4.5	4.5	4.3	4.2	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.0	3.0	3.0
	2645 XVIII	1679	18/08/20	12/09/23	4.0	4.0	4.5	4.5	5.0	5.0	4.8	4.7	5.0	5.0	4.8	4.7	4.5	4.5	4.3	4.2	4.0	4.0	3.5	3.5
	1208 XVIII	1682	20/08/20	14/09/23	3.5	3.5	4.8	4.7	5.5	5.5	5.3	5.2	4.8	4.7	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.0
	6942 XVII	1592	10/11/19	26/09/23	3.5	3.5	5.3	5.2	5.5	5.5	5.5	5.5	5.5	5.0	5.0	5.0	4.5	4.5	3.8	3.7	3.5	3.5	3.0	2.0
	2689 XVIII	1723	16/11/20	26/09/23	4.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.7	4.5	4.5	4.0	4.0	4.0	4.0	6.0	0.0
	1150 XVIII	1614	26/01/20	22/10/23	3.5	3.5	4.5	4.5	5.3	5.2	4.8	4.7	4.5	4.5	4.0	4.0	3.5	3.5	3.3	3.2	3.5	2.0	4.0	0.0
	5147 XVIII	1713	20/10/20	02/11/23	4.0	4.0	4.8	4.7	5.0	5.0	5.5	5.5	5.0	5.0	4.3	4.2	4.0	4.0	3.5	3.5	3.0	3.0	5.0	0.0
	1208 XVIII	1669	03/08/20	23/11/23	4.0	4.0	4.5	4.5	5.0	5.0	5.0	5.0	4.8	4.7	4.5	4.5	4.3	4.2	3.5	3.5	3.0	3.0	4.0	0.0
	4905 XVIII	1594	22/11/19	02/12/23	4.3	4.2	5.0	5.0	6.0	6.0	6.0	6.0	5.5	5.5	5.5	5.0	5.0	5.0	4.5	4.5	4.0	4.0	5.0	0.0
	4995 XVIII	1696	27/09/20	04/12/23	4.0	4.0	4.8	4.7	5.0	5.0	5.5	5.5	5.0	5.0	4.5	4.5	4.3	4.2	3.8	3.7	3.5	3.5	3.0	3.0
	2677 XVIII	1742	18/12/20	10/12/23	3.5	3.5	4.5	4.5	5.5	5.0	5.5	5.0	4.8	4.7	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	3.0	2.0
	2676 XVIII	1689	04/09/20	25/12/23	4.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.5	5.5	5.0	5.0	4.0	4.0	3.0	3.0	5.0	0.0
	1150 XVIII	1590	28/11/19	01/03/24	3.0	3.0	3.5	3.5	4.0	4.0	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5	2.5	2.5	4.0	0.0	4.0	0.0
	4995 XVIII	1699	27/09/20	04/03/24	3.5	3.5	5.0	5.0	5.5	5.5	6.0	6.0	5.5	5.5	5.3	5.2	5.0	5.0	4.0	4.0	3.0	3.0	5.0	0.0
	7094 XVIII	1604	30/12/19	08/04/24	4.0	4.0	4.5	4.5	4.8	4.7	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	1.8	1.4
	1208 XVIII	1734	30/11/20	21/06/24	3.8	3.7	4.3	4.2	4.5	4.5	4.5	4.5	4.3	4.2	4.0	4.0	2.5	2.1	1.6	1.3	1.2	1.4		
	7227 XVIII	1661	28/07/20	24/06/24	4.0	4.0	4.5	4.5	5.0	5.0	5.5	5.5	5.0	5.0	4.0	4.0	2.3	2.1	2.4	2.1	2.1	2.3		
	5246 XIX	1785	20/07/21	29/06/24	4.0	4.0	4.8	4.7	5.0	5.0	5.0	5.0	4.5	4.5	4.3	4.2	2.4	2.1	2.4	2.1	2.1	2.4		

	5232 XIX	1769	15/06/21	11/07/24	3.8	3.7	4.0	4.0	4.5	4.5	4.8	4.7	4.5	4.5	4.5	4.5	3.9	3.3	3.7	3.2	3.1	3.3		
	5147 XVIII	1715	26/10/20	12/07/24	4.0	4.0	5.0	5.0	5.0	5.0	5.5	5.5	5.0	5.0	5.0	5.0	3.8	3.1	3.6	3.1	3.1	3.2		
	1208 XVIII	1667	04/08/20	26/07/24	3.8	3.7	4.3	4.2	4.5	4.5	4.5	4.5	4.5	4.5	Sold	x	x	x	x	x	x	x	x	x
	2737 XIX	1829	24/09/21	28/07/24	3.5	3.5	4.0	4.0	4.3	4.2	4.8	4.7	5.0	5.0	Sold	x	x	x	x	x	x	x	x	x
	5181 XIX	1767	11/06/21	30/07/24	4.0	4.0	4.7	4.8	5.0	5.0	4.5	4.5	4.5	4.5	4.4	4.1	4.3	4.1	3.8	4.1				
	5232 XIX	1790	21/07/21	02/08/24	4.0	4.0	4.5	4.5	5.3	5.2	5.5	5.5	5.0	5.0	Sold	x	x	x	x	x	x	x	x	x
	5232 XIX	1809	27/08/21	25/08/24	3.5	3.5	4.0	4.0	4.5	4.5	4.8	4.7	Sold	x	x	x	x	x	x	x	x	x	x	x
	5232 XIX	1777	02/07/21	26/08/24	4.0	4.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2737 XIX	1814	03/09/21	26/08/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2759 XIX	1833	03/10/21	27/08/24	4.0	4.0	5.0	5.0	5.0	5.0	5.5	5.5	5.9	5.3	5.6	5.1	5.1	5.2						
	5374 XIX	1845	20/10/21	27/08/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2674 XIX	1800	08/08/21	01/09/24	3.8	3.7	4.0	4.0	4.3	4.2	4.5	4.5	4.2	3.1	3.9	3.2	3.3	3.8						
	5232 XIX	1763	26/05/21	03/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2676 XVIII	1688	02/09/20	04/09/24	4.3	4.2	4.5	4.5	4.8	4.7	5.0	5.0	5.8	4.3	5.4	4.4	5.1	4.4						
	5232 XIX	1776	04/07/21	06/09/24	3.5	3.5	4.3	4.2	4.5	4.5	4.8	4.7	4.8	4.3	4.5	4.2	4.2	4.3						
	5232 XIX	1791	25/07/21	08/09/24	3.0	3.0	4.0	4.0	4.5	4.5	4.5	4.5	Sold	x	x	x	x	x	x	x	x	x	x	x
	5310 XIX	1853	15/11/21	24/09/24	4.5	4.5	5.0	5.0	5.5	5.5	5.6	4.2	5.4	4.2	5.1	4.5								
	5246 XIX	1795	20/07/21	25/09/24	4.0	4.0	5.0	5.0	5.0	5.0	5.4	5.1	5.3	4.3	5.1	4.5								
	2737 XIX	1823	17/09/21	26/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5232 XIX	1761	15/05/21	28/09/24	3.5	3.5	4.5	4.5	5.0	5.0	5.5	4.8	5.2	4.2	5.1	4.2								
	1208 XVIII	1760	03/05/21	03/10/24	4.0	4.0	4.0	4.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2759 XIX	1870	10/01/22	19/10/24	4.0	4.0	4.5	4.5	5.5	5.5	6.8	5.7	6.6	5.6	5.1	5.4								
	5147 XVIII	1664	16/07/20	01/11/24	4.0	4.0	4.8	4.7	6.6	5.6	6.4	5.4	5.1	5.7										
	2759 XIX	1831	30/09/21	13/11/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2737 XIX	1830	26/09/21	20/11/24	4.0	3.5	4.0	4.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5310 XIX	1836	13/10/21	21/11/24	4.0	4.0	4.7	3.4	4.9	3.5	4.1	4.4												
Dhikatana																								
	M-53 XVII	923	08/05/19	22/07/23	7.0	6.0	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0	4.0	3.0	4.0	3.0	3.5	3.0	3.0	2.5	2.5	2.0
	2677 XVIII	1008	19/07/20	23/07/23	6.0	5.0	6.5	5.5	6.5	5.5	6.5	5.5	5.5	5.5	5.5	5.5	5.5	5.0	3.7	3.2	3.5	3.0	3.0	2.5
	2689 XVIII	995	02/05/20	24/07/23	6.0	6.0	5.5	5.5	5.5	5.5	5.5	5.0	5.0	5.0	4.0	4.0	4.0	3.0	3.4	3.0	3.0	2.5	2.5	2.0
	1150 XVIII	1004	25/06/20	19/08/23	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.5	5.0	4.0	4.0	3.0	4.0	3.0	3.8	3.3	3.5	3.0	3.0	2.5
	7094 XVIII	1011	27/07/20	20/08/23	6.0	5.0	6.0	5.0	6.0	5.0	6.0	5.5	5.5	5.0	5.0	4.0	5.0	4.0	3.5	3.0	3.4	3.0	3.0	2.5
	7094 XVIII	1026	08/10/20	17/09/23	5.0	5.0	5.0	5.0	5.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.4	4.0	4.0	3.5	3.5	3.0	2.5	2.0
	2689 XVIII	1032	22/11/20	06/10/23	5.5	5.5	5.5	5.5	5.0	5.0	4.0	4.0	4.0	4.0	3.8	3.5	3.5	3.0	3.5	3.0	2.5	2.0	2.5	0.0
	2689 XVIII	1033	24/11/20	28/11/23	5.5	5.0	4.0	4.0	4.0	4.0	5.3	4.9	5.0	4.5	4.5	4.0	4.0	3.0	3.5	3.0	2.5	2.0	3.0	0.0
	7094 XVIII	1007	13/07/20	29/11/23	5.0	5.0	5.0	5.0	5.0	5.0	5.5	5.0	5.0	4.5	4.5	4.0	3.5	3.0	3.0	3.0	2.0	1.5	2.5	0.0
	1150 XVIII	1030	15/11/20	07/12/23	6.5	5.0	5.0	5.0	5.0	5.0	5.3	5.0	5.0	4.5	4.5	4.0	4.5	3.5	4.0	3.5	3.5	2.5	3.0	2.0
	2645 XVIII	1015	18/08/20	24/03/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	7094 XVIII	1023	02/10/20	25/07/24	4.5	4.0	5.5	5.0	6.0	5.5	5.5	5.0	5.0	5.0	4.5	4.5	3.5	3.0	3.0	3.0				
	1208 XVIII	1037	20/12/20	10/08/24	3.5	3.0	5.0	4.5	5.5	5.0	5.5	5.5	6.0	5.5	5.5	5.0	4.5	4.0	4.0	3.0				
	2674 XIX	1053	25/08/21	12/08/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2689 XVIII	1028	18/10/20	14/08/24	3.0	2.5	4.5	4.0	5.0	4.5	5.0	5.0	5.5	5.0	5.0	4.5	4.5	3.5	4.0	3.5				
	5181 XIX	1050	06/06/21	10/09/24	3.5	3.0	5.0	4.5	5.5	5.0	5.5	5.5	5.5	5.0	4.0	4.0	3.5	3.5						
	5320 XIX	1062	12/11/21	12/09/24	3.5	3.0	5.5	5.0	5.5	5.5	5.5	5.0	4.5	4.5	4.5	4.0	4.0	4.0						
	2737 XIX	1054	22/08/21	21/09/24	4.5	4.0	5.0	4.5	6.0	5.5	5.5	5.5	4.5	4.5	4.5	4.0								
	2677 XVIII	1012	08/08/20	22/09/24	4.5	4.5	5.5	5.0	5.5	5.5	5.0	4.5	5.0	4.0	3.5	3.5								
	2737 XIX	1055	22/08/21	24/11/24	4.5	4.5	5.5	5.0	5.0	5.0	4.5	4.0												
Kheri																								
	1208 XVIII	878	25/07/20	13/08/23	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	2.0	1.0
	7147 XVIII	871	12/03/20	29/08/23	5.0	4.5	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	3.5	0.0	3.0	0.0	2.5	0.0

	1208 XVIII	882	01/08/20	11/09/23	6.0	5.5	6.5	6.0	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0
	7147 XVIII	885	09/09/20	21/04/24	4.5	4.0	4.5	4.0	5.0	4.5	4.5	4.0	4.0	3.5	4.0	3.5	3.5	3.0	3.0	2.5	4.0	0.0	Dry	x
	5181 XIX	895	19/06/21	19/07/24	4.0	3.5	5.0	4.5	4.5	4.0	4.0	3.5	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	3.5	0.0		
	2759 XIX	919	20/10/21	11/08/24	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5				
	2759 XIX	912	15/09/21	14/09/24	4.5	4.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.5	3.0	3.0	2.5						
	5320 XIX	923	09/11/21	08/10/24	4.5	4.0	5.0	4.5	4.5	4.0	4.0	3.5	4.0	3.5	3.5	3.0								
	2737 XIX	903	28/08/21	13/10/24	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0								
	5374 XIX	925	17/11/21	14/10/24	5.0	4.5	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5								
	2674 XIX	915	30/09/21	17/11/24	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.0	3.5										
	4905 XVIII	891	24/01/21	08/12/24	5.0	4.5	5.0	4.5	5.0	4.5	4.5	4.0												
	5333 XIX	940	29/03/22	14/12/24	4.5	4.0	5.0	4.5	5.0	4.5	4.5	4.0												
	5310 XIX	920	31/10/21	24/12/24	5.5	5.0	5.0	4.5	5.0	4.5														
	5181 XIX	901	07/08/21	29/12/24	5.5	5.0	5.0	4.5	4.5	4.0														
	5320 XIX	924	13/11/21	11/01/25	4.0	3.5	4.5	4.0	4.5	4.0														
	2674 XIX	911	16/09/21	25/02/25	6.0	5.5																		
	5333 XIX	944	30/04/22	09/03/25	5.5	5.0																		
Jewra																								
	Dara XVII	1221	12/10/19	01/07/23	3.0	3.0	4.0	4.0	4.5	4.0	5.5	5.0	5.5	5.5	5.0	5.0	5.0	4.5	4.5	4.0	3.5	3.5	2.5	2.5
	Dara XVII	1209	05/09/19	11/07/23	3.5	3.0	3.5	3.5	4.0	3.5	5.5	5.0	5.0	5.0	5.5	4.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0
	1150 XVIII	1240	19/12/19	11/07/23	3.0	3.0	4.0	4.0	4.5	4.0	5.0	4.5	5.0	4.5	4.5	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5
	4905 XVIII	1231	25/11/19	03/08/23	3.5	3.0	3.5	3.5	5.5	5.0	5.5	5.5	5.5	5.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.0	3.0
	2594 XVII	1219	14/10/19	17/11/23	3.5	3.0	4.0	4.0	5.0	4.5	5.0	5.0	5.5	5.5	5.5	5.0	4.5	4.5	4.0	4.0	3.0	3.0	Dry	x
	2677 XVIII	1282	28/12/20	01/12/23	4.0	4.0	4.5	4.5	5.0	4.5	5.0	5.0	5.0	4.5	5.0	5.0	4.5	4.5	4.0	4.0	3.0	3.0	Sold	x
	2689 XVIII	1274	16/10/20	07/01/24	3.5	3.0	4.0	4.0	4.5	4.5	5.0	4.5	5.0	5.0	4.5	4.5	4.5	4.0	3.5	3.5	3.0	3.0	Dry	x
	1150 XVIII	1239	27/11/19	10/01/24	3.0	3.0	4.5	4.0	5.0	5.0	5.0	5.0	Sold	x	x	x	x	x	x	x	x	x	x	x
	5147 XVIII	1252	23/04/20	13/01/24	3.5	3.0	4.0	3.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5	3.5	3.0	Dry	x	x	x
	5181 XIX	1312	15/06/21	14/01/24	3.5	3.5	4.0	4.0	4.5	4.5	5.0	4.5	4.0	4.0	4.5	4.0	4.0	4.0	3.5	3.5	3.0	3.0	Sold	x
	7147 XVIII	1249	12/04/20	14/04/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1219 XVIII	1257	22/05/20	03/05/24	3.0	3.0	3.5	3.5	4.5	4.0	4.5	4.5	5.0	5.0	4.5	4.5	3.5	3.5	3.0	3.0	2.5	2.5	Dry	x
	2645 XVIII	1253	25/04/20	11/05/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1208 XVIII	1267	04/09/20	11/05/24	3.5	3.5	4.0	4.0	4.5	4.5	5.0	4.5	5.0	5.0	5.0	4.5	3.5	3.5	3.0	3.0	Dry	x	x	x
	2677 XVIII	1263	27/07/20	10/08/24	2.5	2.5	3.5	3.5	4.5	4.5	4.5	4.0	4.0	4.0	4.5	4.0	4.5	4.0	3.5	3.5				
	7227 XVIII	1271	20/09/20	13/08/24	3.0	3.0	4.0	4.0	5.0	5.0	5.5	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.0	4.0				
	2676 XVIII	1246	03/02/20	21/08/24	4.0	3.5	4.5	4.0	4.5	4.5	4.5	4.0	5.0	4.5	4.5	4.5	4.5	4.0						
	5181 XIX	1311	19/06/21	12/09/24	3.0	3.0	4.0	4.0	4.5	4.0	5.5	5.0	4.5	4.5	5.0	4.5	4.5	4.5						
	5232 XIX	1324	17/07/21	13/09/24	3.5	3.0	4.5	4.0	5.0	5.0	5.0	5.0	5.5	5.0	5.0	5.0	4.5	4.0						
	5232 XIX	1305	14/05/21	18/09/24	3.5	3.5	4.5	4.5	5.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	4.0						
	1208 XVIII	1300	23/04/21	17/09/24	3.0	3.0	3.5	3.5	4.5	4.0	4.5	4.5	4.5	4.0	4.0	4.0	4.0	3.5						
	2689 XVIII	1255	11/05/20	28/09/24	4.0	4.0	5.0	5.0	5.0	5.0	5.0	4.5	5.0	4.0	4.0	4.0								
	2759 XIX	1366	02/10/21	04/10/24	4.0	4.0	4.5	4.5	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5								
	1219 XVIII	1293	07/04/21	13/10/24	3.5	3.5	4.5	4.0	4.5	4.0	5.0	4.5	4.5	4.5	5.0	4.5								
	7147 XVIII	1268	04/09/20	14/10/24	3.0	3.0	4.0	4.0	4.5	4.5	4.5	4.5	4.5	4.0	4.5	4.5								
	5181 XIX	1307	23/05/21	23/10/24	4.5	4.0	4.5	4.5	5.0	5.0	5.0	5.0	4.0	4.0										
	2759 XIX	1365	25/09/21	28/10/24	3.0	3.0	4.0	4.0	5.0	4.5	2.5	2.5	4.5	4.0										
	7604 XIX	1417	20/02/22	29/01/25	4.0	3.5	4.5	4.0																
	5246 XIX	1356	27/09/21	06/02/25	3.5	3.5	4.0	4.0																
	5374 XIX	1384	28/10/21	09/02/25	3.0	3.0	3.5	3.5																
	2674 XIX	1349	10/09/21	16/02/24	3.5	3.5	4.0	4.0																
	5232 XIX	1306	25/05/21	11/03/25	3.5	3.5																		
	2737 XIX	1354	14/09/21	13/03/25	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Kirara																								
	Siknder XVII	504	23/09/19	05/08/23	3.0	3.0	3.5	3.5	5.0	5.0	5.5	5.0	5.0	5.0	5.5	5.5	5.0	5.0	4.5	4.0	4.0	4.0	3.0	3.0
	1150 XVIII	506	11/11/19	26/09/23	5.5	5.0	5.5	5.5	5.5	5.5	5.5	5.0	5.5	5.5	4.5	4.5	4.5	4.0	3.5	3.5	2.5	2.5	Dry	x
	5147 XVIII	518	27/10/20	17/02/24	3.5	3.0	4.0	4.0	4.5	4.5	5.0	4.5	5.0	5.0	5.0	4.5	4.5	4.5	Sold	x	x	x	x	x
	2689 XVIII	516	20/10/20	08/04/24	3.0	3.0	4.5	4.5	5.0	5.0	5.5	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	3.5	Sold	x	x	x
	1150 XVIII	522	22/11/20	12/05/24	3.5	3.5	4.0	3.5	4.0	4.0	5.0	4.5	4.5	4.5	4.5	4.0	4.0	4.0	3.0	3.0	Dry	x	x	x
	5246 XIX	536	15/08/21	06/08/24	3.5	3.5	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5181 XIX	532	23/07/21	10/09/24	5.0	5.0	5.5	5.0	6.0	6.0	5.5	5.5	5.5	5.0	4.0	4.0	3.5	3.5						
	4905 XVIII	525	18/01/21	16/09/24	3.5	3.5	4.0	4.0	5.0	4.5	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5						
	2674 XIX	535	27/08/21	12/10/24	3.5	3.5	4.5	4.5	5.0	5.0	5.5	5.0	5.0	5.0	5.0	4.5								
	2737 XIX	538	21/09/21	22/10/24	3.5	3.5	4.0	4.0	4.5	4.5	5.0	4.5	4.5	4.5										
	7094 XVIII	521	01/11/20	29/10/24	3.5	3.5	4.5	4.5	5.0	5.0	5.5	5.0	4.5	4.0										
	4995 XVIII	512	15/10/20	10/01/25	3.5	3.5	4.0	4.0	4.5	4.5														
	5310 XIX	542	12/10/21	15/01/25	4.0	4.0	4.5	4.0	3.5	3.5														
Sarsod																								
	2594 XVII	718	10/09/19	27/06/23	5.5	5.0	4.5	4.0	5.0	4.5	5.5	5.0	4.5	4.0	4.5	4.0	4.0	3.5	3.0	2.5	2.5	2.0	2.0	0.0
	2677 XVIII	831	07/07/20	05/07/23	5.0	4.5	5.0	4.5	5.5	5.0	5.0	4.5	4.0	3.5	3.5	3.0	4.5	4.0	3.0	2.5	2.5	2.0	Dry	x
	2594 XVII	721	12/09/19	10/07/23	4.0	3.5	5.5	5.0	5.0	4.5	5.0	4.5	4.0	3.5	5.0	4.5	4.0	3.5	3.5	3.0	3.0	2.5	2.0	1.5
	2645 XVIII	795	01/02/20	02/08/23	5.5	5.0	4.5	4.0	5.0	4.5	6.0	5.5	5.5	5.0	5.0	5.0	5.0	4.5	4.0	3.5	4.0	3.5	2.5	2.0
	M-53 XVII	763	30/10/19	12/08/23	4.5	4.0	4.0	3.5	3.5	3.0	5.0	4.5	5.0	4.5	4.5	4.0	3.5	3.0	4.0	3.5	3.5	3.0	3.0	2.5
	2676 XVIII	865	14/09/20	24/08/23	5.5	5.0	5.5	5.0	6.0	5.5	6.0	5.5	5.0	4.5	4.5	4.0	4.0	3.5	4.0	3.5	Dry	x	x	x
	2676 XVIII	863	17/09/20	06/09/23	5.0	4.5	6.0	5.5	5.0	4.5	5.5	5.0	4.0	3.5	4.0	3.5	2.5	2.0	4.0	3.5	Sold	x	x	x
	1150 XVIII	904	03/11/20	06/09/23	6.5	6.0	6.5	6.0	5.5	5.0	6.5	6.0	6.5	5.5	5.5	5.0	5.5	5.0	4.5	4.0	2.5	2.0	2.5	2.0
	Siknder XVII	729	10/09/19	07/09/23	6.0	5.5	6.0	5.5	6.0	5.5	6.0	5.5	5.0	4.5	5.5	5.0	4.5	4.0	4.0	3.5	4.5	4.0	3.5	3.0
	2645 XVIII	870	26/09/20	08/09/23	3.5	3.0	3.5	3.0	6.0	5.5	3.5	3.0	3.5	3.0	3.0	2.2	2.5	2.0	3.5	3.0	3.0	0.0	Dry	x
	1150 XVIII	783	12/12/19	10/09/23	4.5	4.0	5.5	5.0	5.0	5.0	6.0	5.5	5.5	5.0	4.0	3.5	4.5	4.0	4.0	3.5	3.5	3.0	3.5	2.0
	Siknder XVII	747	18/10/19	11/09/23	4.0	3.5	5.0	4.5	5.0	4.5	4.0	3.5	4.0	3.5	4.5	4.0	4.0	3.5	3.5	3.0	4.0	3.5	2.5	2.0
	1150 XVIII	908	20/11/20	12/09/23	4.5	4.0	6.0	5.5	4.5	4.0	5.5	5.0	5.0	4.5	4.5	4.0	3.5	3.0	4.5	4.0	4.5	4.0	3.0	2.5
	4995 XVIII	823	16/06/20	17/09/23	5.0	4.5	6.0	5.5	5.5	5.0	4.5	4.0	4.5	4.0	4.0	3.5	3.0	2.5	3.0	2.5	2.5	2.0	3.0	2.5
	4995 XVIII	883	14/10/20	21/10/23	4.5	4.0	4.0	3.5	5.5	5.0	5.0	4.5	5.5	5.0	4.5	4.0	4.5	4.0	2.5	2.0	Sold	x	x	x
	7227 XVIII	872	16/09/20	25/10/23	5.5	5.0	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.5	5.5	5.0	Dry	x	x	x	x	x
	5147 XVIII	897	29/10/20	25/10/23	5.5	5.5	5.5	5.0	6.0	5.5	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.5	2.5	2.0	2.5	0.0
	7227 XVIII	888	19/10/20	04/11/23	5.0	4.5	5.0	4.5	5.0	4.5	4.0	4.5	5.0	4.5	5.5	5.0	5.5	5.0	4.0	3.5	3.5	3.0	2.5	2.0
	5147 XVIII	815	30/04/20	05/11/23	5.5	5.0	5.0	4.5	6.5	6.0	5.0	4.5	5.0	4.5	5.0	4.5	5.0	4.5	3.5	3.0	2.5	2.0	2.5	2.0
	1150 XVIII	910	26/11/20	08/11/23	4.5	4.0	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.5	4.5	4.0	4.5	4.0	3.0	2.0	3.5	3.0	3.0	2.5
	1219 XVIII	845	12/08/20	29/12/23	5.0	4.5	6.0	5.5	5.0	4.5	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.5	3.5	3.0	2.0	1.5	Dry	x
	5181 XIX	950	07/07/21	12/05/24	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0	2.5	2.0	2.5	0.0	Dry	x
	1219 XVIII	934	19/04/21	31/05/24	6.0	5.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	3.5	3.0	3.5	3.0	3.5	3.0	3.5	3.0	2.5	2.0
	2645 XVIII	875	26/09/20	18/06/24	4.5	4.0	4.5	4.0	4.0	3.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	2.5	2.0	Dry	x	x	x
	1208 XVIII	914	16/12/20	20/06/24	5.5	4.5	5.0	4.5	4.5	4.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x
	2674 XIX	966	19/08/21	28/06/24	4.0	3.5	5.0	4.5	3.5	3.0	3.5	3.0	2.0	1.5	Dry	x	x	x	x	x	x	x	x	x
	4995 XVIII	886	21/10/20	03/07/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	7227 XVIII	939	10/05/21	07/07/24	4.5	4.0	5.0	4.5	5.0	4.5	4.5	4.0	3.5	3.0	4.0	3.5	3.5	3.0	3.5	3.0	Dry	x	x	x
	7227 XVIII	892	19/10/20	08/07/24	5.0	4.5	4.5	4.0	3.5	3.0	5.0	4.5	4.5	4.0	5.0	4.5	4.0	3.5	2.5	2.0	2.0	1.5		
	2645 XVIII	874	17/09/20	09/07/24	5.5	5.0	6.0	5.5	5.0	4.5	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0		
	5232 XIX	970	27/08/21	18/07/24	4.5	4.0	4.5	4.0	5.5	5.0	5.0	4.5	4.0	3.5	3.5	3.0	3.5	3.0	3.5	3.0	3.5	3.0		
	5246 XIX	974	04/09/21	28/07/24	3.5	3.0	4.5	4.0	3.5	3.0	3.5	3.0	2.5	2.0	4.0	3.5	2.5	2.0	Dry	x	x	x	x	x
	2677 XVIII	921	07/01/21	08/08/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5147 XVIII	900	07/11/20	10/08/24	4.5	4.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0	4.5	4.0	3.5	3.0	4.0	3.5				
	2645 XVIII	849	21/08/20	12/08/24	4.0	3.5	4.5	4.0	4.5	4.0	3.5	3.0	3.0	2.5	3.5	3.0	3.5	3.0	2.5	2.0				

