

Institute - Industry Meet organized at ICAR-NDRI, Bengaluru on 6th Oct 2018

An institute – Industry meet was organized at ICAR-NDRI, Bengaluru on 6th October 2018 in order to explore collaboration opportunities with dairy industry as well as to transfer technologies developed at ICAR-NDRI. Various technologies developed at NDRI, Karnal and NDRI, Bengaluru were presented to industry representatives during the meet and industry representatives were also given opportunity to present their views and perspectives on what NDRI is expected to do for the Indian dairy industry. In all 54 persons representing 30 industries like Dodla Dairy, ITC, Britannia Industries, Heritage Foods, Hatsun Agro etc. participated in the Meet.

Mr Sunil Reddy, Managing Director of Dodla Dairy Ltd., Hyderabad was the Chief Guest and **Mr Sanjay Singal**, Chief Operational Officer of ITC Ltd., Bengaluru was the Guest of Honour. Director of ICAR-NDRI, **Dr RRB Singh** presided over the inaugural programme and Joint Director (R) **Dr Bimlesh Mann** and Head of ICAR-NDRI, Bengaluru **Dr K.P. Ramesha** were also present. **Dr. B.C. Ghosh**, Organizing Secretary of the meet welcomed the participants and **Dr K.P. Ramesha** Chairman of the Organizing Committee made the introductory remarks and also highlighted the importance of regular interactions between institute and industry. **Dr. S. Ayyappan**, NABARD Chair Professor explained the importance of transfer of technology quickly to the end users. **Mr Sunil Reddy** stated that dairy institutes are doing good work, but the technologies should be offered to industry as a package including manufacture methods, packaging, cost effectiveness and market opportunities. In that case, his company would be willing to sponsor research project. He also offered to provide fellowship / scholarship to students provided that certain conditions are met. **Mr Sanjay Singal** elaborated the efforts being made by ITC in introducing new products and sought collaboration with NDRI in their endeavors. Director **Dr RRB Singh** assured the industry that NDRI would be pragmatic in its approach in dealing with industry and wanted more and more collaborative approaches instead of working in an isolated manner. He assured the industry that NDRI would direct its research projects to be conducted in a more industry friendly manner. During the inaugural programme, technology brochures published by NDRI Karnal and Bengaluru were released and distributed to industry representatives for their information and knowledge. The Inaugural session ended with vote of thanks by **Dr K. Jayaraj Rao**, Principal Scientist (Dairy Tech.).

The Meet was organised in three sessions. In the first session, five speakers from NDRI: **Dr K.P. Ramesha** (Principal Scientist, AGB), **Dr B.C. Ghosh** (Principal Scientist, DT) from NDRI, Bengaluru; and **Dr P.N. Raju** (Scientist, DT), **Dr Rajan Sharma** (Principal Scientist, DC) and **Dr AK Tyagi** (Principal Scientist, AN) from NDRI, Karnal presented various technologies developed by NDRI and ready for commercialization in dairy processing and production fields. In the second session, two industry representatives: **Mr B. Nataraj** (Former Director, QA, KMF, Bengaluru) and **Dr Deepti Kaushal** (Research Scientist, ITC Ltd., Bengaluru) presented industry's perspective and expectations of the industry. Some of the points they dwelt were: initial milk quality, labeling issues, FSSAI standards, product development issues and technology packages. Their presentations were

followed by an open house interaction between industry representatives and institute scientists. During the interaction, the issues raised by industry were clarified. Director in his remarks said that the NDRI is already working on several issues raised by the industry, but some new issues to work with and provide solutions came to fore. He said that industry can always contact NDRI for any help and he urged industry to come forward to collaborate with NDRI in solving any issues faced by the industry. He also said that any interested industry for tech transfer can contact either NDRI Karnal or Bengaluru for further details. The meet ended on a positive note creating opportunity for more and more future interaction with industry. Participants gave the feedback that innovative ideas were presented in the meet and the Meet was very useful for the industry for sharing views and clarifying doubts and should be conducted periodically at least once every year. They also felt one month short term training course is also needed for new recruits of engineers, QC persons, veterinary assistants and other dairy professionals to make industry ready. Industry personnel should be trained in FSSAI, Codex, BIS and EIA standards. The institute-industry meet concluded with vote of thanks by **Dr P.K. Dixit**, Principal Scientist (D. Econ.).

The Some of the areas identified in the Meet for further work are:

- Improvement of initial quality of milk at collection
- Utilization of concentrated milk for reconstitution and recombination purposes.
- Effective application of membrane technology in the industry (for example in powder plant and evaporation plants)
- Conversion of old powder plants into agglomerated powder plants (agglomerated SMP fetches higher price)
- Restriction of use of sugar in dairy products.
- Development of energy efficient equipment
- Enhancement of shelf life of paneer possibly up to 30 days
- Utilization of treated ETP water (RO, deodorized etc.)
- Accelerated test for determining sterility of UHT milk to avoid incubation time.
- Rapid tests for estimating FSSAI parameters
- Development of low-cost method for detecting aflatoxins
- Fixing of standards for traditional sweets.
- Development of kit methods for approval by FSSAI
- Development of strip test for detection of preservatives in liquid milk
- Study on proteolysis activity in milk testing equipments
- Content development on yield enhancement and veterinary health
- Effectiveness of area specific mineral mixture on conception rate as compared to normal mineral mixture
- Educating farmers and middlemen not to adulterate milk supplies

Glimpses of photographs showing the events of Institute- Industry Meet organized at ICAR-NDRI, Southern Regional Station on 06th October 2018

