

KERALA VETERINARY AND ANIMAL SCIENCES UNIVERSITY

POOKODE, WAYANAD - 673 576



2023-2024

**ANNUAL
REPORT**





DIRECTORATE OF ENTREPRENEURSHIP
KERALA VETERINARY AND ANIMAL SCIENCES UNIVERSITY
POOKODE, LAKKIDI P.O., WAYANAD - 673 576
www.kvasu.ac.in



**KERALA VETERINARY AND ANIMAL
SCIENCES UNIVERSITY**

POOKODE, WAYANAD

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ANNUAL REPORT 2023-2024

Patron

Vice Chancellor

Kerala Veterinary & Animal Sciences University

Pookode, Wayanad

Acknowledgements

Hon. Vice Chancellor

Registrar

Finance Officer

Director (Academics & Research)

Director (Entrepreneurship)

Chief Engineer (ID Wing)

Controller of Examinations

Dean, College of Veterinary & Animal Sciences, Mannuthy

Dean, College of Veterinary & Animal Sciences, Pookode

Dean, Verghese Kurien Institute of Dairy and Food Technology, Mannuthy

Director Clinics

Director Farms

Director (Students' Welfare)

Special Officers

College of Avian Sciences and Management, Thiruvazhamkunnu

College of Dairy Science and Technology, Pookode

College of Dairy Science and Technology, Thiruvananthapuram

College of Dairy Science and Technology, Kolahalamedu

Officers and Heads

Station heads

Faculty members

Librarian

Published By

Directorate of Entrepreneurship

Kerala Veterinary & Animal Sciences University

Pookode, Lakkidi P.O., Wayanad- 673576

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ABOUT THE UNIVERSITY

Kerala Veterinary and Animal Sciences University with headquarters in Pookode, Wayanad has landed assets of KVASU of about 957.95 acres spread across different campuses in Thrissur, Wayanad, Palakkad, Idukki and Thiruvananthapuram districts of Kerala . The powers of the University are vested in its authorities –the Management Council chaired by the Chancellor, the Board of Management (Board) and Academic Council chaired by the Vice Chancellor. The ex-officio members include the Chancellor, Vice Chancellor, Registrar, Finance Officer, Directors and Deans. The functions and powers of these officers are defined in the University Act. The academic staff comprise of Professors, Associate Professors and Assistant Professors apart from research fellows and scholars at various phases of instruction or research. University now has a faculty occupancy of around 78% which would be one of the country’s best and a teacher student ratio of 1:8. Further, the academic activity is supported by a non teaching cum farm staffing of nearly 948. The territorial jurisdiction of the University extends to the whole of the state of Kerala. The University encompasses three faculties- the Faculty of Veterinary and Animal Sciences, the Faculty of Dairy Science and Faculty of Poultry Science; with seven constituent colleges-

1. College of Veterinary and Animal Sciences, Mannuthy, Thrissur
2. College of Veterinary and Animal Sciences, Pookode, Wayanad
3. Verghese Kurien Institute of Dairy and Food Technology, Mannuthy, Thrissur
4. College of Dairy Science and Technology, Pookode, Wayanad
5. College of Dairy Science and Technology, Kaimanam, Thiruvananthapuram
6. College of Dairy Science and Technology, Kolahalamedu, Idukki
7. College of Avian Sciences and Management, Thiruvazhamkunnu, Palakkad

The University has wide network of instructional and research farms spread throughout the state, which include the instructional livestock farms attached to College of Veterinary and Animal Sciences, Pookode and Livestock Farm and Fodder Research & Development Scheme at Mannuthy, Livestock Research Station, Thiruvazhamkunnu, Palakkad, University Poultry and Duck Farm, Mannuthy, Centre for Pig Production and Research, Mannuthy, Goat and Sheep Farm, Mannuthy, Cattle Breeding Farm, Thumburmuzhy and Base Farm, Kolahalamedu. KVASU hosts the All India Co-ordinated Research Project on Poultry, Centre for Advanced Studies in Poultry Science and Centre for Advanced Studies in Animal Breeding and Genetics at Mannuthy. The recent development in the inter-disciplinary initiatives of the University is the establishment of five schools and seven

centres, an emerging academic feature of importance. They are School of Bio-Energy studies and farm waste management, School of Applied Production and Biotechnology, School of Zoonosis, Public Health and Pathobiology, School of New Media and Research, School of Animal Nutrition and Feed Technology, Centre for Animal Adaptation to Environment and Climate Change studies, Centre for Ethno pharmacology, Centre for Livestock Development and Policy Research, Centre for Small Laboratory Animal Production, Central Instrumentation Laboratory and central store. Centre for Wildlife Studies and Centre for One Health Education, Advocacy, Research and Training (COHEART) are located at Pookode, Wayanad. The Centre for Livestock Policy Research is located in Thiruvananthapuram, the State capital along with Regional Research Training Centre. The University offers its services through Teaching Veterinary Clinical Complex at College of Veterinary and Animal Sciences, Pookode, Peripheral Veterinary Clinic and Entrepreneurship Centre, Kakkavayal, Wayanad, Veterinary Hospital Complex at Mannuthy, Veterinary Hospital at Kokkalai, Thrissur. Products from University Meat Plant and Dairy Plant at Mannuthy offers quality assured livestock products to public. The products developed under various stations of the University are being marketed under the brand “kvasu”.

Our mandate:

A reading of the Act and Statutes bestows the responsibility of leading the State with innovative research and education in Animal agriculture and Veterinary sciences including all supporting and allied subjects including management and policy sciences. An added aspect is the responsibility to train farmers to enhance productivity and profit in animal agriculture, promote factor productivity by entrepreneurship acting individually and as concerns, if necessary by forming companies. Focus on entrepreneurship; actable research and commercialization of research productivity are the innovative aspects of institutional design.

Funds and funding

KVASU is funded primarily by the legislature of the state of Kerala as grants in aid in its annual budgets. Apart from Govt. of Kerala, KVASU receive funds from Indian Council for Agricultural Research (ICAR), Externally Aided Projects from other agencies and internal revenue of the University.

FROM REGISTRAR'S OFFICE

The Kerala Veterinary and Animal Sciences University (KVASU) was established under the KVASU Act, 2010 (Act 3 of 2011) of the Government of Kerala for the development of Veterinary and Animal Sciences and for the purpose of ensuring proper and systematic instruction, teaching, training and research and extension exclusively in Veterinary and Animal Sciences in the State of Kerala. The headquarters of the University is situated at Pookode in Wayanad district. KVASU now undertakes academic, research, extension and entrepreneurship activities in the animal production and dairy sector. The University is empowered to award degrees as specified by the UGC under section 22 of the UGC Act 1956 through its main campus in regular mode with the approval of statutory bodies/councils, wherever required. The University has seven constituent colleges, the names of the colleges have been listed below, and these colleges undertake academic, research and extension activities in the areas assigned to them.

1. College of Veterinary and Animal Sciences, Pookode, Wayanad.
2. College of Dairy Science and Technology, Pookode, Wayanad.
3. College of Veterinary and Animal Sciences, Mannuthy, Thrissur
4. Verghese Kurien Institute of Dairy and Food Technology, Mannuthy, Thrissur
5. College of Avian Sciences and Management, Thiruvazhamkunnu, Palakkad
6. College of Dairy Science and Technology, Kolahalamedu, Idukki
7. College of Dairy Science and Technology, Kaimanam, Thiruvananthapuram

The University is working as per the KVASU Act, 2010 (Act 3 of 2011), the KVASU statutes, 2014, the delegation of powers and other rules/ amendments that came into existence by the order of the Government of Kerala or by the University. According to Chapter IV of the KVASU Act, 2010, the Chancellor, Pro-Chancellor and officers of the University are detailed and the list of persons who held the powers (except deans and other officers of the university prescribed in the statutes) during the period is listed below.

Sl. No	Position	Name	Tenure
1	The Chancellor	Shri. Arif Mohammed Khan	Continues from 06-09-2019
2	The Pro-Chancellor	Smt. J. Chinchurani	Continues from 20-05-2021
3	The Vice-Chancellor	Prof. (Dr.) M.R. Saseendranath Prof. (Dr.) P. C Saseendran Prof. (Dr.) Anil K. S	from 24-07-2019 to 02-03-2024 from 03-03-2024 to 25-03-2024 Continues from 27-03-2024 AN

4	The Registrar	Prof.(Dr.) Sudheer Babu	Continues from 29-12-2020
5	The Finance Officer	Sri. Dinesan A.K	Continues from 20/02/2023
6	The Director of Academics & Research	Dr. C. Latha	Continues from 23-04-2022
7	The Director of Entrepreneurship	Dr. T.S. Rajeev	Continues from 26-04-2022

As per Chapter V of the KVASU Act, 2010, the authorities of the university are enlisted as follows.

1. The Management Council;
2. The Board of Management;
3. Academic Council;
4. Research Council;
5. Extension Council;
6. Finance Council;
7. Board of Studies;
8. Faculty Research Committee;
9. Project Co-ordination Committee; and

such other bodies of the University as may be designated by statutes to be the authorities of the University.

The university have provided appropriate level of officers and staff in the following categories of Joint Registrar, Deputy Registrar, Assistant Registrar, Section Officer, Assistant, Office Superintendent, and Computer Assistant to support the authorities in the management and administration of its Institutions/ Stations/ Offices.

The General Administration of the University is under the purview of the office of the Registrar. Important functions and responsibilities attached to this office are as stated below.

- appointments, promotions, and other service-related matters of the teaching, non-teaching and labourer employees in the University.
- Legal-related activities for the University,
- dealing with general directions, legislative questions, and other Government Communications.
- the conduct of the Management Council, Board of Management, and such other Authorities, Bodies, and Committees (other than those related to Academic and Financial matters) as provided under the Act and the Statute of the University.

- the elections to the Authorities, Bodies, and Committees as provided under the Act and the Statute of the University.
- dealing with other administrative duties assigned to the University/ Registrar.

Details of the meeting of the various authorities of the University (other than those at the faculty level) are as follows.

Meetings of the Board of Management held during the period 2023-24		
No. of the Meeting	Date	Venue
Special Meeting	19/05/2023	VC's Secretariate
83rd Meeting	19/08/2023	Periyar Hall, CVAS Pookode
84th Meeting	09/01/2024	Periyar Hall, CVAS Pookode
85th Meeting	19/03/2024	VC's Secretariate

Meetings of the Management Council held during the period 2023-24		
No. of the Meeting	Date	Venue
Special Meeting	19/05/2023	VC's Secretariate
45th Meeting	09/01/2024	Periyar Hall, CVAS Pookode
46th Meeting	19/03/2024	VC's Secretariate

Meetings of the Academic Council held during the period 2023-24		Meetings of the Research Council held during the period 2023-24	
No. of the Meeting	Date	No. of the Meeting	Date
36 th Meeting	19-04-2023	5 th Meeting	04-10-2023
9 th Special Meeting	03-05-2023		
10 th Special Meeting	08-06-2023		
36 th Meeting	18-08-2023		
37 th Meeting	24-11-2023		

Meetings of the Finance Council held during the period 2023-24		Meetings of the Extension Council held during the period 2023-24	
No. of the Meeting	Date	No. of the Meeting	Date
		7th Extension Council	15.03.2024
		6th Extension Council	10.07.2024

Staffing of the University

Teaching Staffs of the University				
	Assistant Professor	Associate Professor	Professor	Total
Sanctioned Strength	240	96	68	404
In position	126	60	54	240

Non-Teaching Staff of the University		
Male	Female	Total
180	160	340

Labours of the University	
Permanent Labours	471
Casual Labours	105

Resume of works conducted in the General Administration wing during 2023-24

- Digital Document Filing System (DDFS) software has been successfully implemented in the Headquarters of the University.
- During this period, the General Administration wing has successfully implemented the biometric punching system in the Pookode campus of the University.
- Requested for exemption of University from payment of registration fee & stamp duty for registration process of land at Koilandi where VUTREC is proposed to be established, as a result of which the Government waived registration fee & stamp duty of University in this regard.
- Reconstituted the 5th Management Council from the teaching, non-teaching, and permanent Labourers constituency and notification issued.
- Statute No. 184 Chapter 5 VI amended and steps have been taken to publish Kerala Gazette.
- A total number of 4 statute amendments were proposed and submitted to the Hon’ble Chancellor for assent.
 1. Non-Teaching Staff establishment - 3
 2. Teaching Staff establishment - 1
 Anticipating assent from the Hon’ble Chancellor
- 4 Board of Management meetings and 3 Management meetings were held during the 2023-24 financial year.
- Initial steps have been taken to strengthen the security system at various locations in the University pookode campus.

FINANCE WING

Kerala Veterinary and Animal Sciences University is a grant in aid Educational & Research institution receiving grants mainly from the Government of India, ICAR and the Government of Kerala.

KVASU, a government aided institution heavily relies on government grants, which make up 80% of its funding. The internal revenue generated by the University such as Fees, Farm proceeds, charges etc. in addition to endowments and donation also contribute substantially.

In the Fiscal year 2023-24, KVASU had a total budget of Rs.27376.00 lakhs. The University allocated 55% of its budget to Non Plan, 18% percentage to State Plan, 2% to External Aided Projects, 6% to RIDF and the remaining 19% to New Courses, Pensionary benefits etc.

A significant amount of expenditure of the University is incurred for the disbursement of salaries/ Pension of staff and Faculty. The University has a utilisation percentage of 83% for Non Plan components in which salaries/ pension of staff and other contingencies are incurred and 92% for plan components (based on receipt from Government) in which the expenditure for Research Projects and Infrastructure are incurred. The University has maintained a stable financial position all throughout the year. However, it has faced challenges related to increasing operational costs and potential fluctuation in Government support. The university also constituted a pension fund for disbursing the benefits of the retired staff.

2. Duties and Responsibilities of Financial Steward:

1. Subject to the general direction and control of the Vice-Chancellor, the Finance Officer shall,-
 - ❖ *be in charge of the Finance, Accounts and Audit branches of the University;*
 - ❖ *be the principal adviser of the University on all matters connected with Finance and Audit of the University. The advice tendered by him shall generally be followed in the University office unless they are inconsistent with the provisions of the Act. Any exception to this shall be recorded by the authorities concerned and thereafter reported to the Finance Committee.*
2. The Finance Officer shall, subject to the control of the Board of Management,-
 - ❖ *ensure that the limits fixed by the Board of Management for recurring and non-recurring expenditure, for a year are not exceeded and that the amount expended for the purpose for which they are granted or allotted;*
 - ❖ *be responsible for the preparation of annual accounts and the Budget of the University and for their presentation to the Board of Management;*
 - ❖ *keep a constant watch on the progress of expenditure against the budget and on the state of investments;*

- ❖ *watch the progress of the collection of revenue and advise on the methods of collection employed;*
 - ❖ *ensure that the registers of buildings, land, furniture and equipment are maintained up-to-date and that stock verifications of equipment and other consumable materials in all Departments of the University, University Centres, University Farms, specialized laboratories, colleges and institutions maintained by the University are conducted;*
 - ❖ *put forward proposal to the Board of Management for calling for explanation in respect of unauthorized expenditure or other financial irregularities in any particular case and suggest disciplinary action against the persons at fault;*
 - ❖ *call for from any Centre, Farm, Laboratory College or Institution maintained by the University any information or returns that he may consider necessary for the discharge of his duties; (viii) make all arrangements for the transaction of business of the meetings of the Finance Council;*
 - ❖ *enter into correspondence with the University Grants Commission, Government of India, State Government and other institutions and bodies on matters connected with the Finance, Accounts and Audit of the University;*
 - ❖ *scrutinize every item of new expenditure not provided for in the budget estimates of the University;*
 - ❖ *make recommendations, whenever necessary, to the Board of Management on all matters relating to the Finance, Accounts and Audit of the University;*
 - ❖ *suggest any new account or audit form or register considered necessary or to suggest alteration to any existing form or register suitable for the proper working of the University office and the subordinate offices for the approval of the Finance Committee and the Board of Management;*
 - ❖ *realise and receive grants or other funds due to the University from Central and State Governments, University 'Grants Commission and other bodies, institutions or individuals;*
 - ❖ *fix the duties and responsibilities of the officers working under him and to exercise control over these officers and to assess their 'work and performance*
3. The Finance Officer shall be the custodian and disbursing officer of the General Fund of the University. All payments received by him shall be credited to that Fund and he shall arrange to issue cheques on behalf of the University.
 4. The Finance Officer shall make all authorized payment out of the University Fund.
 5. The Finance Officer shall be responsible for the proper maintenance of the accounts of the University. It shall also be the duty of the Finance Officer to make arrangements for the audit and payment of bills presented at the University office.
 6. The receipt of the Finance Officer or the person or persons duly authorized in this behalf by the Board of Management for any money payable to the University shall be sufficient discharge for payment of such money.

3. Insights of the Financial Committee Gatherings:

Finance Council is one of the authorities of the University and which consists the Vice Chancellor, the Registrar, the Finance Officer and two elected members from the Management Council. The Finance Council will be the authority to prepare the budget estimate of the University and to review the accounts of expenditure and to make recommendations to the Management Council. The Finance Council will advise and make recommendations to the Management Council on any other financial question affecting the affairs of the University. During the financial year 2023-24 two Finance Council meetings were conducted respectively on 05.12.2023 & 19.03.2024.

4. Recorded Receipts; Grant in Aids:

SI No	Receipt Head	Amount
1	Grant in Aid Non Plan	98,12,22,000
2	Grant in Aid Plan	28,00,00,000
3	External Aided Projects	2,73,15,476
4	ICAR	2,09,43,255
5	Internal Revenue	22,81,07,996
Total		1,53,75,88,727

5. Disbursement breakdown: Fund allocation for the financial year

2023-24

- **Non Plan**

Salary & Wages	Contingency fund transferred to station	Fund transferred to pension section for disbursing Pension & Retirement benefits	Total fund disbursed
83,37,59,572	23,02,07,631	18,53,16,610	1,24,92,83,813

- **State Plan**

KVASU State Plan 2023-24				
Budget Outlay	Opening Balance	Fund Released	TOTAL	Total Expenditure
Rs. 49,00,00,000	Rs. 15,87,934	Rs. 28,00,00,000	Rs. 28,15,87,934	Rs. 26,01,97,422

• External Aided Projects

EAP Receipts 2023-24	Receipt	Disbursement
AICRP ON PIG	3404658	3928108
AICRP ON POULTRY	6650000	6650000
AICRP ON GOAT	2500000	2500000
AICRP ON CATTLE	4148421	4231354
OUTREACH-EVM	514000	514000
ICAR NBAGR	1100000	1100000
SERB	3239000	3139000
ICAR NBAGR SCSP	710000	710000
ICAR JRF/PGS	569777	568906
ICAR SRF	455206	455206
ICAR DEVELOPMENT GRANT	2706000	2706000
ICAR MCM	379577	379577
ICAR VETERINARY INTERNSHIP	2916000	2916000
ICAR STUDENT READY	738000	738000
ICAR NASF	1311053	1311053
ICAR EMERITUS PROFESSOR	700000	700000
ICAR NTS	4707642	4676342
ICAR SC SP	4000000	4000000
ICAR NCVTC	200000	200000
KSCSTE	549356	1333356
NABARD	399000	399000
ADB	215600	215600
ARJUNA NATURALS	240000	240000
DCCD	30000	30000
ICMR	544124	544124
TRAINING	681050	681050
ICAR NAARM TRAINING	250000	250000
AGAPPE	55000	55000
AHD	4000000	4000000
KFD	110000	110000
ETR	4267	4267
KSWDC	31000	31000
ICAR JVAS	200000	0
TOTAL	48258731	49316943

* The difference between the receipt and the expenditure was met from the internal sources of the University.

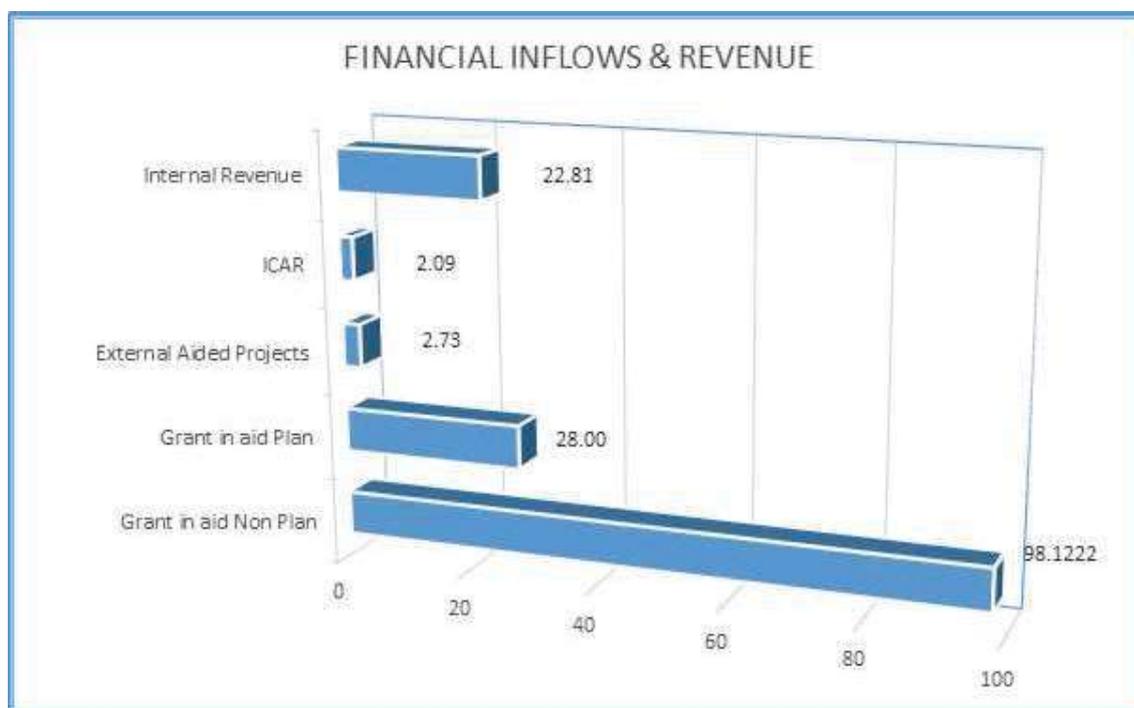
6. Breakdown of Pension Payments for the year 2023-24

Pension	Commutation	DCRG	TSEL	NPS University share
12,98,38,275	5,22,95,335	1,94,52,510	2,55,71,321	3,49,44,818
TOTAL – 26,21,02,259				

7. Concise Budget summary for the year 2023-24 (in crores)

Head	Non-Plan	PLAN	External Aided Projects	RIDF	New Courses	Others	TOTAL
TOTAL	150.56	49.00	5.51	16.00	2.07	50.62	273.76

8. Financial Inflows and Revenue (In crores):



DIRECTORATE OF ACADEMICS AND RESEARCH

1. Scholarly and Investigative Programs

i. Existing programmes: Academic

The University offers the following courses for students coming various educational backgrounds.

