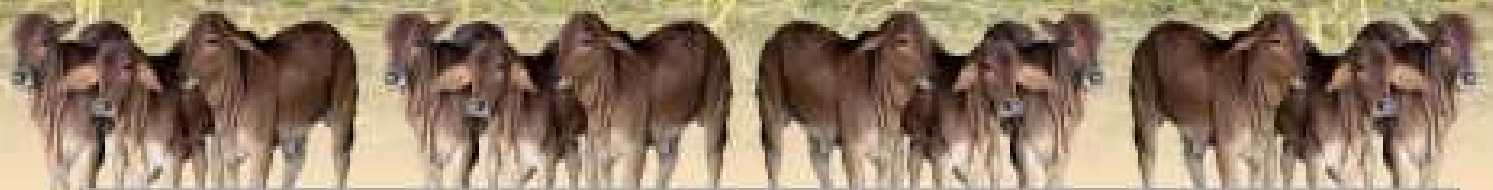
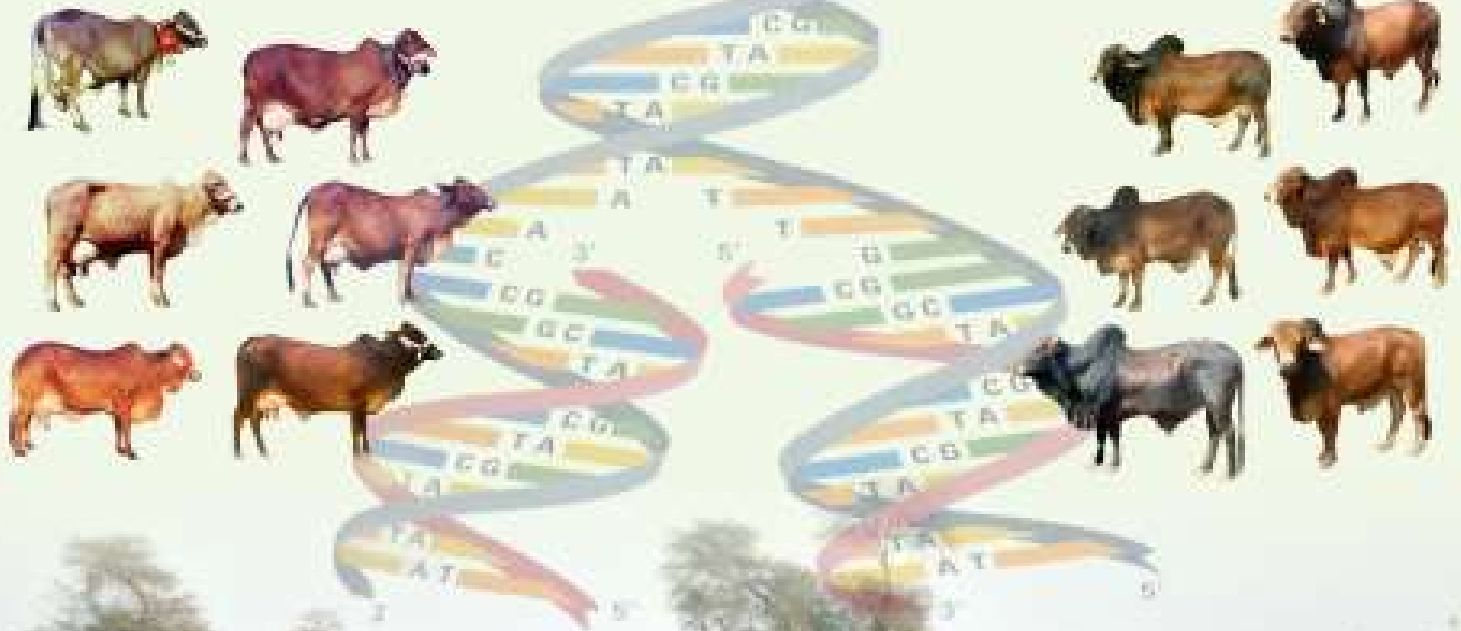




Research Centre FOR CONSERVATION OF INDIGENOUS BREEDS (RCCIB), JHANG



INTRODUCTION

Sahiwal (*Bos indicus*) is one of the established dairy cattle breed of tropical Region. Due to its tick resistance and heat tolerance qualities, this breed is found in many tropical countries of the world. Easy calving, better reproductive efficiency and economic sustainability are its additional qualities. Sahiwal produce A2 type safe milk whereas Holstein Friesian (*Bos taurus*) produce A1 type milk which is associated as risk factor for important human diseases.



Sahiwal are among the largest zebu (humped) cattle, with a mature weight from 500-900 and 360-400 kg in male and female, respectively. The coat colour is usually reddish dun or sorrel, but brown is common. The cows have large, sometimes pendulous udders with big teats. The bulls have a large hump, which often leans to one side, and a pendulous sheath. The dewlap is wrinkled and large. The horns are small and commonly loose in the female. Sahiwal bulls have a reputation of being lethargic when used for draught, but they are quite suitable for heavy and slow work.