	7227 XVIII	940	21/05/21	16/08/24	4.5	4.0	5.5	5.0	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0	3.5	3.0	3.5	3.0				
	5310 XIX	994	10/10/21	16/08/24	3.5	3.0	3.5	3.0	3.5	3.0	4.5	4.0	3.5	3.0	4.0	3.5	3.0	2.5	2.5	2.0				
	2674 XIX	978	13/09/21	18/08/24	4.5	4.0	5.5	5.0	4.5	4.0	4.0	3.5	4.0	3.5	4.5	4.0	4.5	4.0	4.0	3.5				
	1219 XVIII	935	13/04/21	26/08/24	6.5	6.0	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	5.0	4.5	4.5	4.0						
	5246 XIX	955	21/07/21	06/09/24	5.5	5.0	5.0	4.5	5.0	4.5	5.0	4.5	5.0	4.5	5.5	5.0	5.5	5.0						
	2677 XVIII	926	21/01/21	08/09/24	5.0	4.5	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	4.0	3.5						
	2737 XIX	992	26/09/21	14/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5246 XIX	985	21/09/21	15/09/24	5.5	5.0	6.0	5.5	6.0	5.5	3.5	3.0	5.0	4.5	4.0	3.5	4.0	3.5						
	5232 XIX	961	04/08/21	19/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2737 XIX	981	12/09/21	22/09/24	4.5	4.0	4.0	3.5	4.5	4.0	4.0	3.5	4.0	3.5	3.5	3.0								
	5374 XIX	1009	28/11/21	23/09/24	6.0	5.5	5.5	5.0	5.0	4.5	5.5	5.0	5.5	5.0	5.0	4.5								
	5246 XIX	988	25/09/21	10/10/24	5.0	4.5	5.5	5.0	6.0	5.5	5.0	4.5	5.0	4.5	4.5	4.0								
	4995 XVIII	885	15/10/20	12/10/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5232 XIX	972	27/08/21	13/10/24	3.5	3.0	6.5	6.0	4.5	4.0	5.5	5.0	5.5	5.0	Sold	x	x	x	x	x	x	x	x	x
	5320 XIX	1007	07/11/21	13/10/24	4.5	4.0	5.0	4.5	5.0	4.5	5.5	5.0	5.0	4.5	5.0	4.5								
	7227 XVIII	873	21/09/20	29/10/24	5.5	5.0	6.0	5.5	6.0	5.5	6.0	5.5	5.5	5.0										
	5181 XIX	956	30/07/21	10/11/24	5.5	5.0	6.0	5.5	5.0	4.5	5.5	5.0	5.0	4.5										
	5374 XIX	1003	30/10/21	15/12/24	4.5	4.0	5.5	5.0	6.0	5.5	6.0	5.5												
	5320 XIX	1006	08/11/21	10/01/25	5.0	4.5	5.5	5.0	5.5	5.0														
Bichpari																								
	1209 XVIII	661	02/04/20	11/07/23	5.0	4.5	6.0	5.5	6.5	6.0	6.0	5.5	5.5	5.0	5.5	5.0	5.0	4.5	4.0	3.5	3.0	2.2	2.0	1.5
	Siknder XVII	587	26/07/19	14/07/23	5.5	5.0	5.5	5.0	5.0	4.5	5.0	4.5	3.5	3.0	4.0	0.0	4.5	4.0	2.5	2.0	2.5	2.0	3.0	2.5
	7094 XVIII	649	02/01/20	16/07/23	6.5	6.0	5.0	4.5	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	4.0	3.5	3.5	3.0	2.5	2.0
	2645 XVIII	668	14/04/20	16/07/23	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.5	5.0	4.5	4.5	4.0	4.5	4.0	3.5	3.0	2.0	0.0
	7094 XVIII	712	28/09/20	22/07/23	5.0	4.5	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.0	3.5	3.0	3.5	3.0	3.0	2.5	Dry	x	x	x
	1208 XVIII	700	28/08/20	12/08/23	5.0	4.5	6.5	6.0	6.5	5.5	5.0	4.5	5.0	4.5	5.5	5.0	4.5	4.0	2.5	2.0	Sold	x	x	x
	1208 XVIII	701	26/08/20	05/09/23	4.5	4.0	5.5	5.0	5.5	5.0	6.0	5.5	5.0	4.5	4.0	3.5	5.5	5.0	5.0	5.5	4.0	3.5	Dry	x
	2607 XVII	631	27/10/19	23/09/23	6.0	5.5	6.0	5.5	4.0	3.5	4.5	4.0	5.0	4.5	4.5	4.0	4.5	4.0	3.5	3.0	2.0	0.0	Dry	x
	1219 XVIII	680	11/06/20	29/10/23	5.5	5.0	5.5	5.0	5.5	5.0	4.0	3.5	5.5	5.0	4.5	4.0	4.5	4.0	3.0	2.5	2.0	1.5	Died	x
	4995 XVIII	715	23/10/20	12/11/23	4.0	3.5	5.0	4.5	5.5	5.0	5.5	5.0	5.5	5.0	4.0	3.5	4.5	4.0	3.0	2.5	3.0	2.5	2.5	2.0
	2645 XVIII	696	29/08/20	25/12/23	6.5	6.0	6.5	6.0	6.0	5.5	6.0	5.5	5.5	5.0	5.0	4.5	5.0	4.5	3.5	3.0	3.5	3.0	2.5	2.0
	5232 XIX	779	28/08/21	05/03/24	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	5.5	5.0	4.5	4.0	Sold	x	x	x	x	x
	1219 XVIII	678	18/05/20	21/03/24	2.5	2.0	5.0	4.5	5.0	4.5	5.0	4.5	4.5	4.0	5.0	4.5	4.5	4.0	4.5	4.0	3.5	3.0	2.5	2.0
	5232 XIX	751	05/06/21	23/03/24	6.0	5.5	6.0	5.5	5.5	5.0	5.0	4.5	5.0	4.5	4.0	3.5	3.5	3.0	3.5	3.0	3.5	3.0	Dry	x
	1150 XVIII	724	21/11/20	07/04/24	5.5	5.0	5.0	4.5	5.5	5.0	5.5	5.0	6.0	5.5	5.5	5.0	5.0	4.5	5.0	4.5	3.0	2.5	2.5	2.0
	1219 XVIII	742	16/04/21	10/04/24	4.5	4.0	5.5	5.0	6.0	5.5	3.5	3.0	4.5	4.0	3.5	3.0	2.5	2.0	3.0	2.5	2.5	2.0	Dry	x
	5147 XVIII	720	26/10/20	26/04/24	5.0	4.5	5.0	4.5	5.0	4.5	3.5	3.0	4.5	4.0	4.5	4.0	4.5	4.0	2.5	2.0	2.5	2.0	2.5	0.0
	5181 XIX	749	18/05/21	02/05/24	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0
	2676 XVIII	705	19/09/20	18/06/24	5.5	5.0	6.0	5.5	3.5	3.0	5.0	4.5	4.0	3.5	3.5	3.0	2.5	2.0	2.5	2.0	2.5	2.0	2.0	1.5
	4995 XVIII	711	13/10/20	12/07/24	5.0	4.5	5.0	4.5	5.5	5.0	5.0	4.5	4.5	4.0	5.0	4.5	4.5	4.0	4.0	3.5	3.0	2.5		
	5232 XIX	777	23/08/21	19/07/24	4.5	4.0	5.5	5.0	5.5	5.0	4.5	4.0	5.0	4.0	3.5	3.0	3.5	3.0	Sold	x	x	x	x	x
	2737 XIX	788	09/09/21	24/07/24	6.0	5.5	6.5	6.0	3.5	3.0	4.5	4.0	5.5	5.0	4.5	4.0	4.5	4.0	3.5	3.0				
	2737 XIX	789	09/09/21	24/07/24	5.5	5.0	6.0	5.5	4.5	4.0	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x
	5320 XIX	812	11/11/21	26/07/24	5.0	4.5	5.0	4.5	5.5	5.0	5.0	4.5	3.5	3.0	3.0	2.5	2.5	2.0	3.0	0.0				
	5181 XIX	753	18/06/21	28/07/24	4.5	4.0	4.5	4.0	3.5	3.0	4.0	3.5	3.5	3.0	4.0	3.5	3.5	0.0	2.5	0.0				
	2737 XIX	791	15/09/21	28/07/24	5.0	4.5	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.5	4.0	4.0	3.5	3.0	2.5				
	1219 XVIII	744	19/04/21	12/08/24	4.0	3.5	5.0	4.5	4.5	4.0	3.5	3.0	3.5	3.0	3.0	2.5	3.0	2.5	2.0	0.0				
	2645 XVIII	697	23/08/20	14/08/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5246 XIX	757	02/07/21	25/08/24	6.5	6.0	6.0	5.5	5.5	5.0	4.5	4.0	5.5	5.0	5.0	4.5	4.0	3.5						
	5310 XIX	801	16/10/21	28/08/24	5.0	4.5	5.5	5.0	5.5	5.0	6.0	5.5	6.0	5.5	5.5	5.0	4.0	3.5						

	2677 XVIII	731	13/01/21	05/09/24	5.5	5.0	6.0	5.5	4.5	4.0	5.5	5.0	5.0	4.5	5.0	4.5	Sold	x						
	2674 XIX	773	18/08/21	06/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	5320 XIX	820	25/12/21	09/09/24	6.0	5.5	5.5	5.0	5.5	5.0	4.5	4.0	5.0	4.5	5.0	4.5	4.5	4.0						
	5246 XIX	766	02/08/21	12/09/24	5.5	5.0	6.0	5.5	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	1219 XVIII	681	09/06/20	16/09/24	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
	2676 XVIII	703	16/09/20	25/09/24	5.5	5.0	6.0	5.5	5.0	4.5	5.0	4.5	4.5	4.0	5.0	4.5								
	5232 XIX	761	29/06/21	29/09/24	6.5	6.0	4.5	4.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0								
	5246 XIX	783	03/09/21	11/10/24	5.0	4.5	3.5	3.0	4.5	4.0	4.5	4.0	4.0	3.5	3.0	2.5								
	7094 XVIII	710	28/09/20	23/11/24	5.0	4.5	5.5	5.0	6.0	5.5	5.5	5.0												
	1209 XVIII	736	11/03/21	05/12/24	5.5	5.0	6.0	5.5	6.0	5.5	6.0	5.5												
	5310 XIX	800	15/10/21	15/12/24	2.5	2.0	3.5	3.0	3.0	2.5	3.0	2.5												
	5310 XIX	877	07/09/22	16/12/24	4.5	4.0	5.0	4.5	5.5	5.0	4.5	4.0												
	7604 XIX	851	23/06/22	21/01/25	5.5	4.0	5.5	5.0																
Bado Patti																								
	2676 XVIII	406	22/09/20	08/10/23	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	2.0	1.5	2.0	1.0	2.0	1.5	3.0	0.0
	6942 XVII	391	28/10/19	06/11/23	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.5	3.0	3.0	2.5	2.5	2.0	2.0	1.5	Dry	x
	2645 XVIII	403	28/08/20	29/04/24	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	3.0	0.0
	7263 XVIII	418	18/03/21	11/06/24	6.0	5.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	3.0	2.5	2.0	1.5
	5181 XIX	422	29/05/21	13/06/24	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	2.0	1.5
	5232 XIX	421	20/05/21	26/06/24	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	2.0	2.5	2.0	3.5	0.0		
	5246 XIX	426	26/07/21	17/08/24	6.0	5.5	6.0	5.5	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0	3.5	3.0				
	5310 XIX	443	09/07/21	09/10/24	4.5	4.0	4.5	4.0	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5								
	2759 XIX	437	08/10/21	15/10/24	5.5	4.0	5.5	4.0	5.0	4.5	5.0	4.5	4.5	4.0	4.0	3.5								
	5333 XIX	449	25/12/21	17/10/24	4.5	4.0	5.5	5.0	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5								
	2737 XIX	433	19/09/21	21/10/24	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.5	3.0										
	2737 XIX	430	20/08/21	23/10/24	6.0	5.5	5.5	5.0	5.0	4.5	Sold	x	x	x	x	x	x	x	x	x	x	x	x	x
	5181 XIX	428	30/07/21	01/11/24	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0	5.5	5.0										
	7147 XVIII	419	11/04/21	06/11/24	4.5	4.0	5.0	4.5	5.0	4.5	5.0	4.5	5.0	4.5										
	5246 XIX	432	04/09/21	13/11/24	5.0	4.5	5.5	5.0	5.5	5.0	5.5	5.0	5.0	4.5										
	7604 XIX	461	22/06/22	16/12/24	6.0	5.5	6.0	5.5	5.5	5.0	5.5	5.0												
	5310 XIX	446	29/11/21	13/01/25	5.5	5.0	5.0	4.5	5.0	4.5														
	5333 XIX	450	05/01/22	24/02/25	6.0	5.5																		
	2759 XIX	436	30/11/21	25/02/25	5.5	5.0																		
	2737 XIX	431	30/08/21	14/03/25	5.0	4.5																		
Bugana																								
	1150 XVIII	250	02/02/20	19/08/23	6.0	5.0	5.5	5.5	5.5	5.5	5.5	4.5	5.0	4.0	5.0	4.0	5.0	4.0	3.6	3.2	3.5	3.0	3.0	2.5
	2676 XVIII	260	20/05/20	16/09/23	5.5	5.0	5.5	5.0	5.5	4.5	5.0	4.0	5.0	4.0	4.0	4.0	3.8	3.4	3.5	2.5	3.5	3.0	2.5	2.0
	Dara XVII	238	20/10/19	17/09/23	6.0	5.5	6.5	5.5	5.5	5.5	5.0	5.0	5.0	4.0	4.0	4.0	3.7	3.2	3.5	3.0	3.0	3.0	2.5	2.0
	5147 XVIII	262	06/06/20	17/09/23	5.0	5.0	5.0	5.0	5.5	5.0	5.5	4.0	5.0	5.0	5.0	5.0	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5
	2676 XVIII	279	03/09/20	29/11/23	6.5	5.0	5.0	5.0	5.0	5.0	5.4	5.0	5.0	5.0	4.5	4.0	4.0	3.5	3.5	3.0	3.0	2.5	2.5	0.0
	2676 XVIII	280	01/09/20	30/11/23	6.0	6.0	5.5	5.0	5.0	5.0	5.3	4.9	5.5	5.0	5.0	4.5	4.5	4.0	4.0	3.5	3.0	2.0	3.0	0.0
	2689 XVIII	297	21/11/20	09/06/24	3.5	3.0	4.5	4.0	5.5	5.0	5.0	4.5	5.5	5.0	5.0	4.0	4.5	4.5	4.0	4.0	3.0	2.5	2.5	0.0
	2674 XIX	314	11/08/21	26/08/24	4.0	3.5	5.0	5.0	5.5	5.0	5.5	5.5	5.5	5.0	4.0	3.5	3.5	3.0						
	7147 XVIII	309	14/05/21	01/09/24	3.5	3.0	5.0	4.5	5.5	5.0	5.0	4.5	5.0	5.0	4.0	3.0	3.5	3.0						
	1208 XVIII	276	17/08/20	10/09/24	3.0	2.5	4.5	4.0	5.0	4.5	5.5	5.0	4.5	4.0	3.5	3.5	3.0	3.0						
	5246 XIX	313	10/07/21	20/10/24	3.0	3.0	4.5	4.0	5.5	5.0	5.0	4.5	5.0	5.0	4.0	3.5								
	5232 XIX	312	10/07/21	07/12/24	3.5	3.5	4.5	4.5	5.5	5.0	5.0	5.0												
	5320 XIX	316	31/10/21	28/12/24	3.5	3.5	5.0	4.5	4.5	4.5														

Milk Recording & Calving till March 2025

F 15. Set-wise AI, Conception and daughters retained

Set No.	Duration	Bulls (n)	AI	Preg	Calving		Progenies				
					Total	F	Calved (n)	Av. AFC (month)	Complete Recording	Av. Milk Yield (kg/day)	Available (n)
VIII	Jan 2004 to July 2005	17	1679	737	440	199	23	40.84	18	6.89	-
IX	Aug 2005 to Jan 2007	14	3418	1744	1222	556	89	44.45	58	7.88	-
X	Jan 2007 to Oct 2008	13	3400	1795	1252	600	100	42.23	78	7.49	-
XI	Oct 2008 to March 2010	14	4058	2066	1825	892	128	42.39	88	7.10	-
XII	March 2010 to Sept 2011	12	4569	2356	1119	538	142	42.13	101	7.43	-
XIII	Sept 2011 to March 2013	9	6251	3197	1989	937	272	42.75	203	7.77	-
XIV	March 2013 to July 2014	10	4693	2271	1325	638	162	41.63	132	8.00	-
XV	July 2014 to Dec 2015	15	6955	3762	2732	1286	299	40.42	229	8.10	-
XVI	Jan 2016 to July 2017	15	6116	3218	2485	1251	276	40.89	225	7.90	-
XVII	July 2017 to March 2019	15	6053	3382	2636	1254	343#	40.42	233	7.84	-
XVIII	Jan 2019 to July 2020	15	5287	2839	2192	1000	131#	37.68	108	8.32	7
XIX	July 2020 to Dec 2021	12	5568	3139	2420	1216	-	-	-	8.74	288
XX	Jan 2022 to July 2023	14	4968	2650	2132	1069	-	-	-	-	554
XXI	July 2023 to Dec. 2024	15	3211 July 23 to March 24	3584	1467	705					390
XXII	Jan 2025 to June 2026	20	1149 Jan 25 to Mar 25	-	-	-	-	-	-	-	-
# Calving and milk recording of progenies of XVIIth and XVIIIth set is in progress *Pregnancies, calving and female born of XX set till 31 March 2023											1269

F 16. Performance of FPT Programme on Farmer's Buffaloes

Duration	AI	Pregnancies	CR%	Progenies		Progenies				
				Total	Females	Calved (n)	Av. AFC (months)	Complete Recording	Av. Milk Yield (kg/day)	Daughters Available for Future Recording
2001-02	139	25	17.98	15	7	-	-	-	-	-
2002-03	540	236	43.70	147	73	12	42.06	11	7.28	-
2003-04	1001	356	35.56	237	129	15	46.84	12	6.42	-
2004-05	1298	566	43.61	361	173	21	39.66	18	6.54	-
2005-06	1999	1009	50.48	744	345	55	43.80	36	7.75	-
2006-07	2102	1139	54.19	650	305	48	44.40	34	8.09	-
2007-08	2132	1104	51.78	694	341	58	42.77	45	7.60	-
2008-09	2176	1086	49.91	955	477	72	41.44	52	7.04	-
2009-10	2803	1450	51.73	1276	627	90	42.95	60	7.16	-
2010-11	3433	1743	50.77	787	377	97	42.40	72	7.31	-
2011-12	3308	1756	53.08	1103	557	157	43.26	112	7.62	-
2012-13	4204	2104	50.05	1247	553	163	41.94	129	7.88	-

2013-14	3962	1903	48.03	1079	517	135	41.54	133	7.96	-
2014-15	4129	2218	53.72	1614	776	183	40.17	147	8.20	-
2015-16	4434	2326	52.46	1693	806	174	40.66	133	8.00	-
2016-17	3807	2063	54.19	1591	802	182	41.15	145	7.92	-
2017-18	4093	2248	54.92	1724	845	220	40.79	181	7.72	-
2018-19	3977	2214	55.67	1748	798	211	40.59	163	7.98	-
2019-20	3957	2140	54.08	1530	702	170	40.29	137	8.38	5
2020-21	3480	1901	54.63	1401	722	137	37.39	109	8.62	83
2021-22	3167	1815	57.31	1458	702	-	-	-	-	251
2022-23	3766	2013	53.45	1628	828	-	-	-	-	472
2023-24	3898	1526	51.29	1574	755	-	-	-	-	458
2024-25	4912	1908*	50.81	-	-	-	-	-	-	
Overall	72717	36849	51.1	23532	11372	2200	41.79	1729	7.67	1269

*Up to March 2025

Project Co-ordinator's observations on field unit performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR Share as per R E	Expenditure as per AUC	
Total	ICAR Share		ICAR Share	Balance
25.50	25.50	25.50	25.50	0.00

- During the period from April 2024 to March 2025, 4912 artificial inseminations were performed using test bulls of 21st and 22nd Set. The conception rate in the field was worked out to be 50.18%.
- In this period 2357 pregnancies were confirmed and 1566 calving (males 816, females 750) were recorded. 209 daughters were also calved and monthly test day milk yield were recorded.
- The average age at first calving for these 209 daughters was 40.30 months
- The ear tagging has been done in all female progenies born in the field.
- As on 31st March 2025, 1269 female progenies of 18th to 21st set of different age are standing at various field unit centres for future recordings.

Recommendations:

- For implementation of FPT project more effectively, awareness programmes should be organised among farmers in the form of female calf rallies, milk competitions and Kisan Gosthies.

FIELD UNIT: GADVASU, LUDHIANA

(i) Nodal agency : Coordinating unit CIRB HISAR

(ii) Participating Units : 1. CIRB, Hisar
2. GADVASU, Ludhiana
3. NDRI, Karnal

Date of start : November, 2001

OBJECTIVES:

To strengthen the ongoing sire evaluation programme of associated herd progeny testing by including field performance recording of the daughters of test bulls.

Financial Statement for the year 2024-25 (Rs in Lakhs)

	Budget Sanctioned	**ICAR Share**	**State Share**	**Expenditure**
Pay & allowances	-	-		
T.A.				
Contingencies				
Recurring	3200000	2399995	799998	3199993
Equipments	100000	75000	25000	100000
Furniture Fixture	200000	150000	50000	200000
Total	350000	2624995	874998	3499993
ICAR share 75%	**2625000**			

Staff and Infrastructure Buildup during the year :

Staff in position:

Principal Investigator : **Dr. Puneet Malhotra (Professor)**

Co-Principal Investigator :Dr. Simarjeet Kaur (Head of Animal Genetics and Breeding)

Sr. No.	**Name & Designation of the person employed on the sanctioned post with pay scale**	**Pay scale**	**Total time spent for the project**	**Remarks**
1.	Milk Recorder Supervisor	Rs. 10300-34800+3200	Full Time	Posts withdrawn wef. 31.03.2022
2.	Milk Recorder	Rs. 10300-34800+3200	Full Time	

F 1. Herd Strength of Registered females at Different Field Centers during 2024-25

Centers/ Village	**OB**	**Addition**			**Deduction**		**Closing Birth**
		New Reg.	**Birth**	**Purchase/ Traced**	**Sold/**	**Death/ AB**	
Aitiana	384	38			21	1	400
Barsal	188	0			13	7	168
Batha Dhua	372	0			6	1	365
Bharowal Kalan 1 (Bharowal Khurd)	143	37			8	0	172

Bhundri (Gorahoor), Bhundri dairy	463	0			55	7	401
Boparai Kalan	20	0			5	0	15
Chimna	487	63			50	22	478
Chowkiman	337	37			36	4	334
Dhat	11	0			0	0	11
Bharowal Kalan 2 (GKB)	342	43			64	10	311
Gurusar Kaunke	160	0			14	2	144
Gidharpindi	116	35			5	1	145
Hans Kalan	187	57			16	2	226
Jandi	101	40			14	5	122
Jassowal	767	94			73	2	786
Kailpur	363	0			10	0	353
Kehra Bet	441	98			20	0	519
Khudai Chak	380	73			20	0	433
Noorpur Bet	11	33			0	0	44
Ponna	120	14			19	10	105
Raqba	34	0			0	0	34
Sadarpura	236	62			21	2	275
Sawaddi Kalan (Majri)	34	0			0	0	34
Sawaddi Khurd	347	20			22	3	342
Sidhwana Bet/Leelan	132	0			5	3	124
Talwandi Khurd	371	71			16	0	426
Walipur Kalan	328	14			7	0	335
Walipur Khurd	298	29			13	0	314
Chhajjawal	57	32			1	0	88
Thakanbad	84	62			0	0	146
Sibian	1	20			2	0	19
Sohian	6	15			0	0	21
Total	**7321**	**987**	**0**	**0**	**536**	**82**	**7690**

F2. Status of breedable females at different field unit centers during 2024-25

Centers/ Village	**Heifers >3 years**		Buffalo (NP)		Buffalo Pregnant	
	Total	**Pregnant**	**In milk**	**Dry**	**In milk**	**Dry**
Aitiana	85	45	20	18	10	12
Barsal	77	27	10	15	8	10
Bhatha Dhua	95	30	15	15	10	11
Bharowal Kalan 1 & 2 GKB	155	30	13	10	8	10
Bhundri 1 & 2 Gorahoor	155	77	28	30	18	3
Boparai Kalan	124	50	8	7	7	5
Chimna	130	145	25	18	8	7
Dhatt	85	25	4	5	4	4
Walipur Kalan	110	35	18	17	5	9
Gurusar	150	35	10	10	10	5
Jandi	170	35	15	12	8	9
Kailpur	80	70	8	10	8	5
Kehra Bet	100	65	40	45	15	14
Khudai Chak	95	80	15	18	17	7
Pandori	35	30	7	5	7	8
Raqba	95	45	8	7	8	5
Sawaddi Khurd	140	80	40	30	14	13
Walipur Khurd 1 & 2	175	80	20	20	15	5
Chowkiman	220	50	20	17	15	7
Sadarpura	210	75	24	18	15	8
Jasowal	255	135	30	40	35	20
Mandiani	35	5	20	4	3	5
Talwandi Khurd	155	95	35	25	18	10
Sidhwan bet	145	50	30	25	10	10
Thakanbad	120	80	45	40	25	15

Gidarpindi	112	90	35	33	40	10
Sibian	100	80	33	30	15	10
Hans kalan	100	85	25	25	15	20
Chur Chak	20	0	0	0	0	0
Total	**3528**	**1729**	**601**	**549**	**371**	**257**

F3. Monthly A.I.'s at different field unit centers during the period from 4/2024 to 3/2025