Sl. No.	Name of Course
UG	
1	BVSc and AH
2	BTech Dairy Technology
3	BTech Food Technology
4	B.Sc. (Poultry Production and Business Management)
MVSc	
5	MVSc in Veterinary Biotechnology
6	MVSc in Animal Genetics and Breeding
7	MVSc in Animal Nutrition
8	MVSc in Animal Reproduction, Gynaecology and Obstetrics
9	MVSc in Livestock Production and Management
10	MVSc in Livestock Products Technology (Meat/Dairy)
11	MVSc in Poultry Science
12	MVSc in Veterinary Anatomy
13	MVSc in Veterinary Extension Education
14	MVSc in Veterinary Biochemistry
15	MVSc in Veterinary Medicine (Clinical/Preventive)
16	MVSc in Veterinary Microbiology
17	MVSc in Veterinary Parasitology
18	MVSc in Veterinary Pathology
19	MVSc in Veterinary Pharmacology and Toxicology
20	MVSc in Veterinary Physiology
21	MVSc in Veterinary Public Health and Epidemiology
22	MVSc in Veterinary Surgery and Radiology
MTech	
23	M Tech in Dairy Technology
24	M Tech in Dairy Microbiology
25	M Tech in Dairy Chemistry
PhD Veterinary Sciences	
26	PhD in Animal Breeding, Genetics and Breeding
27	PhD in Animal Nutrition
28	PhD in Animal Reproduction, Gynaecology and Obstetrics
29	PhD in Livestock Production and Management
30	PhD in Livestock Products Technology (Meat/Dairy)

31	PhD in Poultry Science
32	PhD in Veterinary Anatomy
33	PhD in Veterinary Extension Education
34	PhD in Veterinary Biochemistry
35	PhD in Veterinary Medicine (Clinical/Preventive)
36	PhD in Veterinary Microbiology
37	PhD in Veterinary Parasitology
38	PhD in Veterinary Pathology
39	PhD in Veterinary Pharmacology and Toxicology
40	PhD in Veterinary Physiology
41	PhD in Veterinary Public Health & Epidemiology
42	PhD in Veterinary Surgery and Radiology
PhD Dairy Science and Technology	
43	Ph.D in Dairy Technology
44	Ph.D in Dairy Microbiology
45	Ph.D in Dairy Chemistry
PhD Biosciences	
46	Ph.D in Histology
47	Ph.D in Diagnostics and Vaccinology
48	Ph.D in Animal Sciences
49	Ph.D in Applied Microbiology
50	PhD in One Health
51	PhD in Animal Nutrition
52	PhD in Developmental Anatomy
53	PhD in Molecular Biology
54	PhD in Clinical Biochemistry
55	PhD in Molecular Genetics
56	Ph.D in Experimental Toxicology
57	PhD in Livestock Products
58	PhD in Diagnostics and Molecular Microbiology
59	Ph.D in Climate Change in Animal Agriculture
MS/MSc	
60	M.S. in Wildlife Studies
61	M.Sc. in Biostatistics
62	M.Sc. in Quality Control in Dairy Industry
63	M.Sc. in Biochemistry and Molecular Biology
64	M.Sc. in Applied Microbiology
65	M.Sc. in Animal Biotechnology
66	M.Sc. in Animal Sciences
67	M.Sc. in Applied Toxicology
PG Diploma	
68	P.G. Diploma in Climate Services in Animal Agriculture
69	P.G. Diploma in Climate Services
70	P.G. Diploma in Veterinary Cardiology
71	P.G. Diploma in Veterinary Anaesthesia

Diploma	
72	Diploma in Dairy Science
73	Diploma in Laboratory Techniques
74	Diploma In Feed Technology

ii) Existing programs: Research

A. State Plan Projects 2023-24

Administrative Sanction for State Plan projects of the University with total outlay of Rs. 49 crores for the year 2023-24 was accorded by the Government vide GO (Rt) No. 475/2023/AHD, dt. 16.10.2023. Out of the total budgeted outlay of Rs. 49 crores, Rs.18 crores and Rs 10 crores have been released by the Government as 1st & 2nd installment vide orders no G.O (Rt) No. 533/2023/AHD, dated 20.11.2024 and G.O (Rt) No. 64/2024/AHD, dated 06.02.2024 respectively. Out of the total amount of Rs. 28 crores, an amount of Rs. 26.01 crores have been utilized under various projects during the FY 2023-24.

Three plan review meetings have been conducted during this period for the evaluation of Plan projects (2023-24).

The details of the University in connection with R&D Budget preparation has been submitted to the Government.

State Plan Projects

Sl. No.	Name of the project	Budget Outlay in lakhs	Fund Released in lakhs	Station/ Department
1	Strategies for Improving the Fodder Production at Cattle Breeding Farm, Thumburmuzhy	24	14.02	CBF Thumburmuzhy
2	Strategies for Improving the Fodder Production of Kerala State	25	14.18	ULF & FRDS
3	Conservation, Characterization and Improvement of Tellichery chicken breed of Kerala	15	15	AICRP Poultry, Mannuthy
4	Conservation of Vechur cattle of Kerala	9	6	CBF Thumburmuzhy
5	Conservation and maintenance of Ankamali pigs of Kerala	8	7	CPPR Mannuthy
6	Conservation and Evaluation of Malabari and Attappady Black Goats	16	11.28	USGF Mannuthy
7	Nutritional and Genetic interventions for breed improvement of native Malabari goats of Kerala	21.5	5.00	Dept of Nutrition, AGB Pookode
8	Sustainable Ex situ Conservation of Vechur and Kasargode Cattle	90	48.56	CASAGB
9	Enhancement of productivity at Cattle Breeding Farm, Thumburmuzhy	45	30.76	CBF, Thumburmuzhy

10	A comparative analysis of productive and reproductive performance of different purebred pigs under intensive management systems in Wayanad district of Kerala	30	25.50	ILFC, Pookode
11	Assessing the performance of Murrah Buffalo Herd for Milk and Meat production in Hot and Humid Climate of Kerala	30	26.87	ULF & FRDS
12	Productivity enhancement of livestock and poultry by optimizing the management strategies in different agro climatic regions of Wayanad district.	26	9.00	LPM, Poultry Science Extension, Pookode
13	Scientific Approaches for Rabbit Productivity Improvement for Enhancing Farmer's Income in Kerala	22	11.03	CASAGB
14	Augmenting productivity and conservation of livestock	30	26.20	LRS, Thiruvazhamkunnu
15	Strengthening of Artificial Insemination Centre, Mannuthy	18	8.00	AI Centre ARGO, Mannuthy
16	Development of a project model and strategies for effective management of infertility and augmenting milk production of dairy cows in selected areas of Wayanad district	25	11.99	ARGO, Surgery CVAS, Pookode
17	Evaluation of genomic and proteiomic markers associated with adaptation, disease resistance and production performance of livestock species of Kerala	7	6.35	SAAPBT, Mannuthy
18	A molecular approach in elucidating heat tolerance, disease resistance and reproductive robustness of indigenous cattle of Kerala	25	10.00	CASAGB, Mannuthy
19	Investigations on the anatomical factors involved in different clinico-pathological conditions affecting various domestic species and its application in field conditions	14.5	9.00	Dept.Anatomy, Pathology Mannuthy
20	Augmenting productivity of livestock through genomic and nutritional interventions	28.5	9.00	Dept.AGB, Nutrition, Statistics, Mannuthy
21	Molecular markers for thermo-tolerance and strategies for alleviation of thermal stress in ruminants	19	7.00	Dept.Biochemistry, Physiology, Mannuthy

22	Genome wide scan for the identification of genetic markers related to economic and functional traits in livestock and poultry	12	8.00	CASAGB
23	Augmenting clinical practice in university referral Veterinary Hospitals, Ambulatory clinics and clinical departments to improve health and productivity of animals	10	3.00	Director of Clinics, Pookode
24	Empowering Clinical Veterinary Services for Comprehensive Livestock Health Coverage In Wayanad And Neighbouring Districts	20	7.76	TVCC, Pookode
25	Universal Veterinary Health Coverage for Optimizing Productivity of Livestock	14	9.00	TVCC, Mannuthy
26	Comprehensive health care management of animals and birds under field condition	10	6.00	TVCC, Mannuthy
27	Empowering Farm Animal Health Care Services for Enhancing Production	15	10.86	UVH, Kokkali
28	Comprehensive health care of livestock and pet animals	28.5	9.00	Surgery and Radiology, AROG, Preventive Medicine Mannuthy
29	Novel diagnostic techniques for economically important bacterial, viral and parasitic diseases of large ruminants	23.5	13.00	Dept.Microbiology, Parasitology, Pathology Mannuthy
30	Development of diagnostics and mining of lead molecules for the control of parasitic disease/ infection	19	10.00	Dept.Parasitology, Pharmacology and Toxicology, Pookode
31	Comprehensive health care of livestock, pet animals and birds in Wayanad district	19	8.00	Dept.Veterinary Clinical Medicin, PM, Pookode
32	Enhancement of animal health and productivity through development of rapid, accurate disease control measures for infectious diseases of viral aetiology.	8	7.72	BRTC, TVM
33	Evaluation and development of antimicrobial and anti-inflammatory herbal formulations for dermatological diseases of livestock and pet animals	19	10.00	Department of Clinical medicine and Pharmacology, Mannuthy

34	Augmenting the quality and safety of foods of animal origin and waste valorization for entrepreneurship facilitation	27	8.00	Dept.LPT, VPH, Dairy Science, Mannuthy
35	A multidisciplinary approach to combat concealed threats in dairy food chain	22	19.50	Dean, VKIDFT
36	Modification of Milk components to increase the bio availability and nutritive value of Milk based products	23	7.50	Dean, VKIDFT
37	Technological Interventions for Improving Socio- economic conditions of Dairy Entrepreneurs through Value addition of Dairy products	20	9.00	Dean, VKIDFT
38	Establishment of research and extension facilities for development and dissemination of new dairy products and services.	15	5.00	CDST, KLMD
39	Upgradation of Dairy and Food Processing Operations in KVASU Dairy Plant	24	22.00	KVASU Dairy Plant, Mannuthy
40	Interventions to Enhance the Quality and Safety of Dairy and Food Products	10	9.00	KVASU Dairy Plant, Mannuthy
41	Application of fermentation technology: Process optimisation of daily staples	16.5	10.75	CDST, Pookode
42	Process standardization of cereal supplemented low calorie functional dairy products and evaluation of its nutritional profile and engineering properties	15	7.00	CDST, Pookode
43	Development of functional food products by value addition of underutilized phytochemical rich pulses and grains	30	8.50	VKIDFT
44	Impact of Chemical and Microbial Contaminants on milk quality	30	4.00	CDST, TVM
45	Development of Functional Milk and Meat Products and Safety Assessment of foods of animal origin	28.5	9.60	Dept.Dairy Science, LPT VPH Pookode
46	Strengthening of department laboratories of College of Dairy Science and Technology, Pookode	14	2.00	CDST, Pookode
47	Investigation on the impacts of vector-borne haemoparasitic diseases in goats	10	6.00	TVCC, Mannuthy

48	Addressing One Health Priority areas through Research, Capacity building and Development of Knowledge products	8	4.50	COHEART, Pookode
49	Early and definitive identification of disease emergence in animals and birds in the scenario of extreme climatic change in farm animals, poultry and pets to support the sustainable and healthy farming in northern Kerala through strengthening of post mortem and diagnostic facilities	19	10.00	Dept. Microbiology Pathology, Pookode
50	Prevalence of zoonotic diseases among companion animals and pet birds in Kerala	6.0	6.00	School of Zoonoses, Public Health and Pathobiology, Mannuthy
51	“Silent Valley Farm Platform” for developing sustainable livestock production system.	27	15.00	LRS, Thiruvazhamkunnu
52	Augmenting activities of KVASU-CWS for implementing the One Health Action Plan at the human-wild animal-ecosystem interface under WGRI-WRTW	8	3.50	CWS, Pookode
53	Bottling of purified compressed bio gas and production of bio-fertilizer from biogas plant slurry	6	2.00	School of Bio-energy Studies & Farm Waste Mgt, Mannuthy
54	Livestock advisory based on weather forewarning	20	18.00	CAADECCS, Mannuthy
55	Strengthening of the elephant study centre, CVAS, Mannuthy for better welfare and conservation of captive elephants in Kerala through efficient healthcare and management	6	1.25	Elephant Study Centre, Mannuthy
56	Hatchery Waste Disposal and its effective utilization	3	1.01	CASPS, Mannuthy
57	Physiological, biochemical and morphological variations due to environmental stresses in crossbred and indigenous farm animals	28.5	8.50	Dept. Biochemistry, Physiology and Anatomy, Pookode
58	Monitoring and evaluation cell	15	5.28	DAR
59	Research in emerging issues, patenting & publication	10	3.27	DAR, KVASU
60	Strengthening the Centre for Livestock Development and Policy Research, Thiruvananthapuram	5	1.00	CLDPR, TVM

61	Strengthening of Bioscience Research and Training Centre, Thiruvananthapuram	8	6.72	BRTC, TVM
62	Strengthening of Veterinary Clinical Laboratory at University Veterinary Hospital, Kokkalai, Thrissur	10	9.00	UVH, Kokkali
63	Strengthening of NABL accredited Radio Immuno Assay Laboratory	4	4.00	CIL, Mannuthy
64	Strengthening of central instruments, Laboratory and instrumentation centre	10	10.00	CIL, Mannuthy
65	Strengthening of Centres - Central Instrumentation Facility (NABARD-RIDF)	10	9.05	CIF, CVAS, Pookode
66	Strengthening of centres - Centre for ethnopharmacology“Chemical profiling and pharmacology of biologically active secondary metabolites by HPTLC/HPLC/GC-MS systems and its comparison with standard drugs”	7	5.50	Centre for Ethanopharmacology, CVAS, Pookode
67	Strengthening of Feed Mill	33	20.00	Head Feed Mill Nutrition, Mannuthy
68	Strengthening of NABL accredited Feed Analysis Laboratory	6	5.00	Head NABL Nutrition, Mannuthy
69	Strengthening of NABL accredited Quality Control Laboratory	4	3.50	Head, NABL, VPH, Mannuthy
70	Strengthening of School of Animal Nutrition and Feed technology	6	5.00	SANFT, Mannuthy
71	Revamping and Maintaining Laboratory Animal and Large Animal Facilities at CVAS, Pookode	10	8.21	Laborator animal facility, Pookode
72	Strengthening CAADECCS for Climate Change Preparedness in Livestock Sector	10	2.00	CAADECCS, Mannuthy
73	Strengthening of Centre for Advanced Studies in Animal Genetics & Breeding	8	7.90	CASAGB
74	Strengthening the meat production, preservation, value addition and capacity building facilities of Meat Technology Unit	75	22.50	Meat Technology KVASU
75	Strengthening of Facilities at Academic Block of College of Avian Sciences and Management, Thiruvazhamkunnu. Palakkad	21	13.09	CASM, Thiruvazhamkunnu

76	Strengthening of Centre for Meat Type Duck Production at Avian Research Station, Thiruvazhamkunnu	25	11.56	ARS, Thiruvizhamkunnu
77	Strengthening of Integrated Rural Poultry Production Centre	35	32.46	ARS, Thiruvizhamkunnu
78	Improving backyard poultry production by supplying crossbred chicks from improved hens	20	20.00	AICRP
79	Selection for eighth week body weight in Kuttanad ducks to produce a broiler duck line	15	12.50	UPDF
80	Augmenting backyard poultry production in Kerala	90	82.10	UPDF
81	Interdisciplinary research in Poultry Science for developing climate resilient birds for Kerala and to establish a cost-effective production system through breeding, nutritional and management interventions	14	13.00	CASM, Thiruvazhamkunnu
82	Advanced mycotoxin testing facility for poultry feed	5	5.00	CASPS, Mannuthy
83	Conservation, Characterization and Popularization of Native varieties of Poultry in Kerala	5	2.20	CASPS, Mannuthy
84	Standardisation of in-ovonutrition and vaccination in chicken and development of strategies for enhancement of poultry welfare in production systems by resource integration in selected five districts of Kerala	28.5	8.10	Dept. LPM, AHE, Poultry Science, Mannuthy
85	Field Progeny Testing (FPT) of Crossbred bulls	13	12.99	CASAGB, Mannuthy
86	AICRP on Goat Improvement (25% of State Share)	6.5	6.50	CASAGB, Mannuthy
87	Evaluation of performance of crossbred pigs (25% share of AICRP on pigs)	24	24.00	CPPR, Mannuthy
88	Poultry improvement for Eggs (25% State share of AICRP)	24	19.154	AICRP, (Poultry), Mannuthy
89	Scaling up of production of piglings	75	68.37	CPPR, Mannuthy
90	Artificial Insemination for improving reproductive efficiency in pigs	8	7.00	CPPR, Mannuthy
91	Development of a sustainable goat farming model for Wayanad District	20	7.65	ILFC, Pookode
92	Strengthening of Instructional Livestock Farm Complex, CVAS, Pookode	80	45.00	ILFC, Pookode

93	Strengthening of Livestock Research Station Thiruvazamkundu	35	15.00	LRS, Thiruvazhamkundu
94	Updating the benchmarks of state animal production	7	3.00	DF
95	Strengthening of Base Farm, Kolahalamedu as knowledge dissemination hub on latest technologies and innovations in dairy farming (2023-2024)	64	28.00	Base Farm, Kolahalamedu
96	Revamping of Small Animal Breeding station	14	10.50	SABS, Mannuthy
97	Strengthening of university Goat and Sheep Farm	22	16.00	USGF, Mannuthy
98	Increasing productivity of Cross-bred Cattle of University Livestock Farm, Mannuthy	50	37.05	ULF & FRDS
99	Optimizing the production performance of various poultry species maintained in Poultry Farm, ILFC, Pookode	25	19.00	ILFC, Pookode

B. State Plan Projects 2019-20 (RIDF)

Administrative and expenditure sanction was accorded for the implementation of the project entitled “Establishment of referral analytical and Diagnostic laboratory for supporting livestock farming and Diagnosis of Zoonotic diseases,” with a total outlay of Rs. 3214.37 lakhs in the University under tranche XXV of the RIDF funded by NABARD. The project has been implemented in the Mannuthy campus of the university, and it includes 30 labs and a BSL-3 (Biosafety Level-3) stand alone facility.

C. State Plan Projects 2022-23 (RIDF)

The following Three project proposals under RIDF for a total outlay of Rs. 1330 lakh has been submitted to the Government during the financial year (2022- 23) for approval and funding.

SI No	Name of the Project	Implementing Officer	Outlay (in lakhs)
1	Developing climate smart integrated farming prototype with focus on animal welfare, waste management and value addition for economic benefits in rproduction systems of Kerala	Dr. Joseph Mathew, Senior Professor & Head, Department of LPM, CVAS, Mannuthy	180
2	Establishment of a Referral Centre for advanced infertility care and reproductive services with inpatient facility	Professor and Head, Dept. of Animal Reproduction Gynaecology & Obstetrics, CVAS, Mannuthy	200

3	Establishment of VUTREC (Veterinary University Teaching Research and Entrepreneurship Centre) at Quilandy, Kozhikode, Kerala	Dr. Prasad A, Associate Professor, Department of LPM, CVAS, Mannuthy	950
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D. State Plan Projects 2023-24 (RIDF)

The following Two project proposals under RIDF for a total outlay of Rs. 1071 lakh has been submitted to the Government during the financial year (2023-24) for approval and funding.

Sl No	Name of the Project	Implementing Officer	Outlay (in lakhs)
1	Establishment of VUTREC (Veterinary University Teaching Research and Entrepreneurship Centre) at Quilandy, Kozhikode, Kerala	Dr. Prasad A, Associate Professor, Department of LPM, CVAS, Mannuthy	950
2	Establishment of seed farm for propagation of Malabari goats	Dr. Pramod S, Assistasnt Professor, Department of LPM, LRST, Thiruvazhamkunnu,	121

E. State Plan Projects 2024-25 (RIDF)

The following Two project proposals under RIDF for a total outlay of Rs. 61.50 lakh has been submitted to the Government during the financial year (2024-25 for approval and funding.

Sl No	Name of the Project	Implementing Officer	Outlay (in lakhs)
1	Establishment of multiple residential complex for scientists, research scholars, students and farmers at Kerala Veterinary and Animal Sciences University, Pookode	Dr. R. Kanthanathan, Assistasnt Professor, Dept, of Physical Education, CVAS, Pookode	3504
2	Establishment of VUTREC (Veterinary University Teaching Research and Entrepreneurship Centre) at Quilandy, Kozhikode, Kerala	Dr. Prasad A, Associate Professor, Department of LPM, CVAS, Mannuthy	2646

F. State Plan (2024-25)

The annual plan proposal with total outlay of Rs. 49 crores for the year 2024-25 has been prepared and submitted to the Government and an amount of Rs. 46.92 crores have been sanctioned by the Special Working Group. Administrative sanction has been accorded for implementing the projects in the University with a total amount of Rs. 46.92 crores vide order No G.O (Rt) No. 405/2024/AHD, dated 05.07.2024 and also for implementing additional Infrastructure projects under the university with a total outlay of Rs. 2.08 [49- 46.92] crores vide order No G.O. (Rt) No. 490/2024/AHD, dated 29.08.2024. Government has released an amount of Rs. 9 crores as first instalment for the implementation of the various projects under state plan 2024-25.

G. Externally aided projects/Revolving fund projects

Currently, the University has 34 ongoing research projects with implementation period up to five years with a total financial support of Rs. 85.53 crores from different external agencies as detailed below.

Sl. No.	Name of Funding Agency	Number of ongoing projects	Outlay (in Lakhs)
1	ICAR	11	547.59
2	DST	3	77.11
3	KSCSTE	4	72.05
4	AHD	1	20.57
5	ATMA	1	9.6
6	NABARD	2	3227.69
7	NMPB	1	21.38
8	ICMR	1	37.5
9	RGM	1	79.2
10	ADB	1	5.5
11	NLM	1	158.78
12	Wayanad Package	2	915.5
13	KIIFB	2	3325
13	Others	3	55.7
	TOTAL	34	8553.17

The following new projects have been sanctioned by various funding agencies during this period.

