N-05015/37/2023-Cattle_Div भारत सरकार / Government of India

मत्स्यपालन, पशुपालन और डेयरी मंत्रालय / Ministry of Fisheries, Animal Husbandry & Dairying पशुपालन एवं डेयरी विभाग / Department of Animal Husbandry & Dairying

कृषि भवन, नई दिल्ली/ Krishi Bhawan, New Delhi Dated: 27th December 2023

OFFICE MEMORANDUM

Subject: Minutes of the meeting regarding final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying held on 20th December 2023.

Please find enclosed herewith the minutes of the meeting regarding final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying held on 20th December 2023 for kind information.

(Dr. Bhushan Tyagi) Joint Commissioner (RGM)

Enclo: As above

Distribution:

1. Dr. Pawan Singh, Principal Scientist, NDRI Karnal

2. Shri Soumanil Mukherjee, Office of PSA to PMO

3. Dr. R.O. Gupta, SGM (PE), NDDB- co-opted member

Copy for kind information to: PPS to AS (C&DD)

Minutes of the meeting for final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying in Committee Room No. 112, Krishi Bhawan, New Delhi on 20th December 2023 at 11 AM in hybrid mode.

The list of participants placed at Annexure-I

The list of applicants placed Annexure-II and III.

A meeting for final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying in Committee Room No. 112, Krishi Bhawan, New Delhi on 20th December 2023.

Under Manthan Platform two problem solutions of DAHD on the following subjects were published.

- 1. Indigenous Sex Sorted Semen Production Technology for Bovine Semen
- 2. Indigenously developed cost-effective technology for Animal Identification and Traceability of Bovines

A total of 5 out of 8 shortlisted participants submitted the detailed presentation in the format desired and presented during the meeting under the subject "Indigenous Sex Sorted Semen Production Technology for Bovine Semen" and total of 14 out of 19 shortlisted participants submitted the detailed presentation in the format desired and presented during the meeting under the subject "Indigenously developed cost-effective technology for Animal Identification and Traceability of Bovines"

After detailed deliberations, the committee decided to shortlist a total of 4 (2+2) proposals out of total 27 (8+19) proposals received for final phase of scrutiny. It was observed that the 4 applicants shortlisted are close to meeting the criteria required like availability of prototype, field trials, industry readiness, experiment/test results. However, the accuracy and sample size of experiments for prototypes are low. The subject-wise applicants finally shortlisted are as follows:

Subject: Indigenous Sex Sorted Semen Production Technology for Bovine Semen

SN	Name of Applicant	Title	Primary Affiliation
1.	Arumugam Kumaresan	Targeted immobilisation method for enriching X-chromosome bearing spermatozoa in a semen sample for skewing sex ratio towards females in dairy cattle	ICAR National Dairy Research Institute
2.	Sudarshan Kumar	Precision in Reproductive Technology: CRISPR-Cas-Based Semen Sexing for Accurate Sex Selection	ICAR National Dairy Research Institute

It was decided that both the ICAR Institutes may collaborate at their end with the semen stations in their respective states in coordination with State Livestock Development Boards for attaining higher accuracy with respect to the final product. A combined proposal may sent to DAHD through DG, ICARafter attaining considerable accuracyin attaining pregnancy with desired sex.



Subject: Indigenously developed cost-effective technology for Animal Identification and Traceability of Bovines

SN	Name of Applicant	Title	Primary Affiliation
1.	Ashish Sonkusare	Development of an Affordable, Scalable and End-to-End Solution for Bovine Identification and Traceability System	eVerseAl
2.	Balaji Lakshmanan	Surabhi ID: muzzle based biometric identity and traceability of bovine	Dvara E Dairy Private Limited

It was decided that the applicants may collaborate at their end with the State Livestock Development Boards for attaining higher accuracy and quick response time while handling large data volume under field conditions. A detailed proposal may be shared with DAHD for pilot to be facilitated in consultation with NDLM team.



List of participants in the meeting for final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying in Committee Room No. 112, Krishi Bhawan, New Delhi on 20th December 2023.