Centre/ month	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Grand Total
Aitiana	25	30	25	25	30	37	45	40	30	35	20	30	372
Barsal	10	20	10	15	10	10	13	20	10	5	15	10	148
Bharowal Khurd	15	20	20	20	0	30	45	20	20	20	20	30	260
Bhatha Dhua	8	5	5	5	7	10	10	13	10	5	5	10	93
Bhundry Dairy	10	0	0	0	5	5	5	5	5	0	8	10	53
Boparai Kalan	10	5	5	7	5	10	20	10	5	0	3	10	90
Chhajjawal	15	20	15	15	15	15	25	20	20	15	10	20	205
Chimna	30	20	40	20	20	30	40	35	15	20	15	25	310
Chowkiman	10	15	10	10	10	35	20	22	10	15	15	10	182
Chur Chak	0	0	0	0	21	9	26	22	20	34	30	15	177
Dhat	0	5	5	0	0	0	7	0	5	0	0	10	32
Giderpindi	20	20	20	20	25	30	30	25	50	40	30	35	345
Gkb	15	10	6	8	10	11	24	20	20	15	10	16	165
Hans Kalan	20	10	10	30	10	25	40	25	25	15	20	23	253
Jandi	20	0	0	20	20	20	15	25	20	30	20	10	200
Jassowal	60	60	30	45	50	60	70	75	70	70	53	70	713
Khera Bet	30	30	40	32	25	30	30	35	47	30	40	45	414
Khudai Chak	20	20	10	20	20	30	40	20	30	30	30	40	310
Noorpur Bet	20	10	15	10	10	20	30	20	15	22	20	23	215
Raqba	10	10	3	0	0	5	0	10	5	0	5	10	58
Sadarpura	20	20	15	20	20	20	25	30	30	30	35	30	295
Sawaddi Khurd	20	15	0	10	10	10	15	30	20	15	20	10	175
Sohian	5	15	5	5	5	3	3	10	10	5	0	5	71
Talwandi Khurd	30	25	50	25	35	35	35	45	45	31	40	53	449
Thakanbad	40	32	56	50	40	50	70	70	60	32	30	55	585
Walipur Kalan	30	30	40	30	35	35	35	40	46	35	40	60	456
Walipur Khurd	15	10	30	10	35	30	40	42	44	10	10	25	301
Grand Total	508	457	465	452	473	605	758	729	687	559	544	690	6927

F4. Bull-wise A.I's. at different field unit centers during the period from 4/2024 to 3/2025

Bull No.	Set no.	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Grand Total
1994	9	0	0	1	0	0	0	0	0	0	0	0	0	1
4354	15	0	17	10	0	18	27	45	32	11	7	5	0	172
4705	16	0	0	0	0	3	0	0	0	2	0	0	0	5
29M	16	0	1	0	0	0	1	0	0	0	0	0	0	2
109	21	351	340	176	2	0	0	7	18	0	0	0	0	894
112	21	0	65	268	450	192	19	8	0	0	0	0	0	1002
297	21	0	0	0	0	260	501	162	15	0	0	0	0	938
2979	21	0	0	0	0	0	0	0	0	130	20	0	0	150
2990	21	0	0	0	0	0	0	0	90	235	253	12	0	590
5638	21	38	0	0	0	0	0	0	0	0	0	0	0	38
5723	21	95	5	0	0	0	0	0	0	0	0	0	0	100
5764	21	24	15	0	0	0	57	345	41	31	0	0	0	513
7630	21	0	14	10	0	0	0	191	251	65	0	0	0	531
7768	21	0	0	0	0	0	0	0	43	88	0	0	0	131
7990	21	0	0	0	0	0	0	0	239	125	0	0	0	364
3113	22	0	0	0	0	0	0	0	0	0	0	0	18	18
5791	22	0	0	0	0	0	0	0	0	0	229	255	30	514
5814	22	0	0	0	0	0	0	0	0	0	0	28	371	399
5872	22	0	0	0	0	0	0	0	0	0	0	0	16	16
5912	22	0	0	0	0	0	0	0	0	0	50	244	255	549
GRAND TOTAL		**508**	**457**	**465**	**452**	**473**	**605**	**758**	**729**	**687**	**559**	**544**	**690**	**6927**

F5: Month –wise Conception at different field unit centers for period from 12/2023 to 11/2024

Centre	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Grand Total
Aitiana	25	15	25	18	13	15	13	13	15	18	22	21	213
Barsal	8		5	5	5	5	5	8	5	5	7	9	67
Bharowal Khurd	8	12	10	10	8	9	11	8	0	13	21	10	120
Bhatha Dhua	4	3	4	5	3	2	2	2	4	3	4	4	40
Bhundry Dairy	2	2	2	0	4	0	0	0	2	2	2	2	18
Boparai Kalan	10	8	7	7	5	3	3	4	3	5	11	5	71
Chhajjawal	10	13	15	13	8	10	8	8	8	8	13	10	124
Chimna	20	17	13	11	14	9	18	9	8	12	17	15	163
Chowkiman	13	5	10	10	5	8	5	5	5	18	11	12	107
Chur Chak	8	0	8	0	0	0	0	0	10	4	13	10	53
Dhat	3	4	3	0	0	3	3	0	0	0	4	0	20
Giderpindi	16	11	24	10	11	10	11	10	11	14	15	12	155
Gkb	14	4	6	9	7	4	3	3	4	5	11	8	78
Gurusar	8	4	0	0	0	0	0	0	0	0	0	0	12
Hans Kalan	8	13	15	12	10	5	5	15	5	13	21	13	135
Jandi	10	10	21	9	10			10	10	9	7	11	107
Jassowal	40	29	35	43	30	24	15	23	20	30	35	38	362
Khera Bet	20	25	20	15	14	18	15	17	14	11	14	13	196
Khudai Chak	22	18	23	24	11	10	6	9	10	14	20	11	178
Noorpur Bet	10	10	12	9	8	5	7	5	4	11	15	9	105
Ponna	6	0	0	0	0	0	0	0	0	0	0	0	6
Raqba	0	0	3	4	5	6	2	0	0	3	0	5	28
Rasoolpur	0	7	0	0	0	0	0	0	0	0	0	0	7
Sadarpura	19	24	10	11	10	9	8	9	9	10	14	15	148
Sawaddi Khurd	16	10	13	18	9	7	0	5	5	6	8	15	112
Sibian	5	10	6	5	0	0	0	0	0	0	0	0	26
Sohian	10	5	5	5	3	7	3	3	3	2	2	5	53
Talwandi Khurd	18	19	19	15	15	13	21	10	14	17	15	18	194
Thakanbad	46	37	26	36	18	16	26	22	23	21	29	42	342
Walipur Kalan	20	15	16	13	13	12	17	13	14	13	15	17	178
Walipur Khurd	8	4	5	5	7	6	14	5	15	14	17	20	120
Grand Total	**407**	**319**	**361**	**322**	**246**	**133**	**134**	**216**	**221**	**281**	**363**	**350**	**3538**

F6: Month –wise Calving at different field unit centers during the period from 4/2024 to 3/2025

Month	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		Total	
CENTRE	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Aitiana	8	8	2	2	5	5	3	3	5	5	5	5	7	10	10	10	5	5	9	9	7	8	4	5	70	75
Barsal	2	2	1	2	2	2	4	4	5	5	2	1	2	2	2	3			2	2	2	2	2	2	26	27
Bharowal Khurd	6	8	2	2	4	4	4	6	5	5	3	2	5	6	3	3	4	5	3	3	3	4	3	3	45	51
Bhatha Dhau	2	2	1	1	2	2	2	3	1	1	1	2	1	1	1	2	1	2	2	2	3	2	2	1	19	21
Bhuundry Dairy	1	1	1	1	1	1			1	1	1	1	1	1	1	1	1	1	1	1			1	2	10	11
Boparai Kalan	3	3	3	3	2	2	2	2	4	3	3	3	2	2	3	3	3	3	3	2	3	3	2	2	33	31
Chhajjawal	3	3	2	2	2	2	3	3	8	8	3	3	3	3	4	4	5	5	6	6	5	5	3	3	47	47
Chimna	5	6	3	4	6	9	3	4	5	8	5	6	4	6	6	8	5	9	4	7	4	6	5	7	55	80
Chowkiman	2	2	2	2	3	3	2	2	3	3	2	2	2	2	5	5	2	2	3	4	3	3	2	2	31	32
Chur Chak	4	6	3	5	3	7	3	7	3	4	4	6	5	5	3	3			3	4					31	47
Dhat	1	1			2	1	2	2	1	1					1	1	2	2	1	1					10	9
Giderpindi	6	7	5	5	6	8	3	4	6	5	6	5	3	2	5	6	3	4	8	10	3	4	4	4	58	64
Gkb	4	3	1	2	3	4	2	3	3	7	5	9	4	5	4	5	2	2	2	3	3	5	3	3	36	51
Gurusar	2	3	0	2	1	2	1	2	1	2			1	2	3	4	0	2							9	19
Hans Kalan	6	6	2	2	2	2	5	5	7	7	7	6	2	2	3	3	4	5	5	5	4	6	4	4	51	53
Jandi	2	3	2	3	1	1	3	3	5	4	3	3	3	3	3	4	3	4	6	8	3	3	3	4	37	43
Jassowal	12	12	4	3	10	10	10	12	14	14	12	15	10	15	13	20	10	12	12	15	13	19	8	12	128	159
Khera Bet							5	7	5	6	4	5													14	18
Khera Bet	6	9	6	10	6	7	7	8	9	7	9	6	7	9	9	8	12	12	9	11	7	6	5	5	92	98
Khudai Chak	6	8	4	5	3	4	7	8	5	6	6	5	5	6	7	8	5	6	7	10	9	10	4	5	68	81
Noorpur Bet	5	5	3	4	5	4	5	6	3	4	3	4	4	4	4	5	4	5	4	5	4	5	3	4	47	55
Ponna	2	2	1	2	0	2	1	2	3	6	2	4	1	1	2	2									12	21
Raqba	1	1	2	1	2	2	1	1	2	1	1	1							1	1	2	2	2	2	14	12
Rasoolpur																	3	3							3	3
Sadarpura	3	4	3	4	4	4	4	4	4	6	5	6	5	4	6	8	7	10	3	4	4	5	3	4	51	63
Sawaddi Khurd	2	2	2	3	2	3	2	2	3	3	1	1	4	4	5	6	3	4	4	5	6	7	3	4	37	44
Sibiana	2	3	3	3	4	4	2	3			2	2	2	3	2	2	3	4	2	2	2	2			24	28
Sohiana	1	1	1	0	2	2	3	3	2	2	2	2	2	2	3	5	2	2	2	2	2	2	2	1	24	24
Talwandi Khurd	9	9	7	8	6	5	6	6	7	8	6	5	6	8	7	8	7	10	7	9	6	8	7	8	81	92
Thakanbad	9	9	7	6	7	8	8	10	6	2	10	15	13	16	21	20	16	19	10	11	14	16	7	8	128	140
Walipur Kalan	4	4	3	4	6	7	5	7	7	6	6	7	6	8	7	10	6	6	7	7	5	6	6	6	68	78
Walipur Khurd	2	3	2	3	2	2	3	4	2	2	2	3	2	3	3	4	2	2	2	2	2	3	3	4	27	35
Grand Total	**121**	**136**	**78**	**94**	**104**	**119**	**111**	**136**	**135**	**142**	**121**	**135**	**112**	**135**	**146**	**171**	**120**	**146**	**128**	**151**	**119**	**142**	**91**	**105**	**1386**	**1612**

F= Female M = Male

F7: Bull–wise Conception at different field unit centers during the period from 12/2023 to 11/2024

BULL NO	SET NO	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Grand Total
1994	9							1						1
4354	15	23	30	8	6		8	4		12	11	16	21	139
4705	16									1				1
29M	16						1				0			1
1454	20	3												3
109	21				41	175	164	74	1			3	8	466
112	21						27	138	215	86	9	4		479
297	21									122	233	81	8	444
2979	21	14												14
2990	21	7											45	52
3014	21	3												3
5414	21	57	74	49	9									189
5638	21	135			63	17								215
5690	21	111	196	35										342
5723	21				67	43	2							112
5764	21				39	11	7				28	164	23	272
7630	21	54		93	49		7	4				95	115	417
7768	21			75	17								20	112
7990	21		34	101	31								110	276
Grand Total		**407**	**334**	**361**	**322**	**246**	**216**	**221**	**216**	**221**	**281**	**363**	**350**	**3538**

F8: Bull–wise calving at different field unit centers during the period from 4/2024 to 3/2025

Month		Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		Total	
Bull No.	**Set No.**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**
1994	9							0	1					0	0											0	1
4354	15													7	2	13	10	13	15	7	1	6	0			46	28
1454	20															1	1									1	1
2831	20	11	10	27	33	14	17																			52	60
2838	20	6	6																							6	6
3004	20	1	0	1	1	1	1																			3	2
5427	20	13	15																							13	15
5481	20	44	50	12	13																					56	63
5500	20	21	28	1	3																					22	31
5505	20	11	13	19	23	2	5																			32	41
5511	20	14	14	18	21																					32	35
109	21																					15	18	63	74	78	92
2979	21					7	6	38	46	33	32	34	41	6	7	5	5									123	137
2990	21															2	2									2	2
3014	21							2	1	7	9	2	2			1	1									12	13
5414	21											34	33	44	50	18	21	25	32	19	21	3	3			143	160
5629	21					80	90	39	52	18	21	17	21	0	4											154	188
5638	21													54	71	48	60					25	27	7	7	134	165
5690	21															38	46	71	84	11	15					120	145
5723	21																					22	28	16	20	38	48
5764	21																					14	19	5	4	19	23
7630	21									19	20	17	20	1	1	20	25			33	38	16	24			106	128
7768	21							32	36	58	60	17	18							26	32	7	8			140	154
7990	21																	11	15	32	44	11	15			54	74
Grand Total		**121**	**136**	**78**	**94**	**104**	**119**	**111**	**136**	**135**	**142**	**121**	**135**	**112**	**135**	**146**	**171**	**120**	**146**	**128**	**151**	**119**	**142**	**91**	**105**	**1386**	**1612**

F = Female M = Male

F9. Live female progeny at field unit centers from (0 to ≤ 6 mo.) as on 3/2025.

281 live female progenies (0 to ≤ 6 month.) available in the field unit centres.

F10. Live female progeny at different field unit centers from (>6 to ≤ 12mo.) as on 3/2025

398 live female progenies (>6 to ≤ 12month) available in the field unit centres.

F11: Live female progeny at different field unit centers (>1 to ≤3 years) as on 3/2025

2032 live female progeny (>1 to ≤3 years) available in the field unit centres.

F12: Live female progeny at different field unit centers (>3 years) as on 3/2025

7168 live female progenies (>3 years) available in the field unit centres.

F13: Daughters calved at different field unit centers during 2024-2025

384 daughters calved during the report period at different field unit centres.

F14: Daughters recorded at different field units during 2024-2025

Test day milk recording of 517 daughters completed at different field unit during the period and 305 days average milk yield was 2469.4 kg

F15. Set wise A.I., Conception, Calving and Daughter's retained till completion of milk recording

Set No.	A.I.	P.D.	Calving		Daughters retained up to			Calving	Complete
			Total	Female	1 year	2 years	3 years		
VI	2323	943	669	300	0	0	24	24	24
VII	1755	651	436	206	0	0	20	20	20
VII	3542	1318	982	461	0	0	34	34	34
IX	5169	1977	1337	595	0	1	83	83	83
X	5396	2094	1542	690	0	0	133	133	133
XI	9478	3579	2326	1147	0	0	219	219	219
XII	8212	3110	2280	1073	0	0	238	238	238
XIII	14923	6357	5050	2333	0	0	577	540	510
XIV	8328	3550	3077	1492	0	0	374	319	296
XV	11982	5248	4289	2002	4	1	1022	621	591
XVI	7460	3344	2724	1277	0	0	696	444	430
XVII	11077	5120	4376	2100	0	0	1262	752	601
XIII	13036	6529	5672	2737	0	0	1604	372	141
XIX	11953	5720	4857	2336	0	1	1577	25	2
XX	12308	6055	4916	2357	78	1097	237	0	0
XXI	11290	4919	2452	1123	597	0	0	0	0
XXII	1496	0	0	0	0	0	0	0	0
Total	**139728**	**60514**	**46985**	**22229**	**679**	**1100**	**8100**	**3824**	**3322**

F.16 Performance of FPT Programme since Inception

Duration	A.I.	Pregnancies	CR%	Calvings	Females born	Daughters recorded	Av. AFC (Mo.)	Av. Milk Yield (kg./days)	Daughters available for recording
2001-02	493	184	37.3	-	-	1	56.1	7.9	-
2002-03	1908	723	37.9	229	135	5	49.7	7.8	-
2003-04	1858	629	33.9	472	245	5	51.1	8.0	-
2004-05	2435	726	29.8	466	215	10	46.1	8.0	-
2005-06	2822	967	34.3	699	333	10	49.7	8.0	-
2006-07	3313	1178	35.6	755	357	10	48.0	8.4	-
2007-08	4015	1438	35.8	870	368	8	47.9	8.3	-
2008-09	4147	1622	39.1	1149	491	4	49.7	8.1	-
2009-10	5415	1878	34.7	1140	538	10	49.7	8.2	-
2010-11	6846	2289	33.4	1274	603	15	49.2	8.1	-
2011-12	7298	2814	38.6	1800	853	42	49.0	8.1	
2012-13	8517	3463	40.7	2497	1155	55	47.5	7.9	
2013-14	8014	3380	42.2	2831	1303	98	47.1	8.1	
2014-15	8316	3810	45.8	2958	1447	90	42.5	8.2	
2015-16	6325	3054	48.3	3013	1383	146	34.9	8.0	
2016-17	5289	2464	46.6	2236	1049	144	0	0	
2017-18	6344	2579	40.7	1933	899	186	0	0	
2018-19	7779	3299	42.4	2468	1192	270	0	0	
2019-20	8690	4307	49.6	3235	1555	270	0	0	
2020-21	7991	4277	53.6	3878	1883	353	0	8.3	
2021-22	8543	3815	44.6	3309	1565	356	54.1	8.2	
2022-23	8343	4146	49.7	3407	1661	370	52.3	8.2	
2023-24	8100	3934	48.6	3368	1613	347	45.4	8.1	
2024-25	**6927**	**3538**	**51.1**	**2998**	**1386**	517	**51.5**	**7.9**	**945**
Overall	**139728**	**60514**	**43.3**	**46985**	**22229**	**3322**	**48.6**	**8.0**	**945**

A.I., Conception, Calvings and Daughters Retained –13th Set

Bull No.	2234	2269	2304	3964	4059	5943	Total
AI	5060	3353	6134	131	214	31	**14923**
Pregnancies	2129	1447	2631	52	85	13	**6357**
Daughter Born	749	537	985	25	32	5	**2333**
Daughters available	199	103	250	11	13	1	**577**
Daughter Calved	182	97	238	10	11	1	**539**
Daughters Complete Recorded	173	92	222	10	11	1	**509**
Daughters to be recorded	26	11	28	1	2	0	**68**

A.I., Conception, Calvings and Daughters Retained –14th Set

Bull No.	2357	2369	4093	4100	4196	4439	6014	6044	6136	Total
AI	1640	5454	253	110	143	214	146	166	202	**8328**
Pregnancies	701	2323	109	48	60	87	63	70	89	**3550**
Daughter Born	262	973	42	24	50	35	31	33	42	**1492**
Daughters available	74	177	18	15	6	22	18	13	31	**374**
Daughter Calved	64	150	14	12	6	22	15	10	26	**319**
Complete Recorded	60	144	11	10	6	19	14	8	24	**296**
Daughters to be recorded	14	33	7	5	0	3	4	5	7	**78**

A.I., Conception, Calvings and Daughters Retained –15th Set

Bull No.	2371	2412	2417	2429	2459	4324	4328	4354	4363	4403	4438	6007	6139	6290	6405	Total
AI	854	820	1605	991	917	1121	701	1429	588	624	564	579	407	371	411	**11982**
Pregnancies	378	367	707	430	383	505	314	609	257	272	257	247	183	159	180	**5248**
Daughter Born	137	139	284	171	158	193	125	214	98	97	96	97	71	59	63	**2002**
Daughters available	98	70	163	109	54	65	60	107	58	55	54	29	40	30	35	**1027**
Daughter Calved	56	51	107	52	34	46	37	56	37	29	35	12	24	22	23	**621**
Daughters Complete Recorded	54	50	102	51	33	41	35	52	35	27	33	12	23	20	23	**591**
Daughters to be recorded	44	20	61	58	21	24	25	55	23	28	21	17	17	10	12	**436**

A.I., Conception, Calvings and Daughters Retained –16th Set

Bull No.	1027	1053	1064	2383	2467	2501	4592	4623	4705	4889	6379	6409	6646	6753	29M	TOTAL
AI	425	278	0	1069	856	1161	386	0	1079	888	174	260	341	52	491	**7460**
Pregnancies	190	127	0	471	383	520	173	0	477	403	82	117	154	24	223	**3344**
Daughter Born	74	48	0	177	146	199	61	0	188	157	33	42	63	7	82	**1277**
Daughters available	26	18	0	112	71	130	23	0	117	84	11	21	39	0	44	**696**
Daughter Calved	18	14	0	68	53	73	19	0	78	56	8	10	24	0	23	**444**
Daughters Complete Recorded	18	13	0	68	53	71	18	0	72	55	8	10	23	0	21	**430**
Daughters to be recorded	8	5	0	44	18	59	5	0	45	29	3	11	16	0	23	**266**

A.I., Conception, Calvings and Daughters Retained –17th Set

Bull No.	1148	2558	2565	2594	2607	4687	4715	4733	4837	6942	7010	51M	53M	B-1-330	Dara	Sikander	Total
AI	674	1308	1192	1335	1291	857	741	454	584	381	286	890	362	368	147	207	**11077**
Pregnancies	327	604	545	609	610	392	336	209	237	190	132	411	173	171	78	96	**5120**
Daughter Born	128	237	215	259	252	166	142	86	98	76	56	123	119	69	33	41	**2100**
Daughters available	43	146	116	162	174	129	91	50	67	29	44	103	33	33	17	25	**1262**
Daughter Calved	24	72	70	86	97	73	56	22	19	7	26	39	11	18	7	10	637
Daughters Complete Recorded	2	32	38	35	30	39	22	6	9	0	18	21	0	0	0	3	255
Daughters to be recorded	41	114	78	127	144	90	69	44	58	29	26	82	33	33	17	22	1010

A.I., Conception, Calvings and Daughters Retained –18th Set

Bull No.	1150	1198	1208	1209	1219	2645	2676	2677	2689	4905	4928	4995	5031	7094	7147	7227	7263	5147	Total
AI	689	0	761	763	952	1540	1416	685	743	977	0	803	0	582	748	763	563	**1051**	**13036**
Pregnancies	331	0	382	389	489	762	684	328	370	472	0	415	0	294	382	392	298	541	**6529**
Daughter Born	160	0	148	176	210	305	284	145	151	211	0	188	0	115	163	163	110	208	**2737**

Daughters available	92	0	105	106	152	152	169	81	60	129	0	92	0	70	89	100	61	146	**1604**
Daughter Calved	30	0	9	29	29	30	38	25	13	47	1	31	0	18	19	25	13	15	**372**
Complete Recorded	18	0	1	9	6	17	19	15	6	19	0	10	0	5	7	7	2	0	**141**
Daughters to be recorded	92	0	105	106	152	152	169	81	60	128	0	92	0	70	89	100	61	146	**1603**

A.I., Conception, Calvings and Daughters Retained –19th Set

Bull No.	**1315**	**2674**	**2737**	**2759**	**2767**	**2781**	**5181**	**5232**	**5246**	**5310**	**5320**	**5333**	**5374**	**5375**	**7604**	**Total**
AI	940	1205	1070	1495	0	0	833	839	885	922	1038	1004	745	0	977	**11953**
Pregnancies	442	580	533	724	0	0	391	410	420	437	487	469	363	0	464	**5720**
Daughter Born	184	247	217	312	0	0	156	163	179	166	197	187	143	0	185	**2336**
Daughters available	126	173	137	209	0	0	92	99	133	113	134	143	100	0	119	**1578**
Daughter Calved	0	7	8	2	0	0	3	2	1	1	0	1	0	0	0	**25**
Complete Recorded	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	**2**
Daughters to be recorded	126	171	137	209	0	0	92	99	133	113	134	143	100	0	119	**1576**

A.I., Conception, Calvings and Daughters Retained –20th Set

Bull No.	2793	2814	2831	2838	2847	2848	2850	3004	5427	7584	7649	5481	1454	5588	5500	5505	5511	5592	19M	**TOTAL**
AI	911	0	548	1056	125	25	56	225	1008	1059	1012	735	1020	713	1150	557	473	502	1133	**12308**
Pregnancies	455	0	264	507	63	12	32	115	496	515	490	355	503	356	571	271	230	252	568	**6055**
Daughter Born	173	0	112	182	25	5	16	54	196	205	203	133	197	137	207	102	82	103	225	**2357**
Daughters available	80	0	87	119	23	3	13	40	128	87	111	65	108	85	139	78	43	66	137	**1412**
Daughter Calved	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Complete Recorded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Daughters to be recorded	80	0	87	119	23	3	13	40	128	87	111	65	108	85	139	78	43	66	137	**1412**

A.I., Conception, Calvings and Daughters Retained –9th Set (Nominated Mating in field)

Bull No.	**1994**	**1575**	**1903**	**1913**	**1940**	**1964**	**2582**	**2592**	**2720**	**2910**	**5112**	**5197**	**5218**	**5258**	**5312**	**TOTAL**
AI	868	76	785	571	1107	1014	165	146	105	54	95	33	76	36	37	**5168**
Pregnancies	307	29	299	224	427	378	72	58	39	22	54	13	27	13	14	**1976**
Daughter Born	93	9	97	66	121	118	26	13	6	6	18	4	9	3	6	**595**
Daughters available	15	1	14	7	18	14	6	2	0	0	5	1	0	0	0	**83**
Daughter Calved	15	1	14	7	18	14	6	2	0	0	5	1	0	0	0	**83**
Daughters Complete Recorded	15	1	14	7	18	14	6	2	0	0	5	1	0	0	0	**83**
Daughters to be recorded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**

A.I., Conception, Calvings and Daughters Retained –21th Set

Bull No.	109	2979	2990	3014	5414	5629	5638	5690	5723	5764	7630	7768	7990	112	297	TOTAL
AI	981	827	603	51	810	895	829	715	230	595	1149	925	740	1002	938	**11290**
Pregnancies	466	337	52	29	390	425	377	342	112	272	514	404	276	479	444	**4919**
Daughter Born	78	123	2	12	143	154	134	120	38	19	106	140	54	0	0	**1123**
Daughters available	7	96	2	9	109	80	70	59	11	3	49	69	33	0	0	**597**
Daughter Calved	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Daughters Complete Recorded	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Daughters to be recorded	7	96	2	9	109	80	70	59	11	3	49	69	33	0	0	**597**

A.I., Conception, Calvings and Daughters Retained –22th Set

Bull No.	3052	3097	3113	3126	5791	5814	5872	5912	5935	TOTAL
AI	0	0	18	0	514	399	16	549	0	**1496**
Pregnancies										
Daughter Born										
Daughters available										
Daughter Calved										
Daughters Complete Recorded										
Daughters to be recorded										

Set-wise AI, Conception and daughters retained

Set no.	No. of Bulls used	AI	Preg.	Calving		Daughters Retained			Daughters Recorded	Av. AFC (Mo.)	Av. Milk Yield (kg)	Daughters to be recorded
				Total	Female	Up to 1Year	Up to 2 Year	3 Year & above				
6th	11	2323	943	669	300	0	0	24	24	52.0	7.9	0
7th	9	1755	651	436	206	0	0	20	20	49.4	8.0	0
8th	17	3542	1318	982	461	0	0	34	34	50.3	8.1	0
9th	15	5169	1977	1337	595	0	1	83	83	47.6	8.2	0
10th	11	5396	2094	1542	690	0	0	133	133	48.1	8.3	0
11th	12	9478	3579	2326	1147	0	0	219	219	50.4	8.1	0
12th	8	8212	3110	2280	1073	0	0	238	238	49.4	8.1	0