Sl. No.	Project	Funding Agency	Outlay (in lakh)
1	Knowledge park for capacity building and business promotion in dairy processing under KVA-SU – Phase I	Wayanad Package	415.5
2	Developing and establishing a cost effective method to produce dehydrated dairy starters for prospective entrepreneurs of the state	NABARD	13.32
3	Development of value added product for amelioration of fatty liver and hyperlipidemia from fruits of <i>Baccaurea courtallensis</i> (Wight); A threatened underutilized fruit species from the forests of Kerala	Kerala Forest Department	2.75
4	Improving animal health practices of veterinarians and livestock farmers to contain antimicrobial resistance and promote One Health (Bangladesh, India, Nepal and Sri Lanka)	Asian Development Bank	5.5
5	Development of innovative technologies for meat animal appraisal and meat production, value addition and waste valorization for augmenting farmers income and entrepreneurship.	National Livestock Mission	158.78
6	Network project on Animal Genetic Resources	ICAR	11

7	Semiochemical based tick control strategies for the sustainable mitigation of haemoprotozoan/ rickettsial diseases in ruminants	DST-SERB-SURE	29.41
8	Pilot study on effect of oral supplementation of turmeric extract on production performance of pigs	M/s Arjuna Natural Pvt. Ltd.	2.4
9	SC-SP project for the socio-economic development of goat farmers in Parakode (Minor) Kollam district, Kerala	ICAR SC-SP	4.6
10	Genetic improvement of Vechur and Kasargode cattle of Kerala	Rashtriya Gokul Mission	79.2
11	Establishment of an advanced veterinary diagnostic imaging centre and upgrading of diagnostic therapeutic and surgical facilities for large animals at TVCC, Pookode, Wayanad (Vythiri Grama Panchayat)	Wayanad Package	500

The State Government had accorded in-principle approval for setting up of Translational Research Centre (TRC) in the University by utilizing KIIFB fund and the University has been designated as the Special Purpose Vehicle (SPV) for the project. Detailed Project Report (DPR) was uploaded in KIIFB PFMS portal on 1.11.2022 and the KIIFB team visited the proposed TRC site at Mannuthy, Thrissur on 29.12.2022. The DPR submitted by KVASU was approved by KIIFB. However, the proposal for two of the component units of the TRC viz. Dairy, and Meat and Egg, were deferred. Approval for the project was given on 22/5/2023 and Rs. 10.2366638 crores were sanctioned. A Sub Project Revision for construction of two new buildings for the two units (1) Commercialisation of value-added dairy/ethnic foods and technology transfer for start-ups, and 2) Establishment of translational research center for value-added meat and egg products) was submitted in the KIIFB portal. The revised outlay of the project for the 4 buildings is Rs. 16.1195 crores and Rs. 8.65 crores is proposed for equipment. (Total outlay of the project is Rs. 24.7695 crores).

The Technical Committee for the KVASU TRC was constituted on 14.6.2023 and a tripartite agreement has been executed among the KIIFB, University, and Animal Husbandry Department. A Green Consultant was selected and appointed and the project has been revised to conform to ESG guidelines. Presently, an amount of Rs. 16.11 crore (excluding equipment component) has been sanctioned for the project on 13.3.2024.

A project proposal entitled “Centre of Excellence in One Health: Western Ghats Biodiversity, Wildlife-Human Interface and Zoonotic Diseases” has been sanctioned by the State Government with an outlay of Rs. 33 crores. Sub project has been created and the DPR of the project has been uploaded in KIIFB- PFMS portal.

The Departmental Working Group has accorded in principle sanction for the collaborative project Development of indigenous Oral Rabies Vaccine by Institute of Advanced Virology (IAV), Kerala Veterinary and Animal Sciences University (KVASU) and Animal Husbandry Department (AHD) for the period from 2023 to 2028 in two phases with total outlay of Rs. 3.6589 crores.

The project aims on the research for development of an indigeneous vaccination to control dog transmitted rabies.

Besides this, 28 new project proposals have been submitted to various funding agencies during this period. Also, seven project proposals with a total outlay of Rs. 13.66 crore under National Livestock Mission are under consideration of Government for financial assistance.

H. Projects under RF mode

The following projects are running in the University under Revolving Fund mode during this period.

Sl. No.	Description of Project	Outlay in Lakhs
1	RF Poultry Project -Feed Production & Hatchery, CASPS (Poultry)	25
2	Revolving fund-Evaluation of water quality - Laboratory Services (Revised as evaluation of feed and water quality)	0.5
3	RF Project Proposal to provide comprehensive clinical service and healthcare at UVH, Mannuthy	1
4	RF Project at Meat plant, Mannuthy	5
5	Revolving Fund Project at UVH, Kokkalai	0.3
6	Production and Processing of Livestock products at Dept. of LPT, COVAS, Pookode	2
7	Eco Farm “ maintenance of various technology units under innovation incubation and on farm trial plan project” at Department of LPM, CVAS, Mannuthy (Eco-farm)	3.5
8	RF Multi enterprise farming model instructional livestock farm ,Pookode (fodder production & Training)	18
9	Production of piglets & fortified pig excreta at CPPR	4
10	“Goat unit and pellet manure”, Sheep & Goat Farm, Mannuthy	5
11	“Production of Farm Products & Training” at CBFT	5
12	Feed mill for “Production & supply of compound feed for various classes of live-stock under SANFT at the Dept. Of Animal Nutrition, CVAS, Mannuthy	0
13	“Central Instrumentation services and training”, CVAS, Mannuthy	2.5
14	Functioning of feed mill at Avian Research Station, Thiruvazhamkunnu	10
15	Training programme in molecular biology, biotechnology and bioinformatics, SAAPB on RF Project mode	1
16	“Manufacturing of value added farm products, Base Farm, Kolahalamedu”	1.15
17	Starter Culture Sales at Dairy Microbiology	0.5
18	Production of value added food products, College of Food Technology, Thumbur-muzhy	2
19	Comprehensive Surgical Care at Dept. of Vety. Surgery & Radiology, CVAS, Mannuthy	2

20	RF Project Comprehensive Animal Health Management through TVCC, Pookode	2
21	RF Karshakamithra medical Store at TVCC Mty	5
22	Margin less Karshakamithra medical store at TVCC Pookode	6.75
23	Establishing a centre for supporting homestead poultry farming in Kerala	5
24	Strengthening infectious disease diagnosis of domestic and pet animals through Dept of VEPM CVAS Pookode	0.5
25	Facility for diagnosis of haemostatic disorders and blood transfusion of farm and pet animals	1
26	Karshakamithra Medical Store at UVH Kokkalai	9
27	Hands on training on the preparation of milk based snack foods	0.25
28	Conduct of training in the department of Vety Pharmacology & Toxicology, CVAS Mannuthy	0.25
29	RF - Publication Division	2
30	RF project of ULF, Mannuthy	0.05
31	RF - Technology Information & Sales counter at Mannuthy	
32	Proposal for starting a RF project at the department of Animal Nutrition at CVAS, Mannuthy (Supply of mineral mixture for various classes of livestock and Poultry)	1
33	Production of Farm Products & Training at LRST	7.4
34	“Clinical training and allied activities” at Directorate of Clinics, CVAS, Pookode	0.05
35	Conduct of trainings in the Department of Animal Reproduction, Gynaecology & Obstetrics, CVAS, Mannuthy	0.8
36	Revolving fund scheme to provide clinical service and health care at evening clinic and advisory call centre, Mannuthy	3
37	“Technology Information sales Centre-TISCAFE at Pookode and kalpetta	1.5
38	Supply of grown-up chicken with the facilities available in the AICRP on Poultry for Eggs, Mannuthy-	2
39	RF training titled Research methodology using chat GPT and Artificial Intelligence tools (Under the training series entitled” National trainings for Capacity building of academia by technology integration”	0.7

I. Research Council

The fifth meeting of the Research Council of the University has been conducted on 4th October 2023 and various research activities have been initiated on the decisions taken in the meeting.

1. Seminars b) training c) Seminars participated (From College Deans/Station Heads)
2. Publications from Stations of the University

- i. *Journals/ Books / text books/ popular articles*

Directorate of Academics and Research

Research Publications in referred Journal International

1. Prasad, M. C. B., Milton, A. A. P., Menon, V. K., Ghatak, S., K. Srinivas, K. M. Momin, S. L. Vineesha, S. Das, A. Sen, C. Latha, B. Sunil, D. Jolly. 2023. Saltatory rolling circle amplification assay for simple and visual detection of *Listeria monocytogenes* in milk and milk products. *Int. Dairy J.* 137: 105498.

National

1. Unni, V., Abishad, P., Juliet, S., John, L., Nambiar, P., Latha, C., Vinod, V.K., Asha, K., Vergis, J., Kurkure, N.V., Barbudde, S.B. and Rawool, D.B. (2023). *In vitro* antimicrobial activity of piperine against multi-drug resistant *Salmonella* spp.. *Haryana Vet.* 62(1): 5-7.
2. Prasad, M.C.B., Menon, V.K., Milton, A.A.P., Sunil, B., Latha, C., Priya, P.M. and Thomas, N. 2024. Occurrence of *Listeria monocytogenes* in raw milk and chicken meat in Thrissur, Kerala. *J. Vet. Anim. Sci.* 55(2):317-324B.

Other Publications/ Presentation in Conferences/ Seminars

International

1. Vrinda Menon K., Murugavelu., Neethu, S., Sreekutty, S., Deepa Jolly., Latha C., Sunil, B. and Sethulekshmi, C. 2023. “Seroprevalence of leptospirosis in risk groups associated with pets and livestock in Kerala” in the proceedings of International symposium on Promotion on one Health, Opportunities, challenges, and solutions by IAVPHS at Hizar on 7-8/12/23
2. Deepa Jolly., Sunil, B. Latha C., Vrinda Menon K., and Sethulekshmi, C. 2023. “Prevalence of *Campylobacter* spp. in marine fishes, crustaceans, and molluscs in Thiruvananthapuram District, Kerala” in the proceedings of International symposium on Promotion on one Health, Opportunities, challenges, and solutions by IAVPHS at Hizar on 7-8/12/23
3. Sethulekshmi, C., Latha C., Sunil, B., Vrinda Menon, K., Deepa Jolly., Sruthy., and Aneesha, K. N. 2023. “Identification of source of *E. coli* contamination in drinking water and effect of *Moringa oleifera* and *Citrullus lanatus* seed extract on drinking water quality” in the proceedings of International symposium on Promotion on one Health, Opportunities, challenges, and solutions by IAVPHS at Hizar on 7-8/12/23
4. Unni, V., Abhishad, P. R., Juliet, S., John, L., Prejit., Vinod, V. K., Asha, K., Latha, C., Rawool, D. B., and Vergis, J. 2023. Antibacterial, antioxidant and antibiofilm potential of green synthesized zinc oxide nanoparticles against multi drug resistant non typhoidal *Salmonella* spp. in the proceedings of International symposium on Promotion on one Health, Opportunities, challenges, and solutions by IAVPHS at Hizar on 7-8/12/23

National

1. Savita, R. Kashappanavar, Latha, C, Sunil, B, Vinod, V. K, Binoj, Chacko and Sunanda, C. 2024. Occurrence of Thermotolerant *Campylobacter* Species In Chicken Meat. Proceedings of the National Symposium on “Integrating One Health Concept bridging the gap at human Srijji, A. P, K 2. Vrinda Menon, C Latha, B Sunil and Deepa Jolly. Risk factors associated with the presence of *Leptospira* spp. in cattle in Kerala). Proceedings of the National Symposium

on “Integrating One Health Concept bridging the gap at human animal environment interfaces and XX Annual Conference of IAVPHS at Shirwal. animal environment interfaces and XX Annual Conference of IAVPHS at Shirwal.

Key note address and Lead paper presentation

1. Latha, C . 2023. One Health Approach to curtail the occurrence of Zoonoses in the proceedings of National seminar on One Health: A new Paradigm to augment livestock productivity and food security conducted by AMST at Chennai.
2. Latha, C . 2023. Keynote address on Strengthening Veterinary Profession towards One Health through Diversity, Equity and Inclusiveness in the International conference by Indian association of Women’s veterinarians at Gannavaram on 27-28/11/23
3. Latha, C . 2023. Lead paper on “Climate change and vectorborne diseases” in International symposium on Promotion on one Health, Oppurtunities, challenges, and solutions by IAVPHS at Hizar on 7-8/12/23.
4. Latha, C . 2023. Lead paper on advancement in management of zoonotic diseases through One health approach in International seminar conducted by IVA in Veterinary Science Congress on 18-19/11/23 at Pookode.
5. Latha, C and Jess, V. 2024. Lead paper on One health capacity building approaches: An overview. Proceedings of the National Symposium on “Integrating One Health Concept bridging the gap at human animal environment interfaces and XX Annual Conference of IAVPHS at Shirwal on 14-15/11/24.

Chapter In Books

1. Latha, C . 2023. One Health Approach to curtail the occurrence of Zoonoses in the proceedings of National seminar on One Health: A new Paradigm to augment livestock productivity and food security conducted by AMST at Chennai.
2. Latha, C . 2023. Keynote address on Strengthening Veterinary Profession towards One Health through Diversity, Equity and Inclusiveness in the proceedings of International conference by Indian association of Women’s veterinarians at Gannavaram on 27-28/11/23
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2. Unnikrishnan M.P.2023. Use of Ultrasound for pregnancy diagnosis in pigs. In: *Training manual on Reproductive ultrasonography in farm and companion animals*. Dept of Animal Reproduction, College of Veterinary and Animal Sciences, KVASU, Mannuthy, pp 60-62.

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3. Mevin, S.M., Ajith, Y., Adithya, S., Amal, R.V., Athira, N., Sonaa, M., Siji, S.R. and Ancy, T., 2023. Therapeutic management of osteodystrophia fibrosa in early weaned Malabari male goat kids. *Veterinary Research Communications*, pp.1-8.
4. Bharti, D., Ajith, Y., Sharun, K., Banu, S.A., Kumar, A., Bhardwaj, A. and Sidar, S.K., 2023. Therapeutic applications of canine platelets and their derivatives: a narrative review. *Topics in Companion Animal Medicine*, p.100840.
5. Edana, G.G., Preena, P., Balan, C., Sarangom, S.B. and Vijayakumar, K., 2023. Hematological characteristics of autochthonous hypermicrofilaremic dirofilariosis in dogs in Kannur District of Kerala. *J. Parasitic Dis.*47: 787-792.
6. Devi, G., Singh, P., Dimri, U., Jacob, S.S., Jairath, G., Kattoor, J.J., Preena, P., Ajith, Y., Mal, G., Sharma, R. and Kumar, S., 2024. Diversity of haemoparasites in migratory small ruminants of Himalayas, India. *Small Ruminant Research*, 234, p.107255.
7. Balakrishnan, N., George, A., Jameel, A.J., Ajith, Y., Abdulla, K.S. and Pillai, U.N., 2024. Canine distemper with myoclonus and tonic-clonic seizures in a domestic cat (*Felis catus*) in Kerala, India. *Comparative Clinical Pathology*, pp.1-3.
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9. Mathai, V.M., Sarangom, S.B., Preena, P., Dominic, S., Baburaj, N.K., Sundaran, S. and Krishna, D.B., 2023. Reliability of two dimensional B-mode ultrasonographic imaging for the detection of intra-abdominal pathologies in dogs. *J. Anim. Res.* 13: 173-181.
10. Gireesh, S.S., Preena, P., Rabha, C. and Mukherjee, R., 2023. Evaluation of prophylactic and therapeutic potential of bovine recombinant Lactoferrin in MRSA associated mice mastitis model. *Pharma Innovation J.* SP-12: 196-200
11. Asharaf, A.M., Sarangom, S.B., Iqbal, A., Preena, P. and Mathai, V.M., 2023. Repair of Supracondylar Fracture of Femur by Cross Intramedullary Pinning in a Calf. *IVJ.*, 100: 37-38.
12. Magnus P K , Jayakumar C , Naicy T , Lali F A , Hiron M Harshan , Abhilash R S , Ajithkumar S. 2023.Etiology behind canine uterine inertia: Role of uterine expression of MLCK4, MYH2, and PKC genes. *Animal reproduction science.* 256: 107298.
13. J. Princy, P. K. Magnus, C. Jayakumar, Shibu Simon and Arun George, 2023. Combined thickness of uterus and placenta, foetal heart rate oscillations and progesterone concentration in last week of canine gestation. *J. Vet. Anim. Sci.* 54(2):472-476

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17. Rahul, B., Venugopal, S.K., Reji, V., Chandrasekhar, L. and John Martin, K.D. 2023. Effects on blood gas and haematological parameters during butorphanol-dexmedetomidine-tiletamine zolazepam anaesthesia in cats. *J. Vet. Anim. Sci.* 54(1):214-217 DOI: <https://doi.org/10.51966/jvas.2023.54.1.214-217>
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1. Sanjeevi Wilson, Vinod Kumar K., Preena P., Javed Jameel A. and Tresamol P.V. 2024 Management of Ventricular tachycardia in a seven years old Labrador Retriever dog with concurrent Canine Babesiosis. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. Pp 187.
2. Mevin Sabu Mathews, Udayasree V. J., Javed Jameel, Arun George, Preena P. 2024. Diagnosis and treatment of microfilariosis in a cat. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. Pp 82-84.
3. Neha R., Athira S., Preena P. and Tresamol P.V. 2024. Cobra envenomation and its management in a Dachshund dog. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. p131-132.
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- Control of Pigeon Malaria in a European Lahore Pigeon Loft. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. p167.
5. Venkata Manoj R., Raina Varghese, Basil C. Varghese, Ajith Y., Preena P., Manoj M., Justin Davis K. and P.V. Tresamol. Viral Epidemic “Lumpy Skin Disease” Threatening the Life of Indigenous Vechur Cattle. 35th Kerala Veterinary Science Congress. Pookode, Wayanad. 10-14 November 2023.pp 100
 6. Aparna P. A., Athira Sajeendran, Arun George, Preena P., Justin Davis K., Tresamol P V. Successful medical management of localised tetanus in a dog. 35th Kerala Veterinary Science Congress. 10-14 November 2023.pp 335.
 7. K.P. Magnus, C. Jayakumar, Naicy Thomas, Lali F. Anand, Abhilash.R.S., Hiron M. Harshan. and S. Ajithkumar. 2023. Transcriptome-based differential gene expression analysis of canine uterus in primary uterine inertia and obstructive dystocia. 38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice. December 6th to 8th 2023, held at college of Veterinary and Animal Sciences, Mannuthy Thrissur, Kerala
 8. K.P. Magnus, C. Jayakumar, Naicy Thomas, Hiron M. Harshan., R.S. Abhilash, Princy Johnson., Elizabeth Kurian. and S. Ajitkumar. 2023. Relative expression of hormone receptors, hormone and electrolyte profile in canine uterine inertia. 38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice. December 6th to 8th 2023, held at college of Veterinary and Animal Sciences, Mannuthy Thrissur, Kerala

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1. Laboratory and molecular techniques for diagnosis of disease. Y. Ajith, Varuna P. Panicker, K. S. Athira, Sasi Adithya, Justin Davis K., P. Preena. Publication date 2024/2/24 Pages 1-68
2. Echocardiography in dogs. Preena P., Sindhu K. Rajan, Ajith Y., Justin Davis K., Ajithkumar S., Athira Sajeendran, Aiswarya A. Publication date 2024/2/24 Pages 1-29.

University Veterinary Hospital, Kokkalai

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1. Laiju M. Philip, Syam K. Venugopal and John Martin, K. D (2023). Partial rostral glossectomy for alveolar rhabdomyosarcoma of tongue and its laryngeal metastasis in a dog. *Indian J. Canine Pract.* 15 (2): 160 - 162.
2. Giggin, T., Narayanan, M. K., John Martin, K. D., Syam K. Venugopal, Anil, K. S. and Sreeranjini, A. R. (2023). Non-contact wound measurements in captive Asian elephants (*Elephas maximus*) using smartphone application. *Intl. J. Vet. Sci. Anim. Husbandry (VET)*. 8 (4): 49-51.
3. Ashok R. Unni, Syam K. Venugopal, John Martin, K. D., Anoop, S., Maya, S. and Dhanush Krishna, B. (2024). Serum biochemical evaluation of critical sized long bone defects in rats treated with biphasic hydroxyapatite (HA) and β - tricalcium phosphate (β -TCP) bioceramic

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 5. Gayathri, K., Syam K. Venugopal, John Martin, K. D., Anoop, S., Lucy, K. M and Shynu, M. (2024). Smartphone aided fundoscopy in albino rabbits. *J. Adv. Biol. Biotechnol., (J. Advances in Biology & Biotechnology (JABB)).* 27(10):1587-1595. <https://doi.org/10.9734/jabb/2024/v27i101583>.
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 10. Giggin, T., Jennes, D., Nair, S.S. and John Martin, K.D. 2023. Mandibular salivary gland adenoma and its surgical management in dog. *Indian J. Can. Pract.* 15(2): 157-159.
 11. Giggin, T., John Martin, K.D., Venugopal, S.K., Anil, K.S., Sreeranjini, A.R. and Narayanan, M.K. 2024. Comparative analysis of mathematical models and app-based measurement for estimating the cutaneous wound areas of Captive Asian Elephants. *Cureus* 16(7): e65533. DOI: [10.7759/cureus.65533](https://doi.org/10.7759/cureus.65533)
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Instructional Livestock Farm Complex, Pookode

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1. Singaravadivelan, A., Sachin, P.B., Harikumar. S., Vijayakumar, P., Vindhya, M.V., Farhana, F.M.B., Rameesa, K.K. and Mathew, J. 2023. Life cycle assessment of greenhouse gas emission from the dairy production system — review. *Trop. Anim. Hlth. Prod.* 55:320
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Centre for Animal Adaptation to Environment and Climate Change Studies (CAADECCS)

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1. Book entitled "Birds of the Campus - Illustrated List of Birds of College of Veterinary and Animal Sciences, Mannuthy, Kerala" edited by **Dr. V. Beena** and **Dr. S. Harikumar** with ISBN: 978-93-91716-08-0 was released on 05.06.2023

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1. Madhavan Unny, N., Zarina, A. and **Beena, V.**, 2023. Fluid and Electrolyte Balance. In *Textbook of Veterinary Physiology* (pp. 193-211). Singapore: Springer Nature Singapore.
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Centre for Ethno Pharmacology, Pookode

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1. Veena, Pragash R.A., Satheesh G., Nair S.N., Kariyil B J, Vergis J, Muneer A, Ajith Kumar K G, Ravindran R and Juliet S. 2023. Detection and quantification of meropenem in broiler bird's plasma using high performance liquid chromatography with diode array detector. *The Pharma Innovation Journal* 12(3): 2330-2335 NAAS 5.23
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3. Amrutha, B.M., Kumar, K.G.A., Kurbet, P.S., Varghese, A., Deepa, C.K., Pradeep, R.K., Nimisha, M., Asaf, M., Juliet, S., Ravindran, R. and Ghosh, S., 2023. Morphological and molecular characterization of *Rhipicephalus microplus* and *Rhipicephalus annulatus* from selected states of southern India. *Ticks and Tick-borne Diseases*, 14(2), p.102086.
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 5. Arya, P.R., Abishad, P., Unni, V., Bibin, M., Marita, D., John, L., Karthikeyan, A., Nambiar, P., Juliet, S., Vinod, V.K. and Vergis, J., 2023, March. Antioxidant, antibacterial and antibiofilm potential of green synthesized silver-zinc oxide nanocomposites from *Curcuma longa* extract against multi-drug-resistant enteroaggregative *E. coli*. In *Medical Sciences Forum* (Vol. 21, No. 1, p. 23). MDPI.
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16. Mohan, B., Abishad, P., Arya, P.R., Dias, M., Vinod, V.K., Karthikeyan, A., Juliet, S., Kurkure, N.V., Barbuddhe, S.B., Rawool, D.B. and Vergis, J., 2024. Elucidating antibiofilm as well as photocatalytic disinfection potential of green synthesized nanosilver against multi-drug-resistant bacteria and its photodegradation ability of cationic dyes. *Gut Pathogens*, 16(1), p.51.

