

## Sundaresan School of Animal Husbandry & Dairying



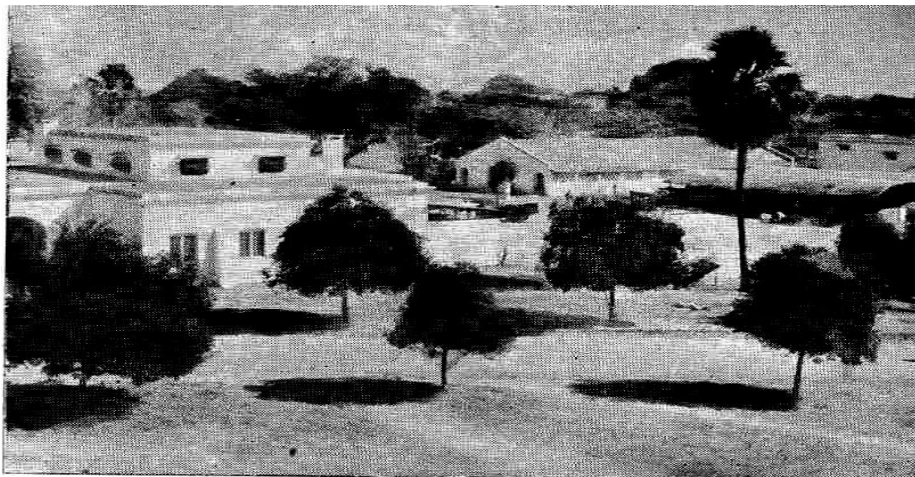
Historical overview of Old Animal Husbandry Department



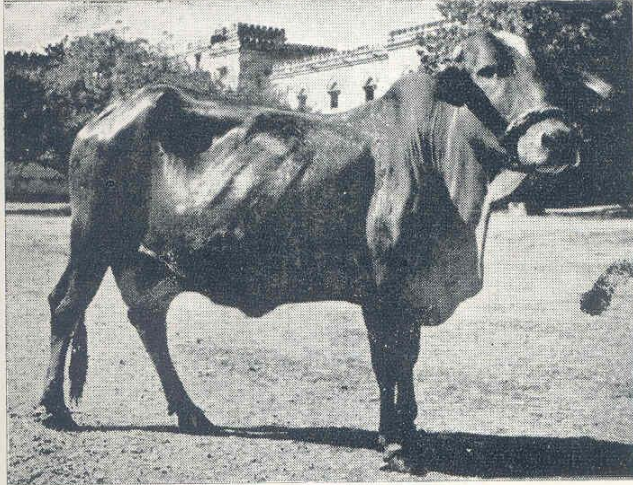
**Dr. Ramesh Pandey**  
School Research Co-ordinator

Animal Husbandry is the oldest department established by founder of this Institute Dr. Sam Higginbottom in 1924. Department of Animal husbandry has its significant contribution towards cross-breeding program in cows by developing two cross-breeds namely Jersind (3/8-5/8 exotic inheritance) and Brownsind (3/8-5/8 exotic inheritance) in India.

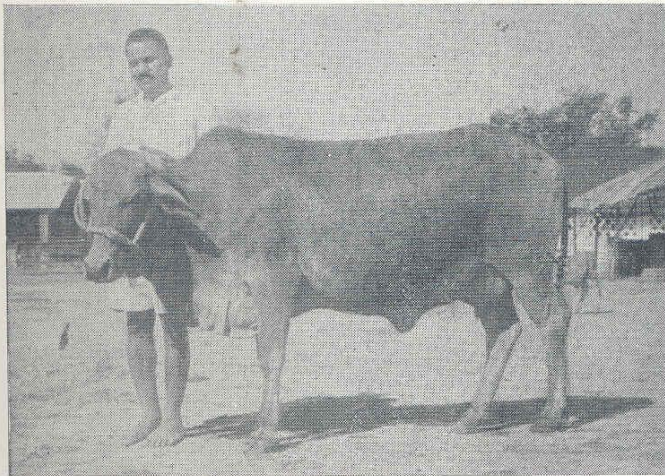
January 1, 1924 stands out as an important landmark in the history of Dairy training in India as on this day admission for the first batch of Indian Diploma in Dairying was conducted at Allahabad and Bangalore centres. In 1960 and 1964 the course was bifurcated and given recognition for IDD (Dairy Husbandry) and IDD (Dairy Technology), respectively.