13th	6	14923	6357	5050	2333	0	0	577	510	51.5	7.9	
14th	9	8328	3550	3077	1492	0	0	374	296	76.0	7.8	
15th	15	11982	5248	4289	2002	4	1	1022	591	55.0	8.2	
16th	15	7460	3344	2724	1277	0	0	696	430	49.1	8.2	
17th	16	11077	5120	4376	2100	0	0	1262	601	51.4	7.9	35
18th	17	13036	6529	5672	2737	0	0	1604	141	51.2	8.0	394
19th	15	11953	5720	4857	2336	0	1	1577	2	43.3	10.8	516
20th	18	12308	6055	4916	2357	78	1097	237	0	0	0	
21st	15	11290	4919	2452	1123	597	0	0	0	0	0	
22nd	9	1496	0	0	0	0	0	0	0	0	0	
Total	**218**	**139728**	**60514**	**46985**	**22229**	**679**	**1100**	**8100**	**3322**	**42.6**	**7.6**	**945**

Bull- wise additional daughters completing 1st lactation from 13th set

Bull No.	Daughter No	Date of birth	Date of calving	Age at 1st calving (days)	Lact length	Lact. Yield
1668	2269	18-Nov-20	10-Dec-23	1117	305	2794.9

Bull- wise additional daughters completing 1st lactation from 15th set

Bull No.	Daughter No	Date of birth	Date of calving	Age at 1st calving (days)	Lact length	Lact. Yield
2417	6927	30-Jan-17	08-Jul-23	2350	305	2515.4

Bull- wise additional daughters completing 1st lactation from 16th Set

Bull No.	Daughter No	Date of birth	Date of calving	Age at 1st calving (days)	Lact length	Lact. Yield
2383	7278	15-Oct-17	01-May-23	2024	305	2684.4
2383	7570	25-Jan-18	28-Feb-24	2225	305	2794.0
2383	7996	10-Apr-18	07-Dec-23	2067	305	2567.2
2467	7522	10-Feb-18	25-Nov-23	2114	305	2381.3
2467	7585	30-Mar-18	14-Nov-23	2055	305	2577.0
2501	7375	30-Sep-17	17-Dec-23	2269	305	2755.8
2501	7686	7-Mar-18	10-Oct-23	2043	305	2884.0
2501	7710	5-Apr-18	17-Oct-23	2021	305	2772.5
2501	7951	17-Apr-18	09-Aug-23	1940	305	2842.0
4592	7431	10-Feb-18	10-Feb-24	2191	305	2425.8
4592	7529	25-Feb-18	10-Jul-23	1961	305	2525.5
4705	7618	17-Apr-18	05-Aug-23	1936	305	2622.0
4705	7627	15-Apr-18	17-Sep-23	1981	305	2449.3
4705	7659	2-Jun-18	05-May-23	1798	305	2672.6
4705	7782	22-May-18	26-Oct-23	1983	305	2382.2
4705	7789	15-May-18	29-Aug-23	1932	305	2310.4
4705	7796	20-May-18	20-Nov-23	2010	305	2366.6
4705	7814	20-May-18	11-Sep-23	1940	305	2420.5
4705	8099	25-Apr-18	10-May-23	1841	305	2172.3
4705	8204	30-May-18	06-May-23	1802	305	2350.2
4705	8246	28-May-18	18-Dec-23	2030	305	2734.6
4889	7521	25-Jan-18	23-Feb-24	2220	305	2437.9
4889	7661	13-May-18	28-May-23	1841	305	2827.4
4889	7746	25-Jul-18	29-Sep-23	1892	305	2867.7
4889	7803	12-Mar-18	15-Apr-23	1860	305	2455.6
4889	7816	25-Aug-18	06-May-23	1715	305	2450.1
6409	7115	15-Aug-17	18-Jul-23	2163	305	2464.8

Bull- wise additional daughters completing 1st lactation from 17th Set

Bull No.	Daughter No.	Date of Birth	Date of Calving	Age at 1st Calving	Lact. Lenght	Lactation Yield
330	875	18-Aug-19	15-Dec-23	1580	305	2473.3
330	8778	15-Sep-19	14-Nov-23	1521	305	2640.1
330	8786	20-Sep-19	20-Dec-23	1552	305	2758.5
330	8905	14-Sep-19	25-Oct-23	1502	305	2716.0
330	8908	13-Sep-19	28-Oct-23	1506	305	2696.2
330	8912	25-Sep-19	16-Nov-23	1513	305	2857.1
330	8924	3-Dec-19	01-Dec-23	1459	305	2821.3
330	9029	18-Aug-19	05-Sep-23	1479	305	2464.6
330	9056	14-Sep-19	18-Jul-23	1403	305	2372.5
330	9070	5-Sep-19	20-Mar-24	1658	305	2410.3

330	9072	20-Sep-19	15-May-23	1333	305	2084.5
330	9074	19-Sep-19	17-Nov-23	1520	305	1832.8
330	9084	23-Sep-19	10-Dec-23	1539	305	2155.5
330	9085	12-Aug-19	10-Aug-23	1459	305	2140.9
330	9090	3-Sep-19	12-Aug-23	1439	305	2116.6
330	9208	10-Sep-19	13-Sep-23	1464	305	2198.7
330	9218	9-Sep-19	17-Jan-24	1591	305	2211.1
330	9219	14-Aug-19	15-Apr-23	1340	305	2059.1
330	9227	5-Aug-19	25-Dec-23	1603	305	2240.3
1148	8498	20-Jun-19	06-Feb-24	1692	305	2768.0
1148	8727	30-Jun-19	15-Nov-23	1599	305	2694.5
1148	8736	28-Jun-19	12-Jul-23	1475	305	2643.9
1148	8756	15-Jun-19	20-Dec-23	1649	305	2562.2
1148	8766	16-Jun-19	07-Feb-24	1697	305	2763.9
1148	8772	27-Jul-19	27-Oct-23	1553	305	2552.4
1148	8773	29-Jul-19	25-Oct-23	1549	305	2619.5
1148	8790	30-Jun-19	10-Jan-24	1655	305	2924.3
1148	8901	30-Sep-19	10-May-23	1318	305	2678.1
1148	8906	12-Jul-19	20-May-23	1408	305	2686.1
1148	8915	19-Sep-19	24-Mar-24	1648	305	2677.8
1148	8933	15-Sep-19	15-Dec-23	1552	305	2448.9
1148	8966	15-Aug-19	14-Jan-24	1613	305	2973.3
1148	8968	7-Aug-19	11-Oct-23	1526	305	2505.2
1148	9024	16-Sep-19	24-May-23	1346	305	2420.1
1148	9088	3-Jul-19	16-Jul-23	1474	305	2163.7
1148	9143	18-Oct-19	03-Jun-23	1324	305	2437.3
1148	9187	23-Sep-19	24-Dec-23	1553	305	2436.0
1148	9221	25-Sep-19	10-May-23	1323	305	2254.2
1148	9223	20-Sep-19	27-May-23	1345	305	1810.1
2558	7620	15-Sep-18	10-Aug-23	1790	305	2266.1
2558	7842	27-Jul-18	05-May-23	1743	305	2433.7
2558	8060	25-Jul-18	15-May-23	1755	305	2636.9
2558	8113	14-Nov-18	27-Dec-23	1869	305	2402.5
2558	8119	10-Nov-18	05-Mar-24	1942	305	2129.9
2558	8136	22-Jan-19	18-Apr-23	1547	305	2408.8
2558	8168	29-Jan-19	03-Mar-24	1860	305	2499.9
2558	8171	25-Jan-19	14-Oct-23	1723	305	2440.1
2558	8172	17-Oct-18	07-May-23	1663	305	2462.5
2558	8182	27-May-19	06-Jan-24	1685	305	2402.9
2558	8186	10-May-19	17-Mar-24	1773	305	2385.1
2558	8234	14-Sep-18	16-Apr-23	1675	305	2405.1
2558	8256	27-Jul-18	14-Apr-23	1722	305	2533.4
2558	8279	18-Jan-19	25-Oct-23	1741	305	2620.5
2558	8283	15-Nov-18	15-Jul-23	1703	305	2582.4
2558	8297	18-Dec-18	15-Mar-24	1914	305	2698.0
2558	8308	29-Nov-18	12-Aug-23	1717	305	2252.7
2558	8322	10-Oct-18	15-Apr-23	1648	305	2652.6
2558	8332	5-Nov-18	12-Aug-23	1741	305	2681.7
2558	8339	10-Nov-18	20-Sep-23	1775	305	2898.7
2558	8356	20-Oct-18	14-Jul-23	1728	305	2499.5
2558	8384	12-Oct-18	12-Aug-23	1765	305	2082.0
2558	8444	30-Oct-18	26-Mar-24	1974	305	2526.9
2558	8474	25-May-19	10-Jul-23	1507	305	2894.5
2558	8487	6-Dec-18	22-Jul-23	1689	305	2740.6

2558	8645	10-Oct-18	30-Mar-24	1998	305	2547.7
2558	8646	12-Oct-18	20-Apr-23	1651	305	2293.0
2558	8657	13-Oct-18	14-Apr-23	1644	305	2339.9
2558	8665	17-Dec-18	25-Oct-23	1773	305	2259.3
2558	8670	30-Dec-18	19-Aug-23	1693	305	2028.2
2558	8683	16-Nov-18	20-Jul-23	1707	305	2296.1
2558	8701	14-Jun-19	13-Nov-23	1613	305	1859.6
2558	8737	25-Jun-19	18-Feb-24	1699	305	1979.0
2558	8741	30-Jun-19	19-Dec-23	1633	305	2589.3
2558	8743	20-Jun-19	19-Jul-23	1490	305	2418.8
2558	8745	9-Jun-19	18-Oct-23	1592	305	2062.3
2558	8851	27-May-19	29-Mar-24	1768	305	2348.6
2558	9008	21-Oct-19	15-Oct-23	1455	305	1806.7
2558	9065	23-Oct-19	15-Jun-23	1331	305	2331.3
2558	9229	15-Oct-19	08-Feb-24	1577	305	2818.4
2558	9525	5-Nov-19	04-Jun-23	1307	305	2515.0
2565	779	20-Sep-18	09-May-23	1692	305	2514.4
2565	7644	13-Sep-18	14-Jul-23	1765	305	2759.9
2565	7653	20-Sep-18	04-Jun-23	1718	305	2588.4
2565	7692	12-Oct-18	09-Nov-23	1854	305	2733.1
2565	7745	24-Jun-18	10-Sep-23	1904	305	2263.7
2565	7857	15-Sep-18	14-Aug-23	1794	305	2233.9
2565	7954	16-Oct-18	28-Jun-23	1716	305	2525.3
2565	8023	20-Aug-18	29-Oct-23	1896	305	2410.4
2565	8032	6-Sep-18	17-Feb-24	1990	305	2523.9
2565	8068	6-Oct-18	20-Aug-23	1779	305	2329.6
2565	8226	11-Sep-18	28-Jul-23	1781	305	2428.8
2565	8293	12-Oct-18	05-May-23	1666	305	2774.5
2565	8354	20-Aug-18	26-Oct-23	1893	305	2325.1
2565	8540	12-Oct-18	11-Jul-23	1733	305	2800.8
2565	8582	10-Oct-18	23-Mar-24	1991	305	2484.0
2565	8587	10-Oct-18	28-Aug-23	1783	305	2315.7
2565	8590	7-Oct-18	13-Oct-23	1832	305	2425.7
2565	8614	27-Oct-18	25-Jul-23	1732	305	2421.9
2565	8792	14-Aug-19	05-Oct-23	1513	305	2566.7
2565	8816	30-Jun-19	13-Dec-23	1627	305	2886.7
2565	8936	24-Aug-19	11-Oct-23	1509	305	2460.4
2565	8993	25-Aug-19	14-May-23	1358	305	2361.3
2565	9026	28-Sep-19	16-May-23	1326	305	2501.0
2565	9089	16-Aug-19	10-Apr-23	1333	305	1968.4
2565	9103	29-Aug-19	16-May-23	1356	305	2403.1
2565	9132	26-Aug-19	13-May-23	1356	305	2153.6
2565	9178	10-Aug-19	08-Apr-23	1337	305	2416.7
2594	7669	18-Jul-18	02-May-23	1749	305	2423.5
2594	7788	27-Jul-18	20-Jul-23	1819	305	2744.0
2594	7806	18-Jun-18	13-Apr-23	1760	305	2485.0
2594	7829	15-Jul-18	20-Oct-23	1923	305	2349.3
2594	7966	19-Jul-18	10-Jan-24	2001	305	2707.5
2594	7982	26-Jun-18	02-May-23	1771	305	2604.3
2594	7991	18-Jun-18	19-Jul-23	1857	305	2726.2
2594	8021	25-Nov-18	10-Mar-24	1932	305	2096.2
2594	8062	10-Dec-18	18-Oct-23	1773	305	2478.2
2594	8104	18-Dec-18	29-Dec-23	1837	305	2394.1
2594	8109	23-Dec-18	12-Apr-23	1571	305	2486.5

2594	8112	20-Dec-18	13-Jan-24	1850	305	2373.1
2594	8125	23-Nov-18	22-Feb-24	1917	305	2528.6
2594	8164	5-Jan-19	28-Jun-23	1635	305	2341.4
2594	8209	29-Dec-18	04-Jul-23	1648	305	2517.1
2594	8229	20-Jun-18	12-Feb-24	2063	305	2190.5
2594	8236	15-Jul-18	07-Feb-24	2033	305	2415.1
2594	8240	7-Jan-19	26-Mar-24	1905	305	2584.0
2594	8257	28-Jul-18	10-Nov-23	1931	305	2354.0
2594	8258	14-Nov-18	17-Mar-24	1950	305	2437.6
2594	8317	27-Dec-18	20-Nov-23	1789	305	2461.9
2594	8382	27-Nov-18	16-Apr-23	1601	305	1982.1
2594	8412	21-Dec-18	11-Nov-23	1786	305	2799.4
2594	8415	19-Nov-18	18-Apr-23	1611	305	2284.2
2594	8419	10-Dec-18	16-Sep-23	1741	305	2430.4
2594	8439	21-Nov-18	18-Jul-23	1700	305	2265.5
2594	8443	10-Dec-18	30-Mar-24	1937	305	2444.3
2594	8509	15-Nov-18	10-May-23	1637	305	2430.4
2594	8552	10-Dec-18	23-Nov-23	1809	305	2436.9
2594	8615	10-Nov-18	22-Oct-23	1807	305	2504.6
2594	8633	12-Dec-18	11-Oct-23	1764	305	2367.5
2594	8636	10-Dec-18	10-Jan-24	1857	305	2165.6
2594	8647	15-Dec-18	07-Jan-24	1849	305	2285.8
2594	8648	20-Dec-18	12-Aug-23	1696	305	2273.0
2594	8661	17-Nov-18	06-May-23	1631	305	2274.1
2594	8895	28-Oct-19	10-Nov-23	1474	305	2463.6
2594	8896	20-Oct-19	05-Jan-24	1538	305	2465.4
2594	8996	20-Oct-19	07-Sep-23	1418	305	2429.1
2594	9036	15-Oct-19	07-Jun-23	1331	305	2499.5
2594	9038	14-Oct-19	12-Oct-23	1459	305	2346.3
2594	9042	6-Oct-19	20-Jul-23	1383	305	2479.7
2594	9048	24-Oct-19	20-Oct-23	1457	305	2402.8
2594	9053	4-Oct-19	18-Nov-23	1506	305	1883.8
2594	9064	20-Oct-19	20-Oct-23	1461	305	1857.3
2594	9076	8-Oct-19	15-Mar-24	1620	305	2194.7
2594	9096	20-Oct-19	18-Aug-23	1398	305	1940.6
2594	9334	12-Nov-19	16-Oct-23	1434	305	2326.2
2594	9426	18-Nov-19	19-Jun-23	1309	305	2419.1
2594	9430	13-Nov-19	14-Jun-23	1309	305	2428.0
2607	7798	10-Jul-18	18-Apr-23	1743	305	2078.9
2607	7875	22-Jul-18	17-Apr-23	1730	305	2316.3
2607	8108	5-Dec-18	19-Feb-24	1902	305	2465.1
2607	8110	30-Nov-18	08-Oct-23	1773	305	2356.4
2607	8302	4-Dec-18	15-Dec-23	1837	305	2478.7
2607	8313	31-Dec-18	21-Aug-23	1694	305	2698.2
2607	8323	10-Dec-18	20-Dec-23	1836	305	2321.8
2607	8343	4-Jan-19	12-Dec-23	1803	305	2413.8
2607	8360	25-Nov-18	24-Feb-24	1917	305	2545.1
2607	8371	21-Oct-18	28-Feb-24	1956	305	2688.9
2607	8381	5-Nov-18	15-Aug-23	1744	305	2186.0
2607	8385	21-Dec-18	16-Jul-23	1668	305	2183.4
2607	8389	28-Sep-18	17-Sep-23	1815	305	2388.4
2607	8399	27-Dec-18	12-May-23	1597	305	2135.0
2607	8403	4-Jan-19	20-Sep-23	1720	305	2413.9
2607	8406	28-Nov-18	30-Jul-23	1705	305	2217.0

2607	8409	17-Dec-18	15-Jul-23	1671	305	2238.6
2607	8418	7-Jan-19	15-Sep-23	1712	305	2201.6
2607	8456	1-Jul-19	16-Apr-23	1385	305	1967.3
2607	8476	7-Jul-19	05-Nov-23	1582	305	2635.5
2607	8490	25-Dec-18	25-Aug-23	1704	305	2637.3
2607	8519	25-Aug-19	04-Mar-24	1653	305	2939.5
2607	8525	30-Nov-18	15-May-23	1627	305	2762.2
2607	8573	10-Nov-18	11-Aug-23	1735	305	2507.7
2607	8576	22-Jan-19	03-Feb-24	1838	305	2531.1
2607	8592	12-Nov-18	13-Apr-23	1613	305	2479.4
2607	8610	9-Dec-18	04-Feb-24	1883	305	2410.0
2607	8629	15-Nov-18	12-Jan-24	1884	305	2394.5
2607	8635	18-Nov-18	20-Apr-23	1614	305	2144.3
2607	8636	9-Dec-18	14-Jul-23	1678	305	2380.8
2607	8641	10-Nov-18	24-Mar-24	1961	305	2431.9
2607	8649	18-Dec-18	21-Feb-24	1891	305	2664.2
2607	8651	13-Nov-18	20-May-23	1649	305	2177.9
2607	8663	13-Dec-18	17-Apr-23	1586	305	2179.3
2607	8669	7-Dec-18	22-Jul-23	1688	305	2162.7
2607	8692	15-Dec-18	05-Aug-23	1694	305	2542.3
2607	8702	6-Jun-19	17-Apr-23	1411	305	2126.8
2607	8707	27-Jun-19	15-Aug-23	1510	305	2259.2
2607	8749	24-Jun-19	15-Jan-24	1666	305	2300.8
2607	8751	15-Aug-19	24-Nov-23	1562	305	2490.3
2607	8783	19-Aug-19	09-Dec-23	1573	305	2696.5
2607	8784	16-Aug-19	13-Sep-23	1489	305	2775.1
2607	8798	10-Jul-19	04-Dec-23	1608	305	2630.8
2607	8881	20-Aug-19	17-Nov-23	1550	305	2434.1
2607	8910	11-Aug-19	17-Jun-23	1406	305	2689.1
2607	8921	27-Aug-19	20-Jul-23	1423	305	2757.0
2607	9004	21-Sep-19	19-May-23	1336	305	2285.1
2607	9006	28-Oct-19	28-Jun-23	1339	305	2496.4
2607	9008	24-Oct-19	20-Jun-23	1335	305	2355.2
2607	9017	23-Aug-19	07-Dec-23	1567	305	2487.6
2607	9027	27-Oct-19	08-Feb-24	1565	305	2558.2
2607	9184	15-Aug-19	22-Dec-23	1590	305	2382.2
2607	9194	30-Aug-19	17-Dec-23	1570	305	2598.8
2607	9198	17-Oct-19	14-Sep-23	1428	305	2392.8
2607	9200	19-Aug-19	19-Nov-23	1553	305	2328.1
2607	9220	25-Aug-19	15-Dec-23	1573	305	2133.8
2607	9228	5-Sep-19	20-Dec-23	1567	305	2251.6
2607	9399	10-Nov-19	15-Feb-24	1558	305	1926.5
2607	8711/8411	27-Jun-19	07-Oct-23	1563	305	2562.4
4687	7622	12-Jul-18	09-Jul-23	1823	305	2483.7
4687	7671	11-Sep-18	01-Aug-23	1785	305	2869.4
4687	7744	15-Sep-18	15-Sep-23	1826	305	2531.0
4687	7754	14-Jun-18	28-Sep-23	1932	305	2350.6
4687	7791	24-Jul-18	16-Mar-24	2062	305	2474.7
4687	7851	15-Jul-18	04-Aug-23	1846	305	2339.9
4687	7893	17-Aug-18	15-Feb-24	2008	305	2435.5
4687	7920	10-Jun-18	15-May-23	1800	305	2258.5
4687	7955	7-Oct-18	20-Oct-23	1839	305	2632.1
4687	7975	2-Jun-18	05-Oct-23	1951	305	2875.8
4687	7984	30-Aug-18	10-Aug-23	1806	305	2732.7

4687	7992	9-Jun-18	20-Apr-23	1776	305	2822.4
4687	8061	5-Jun-18	26-Sep-23	1939	305	2429.8
4687	8091	11-Aug-18	25-Sep-23	1871	305	2615.4
4687	8094	5-Jun-18	08-Aug-23	1890	305	2233.5
4687	8173	25-Feb-19	15-Apr-23	1510	305	2505.9
4687	8304	18-Mar-19	08-Dec-23	1726	305	2415.5
4687	8362	26-Feb-19	28-Aug-23	1644	305	2289.0
4687	8400	11-Jan-19	12-Oct-23	1735	305	1863.7
4687	8425	7-Mar-19	17-Jul-23	1593	305	2227.1
4687	8437	25-Jan-19	16-Oct-23	1725	305	2459.7
4687	8473	15-Apr-19	29-May-23	1505	305	2764.0
4687	8517	5-May-19	27-Sep-23	1606	305	2628.2
4687	8545	12-Mar-19	17-Jul-23	1588	305	2707.4
4687	8560	17-Feb-19	14-Feb-24	1823	305	2502.1
4687	8631	20-Jan-19	15-Aug-23	1668	305	1986.8
4687	8655	24-Jan-19	23-May-23	1580	305	2004.2
4687	8748	18-May-19	25-Jun-23	1499	305	2150.6
4687	8788	26-May-19	20-Aug-23	1547	305	2687.2
4715	7698	15-Aug-18	20-Apr-23	1709	305	2109.1
4715	7769	15-Sep-18	19-Jul-23	1768	305	2444.2
4715	7811	25-Aug-18	09-Jul-23	1779	305	2427.8
4715	7828	15-Sep-18	15-Jan-24	1948	305	2410.9
4715	7874	12-Aug-18	10-Sep-23	1855	305	2252.1
4715	7974	28-Feb-19	04-Aug-23	1618	305	2709.8
4715	7979	20-Aug-18	27-May-23	1741	305	2821.4
4715	8057	15-Aug-18	13-Jun-23	1763	305	2425.3
4715	8111	23-Jan-19	17-Dec-23	1789	305	2322.5
4715	8127	7-Mar-19	07-May-23	1522	305	2562.4
4715	8142	10-Mar-19	19-Sep-23	1654	305	2424.3
4715	8206	22-Feb-19	01-Nov-23	1713	305	2634.2
4715	8233	26-Aug-18	27-Jul-23	1796	305	2458.9
4715	8268	5-Mar-19	09-Jan-24	1771	305	2749.2
4715	8281	11-Mar-19	15-Nov-23	1710	305	2515.5
4715	8370	28-Feb-19	18-Apr-23	1510	305	2059.4
4715	8386	14-Feb-19	07-Jun-23	1574	305	2086.4
4715	8529	12-Feb-19	09-Dec-23	1761	305	2782.0
4715	8535	15-Feb-19	05-Dec-23	1754	305	2689.1
4715	8557	20-Mar-19	12-Apr-23	1484	305	2494.0
4715	8588	21-Feb-19	13-Aug-23	1634	305	2043.9
4715	8589	22-Feb-19	14-Jul-23	1603	305	2500.2
4715	8596	30-Nov-18	20-Jul-23	1693	305	2461.7
4715	8616	10-Feb-19	20-Jan-24	1805	305	2330.2
4715	8625	28-Feb-19	24-May-23	1546	305	2278.0
4715	8758	18-Apr-19	20-Jan-24	1738	305	2620.7
4733	7617	25-Aug-18	30-Dec-23	1953	305	2344.4
4733	7687	15-Aug-18	08-Oct-23	1880	305	2769.2
4733	7805	10-Aug-18	12-Feb-24	2012	305	2632.1
4733	7980	11-Sep-18	09-Jun-23	1732	305	2671.9
4733	8458	24-Apr-19	15-Dec-23	1696	305	2872.4
4733	8465	2-May-19	25-Jul-23	1545	305	2513.9
4733	8491	17-May-19	15-Jul-23	1520	305	2763.5
4733	8495	19-May-19	20-Jul-23	1523	305	2761.0
4733	8512	14-Apr-19	07-Aug-23	1576	305	2409.3
4733	8708	22-Apr-19	15-Apr-23	1454	305	2318.9

4733	8725	4-May-19	15-Feb-24	1748	305	2208.3
4733	8759	14-May-19	10-Jan-24	1702	305	2548.7
4733	8780	14-Jun-19	17-Aug-23	1525	305	2683.2
4733	8872	3-May-19	16-Feb-24	1750	305	2483.2
4837	7838	10-Sep-18	21-Oct-23	1867	305	2649.6
4837	7840	15-Sep-18	10-Oct-23	1851	305	2378.4
4837	8033	12-Sep-18	15-Oct-23	1859	305	3036.1
4837	8059	15-Sep-18	10-Aug-23	1790	305	2257.2
4837	8212	15-Oct-18	11-Dec-23	1883	305	2248.0
4837	8395	10-Mar-19	15-Apr-23	1497	305	2405.2
6942	8891	29-Oct-19	05-Feb-24	1560	305	2447.3
6942	8997	28-Aug-19	30-Jul-23	1432	305	2457.4
6942	8999	22-Sep-19	20-May-23	1336	305	1881.7
6942	9043	5-Sep-19	08-Aug-23	1433	305	2341.9
6942	9094	5-Sep-19	30-Nov-23	1547	305	2318.1
6942	9110	30-Sep-19	10-Dec-23	1532	305	2376.9
7010	8053	13-Aug-18	19-Aug-23	1832	305	2096.2
7010	8163	20-Jan-19	20-Nov-23	1765	305	2429.4
7010	8177	15-Jan-19	15-Jun-23	1612	305	2414.4
7010	8178	22-Jan-19	12-Jan-24	1816	305	2349.6
7010	8301	16-Feb-19	10-Apr-23	1514	305	2490.2
7010	8309	25-Feb-19	20-Nov-23	1729	305	2386.4
7010	8369	25-Mar-19	18-Sep-23	1638	305	2101.9
7010	8424	25-Mar-19	19-Oct-23	1669	305	2192.9
DARA	8245	12-Feb-19	10-Nov-23	1732	305	2558.0
DARA	8497	14-Nov-19	15-Sep-23	1401	305	2840.0
DARA	8925	4-Oct-19	02-Jun-23	1337	305	2717.6
DARA	9030	28-Sep-19	19-Nov-23	1513	305	2746.9
DARA	9054	4-Oct-19	12-Dec-23	1530	305	2547.8
DARA	9323	26-Nov-19	11-Oct-23	1415	305	2455.0
DARA	9561	30-Nov-19	07-Oct-23	1407	305	2482.8
M51	7958	5-Feb-19	27-May-23	1572	305	2899.6
M51	8006	20-May-19	20-Nov-23	1645	305	2346.8
M51	8123	12-Jan-19	21-Sep-23	1713	305	2506.0
M51	8464	22-May-19	04-Aug-23	1535	305	2772.3
M51	8488	10-May-19	20-Apr-23	1441	305	2510.0
M51	8496	19-May-19	04-Feb-24	1722	305	2952.7
M51	8508	10-Mar-19	10-Jun-23	1553	305	2610.5
M51	8514	28-Feb-19	05-Jan-24	1772	305	1659.5
M51	8717	17-May-19	12-Aug-23	1548	305	2594.9
M51	8720	27-May-19	10-Jul-23	1505	305	2469.6
M51	8721	30-May-19	25-May-23	1456	305	1779.3
M51	8733	20-May-19	14-Jun-23	1486	305	2412.4
M51	8755	25-May-19	11-Jan-24	1692	305	2904.9
M51	8767	27-May-19	18-Dec-23	1666	305	2918.2
M51	8787	13-Jul-19	05-Jul-23	1453	305	2768.9
M51	8876	25-Jun-19	17-May-23	1422	305	2178.5
M53	8765	29-Jun-19	05-Sep-23	1529	305	2608.3
M53	8917	29-Jul-19	09-Feb-24	1656	305	2767.0
M53	8919	3-Dec-19	15-Mar-24	1564	305	2284.1
M53	8920	20-Jul-19	26-Nov-23	1590	305	2650.7
M53	9035	17-Sep-19	15-May-23	1336	305	2148.2
M53	9052	24-Sep-19	10-Aug-23	1416	305	2866.8
M53	9061	19-Sep-19	15-Sep-23	1457	305	2312.3

