GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE AND FARMERS WELFARE DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA UNSTARRED QUESTION NO. 1331 TO BE ANSWERED ON 3RD DECEMBER, 2024

RESEARCH PROJECTS BY NDRI, KALYANI

1331. SHRI JAGANNATH SARKAR:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण मंत्री be pleased to state:

(a) the current research projects being undertaken at the Eastern Regional Station of the Indian Council of Agricultural Research (ICAR), National Dairy Research Institute (NDRI) in Kalyani, West Bengal;

(b) the specific contributions of the NDRI Kalyani in improving dairy farming techniques and productivity in the Eastern region of the country;

(c) whether the Government has any plans to expand the research facilities or introduce new programs at the Eastern Regional Station of NDRI, Kalyani; and

(d) the extent of collaboration between the Eastern Regional Station of NDRI, Kalyani, and local dairy farmers in West Bengal to disseminate research findings and improve dairy practices?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

(a): List of current projects undertaken by Eastern Regional Station of the Indian Council of Agricultural Research (ICAR) National Dairy Research Institute (NDRI) is attached as **Annexure-I**

(b): The Eastern Regional Station (ERS) of ICAR-National Dairy Research Institute (NDRI), Kalyani, has played a pivotal role in improving dairy farming techniques and productivity in the Eastern region of India. Its significant contributions are attached as **Annexure-II**

(c): The Government has not sanctioned any new scheme specifically for expansion of infrastructure or introduction of new programme at Eastern Regional Station (ERS) in Kalyani. The station is working as per the mandate of ICAR-National Dairy Research Institute (NDRI) for addressing region specific problems.

(d): The Eastern Regional Station (ERS) of ICAR-NDRI, Kalyani, has established strong collaboration with local dairy farmers in West Bengal, particularly in the Nadia district, to disseminate research findings and improve dairy practices. Through a

network of agro advisories and expert guidance provided in partnership with Krishi Vigyan Kendra (KVK) experts, over one lakh farmers in the district have received information on agriculture and animal husbandry. This collaboration has significantly enhanced the productivity and efficiency of dairy husbandry in the region.

In the past three years, the ERS has directly benefitted more than 8,000 farmers from eastern and north-eastern states of the country through various interventions under direct benefit transfer programmes. These initiatives have played a crucial role in equipping farmers with the knowledge, resources, and techniques needed to adopt modern and sustainable dairy practices. This active engagement demonstrates the ERS's commitment to improving the livelihoods of dairy farmers by ensuring the practical application of its research outputs.

[Part (a) of Lok Sabha USQ No. 1331 dated 3RD DECEMBER, 2024]

- 1. Livelihood improvement of rural farmers through augmentation of fertility in dairy cows with assured female calf approach in Haringhata and Chakdaha blocks of Nadia district, West Bengal
- 2. Characterization of Native Livestock and Poultry Population of West Bengal State. Funded by ICAR under "Network project on characterization and documentation of ANGR" of NBAGR, Karnal.
- 3. Upskilling and reskilling *Pashu Sakhis* on improved animal husbandry and agricultural practices for effective dissemination of technologies
- 4. Upliftment of socio-economic condition of tribal people through integrated livestock farming in North Eastern Hill Region/Eastern part of India (TSP)
- 5. Improving the livelihood through dairy farming in North Eastern region of India (NEH)
- 6. Establishment of field-based conservation unit of Lakhimi Cattle of Assam
- 7. Facial image-based biometric recognition for unique animal identification using machine learning (Artificial Intelligence)
- 8. Elucidating the role of placental characteristics on birth related traits and reproductive efficiency in Black Bengal goats and strategies for their improvement
- 9. Enhancing the fertilizability of Bengal buck semen through optimization of sperm dose and amelioration of oxidative stress with membrane targeting antioxidants
- 10. Formulation of a novel feed supplement to promote early rumen development for improving animal productivity.
- 11. Validation of Nutrient Enriched Rice Straw (NERS) technology in an organized dairy farm
- 12. Evaluating genetic variations of feeding behaviors and their associations with production and reproduction performance of Jersey crossbred cattle
- 13. Therapeutic management of calf diarrhoea with probiotics and herbal antidiarrheal compounds
- 14. A Rapid Test Kit for Detecting Bovine Ketosis at Point of Care
- 15. Assessment of the Socio-spatial Dynamics for Bio-Fertilizer Adoption within Dairy based Farming Systems

[Part (b) of Lok Sabha USQ No. 1331 dated 3RD DECEMBER, 2024]

- A notable achievement of the station is the development of a location-specific mineral mixture tailored to the unique nutritional requirements of dairy animals in the region. This initiative has significantly improved animal health and productivity. The ERS has also focused on utilizing locally available non-conventional feed resources and upgrading low-grade feeds, ensuring enhanced dietary intake and better performance of livestock.
- In infrastructure development, the station has designed efficient animal housing systems, which contributed to the improved health and productivity of the animals. Additionally, it has made remarkable strides in goat farming through the production of buck semen for artificial insemination in Black Bengal goats, enhancing the genetic quality and reproductive efficiency of this breed. The development of a milk replacer for Black Bengal kids has further boosted their survivability and growth, leading to healthier and more robust offspring.
- To ensure that these advancements reach the farming community, ERS employs a robust dissemination strategy. The station organizes regular training programmes, workshops, and field demonstrations, along with farmer-scientist interactions, farmer fairs, and off-farm visits. These initiatives are complemented by the use of print and digital media, such as brochures, manuals, mobile apps, and social media platforms, to provide continuous updates and guidance. This multi-channel approach ensures that the benefits of ERS's research and technologies are effectively transferred to the end-users, contributing to the overall productivity and sustainability of the animal husbandry sector in the region.
- Further the KVK, Nadia (Additional) under the administrative control of the NDRI-ERS is mandated to disseminate the developed technology among the farmers and other stakeholders in the region.