According to Punjab Livestock Census 2006, 2.75 million head of Sahiwal cattle are available in the province. The purebred population is decreasing over the years due to crossbreeding and change in agriculture system. In the past, genetic trend remained static because of high rate of inbreeding in recorded herds. Due to its utmost importance and unique characteristics, it needs conservation as a pure breed. The best way to conserve Sahiwal breed is to keep it commercially viable under existing circumstances. Traits of commercial value such as milk yield need genetic improvement. Increase in the milk and meat production by improving its production potential will not only enhance the socio

will a
dema

Importance the Government of Punjab launched a Conservation programme in the well populated breed districts with Head Quarter at Jhang during 2003-04.

The Project successfully completed its five years gestation period on 30-06-2008 and now has been regularized from 01-07-2014.

RCCSC Phase-II completed its three year gestation period on 30-06-2011 and now has been transferred to non-development phase.

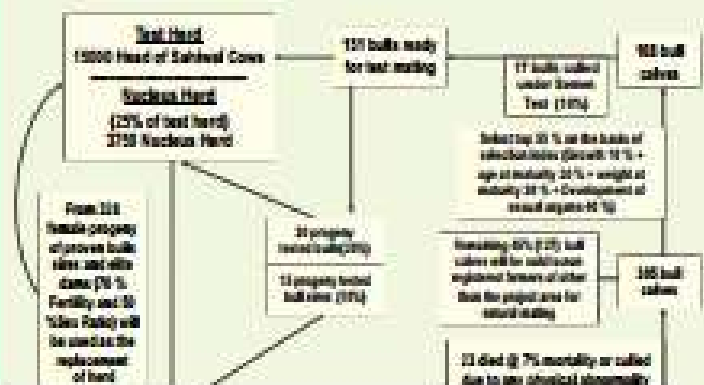
MANDATE

Conserve Sahiwal Cattle breed through Genetic Improvement and Management.

OBJECTIVES

- Maintenance of nucleus herds of superior germplasm of Sahiwal cattle
- Registration and documentation of institutional and private Sahiwal cattle herds
- Performance recording for genetic evaluation and herd management
- Identification of superior germ plasm
- Publishing and dissemination of sire/cow summaries
- Conducting research on conservation and genetics
- Collaboration with national and international institutions involved in breed development.

BREEDING PLAN



Breed Performance Traits	
Average birth weight females (kg)	20
Average birth weight males (kg)	22
Average age at first service (months)	27
Average weight at first service (kg)	225
Average age at first calving (months)	36
Service period (days)	156
Gestation period (days)	285
Lactation Period (days)	291
Calving interval (days)	441
Fertility %	80
Daily maximum milk yield (kg)	39
Maximum 305 days milk yield	5600
Average 305-days milk yield (kg)	2000
Fat (%)	4.5



INCENTIVES TO SAHIWAL BREEDERS

Following services are provided to the registered breeders:

- Insemination of Sahiwal cows.
- Vaccination to all animals.
- Deworming of Sahiwal calves.
- Purchase of bull calves at premium price.
- Prizes for winners in milk and breed beauty competitions.
- Special Reward to high yielder Sahiwal cows yielding >17 kgs of milk in 24hrs. from Rs: 30,000/- to Rs:50,000/-
- Special reward for highyielder sahiwal first calvers yielding > 12 kgs of milk in 24 hours from Rs:20,000/- to Rs:40,000

Research centre for conservation of indigenous breeds (rcib), Jharkh

YEAR WISE RED GOLD CLUB (UPTO 2021)

Year	Silver Membership	Golden Membership	Platinum Membership	No. of Total Cows
2000-2000	9	12	4	25
2001-2001	10	5	1	16
2002-2002	10	5	2	17
2003-2003	10	5	2	17
2003-2004	23	5	2	30
2004-2005	10	5	1	16
2005-2006	12	2	2	16
2006-2007	12	3	2	17
2007-2008	10	2	0	12
2008-2008	5	0	0	5
2008-2009 Silver	20	2	4	26
2008-2009 Junior	10	11	0	21
2009-2021 Silver	25	5	2	32
2009-2021 Junior	20	17	10	47
2009-2021 Junior (Challenger)	2	-	-	2
Total	215	102	47	364

ALIVE RED GOLD COWS - 230

Red Gold Club	Silver Membership	Golden Membership	Platinum Membership
Senior	17 kg to 21.00 kg/day Rs: 20,000	22 kg to 25.00 kg/day Rs: 40,000	26 kg/day Or More Rs: 50,000
Junior	12 kg to 13.00 kg/day Rs: 20,000	14 kg to 15.00 kg/day Rs: 30,000	16 kg/day Or More Rs: 40,000