M53	9066	13-Sep-19	20-May-23	1345	305	2183.3
M53	9075	17-Sep-19	15-Nov-23	1520	305	2345.4
M53	9079	16-Sep-19	13-Aug-23	1427	305	2027.2
M53	9179	17-Oct-19	15-Dec-23	1520	305	2746.6
M53	9285	20-Oct-19	27-Aug-23	1407	305	2450.4
SK	8372	25-Mar-19	24-Oct-23	1674	305	2500.9
SK	8484	15-Nov-19	16-Dec-23	1492	305	2857.7
SK	8754	1-Sep-19	21-Oct-23	1511	305	2627.2
SK	8762	22-Aug-19	16-Nov-23	1547	305	2638.4
SK	8763	12-Oct-19	03-Jun-23	1330	305	2565.0
SK	8930	6-Oct-19	02-Jun-23	1335	305	2585.6
SK	8953	25-May-20	14-Feb-24	1360	305	3001.6

Bull- wise daughters completing 1st lactation from 18th Set

Bull No.	Daughter No.	Date of Birth	Date of Calving	Age at 1st Calving	Lact. Lenght	Lactation Yield
1150	8975	27-Nov-19	12-Jun-23	1293	305	2757.9
1150	9252	13-Dec-19	15-Jun-23	1280	305	2422.6
1150	9257	16-Dec-19	10-Jun-23	1272	305	2238.9
1150	9269	15-Dec-19	11-Jun-23	1274	305	2050.2
1150	9591	5-Feb-20	24-Jun-23	1235	305	2529.3
1150	9131	13-Jan-20	18-Jul-23	1282	305	2786.6
1150	9877	17-Apr-20	29-Jul-23	1198	305	2411.2
1150	9231	14-Nov-19	15-Aug-23	1370	305	2170.0
1150	9243	15-Nov-19	17-Oct-23	1432	305	2122.9
1150	9271	6-Nov-19	22-Nov-23	1477	305	2253.7
1150	9899	10-Apr-20	28-Dec-23	1357	305	2401.9
1150	8275	25-Apr-20	15-Jan-24	1360	305	2766.4
1150	9506	17-Mar-20	11-Jan-24	1395	305	2424.8
1150	9251	3-Nov-19	12-Feb-24	1562	305	2409.3
1150	9255	6-Dec-19	02-Feb-24	1519	305	2269.3
1150	9264	10-Nov-19	20-Feb-24	1563	305	2369.4
1150	9480	25-Jan-20	12-Feb-24	1479	305	1991.9
1150	8957	9-May-20	13-Mar-24	1404	305	2836.5
1208	771	26-Jun-21	26-Mar-24	1004	305	2648.9
1209	9647	4-Jun-20	05-Jul-23	1126	305	2612.8
1209	9667	2-Jun-20	21-Jul-23	1144	305	2886.5
1209	B001	17-Jul-20	15-Aug-23	1124	305	2765.1
1209	9897	27-May-20	23-Oct-23	1244	305	2406.6
1209	9898	24-May-20	14-Nov-23	1269	305	2399.5
1209	9737	8-Jul-20	05-Dec-23	1245	305	2633.2
1209	B006	30-Jul-20	14-Dec-23	1232	305	2631.6
1209	B048	18-Apr-20	01-Jan-24	1353	305	2794.5
1209	9716	29-Jun-20	15-Feb-24	1326	305	2395.8
1219	9861	13-Jul-20	02-Aug-23	1115	305	2416.4
1219	B218	10-Jul-20	17-Aug-23	1133	305	2257.4
1219	B236	13-Jul-20	12-Sep-23	1156	305	2424.3
1219	B222	30-Jun-20	14-Jan-24	1293	305	2196.4
1219	9841	12-Jul-20	13-Feb-24	1311	305	2430.0
1219	9864	2-Jul-20	19-Mar-24	1356	305	2763.5
2645	9346	17-Nov-19	26-Apr-23	1256	305	2482.1

2645	8472	16-Jan-20	20-Jun-23	1251	305	2504.7
2645	9201	17-Dec-19	24-Jun-23	1285	305	2523.4
2645	9441	18-Jan-20	12-Jun-23	1241	305	2377.2
2645	9335	28-Dec-19	20-Jul-23	1300	305	2403.3
2645	9433	24-Dec-19	10-Sep-23	1356	305	2264.2
2645	9531	16-Jan-20	09-Sep-23	1332	305	2464.2
2645	9583	15-Jan-20	14-Sep-23	1338	305	2413.0
2645	9624	9-Jan-20	08-Sep-23	1338	305	2560.2
2645	9279	17-Dec-19	20-Oct-23	1403	305	2424.7
2645	9507	16-Dec-19	13-Nov-23	1428	305	2310.5
2645	8962	25-Jan-20	06-Dec-23	1411	305	2779.7
2645	9438	27-Dec-19	17-Dec-23	1451	305	2407.6
2645	9576	15-Dec-19	09-Dec-23	1455	305	2374.9
2645	9621	19-Dec-19	20-Dec-23	1462	305	2831.5
2645	9241	27-Dec-19	24-Feb-24	1520	305	2444.0
2645	8962	10-Jan-20	02-Mar-24	1513	305	2949.7
2676	9121	13-Dec-19	15-Jun-23	1280	305	2565.9
2676	9411	26-Dec-19	17-Jun-23	1269	305	2415.4
2676	9234	16-Dec-19	26-Aug-23	1349	305	2382.0
2676	9274	6-Dec-19	12-Aug-23	1345	305	2412.6
2676	9273	12-Dec-19	16-Oct-23	1404	305	2639.4
2676	9471	19-Dec-19	18-Oct-23	1399	305	1794.4
2676	B038	31-Oct-20	25-Nov-23	1120	305	2688.1
2676	B054	22-Oct-20	10-Nov-23	1114	305	2704.0
2676	9453	17-Dec-19	18-Dec-23	1462	305	2060.6
2676	9472	20-Nov-19	11-Dec-23	1482	305	2195.9
2676	9422-a	18-Nov-19	18-Dec-23	1491	305	1990.8
2676	466	13-Dec-20	16-Jan-24	1129	305	3017.9
2676	9236	16-Jan-20	15-Jan-24	1460	305	2079.1
2676	9468	16-Nov-19	18-Jan-24	1524	305	1816.2
2676	9226	31-Jan-20	20-Feb-24	1481	305	1919.3
2676	9235	5-Dec-19	12-Feb-24	1530	305	2303.5
2676	B072	28-Nov-20	11-Feb-24	1170	305	2300.3
2676	9396	27-Nov-19	07-Mar-24	1562	305	2001.7
2676	9499	23-Dec-19	20-Mar-24	1549	305	2381.0
2677	8489	18-Dec-19	20-Jun-23	1280	305	2699.4
2677	8943	12-Dec-19	12-Jun-23	1278	305	2384.4
2677	9350	26-Nov-19	16-Jun-23	1298	305	2445.4
2677	9630	10-Dec-19	15-Jun-23	1283	305	2722.8
2677	9528	25-Dec-19	17-Jul-23	1300	305	2422.9
2677	9360	21-Dec-19	15-Aug-23	1333	305	2308.3
2677	9617	12-Dec-19	10-Oct-23	1398	305	2601.1
2677	9685	23-Apr-20	13-Oct-23	1268	305	2305.7
2677	9552	20-Dec-19	01-Nov-23	1412	305	2438.2
2677	8945	22-Nov-19	19-Jan-24	1519	305	2901.9
2677	9511	25-Nov-19	27-Jan-24	1524	305	2170.3
2677	9512	10-Dec-19	15-Jan-24	1497	305	2204.2
2677	9980	17-May-20	15-Jan-24	1338	305	2393.6
2677	9230	10-Feb-20	23-Feb-24	1474	305	2202.8
2677	8459	15-Dec-19	01-Mar-24	1538	305	2835.8

2689	9470	28-Dec-19	10-Aug-23	1321	305	2388.4
2689	B029	20-Sep-20	15-Oct-23	1120	305	2372.3
2689	B036	11-Sep-20	16-Nov-23	1161	305	2563.9
2689	B385	22-Sep-20	04-Jan-24	1199	305	2317.4
2689	B335	22-Sep-20	25-Feb-24	1251	305	1933.9
2689	B021	15-Oct-20	10-Mar-24	1242	305	2574.8
4905	9254	30-Mar-20	20-Jun-23	1177	305	2186.7
4905	9620	28-Jan-20	15-Jun-23	1234	305	2697.5
4905	8959	18-Apr-20	20-Jul-23	1188	305	2860.2
4905	9297	22-Mar-20	07-Jul-23	1202	305	2910.1
4905	9560	25-Feb-20	13-Jul-23	1234	305	2478.3
4905	9671	20-Apr-20	11-Aug-23	1208	305	2719.7
4905	9566	28-Feb-20	11-Sep-23	1291	305	2377.5
4905	9260	4-Mar-20	12-Oct-23	1317	305	2156.8
4905	9638	6-Apr-20	10-Oct-23	1282	305	2571.4
4905	9301	13-Mar-20	08-Dec-23	1365	305	2787.1
4905	8963	15-Apr-20	09-Jan-24	1364	305	2813.7
4905	9680	19-Apr-20	13-Jan-24	1364	305	2816.4
4905	9288	2-Apr-20	15-Feb-24	1414	305	2252.4
4905	8956	19-May-20	10-Mar-24	1391	305	2962.4
4905	9465	26-Mar-20	10-Mar-24	1445	305	2323.8
4905	9516	15-Feb-20	16-Mar-24	1491	305	2363.1
4905	9643	20-May-20	10-Mar-24	1390	305	2961.9
4905	B008	28-Aug-20	15-Mar-24	1295	305	3012.7
4995	9637	19-Jun-20	10-Jul-23	1116	305	2955.6
4995	9992	29-May-20	15-Jul-23	1142	305	2462.2
4995	9995	20-Jun-20	05-Jul-23	1110	305	2898.5
4995	9631	3-Jul-20	16-Aug-23	1139	305	2698.2
4995	9639	10-Sep-20	26-Oct-23	1141	305	2588.1
4995	9661	25-Jul-20	10-Oct-23	1172	305	2640.4
4995	9891	29-Jun-20	18-Oct-23	1206	305	2293.7
4995	9639	28-Jul-20	03-Dec-23	1223	305	2672.1
4995	9925	15-Jun-20	07-Jan-24	1301	305	2488.7
4995	9309	14-Jul-20	14-Mar-24	1339	305	2903.7
7094	8271	19-Apr-20	10-Jul-23	1177	305	2860.1
7094	9656	24-Jul-20	07-Aug-23	1109	305	2711.3
7094	9292	7-Apr-20	02-Oct-23	1273	305	2670.6
7094	8954	25-Apr-20	02-Nov-23	1286	305	2536.5
7094	9663	4-Sep-20	15-Mar-24	1288	305	2326.7
7147	8974	30-Mar-20	04-Jun-23	1161	305	2627.3
7147	8982	23-Mar-20	07-Jun-23	1171	305	2843.3
7147	9424	22-Jan-20	01-Sep-23	1318	305	2468.9
7147	7518	7-Oct-20	17-Nov-23	1136	305	2450.7
7147	9332	19-Feb-20	07-Nov-23	1357	305	2428.0
7147	9973	5-Aug-20	20-Jan-24	1263	305	2964.2
7147	9429	26-Jan-20	19-Feb-24	1485	305	2478.2
7227	9616	27-Feb-20	10-Jun-23	1199	305	2641.2
7227	9645	18-Mar-20	06-Jun-23	1175	305	2688.2
7227	9701	10-Sep-20	25-Jul-23	1048	305	2434.7
7227	9128	27-Feb-20	20-Sep-23	1301	305	2645.1

7227	B184	29-Dec-20	15-Sep-23	990	305	2428.2
7227	9676	24-Mar-20	12-Dec-23	1358	305	2733.7
7227	9119	24-Feb-20	25-Jan-24	1431	305	3012.1
7263	479	31-Dec-20	18-Jan-24	1113	305	2474.8
7263	B362	2-Sep-20	22-Feb-24	1268	305	2229.6

Bull- wise additional daughters completing 1st lactation from 19th set

Bull No.	Daughter No	Date of birth	Date of calving	Age at 1st calving (days)	Lact length	Lact. Yield
2674	1004	20-Jun-21	26-Nov-23	889	305	2489.9
2674	997	23-Jun-21	15-Mar-24	996	305	4142.5

Project Co-ordinator's observations on Field Unit performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned as per R E 2024-25		Released ICAR	Expenditure as per AUC		Balance
Total	ICAR Share	Share as per R E	ICAR Share	State Share	(ICAR Share)
35.00	26.25	26.25	26.24995	8.75	0.00005

- Total 6927 AI's were performed and 3538 buffalos conceived using bulls from 15th & 16th set PT bull and 21st & 22nd test mating set during report period. The conception rate reported 51.1%.
- 2998 no. of calving reported during the period out of which 1612 male and 1386 were female.
- At various centers 9879 female progenies of different age groups are standing for future recording
- During the year 384 daughters calved and 517 daughters recorded for lactation.

Recommendations:

- More emphasis should be given increase the no. of AIs in the field.
- More awareness should be created among farmers through calf rallies, Kishan gosthies and extension programmes for active participation in FPT programme.

FIELD UNIT: ICAR-NDRI, KARNAL

a. Research Evaluation Performa

1. Name of Center and year of initiation : ICAR-NDRI, Karnal (2001-02)
2. Project Code : 1005961
3. Project Title : Network Project on Buffalo Improvement-Field Unit
4. Subproject : Field Progeny Testing Unit-Murrah (NDRI)
5. Name of project In-charge : Dr. Vikas Vohra, Principal Scientist, AG&B
6. Activities assigned and targets fixed: : As per technical programme of the FPT Murrah Enclosed Tables 1-15
7. Objectives : a) To perform the minimum 4500 AI in the NDRI adopted villages
   b) To evaluate Murrah Sire in the associated herds of the filed/villages
4. Activities carried out during the period : AI, Milk recording, Deworming, Vaccination, Camps, Calf Rally, Farmer Visit.
5. Selection of Bull Set wise : Bulls selected for 22nd Set
6. Progeny test evaluation- set wise : Set evaluation was not due during the reported period
7. Technology developed / patent : Nil
8. Bulls for elite mating : Nil
9. Feeding, Reproduction, Management study, if any: Nil
10. Gaps / Constraints / Shortfalls
    - A large movement of buffaloes due to sale-purchase in the villages.
    - The animals in the project, when tagged, fetch higher prices in the village hence frequently sold, leading to less number of daughters for recording.
    - Shortage of adequate funds to improve the coverage of AI and data recording the field
11. Further programme, activities, target : Enclosed

b. Financial Statement/ administrative evaluation Performa

1.	No. of Sanction posts and designation	Nil
2.	No. of posts filled	NA
3.	No. of posts vacant (vacant since when)	NA
4.	Funds released during the year	Rs. 25,50,000 /-
5.	Previous balance (refunded)	Rs. 8,393/- (Refund to Co-Unit)
6.	Funds Utilised	Rs. 25,47,811 /- (99.86% utilized)
7.	Closing Balance	Rs. 2,189 /-

Research Achievements

A total of 5008 were performed in Murrah Buffaloes under field conditions during 2024-25 and as a result an overall conception rate of 46.29% was obtained. The highest conception rate was achieved in the month of April 2024 (48.03%) and the lowest was found for the month of December 2024 (44.35%), when recorded till January 2025. Across the villages, the highest conception rate was observed in Kheriman Singh (61.47%) village and lowest in Darar (45.76%), when recorded village till January 2025. A total of 1548 (911 Male and 637 Female) Murrah buffalo calves were born in the farmers' herds and performance data on milk recording of 134 daughters have been recorded for evaluation of bulls under field conditions. The average lactation yield in the field was recorded as 2370.97 ± 326.9 kg daily milk yield in the recorded daughter were 7.8 kg/day. The total herd strength of registered females and the breedable females at different centers was 5678 and 4505 respectively.

Action Taken Report (21st ARM)

Recommendations	Action Taken Report
Baghpat area of Uttar Pradesh should be explored as a field unit in collaboration with CIRC, Meerut to increase the test mating and performance recordings.	With due consideration the matter was consulted with in-charge AICRP at ICAR-CIRC, Meerut. We acknowledge the scientific merit of such collaborations but after thorough evaluation of the current operational priorities, non-availability of infrastructure & manpower with either NDRI or CIRC, we believe that at present our current efforts are best focused on consolidating and optimizing performance within existing operational areas only.
The performance of Murrah FPT unit is satisfactory and the centre can be continued.	Noted.

Research Target: 4500 AI in the villages **Target Achieved :** 5008 AI (111.28%)

Other Activities

The AG&B Division, NDRI, under the Network Project on Buffalo Improvement (FPT Murrah Unit). Under this program the general-purpose medicines, spray and calcium supplement were distributed as support to about 90 dairy farmers belonging to the SC community from district Karnal. The dairy farmers were also upraised about the scientific breeding and management practices of dairy buffaloes, with special emphasis on the role of calcium supplementation in buffaloes.

F 1. Herd Strength of Registered females under field unit as on 31-03- 2025

Name of Centre	OB	Addition	Deduction		Total
		New Reg. (Birth/ Purchase)	Sold	Death	Closing Balance
Darar	1764	90	202	5	1647
Kheriman Singh	1183	76	146	3	1110
Rindal	928	80	180	2	826
Sheikhpura	1178	86	110	3	1151
Kamalpur	912	122	87	3	944
Total	**5965**	**454**	**725**	**16**	**5678**

F2. Status of Breedable females under field unit as on 31-03- 2025

Name of Village	Heifers >3 years		Buffalo (NP)		Buffalo Pregnant	
	Total	Pregnant	In milk	Dry	In milk	Dry
Darar	265	154	282	61	142	58
Kheriman Singh	287	156	275	52	127	63
Rindal	223	164	168	37	185	35
Sheikhpura	348	151	186	49	119	52
Kamalpur	312	149	192	55	124	34
Total	**1435**	**774**	**1103**	**254**	**697**	**242**

F 3. Monthly AI under Field Unit during 01-04-2024 to 31-03-2025

Month	Centre / Village					Total
	Darar	Kheriman Singh	Rindal	Shekhpura	Kamalpur	
April 24	75	65	81	85	75	381
May	60	54	80	82	70	346
June	68	47	77	80	63	335
July	70	52	81	81	80	364
Aug.	90	68	92	85	86	421
Sept.	87	83	92	86	88	436
Oct.	95	96	93	80	92	456
Nov.	74	103	84	82	96	439
Dec.	105	102	90	91	90	478
Jan. 25	145	106	87	90	70	498
Feb.	70	85	84	82	95	416
March.	70	94	88	90	96	438
Total	**1009**	**955**	**1029**	**1014**	**1001**	**5008**

F 4 Bullwise AI at Different Field Unit Centers during the Period 1-4-2024 to 31-03-2025

Set No	Bull No	April	May	June	July	Aug	Sept	Oct.	Nov.	Dec	Jan	Feb	March	Total
21	109	61	41			31	8		73	35	127			**376**
21	112	36	12											**48**
21	297	107	50				37	17	88	46				**345**
21	2979				24	61					25			**110**
21	2990	20	69	40	50	85	22				112			**398**
21	3014							26	48	136				**210**
21	5414					35	59	28	35	83	25			**265**
21	5629		39	68	13		83	68	21					**292**
21	5638	114	88	91	68			26						**387**
21	5690			74	142	25		41	41	30	69			**422**
21	5723	43	47	62			30							**182**
21	5764										25			**25**
21	7630							52	74	78	12			**216**
21	7768					98	197	118						**413**
21	7990				67	86		80	59	70				**362**
22	3097										60		107	**167**
22	3113										43	26	134	**203**
22	3126											81		**81**
22	5791											85	57	**142**
22	5814											118	25	**143**
22	5912											41	37	**78**
22	8100											65	62	**127**
22	8198												16	**16**
Total		**381**	**346**	**335**	**364**	**421**	**436**	**456**	**439**	**478**	**498**	**416**	**438**	**5008**

F 5: Month – wise Conception at Different Field Units during the period 01-4-24 to 31/03/25

Month	Village / Centre							CR %
	Darar	Kherimann Singh	Rindal	Sheik hpura	Kamalpur	Total Conce.	Total AI	
April 24	40	31	37	43	32	183	381	48.03
May	30	26	35	39	28	158	346	45.66
June	33	23	35	39	27	157	335	46.87
July	36	25	36	40	32	169	364	46.43

Aug.	42	31	45	43	34	195	421	46.32
Sept.	41	38	45	42	38	204	436	46.79
Oct.	45	52	44	41	35	217	456	47.59
Nov.	34	49	41	41	39	204	439	46.47
Dec	46	45	41	46	34	212	478	44.35
Jan. 25	67	51	38	44	24	224	498	44.98
Feb.								
March								
Total	**464**	**477**	**503**	**508**	**417**	**1923**	**4154**	**46.29**
AI	**869**	**776**	**857**	**842**	**810**	**Av.**		
CR%	**45.76**	**61.47**	**58.69**	**60.33**	**51.48**	**CR=(1923/4154)*100=46.29%**		

This Table No. 5 will be Updated in July-2025

F 6: Monthwise Calvings at Different Field Unit Centers During the Period 01-04-2024 to 3-2025

Month	Darar		Kherimann Singh		Rindal		Sheikhpura		Kamalpur		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Apr 24	7	7	11	11	11	8	20	12	16	9	**65**	**47**
May	9	8	12	8	11	7	18	16	18	10	**68**	**49**
June	10	8	22	16	11	8	18	11	19	13	**80**	**56**
July	8	8	25	12	12	9	18	12	20	13	**83**	**54**
Aug.	13	12	24	12	13	12	18	12	22	13	**90**	**61**
Sept.	10	12	8	9	12	9	16	12	28	12	**74**	**54**
Oct.	14	11	23	16	11	8	16	13	21	12	**85**	**60**
Nov.	13	12	17	18	12	9	15	10	21	11	**78**	**60**
Dec.	13	13	19	14	11	9	18	12	23	13	**84**	**61**
Jan 25	5	4	16	20	14	9	19	11	24	8	**78**	**52**
Feb	7	9	14	8	9	7	17	11	20	9	**67**	**44**
Mar	5	6	12	7	12	9	15	8	15	9	**59**	**39**
Total	**114**	**110**	**203**	**151**	**139**	**104**	**208**	**140**	**247**	**132**	**911**	**637**

M = Male: 911 F = Female: 637 Total = 1548

F 7. Bull wise Conception at different Field Unit Centers during 1-4-2024 to 31-03-2025

Set No	Bull No	April 24	May-24	Jun-24	Jul-24	Aug. 24	Sept. 24	Oct. 24	Nov. 24	Dec. 24	Jan. 2025	Feb. 25	Mar-25	Total
20	109	33	17			15	4		33	13	61			**176**
20	112	16	5											**21**
20	297	46	25				17	6	42	24				**160**
20	2930										11			**51**
20	2979				10	30					50			**188**
20	2990	10	29	20	26	43	10							**95**
21	3014							13	20	62	13			**125**
21	5414					17	25	13	17	40				**137**
21	5629		18	32	5		36	37	9					**187**
21	5638	58	41	41	35			12			34			**198**
21	5690			35	61	12		21	21	14				**86**
21	5723	20	23	29			14				10			**10**
21	5764										5			**94**
21	7630							25	33	31				**191**
21	7768					44	98	49						**164**
21	7990				32	34		41	29	28	23			**23**
22	3097										17			**17**
22	3113										61			**176**
Total		**183**	**158**	**157**	**169**	**195**	**204**	**217**	**204**	**212**	**224**	**0**	**0**	**1923**

This table No. 7 will be updated in July-2025

F8. Bullwise Calving at Different Field Unit Centers during 1-4-2024 to 31-3-2025

Month		April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb	Mrch	**Total**
5481/20	M	29	11											40
	F	19	6											25
5505/20	M	36	21											57
	F	28	14											42
109/21	M										20	7	5	32
	F										8	7	4	19
112/21	M									31	37	7	1	76
	F									22	32	4	1	59
297/21	M											22	4	26
	F											11	5	16
2930/21	M			7	12							2		21
	F			3	8							3		14
2979/21	M				22	22	23							67
	F				15	12	20							47
2990/21	M							16	2				13	31
	F							12	3				9	24
3014/21	M				36	23								59
	F				22	17								39
5414/21	M		17	15	2				7					41
	F		14	11	1				8					34
5629/21	M			14	2	13	12	7					7	55
	F			11	1	7	5	5					5	34
5638/21	M					14	12					24	20	70
	F					13	9					15	10	47
5690/21	M						23		6					29
	F						15		4					19
5723/21	M						3					5	9	17
	F						4					4	5	13
5764/21	M								8	47	21			76
	F								4	35	12			51
7630/21	M							24	28					52
	F							18	17					35
7768/21	M		19	44	9	18		7						97
	F		15	31	7	12		4						69
7990/21	M						1	31	27	6				65
	F						1	21	24	4				50
TOTAL		**112**	**117**	**136**	**137**	**151**	**128**	**145**	**138**	**145**	**130**	**111**	**98**	**1548**

F. 9 Bull wise female progeny at different Field Unit Centers (0-12 months) as on 31/3/25

Bull No	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	**Total**
5481/20	2		8	9	6	25
5505/20	5	17	3	8	9	42
109/21	10		4		5	19
112/21	5	21	9	12	12	59
297/21	5		3		8	16
2930/21	5			9		14
2979/21	10	13		12	12	47
2990/21	1	15			8	24
3014/21	10	4	15	4	6	39
5414/21	10	8	4	6	6	34
5629/21	6		5	11	12	34
5638/21	7	11	15	13	1	47
5690/21	4	9			6	19

