









# ICAR – National Agricultural Higher Education Project (NAHEP) Centre for Advanced Agricultural Science and Technology (CAAST)



# Centre of Excellence for Advanced Research on Animal Food Safety

Mumbai Veterinary College, Parel, Mumbai – 400 012 Maharashtra Animal & Fishery Sciences University, Nagpur – 440 001, Maharashtra, India











## Massage From Vice-Chancellor



First and foremost, I would like to congratulate team of NAHEP-CAAST for grand organization of inauguration program of NAHEP-CAAST-MAFSU by the auspicious hands of Hon'ble Shri Ajit Anantrao Pawar, Deputy Chief Minister, Finance, Planning, Govt. of Maharashtra, The efforts taken by entire NAHEP-CAAST team for organizing such a grand program is commendable. Further different training programs

conducted by the centre will help to the goals of and will enhance the visibility of the project as well as MAFSU nationwide. I put forth my good wishes for the entire NAHEP-CAAST team for their continued success for the extended project duration.

> Col. (Dr.) Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, MAFSU Nagpur.

### National Webinar on "Role of Proteins in Human Nutrition: Challenges and Opportunities"

Proteins plays a vital role in human nutrition so that to create awareness about role of various types of proteins in human nutrition a one Day National Webinar was organized under "Centre of Excellence for Advanced Research on Animal Food Safety" on 24th December 2021.

The webinar was graced by Col. (Dr.) Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, MAFSU, Nagpur; Dr. R. C. Agrawal, DDG (Education) and National Director, NAHEP, ICAR, New Delhi; Dr. Prabhat Kumar, NC, NAHEP-CAAST, ICAR, New Delhi; Dr. S.V. Upadhey, DI and Dean, Faculty of Veterinary Science, MAFSU, Nagpur; Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur; Dr. A. U. Bhikane, Director of Extension Education, MAFSU Nagpur and Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur.

Dr. A. S. Ranade, Associate Dean, Mumbai Veterinary College, Parel, Mumbai delivered talk on "Egg Proteins and their Advantages". Second speaker Dr. Girish S. Patil, Principal Scientist, ICAR-National Research Centre on Meat, Hyderabad, shed light on "Significance of Animal Proteins in Human Well Being". One of the important topics "Role of Milk Protein in Human Health" was covered by Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur. Dr. Sohil Wazir, Chief Marketing Officer, Bluetribe Foods











Pvt. Ltd., Worli, Mumbai, was one of the eminent speakers who expressed his views on "Emerging Opportunities of Plant Based Proteins in Human Nutrition".

Speaker	Topic		
24/:	12/2021		
Dr. A. S. Ranade, Associate Dean,	Egg Proteins and their Advantages		
Mumbai Veterinary College, Parel,			
Mumbai – 12			
Dr. Girish S. Patil, Principal Scientist,	Significance of Animal Proteins in Human		
ICAR-National Research Centre on Meat,	Well Being		
Hyderabad			
<b>Dr. P. G. Wasnik</b> , Dean, Faculty of Dairy	Role of Milk Protein in Human Health		
Technology, MAFSU, Nagpur			
<b>Dr. Sohil Wazir,</b> Chief Marketing	Emerging Opportunities of Plant Based		
Officer, Bluetribe Foods Pvt. Ltd., Worli,	Proteins in Human Nutrition		
Mumbai			
Panel	Discussion		
Chairman	Col. (Dr.) Prof. A. M. Paturkar		
	Hon`ble Vice-Chancellor, MAFSU, Nagpur		
Member	Mr. Bhupinder Singh		
	MD, Vista Processed Food Pvt. Ltd.		
Member	Dr. P. G. Wasnik		
	Dean, Faculty of Dairy Technology, MAFSU,		
	Nagpur		
Member	Dr. (Prof.) A. S. Ranade		
	Project Implementing Officer &		
	Associate Dean, MVC, Mumbai		
Member	Dr. B. Sunil		
	Professor and Head, Department of LPT and		
	Meat Technology Unit, CVASc, Mannuthy,		
	Kerala		
Member	Dr. R. J. Zende		
	Principal Investigator		
	NAHEP-CAAST, MVC, Mumbai		
Member	Dr. Sohil Wazir		
	Chief Marketing Officer, Bluetribe Foods Pvt.		
	Ltd., Worli, Mumbai		
Moderator	Dr. V. S. Waskar,		
	Professor & Head, Dept of VPH, KNPCVS,		
	Shirval, Satara.		

