

## National Dairy Research Institute, Karnal

### Frequently Asked Questions

**1. What are the improved breeds of cattle developed by NDRI?**

A: By crossing, high yielding milch breeds of cattle i.e., Holstein –Friesian and Brown Swiss with indigenous breeds i.e., Tharparker and Sahiwal, NDRI has developed two strains of crossbred cattle named as **Karan-Fries** and **Karan Swiss**. These cross bred animals are high milk producers and well adapted to our climatic conditions.

**2. Whether crossbred cattle developed by NDRI, are available to general public on sale?**

A: Crossbred cattle along with other surplus animals are offered to the public by sale through general auction held twice a year on third Friday and Saturday in the month of March and September.

**3. Where can we get good quality crossbred animals?**

A: NDRI has adopted several villages around Karnal (Haryana), where, through its outreach programs a large population of good crossbred animals has been produced. Therefore one can buy good quality crossbred animals from the farmers in villages around Karnal.

**4. Does NDRI sell seeds of different fodder crops to general public?**

A: NDRI has revolving fund scheme, operating at its farm section for the production of quality seeds of various fodder crops such as Maize, Sorghum, Multicut Sorghum, Oats, Mustard, Turnip and Berssem. The seed is sold to the general public through Agriculture Technology Information Center(ATIC) at NDRI. has

**5. What are the benefits of giving “Total Mixed Ration” to Animal in the feed?**

A: It is observed that the milk production increases and sustained for longer period, if animal is given Total Mixed Ration in the feed; in addition there is no nutrient deficiency.

**6. How much Mineral mixture should be given to animals per day?**

A: A milch animal should be given 50 g Mineral mixture per day. Since milk contains large amount of Calcium which is met from mineral mixture. However the quality of mineral mixture should be good.

**7. What is By-pass protein in Animal feed?**

A: By-pass is that protein which by-passes Rumen without degradation and is digested further in the digestive tract. This protein enhances milk production. The level of By-pass protein is high in some feed ingredients such as cotton seed cake, and soya meal but is less in other protein sources such as mustard cake.

**8. How can one get information about different technologies developed by NDRI?**

A: A consultancy unit, presently in the Division of Dairy Technology provides all type of Information regarding technologies developed in the field of Animal Production, milk processing and dairy technology

**9. How can one get dairy cultures from NDRI?**

A: A National Collection of Dairy Cultures (NCDC) is located in Division of Dairy Microbiology, that supplies cultures to various research institutions and industry at nominal charges.

**10. What are different academic programmes offered by NDRI?**

A: NDRI Deemed University offers a B.Tech course in Dairy Technology at undergraduate level and post graduate courses both at Masters and Ph.D level in 13 disciplines in the areas of Dairy Production, Dairy Processing and Management.

**11. What is the procedure for admission to B.Tech, M.Tech and Ph.D programmes?**

A: NDRI Deemed University offers a B.Tech course in Dairy Technology at undergraduate level and post graduate courses both at Masters and Ph.D level in 13 disciplines in the areas of Dairy Production, Dairy Processing and Management.

**12. Does NDRI accept International students for its academic programmes?**

A: NDRI being a premier institution in Tropical Dairying attracts a large number of Foreign Students, particularly from developing countries. Such students are accepted for admission both at Masters and PhD level through Indian Council of Agricultural Research/ Department of Agriculture Research and Education, Govt. of India.

**13. Does NDRI provide training to farmers on different aspects of Dairying?**

A: NDRI through its Krishi Vigyan Kendra (KVK) provides need based training to farmers, farm women and rural youth in different aspects of Dairy farming besides training on Fisheries, Bee keeping etc. on regular basis. Farmers both from Karnal district and other states are provided training at NDRI.

**14. Whether NDRI provides testing facilities for milk & milk products?**

A: NDRI, through its consultancy unit provides all type of testing facilities/ services for milk and milk products to dairy industry at nominal charges.

**15. Are there any techniques/ kit developed by NDRI to detect milk adulteration?**

A: NDRI has developed a milk detection kit for detection of a large number of adulterants and antibiotic residues in milk. A detergent based test has also been developed to detect the adulteration of milk with so called Synthetic milk.

**16. Does NDRI provide good quality semen to the farmers?**

A: Artificial Breeding Research Center (ABRC) at NDRI maintains a large number of cattle (Karan Fries, Karan Swiss, Sahiwal, Tharparker) and Murrah buffalo breeding bulls. Quality semen from such bulls is provided to the farmers and other State govt. institutions for genetic improvement of animals at a nominal price.

**17. What should we do to increase milk production in animals?**

A: Animals should be feed green fodder such as berseem, Lucerne; Maize + Cowpea around the year. By feeding quality green fodder instead of concentrates, milk can be produced at cheaper cost. Thus due consideration should be given to cultivation of green fodder in the crop rotation scheme.

**18. Does NDRI provide training to entrepreneurs who want to set up dairy plant?**

A: NDRI has established Technology Business Incubator (TBI) through which prospective dairy entrepreneurs are provided technologies, facilities for product development/ manufacture and marketing till such time that they gain confidence to launch enterprise on their own.

**19. Does NDRI have a single window system to address the problems of dairy farmers & entrepreneurs?**

A: NDRI through Agriculture Technology Information Center (ATIC) located near main gate of the Institute provides a single window system to address the problems of dairy farmers & entrepreneurs besides sale of seeds and bio-fertilizers and institute publications?

**20. How can we get the technologies developed at NDRI?**

A: The product and process technologies developed at NDRI can be procured through Consultancy Cell (Division of Dairy Technology) or through NRDC which has authorized to commercialize the technologies.