PROJECT AREA

REFERENCES

- Registration number
- Capital
 - Golden
 - Silver
 - Platinum
 - Red Gold Club
 - Lohardigha
 - West Singhbhum
 - East Singhbhum
 - West Jharkhand
 - East Jharkhand
 - Jharkhand

Jharkh	Deoghar	Sahibganj	West Singhbhum	East Singhbhum
Bokaro	West Singhbhum	East Singhbhum	Lohardigha	West Jharkhand
Deoghar	East Singhbhum	West Jharkhand	East Jharkhand	Jharkhand

YEAR WISE DETAIL OF SAHIWAL BULL CALVES AT CRC KALURKOT UNDER RCCIB JHANG (2004-05 TO 2021-22) UPDATED ON 13-11-2021

Sl. No.	Year	No. of Calves Registered under the Bull Book	No. of Calves Registered under the Bull Book	No. of Bulls Registered under the Bull Book	No. of Bulls Registered under the Bull Book	Total Bull Calves Registered under the Bull Book	Total Bull Calves Registered under the Bull Book	Total Bull Calves Registered under the Bull Book	Total Bull Calves Registered under the Bull Book
1	2004-05	01	0	7	0	0	4	0	0
2	2005-06	03	36	37	0	21	3	3	0
3	2006-07	75	36	44	0	45	3	1	0
4	2007-08	190	27	36	0	108	9	2	0
5	2008-09	51	0	7	0	48	13	0	0
6	2009-10	114	75	35	0	58	13	5	0
7	2010-11	125	40	48	0	78	8	1	12
8	2011-12	55	16	43	0	31	19	10	0
9	2012-13	33	18	28	0	45	3	30	05
10	2013-14	53	16	39	0	08	2	01	05
11	2014-15	14	1	24	0	17	1	07	00
12	2015-16	130	17	43	0	24	4	41	01
13	2016-17	62	0	24	0	30	3	20	10
14	2017-18	71	3	19	0	11	0	27	01
15	2018-19	37	5	13	0	07	0	4	0
16	2019-20	68	7	17	0	08	0	24	0
17	2020-21	73	14	00	22*	27	3	23	0
18	2021-22	46	13	--	22*	3	--	0	--

E.T.T TRIALS

Embryo Transfer Technology Trials are carried out at LES Jahangirabad. First trial was conducted during 2005 and 50 trials have been successfully executed with the collection of 193 embryos resulting to delivery of 20 calves.



SAHIWAL CATTLE BREEDERS CONFERENCE/ SAHIWAL CATTLE FAIRS

Forty eight cattle fairs have been organized upto 2021-22 with the collaboration of Sahiwal Cattle Breeders Society/ Association (Punjab) Pakistan. Sahiwal Cattle Fairs provide an opportunity for technology transfer and motivation for Sahiwal Breed improvement. These Melas also provide a get together opportunity for all stakeholders of Livestock sector where problems are identified and their solutions are sought. Annual Sahiwal Cattle Breeders Conference is carried out every year in which reward of Rs. 30 lacs to owners of winner cows under National Red Gold Club is distributed. Ten Sahiwal bulls are also distributed every year to applicants where A.I is not available on agreement basis for the propagation of sahiwal breed.



A view of 8th annual Sahiwal Cattle Breeders Conference 2014

PROGENY TESTING PROGRAM (PTP)

226 sahiwal bulls are under PTP on 15000 registered cows of 1500 farmers at 41 sub centres in 15 districts of the Punjab. According to Genetic bull evaluation, 90 bulls have been found with positive EBV's. Semen of 19 bulls is available for further breed improvement.

RECOGNITION

● FAO

"The RCCSC could be regarded as a model conservation programme for Sahiwal breed in the tropics where both human and financial capital has been concentrated to enhance breed conservation and utilization".

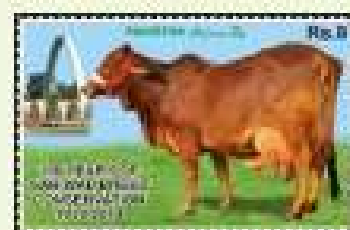
Reference: ELATISA, E. D., R. Roessler, A. K. Kahl and A. Valle Zarate. 2011 Breeding and Conservation Programmes for Sahiwal Cattle genetic resources in the tropics: A review. *Animal Genetic Resources: An International Journal* 2011, 49, 65-74. FAO Rome Italy.

● GOP

Government of Punjab (GOP) has awarded Commendation Certificate and cash prize to the Team Leader of RCCSC on his outstanding performance as a civil servant on 15th day of March, 2013.

● POSTAL STAMP

Hundred years of Sahiwal Cattle Dock Ticket has also been issued by the Govt. of Pakistan.



CONTACT US

Research Centre for Conservation of Indigenous breed
Livestock & Dairy Development Department
3-km, Toba Road Jhang (Punjab) Pakistan. Tel:047-7630983-84 Fax: 047-7630983
E-mail: dirccolb@gmail.com www.rccsc.com.pk