Centre for One Health Education Advocacy Research and Training, Pookode

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1. Femi Francis, Prejit, Ramziya P.K., Anjusha K.M., Asha K., Marita Dias and Amal Raj K.V. (2023). Occurrence of Methicillin resistant *Staphylococcus aureus* (MRSA) in Dairy Farms of Wayanad District of Kerala. *Biol. Forum- An International Journal*, 15(5): 663-667.
2. Asha, K., Sethulekshmi, C., Renuka N., Vinod, V.K., Vergis, J., Sumod, K., Murugadas, V. and Prejit. 2024. Occurrence of diarrheagenic *E. coli* pathotypes in broiler chicken birds reared in Kerala. *J. Vet. Anim. Sci.* 55(1): 39-46.
3. Akhil, K., Asha, K., Vinod, V.K., Vergis, J., Sumod, K. and Deepthy, B.J. 2024. Detection and molecular characterisation of *Klebsiella* spp in human, animal and environmental interface: A one health approach. *J. Vet. Anim. Sci.* 55(1):226-228.
4. Manoj, M., Prejit, Vergis, J., Vinod, V.K., Asha, K. and Vibha, Y., 2023. Occurrence of extended spectrum beta-lactamase producing *Escherichia coli* and *Salmonella* spp. in houseflies infesting farm and non-farm premises in Wayanad, Kerala, India. *Haryana Vet.* 62(1): 42-45.
5. Karthikeyan A., Chandran S., Kunjukunju V. V., Vergis J., Nayar R., Sumod K., Vaiyapuri M. and Prejit. 2023. Occurrence of diarrheagenic *Escherichia coli* in aquaculture reared fish from Kerala. *Indian J. Anim. Health*, 62(2): 202-211.

Centre for Wildlife Studies

Articles in Journals

1. Bhagavathi Parambu, C., PM, D., Chandy, G., Habeeb, B. P., & O, P. (2024). In the Lap of Gods: Sacred Bonds and Socio-Economic Dynamics in Resolving Human- Bonnet Macaque Conflicts for Harmonious Coexistence, Preprints <https://doi.org/10.20944/preprints202404.0071.v1>
2. Bhagavathi Parambu, C. (2024). The Ethnobotanical Knowledge of Tribal Communities in Kerala: A Comprehensive Review, Preprints, <https://doi.org/10.20944/preprints202404.0104.v1>

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1. A review of Invasive Alien plant Species of Kerala, India, Conference Paper: Swadeshi Science Congress National Conference on 'Holistic Approach for Sustainable Lifestyle Perspectives from Indian Knowledge System', NIT, Calicut 25th-27th May 2023.
2. K. P. Nidhichand, R. Roshnath, Tijo K. Joy, Sidharthan, A. C. Arjun, V. Sreeshma, Arunkumar Akash, S. Abhishek and George Chandy. 2023. Nest movement behaviour of the Jungle Nightjar (*Caprimulgus Indicus*). Proceedings. 15th Kerala Veterinary Science Congress. Wayanad, Kerala, India. November 2023. Indian Veterinary Association. Pp 197. DOI: ISSN-2394-255X
3. Nidhichand K. P. 2023. The Vanishing Allies of Western Ghats: Frogs of KVASU, The Science World-Monthly e magazine. 3: (05), 713-714.
4. K. P. Nidhichand, R. Roshnath, Tijo K. Joy, Sidharthan, A. C. Arjun, V. Sreeshma, Arunkumar Akash, S. Abhishek and George Chandy. 2023. Nest movement behaviour of the Jungle Nightjar (*Caprimulgus Indicus*). Proceedings. 15th Kerala veterinary Science Congress. Wayanad, Kerala, India. November 2023. Indian Veterinary Association. Pp 197. DOI: ISSN-2394-255X
5. Sreeshma V. 2023. Night Wanderers: The Moths of Gothra. The Science World-Monthly e magazine. 3: (05), 718-719.

4. Aggregate Students Body and Turnout

Sl. No.	Name of College	Parameters	Numbers				
			Bachelor's	Master's	Ph.D.	Others Including Diploma	Total
1	CVAS, Pookode	Intake	100	39	6	40	185
		Enrolled	100	38	6	39	183
		Passed Out	87	47	4	37	175
2	CVAS, Mannuthy	Intake	125	114	52	149	440
		Enrolled	125	84	15	119	343
		Passed Out	121	73	23	65	282
3	VKIDFT, Mannuthy	Intake	22	46	10	3	81
		Enrolled	21	40	10	3	74
		Passed Out	20	38	9	3	70
4	CDST, Pookode	Intake	22	-	-	-	22
		Enrolled	19	-	-	-	19
		Passed Out	20	-	-	-	20
5	CDST, Thiruvananthapuram	Intake	22	-	-	-	22
		Enrolled	14	-	-	-	14
		Passed Out	20	-	-	-	20

6	CDST, Kolahalamedu.	Intake	22	-	-	-	22
		Enrolled	12	-	-	-	12
		Passed Out	15	-	-	-	15
7	CASM, Thiruvazhamkunnu.	Intake	44	-	-	-	44
		Enrolled	44	-	-	-	44
		Passed Out	33	-	-	-	33
8	CWS, Pookode	Intake	-	22	-	-	22
		Enrolled	-	14	-	-	14
		Passed Out	-	5	-	-	5
9	Distant Courses	Intake	-	-	-	368	368
		Enrolled	-	-	-	368	368
		Passed Out	-	-	-	-	-

5. Category wise total number of students in the University during the reported period

Programme	No. of students					
	SC	ST	OBC	EWS	General	Total
Bachelor's	163	56	978	112	462	1771
Master's	34	10	158	17	102	321
Ph. D.	7	1	43	-	33	84
Others	66	10	260	7	227	570
	Total					2746

6. Gender Pattern amongst Student Enrolled in University/ Constituent College/Faculty:

SN	Name of College	Parameters	Numbers			
			Bachelor's	Master's	Ph.D	Total
1	CVAS, Pookode	Male	185	48	15	248
		Female	336	79	11	426
		Total	521	127	26	674
2	CVAS, Mannuthy	Male	238	41	22	301
		Female	425	117	31	573
		Total	663	158	53	874
3	VKIDFT, Mannuthy	Male	81	5	0	86
		Female	227	12	5	244
		Total	308	17	5	330
4	CDST, Pookode	Male	5	-	-	5
		Female	14	-	-	14
		Total	19	-	-	19
5	CDST Thiruvananthapuram	Male	10	-	-	10
		Female	53	-	-	53
		Total	63	-	-	63

6	CDST, Kolahalamedu.	Male	11	-	-	11
		Female	39	-	-	39
		Total	50	-	-	50
7	CASM, Thiruvazhamkundu.	Male	79	-	-	79
		Female	68	-	-	68
		Total	147	-	-	147
8	CWS, Pookode	Male	-	12	-	12
		Female	-	7	-	7
		Total	-	19	-	19

Total number of students registered for various technology enabled distance (2023-2024): 150

5. Chief of Disciplines, Scholarly Staff and Turnout- Colleges

6. Student details - Gender based data/SC/ST based list – given above

7. Commenced course offerings

i. Details of new courses started- Nil

8. Unveiled Academics extensions

i. Details of new Departments created (Deans)

9. Scholarships conferred

A. Merit Scholarship for the following number of students was granted during the period.

Sl. No.	Name of the Programme	Colleges	Year of Admission and Year of study	No. of students
1	B.Sc. (PP&BM)	CASM, Thiruvazhamkundu	2020	5
			2021	3
2	BVSc & AH	CVAS, Pookode	2022	7
3	B.Tech	CDST, Pookode	2020	4
			2019	2
			2021	2
4	B.Tech	VKIDFT, Mannuthy	2020	4
			2021	4
5	B.Tech FT	VKIDFT, Mannuthy	2021	2
			2019	4
6	BVSc & AH	CVAS, Mannuthy	2019	20
			2021	10
			2020	10
7	B.Tech	CDST, Thiruvananthapuram	2019	2
			2020	2
			2021	2
8	B.Tech	CDST, Kolahalamedu	2019	4
			2020	4

B. Merit cum Means Scholarship for the following number of students were granted during the period.

Sl. No.	Name of the Programme	Colleges	Year of Admission and Year of study	No. of students
1	BVSc & AH	CVAS, Pookode	2022	5

2	B Tech	CDST, Kolahalamedu	2019	1
			2020	1
			2021	1
3	BSc.(PP & BM)	CASM, Thiruvazhamkunnu	2021	2
4	B Tech	CDST, Pookode	2021	1
5	B.Tech (FT)	VKIDFT Mannuthy	2020	1

C. JRF was granted for the following number of students during this period

Sl. No	Course	College	Year	No. of students
1	M.V.Sc.	CVAS, Pookode	2023	28
			2022	38
		CVAS, Mannuthy	2023	67
			2022	61
2	M.Tech	VKIDFT, Mannuthy	2022	7
			2023	7

D. SRF was granted for the following number of PhD students during this period

Sl. No	College	Year	No. of students
1	CVAS, Mannuthy	2022	8
2	VKIDFT, Mannuthy	2022	1

10. Internship programme offered (Deans)

11. Externship (Deans)

12. Eminent guests enriching the campus

i. Brain gain

Various activities under Brain Gain Programme have been conducted during this period by engaging Dr. Jacob Chacko Thundathil, Faculty of Veterinary Medicine, University of Calgary, Canada as an expert/ visiting scholar in the Department of Animal Reproduction, Gynecology & Obstetrics, College of Veterinary and Animal Sciences, Mannuthy. The KSHEC has sanctioned and released an amount of Rs. 3,50,000 (70 % of the total outlay of Rs.5.00 lakh) to the account of the Finance Officer as advance for the above purpose and the programme implemented in the University. Supporting documents have been sent to the KSHEC after the completion of the programme.

ii. Important visitors to the University (Registry/VCs office)

13. Memoranda of Understanding Endorsed

At present 34 Memoranda of Understandings (MoUs) have been signed between the University and reputed National International Institutions to foster collaboration in the field of academics, research and extension. During 2023-2024, MoUs with the following institutions/firms were signed by the University:

Sl. No.	Name of the Institute/ Organization / Industry	Date of start	Year
1	Sher-e-Kashmir University (SKUAST), Srinagar, J & K, India	03.05.2023	3 years
2	Malabar Cancer Centre (MCC), Thalasseri, Kerala	14.07.2023	5 years
3	ICAR-National Institute of High Security Animal Diseases (NIHSAD)	14.08.2023	5 years
4	Kerala Agricultural University (KAU)	18.08.2023	10 years
5	KMTC- Kerala Medical Technology Consortium	26.09.2023	2 years
6	Thrissur Zoological Park, Wild Life Conservation & Research Centre	02.10.2023	5 years
7	TIFE- Thunen Institute of Farm Economics	05.10.2023	5 years
8	University of Georgia	13.11.2023	5 years

14. Reflection of Alumni Nexus (Deans/Special Officers)

15. Emergence of Excellence: Convocation Gala

The fourth convocation of Kerala Veterinary and Animals Sciences University was held on 20th May (Saturday), 2023 at 10.30 am at the University Headquarters, Pookode, Wayanad. Hon'ble Governor and Chancellor of KVASU, Shri. Arif Mohammed Khan conferred the degrees and awards in the august presence of Hon'ble Pro-Chancellor, Smt. J. Chinchurani and Dr. Bhupendra Nath Tripathi, Deputy Director General (Animal Sciences), Indian Council of Agricultural Research, Government of India. Nineteen Gold medals and 22 Endowment awards were distributed by the Hon'ble Governor and Chancellor of KVASU

1. Research Highlights

1. External Aided Projects

Sl. No	Name of the Project	Funding Agency	Name of PI	Department	Total outlay (Lakhs)
1	Multi target therapeutic approach for management of repeat breeding in cattle	ATMA	Dr C. Jayakumar	Department of Animal Reproduction, Gynecology & Obstetrics, CVAS, Mannuthy	9.6
2	Bioactivity guided fractionation and isolation of bioactive molecules from Thespesia populnea medicinal plant with anticancer potential against triple negative breast cancer	National Medicinal Plants Board	Dr. Bibu John Kariyil	Department of Veterinary Pharmacology and Toxicology, CVAS, Mannuthy	21.38
3	Development of recombinant protein based diagnostic kit for visceral Schistosomosis and sero-epidemiological study of the infection in ruminants.	KSCSTE	Dr. Bindu Lakshmanan	Department of Veterinary Parasitology, CVAS, Mannuthy	12.57

4	Role of Parkin mediated mitophagy in metastatic melanoma in the in vivo mouse and in vitro anoikia models	Science and Engineering Research Board (SERB) – TARE Project	Dr. Leena Chandrasekhar	Department of Veterinary Anatomy, CVAS, Mannuthy	18.30
5	Evaluation of maternal antibody transfer against infectious bronchitis and infectious bursal disease in chicken	AHD	Dr. Krithiga K.	Department of Veterinary Pathology, BRTC, Thiruvananthapuram	18.65
6	Development of small molecular weight bioactives and polysaccharides from marine and coastal bivalves to develop prospective nutraceutical products	ICAR-NASF	Dr. Bibu John Kariyil	Department of Veterinary Pharmacology and Toxicology, CVAS, Mannuthy	33.01
7	Pilot study on the efficacy of vaccination against Marek's Disease in Turkey Birds	AHD	Dr. Priya P. M.	Department of Microbiology, CVAS, Mannuthy	15.6
8	An open label randomised multicentric study to assess safety and immunogenicity of Indian Immunologicals Limited manufactured Infectious Bovine Rhinotracheitis Recombinant Vaccine (Inactivated) in Cattle	M/s Indian Immunologicals Limited, Hyderabad	Dr. Deepa P. M.	Department of Veterinary Epidemiology & Preventive Medicine	30.45
9	Development of an eco-friendly smart organogel based drug delivery system for administration of antibiotics in aquaculture and evaluation of its efficacy as targeted drug delivery system in fishes	KSCSTE	Dr. Suresh N. Nair	Department of Veterinary Pharmacology and Toxicology, CVAS, Mannuthy	17.22
10	Gene network and pathway analysis of the impact of heat stress on exotic Large White Yorkshire pigs	KSCSTE	Dr. Roshin Anie Jose	Department of Livestock Production Management, CVAS, Pookode	21.24
11	Molecular characterisation, antibiogram and geospatial analysis of leptospiral isolates from Kerala	ICMR-EMR	Dr. Ambily R.	Department of Veterinary Microbiology, CVAS, Mannuthy	37.51

12	Corroborating host-vector-pathogen interplay in sub clinical forms of arthropod-borne hemoparasitic diseases in goats	DST-SERB	Dr. Ajith Y.	Department of Clinical Medicine, CVAS, Mannuthy	29.4
13	Frontline demonstration unit of high density cashew plantation at Livestock Research Station, Thiruvazhamkundu, Palakkad	Directorate of Cashew nut and Cocoa Development (DCCD)	Dr. Prasad A.	Department of Livestock Production and Management, LRS, Thiruvazhamkundu	2.4
14	Knowledge park for capacity building & business promotion in dairy processing under KVASU – Phase I	Wayand Package	Dr. G.R. Jayadevan	CDST, Pookode	415.5
15	Developing and establishing a cost effective method to produce dehydrated dairy starters for prospective entrepreneurs of the state	NABARD	Dr. A. K. Beena	Department of Dairy Microbiology, VKIDFT, Mannuthy	13.32
16	Development of value added product for amelioration of fatty liver and hyperlipidemia from fruits of <i>Baccaurea courtallensis</i> (Wight); A threatened underutilized fruit species from the forests of KERALA	KFD	Dr. Suja Rani (Co-PI)	Department of Pharmacology & Toxicology, CVAS, Mannuthy	2.75
17	Improving animal health practices of veterinarians and livestock farmers to contain antimicrobial resistance and promote One Health (Bangladesh, India, Nepal and Sri Lanka)	Asian Development Bank	Dr. Jess Vergis	Department of Veterinary Public Health, CVAS, Pookode	5.5
18	Development of innovative technologies for meat animal appraisal and meat production, value addition and waste valorization for augmenting farmers income and entrepreneurship.	National Livestock Mission	Dr. V. N. Vasudevan	Department of Livestock Products Technology, Meat Technology Unit, Mannuthy	158.78

19	Semiochemical based tick control strategies for the sustainable mitigation of haemoprotozoan/ rickettsial diseases in ruminants	DST-SERB SURE	Dr. Asha Rajagopal	Department of Veterinary Parasitology, CVAS, Mannuthy	29.41
20	Pilot study on effect of oral supplementation of turmeric extract on production performance of pigs	M/sArjuna Natural Pvt. Ltd.	D. M. P. Unnikrishnan	Department of Animal Reproduction, CPPR, Mannuthy	2.4
21	SC-SP project for the socio-economic development of goat farmers in Parakode (Minor) Kollam district, Kerala	ICAR SC-SP	Dr. Marykutty Thomas	Department of Animal Breeding and Genetics, CASAGB, Mannuthy	4.6
22	Genetic improvement of Vechur and Kasargode cattle of Kerala	Rashtriya Gokul Mission	Dr. Manoj M.	Department of Animal Breeding and Genetics, CVAS, Mannuthy	79.2
23	Establishment of an advanced veterinary diagnostic imaging centre and upgrading of diagnostic therapeutic and surgical facilities for large animals at TVCC, Pookode, Wayanad (Vythiri Grama Panchayat)	Wayanad Package	Dr. Bipin K. C.	Teaching Veterinary Clinical Complex, Pookode	500

ICAR Network Projects

SL No	Name of faculty (Principal Investigator)	Title of Project	Department	Outlay/year (in Lakhs)
1	Dr. Arun George	All India Network Project on Ethno Veterinary Medicine (Former Outreach Programme on Ethno Veterinary Medicine)	Department of Clinical Medicine, Ethics and Jurisprudence, CVAS Mannuthy	5.14
2	Dr. Beena C Joseph	AICRP on Poultry Breeding, Mannuthy Centre	AICRP on Poultry for Eggs, Mannuthy	66.50
3	Dr. Radhika G.	AICRP on Cattle-Field Progeny Testing Scheme	Centre for Advanced Studies in Animal Genetics and Breeding, Mannuthy	41.48
4	Dr. R. Thirupathy Venkitchalopathy	AICRP in Goat Improvement	Centre for Advanced Studies in Animal Genetics and Breeding, Mannuthy	25.00

5	Rejeesh R.	Network centre of Dairy Microbes (ICAR-NCVTC, Hisar, Haryana)	College of Dairy Science and Technology, Thiruvananthapuram	2.00
6	Dr. R. Thirupathy Venkitchalapathy	AICRP on pigs	Centre for Pig Production and Research, Mannuthy	34.05
7	Dr. R. Thirupathy Venkitchalapathy	Network project on Animal Genetic Resources	Centre for Pig Production and Research, Mannuthy	11.00

2. Research Report: Report for the year 2023-24 is not prepared

3. Ph.D. and P.G. Thesis

Sl. No.	Name of the Thesis	Degree Conferred	Department
1	Comparative histomorphology and ultrastructure of the skeletal muscle of broiler and Kuttanad ducks	PhD	Veterinary Anatomy and Histology
2	Social and feeding behaviour in free-ranging and captive populations of lion-tailed macaque (<i>Macaca silenus</i>)	PhD	Animal Sciences
3	Development and quality evaluation of shelf stable extruded snack incorporated with chicken meat	PhD	Livestock Products Technology
4	Transcriptome analysis of pectoral muscle among Pekin and Kuttanad ducks	PhD	Poultry Science
5	Efficacy of campylophages and selected phytochemicals in the control of campylobacter biofilms	PhD	Veterinary Public Health
6	Analysis of differential expression of microRNA in lipopolysaccharide challenged lymphocytes of Vechur and crossbred cattle	PhD	Veterinary Biochemistry
7	Multidrug resistance profiling of bacterial pathogens in bovine mastitis and <i>in vitro</i> therapeutic interventions using silver nanoparticles	PhD	Veterinary Epidemiology and Preventive Medicine
8	Prediction of protein coding genes in rumen metagenomic reads of cattle with machine learning based approach	PhD	Animal Genetics and Breeding
9	Detection and characterisation of bacterial and viral agents associated with neonatal diarrhoea in calves	PhD	Applied Microbiology
10	Evaluation of calf rearing practices to develop new strategies for producing healthy replacement heifers	PhD	Livestock Production Management
11	Influence of season on follicular development and oocyte competence in crossbred dairy cattle	PhD	Animal Reproduction, Gynaecology and Obstetrics

12	Evaluation of cutaneous wound healing in captive Asian Elephant (<i>Elephas maximus</i>)	PhD	Veterinary Surgery and Radiology
13	Predictive potential of physio-biochemical parameters for peri-parturient production diseases in crossbred dairy cows	PhD	Livestock Production Management
14	Profiling of non-classical Renin Angiotensin Aldosterone system in cardiac diseases in dogs	PhD	Veterinary
15	Structural integrity of digital cushion and its relevance as a predictor of claw horn disruption lesions in crossbred cattle of Kerala	PhD	Veterinary Anatomy and Histology
16	Assessment of linkage of clones of drug-resistant <i>Escherichia coli</i> among broiler chicken and farmed fish and the efficacy of synthesised nanoparticles on recovered isolates	PhD	Veterinary Public Health
17	Clinico-therapeutic studies of pyoderma in dogs and <i>in vitro</i> efficacy of green synthesised silver nanoparticles using <i>Azadirachta indica</i> against <i>Staphylococcus epidermidis</i> isolates	PhD	Veterinary Epidemiology and Preventive Medicine
18	Physiological effects of soybean isoflavones as oestrogen agonists on ovarian receptor dynamics of layer chicken	PhD	Veterinary Physiology
19	Detection of selection signatures, single nucleotide variants and functional candidate genes for production traits based on whole genome re-sequencing of indigenous goat breeds of Kerala	PhD	Animal Genetics and Breeding
20	Comparison of whole blood transcriptome profiles of Vechur cattle and high and low milk producing crossbred cattle of Kerala	PhD	Animal Genetics and Breeding
21	Responses of Malabari and Attapady black goats to multiple stressors	PhD	Livestock Production Management
22	Evaluation of tiletamine-zolazepam and tiletamine-zolazepam-isoflurane anaesthesia in xylazine/dexmedetomidine and butorphanol premedicated goats	PhD	Veterinary Surgery and Radiology
23	Diversity analysis of Chara and Chemballi varieties of Kuttanad ducks	PhD	Poultry Science
24	<i>In vitro</i> embryo production by supplementing oocyte maturation medium with follicular fluid exosomes	PhD	Animal Reproduction, Gynaecology and Obstetrics
25	Formulation of hypoallergenic whey protein supplement with enhanced iron bioavailability	PhD	Dairy Chemistry
26	Development and evaluation of helix loop-mediated amplification assay for detection of <i>Listeria monocytogenes</i> in milk and meat	PhD	Veterinary Public Health