5723/21	4	1	4	4		13
5764/21	8	16	9	9	9	51
7630/21	7		8	10	10	35
7768/21	7	21	8	21	12	69
7990/21	4	15	9	12	10	50
Total	**110**	**151**	**104**	**140**	**132**	**637**

F. 10. Bull wise Live Female Progeny at different Field Unit s (1-2 yrs) as on 31/3/ 2025

Bull No	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	Total
M-19/20	8		10	16	25	**59**
1454/20	12	25	16	12	26	**91**
2814/20	15					**15**
2831/20	10	14	6	9	10	**49**
2838/20	1	15	2	20		**38**
2848/20		9	3		1	**13**
2850/20	14	16	14	10	7	**61**
3004/20	6	6	2	6	7	**27**
5427/20		25	10	11	10	**56**
5481/20	5		7			**12**
5500/20	10	37	5	13	16	**81**
5505/20		6			6	**12**
5511/20	7	4	2	3	1	**17**
5588/20	6	7	3		5	**21**
5592/20	4			7		**11**
7584/20	2	8		3	2	**15**
7649/20	8			9		**17**
Total	**108**	**172**	**80**	**119**	**116**	**595**

F. 11. Bull wise Live Female Progeny at different Field Unit s (2-3 yrs) as on 31/3/ 2025

Bull No	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	Total
1315/19	18	23	9	17	12	**79**
2674/19		9	10	8	11	**38**
2737/19	12	6	4	4	5	**31**
2759/19	10		5	4	8	**27**
5246/19			4	6		**10**
5310/19		9	16	4	17	**46**
5320/19	18	24		3	15	**60**
5333/19	4	15	14	7	4	**44**
5374/19	7	18	5	17	9	**56**
7604/19	3					**3**
2793/20	2		3			**5**
2831/20		2				**2**
2848/20	5	8	4	4	5	**26**
3004/20	3	7		6		**16**
5427/20	13	25	6	15	9	**68**
7584/20	13	9	17	7	18	**64**
7649/20	20	20	9	8	12	**69**
Total	**128**	**175**	**106**	**110**	**125**	**644**

F. 12. Bull wise Live Female Progeny at different Field Unit Centers (>3 Years) as on 31/3/2025

Bull No	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	Total
1150/18		4				**4**
1208/18				6		**6**
2645/18			7			**7**
2676/18				5	10	**15**
2677/18	8			5		**13**
4905/18			3		10	**13**
4995/18	3	5				**8**
5147/18		3				**3**
7147/18		18				**18**
7227/18	13		5	2		**20**
7263/18		10			12	**22**
2674/19	3	11	2		9	**25**
2737/19	4	6		4	5	**19**
2759/19	3	6	3	4		**16**
5181/19	12	14	18	10	6	**60**
5232/19	3	9	10	8	17	**47**
5246/19	17	20	8		15	**60**
5310/19	13	6		2		**21**
5320/19			12	4		**16**
5333/19					8	**8**
7604/19	4	13	14	28	18	**77**
TOTAL	**83**	**125**	**82**	**78**	**110**	**478**

F 13. Bull wise daughters calved at different field unit centers during2024-25

Bull No/Set No.	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	Total
2607/17	6					**6**
4837/17		3				**3**
6942/17	5	2				**7**
Sikander/17	4	1				**5**
M-51/17	2					**2**
M-53/17	3	1				**4**
1150/18			3	3	4	**10**
1208/18			1	1		**2**
1209/18			1			**1**
2645/18		6	2	3	7	**18**
2676/18		2	1		3	**6**
2677/18				1		**1**
2689/18		4	2	2		**8**
4905/18		5	1	2	2	**10**
4995/18			1	2		**3**
7094/18	7	1	1	2		**11**
7147/18	2		4	4		**10**
7227/18		3				**3**
7263/18			1	2	3	**6**
1315/19		2				**2**
2759/19		1				**1**
5181/19			5	1	2	**8**
5232/19			1		3	**4**
5246/19					2	**2**
7604/19			1			**1**
Total	**29**	**31**	**25**	**23**	**26**	**134**

F. 14. Bull wise daughters recorded at different field units during2024-25

Bull No/Set No.	Darar	Kheriman Singh	Rindal	Sheikhpura	Kamalpur	Total
2558/17		1		2		**3**
2594/17			2	2		**4**
2607/17	6			3		**9**
4687/17	3					**3**
4715/17	3		3	2		**8**
4837/17		5	1			**6**
6942/17	3	3	2	1		**9**
7010/17	2		1			**3**
M-330/17				2		**2**
Dara/17				4		**4**
M-51/17	3	1				**4**
M-53/17	2	5				**7**
Sikander/17	3	1	1	2		**7**
1150/18			1	3		**4**
1208/18		2	3			**5**
1209/18			4			**4**
1219/18			1		1	**2**
2645/18		7			4	**11**
2676/18		1	3		3	**7**
2677/18					1	**1**
2689/18			1		4	**5**
4905/18		3				**3**
4995/18		1		1		**2**
7094/18	1	1		2	5	**9**
7147/18			2	1	1	**4**
7227/18		1			4	**5**
7263/18			2			**2**
5310/19		1				**1**
Total	**26**	**33**	**27**	**25**	**23**	**134**

F 15. Setwise AI, conception, calving and daughters retained till completion of milk recording as on 31/03/2025

Set No.	AI	Conc eptions	Calvings		Daughters retained upto				Complete Reco
			Total	Female	1 Year	2 Year	3 Year	Calving	
6th	1156	500	325	144				62	47
7th	2299	1024	592	281				74	77
8th	2435	1021	579	270				135	103
9th	3735	1592	1066	552				287	186
10th	3133	1394	981	448				234	144
11th	6422	2915	2323	1145				344	282
12th	1934	999	799	408				97	71
13th	2261	1115	865	403				97	72
14th	5930	2914	2457	1172				150	142
15th	6936	3044	1453	685				119	125
16th	4937	2658	1723	780			6	118	126
17th	5061	2199	1689	733			107	167	157
18th	7670	3438	2679	1122	209	701	727	145	67
19th	6807	2900	2469	1055	1055	890	817	18	1
20th	7398	3498	1818	1043	1043	878	250	--	--
21st	7954	3668	1384	570	570	--	--	--	--
22nd	957	40	--	--	--	--	--	--	--
Total	**77025**	**34919**	**23202**	**10811**	**2877**	**2469**	**1907**	**2047**	**1600**

* as on 31.03.2025

F 16. Performance of FPT Programme on Farmer's Buffaloes NDRI unit since inception

Duration	AI	Pregnancies	CR%	Calvings	Females Born	Daughters Recorded	Av. AFC (months)	Av. Milk Yield (kg/day)	Daughters Available for Recording
2004-05	2223	993	41.97	710	333				
2005-06	2224	994	42.97	875	400				
2006-07	2193	976	33.5	918	440				
2007-08	2594	1212	46.72	1140	517				
2008-09	2529	1190	47.05	1086	503	34	41.4	7.55	
2009-10	2739	1377	50.27	1159	569	45	45.4	6.11	
2010-11	2747	1399	50.92	1225	560	65	46.7	6.87	21
2011-12	2995	1600	53.42	1260	605	109	46.8	7.29	78
2012-13	2905	1422	48.95	1159	569	138	45.3	7.36	109
2013-14	4419	2242	51.27	1225	560	211	45.3	7.08	168
2014-15	3941	2033	51.58	1860	905	183	44.2	7.68	298
2015-16	3905	1994	51.06	1648	768	133	45.2	7.82	58
2016-17	3916	1975	50.43	1524	722	138	42.9	7.29	125
2017-18	3241	1605	49.52	1397	640	119	42.6	7.37	485
2018-19	4315	1995	46.23	1030	456	83	41.58	8.6	529
2019-20	4571	1999	46.96	1532	647	87	43.02	7.69	289
2020-21	4874	1928	47.76	1559	640	85	48.56	8.07	286
2021-22	5126	2467	48.13	1793	772	91	48.27	8.05	296
2022-23	4844	2317	47.83	1866	803	86	49.60	7.76	201
2023-24	5108	2369	46.38	1625	682	108	52.44	7.43	399
2024-25*	**5008**	**1923**	**46.29**	**1548**	**637**	**134**	**49.19**	**7.80**	**478**
Overall	**76417**	**35623**	**47.5962**	**28139**	**12728**	**1849**	**45.79**	**7.51**	

Conception of Jan. 2025 will be added in July 2025

Project Co-ordinator's observations on field performance

Financial Statement for the year 2024-25 (Rs in Lakhs)

Sanctioned R E 2024-25		Released ICAR	Expenditure as per AUC		Balance
Total	ICAR Share	Share as per R E	ICAR Share	State Share	
25.50	25.50	25.50	25.47811	--	(±) 0.02189

- A total of 5008 AI was performed in adopted villages with the semen of bulls of 21st and 22nd set for test mating during 2024-25. The conception rate was 46.29 %.
- Total 1548 calving (911 male and 637 female) recorded in the field.
- During the report period 134 daughters calved and 134 daughters recorded for first lactation milk yield.
- As on 31st March 2025: total 2354 daughters of various age groups (0-12 months: 637, 1-2 years: 595, 2-3 years: 644 and > 3 year: 478) are standing in field for future recording.

Recommendations:

- More awareness programmes should be organised for farmers in the form of calf rallies, milk competitions and Kisan Gosthies.
- Recording of daughters first lactation milk yield should be emphasized for more accuracy in progeny testing programme.

SUMMARY OF RESEARCH ACHIEVEMENTS AND PROGRESS OF THE PROJECT

Selection and use of Breeding Bulls for Murrah breed

From July 93 till date test mating from 21 sets of Murrah breeding test bulls have been completed and test mating of 22nd is continuing from January 2025 and complete in June 2026. Brief summary of the duration, the number of bulls, average of the dam's best yield and highest dam's yield in each set is shown below.

Twenty sets of bulls used under Network Project on Buffalo since July 1993

Set No.	Duration	Centrewise No. of bulls						Total Bull	Av. of 305 day or less dams best yield (kg)	Highest dam 305 day yield (kg)	305 day or less herd Average (kg)/N
		CIRB	NDRI	GADVASU	LUVAS	NDUAT	IVRI				
1	July, 1993 to Dec., 1994	2	9	0				11	3050	4114	1820/501
2	Jan., 1995 to June, 1996	4	5	6				15	3002	3898	1920/487
3	July, 1996 to Dec., 1997	8	5	2				15	2876	3275	2053/476
4	Jan., 1998 to June, 1999	5	4	5				14	2999	3401	1973/457
5	July, 1999 to Dec., 2000	6	5	4				15	3120	3898	1943/551
6	Jan., 2001 to June 2002	5	5	4	2			16	3055	3898	1972/562
7	July 2002 to Dec., 2003	5	2	4	1			12	2928	3544	2017/505
8	Jan., 2004 to June 2005	5	5	4	2			16	2928	3690	2056/511
9	July 2005 to Dec. 2006	4	5	5	1			15	2923	3336	2008/458
10	Jan., 2007 to June 2008	3	1	5	1	3	1	14	2829	3369	2130/509
11	July 2008 to Dec., 2009	4	4	3	1	1	1*	14	2792	3051	2046/483
12	Jan., 2010 to June 2011	1	3	3	1		3**	11	3362	5192	2115/384
13	July 2011 to Dec., 2012	2	1	3			2	8	3205	3805	2199/380
14	Jan., 2013 to June 2014	4	4	3			1	12	3451	4636	2356/288
15	July, 2014 to Dec., 2015	6	5	4				15	3350	4636	2361/335
16	Jan., 2016 to June 2017	5	4	3	3			15	3762	4636	2349/280
17	July, 2017 to Dec., 2018	10	2	4				16	3526	4668	2449/315
18	Jan., 2019 to June 2020	3	4	4	4			15	3284	3867	2586/333
19	July, 2020 to Dec., 2021	7	1	3	1	-	-	12	3435	4069	2607/374
20	Jan., 2022 to June 2023	5	2	5	2	-	-	14	3658	4814	2625/367
21	July, 2023 to Dec., 2024	5	3	3	2	-	1	14	3755	4420	2721/401

22	Jan., 2025 to June 2026	8	4	4	2	-	2	20	3755	4824	2670/419

* bulls from Deedwadi ** Two from Redhu Farm

List of bull (Murrah) selected for test mating for 22nd set (January 2025 - June 2026)

Sr. no.	Bull no.	Location	D.O.B.	Dam No.	Sire No./ set No	Dam's All Lact Milk Yield (kg) (305 or less days)	Highest Yield/ Best Peak
1.	306	LUVAS	13/11/21	1358	5232 XIX	3550/3847/3541	3847/18.3
2.	317	LUVAS	28/12/21	1068	4196 PT XIV	3128/3660/3431/3206	3660/16.3
3.	374	IVRI	18/09/18	1012	4733 XVII	2664/3270/3166/2865/2950/ 2520/2969/2334	3270/16.0
4.	596	IVRI	27/10/21	1012	2677 XVIII	2664/3270/3166/2865/2950/ 2520/2969/2334/	3270/16.0
5.	3052	GADVASU	09/10/21	3180	5232 XIX	2648/3336/2605	3336/17.8
6.	3097	GADVASU	26/07/21	RANI	Sikander XVII	4824	4824/26.8
7.	3113	GADVASU	16/09/22	P2897	Bhisma Field	1577/3049/4025/4815/ 3898/1167	4815/28.7
8.	3126	GADVASU	07/11/22	P2766	102699 HLDB	3074/3602/2864/3433	3602/21.1
9.	5791	CIRB	15/01/21	4817	183 PT XII	2606/4250/4201/4180/4507/ In 6th lact	4507/23.5
10.	5814	CIRB	19/03/21	4251	7094 XVIII	2407/3184/4138/3784/2913/ 3904/ in 7th Lact	4138/22.0
11.	5872	CIRB	09/08/21	4235	6044 PT XIV	2874/3169/3533/3009/2940/ Auct	3533/16.9
12.	5912	CIRB	16/10/21	4899	6044 PT XIV	3505/4216/4350/3765/ in 5th lact	4350/20.0
13.	5935	CIRB	03/12/21	4767	4196 PT XIV	2468/3697/4268/4308/4261/ in 6th lact	4308/20.6
14.	5950	CIRB	11/01/22	5225	7604 XIX	2876/3044/3356/ In 4th lact	3356/20.6
15.	5864	CIRB	29/07/21	4709	6044PT XIV	2673/3259/2921/ 3590/3258/ Died	3590/21.2
16.	5941	CIRB	23/12/21	4517	4196PT XIV	2416/2723/3077/3511/3725/ 3259/ Dry	3725/21.5
17.	8100	NDRI	01/08/21	6871	2357 PT XIV	2477/3272/2387/2357/ 1883/1200	3272/16.0
18.	8129	NDRI	20/09/21	7460	7604 XIX	3125/979	3125/14.0
19.	8185	NDRI	27/12/21	6774	2737 XIX	1973/2459/2766/3466	3466/19.5
20.	8198	NDRI	14/02/22	5620	6044 PT XIV	2557/2332/3104/2776/2544/ 2120/2056/2958/2101	3104/14.5

Note: From each bull 8,000 semen doses are to be frozen.

Health Evaluation and Semen Quality Testing: During the period under report, apparently healthy buffalo breeding bulls of different centres (CIRB Hisar, NDRI Karnal, GADVASU Ludhiana and LUVAS Hisar) all of Murrah breed and proposed for XXII set for semen collection under Network Project on Buffalo were screened for TB, JD and Brucellasis etc.

Progeny Test Evaluation of Bulls: Data of 882 daughters born from the 17th set of bulls which completed 1st lactation was compiled and progeny test evaluated. Bull no. M-51 from CIRB Hisar and 2594 from GADVASU, Ludhiana ranked 1st and 2nd with breeding value 2558.57 kg and 2532.78 kg respectively.

Progeny Test evaluation of 17th set bulls (Murrah July 2017 to December, 2018)

Bull No	Location	Date of Birth	Dam No.	Sire No./ Set No	Dam's best lact. yield (305 or less days) kg	No of Daughters Completed 1st lact	Average Daughter FLMY (kg)	Daughter Maximum FLMY (kg)	Breeding Value	% Super-iority	Rank
M-51	**CIRB**	**03-02-2006**	**22 P**	**274 P**	**4668**	**68**	**2528.83**	**3239.50**	**2558.57**	**6.76**	**I**
2594	**GADVASU**	**30-07-2014**	**2221**	**1994 PT/IX**	**3557**	**85**	**2515.36**	**3900.00**	**2532.78**	**5.68**	**II**
2565	GADVASU	24-01-2014	2522	2269/XIII	3287	82	2465.14	3201.00	2469.72	3.05	III
6942	NDRI	23-08-2014	6627	4439/XIV	3533	51	2402.30	3752.00	2400.18	0.15	IV
Dara	Field	29-09-2014	Rani	Not Known	PY 28.9 kg	36	2389.05	3151.00	2393.37	-0.14	V
M-53	CIRB	25-02-2006	23 P	FT 328	3789	30	2387.87	3155.50	2388.72	-0.33	VI
1148	LUVAS	28-04-2015	894	6066/XIV	3587	30	2375.52	2988.00	2385.31	-0.47	VII
4715	CIRB	27-03-2014	3351	4093/XIV	3059	88	2369.31	2997.05	2381.14	-0.65	VIII
4837	CIRB	30-11-2014	3417	2422 PT/VIII	3076	47	2365.61	3166.15	2374.48	-0.92	IX
7010	NDRI	27-12-2014	415	4100/XIV	3068	70	2359.41	3304.00	2370.78	-1.08	X
Sikander	Field	15-07-2013	Rani	Not Known	PY 28.9 kg	81	2352.53	3209.90	2368.49	-1.17	XI
2558	GADVASU	20-12-2013	2279	1875 PT/VIII	3574	26	2347.73	3296.00	2351.36	-1.89	XII
4687	CIRB	20-01-2014	3156	1994 PT/X	3309	67	2346.38	3327.25	2350.63	-1.92	XIII
4733	CIRB	14-06-2014	4216	6044 PT/XIV	2851	52	2336.61	3662.30	2346.97	-2.07	XIV
2607	GADVASU	17-12-2014	2605	2369/XIV	3899	37	2321.76	3302.00	2342.03	-2.28	XV
B1/330	CIRB	29-12-2006	05B/900	FT 326	4595	32	2295.54	3066.00	2331.72	-2.71	XVI

Herd first lactation 305 or less day average milk yield = 2396.64 kg based on 882 daughters

Progeny Tested bulls used under Network Project

The top ranking 25 % progeny tested bulls (2 to 3 bulls from each set) used for elite/ nominated matings from set I to set XVII as selected from the centres are listed below. The pedigree detail, sire index and availability of frozen semen doses from each bull are under.

List of Progeny Tested Bulls 1st to 17th Set (Murrah breed)

Sr No.	Bull No.	Location	Date of Birth	Dam No.	Sire No.	Dam's best lact. 305-day yield (kg)	% superiority	Rank
Set - I								
1.	392	CIRB	06.04.89	238	PQ1	2594	22.8	I
2.	3567	NDRI	07.09.89	2408	2304	2877	6.4	II
3.	896	CIRB	27.07.87	911	644	3003	5.5	III
Set – II								
1.	761	CIRB	20-11-90	474	366	2878	9.37	I
2.	93	CIRB	03-11-90	-	PQ-1	22.0*	3.96	II
3.	829	CIRB	04-07-91	597	766	2626	3.53	III
Set – III								
1.	1354	PAU	12-12-92	762	989	3088	13.11	I
2.	1153	CIRB	13-08-93	701	896 PT	2540	12.27	II
3.	1061	CIRB	24-09-92	769	896 PT	2846	9.50	III
Set – IV								
1.	1506	PAU	25-04-95	-	988	3018	18.81	I
2.	1451	PAU	10-08-94	-	3567 PT	3401	10.44	II
3.	1437	PAU	04-04-94	797	636	3127	8.11	III
Set – V								
1.	4393	NDRI	10-12-95	2762	1908	3898	22.29	I
2.	4371	NDRI	23-10-95	2984	988	3258	14.90	II
Set –VI								
1.	1153	HAU	29-09-96	618	759	2675	13.31	I
2.	4506	NDRI	31-10-96	3527	3551	3512	9.29	II
3.	1933	CIRB	01-10-97	208	988	2650	6.92	III
Set – VII								
1	4915	NDRI	28-10-99	3521	2921	3437	17.26	I
2	1796	PAU	10-02-00	1386	1506 PT	3170	15.81	II
Set – VIII								
1.	1875	GADVASU	20-08-01	1669	558	2714	24.89	I
2.	4813	NDRI	17-01-99	3818	3966	3016	12.59	II

3.	2422	CIRB	19-08-00	1194	4371 PT	3369	9.41	III
Set – IX								
1	1994	GADVASU	16-06-03	1884	392 PT	2938	11.73	I
2	5258	NDRI	01-08-02	4066	1706	3305	10.52	II
Set -X*								
1.	1693	LUVAS	27-10-03	1050	392 PT	3194	1.23	1
2.	2045	GADVASU	24-02-04	1835	3567 PT	3369	1.23	II
Set -XI*								
1.	3267	CIRB	27-09-04	2263	1419	2489	0.20	I
2.	3591	CIRB	29-05-06 (P)	3590		2598	0.14	II
3.	2133	GADVASU	09-11-05	2041	1354 PT	2844	0.09	III
Set -XII*								
1.	2185	GADVASU	23-11-06	1898	1354 PT	3423	0.94	I
2.	183	CCS HAU	03-06-07	1374	1354 PT	2824	0.75	II
Set -XIII								
1.	2234	GADVASU	06-03-08	2138	5396	3114	14.80	I
2.	2269	GADVASU	17-12-08	2295	3631	3617	13.86	II
Set -XIV*								
1.	2357	GADVASU	24-07-10	P2488	1933 PT	3559	2.78	I
2.	6044	NDRI	15-01-09	430	4371 PT	3567	2.43	II
3.	4196	CIRB	10-05-10	3586	1153 PT	3304	2.27	III
Set -XV*								
1.	4354	CIRB	05-09-11	4353 Pur	UK (P)	3528	1.67	I
2.	6007	NDRI	15-09-08	5231	5396	3260	1.61	II
3.	2459	GADVASU	22-12-11	2489	1796 PT	4636	1.58	III
Set -XVI*								
1.	M-29	CIRB	16-10-05	4 P	P274	4600	3.82	I
2.	1053	LUVAS	17-12-13	683	M-29	3559	3.35	II
3.	2383	GADVASU	13-10-10	2489 P	3267PT/XI	4636	2.53	III
Set -XVII*								
1.	M-51	CIRB	03-02-2006	22 P	274 P	4668	6.76	I
2.	2594	GADVASU	30-07-2014	2221	1994/PT/IX	3557	5.68	II

* BLUP Model used for evaluation

Semen freezing and balance stock for bulls under test

Centre wise test bulls semen of Murrah breed as on 31-03-2025 at various centres

CIRB			NDRI			GADVASU		
Bull No.	**Set No**	**Semen doses CIRB+ NDRI**	**Bull No.**	**Set No**	**Semen doses NDRI+CIRB**	**Bull No.**	**Set No**	**Semen doses GAD+ CIRB+ NDRI**
4905	XVIII	8000+0	7094	XVIII	1946+0	2645	XVIII	7141+1794+0
4995	XVIII	8000+0	7147	XVIII	2246+0	2676	XVIII	6210+2370+0
5147	XVIII	8000+0	7227	XVIII	496+0	2677	XVIII	2104+2375+0
1150	XVIII	8000+0	7263	XVIII	2078+0	2689	XVIII	2974+737+0
1208	XVIII	8000+0	7604	XIX	1343+0	2674	XIX	1052+2612+0
1209(LUV)	XVIII	7485+0	7584	XX	2088+0	2737	XIX	5448+1060+0
1219(LUV)	XVIII	4230+0	7649	XX	2928+0	2759	XIX	3474++2605+0
5232	XIX	9635+0	7630	XXI	2593+1940	2814	XX	0+580+0
5181	XIX	8835+0	7768	XXI	4649+1810	2850	XX	0+1080+0
5246	XIX	9240+0	7990	XXI	2634+1519	3004	XX	0+950+0
5310	XIX	8620+0	8100	XXII	3340+190	2793	XX	6214+445+0
5320	XIX	7961+0	8129	XXII	2780+170	2831	XX	11986+1830+0
5333	XIX	8213+0	8185	XXII	1470+0	2979	XXI	8178+3020+505

5374	XIX	8203+0	8198	XXII	1430+120	2990	XXI	0+955+145
1315(LUV)	XIX	6467+0				3014	XXI	525+2025+245
19 (LUV)	XX	8010+0				3097	XXII	2955+2345+245
1454(LUV)	XX	8065+0				3113	XXII	1352+1955+245
5427	XX	8090+0				3126	XXII	1345+1130+135
5500	XX	8350 +0						
5505	XX	1688+0						
5511	XX	6376+0						
5481	XX	8323+0						
5414	XXI	8254+525						
5629	XXI	8836+290						
5638	XXI	6122+290						
5647	XXI	1147+0						
5690	XXI	8377+365						
5764	XXI	146+440						
5723	XXI	234+10						
297(IVRI)	XXI	4055+515						
109(LUV)	XXI	1743+475						
112(LUV)	XXI	3961+420						
5791	XXII	5695+295						
5814	XXII	3495+345						
5872	XXII	160+100						
5912	XXII	3730+395						
		223746+4465			5749+32021			60958+26563+1420
Sub Total		**228211**			**37770**			**88941**
Grand Total								**354922**

Germplasm dissemination for breeding purpose (Murrah breed)

Superior germplasm disseminated from various centers is presented below

Year	CIRB		GADVASU		NDRI	
	Bulls	Semen	Bulls	Semen	Bulls	Semen
1998-99	32	50	10	6000	15	1740
1999-00	26	100	22	5847	11	1320
2000-01	16	70	33	3449	9	2230
2001-02	18	21648	18	8579	8	5030
2002-03	18	2270	8	3205	9	2655
2003-04	53	3300	17	3977	15	15614
2004-05	15	1534	10	19675	8	4579
2005-06	4	372	15	1763	17	4123
2006-07	18	04	8	2227	9	574
2007-08	5	140	6	1777	5	433
2008-09	2	6375	7	4053	3	1232
2009-10	0	63974	5	8181	0	9404
2010-11	0	59546	5	22383	0	22405
2011-12	0	129099	4	53131	16	18129
2012-13	4	80081	2	41276	9	23751
2013-14	6	68635	28	24784	5	62054
2014-15	38	57761	21	13510	9	11966
2015-16	57	41866	37	24529	22	12792

2016-17	64	54077	21	18909	3	14805
2017-18	52	76704	11	25398	20	14554
2018-19	49	97657	4	55758	4	11700
2019-20	37	138906	3	52268	0	15949
2020-21	19	94320	37	3808	30	5400
2021-22	42	131968	22	57730	10	7625
2022-23	48	101787	20	73976	11	14436
2023-24	52	162070	39	49540	9	15140
2024-25	37	299872	10	45636	22	12060
Total	**712**	**1694186**	**423**	**631369**	**279**	**311700**

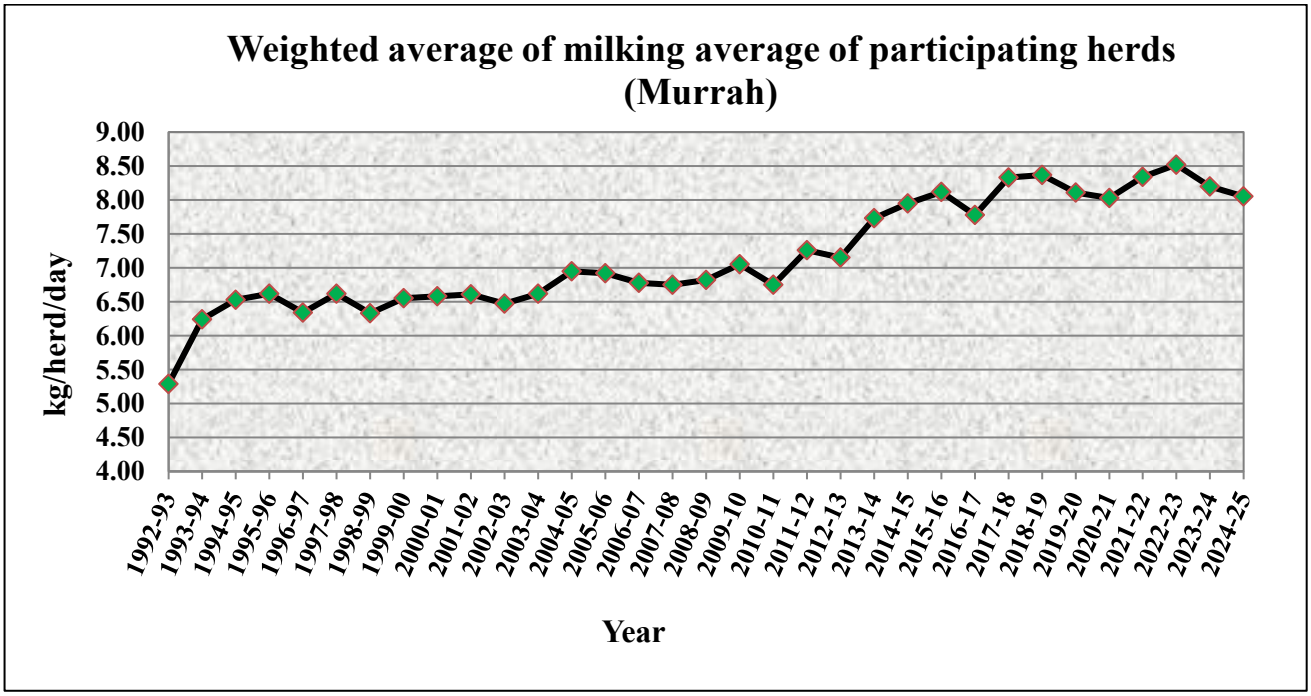
Performance Characteristics

Herd performance with respect to various production and reproduction traits at different participating centers has been compiled and presented as under.