*Dams*

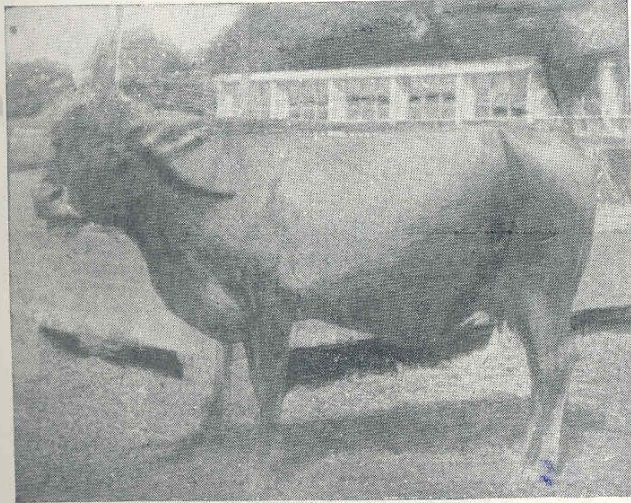


Pure Red Sindhi



$\frac{1}{2}$  Jersey  $\times$   
 $\frac{1}{2}$  Red Sindhi





$\frac{1}{2}$  Brown Swiss  $\times$   
 $\frac{1}{2}$  Red Sindhi



Father of Nation talking to students

## Awards and Honors

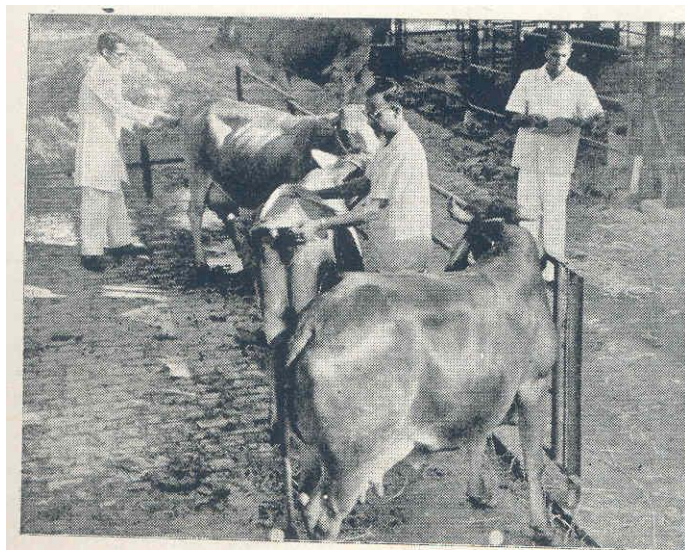
S. No.	Name of Faculty	Awards
1.	Dr. Jagdish Prasad	1. <b>LIFE TIME ACHIEVEMENT AWARD-2010</b> in Centenary Convocation, 2010 of SHIATS on 3 <sup>rd</sup> November, 2010. 2. <b>HONORARY FELLOWSHIP-2011</b> by Society of Biological Sciences & Rural Development, New Jhansi, Allahabad.
2.	Dr. Neeraj	1. <b>SHATABDEE SAMMAN of Vigyan Parishad, Prayag-2013</b> 2. <b>BEST TEACHER AWARD OF ICAR-2013</b> during 9 <sup>th</sup> convocation of SHIATS on 03/12/2013.
3.	Dr. Ramesh Pandey	1. <b>SHATABDEE SAMMAN of Vigyan Parishad, Prayag -2013</b> 2. <b>BEST TEACHER AWARD OF ICAR-2014</b>

## Research Achievements :

### Animal Nutrition:

- Productivity enhancement of farm animals through scientific feeding.
- Improvement of low grade roughages for better utilization by animals.
- Preparation of economically balanced concentrate mixture.
- Utilization of locally available agro-industrial by-products.
- Nutritional status and mineral profile of dairy animals.

### Livestock Production & Management /Animal Husbandry



Dr. D. Sundaresan,  
Dr. O. B. Tandon  
and Dr. R. Sagar,  
collecting data on  
crossbred cows.



Prime Minister Lal Bahadur Shastri at  
A. H. Deptt. (1965), understanding cross  
breeding programme as explained  
by Prof. O. P. Agarwala.