27	Fertility of cryopreserved Malabari buck semen on post-thaw supplementation of goat seminal plasma	PhD	Animal Reproduction, Gynaecology and Obstetrics
28	Antineoplastic effect of <i>Semecarpus anacardium</i> nut milk extract and <i>Tinospora cordifolia</i> stem extract in tumour-induced mouse model	PhD	Molecular Genetics
29	Immunohistochemical evaluation of cancer stem cells in canine mammary tumours using biomarkers.	PhD	Veterinary Pathology
30	Feeding value of grass silage incorporated with propionic acid and bacterial inoculum in crossbred heifers	MVSc	Animal Nutrition
31	Follicular fluid exosome supplementation on <i>in vitro</i> maturation competence of bovine oocytes exposed to heat stress	MVSc	Animal Reproduction, Gynaecology & Obstetrics
32	Induction of oestrus using long term and short term progesterone based protocols in anoestrous goats	MVSc	Animal Reproduction, Gynaecology & Obstetrics
33	Foeto-maternal haemodynamics and combined thickness of uterus and placenta for prediction of time of whelping in canines	MVSc	Animal Reproduction, Gynaecology & Obstetrics
34	Medical management of canine pyometra with prostaglandin e1 analogue and progesterone receptor antagonist	MVSc	Animal Reproduction, Gynaecology & Obstetrics
35	Development and evaluation of enrobed chicken nuggets incorporated with millets and hydrocolloids	MVSc	Livestock Products Technology
36	Dietary supplementation of selected essential amino acids in large white yorkshire piglets	MVSc	Animal Nutrition
37	Comparison of multimodal anaesthesia protocols with isoflurane and sevoflurane maintenance in geriatric canine patients	MVSc	Veterinary Surgery & Radiology
38	B-mode ocular ultrasonography for diagnosis and treatment of glaucoma in dogs	MVSc	Veterinary Surgery & Radiology
39	Assessment of seroprevalence and molecular diagnosis of leptospirosis in cats	MVSc	Veterinary Microbiology
40	Development and standardisation of flavoured egg drink	MVSc	Poultry Science
41	Prevalence of multiple anthelmintic resistance in <i>haemonchus contortus</i> of caprines	MVSc	Veterinary Parasitology
42	Evaluation of synthetic analogue of assembly pheromone for tick control in ruminants	MVSc	Veterinary Parasitology
43	Effect of heat stress on milk fatty acid profile and expression of stearyl-coenzyme a desaturase gene in crossbred and vechur cattle	MVSc	Veterinary Biochemistry

44	Effect of energy supplementation using maize and soy lecithin during late gestation on production performance of crossbred cattle	MVSc	Animal Nutrition
45	Dietary inclusion of garden cress seed (<i>lepidium savitum</i>) in growing rabbits	MVSc	Animal Nutrition
46	Genomic characterisation of cellulolytic bacteria from dung of elephant and horse	MVSc	Animal Nutrition
47	Effect of different levels of protein in total mixed ration on growth performance in vechur cattle	MVSc	Animal Nutrition
48	Influence of dietary levels of rumen undegradable protein on growth of crossbred calves	MVSc	Animal Nutrition
49	Production performance of tellicherry and red variety of desi chicken under intensive and backyard systems and determinants of knowledge and adoption of recommended practices by poultry farmers	MVSc	Poultry Science
50	Effect of dietary supplementation of postbiotics derived from lactobacillus plantarum on growth performance, immune status and intestinal salmonella spp count of broiler chicken	MVSc	Poultry Science
51	Isolation and characterisation of <i>avibacterium paragallinarum</i> from poultry in kerala	MVSc	Veterinary Microbiology
52	Molecular characterisation of antibiotic resistance of bacteria isolated from the reproductive tract of subfertile dogs during oestrus	MVSc	Veterinary Microbiology
53	Welfare of weanling large white yorkshire piglets on different bedding materials	MVSc	Livestock Production Management
54	Quality assessment of cow milk in different seasons in thrissur district	MVSc	Livestock Production Management
55	Goat production system and extent of adoption of scientific practices in androth and kavaratti islands of lakshadweep	MVSc	Livestock Production Management
56	The cattle production systems of selected islands of lakshadweep: current practices and future prospects	MVSc	Livestock Production Management
57	Effect of forced aeration and turning on the quality of livestock manure compost	MVSc	Livestock Production Management
58	Impact of heat stress on physio-biochemical parameters during early lactation of crossbred dairy cattle	MVSc	Veterinary Physiology
59	Evaluation of wound healing activity of <i>cissus quadrangularis</i> and <i>chromolaena odorata</i> in mitchicillin resistant <i>staphylococcus aureus</i> infected wound in wistar rats	MVSc	Veterinary Pharmacology & Toxicology
60	Modulation of oestrogenic activity by methanolic extracts of bark and flower of <i>saraca asoca</i> in mcf-7 cell line	MVSc	Veterinary Pharmacology & Toxicology

61	Association of mucin 6 genotypic variants with gastrointestinal parasitic resistance traits in malabari goats of kerala	MVSc	Animal Genetics & Breeding
62	Immunohistochemical localisation of phosphate and tensin homolog deleted on chromosome 10 and p53 in relation to hormone receptors in canine mammary tumours.	MVSc	Veterinary Pathology
63	Studies on e and n cadherins as epithelial-mesenchymal transition makers in canine mammary tumours	MVSc	Veterinary Pathology
64	Pathological, immunohistochemical and molecular studies of parvo, rota and corona viral gastroenteritis in dogs and cats	MVSc	Veterinary Pathology
65	Screening of synergistic viral infections in porcine circovirus-2 infected piglets and comparative evaluation of il-6 and tnf-a	MVSc	Veterinary Pathology
66	Evaluation of protective effect of <i>murraya koenigii</i> extract in experimentally induced acute pancreatitis in rat.	MVSc	Veterinary Pathology
67	Screening for <i>salmonella spicies</i> and <i>shigella species</i> in chicken shawarma	MVSc	Veterinary Public Health & Epidemiology
68	Molecular characterisation of bacterial and viral pathogens associated with respiratory tract infections in gogs	MVSc	Veterinary Microbiology
69	Comparative evaluation of linear and phased array transducers in ultrasonographic diagnosis of lung diseases of dogs	MVSc	Veterinary Medicine
70	Symmetric dimethyl arginine as a biomarker for early detection of renal injury associated with brugian filariasis in dogs	MVSc	Veterinary Medicine
71	Consumer preferences and awareness about safety and quality of meat and meat products	MVSc	Veterinary extension Education
72	Association of common bacterial pathogens in urinary tract infections in dogs with selected biomarkers	MVSc	Veterinary Medicine
73	Structure and vascular pattern variations of the tumour microenvironment and associated lymph node in murine model of triple negative breast cancer	MVSc	Veterinary Anatomy
74	Development and efficacy assessment of a customised percussive stunner for rabbits	MVSc	Livestock Products Technology
75	Antifungal susceptibility profiling of mycotic isolates from reproductive tract of postpartum cows	MVSc	ARGO
76	Detection and molecular characterisation of viruses associated with reproductive dysfunction in pigs with special reference to porcine teschovirus	MVSc	Veterinary Microbiology

77	Efficacy of dry cow therapy on the persistence of common contagious pathogens in bovine under in wayanad district	MVSc	Veterinary Epidemiology and Preventive Medicine
78	Effect of dietary supplementation of banana inflorescence with probiotic on growth performance in broiler chicks	MVSc	Animal Nutrition
79	Pathology of ocular and adnexal lesions in dogs with special reference to expression of atp-binding cassette g2 protein in corneo-conjunctival lesions	MVSc	Veterinary Pathology
80	Clinico.epidemiological and therapeutic studies on renal dysfunctton In cats with special reference to leptospira spp. And feline coronavirus	MVSc	Veterinary Epidemiology and Preventive Medicine
81	Effect of dtetary incorporation of encapsulated probiotics on growth performance of large white yorkshire crossbred piglets	MVSc	Animal Nutrition
82	Evaluation of pro-inflammatory cytokines and acute phase proteins of post-partum dairy cows with subclinical endometritis and its effect on fertility	MVSc	ARGO
83	Early diagnosis of pesudopregnancy in goats by ultrasonography and therapeutic management using croprostamol sodium	MVSc	ARGO
84	Molecular detection of major pathogens associated with infectious abortion of domestic pigs	MVSc	Veterinary Epidemiology and Preventive Medicine
85	<i>In vivo</i> pharmacokinetics of meropenem alone and in combination with cat]onic antimicrobial peptide, cecropin a-(1 -7) melifrn agatnst mult -drug resttant <i>eschertchia coli</i> in broiler chicken	MVSc	Veterinary Pharmacology and Toxicology
86	Comparative diagnostic and therapeutic protocol for the management of dermatophytosis in dogs	MVSc	Veterinary Epidemiology and Preventive Medicine
87	Comparative evaluation of the antimicrobial activity of kaempferia galanga and curcuma longa against multi-grug resistant non-typhoidal salmonella spp. In broiler chicken	MVSc	Poultry Science
88	Livestock rearing practicesamong the tribal farmers of wayanad district of kerala	MVSc	Veterinary Extension Education
89	Assessment of the status and job satisfaction of private veterinary practitioners in kerala	MVSc	Veterinary Extension Education
90	Effect of dietary incorporation of sukumara gritham residue on growth performance of malabari kids	MVSc	Animal Nutrition
91	Nerve conduction studies for localisation of neurological lesions in paralytic dogs and its therapeutic management	MVSc	Veterinary Clinical Medicine, Ethics and Jurisprudence

92	Source tracing of drug-resistant klebsiella pneumoniae causing human respiratory tract infections from domestic animals and environment	MVSc	Veterinary Public Health and Epidemiology
93	Survival prognosis of canine neonates delivered by medical assistance and caesarean section	MVSc	ARGO
94	Molecular diagnosis and therapeutic of respiratory mycoplasmosis in goats of wayanad district	MVSc	Veterinary Epidemiology and Preventive Medicine
95	Clinico therapeutic studies on tracheal collapse in dogs	MVSc	Veterinary Clinical Medicine, Ethics and Jurisprudence
96	Clinico-biochemical and ultrasonographic evaluations of hepatobiliary disorders in domestic cats	MVSc	Veterinary Clinical Medicine, Ethics and Jurisprudence
97	Detection of polymorphisms of the olfactory receptor family 51 sub-family h member 1 gene and the association of different genotypes with theileria infection in crossbred and vechur cattle of kerala	MVSc	Animal Genetics and Breeding
98	Standardisation and quality evaluation of <i>kozhi ada</i> , a malabari shelf stable snack	MVSc	Livestock Products Technology
99	Development and quality evaluation of dehydrated porridge mix containing chicken meat powder	MVSc	Livestock Products Technology
100	Clinico-diagnostic and therapeutic management of dermatophytosis in cats	MVSc	Veterinary Epidemiology and Preventive Medicine
101	Effect of supplementation of probiotics and postbiotics from lactobacillus plantarum and prebiotics in growth performance of broiler chicken	MVSc	Animal Nutrition
102	Comparison of the biogas production potential of four types of full-scale biogas plants utilizing cow dung as feedstock	MVSc	Livestock Production Management
103	Assessment of traditional and molecular methods for the estimation of post-mortem intervals in dogs	MVSc	Veterinary Pathology
104	Molecular typing of canine parvovirus and clinico pathological studies on canine parvovirus enteritis in dogs of kerala	MVSc	Veterinary Medicine
105	Immunohistochemical evaluation of mts homologue 2 protein in various cutaneous tumours in dogs	MVSc	Veterinary Pathology
106	Effect of supplementation of essential oils from glycyrrhiza glabra and zingiber officinale on performance of broiler chicken	MVSc	Animal Nutrition
107	Characterisation of lactic acid bacteria from raw milk of wayanad district with emphasis on technological properties	MVSc	Dairy Science
108	Efficacy of green synthesised zinc oxide-calcium oxide nanocomposites against multi-drug-resistant bacterial pathogens of public health importance	MVSc	Veterinary Public Health and Epidemiology

109	Detection and molecular characterisation of rabies virus from animals in kerala based on nucleoprotein and glycoprotein genes	MVSc	Veterinary Microbiology
110	Etiopathological and therapeutic studies on gangrenous mastitis in goats	MVSc	Veterinary Epidemiology and Preventive Medicine
111	Polyvinyl alcohol-hydroxyapatite composite ceramic as a bone craft substitute in rat calvarial defect model	MVSc	Veterinary Surgery and Radiology
112	Multimodal balanced general anaesthesia using tiletamine, zolazepam, butorphanol, dexmedetomidine, propofol and lignocaine in dogs	MVSc	Veterinary Surgery and Radiology
113	An assessment of resistance and virulence of enterococcal isolates from dahi/ thairu samples	MTech	Dairy Microbiology
114	Effect of plectranthus amboinicus on oxidative stability of vechur ghee	MTech	Dairy Chemistry
115	Modelling the production and price of milk in Kerala	MSc	Biostatistics
116	Modelling lactation curve in buffaloes	MSc	Biostatistics
117	Isolation, antibiogram and phylotyping of <i>Escherichia coli</i> associated with canine pyometra	MSc	Applied Microbiology
118	Isolation, identification and antibiogram of bacterial organisms in the reproductive tract of sub fertile dogs during oestrus	MSc	Applied Microbiology
119	Assessment of virulence factors of <i>Riemerella anatipestifer</i> isolates	MSc	Applied Microbiology
120	Evaluation of multiplex polymerase chain reaction for diagnosis of pasteurellosis, contagious caprine pleuropneumonia and peste des petits ruminants in goats	MSc	Applied Microbiology
121	Comparison of amino acid profile of Malabari and Attappady black goat milk in different geographical locations	MSc	Biochemistry and Molecular Biology
122	Analysis of amino acid profile of milk and milk products of cattle and buffalo using UHPLC	MSc	Biochemistry and Molecular Biology
123	Evaluation of cytotoxic potential of methanolic extract and fractions of <i>Cyclea peltata</i> leaves in MCF-7 cell lines.	MSc	Biochemistry and Molecular Biology
124	<i>In vitro</i> evaluation of anti-inflammatory activity of <i>Tamarindus indica</i> seed coat extract and its fractions	MSc	Biochemistry and Molecular Biology
125	Determination of water soluble vitamins in the milk and milk products of cattle and goat using UHPLC	MSc	Biochemistry and Molecular Biology
126	Characterisation of pepsin soluble collagen from Daggertooth pike conger (<i>Muraenesox cinereus</i>)	MSc	Biochemistry and Molecular Biology
127	Assessment of lipid mobilisation and liver enzyme levels during early lactation in crossbred cows	MSc	Biochemistry and Molecular Biology
128	Molecular characterisation of the coding region of <i>ATPIA1</i> gene in Malabari goats	MSc	Biochemistry and Molecular Biology

129	Sequencing of promoter and coding regions of serum Albumin gene of Vechur cattle and its comparison with crossbred cattle of Kerala	MSc	Biochemistry and Molecular Biology
130	Effects of short-term mobile phone radiation on tulsi plant on its morphological features	MSc	Wildlife Studies
131	A study on the acute toxic effects of Diclofenac and Amoxicillin in <i>Danio rerio</i>	MSc	Wildlife Studies
132	Activity pattern of smaller mammals in winter using camera traps in Khetolai, Rajasthan	MSc	Wildlife Studies
133	Estimation of defecation rate and age determination based on dung size in the captive Asian elephant (<i>Elephas maximus</i>)	MSc	Wildlife Studies
134	Nesting site selection of woolly-necked stork (<i>Ciconia episcopus episcopus</i> , BODDAERT 1783) in Kerala	MSc	Wildlife Studies
135	Surgical management of traumatic spinal injuries in snakes using modified microplate spinal fixation technique	MSc	Wildlife Studies
136	Factors affecting the communal roosting behaviour of birds at Panamaram heronry, Wayanad district	MSc	Wildlife Studies
137	Assessment of public perspectives and prey decline as Possible threats to otters in selected sites of Wayanad	MSc	Wildlife Studies
138	Determining the presence of Salmonella species and its antibiotic resistance in captive snakes of MVR Snake Park, Kannur	MSc	Wildlife Studies
139	Diversity, abundance and forage plant association in Relation with proboscis length of selected butterfly species in Kerala Veterinary and Animal Sciences University's Pookode campus	MSc	Wildlife Studies
140	Microhabitat specificity of Nyctibatrachus frogs in Riparian habitats, basic description of their call structure and threats to their population in selected sites of Wayanad district	MSc	Wildlife Studies
141	Nesting status evaluation of White-bellied Sea eagle (<i>Haliaeetus leucogaster</i>) in northern Kerala	MSc	Wildlife Studies
142	Evaluation of the efficacy of two deterrents (HERBOLIV® and BOREP®) against crop raiding wild animals	MSc	Wildlife Studies
143	Antioxidant activity of herbal yoghurt incorporated with tulsi (<i>Ocimum sanctum</i>) and cinnamon (<i>Cinnamomum zeylanicum</i>) extracts.	MSc	Quality Control in Dairy Industry
144	Synthesis, characterisation and evaluation of antibacterial effect of lactoferrin conjugated silver nanoparticles	MSc	Biochemistry and Molecular Biology

145	Isolation and characterization of <i>Staphylococcus</i> spp. in different brands of milk powders marketed in Thrissur district	MSc	Quality Control in Dairy Industry
146	Molecular characterisation of coding region of Interleukin-4 Gene of Vechur and crossbred cattle	MSc	Biochemistry and Molecular Biology
147	Molecular characterisation of <i>Amblyomma integrum</i> (Deer tick)	MSc	Wildlife Studies
148	Molecular characterization of <i>Paragonimus</i> species among wild animals	MSc	Wildlife Studies
149	Analysis of heavy metal residues in spider webs of common funnel web spider (<i>Hippasa agelenoides</i>) by atomic absorption spectrometer	MSc	Wildlife Studies
150	Determination of virulence genes and antibiotic resistance of <i>Escherichia coli</i> isolated from heronry birds in various parts of Kerala	MSc	Wildlife Studies
151	Niche partitioning and phylogenetics of langur species on selected areas of southern western ghats, India	MSc	Wildlife Studies
152	Roosting ecology of house sparrow (<i>Passer domesticus</i>) in KVASU campus, Pookode, Wayanad, Kerala	MSc	Wildlife Studies
153	Nesting status of olive ridley sea turtles (<i>Lepidochelys olivacea</i>) in Kasaragod coast, Kerala and its conservation aspects	MSc	Wildlife Studies
154	Understanding people's perception of snakes and snakebite remedies at Kannur district, Kerala	MSc	Wildlife Studies
155	Morphological and molecular characterisation of <i>Bertiella studeri</i> from a monkey	MSc	Wildlife Studies
156	Phylogenetic analysis of Nilgiri Tahr (<i>Nilgiritragus hylocrius</i>) using mitochondrial cytochrome B gene	MSc	Wildlife Studies
157	Utilization of ex polysaccharide producing <i>Streptococcus thermophilus</i> and <i>Lactobacillus bulgaricus</i> for enhancing rheological and sensory attributes of low-fat yoghurt	MSc	Quality Control in Dairy Industry
158	Development and quality evaluation of functional yoghurt prepared with <i>Lactobacillus rhamnosus</i> GG and carrot (<i>Daucus carota</i> L.) juice	MSc	Quality Control in Dairy Industry
159	Measurement of knowledge, attitude and practices among the public residing around the Indian Flying Fox (<i>Pteropus medius</i>) roosting site	MSc	Wildlife Studies
160	People's perception on human-Bonnet Macaque (<i>Macaca radiata</i>) conflict with special reference to a selected sacred grove of Calicut, Kerala	MSc	Wildlife Studies
161	People's perception of human-elephant conflict in Vythiri panchayath of Wayanad district	MSc	Wildlife Studies

162	Molecular detection of <i>Leptospira</i> from environmental samples	MSc	Animal Biotechnology
163	Modelling the productive lifetime of female goats	MSc	Biostatistics
164	Isolation, identification and antimicrobial sensitivity testing of <i>Escherichia coli</i> and <i>Salmonella</i> spp. from pet birds with gastro-intestinal ailments	MSc	Applied Microbiology
165	Molecular detection of antibiotic resistance in leptospiral isolates from Kerala	MSc	Applied Microbiology
166	Antibiogram of bacterial isolates from anterior vaginal swabs and faecal material of dogs affected with pyometra.	MSc	Applied Microbiology
167	Molecular typing of <i>Staphylococcus aureus</i> isolated from canine pyometra	MSc	Applied Microbiology
168	Evaluation of serum biochemical status, endocrine profile and oxidative stress in Malabari does during periparturient period	MSc	Biochemistry and Molecular Biology
169	Estimation of Taurine and L-Carnitine in plasma of dogs with dilated cardiomyopathy by high performance liquid chromatography	MSc	Biochemistry and Molecular Biology
170	Effect of soyabean meal incorporated diet on expression of oestrogen receptor alpha in non-gonadal tissues of layer chicken	MSc	Biochemistry and Molecular Biology
171	Role of reactive oxygen species and Epigallocatechin-3-Gallate in the stemness of breast cancer cells	MSc	Biochemistry and Molecular Biology
172	Evaluation of apoptotic activity and infiltration of CD8+ lymphocyte subsets in the microenvironment of Murine model of triple negative breast cancer	MSc	Animal Biotechnology
173	Genomic imprinting and allele-specific expression of Caprine <i>insulin-like growth factor 2</i> gene	MSc	Animal Biotechnology
174	Evaluation of poultry carcass composting using different inoculums	MSc	Animal Sciences
175	Management practices, production performance and marketing methods in backyard poultry production system	MSc	Animal Sciences
176	Isolation and characterization of <i>Staphylococcus</i> spp. in different brands of milk powders marketed in Thrissur district.	MSc	Quality Control in Dairy industry
177	Assessment and modelling of pre-weaning kid mortality	MSc	Biostatistics
178	Cytotoxic potential of methanolic extract of <i>Cucurbita pepo</i> L seed and its fractions in MCF-7 cell lines.	MSc	Biochemistry and Molecular Biology
179	Antibacterial activity of silver nanoparticles of <i>Chromolaena odorata</i> extract loaded Carrageenan-gelatin hydrogel against multi drug resistant bacteria	MSc	Biochemistry and Molecular Biology

180	<i>In vitro</i> evaluation of anti-inflammatory activity of methanol extract of <i>Erythrina variegata</i> stem bark and its fractions.	MSc	Biochemistry and Molecular Biology
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4. Journal of Veterinary and Animal Sciences

The Journal of Veterinary and Animal Sciences is a quarterly publication of the Kerala Veterinary and Animal Sciences University (KVASU) devoted to the publication of original research papers on various aspects of Veterinary, Dairy and Animal Sciences and clinical articles which are of interest to research workers and practitioners engaged in livestock and poultry production. The Journal was first published in 1970. The journal launched its website in 2018 and is currently available as an online open access journal with E- ISSN- 2582-0605 through the link: <http://www.jvas.in>. The articles published in the journal are copyrighted and licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. The journal is currently indexed with several indexing agencies.