Milking average per buffalo at various participating herds since 1992-93

Year	CIRB	GADVASU	NDRI	LUVAS	IVRI	CCBF	NDUAT	Weighted average
1992-93	4.80 (165)	5.54 (149)			4.31 (22)	6.3 (65)		5.29 (403)
1993-94	5.65 (153)	6.20 (115)	7.80 (115)	6.3 (42)	4.62 (380	5.8 (62)		6.24 (525)
1994-95	6.09 (181)	6.09 (116)	8.39 (114)	7.2 (49)	3.90 (39)	6.3 (48)		6.53 (547)
1995-96	6.43 (1.53)	6.43 (123)	8.03 (109)	7.3 (54)	3.63 (29)	6.0 (82)		6.62 (550)
1996-97	5.62 (122)	6.17 (112)	7.90 (103)	7.0 (76)	3.63 (29)	5.7 (67)		6.34 (508)
1997-98	6.12 (121)	6.53 (116)	7.40 (119)	6.5 (68)	4.19 (28)	7.2 (58)		6.62 (509)
1998-99	6.77 (133)	6.26 (119)	5.93 (100)	6.2 (71)	5.79 (20)	6.5 (72)		6.33 (515)
1999-00	6.85 (137)	6.26 (109)	6.60 (90)	5.2 (60)	5.77 (23)	7.4 (98)		6.55 (521)
2000-01	6.68 (148)	6.70 (105)	6.65 (104)	6.7 (55)	5.42 (30)	6.5 (84)		6.58 (523)
2001-02	6.59 (147)	7.09 (94)	6.26 (90)	7.47 (48)	5.82 (32)	6.3 (81)		6.61 (492)
2002-03	6.27 (143)	7.22 (109)	6.23 (73)	7.5 (47)	4.94 (30)	5.9 (68)		6.47 (470)
2003-04	6.49 (151)	7.01 (108)	6.36 (80)	7.30 (68)	5.94 (37)	6.2 (57)		6.62 (501)
2004-05	6.39 (154)	7.33 (91)	7.39 (111)	7.70 (66)	5.99 (38)	6.70 (47)		6.95 (509)
2005-06	6.57 (151)	7.36 (74)	7.05 (107)	7.70 (63)	6.14 (46)	6.7 (39)		6.92 (479)
2006-07	6.45 (137)	7.03 (81)	6.70 (100)	7.8 (65)	6.15 (41)	6.8 (48)	6.52 (29)	6.78 (501)
2007-08	6.64 (146)	6.90 (70)	6.80 (104)	7.60 (66)	5.98 (62)		6.92 (22)	6.75 (470)
2008-09	6.50 (133)	7.07 (78)	7.09 (64)	7.10 (62)	6.69 (53)	6.4 (59)	6.66 (22)	6.82 (412)
2009-10	7.01 (106)	7.62 (83)	7.32 (91)	6.8 (69)	6.68 (45)		5.39 (27)	7.05 (421)
2010-11	7.45 (109)	7.21 (88)	5.83 (96)	7.3 (64)	5.88 (47)		5.60 (21)	6.75 (425)
2011-12	7.83 (110)	7.56 (88)	6.79 (66)		5.82 (41)	**KVASU**	**LRS Mamnoor**	7.26 (305)
2012-13	7.74 (109)	7.74 (78)	7.35 (90)		5.66 (39)	4.82 (13)	4.70 (17)	7.15 (346)
2013-14	8.01	7.98	7.80	9.40	5.85	5.54	5.25	7.73

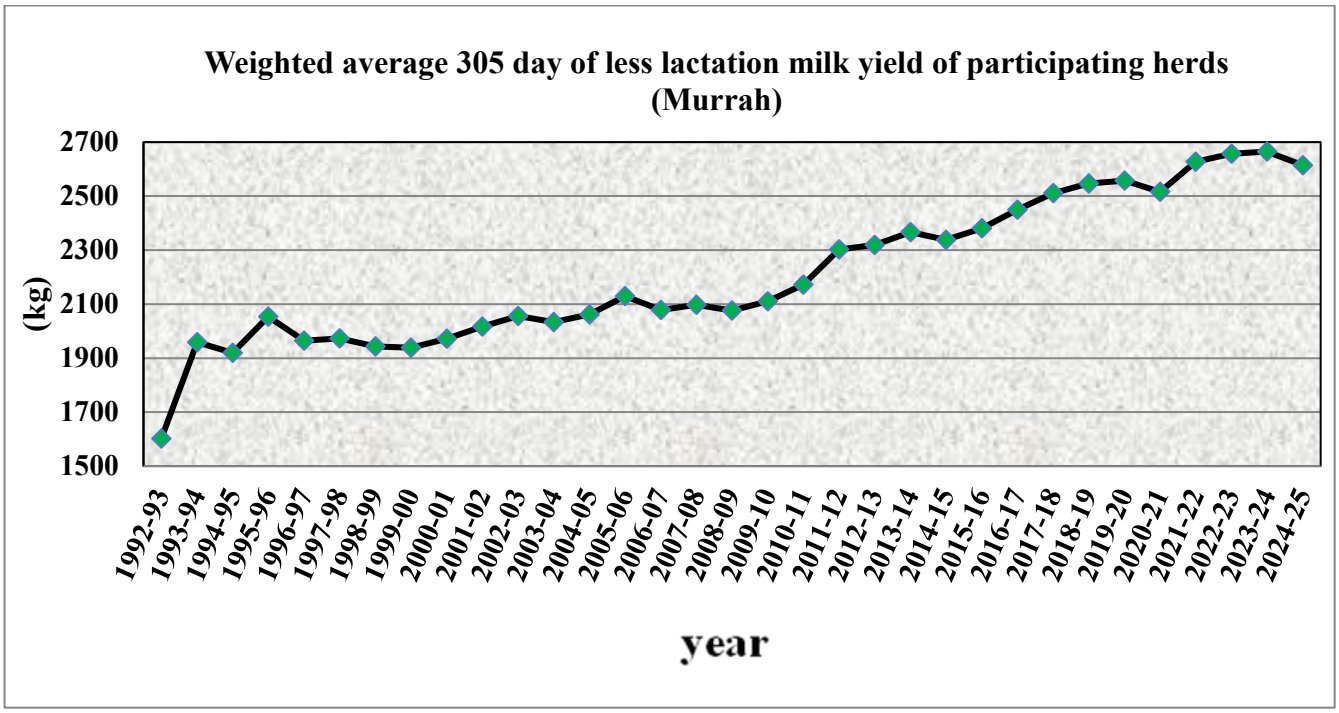
	(105)	(61)	(101)	(62)	(45)	(19)	(11)	(404)
2014-15	8.25 (110)	7.97 (54)	8.05 (115)	8.70 (64)	6.80 (43)	**RCER Patna**	5.90 (22)	7.95 (408)
2015-16	8.04 (114)	8.04 (54)	8.43 (132)	9.90 (72)	6.48 (44)	7.45 (14)	5.81 (32)	8.12 (462)
2016-17	8.08 (133)	7.92 (53)	8.39 (85)	9.7 (60)	6.00 (55)	6.39 (19)	5.67 (43)	7.78 (448)
2017-18	8.71 (115)	8.03 (49)	8.23 (99)	10.3 (81)	5.77 (51)	4.30 (12)	--	8.33 (407)
2018-19	8.92 (101)	8.40 (68)	7.40 (112)	11.0 (76)	6.43 (50)	4.85 (15)	--	8.37 (422)
2019-20	9.66 (124)	8.31 (67)	6.67 (115)	10.4 (78)	5.95 (64)	5.12 (27)	--	8.11 (475)
2020-21	9.91 (130)	8.22 (66)	6.6 (86)	9.6 (73)	5.84 (68)	4.42 (27)	--	8.03 (450)
2021-22	10.07 (132)	8.42 (72)	7.7 (85)	9.25 (82)	5.86 (72)	5.44 (26)	--	8.34 (469)
2022-23	10.20 (129)	8.45 (54)	7.8 (87)	9.4 (85)	5.99 (71)	6.77 (27)	--	8.52 (453)
2023-24	10.20 (120)	8.69 (58)	7.6 (77)	8.6 (89)	5.45 (76)	6.48 (29)	--	8.20 (449)
2024-25	**9.78 (123)**	8.70 (68)	7.6 (68)	8.6 (73)	5.33 (78)	6.12 (29)	--	8.05 (439)



Average 305 day or less milk yield at various participating herds since 1992 – 93

Year	CIRB	GADV ASU	NDRI	LUVAS	IVRI	CCBF/ KVASU	NDUAT/ Mamnoor	Weighted average
1992-93	1508±34 (137)	1730 (138)			1458±48 (34)	1899.1		1602 (309)
1993-94	1686±46 (148)	1948 (144)	2351.8 (137)	1818.8	1537±49 (28)	1746.0		1959 (457)
1994-95	1787±0 (206)	1877 (121)	2270.1 (128)	1912.7	1536±40 (32)	1896.7		1920 (487)
1995-96	1855±42 (147)	2008 (126)	2576.1 (106)	1987.5	1457±51 (27)	1950.4		2053 (476)
1996-97	1775±45 (173)	1948 (125)	2423.1 (105)	1880.8	1629±76 (20)	1714.1		1965 (498)
1997-98	1688±37	1995	2191.2	2103.7	1715±95	2006.8		1973

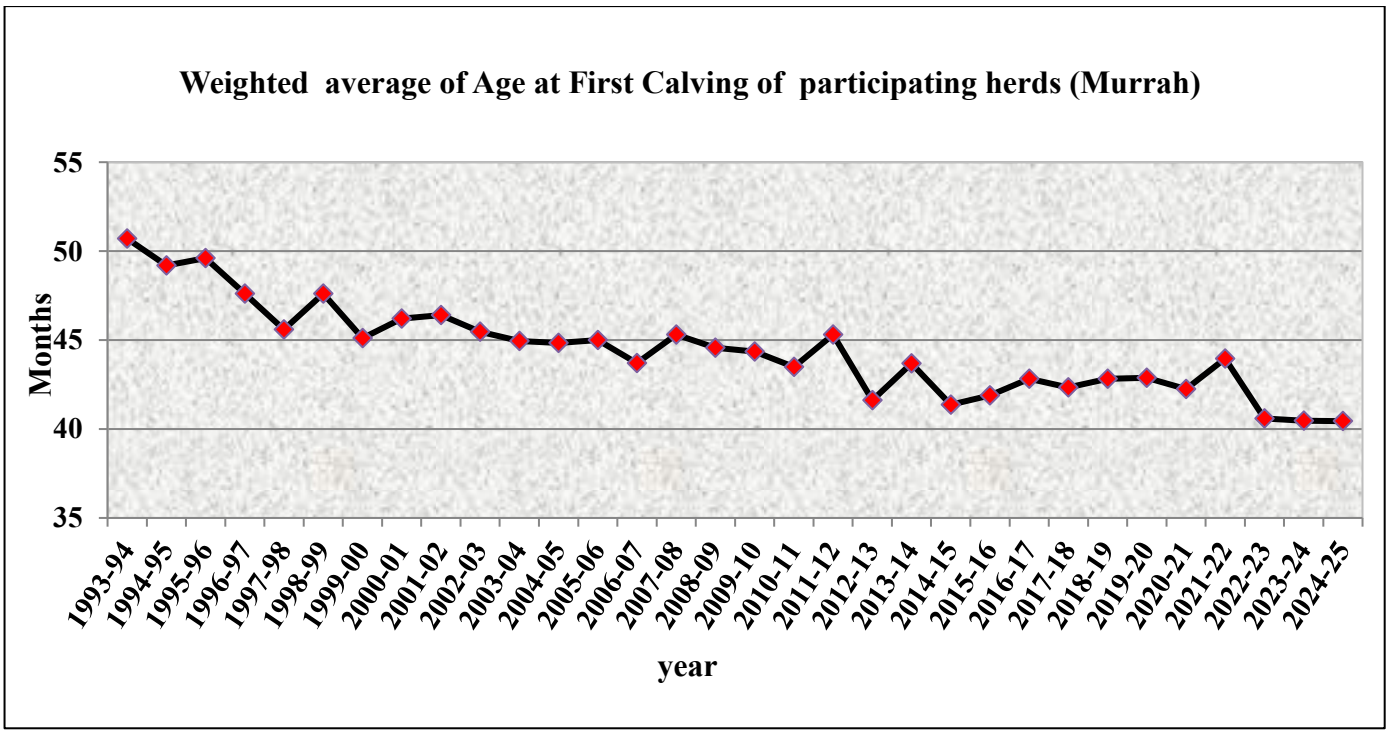
	(123)	(98)	(128)		(23)			(455)
1998-99	1702±33 (153)	2101 (125)	2032.7 (112)	1964.7	1980±97 (22)	2179.7		1943 (551)
F1999-00	2042±31 (141)	2041 (114)	1822.4 (102)	1688.7	2026±98 (18)	2134.9		1939 (439)
2000-01	1914±36 (173)	2032 (103)	2019 (126)	2183.1	1898±147 (20)	1875.0		1972 (562)
2001-02	1898±35 (152)	2175 (112)	1963±61 (91)	2119±46 (50)	2102±75 (19)	2000.0 (81)		2017 (505)
2002-03	1902±32 (148)	2144 (105)	2000.6 (81)	2522±13 (46)	2362.5 (55)	1789.1 (76)		2056 (511)
2003-04	1837±31 (148)	2233 (111)	1897 (29)	2162±42 (75)	2103±118 (26)	1881.9 (6)		2033 (395)
2004-05	1886±33 (167)	2270 (106)	2025 (98)	2134±44 (61)	2369±128 (10)	2114 (26)		2062 (494)
2005-06	1921±38 (149)	2327 (78)	2159 (142)	2252±47 (77)	2218±89 (32)	2085 (32)		2130 (509)
2006-07	1882±32 (170)	2235 (91)	2054 (111)	2261±44 (75)	2412±89 (27)	2139 (54)	1941±77 (27)	2079 (555)
2007-08	1891±34 (127)	2176±60 (67)	2094 (127)	2130±44 (80)	2525±109 (28)	--	1988±83 (24)	2097 (453)
2008-09	1926 (138)	2141±48 (88)	2256 (86)	2041±48 (76)	2209±106 (16)	1822 (57)	2078±89(22)	2076 (426)
F2009-10	1995 (102)	2271±53 (67)	2222 (84)	1858±33 (84)	2570±92 (26)		2153±107 (20)	2110 (383)
2010-11	2247 (113)	2470±68 (81)	2015 (130)	2042±48 (66)	2136±63 (56)		2092±54 (22)	2172 (468)
2011-12	2374 (116)	2306±72 (87)	2192 (67)		2277±83 (49)	KVASU	LRS Mamnoor	2302 (319)
2012-13	2335±45.71 (110)	2528±55 (75)	2256 (83)		2242±108 (20)	1698±219 (11)	1560 (5)	2319 (304)
2013-14	2291±58.25 (98)	2509±67 (55)	2431 (82)	2808±43 (65)	2038±62 (47)	1728±158 (17)	1753 (13)	2367 (377)
2014-15	2355±47.55 (110)	2674±82 (46)	2224 (124)	2584±49 (62)	2136±52 (53)	**RCER Patna**	1626 (11)	2338 (406)
2015-16	2336±33.36 (152)	2640±73 (45)	2523 (118)	2577±57 (78)	2302±65 (51)	1866±37 (18)	1843±31 (44)	2381 (506)
2016-17	2457±39.61 (133)	2561 (53)	2536 (87)	2967±64 (60)	2194±73 (55)	1736±21 (19)	2028±51 (43)	2449 (450)
2017-18	2424±48.86 (140)	2707 (54)	2387±44.8 (96)	3050±72.7 (69)	2129±56.25 (45)	1997±122.6 (12)	--	2511 (416)
2018-19	2567±49.21 (123)	2771 (62)	2319 (123)	3067±84.1 (66)	2205±68 (40)	1985±135 (16)	--	2547 (430)
2019-20	2648±52.53 (128)	2841 (73)	2184 (106)	3090±54.1 (60)	2307±51 (60)	2088±19.16 (20)	--	2558 (447)
2020-21	2730±41.52 (148)	2614 (50)	2199±41.48 (90)	2976±52.4 (65)	2224±37.11 (57)	1824±63.04 (31)	--	2516 (441)
2021-22	2852±48.96 (153)	2672±57 (62)	2436±58.10 (85)	2793±49.91 (101)	2273±44.35 (59)	1944±78.37 (25)	--	2627 (485)
2022-23	2861±52.78 (146)	2564±72 (31)	2454±55.86 (70)	2957±49.4 (92)	2221±41.52 (80)	2374±88.54 (19)	--	2657 (438)
2023-24	2949±52.99 (146)	2718±68 (50)	2553±53.00 (64)	2658±102.4 (102)	2270±45.51 (65)	2239±114.14 (25)	--	2665 (452)
2024-25	3004±52.93 (129)	**2614±63 (46)**	**2469±50.52 (68)**	**2556±53.90 (85)**	**2076±39.95 (52)**	**2328±79.39 (26)**	--	**2613 (406)**



Average Age at first calving at various participating herds

Year	CIRB	GADVASU	NDRI	LUVAS	IVRI	CCBF	NDUAT	Weighted average
1993-94	59.1±1.6 (48)	46.7 (24)	45.5 (44)	51.6	39.4±3.0 (7)	43.0		50.7 (123)
1994-95	55.3±1.3 (48)	47.5 (37)	46.0 (37)	51.3	38.3±1.7 (10)	48.0		49.2 (132)
1995-96	55.3±1.5 (22)	49.4 (43)	46.8 (27)	51.9 (26)	42.1±3.4 (14)	51.0		49.6 (132)
1996-97	47.6±1.6 (23)	49.4 (34)	46.8 (27)	47.3 (44)	42.1±3.4 (4)	51.0		47.6 (132)
1997-98	45.5±0.5 (49)	45.0 (45)	44.8 (34)	48.7 (28)	40.1±3.4 (6)	51.0		45.6 (162)
1998-99	50.0±0.01 (57)	47.0 (34)	46.2 (54)	47.3 (22)	43.4±2.3 (8)	54.0		47.6 (178)
1999-00	46.2±1.0 (54)	42.0 (54)	42.6 (29)	49.4 (15)	48.8±7.0 (6)	55.0 (10)		45.1 (168)
2000-01	46.2±1.2 (45)	44.4 (27)	42.4±0.7 (42)	50.6±2.0 (17)	42.4±2.8 (4)	60.5 (11)		46.2 (146)
2001-02	49.8±0.8 (51)	44.7±1.4 (32)	44.0±1.0 (34)	46.7±4.9 (14)	44.4±2.6 (11)	45.0 (12)		46.4 (154)
2002-03	47.83±0.5 (61)	40.2±1.1 (39)	44.0±1.5 (20)	47.0±41.2 (27)	41.2±2.9 (4)	50 (15)		45.47 (166)
2003-04	50.52±0.8 (77)	36.8±1.0 (23)	43.87 (62)	40.37±12.4 (40)	41.82±3.2 (8)	48 (11)		44.94 (221)
2004-05	48.18±0.8 (76)	41.7±1.7 (27)	43.40±0.9 (47)	40.0±3.6 (26)	42.5±1.7 (8)	46 (16)		44.83 (200)
2005-06	47.89±0.7 (76)	43.7±1.0 (35)	39.9±1.0 (36)	41.03±1.1 (31)	42.1 (10)	54 (18)		45.0 (206)
2006-07	46.9±1.06 (43)	43.3±1.2 (20)	41.4±1.5 (50)	41.8±1.8 (15)	41.9±2.3 (10)	45 (19)	47.2±0.4 (3)	43.7 (160)
2007-08	48.3±0.6 (77)	42.7±1.0 (30)	41.8±1.5 (42)	44.4±1.1 (30)	45.8±0.9 (28)		46.4±0.7 (10)	45.3 (217)
2008-09	47.7±0.97 (44)	42.5±0.7 (43)	40.7±1.8 (31)	48.4±1.1 (40)	39.7±1.8 (16)	54.0 (17)	43.8±0.97 (7)	44.56 (181)
2009-10	49.2±0.75	39.3±1.2	41.1±1.4	45.7±1.1	41.3±4.7		43.6±0.14	44.35

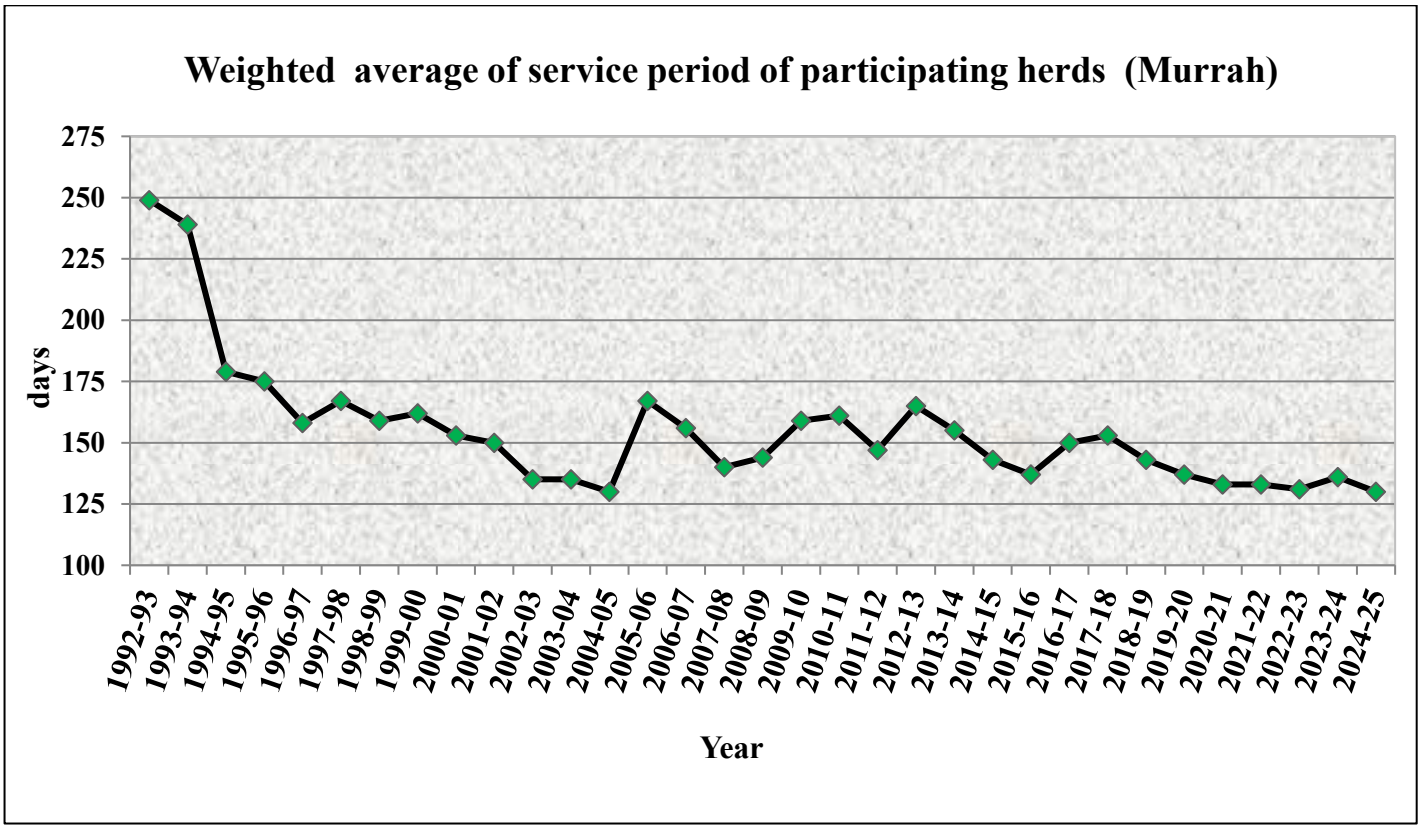
	(51)	(29)	(25)	(27)	(15)		(14)	(161)
2010-11	49.9±1.0 (35)	39.1±1.4 (21)	41.26 (50)	45.8±1.8 (33)	39.6±1.2 (25)		43.7±0.44 (9)	43.49 (173)
2011-12	51.9 (37)	37.4 (22)	42.13 (24)		45.6±3.2 (20)			45.30 (103)
2012-13	44.5±1.4 (37)	38.9±3.5 (34)	41.6±5.7 (29)		39.7±2.8 (7)	**KVASU**	**LRS Mamnoor**	41.62 (107)
2013-14	45.6±0.8 (37)	42.3±1.6 (12)	41.8±3.8 (36)	46.6±1.4 (33)	38.2±2.2 (18)	59.2±7.4 (7)	--	43.68 (143)
2014-15	42.8±0.8 (61)	38.6±0.6 (23)	40.4±1.2 (35)	45.9±1.7 (17)	37.64±1.3 (18)	**RC ER Patna**	--	41.37 (154)
2015-16	44.96±1.2 (24)	40.2±0.7 (24)	39.3±1.3 (24)	41.7±1.28 (27)	40.2±2.6 (9)	--	54.0±1.19 (4)	41.88 (112)
2016-17	44.91±0.81 (38)	41.50 (27)	43.21 (29)	42.0±7.08 (34)	38.99±1.2 (19)	--	58.50±3.4 (3)	42.83 (150)
2017-18	43.58±0.67 (67)	41.28±1.19 (25)	42.29 (35)	42.2±0.87 (27)	38.64±1.16 (14)	--	--	42.34 (168)
2018-19	45.76±0.80 (31)	40.74±1.43 (39)	44.39 (41)	42.5±0.83 (21)	38.62±1.05 (16)	--	--	42.82 (148)
2019-20	43.62±0.80 (71)	40.42±1.05 (23)	44.52 (37)	43.5±0.49 (22)	39.24±2.11 (20)	--	--	42.87 (173)
2020-21	42.48±0.73 (71)	40.56±0.70 (34)	45.10 (26)	43.1±0.8 (27)	39.03±0.84 (23)	48.34±5.26 (3)	--	42.25 (184)
2021-22	38.61±0.82 (67)	40.93±0.56 (53)	58.7 (35)	46.5±0.8 (33)	39.38±1.30 (23)	51.35±12.4 (3)	--	43.95 (214)
2022-23	37.72±0.72 (60)	39.28±0.82 (31)	42.2 (40)	44.8±0.9 (40)	39.15±1.23 (23)	54.00 (1)	--	40.59 (195)
2023-24	38.07± 0.59 (55)	39.78±0.89 (30)	43.97 (38)	39.9±1.1 (27)	40.57±1.12 (15)	51.28±7.18 (3)	--	40.46 (168)
2024-25	**40.25± 0.53 (53)**	**37.80±0.86 (36)**	**42.00 (44)**	**40.28±1.06 (31)**	**41.09±1.20 (20)**	**47.65±1.22 (4)**	**--**	**40.44 (188)**