The technical program was followed by a panel discussion wherein various stalwarts of animal origin foods exchanged their views. The panel agreed that there is urgent need to formulate rules and regulations so as to prevent the malpractices and to protect the consumer













rights by providing the truthful information on label. A total of 142 participants including

P.G. and Ph.D. Students, Scientists, Faculty members, Industry personnel and other related stake holders participated in the webinar.

# National Ten days Training on "Advances in Quality Assurance and Hygienic Production of Animal Origin Foods".

Ten days online training on "Advances in Quality Assurance and Hygienic Production of Animal Origin Foods" was held on 17<sup>th</sup> January, 2022 to 28<sup>th</sup> January, 2022 under "Centre of Excellence for Advanced Research on Animal Food Safety".

The webinar was graced by Col. (Dr.) Prof. A. M. Paturkar, Hon'ble Vice-Chancellor, MAFSU, Nagpur; Dr. R. C. Agrawal, DDG (Education) and National Director, NAHEP, ICAR, New Delhi; Dr. Prabhat Kumar, NC, NAHEP-CAAST, ICAR, New Delhi; Dr. S.V. Upadhey, DI and Dean, Faculty of Veterinary Science, MAFSU, Nagpur, Dr. N. V. Kurkure, Director of Research, MAFSU, Nagpur;

Dr. A. U. Bhikane, Director of Extension Education, MAFSU, Nagpur and Dr. P. G. Wasnik, Dean, Faculty of Dairy Technology, MAFSU, Nagpur.

On Day One, Dr. S. B. Prasanna, Associate Professor and Head, Department of Livestock Farm Complex, Veterinary College, Gadak, Karnataka, delivered his talk on "Advanced Technologies used in Caring and Proper Management of Food Animals at Farm Level" while Dr. Vikas Waskar, Professor, Dept. of Veterinary Public Health, Krantisinh Nana Patil College of Veterinary Science, Shirwal, Dist. Satara., spoke on the topic "Regulatory Guidelines and Challenging











Issues in Transportation of Food Animals".

On Day second, Dr. Simranpreet Kaur, Associate Professor, School of Public Health & Zoonoses, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, Punjab, delivered a talk on "Importance of Conducting Scientific Ante-mortem Inspection Production of Hygienic Meat". The topic on "Postmortem Examination: Importance of Examination of Lymph-nodes in Meat Inspection" was delivered by Dr. N. V. Kurkure, Director of Research, Maharashtra Animal and Fishery Sciences University, Futala Lake Road, Nagpur.

Livestock **Products** Technology, Veterinary College, Gokula Campus Vidyanagara, Hassan delivered lecture on "Best **Practices** for Hygienic Milk Production" while Dr. P. K. Mandal, Professor. Department of Livestock **Products** Technology, Rajiv Gandhi Institute of Veterinary Education Research, Kurumbapet, Puducherry, spoke on "Traditional and Scientific Methods for Slaughtering of Food Animals".

On Day Four, Dr. Nadeem Firoze, Ex Professor and Head, Department of Livestock Product Technology, Veterinary College, Bangalore, KVAFSU, spoke on "Guidelines for Setting Up Modern



# Advances in Quality Assurance and Hygienic Production of Animal Origin Foods

On Day three Dr. Devaraja Naik, Professor and Head, Department of Abattoir". Mr. Shrikant Tambe, Senior Consultant, Meat Industry, Mumbai,











expressed his views regarding "Recent Advances in Pork Meat Production: It's Scope for Export". He enriched the participants knowledge with his personal experience and vast knowledge.