The journal is also listed in the NAAS score list published by National Academy of Agricultural Sciences.

The journal follows stringent measures to ensure quality of published articles and so manuscripts are qualified to be forwarded to the reviewers only after screening for plagiarism using software subscribed by the University. Currently plagiarism checker provided by UGC- 'Urkund' software is being used. Every manuscript submitted undergoes a strict review process managed through the online journal management system and follows a double blind review process.

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DIRECTORATE OF ENTREPRENEURSHIP

The Directorate of Entrepreneurship headed by Director (Entrepreneurship) has Publications, Training, Entrepreneurship, capacity building and knowledge transfer, Media and Informatics, Technology Enabled Distance Learning as major divisions. Directorate of Entrepreneurship with headquarters at Pookode, Wayanad focus on capacity building of farmers, entrepreneurs and extend services through outreach programmes, developing model farms, supporting self-help groups in improving production and productivity of livestock. This division also conducts need based researches in different fields, workshops, exhibitions and seminars on behalf of the University. The Publication Division coordinates the publication works of University publications. Technology enabled Distance Learning Centre coordinates the conduct of various distance learning courses of the University. The 24X7 Veterinary Services “e- Vet connect” provides veterinary services and advisories to owners of large and small ruminants, pet animals in the State. The facilities for emergency veterinary services of experts even after normal working hours are provided. The Centre for Livestock Development and Policy Research undertakes policy research and capacity building. The Regional Research and Training Centre at Thiruvananthapuram act as an intermediary between the headquarters of the University and Government focusing on policy issues and trainings. The Academic Staff College of the University functioning under the directorate, focus on career advancement programmes of the faculty and other advanced training programmes. The directorate launched the Technology Business Incubation Centre (TBIC) in the Mannuthy campus during this year, with main focus on student entrepreneurship and startups. The Directorate of Students Welfare monitors the student welfare activities, coordination of NSS activities etc. The Directorate plays a vital role in commercializing new ideas and raising productivity and employment in all sectors, specially benefitting the farming community. The University student focused activities include the Student Entrepreneurship Scheme, educating students in cultivating a startup business idea, teaching them basic strategies like estimating costs and writing a project proposal/ business plan etc. 20 percent attendance relaxation and 4 percent grace marks are provided for students who pursue entrepreneurship and innovation during their studies. The Entrepreneurship division gives major emphasis to entrepreneurship development, extension, knowledge dissemination, distance learning and awareness programmes.

CAMPS

- Veterinary Medical Camp ON 13th April 2023
- Two days “Aaral”- summer camp for students from Tribal Hamlets of Wayanad- Chembatty, Narangakandy and Mutharikunnu on May 2023
- 1 day Dairy farm and Dairy plant exposure visit for Children aged Three to Ten. 29 kids participated in the 1 day camp at VKIDFT
- Veterinary health camp for goat and feed distribution at Vellapankandy on 3rd August 2023
- Awareness and Fertility camp- Pashudhan Jagrithi Abhiyan- 14th August 2023

- Rabies Day Seminar Diabetic Camp on 28th September 2023
- Pashudhan Jagrithi Abhiyan -Infertility Treatment Camp on 21st September 2023
- As part of OPPAM programme conducted Song and Poetry workshop at Chembatty, Chundale on 12/11/2023
- NSS students 7 days camp at Nilambur-Pre camp-Visit to tribal hamlet on 30/01/2024
- The NSS units of CVAS Pookode conducting NSS camp. The camp is organised with support from JSS-Jan Shikshan Sansthan scheme under Ministry of Skill Development and Entrepreneurship (MSDE) and Animal Husbandry Department, Kerala-09/02/2024

TRAINING

- KSVC Sponsored Mosquito taxonomy Workshop for specialist Veterinarian on April 2023 at CVAS, Pookode.
- Training on Techniques in Small Animal Anesthesia
- Obligatory Three Months Training Program for Assistant Directors of AHD-15.05.2023- 12.08.2023- Inauguration Function
- Hands on training on Molecular Biology Techniques and Bioinformatics Tools for Advance Life Science Research
- 5 days training on Laboratory Animals as Experimental Models on 2nd to 6th May 2023 at CVAS, Mannuthy.
- Training on Technology identification and commercialization workshop on June 2023
- Workshop on Fluctuating Price of Poultry Meat- Challenges and Alternatives on 30th June 2023 at CASPS Mannuthy.
- High-end workshop (Karyashala), special emphasis to recent techniques in antimicrobialresistance on July 2023
- One day workshop on Skill Enhancement on Radio Talk for Faculty and students on 22nd July 2023
- Training programme on advances in cashew production technology under DCCD Scheme
- Entrepreneurship training on rabbit processing and Marketing (2 batches)
- Hands on training on value added Food products
- Hands on training on ‘ Preparation of Fermented milk products and Starter culture Technology’
- Training on Entrepreneurship development in Fresh and processed meat products
- “Prathiksha” Hands on training-Broiler Farming in Backyard system supported with BSF larva units on 4th August 2023 at CASPS Mannuthy
- Five days Hands on Training on “Basic Training on General Management, Health Care and Tranquilization of Captive Asian Elephants at ASC, Mannuthy from 21/08/2023 to 25/08/2023
- Three month obligatory AHD training for Assistant Directors, 1st batch - Valedictory function on 14th August 2023
- Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Pozhuthana on 19th September 2023
- Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Ambalavayal on 25th

September 2023

- Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Mananthavady on 26th

September 2023

- Farmers training at Goat farm, Mannuthy on 13/10/2023
- 1st session of Technology Valuation and Communication workshop at VKIDFT, Mannuthy on 7th October 2023
- 2nd session Technology Valuation and Commercialization workshop at MTU, Mannuthy
- 3rd session Technology Valuation and commercialization workshop at CVAS, Mannuthy
- Three months obligatory training for Assistant Directors of AHD 2nd Batch 2023-24 inaugural day 9th October 2023 introductory session
- Five days training and capacity building programme on need based intervention for livelihood up-liftment of scheduled caste clusters by supply of heifer cow at on 18th to 21st and 25th October, CVAS, Pookode
- One day workshop on Harnessing Artificial Intelligence’s impact on Education, Research and Entrepreneurship on 28.10.2023
- Workshop on Sustainability of Career Development Centres in collaboration with ICAR-NAARM on 07th November 2023
- National Workshop on AMR conducted by department of VPH, CVAS Mannuthy, School of Zoonoses and ReAct Asia Pacific on 24th, November 2023
- Training in hygienic practices in dairy plant and processing of milk for preparation of milk products
- Apprentice training in the preparation and quality assurance of milk and milk products
- Training in operation and maintenance of Dairy equipment
- Training on Instrumentation and quality control in Dairy Industry
- Workshop on the Sustainability of CDCs and NAHEP Component 2-07/11/2023
- One day workshop on Formulation of strategies and finalisation of training modules- 7th December 2023
- Sparkle, Discover Your Passion- One day workshop on 13/12/2023
- Entrepreneurship Awareness Programme on Food Processing- One day workshop on 14th December 2023
- Training programme for Imparting practical knowledge in canine cardiology to practicing veterinarians- December 14-16, 2023
- Leadership training programme for newly elected presidents, secretaries and UUCs of students Union 23-24 as on 18th December 2023
- State Level Workshop- Feeding Strategies and Improving Feed Resources for Sustainable Milk Production in Kerala- 19th December 2023
- ‘Arike’-Scientific patient care training campaign an awareness class and practical training session was organized by NSS unit of CASM in association with Edathanattukara palliative care society on 03/01/2024
- Value added snacks from milk- Training programme on 8th and 9th January 2024
- NSS collaboration with DSW and KVASU, organised a dynamic one day training program on

January 2024

- A one day career guidance training program for Higher Secondary school students of the Chadayamangalam constituency was organized at Sanmargadayini Smaraka Vayanasala, Chanappara, Kadakkal on January 15, 2024
- Awareness and Sensitisation workshop on Technology valuation and commercialisation on 18th January 2024
- An interactive lecture entitled “Digital library platform for personalized learning and research, build your e-library with all e contents” on 19th January 2024
- International workshop – Animal welfare One Health on 22nd January 2024
- Three days online theory (January 11-13, 2024) and three days offline hands on (January 18-20, 2024) training programme for “Imparting practical knowledge in canine cardiology to practicing veterinarians” at UVH & TVCC, Mannuthy
- As part of Oppam project conduct a Poultry management training programme on 18th January 2024
- Hands on training in artificial insemination in goats on 5th March 2024
- Capacity building programme and Hands on training on Artificial insemination in goat
- Workshop on “Participatory Management in Mitigating Human Wildlife Conflict in Kerala”- 12th March 2024
- Awareness workshop for improve mental health, life skills and soft skills, people management and Leadership skills on 12-03-2024

EXTENSION ACTIVITIES

- Dispute Poultry, cage and feed distributed to the Scheduled Tribe beneficiary and Awareness programme as also conducted. Total of 100 beneficiaries received the unit on 1st April 2023 at Vellanoor & Alayaman Gramapanchayath
- Facilitated two days workshop of tribal student of Chempatty to visit Kochi Binnale were train the student for install/ present the binnale work on 3rd April 2023
- SYMPHONY@10- 10th Foundation Day Celebration of CASM & ARS
- Brain Gain Programme- Kerala State Higher Education Council & KVASU on April to June 2023
- Sensitization workshop for Researchable issues on livestock poultry and companion Animals on 10th May 2023 at CVAS, Mannuthy
- Sensitization workshop for Researchable issues on livestock poultry and companion Animals
- Online session on Scientific writing and research publications by Dr John Kastelic Professor of Theriogenology University of Calgary organised as part of brain gain scheme
- FoodiPedia- Experiential Learning Programme-2019 Admission
- 102 students and 10 teachers of Sree Narayana Teachers Training Institute, Kottappuram, Sreekrishna puram, Palakkad, visited CASM & ARS to learn about the activities of our institute and to learn basics of Poultry Production.

- Nanmayulla Mazhakalam seminar on 26th May 2023 and 29th May 2023
- 13th Foundation Day celebration on 14th June 2023
- Free rabies vaccination on 14th June 2023
- Livelihood Intervention Facilitation Enclave(KVASU-LIFE) on 17th June 2023
- Jeevanadham Radio programme on 21st, 22nd and 28th June 2023
- “Oppam” Football coaching inauguration at Chembatty Tribal Hamlet .As the part of program distributed Boot and football for training
- The renovated Technology Information and Sales Centre, Kalpetta was inaugurated by Hon’ble Vice Chancellor at July 2023
- 2022- Kerala Cattle feed, Poultry feed, Mineral mixture (Controlling of production and sales) – bill related select committee workshop on 24th July 2023 at VKIDFT, Mannuthy
- Jeevanadham Radio programme on 05th , 12th , 19th and 26th July 2023
- “Nanmayulla Mazhakalam”- Farmers seminar and fodder distribution on 7th August 2023
- Farmers Science Congress “Nattile Sasthram” on 17th August 2023 at Kabani auditorium, Pookode
- Indipendance Day Quiz cometition, Chempatty Colony on 15th August 2023 as part of “OPPAM”
- The official launch of KVASU programme - ‘**PRATHIKSHA**’ -(backyard poultry rearing model) and free distribution of household BSF Larva units with male Gramasree birds to the selected Kudumbasree members was held at Pananchery Gramapanchayath Hall, Pattikkad, Thrissur. The programme was presided by Sri.Adv.K.Rajan, Ollur MLA and honourable State Minister for Revenue housing, survey and land records, land reforms and housing and inaugurated by Smt.J.Chinchurani, Hon Minister for Animal Husbandry, Dairying and Zoos, Govt of Kerala on 8th September, 2023
- KVASU’s own multimedia studio - ‘**KVASU MIRROR**’ established in the Technology Business Incubation Centre at Mannuthy campus was inaugurated by Smt.J.Chinchurani, Hon Minister for Animal Husbandry, Dairying and Zoos, Govt of Kerala followed by capturing her interview as the first recording on 8th September, 2023
- Jeevanadham Radio programme on 6th, 13th, 16th, 20th and 27th Sebtember 2023
- Cow shed hand over and cow mat distribution at Chembatty colony, Chundale on 18/10/2023
- Poultry and Cattle feed distribution at Chembatty colony, Chundale on 18/10/2023
- KVASU has signed an MoU with Zoological Park, Puthur, Thrissur in presence of ministers, Adv.K.Rajan, Shri. K Krishnankutty, Shri. A.K.Saseendran and Smt. R. Bindu
- NSS Units of CVAS, Pookode in collaboration with Hume Centre, Kalpetta organized Children’s Climate Parliament on 02/10/2023 at Chandragiri Auditorium, Pookode.
- NSS Day was celebrated at CVAS, Pookode. Volunteers were given hands on training on first aid, by resource persons from a CSR initiative of Daya Hospital, Thrissur on 03/10/2023
- Experiential Learning programme as part of course curriculum for 2019 admission DT students was inaugurated on 10/1/2023
- “Cattle Insurance Challenge” conducted to insure cattle at Mananthavady by NSS Volunteers of CVAS, Pookode in collaboration with Vetrinary Hospital and Dairy Coperative Society,

Mamantavady on 13th and 14th October 2023

- As part of the HIV awareness programme, a puppetry was held at College of Avian Sciences and Management in association with FHC, Kottopadam on 16.10.2023.
- World food day celebration on 16th October 2023
- Jeevanadham Radio Programme on 04/10/2023
- Online Programme- Palarivukal- Part I-Farmers seminar on 7/10/2023
- Online Programme- Palarivukal- Part II-Farmers seminar on 14/10/2023
- Online Programme- Palarivukal- Part III-Farmers seminar on 28/10/2023
- Online Programme- Palarivukal- Part IV-Farmers seminar on 11//11/2023
- As part of OPPAM programme conducted Library formation at Chembatty on 03/11/2023
- As part of OPPAM programme conducted friendly football match between students of Chembatty and Yuva Pookode at CVAS, Pookode ground on 05/11/2023
- 15th Kerala Veterinary Science Congress 2023 and International Seminar-17-19 th November 2023
- University Meritday- 27th November 2023
- Poultry distribution and Poultry Feed distribution-22/12/2023 at Vellapnkandy
- The Silver Jubilee celebration of Revolving Fund Poultry Project- 8th December 2023
- World computer literacy day celebration-02/12/2023
- Scientist cabin inaugurated at buffalo farm
- Orientation programme for first year BVSc & AH students- 29/12/2023
- Session on overview of intellectual property rights with special emphasis on patents- 9th January 2024
- University Students Union inauguration
- Inauguration of hostel building and international workshop for research students on 22nd January 2024
- KVASU represented in Face to Face programme of Dairy farmers and stake holders in connection with PADAVU 2024-State Ksheera Sangamam at Anakkara, Idukki
- YIP 6.0 sensitization programme. In order to create an awareness on various programmes of Young innovators programme and to promote entrepreneurship and innovation among students. 19.02.2024
- India @ 2047 on the theme “India’s Panch Pran- A Youth Dialogue/Bharat Ke Panch Pran- Ek Yuva Paricharcha” was organised at CASM by the NSS unit on 19.02.2024
- A talk on “Changing Paradigm in Professional Higher Education”-22-02-2024
- As part of Oppam organised study trip to Global Science Festival. 10 tribal students from Priyadarshini, Naraghakandy and Chembatty were participated in the program
- As part of Oppam livelihood project conducted bird monitoring at Priyadarshini Tribal Hamlet
- NSS programme on 28th February 2024-Class on panch pran: expert talk by Dr.T.S.Rajeev
- Session on “How to innovate” and an exposure visit to biomedical innovation and Incubation at TBII of Sahrudaya College
- As part of Oppam project distributed Goat and Nutrition kit on 25th March 2024

EXHIBITION



- Inauguration of 1000 Square feet KVASU Pavillion at Thrissur Pooram Exhibition 2023
- Enta Keralam Exhibition Stall on April 2023
- Exhibition Stall on pet food and supplements from 1st to 7th November 2023 at Thiruvanthapuram as part of “Keraliyam”, 2023.
- KVASU stall @ Pooppoli, Ambalavayal at 1st to 15th January 2024
- KVASU stall @ international Fisheries congress & Expo 2024 on 12-14 January
- KVASU stall at Malayala Manorama Karshakasree Karshikamela

Two days workshop for tribal students and visit to Kochi Binnale on 3rd and 4th April 2023

Sensitization workshop for Researchable issues on livestock poultry and companion Animals, CVAS, Pookode



Nanmayulla Mazhakalam



KVASU Foundation Day 2023 – June 14th 2023




CDST, Pookode - NSS unit- Distribution of study materials to kids of Chembatty Nagar



“Oppam” Football coaching inauguration at Chembatty Tribal Hamlet. As the part of program distributed Boot and football for training



2022- Kerala Cattle feed, Poultry feed, Mineral mixture (Controlling of production and sales) – bill related select committee workshop

കേരള നിയമസഭ
 2022 ലെ കേരള കന്നുകാലിത്തീറ്റ, കോഴിത്തീറ്റ, ധാതുലവണമിശ്രിതം ഉൽപ്പാദനവും വിൽപനയും നിയന്ത്രിക്കൽ) ബിൽ സംബന്ധിച്ച സെലക്ട് കമ്മിറ്റി

ശില്പശാല

VKIDFT (അറ്ററിനനി അറ്റ് ആനിമൽ സയൻസ് സർവകലാശാല, മണ്ണൂർ) ചെയർപേഴ്സൺ **ശ്രീമതി ജെ. ചിഞ്ചുറാണി** (ബഹു. മുഗസംരക്ഷണ ക്ഷീരവികസന വകുപ്പ് മന്ത്രി)

സെലക്ട് കമ്മിറ്റി അംഗങ്ങളായ **ബിപി. എം.എൽ.എ മാർ,** വെറ്ററിനറി സംരക്ഷണ വിഭാഗം, ഉദ്യോഗസ്ഥർ കർഷക സംഘടന പ്രതിനിധികൾ എന്നിവർ പങ്കെടുക്കുന്നു

23 ജൂലൈ 24 തീയതി രാവിലെ 10.30 ന് VKIDFT സെമിനാർ ഹാൾ, മണ്ണൂർ



Goat health camp and feed distribution



Nanmayulla Mazhakalam"- Farmers seminar and fodder distribution



Farmers Science Congress – “Nattile Sasthram” – August 17th 2023



Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Pozhuthana on 19th September 2023



Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Ambalavayal 25th September 2023



Pashudhan Jagrithi Abhiyan” Cattle Fertility Awareness Classes held at Mananthavady on 26th September 2023



University Students Union inauguration



Inauguration of hostel building and international workshop for research students on 22nd January 2024 at LRS, Thiruvazhamkunnu



“Nattile Sasthram” state level Farmers Science Congress - PADAVU 2024-State Ksheera Sangamam at Anakkara, Idukki, February 2024



Study trip to Global Science Festival. 10 tribal students from Priyadarshini, Naraghakandy and Chembatty participated as part of Oppam program of DoE



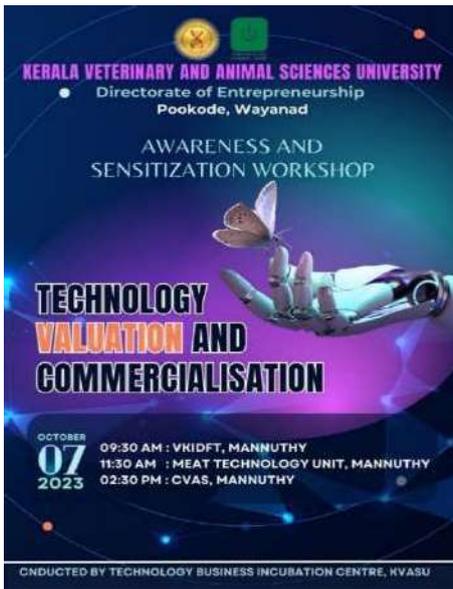
Session on “How to innovate” and an exposure visit to biomedical innovation and Incubation at TBII of Sahrudaya College , March 2024 co-ordinated by TBIC, Mannuthy



Five days Hands on Training on “Basic Training on General Management, Health Care and Tranquilization of Captive Asian Elephants – 21st to 25th August, 2023



1st session of Technology Valuation and Communication workshop at VKIDFT, Mannuthy, October 7th, 2023



2nd session Technology Valuation and Commercialization workshop at MTU, Mannuthy, October 7th, 2023



3rd session Technology Valuation and commercialization workshop at CVAS, Mannuthy, October 7th, 2023



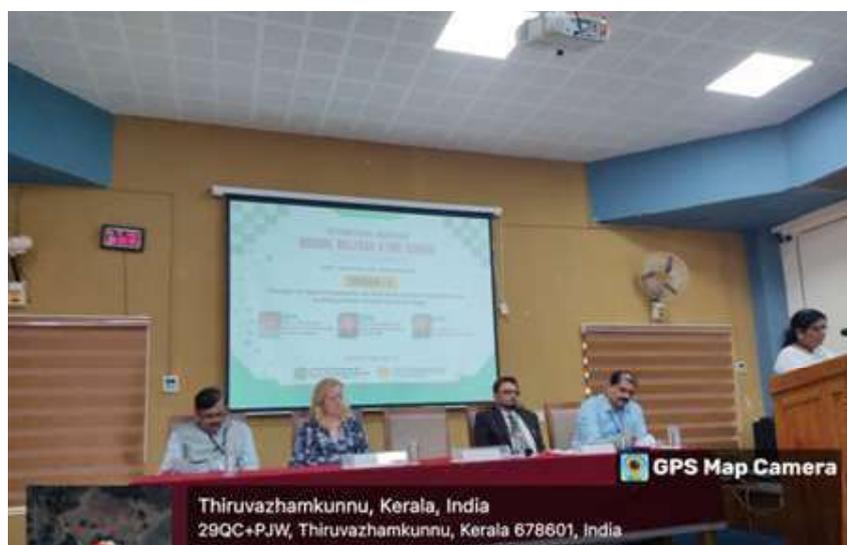
One day workshop on Harnessing Artificial Intelligence’s impact on Education, Research and Entrepreneurship on 28.10.2023



National Workshop on AMR conducted by department of VPH, CVAS Mannuthy, School of Zoonoses and ReAct Asia Pacific on 24th, November 2023



International workshop – Animal welfare One Health on 22nd January 2024 at LRS, Thiruvazhamkunnu



Three days online theory (January 11-13, 2024) and three days offline hands on (January 18-20, 2024) training programme for “Imparting practical knowledge in canine cardiology to practicing veterinarians” at UVH & TVCC, Mannuthy



Workshop on “Participatory Management in Mitigating Human Wildlife Conflict in Kerala”- 12th March 2024



DIRECTORATE OF STUDENTS' WELFARE

1. College of Dairy Science and Technology, Pookode - Skill development training programme for students 06.12.2023

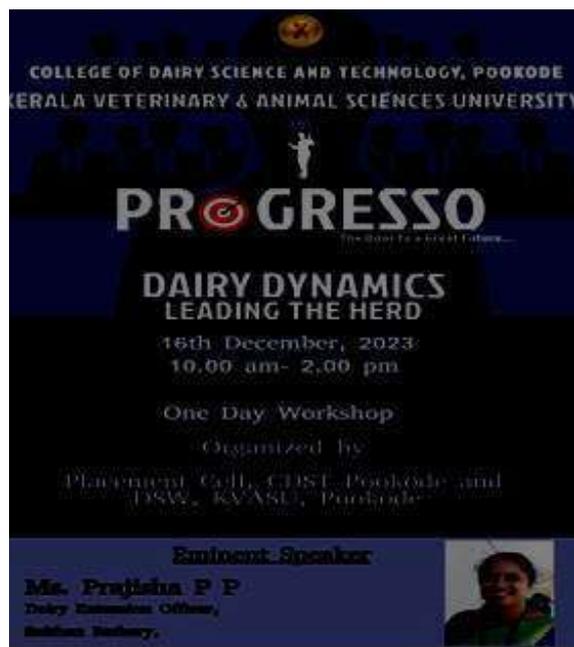
One day skill development training programme for the students of College of Dairy Science and Technology, Pookode was jointly organized by the Directorate of Students Welfare and NSS Unit-CDST Pookode. The objective of the training programme was to offer hands-on training to the students of dairy technology in acquiring the skills of baking and confectionery making. The session was handled by Mr. Jennison B, Sous Chef In charge, Klov resort and former demonstrator of food production bakery and confectionery, Food Craft Institute, Kalamassery. The training programme was designed to offer practical insights into the art and science of baking and confectionery making. The students had the unique opportunity to learn from an industry expert, gaining valuable knowledge that goes beyond the theoretical aspects taught in classrooms. The organizers extend their gratitude to Mr. Jennison B for his valuable contribution, as well as to the Directorate of Students Welfare and NSS Unit-CDST Pookode for their collaborative efforts in making the skill development training programme a success.