Average Service period at various participating herds

Year	CIRB	GADVASU	NDRI	LUVAS	IVRI	CCBF	NDUAT	Weighted average
1992-93	304±15 (96)	207 (100)			120±33 (8)	115		249 (204)
1993-94	312±158 (158)	228 (105)	148(97)	107.5	101±16 (10)	165		239 (370)
1994-95	202±15 (105)	206 (96)	119(70)	163.1	77±5 (9)	159		179 (280)
1995-96	193±10 (149)	218 (105)	115(72)	135.0	100±12 (12)	132		175 (391)
1996-97	182±10 (149)	196 (76)	114(66)	107.0	125±11 (7)	204		158 (361)
1997-98	175±14 (106)	248 (94)	97(59)	107.7	83±06 (11)	175		167 (325)
1998-99	137±09 (121)	232 (81)	118(63)	108.7	153±25 (11)	186		159 (323)
1999-00	138±09 (104)	213 (59)	159(82)	148.3	190±28 (16)	187		162 (310)
2000-01	146±09 (151)	197 (81)	107±14 (53)	146.0	165±22 (17)	163		153 (370)
2001-02	146±11 (125)	202±14 (83)	123±9 (77)	147±14 (31)	134±25 (12)	126 (69)		150 (397)
2002-03	133±9 (126)	133±9 (95)	141±12 (59)	165±11 (47)	405±96 (5)	102 (76)		135 (408)
2003-04	151±10 (142)	160 (107)	131.65 (117)	87.6±8.4 (42)	108±15.5 (19)	48(11)		135 (432)
2004-05	111±7 (100)	140 (80)	126±10 (93)	96±6.0 (52)	150±16 (30)	160 (87)		130 (442)
2005-06	184±12 (112)	143 (65)	149±12 (68)	148±8.5 (128)	180±28 (54)	253 (32)		167 (459)
2006-07	183±11 (113)	166±15 (69)	131±10 (80)	165±12 (60)	139±15 (40)	151 (37)	99±12.7 (22)	156 (421)
2007-08	159±11 (113)	147±12 (53)	119±11 (84)	165±16 (57)	115±7.5 (62)		109±15.6 (22)	140 (391)
2008-09	171±12 (80)	142±9 (90)	131±22 (61)	139±13 (54)	152±12 (48)	191 (63)	91±17.5 (22)	144 (355)
2009-10	212±17 (77)	151±10 (76)	146±22 (62)	157±12 (68)	122±11 (59)		130±14.6 (17)	159 (359)
2010-11	186±14 (80)	154±12 (94)	145 (76)	155±12 (38)	175±16 (35)		140±3.9 (15)	161 (338)
2011-12	181 (80)	136 (65)	121 (87)		153±216 (29)	**KVASU**	**LRS Mamnoor**	147 (261)
2012-13	174±12 (72)	151±13 (53)	124±27 (69)		213±26 (30)	298±42 (11)	172 (9)	165 (244)
2013-14	190±11 (86)	159±11 (67)	128±11 (73)	118±9 (39)	140±13 (39)	322±115 (6)	143±11 (14)	155 (324)
2014-15	168±8 (88)	160±18 (40)	135±19 (71)	117±11 (52)	124±12 (55)	**RCER Patna**	141±17 (34)	143 (340)
2015-16	138±7 (111)	162±12 (26)	134±23 (92)	127±10 (58)	142±15 (51)	140±5 (12)	128±15 (27)	137 (377)
2016-17	148±9 (93)	184 (26)	132 (54)	129±9.6 (43)	146±10 (52)	183±6 (14)	184±18 (22)	150 (304)
2017-18	167±10 (101)	152±10 (41)	138±10 (49)	135±12 (46)	141±15 (35)	195±8 (12)	--	153 (284)
2018-19	136±7 (97)	136±10 (104)	139 (77)	145±11 (60)	169±16 (46)	157±9 (18)	--	143 (402)
2019-20	143±8 (90)	125±10 (82)	134 (60)	123±8 (64)	173±20 (47)	131±13 (20)	--	137 (363)
2020-21	127±7 (100)	138±12 (95)	140 (39)	127±9 (67)	137±11 (50)	130±11 (31)	--	133 (382)
2021-22	131±8 (99)	147±13 (55)	143 (27)	118±12 (68)	141±11 (46)	123±12 (25)	--	133 (320)
2022-23	126±6 (122)	128±9 (66)	119 (28)	145±9 (64)	140±10 (46)	132±15 (25)	--	131 (351)
2023-24	135±7	124±9	143	140±25	140±11	129±23	--	136

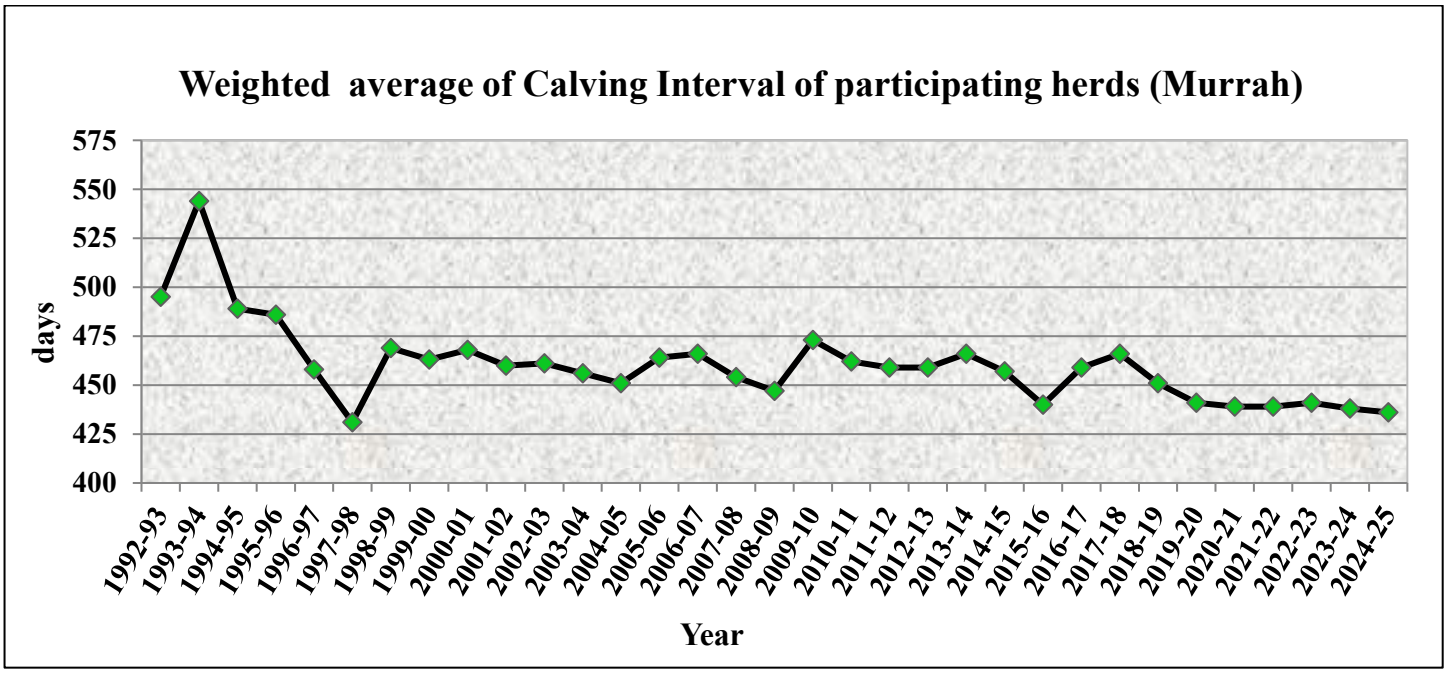
	(99)	(41)	(17)	(96)	(48)	(18)		(319)
2024-25	**125±6 (105)**	**115±7 (52)**	**126 (59)**	**140±12 (69)**	**140±8.94 (60)**	**134±2.63 (25)**	**--**	**130 (370)**



Average calving interval at various participating herds

Year	CIRB	GADVASU	NDRI	LUVAS	IVRI	CCBF	NDUAT	Weighted average
1992-93	489±16 (42)	510 (100)			404±22 (8)	498		495 (250)
1993-94	625±10 (161)	532 (106)	428 (98)		406±17 (3)	480		544 (368)
1994-95	527±10 (116)	512 (96)	428 (70)	459	377±08 (20)	523		489 (302)
1995-96	501±09 (152)	526 (105)	423 (72)	456 (40)	401±16 (7)	539		486 (376)
1996-97	473±09 (152)	510 (76)	423 (66)	408 (76)	424±23 (7)	510		458 (377)
1997-98	491±10 (118)	553 (94)	395 (60)	389 (55)	392±13 (11)	574		431 (338)
1998-99	455±10 (126)	553 (87)	424 (62)	417 (46)	438±15 (10)	522		469 (331)
1999-00	451±08 (120)	518 (63)	435 (52)	459±34 (49)	422±21 (11)	513		463 (295)
2000-01	454±09 (154)	511 (82)	408±21 (56)	479±33 (25)	411±13 (9)	491		468 (427)
2001-02	456±11 (135)	496±15 (84)	428±13 (43)	457±14 (31)	440±24 (12)	445 (69)		460 (374)
2002-03	440±9 (130)	463±13 (95)	406±16 (31)	472±11 (47)	585±69 (4)	501 (76)		461 (383)
2003-04	458±10	455	438	396.3±8.6	553±36	441		456

	(151)	(93)	(17)	(42)	(29)	(10)		(342)
2004-05	426±7 (101)	478±13 (80)	428±20 (35)	402±6.2 (52)	481±28 (37)	480 (87)		451 (392)
2005-06	499±12 (112)	433±14.7 (60)	413±36 (54)	455±8.5 (126)	477 (37)	510 (32)		464 (421)
2006-07	495±11 (116)	437±12 (61)	419±11 (50)	473±12 (60)	452±21 (30)	502 (37)	444±4.6 (21)	466 (375)
2007-08	482±12 (117)	419±7 (58)	441±20 (55)	469±16 (57)	443±21 (43)		408±13 (21)	454 (351)
2008-09	469±12 (85)	438±8 (52)	424±14 (21)	444±13.4 (54)	452±11 (48)	503 (63)	402±17 (22)	447 (282)
2009-10	520±16 (77)	492±17 (72)	413±25 (30)	459±21.4 (68)	445±13 (63)		440±14 (17)	473 (327)
2010-11	492±14 (83)	457±105 (76)	442 (44)	462±12.2 (38)	449±16 (60)		426±6.7 (15)	462 (316)
2011-12	485 (81)	473 (85)	428 (56)		461±18 (39)	**KVASU**	**LRS Mamnoor**	459 (261)
2012-13	481±12 (73)	453±12 (59)	402±24 (55)		479±23 (31)	654±47 (6)	464±18 (22)	459 (246)
2013-14	495±12 (87)	471±11 (64)	424±24 (48)	423±29 (39)	471±14 (39)	599±48 (12)	398±5 (14)	466 (303)
2014-15	473±8 (88)	513±124 (41)	421±18 (40)	425±11 (52)	439±16 (44)	**RCER Patna**	462±21 (34)	457 (299)
2015-16	449±7 (111)	458±17 (25)	430±23 (92)	434±11 (58)	447±16 (49)	425±1.4 (12)	426±16 (27)	440 (374)
2016-17	458±9 (93)	472 (26)	428±12 (27)	434±10.1 (43)	457±15 (40)	481±7 (12)	530±27 (22)	459 (263)
2017-18	478±10 (101)	459±12 (41)	432±11 (33)	445±12 (46)	483±20 (35)	515±7 (12)	-	466 (268)
2018-19	446±7 (97)	441±10 (104)	446 (77)	454±11 (60)	496 ±19 (36)	463±22 (18)	-	451 (392)
2019-20	451±8 (90)	436±11 (82)	444 (60)	431±8 (64)	449±13 (47)	426±40 (20)	-	441 (363)
2020-21	437±7 (100)	434±11 (95)	440 (39)	437±9 (67)	434±12 (50)	468±24 (31)	-	439 (382)
2021-22	438±8 (99)	454±15 (55)	452 (27)	420±9 (68)	443±9 (46)	446±24 (25)	-	439 (320)
2022-23	435±6 (122)	437±9 (66)	427 (28)	454±9 (64)	456±12 (46)	438±24 (25)	-	441 (351)
2023-24	445±6.7 (99)	435±9 (41)	444 (17)	426±23.5 (96)	448±11 (48)	434±28 (18)	-	438 (319)
2024-25	**433±6 (105)**	**425±7 (52)**	**445 (47)**	**433±12.12 (69)**	**443±10 (60)**	**440±2.7 (25)**	-	**436 (358)**



Average Fat % during the years

Murrah	CIRB	GADVASU	NDRI	LUVAS	IVRI	NDUAT	SVVU	KVASU	Overall
2006-07	7.01 (130)	7.57 (82)	8.07 (99)	7.6 (37)	7.55 (71)	8.17 (27)			7.55 (446)
2007-08	7.03 (136)	7.31 (71)	7.92 (101)	7.70 (30)	7.99 (111)	8.02 (24)			7.58 (473)
2008-09	7.82 (1436)	7.80 (78)	7.98 (787)	7.3 (652)	8.19 (1244)	7.96			7.88 (4197)
2009-10	7.70 (85)	7.54 (79)	8.11 (1083)	6.8 (65)	7.97 (1008)	7.92 (20)			7.98 (2340)
2010-11	7.81 (1257)	8.17 (87)	8.03 (1107)	6.9 (783)	8.01 (1080)	7.99	7.18 (546)		7.69 (4860)
2011-12	7.66 (1257)	7.99 (88)	8.19 (750)		8.08 (924)		**LRS Mamnoor**		7.93 (3019)
2012-13	7.66 (1240)	8.27 (83)	8.15 (1010)		7.88 (872)		7.56 (196)	8.95 (12)	7.88 (3413)
2013-14	8.44 (1194)	8.59 (61)	7.90 (101)	6.80 (61)	7.89 (82)		8.20 (133)	7.80 (2423)	8.00 (4055)
2014-15	8.46 (1168)	8.33 (61)	8.30 (116)	7.20 (64)	7.87 (363)	**RC ER Patna**	8.15 (268)	--	8.26 (2040)
2015-16	--	7.97 (54)	8.28 (1648)	7.4 (78)	7.91 (996)	7.35 (84)	8.00 (380)	--	8.08 (3240)
2016-17	--	7.46 (49)	7.99 (1240)	7.3 (84)	7.95 (970)	--	8.05 (380)	--	7.95 (2723)
2017-18	--	7.32 (49)	7.89 (1150)	7.3 (81)	7.96 (994)	7.42 (12)	--	--	7.89 (2286)
2018-19	--	7.35 (68)	7.69 (106)	7.1 (76)	7.76 (292)	--	--	--	7.60 (542)
2019-20	--	7.34 (67)	7.54 (111)	7.1 (78)	7.35 (364)	--	--	--	7.35 (620)
2020-21	--	7.42 (64)	7.97 (79)	6.8 (72)	7.03 (395)	--	--	--	
2021-22	7.92 (783)	7.64 (72)	8.19 (81)	6.97 (81)	7.14 (404)	7.48 (440)	--	--	7.61 (1861)
2022-23	8.00 (948)	7.53 (54)	8.46 (79)	6.78 (85)	6.69 (399)	7.39 (300)	--	--	7.57 (1865)

2023-24	7.87 (1287)	7.58 (59)	8.31 (80)	7.1 (90)	6.53 (274)	7.37 (720)	--	--	7.56 (2510)
2024-25	**7.43 (1316)**	**7.74 (71)**	**8.30 (1032)**	**6.60 (73)**	**6.87 (292)**	**7.37 (920)**	**--**	**--**	**7.60 (3704)**
Between breeds	**Murrah**	**Nili-Ravi**	**Bhadawari**	**Jaffarabadi**	**Pandharpuri**	**Surti**	**Godavari**	**Swamp**	
2006-07	7.55 (446)	6.8 (118)	7.65 (34)	8.21 (34)	8.01 (25)	7.12 (34)	7.38 (47)	8.38 (12)	
2007-08	7.58 (473)	6.70 (122)	8.09 (106)	8.25 (29)	8.03 (15)	7.25 (34)	7.00 (47)	7.67 (21)	
2008-09	7.88 (4197)	6.9 (108)	8.09 (604)	8.61 (260)	8.04 (180)	7.33 (446)		7.73 (16)	
2009-10	7.98 (2340)	6.9 (146)	8.02 (375)	8.02 (446)	8.04 (257)	7.5 (301)	7.64 (44)	8.52 (20)	
2010-11	7.69 (4860)	6.8 (98)	8.20 (309)	8.01 (364)	8.03 (203)	8.06 (267)		8.91 (159)	
2011-12	7.93 (3019)	7.3 (81)	8.03 (195)	8.03 (27)	8.03 (630)	7.93 (229)		9.23 (115)	
2012-13	7.88 (3413)	7.62 (123)	8.16 (242)	8.24 (1632)	8.01 (545)	7.96 (240)		8.04 (155)	
2013-14	8.00 (4055)	8.20 (109)	8.65 (309)	8.06 (34)	7.85 (187)	7.89 (226)		10.16 (184)	
2014-15	8.265 (2040)	7.86 (115)	8.12 (340)	8.46 (386)	8.02 (289)	7.58 (364)		8.45 (62)	
2015-16	8.08 (3240)	7.38 (110)	8.26 (28)	8.38 (403)	8.09 (137)	7.43 (187)		8.35 (82)	
2016-17	7.95 (2723)	7.23 (111)	--	8.38 (42)	8.03 (120)	7.18 (21)	**Nili-Ravi (GADVASU)**	8.62 (82)	
2017-18	7.89 (2286)	7.40 (108)	8.17 (294)	8.32 (495)	8.04 (83)	8.11 (248)	7.54 (33)	7.65 (80)	
2018-19	7.60 (542)	7.61 (113)	8.23 (187)	8.12 (781)	Center Closed	6.64 (288)	7.99 (33)	Center Closed	
2019-20	7.35 (620)	7.41 (N)	8.23 (309)	7.91 (773)	--	6.94 (270)	8.01 (34)	--	
2020-21		7.21 (115)	8.31 (462)	7.88 (721)	--	6.37 (186)	7.97 (37)	--	
2021-22	7.61 (1861)	7.1 (102)	8.38 (339)	7.9 (58)	--	6.43 (171)	7.70 (28)	--	
2022-23	7.57 (1865)	7.6 (106)	--	8.1 (70)	--	7.05 (145)	7.36 (26)	--	
2023-24	7.56 (2510)	7.84 (1140)	8.23 (63)	8.0 (63)	--	6.83 (176)	7.47 (27)	--	
2024-25	**7.60 (3704)**	**7.82 (1042)**	**8.64 (143)**	**8.30 (33)**	**--**	**6.92 (141)**	**7.62 (29)**	**--**	

Total AI, Calving, PD, Conception and daughter's milk recording in Field Units

Murrah Breed	AI	Pregnancy	Total calving	Daughters Born	Daughters Recorded
GADVASU, Ludhiana					
2001-02	493	184	-	-	1
2002-03	1908	723	229	135	5
2003-04	1858	629	472	245	5
2004-05	2435	726	466	215	10
2005-06	2822	967	699	333	10
2006-07	3313	1178	755	357	10
2007-08	4015	1438	870	368	8
2008-09	4147	1622	1149	491	4
2009-10	5415	1878	1140	538	10

2010-11	6846	2289	1274	603	15
2011-12	7298	2814	1800	853	42
2012-13	8517	3463	2497	1155	55
2013-14	8014	3380	2831	1303	98
2014-15	8316	3810	2958	1447	90
2015-16	6325	3054	3013	1383	146
2016-17	5289	2464	2236	1049	144
2017-18	6344	2579	1933	899	186
2018-19	7779	3299	2468	1192	270
2019-20	8690	4307	3235	1555	270
2020-21	7991	4277	3878	1883	353
2021-22	8543	3815	3309	1565	356
2022-23	8343	4146	3407	1661	370
2023-24	8100	3934	3368	1613	347
2024-25	6927	3538	2998	1386	517
Sub Total	**139728**	**60514**	**46985**	**22229**	**3322**
CIRB, Hisar					
2001-02	139	25	15	7	-
2002-03	540	236	147	73	11
2003-04	1001	356	237	129	12
2004-05	1298	566	361	173	18
2005-06	1999	1009	744	345	36
2006-07	2102	1139	650	305	34
2007-08	2132	1104	694	341	45
2008-09	2176	1086	955	477	52
2009-10	2803	1450	1276	627	60
2010-11	3433	1743	787	377	72
2011-12	3308	1756	1103	557	112
2012-13	4204	2104	1247	553	129
2013-14	3962	1903	1079	517	133
2014-15	4129	2218	1614	776	147
2015-16	4434	2326	1693	806	133
2016-17	3807	2063	1591	802	145
2017-18	4093	2248	1724	845	181
2018-19	3977	2214	1748	798	163
2019-20	3957	2140	1530	702	137
2020-21	3480	1901	1401	722	109
2021-22	3167	1815	1458	702	-
2022-23	3766	2013	1628	828	-
2023-24	3898	2015	1574	755	-
2024-25*	4912	1908	-	-	-
Sub Total	**72717**	**37338**	**23532**	**12217**	**1729**
NDRI, Karnal					
2004-05	2223	993	710	333	34
2005-06	2224	994	875	400	45
2006-07	2193	976	918	440	65
2007-08	2594	1212	1140	517	109
2008-09	2529	1190	1086	503	138
2009-10	2739	1377	1159	569	211
2010-11	2747	1399	1225	560	183
2011-12	2995	1600	1260	605	133
2012-13	2905	1422	1159	569	138
2013-14	4419	2242	1225	560	119

2014-15	3941	2033	1860	905	83
2015-16	3905	1994	1648	768	87
2016-17	3916	1975	1524	722	85
2017-18	3241	1605	1397	640	91
2018-19	4315	1995	1030	456	86
2019-20	4571	1999	1532	647	108
2020-21	4874	1928	1559	640	134
2021-22	5126	2467	1793	772	-
2022-23	4844	2317	1866	803	-
2023-24	5108	2369	1625	682	-
2024-25*	5008	1923	1548	637	-
Sub Total	**76417**	**36010**	**28139**	**12728**	**1849**
Grand Total	**288862**	**133862**	**98656**	**47174**	**6900**

* Conception of Jan 2025 will be added in July 2025

NDUAT Faizabad					
2006-07	482	57	222	103	-
2007-08	372	122	143	61	-
2008-09	-	-	-	-	-
2009-10	1178	416	275	122	-
2010-11	3695	427	328	164	Centre closed
Total	**5727**	**1022**	**968**	**450**	**-**
SVVU Venkataramangudam					
2010-11	**282**	**67**	**21**	**8**	Centre closed

OTHER BREEDS

	AI	**Pregnancy**	**Total Calving**	**Daughters Born**	**Daughters Recorded**
Jaffarabadi (KU, Junagadh)					
2005-06	15				-
2006-07	966				-
2007-08	2169	1196 (1907)	468	223	-
2008-09	2961	1141 (2065)	944	455	-
2009-10	3070	1563 (2676)	1429	694	-
2010-11	3457	1613 (2651)	1333	666	-
2011-12	3738	1603 (2918)	1538	729	-
2012-13	4067	1776 (3627)	1684	810	-
2013-14	4121	1957 (4021)	1688	801	-
2014-15	4781	2150 (4271)	1564	731	1
2015-16	3375	1719 (3691)	1892	867	15
2016-17	2971	1228 (3041)	1256	537	74
2017-18	2462	1032 (2436)	815	365	72
2018-19	2013	840 (1971)	803	347	89
2019-20	1962	776 (1894)	712	308	86
2020-21	2139	928 (1273)	800	374	76
2021-22	1931	842 (1910)	766	344	99
2022-23	1805	840 (1893)	784	422	104
2023-24	1531	728 (1629)	700	331	57
2024-25	1892	739(1535)	412	197	-
Total	**51426**	**22671 (45409)**	**19588**	**9201**	**673**
Surti (LRS, Vallabhnagar)					
Pre-2001					62
2001-02	2256	480	482	191	35
2002-03	1850	421	403	171	35

2003-04	1980	473	359	156	37
2004-05	1861	550	351	168	26
2005-06	1717	536	470	195	29
2006-07	1691	504	426	163	35
2007-08	1811	542	418	167	22
2008-09	1804	609	429	186	17
2009-10	1975	672	503	218	24
2010-11	2038	628	526	223	25
2011-12	2023	568	451	198	30
2012-13	1897	583	487	235	27
2013-14	1591	555	495	197	37
2014-15	1534	455	409	156	45
2015-16	1986	556	345	145	44
2016-17	1979	622	466	178	32
2017-18	1478	506	453	188	16
2018-19	1719	485	397	173	9
2019-20	1538	539	409	183	3
2020-21	1678	456	409	177	-
2021-22	1480	540	402	185	-
2022-23	1237	425	394	187	-
2023-24	1634	574	405	181	-
2024-25	1501	565	557	237	-
Total	**42258**	**12844**	**10446**	**4458**	**590**
Pandharpuri (MPKV, Kolhapur)					
2006-07	3969	1530	770	382	40
2007-08	5299	2001	1254	544	42
2008-09	9349	4402	1314	660	70
2009-10	25006	9622	4273	1902	80
2010-11	22602	10337	6093	2086	108
2011-12	21047	9263	5906	2619	105
2012-13	4081	2183	3520	1523	43
2013-14	3766	2202	2800	1301	152
2014-15	4329	2104	1165	514	61
2015-16	4607	2212	2039	949	-
2016-17	3642	1226	939	392	
2017-18	4286	1976	1438	635	Centre closed
Total	**111983**	**49058**	**31511**	**13507**	**701**
Godavari, SVVU, Venkataramanngudem					
2006-07	2167	530	271	124	
2007-08	1436	619	428	202	
2008-09					
2009-10	196	32	86	40	Centre closed
Total	**3799**	**1181**	**785**	**366**	
Grand Total	**206073**	**84450**	**61361**	**27098**	**1964**