- 1. Dr. Bhushan Tyagi, Joint Commissioner (Cattle), DAHD, New Delhi
- 2. Shri Soumanil Mukherjee, Office of PSA to PMO
- 3. Dr. R.O. Gupta, SGM (PE), NDDB- coopted member
- 4. Dr. Chandra Bhadra, AC, Cattle, DAHD, New Delhi
- 5. Dr. Pankaj Deori, LO, Cattle, DAHD, New Delhi
- 6. Dr. Harshla Gupta, Consultant, DAHD
- 7. Dr. Chandra Sekhar Godara, Consultant, DAHD
- 8. Shri Sanjeev Jain, Project Manager, PMA
- 9. Shri Abhishek, PMA

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Annexure-II

List of applicants for "Indigenous Sex Sorted Semen Production Technology for Bovine Semen" present in the meeting for final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying in Committee Room No. 112, Krishi Bhawan, New Delhi on 20th December 2023.

SN	Name of Proposer	Title	Primary Affiliation
1.	Arumugam Kumaresan	Targeted immobilisation method for enriching X-chromosome bearing spermatozoa in a semen sample for skewing sex ratio towards females in dairy cattle	ICAR National Dairy Research Institute
2.	Mohan Mondal	TOWARDS DEVELOPMENT OF NOVEL HYBRID MICRO- AND NANO-FLUIDICS-BASED INDIGENOUS SEX SORTED SEMEN PRODUCTION TECHNOLOGY FOR BOVINE SEMEN	ICAR National Dairy Research Institute
3.	Sharad Gupta	Development of Non-linear Optical Excitation Spectroscopy and Imaging for Bovine Sperm Identification Augmented with Microfluidics for Semen Sexing	Indian Institute of Technology Indore
4.	Mridula Sharma	Immunological sexing of bovine sperm	G.B.Pant University of agriculture and technology
5.	Sudarshan Kumar	Precision in Reproductive Technology: CRISPR-Cas-Based Semen Sexing for Accurate Sex Selection	ICAR National Dairy Research Institute



Annexure-III

List of applicants for "Indigenously developed cost-effective technology for Animal Identification and Traceability of Bovines" present in the meeting for final screening of proposals received in Manthan Platform for opportunities published by Department of Animal Husbandry and Dairying in Committee Room No. 112, Krishi Bhawan, New Delhi on 20th December 2023.

SN	Name of Applicant	Title of proposal	Primary Affiliations
1.	Anuj Pachoree	Cheqbrand, Variable QR based Identity	Posttech Internet
1.	Andj Fachoree	management with track and trace.	Solution
2.	Ashish Sonkusare	Development of an Affordable, Scalable and End- to-End Solution for Bovine Identification and Traceability System	eVerseAl
3.	Balaji Lakshmanan	Surabhi ID: muzzle based biometric identity and traceability of bovine	Dvara E Dairy Private Limited
4.	Dr. P Selvaraj	Development of Language Interfaced – Al Driven, Facial Profile, Dentition, Phenotypic Features & Biometrics based Integrated Animal ID System (i AnID)	TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY
5.	GajendrakumarBamania	MooMetrics -A biometric identification Solution for cattle and buffalo management	Xcell Breeding and Livestock Services Private Limited
6.	Mukul Jain	GauFit	Tropical Animal Genetics Pvt Ltd
7.	Devdulal Ghosh	Development of indigenous cost-effective technology for Animal Identification and Traceability of Bovine	Centre For Development Of Advanced Computing Kolkata
8.	Gyanendra Kumargaur	Development of a muzzle-based intelligent system for bovine identification and traceability and its integration with mobile application	ICAR Indian Veterinary Research Institute Izatnagare
9.	Hari Shankar	Indigenously developed cost effective technology for Animal Identification and Traceability of Bovines, Equines, and small ruminants	Gluon Technology Private Limited
10.	Kuldeep Tyagi	Identity and pedigree determination using novel artificial intelligence based facial recognition vis-àvis DNA fingerprinting techniques in adult Buffaloes of Western Uttar Pradesh	Sardar Vallabhbhai Patel University of Agriculture and Technology
11.	Manish Kumar	Animal Mark Certification standards and Animal ICU powered blockchain enabled MuzzleTech and Livestock biometric linked RFID tags for hassle free identification	Verdant Impact
12.	Naresh Bana	Device for Identification and Traceability of Bovines	Gajanan Innovations Pvt Ltd
13.	Omkarthik Thummala	Cattle, Buffalo & Mithun Traceability through image & real time Muzzle pattern technology.	ANITRA TECH PRIVATE LIMITED
14.	Sanjay Madan	Development of an indigenous Artificial Intelligence based cattle identification technique using muzzle point image patterns	Centre for Development of Advanced Computing Mohali