On Day Five, Dr. Manish Chatli, Dean, College of Veterinary Science, Rampura Phul, Guru Angad Dev Veterinary and Animal Sciences University Ludhiana, Punjab, delivered his on "Different Methods lecture Stunning and its Impact on Meat Quality". Dr. Jasbir Singh Bedi, Director School of Public Health, Guru Angad Animal Veterinary and Sciences University Ludhiana, Punjab, spoke on "Regulation and Risk Assessments of Chemical Residue in Animal Origin Foods".

On Day Six, Dr. Siddheshwar Rindhe, Plant QA Head Pan India, M/S Vista Processed Foods Pvt. Ltd., M- 75, MIDC, Raigad, Taloja, Thane, Navi Mumbai, shared his valuable knowledge on "Quality Management System in Production of Food Products: Challenges K. and Opportunities". Dr. N. Bhilegaonkar, Principal Scientist & Station In-charge, Training and Education Centre, ICAR-IVRI, Shivajinagar, Pune, delivered his talk on "Microbial Standards for Foods of Animal Origin".

On Day Seven, Dr. Amitkumar Nandavadekar, Deputy Manager - QA/QC, Venkateswara Hatcheries Pvt. Ltd. (Food Division), Ranebennur, Karnataka, spoke "Regulatory Aspects of Food on Processing in India with Special Reference to Poultry Processing". Dr. Surinder P. Chawla, Ex Scientific Officer G, Food Technology Division, Bhabha Atomic Research Centre Trombay, Mumbai, delivered a lecture on "Use of Gamma Radiation Technology for Extension of Shelf-life of Meat".

On Day Eight, Dr. Z. B. Dubal, Senior Scientist, Veterinary Public Health Division, ICAR-IVRI, Izatnagar, Bareilly, spoke Uttar Pradesh, on "Effluent Treatment Plant for Disposal of Solid & Liquid Slaughterhouse Waste". Dr. S. B. Barbuddhe, Director, ICAR- National Research Centre on Meat, Chengicherla, Boduppal post, Hyderabad, shared his views on "Different Hurdle Technologies Used for Improvement of Meat Quality for Export Purpose".

On Day Nine, Dr. Vijay Wavare, Assistant Director, Export Inspection Agency, Government of India, Andheri, Mumbai, delivered his talk on "Challenges & Opportunities in Export of Chicken and Eggs in European Countries". Mr. R. Ravindra, Deputy General Manager, Agricultural and Processed Food Products











Export Development Authority, Vashi, Navi Mumbai, spoke on "Role of APEDA in Exports of Meat and Meat Products: Challenges and Opportunities".

On Day Ten, Dr. B. M. Naveena, Principal Scientist, ICAR- National Research Centre on Meat, Chengicherla, Boduppal post, Hyderabad, delivered lecture on "Role of FSSAI in Registration of Food Establishments for Production of Meat & Meat Products". Dr. Suman Talukder, Senior Scientist, Division of Livestock Products Technology ICAR-IVRI, spoke on "Suitable Measures for Economic Utilization of Slaughter House Waste". A total of seven hundred and five participants attended the training programme.



**Advances in Quality Assurance and Hygienic Production of Animal Origin Foods** 

#### IMPORTANT MEETING ATTENDED

- ➤ All **Nodal Officers** of the **World Bank** funded ICAR-NAHEP-CAAST project from constituent colleges of MAFSU attended online meeting regarding "Experience sharing by call I/II Institutes on ESP" conducted by NAHEP on 6<sup>th</sup> December 2021.
- ➤ All the Associate Deans of the constituent colleges of MAFSU attended online meeting on 18/01/2022 to discuss about implementation of NAHEP activities at various colleges regarding mapping of PG and Ph.D. students for financial support to their research project on Food Safety.