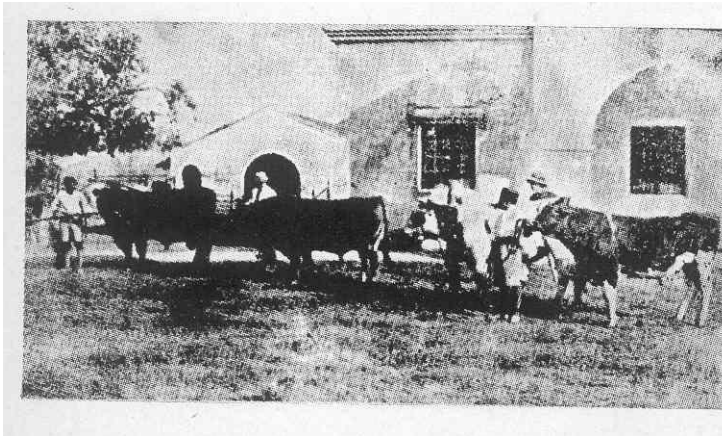
### **Livestock Production and Management:**

- Heat stress management of dairy animals.
- Sanitary milk production

### **Poultry Production:**

- Use of herbal products for better performance of broilers.
- Space requirements for rearing of broilers

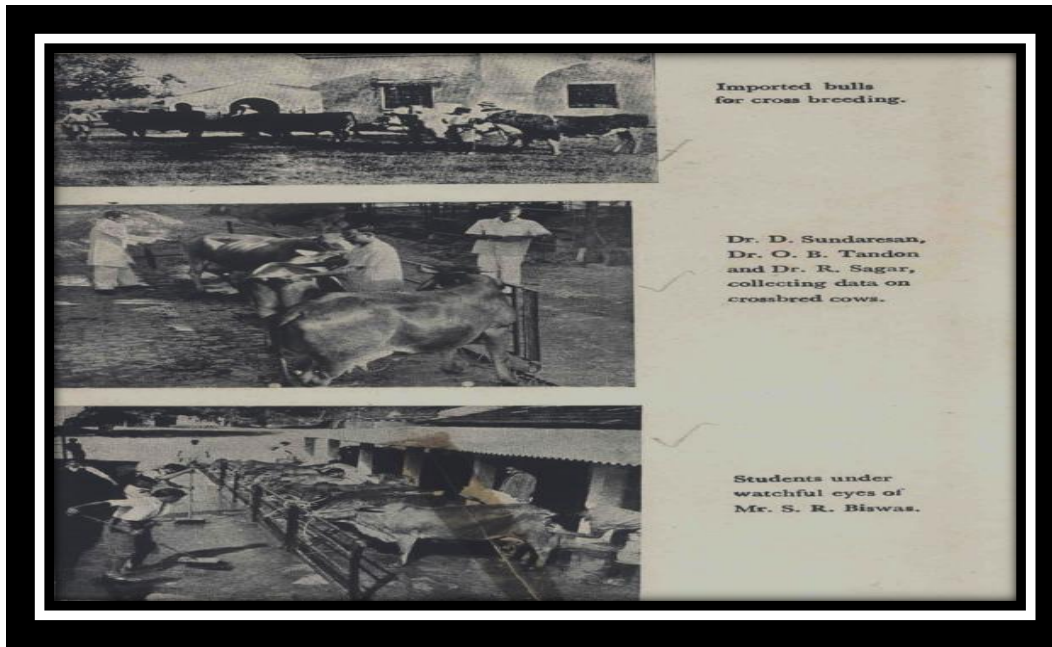
### **Animal Genetics and Breeding:**



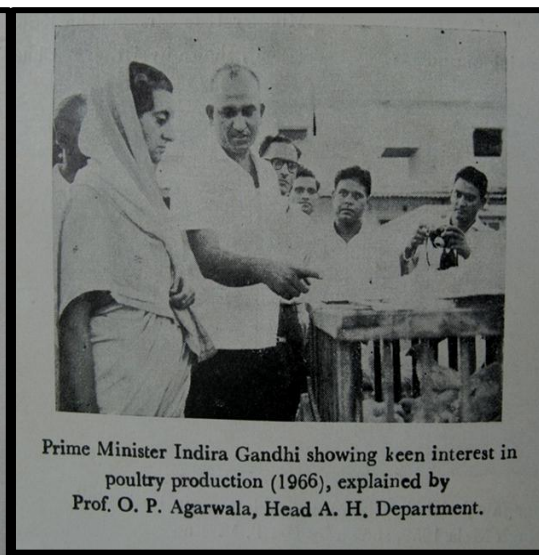
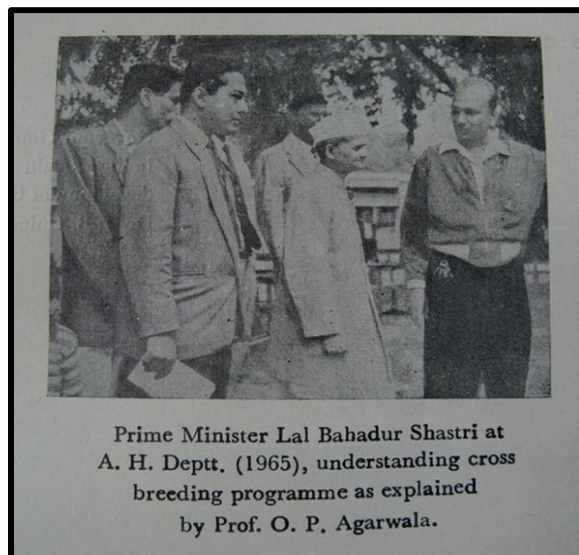
**Imported bulls  
for cross breeding.**