2.PROGRESSO- Professional's' Perspectives at College of Dairy Science and Technology Pookode

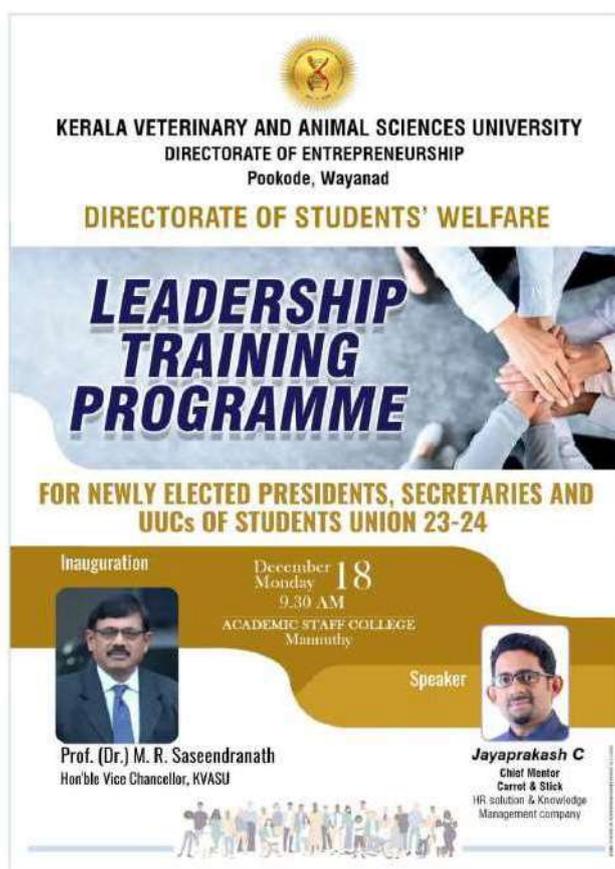
The Placement Cell at the College of Dairy Science and Technology Pookode, in collaboration with the Directorate of Students Welfare, held a one-day orientation program on December 16, 2023. The program was inaugurated by Dr Rahila M P, Special Officer CDST, Pookode. The initial session, led by Ms. Akhila V, the Placement Cell Coordinator, encompassed an overview of the organizational structure of Kerala Veterinary and Animal Sciences University, also added opportunities for advanced studies. This session primarily targeted first-year students. The Major session, led by Ms. Prajisha P P, a Dairy Extension Officer from Sulthan Bathery Block, on the topic ‘ Dairy Dynamics, leading the Herd’, provided insights into cultivating leadership skills within the dairy profession. Fifty-nine students from three different batches, along with the staff, participated in the program. The session concluded with students providing feedback, followed by Mr. Muhammed Arshad, Assistant Placement Cell Coordinator, delivering the vote of thanks.





3. Leadership Training programme

“Leadership training programme” was conducted by the Directorate of Students’ Welfare for the newly elected presidents, secretaries and UUCs of the students’ union 2023-24 was conducted on 18th December 2023 at Academic Staff College, Mannuthy. Sri.Jayaprakash C.B, Chief Mentor, Carrot & Stick, hr Solution & knowledge Management Company .The programme was inaugurated by the Honorable Vice Chancellor Prof.(Dr.) M.R Saseendranath. Dr Sreerenjini A R, Director of Students’ Welfare delivering vote of thanks. The trainer has handled two sessions, leadership and personality development and training on public speaking.



4. College of Veterinary and Animal Sciences , Mannuthy

The NSS unit of CVAS, Mannuthy and Directorate of Students' Welfare conducted an orientation program for National Service Scheme (NSS) volunteers held on the 19th of October 2023 and 20th of December 2023 at CVAS, Mannuthy, Thrissur, aimed to provide new volunteers with essential knowledge, skills, and motivation to actively participate in NSS activities. It served as a platform to empower volunteers with the requisite knowledge, skills, and motivation to actively engage in NSS activities. Dr. Arun Balakrishnan, an esteemed figure in NSS activities, served as the trainer for the program.

The program commenced at 4:30 PM and continued until 7:30 PM. Dr. C B Manomohan, former Registrar of Kerala Veterinary and Animal Sciences University (KVASU) and former Programme Officer (PO) of NSS, addressed the gathering. His speech was centred on reminiscing about old memories associated with NSS and highlighting the significant role NSS plays in nation-building. Dr. Manomohan provided insights into the history of NSS, tracing its roots, objectives, and evolution over the years. He emphasized the pivotal role NSS has played in fostering a sense of social responsibility among the youth. He underscored the crucial role NSS volunteers play in addressing societal issues and contributing to community development. He elaborated on various initiatives undertaken by NSS and their impact on society as well as motivated the volunteers by sharing anecdotes and success stories of NSS activities. He encouraged them to actively participate and make a meaningful difference in the lives of others through NSS.

The next session of the orientation program continued the training sessions under the guidance of Dr. Arun Balakrishnan who elucidated the objectives of NSS, focusing on instilling the values of community service, social harmony, and national integration among volunteers. He provided an overview of the various activities planned by NSS and their significance. He emphasized the proactive role volunteers should play in identifying community needs, planning initiatives, and implementing projects effectively. He stressed the importance of teamwork, leadership, and communication skills in NSS activities. The trainer conducted interactive sessions and workshops aimed at enhancing volunteers' skills in areas such as communication, problem-solving, and project management. Practical exercises and case studies were utilized to reinforce learning. Dr. Arun Balakrishnan also discussed the code of conduct and ethical guidelines that volunteers are expected to adhere to while participating in NSS activities. He highlighted the importance of integrity, respect, and empathy in all interactions.

The training sessions by Dr. Arun Balakrishnan were repeated for the next batch of NSS volunteers on 20.12.23 in the same venue and time period. The program concluded with a renewed sense of commitment and enthusiasm among the volunteers to make a positive impact in their communities. The sessions ended by 7.30 pm on both days.



5. Placement Orientation Programme for final year students -VKIDFT

A 2 day placement orientation programme was conducted by the Students Counselling & Placement Cell, VKIDFT in association with the Directorate of students welfare, KVASU for the final year Undergraduate students of B. Tech Dairy Technology and B. Tech Food Technology during 22nd and 23rd of December 2023 at Conference hall, VKIDFT. The programme commenced at 10 am on the first day with an inaugural session presided over by Dr. SN Rajakumar, Dean, VKIDFT and Dr. Sreeranjini AR, Director of Students Welfare as the Chief guest. Mr. Faisal I, Convenor, Students Placement and Counselling cell, VKIDFT welcomed the gathering. Dr. AK Beena, Chairman, Students Placement and Counselling cell and Professor -Academics, offered felicitations and Dr T N Jagadeesh Kumar gave a brief overview to the gathering about the programme. Soon after the inaugural session, the programme started with interactive sessions on How to prepare to resume by Sri P L Jomy and How to face a job Interview by Dr T N Jagadeesh Kumar. The afternoon session commenced at 2pm with one-to-one mock interview sessions for each student with a technical panel from the faculty of VKIDFT to assist the experts. Dr. Dinker Singh, Asst professor, Department of Dairy Technology served as the technical panel in the Interview board for the afternoon session of the first day. The Mock interview session continued till 04.45 pm.

The second day started at 9am with the Mock Interview session headed by expert panel along with Mr. Faisal I, Department of Food process technology as the technical panel. At 10 am, all the students were assembled to give a general feedback session and further instructions to score well in a job interview including the dos and donts by Sri PL Jomy, followed by a session on being better employable by Dr T N Jagadeesh Kumar. It was followed by the continual of mock interview session for the remaining students with Dr. Divya MP, Department of dairy Chemistry, Mrs. Rashmi KG, Department of Dairy Technology and Dr. Indu B, Department of Dairy Chemistry being the technical panel for the rest of the session. The mock interview session was comprehensive and corrective and allowed each student to perform an actual interview in a similar environment of a placement session. Experts provided valuable suggestions and corrections to the students to improve their performance including the vocabulary, body language and way of presenting themselves and necessary corrections and modifications were provided in each of their resume. The programme was well received by the students who thanked the experts for providing valuable suggestions that could boost their performance in future Job interviews. Sessions. The session wound up at around 4.30pm after a group photo of the experts with the students.



6 Verghese Kurien Institute of Dairy and Food Technology, Mannuthy

NSS Unit VKIDFT Mannuthy 26 /12/2023 left at 9 for training in making value-added products for farmers. The students went to three different milk procurement cooperative societies in three groups. They reached Vilanganur Society at 9:19, Mandamangalam Society at 9:24 and Valakavu Society at 9:45..

Mandamangalam Society

The program at Mandamangalam Society started at 10:15 and was inaugurated by the group president George Panthampilly. Teacher representative Dr.Divya KB delivered the welcome speech and the students led by NSS unit member Aleena Rose August prepared paneer, paneer pickle, whey drink and pineapple squash. The students and the teachers who came to the aid of the students, Dr.Divya KB and Ms Ambili, together with the students, clarified the doubts of the farmers. Committee members Joseph George Manancherry and Varghese Akashery were present. The volunteers gave the university's own product, Nutrient Feed Mix, to the farmers who arrived.



Vilanganur Cooperative Society

The students who went to Vilanganur Cooperative Society were led by Akhil Krishnan and teachers Riyas, Binsi, Amulya, Jose, and Enivar came to help. Parivadi Ward Member Shyju Kuriyayan inaugurated the program, which started at 10:50, and Binsi greeted them. Sangha President Monson Mathew, Secretary Jessy, and Vice-President PK Rajamma were present. The main dishes were made from peda and squash. After clearing doubts, the children concluded the program at 12:15 and the volunteers distributed 20 nutrient feed mixes, a product of the university, to the farmers.



Valakavu Society

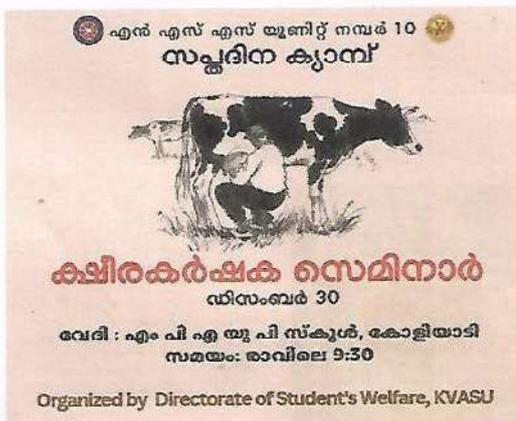
The students who came to the Valakavu group under the leadership of Nishma and supported by Dr Reshmi and Ms Gloria made paneer, paneer pickle, pineapple whey drink and pineapple squash. The program, which started at 10:30, was inaugurated by the Society President Shri T. K. Sasikumar and the welcome speech was delivered by Dr Reshmi. The program ended at 12:45, after clearing doubts, the children distributed about twenty nutrient feed mixes to the dairy farmers and parted ways



7. College of Dairy Science and Technology, Pookode

One Day Farmers Training Programme

Directorate of Students Welfare and NSS Unit of College of Dairy Science and Technology Pookode jointly organised a one day farmers training programme on December 30 2023, in connection with the Special Camp. A total of fifty farmers attended the programme from Sultan Bathery block panchayat. The programme was inaugurated by Nenmeni Grama Panchayath President Ms. Sheela Punchavayal.





A session on value addition of milk and milk products was delivered by Ms. Akhila V, Assistant Professor, Department of Dairy Engineering. The students also made discussions on the topics clean milk production, animal health and prospects of future dairying with the farmers. All the farmers actively participated in the discussions and raised their questions on topics of discussion. NSS Programme Officer Dr.Archana Chandran delivered vote of thanks.

8.College of Veterinary and Animal Sciences, Mannuthy

Civil Service Training Orientation Program for NSS Volunteers

Step IAS Academy, Thrissur, was invited for an orientation program on civil service training for NSS volunteers as well as students of BVP School, Adat as a part of the National Service Scheme (NSS) 7-day residential camp at BVP School Adat in association with the Directorate of Students' Welfare . The program aimed to provide students with insights into the civil services examination, career opportunities in the administrative sector, and strategies for effective preparation. The primary objective of the orientation program was to acquaint NSS volunteers with the civil service examination process, including its stages, eligibility criteria, and syllabus.

Schedule of the programme

9:00 am - 9:30 am: Registration and Welcome Address: NSS volunteers registered for the program, and the session commenced with a welcome address by the organizers, outlining the objectives of the orientation program.

9:30 am - 10:30 am: Introduction to Civil Services- Two experts from Step IAS Academy, Sri Firosh and Sri Vinod delivered a comprehensive presentation on the Indian Civil Services, including its significance, roles, and responsibilities. The session provided an overview of the various services under the UPSC, such as IAS, IPS, IFS, and IRS.

10:30 am - 11:30 am: Examination Pattern and Syllabus- Detailed insights into the civil services examination pattern, including the preliminary, mains, and interview stages, were provided. The session also covered the syllabus for each stage and emphasized the importance of understanding the exam format for effective preparation.

11:30 am - 12:00 pm: Study Strategies and Time Management- Strategies for effective preparation, including time management techniques, resources, and study plans, were discussed. Tips for balancing academic commitments with civil service preparation were shared to help students optimize their study schedules.

12:00 pm - 12:30 pm: Q&A Session and Conclusion- The orientation program concluded with a question and answer session, allowing students to clarify doubts and seek guidance from the experts. Final remarks were made, encouraging students to embark on their civil service preparation journey with determination and perseverance.

Benefits of the programme

The orientation program on civil service training had a positive impact on the NSS volunteers, equipping them with valuable insights and resources to pursue a career in the administrative services. NSS volunteers gained a better understanding of the civil services examination process, eligibility criteria, and career opportunities available in the administrative sector. The program inspired students to aspire for civil services and motivated them to start their preparation journey with confidence. Participants received practical guidance on study strategies, time management, and exam preparation, which will aid them in their journey towards civil service success. The program provided an opportunity for students to network with peers, experts, and mentors from Step IAS Academy, fostering a supportive environment for learning and growth.

The orientation program on civil service training conducted by Step IAS Academy, Thrissur, as a part of the NSS 7-day residential camp at BVP School Adat, was highly informative and inspiring. By equipping NSS volunteers with knowledge, guidance, and motivation, the program contributes to nurturing future leaders and civil servants who will contribute to the nation's development. With continued support and initiatives like these, students are empowered to pursue their aspirations and make meaningful contributions to society through the civil services.



**NSS UNIT , MANNUTHY IN ASSOCIATION WITH
DSW
(DIRECTORATE OF STUDENTS WELFARE)**



**Career Orientation
Programme**

Handled by:
STEP IAS ACADEMY

29/02/2024

Venue : BVP School, Adat
Time : 10 AM to 12 PM

9.College of Veterinary and Animal Sciences,Pookode

On the 8th of February 2024, a of Farmer Seminar was organized in multiple hamlets of Chaliyar Gramapanchayath, Nilambur, under the joint efforts of NSS, CVAS, Pookode, with the esteemed backing of DSW, KVASU. Led by five teams of dedicated volunteers and guided by a Post-Graduate veterinarian in each team, these seminars were orchestrated to address the pressing health and welfare concerns of the local livestock across five different tribal hamlets in the area.

Gathering farmers within each hamlet on the preceding day, volunteers, along with their veterinarian leader, diligently compiled findings and insights garnered from meticulous examining the animals. These seminars became forums for enlightenment and action, as issues like anemia and unthriftiness among goats were earnestly discussed, shedding light on their root causes and proposing practical solutions. With a proactive stance towards intervention, substantial funds facilitated the provision of essential medicines, courtesy of the Director of Entrepreneurship at KVASU. These medications, including potent Fenbendazole tablets for deworming, were promptly administered, aiming to fortify the health and vitality of the entire goat population in the study area. Further combatting prevalent issues, such as tick infestation, a vital supply of deltamethrin liquid was distributed, while a substantial provision of mineral mixture from the esteemed KVASU Feed mill addressed nutritional deficiencies pervasive throughout the region.

Yet, the efforts extended beyond mere remediation. Expert treatments for multiple livestock ailments, ranging from respiratory infections to maggot wounds, were meticulously administered, ensuring comprehensive care and recovery. The seminars did not merely offer solutions; they imparted knowledge and empowerment. Practical demonstrations elucidated essential livestock management practices, from tick examination techniques to comprehensive health assessments. Instructional sessions delved into scientific feeding practices, reproductive management strategies, and the importance of meticulous record-keeping, equipping farmers with invaluable tools for sustainable farming practices. Additionally, in a gesture of goodwill towards community health, approximately 30 owned dogs were vaccinated against rabies, a vital initiative generously supported by M/s Virbac Ltd.

As the day concluded, its impact lingered, leaving an indelible imprint on the livestock welfare landscape of the region. The Farmer Seminars, orchestrated with precision and passion, not only addressed immediate concerns but also fostered a culture of empowerment and resilience within the farming community, paving the way for a brighter and healthier future for both farmers and their livestock.



Glimpses of Farmer Seminar

10.College of Veterinary and Animal Sciences, Mannuthy

Waste Management Training Program for Farmers

As a part of the NSS 7-day residential camp at BVP School Adat, a training program on poultry waste management was conducted on March 1, 2024 in association with the Directorate of Students' Welfare. The program aimed to educate farmers and NSS volunteers about effective waste management practices in poultry farming to minimize environmental impact and optimize resource utilization. The primary objective of the training program was to equip farmers and NSS volunteers with knowledge and skills related to poultry waste management which included educating participants about the types and sources of poultry waste, providing insights into the environmental impact of poultry waste and the importance of proper management practices, introducing techniques and strategies for efficient poultry waste management, empowering participants to implement sustainable waste management practices on their farms.

The training program consisted of informative sessions and practical demonstrations conducted by experts in the field. The schedule for the day was as follows:

10:00 am - 11:30 am: Class on Poultry Waste Management by Dr. Sankaralinkam, Head of AICRP on Poultry, delivered a comprehensive lecture on poultry waste management. The session covered topics such as the types and composition of poultry waste, environmental implications, and best practices for waste handling and disposal. Poultry waste management is a crucial aspect of sustainable farming practices due to the significant growth of the poultry industry and the environmental challenges it poses. Adopting these best practices for poultry waste management is essential to mitigate environmental impacts, ensure food safety, and promote sustainable agricultural practices in the poultry industry.

11:30 am - 12:30 pm: Class on Hatchery Waste Management by Dr. Lijin:- In the realm of hatchery operations, the meticulous management of waste holds paramount importance, ensuring both public health and environmental well-being. Compliance with local regulations and guidelines regarding waste management and biosecurity is imperative for hatcheries to mitigate the risks associated with disease transmission and environmental contamination. Effective hatchery waste management not only safeguards public health by preventing the spread of pathogens but also minimizes environmental pollution by controlling the release of organic matter and harmful substances into the ecosystem. By adhering to robust waste management practices, hatcheries uphold their responsibility towards public safety, environmental sustainability, and regulatory adherence, fostering trust and accountability within the poultry industry and the broader community. Dr. Lijin, Hatchery Manager, conducted a specialized session on hatchery waste management. Participants learned about the various types of waste generated in hatcheries, including eggshells, unhatched eggs, and biohazardous materials. Practical strategies for segregating, treating, and disposing of hatchery waste were discussed.

12:00 pm - 12:30 pm: Q&A Session and Conclusion- The training program concluded with a question and answer session, allowing participants to seek clarification on any doubts or concerns related to poultry waste management. Final remarks were made, emphasizing the importance of implementing the knowledge gained to enhance sustainability in poultry farming practices.

The poultry waste management training program had a significant impact on the participants, empowering them with knowledge and skills to adopt sustainable practices on their farms. Participants gained a deeper understanding of poultry waste management practices, including the environmental and economic benefits of effective waste management. The sessions provided practical insights and techniques that participants could apply directly to their poultry farming operations, enhancing efficiency and sustainability. Farmers and NSS volunteers were inspired to take proactive measures to minimize the environmental impact of poultry farming by implementing proper waste management practices. The training program facilitated networking and knowledge sharing among participants, fostering a sense of community and collaboration in promoting sustainable agriculture practices.