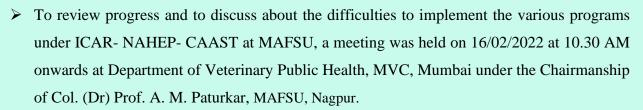












- > Dr. R. J. Zende, PI and all Co-PIs attended a Kick off meeting conducted by NAHEP on 07/12/2021.
- > Dr. R. J. Zende, PI, Dr S. D. Ingole, Co PI and Dr. V. M. Vaidya, Nodal Officer, Procurement attended post procurement review phase 2 meeting on 28th February to 3rd March, 2022 conducted by NAHEP.

#### INTERNAL AUDIT

Internal audit of the project was conducted NAHEP team partly by virtually and partly by physically during 7th December, 2021 to 13th December, 2021 at Mumbai Veterinary College, Parel, Mumbai to ensure compliance to requirements.

### **National Level Hackathon 2.0**

Hackathon opportunity student/faculty/ Kritagya was the to entrepreneurs/innovators to showcase their innovative approaches and technology solutions to promote the livestock farming in India and enhancing the learning capabilities, innovations and disruptive solutions, employability and entrepreneurial drive in the livestock sector.

West zone committee headed by the Hon'ble Col. (Dr.) Prof. A. M. Paturkar as Chairman, Dr. Arun Kumar Tomar as Co-Chairman and Dr. R. J. Zende as Secretory of the committee. From west zone, a total of 24 teams participated in the event which were shortlisted on the basis of their innovative ideas and themes.













### PURCHASE OF LABORATORY AND OFFICE EQUIPMENT'S

The NAHEP-CAAST project is aimed to upgrade the existing Western Region Referral Laboratory to the "Centre of Excellence for Advanced Research on Animal Food Safety". To keep this objective in mind various equipment's sanctioned such as Kel plus, Socs plus, and Fibra plus were purchased, installed and successfully demonstrated the performance of the equipment's.

To access the exit and entry of personnel in the lab, biometric machine was installed and to ensure the security CCTV cameras were also installed.





### Kelplus Analyser





Socs Plus



Texture Analyser



Fibra - Plus

Muffle Furnace











### **Sponsoring the MOOC on "Digital Teaching Techniques"**

With the motive to enhance the skills of the Academic Officers of the University, staff members from different constituent colleges of MAFSU were recommended for participation in MOOC on "Digital Teaching Techniques" organized by ICAR-NAARM-Hyderabad by Online mode during 1<sup>st</sup> to 31<sup>st</sup> December 2021. The registration fees for all the successful candidates were sponsored by NAHEP-CAAST project. A total of 39 Academic Officers attended the training program.

### SAPICON 2022

30th Annual Symposium (SAPICON 2022) of Society of Animal Physiology of India (SAPI) on "Shifting Basic Physiology Paradigm Toward Clinico-Therapeutic Innovative Interventions for Improvement in Livestock Health and Production" was organized virtually during 17th -19th Feb 2022. A total of 67 Academic Officers and 63 PG/ Ph.D students were recommended for attending the conference and Registration fees these faculties and students was sponsored from the project.

#### **INAUGURATION**

"Centre of Excellence for Advanced Research on Animal Food Safety" was inaugurated on 16<sup>th</sup> February 2022 at the auspicious hands of Hon'ble Shri Ajit Anantrao Pawar, Deputy Chief Minister, Finance, Planning, Govt. of Maharashtra. Hon'ble Shri. Sunil Chhatrapal Kedar, Minister, Animal Husbandry, Dairy Development, Sports and Youth Welfare, Govt. of Maharashtra; Hon'ble Shri Dattatray Vithoba Bharane, State Minister, Public Works, Soil and Water Conservation, Forests, Animal Husbandry, Dairy Development and Fisheries, General Administration; Hon'ble Shri Aslam Shaikh, State Minister, Textiles, Fisheries Department and Ports Development; Col.(Dr.) Prof. A. M. Paturkar, Hon'ble Vice Chancellor, MAFSU, Nagpur, Dr. Prabhat Kumar, National Coordinator ICAR NAHEP-CAAST, Govt. of India, New Delhi, Dr. S. V. Upadhye, DI and Dean, Faculty of Veterinary Science, MAFSU, Nagpur, Dr N. V. Kurkure, Director of Research, MAFSU, Nagpur were present for the inaugural function.