As the demand for milk and meat is increasing day by day owing to increase in population and individual income, the only solution to increase the milk and meat production is to scientifically control the population of animals and upgrade them for better quality and for more quantity of milk and meat per animal.

A sound breeding program is an essential part of the total animal production system. Traits of economic significance in livestock farming shows continuous variation, thus the production capacity and physical appearance of livestock population can greatly be changed through judicious, planned and selective breeding.

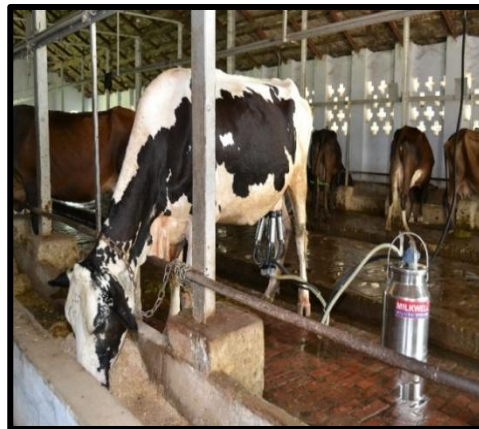


**Cross-breeding program at Animal Husbandry Department**





**Dairy barn of the school**



**Machine milking at the barn**

- Improvement of Gangatiri cows (Externally Funded Project).
- Evaluation of productive and reproductive traits of dairy animals.
- Genetic studies of Murrah buffaloes

A project on “**Improvement of Gangatiri Cows**” has been sanctioned by UPCAR, Lucknow to Sundaresan School of Animal Husbandry and Dairying,

Gangatiri is an important dual-purpose cattle breed of Uttar Pradesh state of India. The breed is significantly contributing the livelihood of the people due to its good draught ability and average daily milk yield of Gangatiri cow ranged between 4-6 liters/day with a lactation length of 150-250 days. The Inter-calving period between 14-24 months. The average fat is 4.33% (range 3.1-6.0%) and SNF content 8.2% (Range 7.87-8.42%). The average body length, height at withers, chest girth, 110, 124, 153 cm, in cows and 121, 142, 146 cm in bullocks under field conditions, respectively. Therefore, sincere efforts should be undertaken for its genetic improvement by using semen of Gangatiri bulls and with the shifting in breeding policy of animals from crossbreeding to conservation of germplasm, it is imperative to maintain, multiply, conserve and improve indigenous recognized breeds of cattle.

Project has the following



## **Objectives:**

- **To improve productive and reproductive efficiency by selective breeding of Gangatiri cow.**
- **To provide an improved Gangatiri breed to landless/marginal/small farmers of the rural areas.**

## **With Technical Programme as: Selection of animals:**

The number of stock will be 20 dairy cows and two breeding bulls, selected on the basis of

- i) Individual Selection (Based on own performance)
- ii) Family selection (Collateral Relatives)

## **Following observations are under consideration:**

### **A) Productive Parameters:**

- |                          |                                  |                         |
|--------------------------|----------------------------------|-------------------------|
| 1. Growth- monthly       | 2. Weight- monthly               | 3. Milk Yield-per day   |
| 4. Fat percent-per day   | 5. T. S., S.N.F. in milk-monthly | 6. Dry Period           |
| 7. Lactation Length-days | 8. Wet Average-monthly           | 7. Herd Average-monthly |

### **B) Reproductive Parameters:**

- |                           |  |                     |
|---------------------------|--|---------------------|
| 1. Service period         | 2. Estrus (Regular/Irregular/Pronounced) | 3. Conception rate  |
| 4. Service per conception | 5. Intercalving period                   | 6. Calving problems |



**Genetics Improvement of Gangatirei**