Hon'ble Deputy Chief Minister of Maharashtra, Shri Ajit Pawar praised the MAFSU for getting such a prestigious project and expressed his commitments for overall development of MAFSU.































# Inauguration

# **Upcoming Events**

## March 2022 - May 2022

Sr. No.	Trainings/Workshops/Important events			
1	E- Waste Management			
2	Orientation Programme for Faculty			
3	Orientation Programme for Students			
4	Important Meeting Attended			
	Preparation, Plan, Tips for ICAR/SRF/JRF examination for			
5	Admission to Higher Education (PG, Ph.D.) in the Discipline of			
	Animal Veterinary			













## **University Authorities**

### **Name and Designation**



Col. (Dr.) Prof. A. M. Paturkar Vice-Chancellor MAFSU, Nagpur



Dr. S. V. Upadhye Director of Instructions and Dean (Veterinary Science) MAFSU, Nagpur



Dr. N. V. Kurkure Director of Research MAFSU, Nagpur



Dr. A. U. Bhikane **Director of Extension Education** MAFSU, Nagpur



Dr. P. G. Wasnik Dean, Faculty of Dairy Technology MAFSU, Nagpur



Mr. Sachin Kalantre Registrar MAFSU, Nagpur



Miss Shubhangi Dhurve Comptroller MAFSU, Nagpur

# "QUALITY IS NEVER AN ACCIDENT. IT ALWAYS THE RESULT OF INTELLIGENT EFFORTS"











# Research Team

**Project Implementing Officer, NAHEP-CAAST** 



Dr. A. S. Ranade Associate Dean Mumbai Veterinary College, Mumbai

**Principal Investigator, NAHEP-CAAST** 



Dr. R. J. Zende Professor and Head Department of Veterinary Public Health MVC, Mumbai

Co-Principal Investigators					
Name and Designation					
	Dr. V. M. Vaidya  Assistant Professor  Department of Veterinary Public Health  MVC, Mumbai				
	Dr. S. D. Ingole Professor Department of Veterinary Physiology MVC, Mumbai				
	Dr. R. V. Gaikwad  Professor  Department of Veterinary Medicine  MVC, Mumbai				
	Dr. B. N. Ramteke Professor Department of Animal Nutrition MVC, Mumbai				
	Dr. (Mrs.) Rajashree S. Gandge Professor Department of Veterinary Microbiology MVC, Mumbai				













### Dr. G. P. Bharkad

**Associate Professor** Department of Veterinary Parasitology MVC, Mumbai



### Dr. V. H. Shukla

Assistant Professor, Department of Livestock Products Technology MVC, Mumbai



#### Dr. P. V. Meshram

**Assistant Professor** Department of Veterinary Pathology MVC, Mumbai



### Dr. S. A. Ingle

**Assistant Professor** Department of Animal Biotechnology NVC, Nagpur

#### **Team Leader:**

Col. (Dr.) Prof. A. M. Paturkar Vice-Chancellor MAFSU, Nagpur-440001

### **Principal Investigator:**

Dr. R. J. Zende, ICAR-NAHEP-CAAST-MAFSU, Mumbai-400012

#### **Chief Editors:**

Dr. S. D. Ingole

Dr. R. S. Gandage

Dr. V. M. Vaidya

Dr. V. H. Shukla

#### **Editors:**

Dr. Snehalata P. Kamble Dr. Anu Anupama

Mr. Sahil M. Hake

**Book Post** 

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If undelivered please return to:

The Principal Investigator,

NAHEP-CAAST.

Centre of Excellence for Advanced Research on Animal Food Safety,

Department of Veterinary Public Health and Epidemiology,

Mumbai Veterinary Collage,

Parel, Mumbai-400012.





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