11. College of Dairy Science and Technology, Pookode

Stress Management Workshop on Mental Health and Stress Management

On 18th March 2024, a Stress Management workshop on ‘Mental Health and Stress Management’ was conducted at the College of Dairy Science and Technology, Pookode. The workshop aimed to provide valuable insights and strategies for managing stress and promoting mental well-being among the students. The full-day workshop was led by Mr. Nishad K C., a seasoned District School Mental Health Officer with expertise in the field. The workshop commenced with an interactive session discussing the importance of mental health and the impact of stress on overall well-being. Participants engaged in group activities, discussions, and practical exercises to enhance their understanding of stress management techniques. Throughout the workshop, participants learned various coping mechanisms to deal with stress effectively. Mr. Nishad K C. emphasized the significance of self-care, mindfulness, and seeking professional help when needed. The workshop also shed light on the importance of maintaining a healthy work-life balance and fostering supportive

relationships.

Feedback from the participants was overwhelmingly positive, with many expressing gratitude for the valuable insights gained during the workshop. The interactive nature of the sessions and the expertise of the facilitator were particularly appreciated. Participants left the workshop feeling empowered and equipped with practical tools to manage stress in their academic and personal lives. The Stress Management workshop on ‘Mental Health and Stress Management’ proved to be a valuable learning experience for the 73 B.Tech. students and faculty members who attended. The collaboration between the College of Dairy Science and Technology, Pookode, and the Directorate of Students Welfare, KVASU, in organizing this workshop exemplifies their commitment to promoting mental well-being within the academic community.



12. Stress Management for Mental Well-being for Students of 2020 Batch BVSc, CVAS, Pookode

On the 26th of March 2024, amidst a campus community reeling from recent tragic events, the Directorate of Student Welfare (DSW) took proactive steps to address the escalating levels of stress and anxiety among the 2020 BVSc students. Recognizing the urgency of the situation, a Stress and Anxiety Management Session was organized, headed by the experienced Performance Analyst, Devendranath Sankaranarayanan. Mr. Sankaranarayanan’s approach to stress management offered a unique perspective, emphasizing practical strategies tailored to the specific needs of the students.

The session, attended by approximately 80 students, provided a safe and supportive environment for open dialogue and reflection. Sankaranarayanan’s interactive approach encouraged students to

share their emotions and experiences, creating mutual support among participants. Drawing upon his expertise, he introduced a range of coping strategies mindfulness and meditation.

The resource person recognized the diverse needs of the student body and provided personalized guidance and counseling to those requiring additional assistance. This tailored approach ensured that each student felt heard and valued, fostering a sense of empowerment and resilience within the community. Following the session, participants expressed a profound sense of relief and empowerment, noting that they felt better equipped to manage their stress and anxiety. The overwhelmingly positive feedback underscored the session's effectiveness in addressing the students' immediate needs and promoting their mental well-being.

Looking ahead, there is a clear need for continued support and proactive measures to promote mental health awareness and resilience within the campus community. Follow-up sessions and workshops can reinforce the coping strategies introduced during the session, while collaborative efforts with mental health professionals and faculty members can establish a comprehensive support system for students.



Redressal of Grievances of Students

1. COLLEGE OF DAIRY SCIENCE AND TECHNOLOGY, TRIVANDRUM

The College of Dairy Science and Technology in association with the Students' Union 2023-24 conducted an awareness class to students and staff on the Prevention of Sexual Harassment (PoSH) Act non 21.2.2024, 12 noon. The programme was inaugurated by the Special Officer, D. Rachana. C.R. Dr. Shyam Suraj S.R., Assistant Professor (Dairy Extension) took the class and explained the salient features of the Act along with the UGC guidelines framed in accordance with the same. The students were made aware of the prevention, prohibition and redressal of sexual harassment related activities and the forums available at the college for complaints. Ms. Abhija, Secretary of the Students' Union welcomed the participants and Ms. Arya S. Nair, Secretary, National Integration/Literacy and Debating Club gave the vote of thanks.



College Grievance Redressal Cell

Grievance Redressal System is a vital part of any administration.

It is the responsibility of the College Administration to provide a secure and contented environment to all its Staff and Students.

The Grievance Redressal Committee has been formed in the College as per the UGC guidelines to redress the grievances of both the staff and the students.

The Committee is directly under the purview of the Special Officer.

The grievances received by the Special Officer are forwarded to the concerned Committee members who look into the problems depending upon the seriousness of the issue.

The College has been continuously striving to take the best efforts possible to create a harmonious and conducive atmosphere to everyone in question.

Functions of the Grievance Redressal Cell

- To accept written grievances from students and staff
- To create and implement a mechanism to handle the reported grievances.
- To forward the findings to the Management if necessary for further action.
- To listen, record and scrutinize the grievances and take necessary steps immediately.
- To attend to the grievances based on the authenticity and gravity.
- To convene periodical meetings to discuss whether the grievances have been settled.
- To make a follow-up of these matters at regular intervals till their final disposal.
- To maintain strict confidentiality, if necessary.

2.VERGHESE KURIEN INSTITUTE OF DAIRY AND FOOD TECHNOLOGY, MANNUTHY

NSS unit of VKIDFT along with the directorate of students welfare, Kerala Veterinary and Animal Sciences University had conducted an Awareness programme on 26th March 2024 on the topic “Empowering Equality: Understanding Acts, Policies, and Constitutional Safeguards among students with special focus on UGC regulations 2023”. The class was conducted by Dr Dhanya Shankar K S, Head, Department of Economics & Research Guide in Economics, St. Mary’s College, Thrissur. The volunteers of VKIDFT had actively participated in the programme. The seminar covered a topics related to Indian Constitution, laws and new regulations by University Grants Commission.



3.COLLEGE OF DAIRY SCIENCE AND TECHNOLOGY, KOLAHALAMEDU

The College of Dairy Science and Technology in Kolahalamedu, Idukki organized a session on “Sensitization and Awareness on Internal Complaint Committee and University Student Grievances Addressal Forum”. The session was conducted by The Special Officer, Ms. Asha Ashok in the college auditorium on 27/03/2024. The seminar commenced at 11:00AM. The awareness programme emphasized the significance of Internal Complaint Committee (ICC). ICC serves as a confidential platform for addressing complaints, ensuring a fair investigation process, and taking necessary actions to curb harassment. The ICC members details were displayed on notice board and places frequented

by students.

The Special Officer also detailed about the Women Forum, Students Forum and Complaints of caste discrimination by SC/ST/OBC students in the University website. The students can avail the forum in times of distress. The session came to an end by 12:00 PM.

Ms. Asha Ashok awareness session on ICC and University students' grievances forum



4. COLLEGE OF AVIAN SCIENCES AND MANAGEMENT, THIRUVAZHAMKUNNU

The Directorate of Students Welfare, Kerala Veterinary and Animal Sciences University and Counseling and Placement Cell of CASM in association with Mannarkkad Taluk Legal Services Committee has organized an awareness programme on 'Sexual Harassment of women at workplace (prevention, prohibition and redressal) Act 2013 and UGC (Redressal of grievances of students) regulations 2023 on 03.04.2024 at College of Avian Sciences and Management, Thiruvazhamkunnu. The programme was inaugurated by Prof.(Dr.)Sreeranjini A.R., Director, Students Welfare, KVASU. Dr.Prasoon S., NSS Programme Officer welcomed the gathering and the programme was presided over by Dr.Harikrishnan S., Special Officer, CASM. 74 students, teaching and non-teaching staff from CASM from CASM attended the programme. The students got an opportunity to interact with the speaker to familiarize with various provisions of the concerned regulations. The programme was ended with vote of thanks from Dr.Abhin Raj K.P., Assistant Professor, CASM.

Report on- Orientation Programme for freshers

1. College of Avian Sciences and Mangement , Thiruvazhamkunnu- *Rise & Shine* Orientation Programme for Freshers

The Directorate of Students Welfare, KVASU in association with the placement cell of CASM, has organised an orientation programme for first year students of CASM on 14th December 2023.The programme was inaugurated by Dr. Sreeranjini A.R., Director, Student's Welfare, and KVASU. Dr. Harikrishnan S , Special Officer presided the function while Dr. Prasoon S., and Miss. Nithyadas felicitated the programme. The session was led by Mr. Mohammed Ikan, Consultant Soft skills expert. The session was mainly oriented with various activities to improve soft skills and career development skills. 41 students, Dr. Stella Cyriac,Dr. Abhin Raj K.P., teaching and non-teaching staff were present for the programme.



2.College of Dairy Science and Technology, Thiruvananthapuram

The College of Dairy Science and Technology (CDST) Thiruvananthapuram campus in association with the Directorate of Students' Welfare, KVASU organized a Life Skills Training Programme for the newly inducted batch of B.Tech (Dairy Technology) students titled **“Beyond the Dreams – Unleash the Power Within”** on December 16, 2023, from 09:00 a.m. to 03:00 p.m. The programme was arranged at the Seminar Hall of the College. Renowned trainer, **Sri. Sujith Edwin Pereira, Director - Lives Facilitator and Mentors' Mentor, National Institute for Training and Educational Research (NaITER), Thiruvananthapuram** led the training session. The inaugural ceremony started at 09:00 a.m. with a prayer by the college choir and a welcome speech by Ms. Arya Nair B., Secretary (Literary & Debating Club). The President of Students' Union, Ms. Saniya Rachel Sam, delivered the presidential address. The training programme was

inaugurated by the **Director of Students' Welfare - KVASU, Prof. (Dr.) Sreeranjini A. R.** In her inaugural address, Dr. Seeranjini A. R. stressed the growing relevance of learning the life skills for unleashing the best of every one's potential in this highly competitive world. Dr. G. R. Jayadevan (Associate Patron of Students' Union), Dr. Lalu K. (Associate Professor, Dept. of Dairy Husbandry) and Dr. Beena R. L. (Assistant Professor, Dept. of Dairy Technology) offered felicitations for the programme. Ms. Abhija R., Secretary - Students' Union delivered the vote of thanks. The inaugural session came to a close by 10:00 a.m. and it was followed by a four-hour long training session led by Sri. Sujith Edwin Pereira. Sri. Sujith discussed about several life skills and stressed the point that every individual is full of potential, which manifests itself in his/her ability to do exemplary things, such as ground-breaking scientific research, commendable social services, outstanding achievements in various fields, and many more. He touched upon the fact that life skills not only aid in realising our potential but also in living a contented and meaningful life. There was an overwhelming response with senior batch students also attending the training session. A separate post-lunch session titled **"All about KVASU – The Journey Ahead"** was also arranged as part of the above programme. **Dr. G. R. Jayadevan, Assistant Professor, Dept. of Dairy Business Management** delivered a presentation on the KVASU, its genesis, mandate, authorities, academics and research, outreach activities and the CDST Thiruvananthapuram campus in particular. The session came to a close by 03:00 p.m.



3 College of Dairy Science and Technology, Pookode-(PROGRESSO- one-day orientation program)

The Placement Cell at the College of Dairy Science and Technology Pookode, in collaboration with the

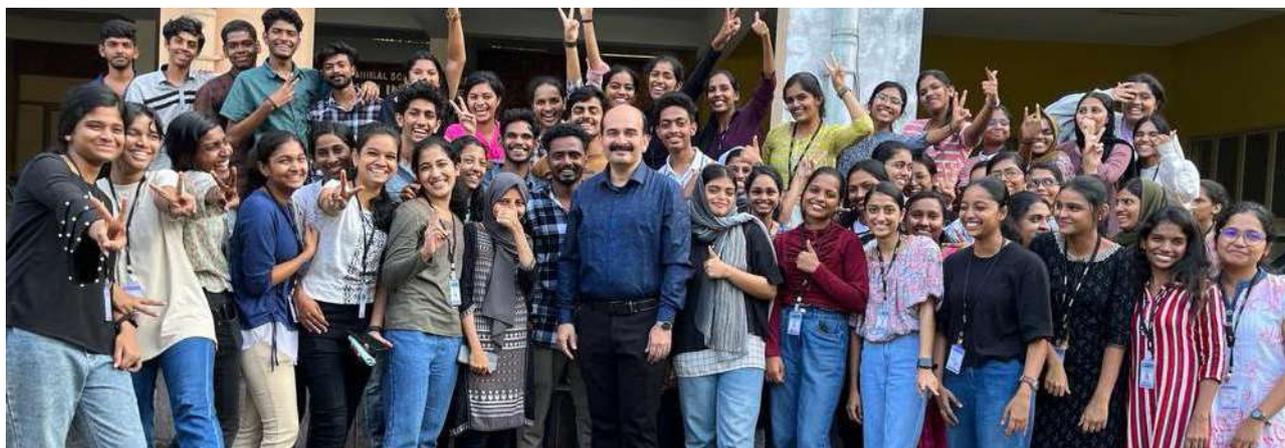
Directorate of Students Welfare, held a one-day orientation program on December 16, 2023. The program was inaugurated by Dr Rahila M P, Special Officer CDST, Pookode. The initial session, led by Ms. Akhila V, the Placement Cell Coordinator, encompassed an overview of the organizational structure of Kerala Veterinary and Animal Sciences University, also added opportunities for advanced studies. This session primarily targeted first-year students. The Major session, led by Ms. Prajisha P P, a Dairy Extension Officer from Sulthan Bathery Block, on the topic 'Dairy Dynamics, leading the Herd', provided insights into cultivating leadership skills within the dairy profession. Fifty-nine students from three different batches, along with the staff, participated in the program. The session concluded with students providing feedback, followed by Mr. Muhammed Arshad, Assistant Placement Cell Coordinator, delivering the vote of thanks.



4. Verghese Kurien Institute of Dairy and Food Technology, Mannuthy

An orientation programme was conducted by the Students Counselling & Placement Cell, VKIDFT in association with the Directorate of students welfare, KVASU and Students' union 2023-24, VKIDFT for the first year Undergraduate students of B. Tech Dairy Technology and B. Tech Food Technology on 19th December 2023 at Seminar hall, VKIDFT. The programme commenced at 1.45 pm with an inaugural session presided over by Dr. SN Rajakumar, Dean, VKIDFT and Dr. Sreeranjini AR, Director of Students Welfare as the Chief guest. Ms. Ardra K, Secretary, students Union 2023-24 welcomed the gathering. Dr. AK Beena, Chairman, Students Placement and Counselling cell and Professor -Academics, VKIDFT and Dr. Indu B, Academic officer -FT, VKIDFT offered felicitations and Mr. Aswanth PV, President , students Union 2023-24 offered the vote of thanks to the gathering for the inaugural session. It was followed by a presentation on the topic "**KVASU -Our university & facilities – A Glimpse**", handled by Mr. Faisal I, Convenor, Students Placement and Counselling cell, VKIDFT which gave students an overview about the various major constituent

colleges & facilities, University officers and faculties of KVASU and VKIDFT in a short span. The session was followed by the major Orientation programme titled **”Develop new Dimensions”** handled by Dr. Siju Thottappilly, Motivational Speaker and trainer. The lively and interactive session aimed at improving the overall performance of the students while maintaining the consistency in it . The programme was well received by the students who had an exciting time that provided the well needed motivation and confidence in them. The session wound up at around 4.30pm after a group photo of the trainer with the students.



5. College of Dairy Science and Technology, Kolahalamedu- “Unleash the power within One Day Life Training Programme for Students” -21.12.2023

The training session started at 10:30 A.M. It started with an introductory speech by Ms. Sheetal Simon, 3rd year B. Tech. student. Ms. Asha Ashok, Special officer extended a warm welcome to Sri. Sujith Edwin Pereira. The training commenced with engaging activities, including ice-breaking sessions. The trainer emphasized to students about the life skills like Focus and Self-Control, Perspective-Taking, Communication, Making Connections, Critical Thinking, Taking on Challenges, Self-Directed and Engaged Learning. The overall training included development of communication skills, personality development, and aptitude finishing school skills training. The session came to an end by 2:30 P.M. The session received positive feedback from students highlighting the effectiveness of the content and the engaging delivery by Sri. Sujith Edwin Pereira. The vote of thanks was delivered by Martin George, 3rd year B. Tech. student.



6. College of Veterinary and Animal Sciences, Mannuthy

The Director of Students' Welfare organised an orientation programme for the 1st year BVSc & AH Students of CVAS, Mannuthy on 29th December 2023 at the Seminar Hall of the College. The inaugural ceremony started at 9.30 am with a welcome speech by Dr. Sreeranjini A R, Director of Students' Welfare. The training was inaugurated by Dr. Shynu, Associate Dean of CVAS, Mannuthy. Sri. Sujith Edwin Pereira, Director - Lives Facilitator and Mentors' Mentor, National Institute for Training and Educational Research (NaITER), Thiruvananthapuram led the training session.





7. College of Veterinary and Animal Sciences, Pookode

On January 8, 2024, the collaborative efforts of the National Service Scheme (NSS), the Directorate of Students' Welfare (DSW), and Kerala Veterinary and Animal Sciences University (KVASU) culminated in a transformative one-day training program designed to empower first-year students embarking on their academic journey. The day commenced with a morning session led by Mr. Mohammed Ikan, an esteemed figure as the Director of the Society for Training and Development in Lakshadweep. Mr. Ikan's session was an exploration into the fundamental significance of cultivating leadership qualities and honing communication skills to foster effective learning environments and enrich academic experiences. Through engaging discussions and practical exercises, students were not only enlightened about the essence of leadership but also equipped with invaluable insights on self-presentation techniques crucial for excelling in interviews and assuming leadership roles.

Following the enriching morning session, the afternoon session was handled by Dr. Bipin KC. His comprehensive orientation on KVASU's academic structure and the diverse programs tailored for



BVSc&AH students. Dr. KC's session provided a panoramic view of the educational landscape, ensuring that students gained a profound understanding of their academic trajectory within the

university. Simultaneously, Mr. Ikan spearheaded a specialized workshop catering to the professional development of educators. With the participation of approximately 20 teachers, the workshop delved into the nuances of soft skill cultivation, emphasizing effective communication, adept time management, and the seamless integration of cutting-edge technology into pedagogical practices.

By providing students with essential leadership and communication tools and equipping faculty with innovative teaching methodologies, the training fostered a conducive learning environment promoting growth and excellence.





Awareness programme on

Sexual harassment of women at workplace
(Prevention, Prohibition and Redressal) Act 2013

&

UGC (Redressal of grievances of students)
regulations, 2023

Speakers:



Adv. Noushad



Adv. Shabira

03 April, 2024 | 02:00 PM – 04:00 PM
at Seminar Hall CASM

8. College of Veterinary and Animal Sciences, Mannuthy

The placement cell of College of Veterinary and Animal Sciences, Mannuthy and Directorate of Students' Welfare conducted an awareness class to Students on Sexual Harassment on women at workplace (Prevention, Prohibition & Redressal act 2013) and UGC (Redressal of grievances of students) regulations 2023 on 08.04.2024 at the Indraneelam Seminar Hall of CVAS, Mannuthy. The programme was inaugurated by Prof.(Dr.)Sreeranjini A.R., Director, Students Welfare, KVASU. Advocate: Simmy A.M, Child Welfare Committee Member, Thrissur was the resource person. The students got an opportunity to interact with the speaker with various matters in connections with the regulations.





COLLEGE OF VETERINARY AND ANIMAL SCIENCES, MANNUTHY, THRISSUR

The College of Veterinary and Animal Sciences was started by the Government of Travancore-Cochin on August 1, 1955 as Government Veterinary College, Ollukara with central aid of Rs. 48 lakhs. The campus proper was carved out of 70 acres of the Government Estate of 400 acres, of which 190 acres belonged to the Animal Husbandry Farms of the State of Travancore-Cochin that included the District Livestock Farm with a goat unit attached and the State Poultry Farm. Initially, a building of the District Livestock Farm, Mannuthy near the present Centre for Advanced Studies in Poultry Science, served at the college. From a small establishment of just six teaching staff, the college has grown and is now served by 103 teaching faculty and thirty-nine non-teaching staff. From a modest undergraduate student intake of seventy, the college now admits 125 undergraduate students annually. The details below present a brief abstract of the administrative set up of the college.

1. Dean's Office

Staff details

Sl. No.	Name	Designation	Email	Mobile
1	Dr. K. Vijayakumar	Faculty Dean	deanvetmty@kvasu.ac.in	9495900300
2	Dr. Shynu M.	Associate Dean	adeanmty@kvasu.ac.in	9447674075

2. Teaching staff

Sl. No.	Professors	Associate Professors	Assistant Professors	Female	Male	SC/ST
	26	24	53	58	45	7
Total	103					

3. Nonteaching staff

Sl. No.	Females	Males	SC/ST
	19	20	3
Total	39		

ACADEMICS

Academic cell 1

The academic cell-1 coordinates all academic activities related to B.V.Sc. & A.H., M.V.Sc. and Ph.D programmes. Academic cell is responsible for ensuring the implementation of academic programmes as per the academic regulations formulated by the University from time to time. It also serves as an advisory centre to the Office of the Dean in academic matters.

Activities

1. Administrative support to students for curricular and co-curricular activities from admission to completion of the programme
2. Programming the semester annual schedules and class time tables and coordinating the conduct of various examinations for undergraduate, postgraduate and doctoral programmes
3. Monitoring the overall student activities and ensuring availability of student amenities and other facilities.
4. Coordinating internship training programme of B.V.Sc & AH students
5. Conducting credit seminars and defense seminars of postgraduate and doctoral students.
6. Issuing bonafide certificates to students for various purposes.

Academic programmes

Bachelor of Veterinary Science and Animal Husbandry (B.V.Sc., and A.H.)

The undergraduate B.V.Sc., and A.H. course is a five-and-half year professional degree programme with a curriculum including core courses to be taken in four professional years extending over four and half years and an internship programme including entrepreneurial training for twelve calendar months. Successful completion of the degree programme enables the candidate to register as a veterinary practitioner in the state/central veterinary council as per Indian Veterinary Council Act, 1984.

Mode of admission

Students seeking admission for B.V.Sc., and A.H. have to qualify in the National Eligibility cum Entrance Test – Undergraduate (NEET-UG) and 15 per cent of the seats are allotted by Veterinary Council of India while 85 per cent is filled by the Controller of Entrance Examinations, Kerala through the KEAM procedure. Annual undergraduate intake for the college stands at 125 students.

Year of study	Admission	Total	No. of Dropouts	Female	Male	SC/ST	EWS	OBC
First year	2023 & earlier admn	131	0	87	44	14	6	67

Second year	2022 & earlier 126 0			85	41	10	14	59
Third year	2021 & earlier	123	0	83	40	10	0	-
Fourth year	2020 & earlier	96	0	59	37	12	0	54
Fifth year	2019 & earlier	101	1	65	36	10	0	54
Internship	2018 & earlier	82	0	45	37	12	0	35
Internship	2015 & earlier Re-Re-Repeat	4	0	1	3	2	0	0
Total		663	1	425	238			

Master of Veterinary Science

About the course

A two-year Master of Veterinary Science course is offered by the college in various disciplines.

Mode of admission

Admission to the M.V.Sc. course is through an entrance examination conducted by the University. Twenty five per cent of seats in each department are earmarked for ICAR candidates who qualify in the entrance examination conducted by ICAR and are advised to KVASU.

Total intake (2023-2024) : 114

Year of study	Admission	Semester No./year	Total	Drop outs	Female	Male	SC/ST	EWS	OBC
First	2023	1	84	0	57	27	10	2	42
Second	2022	3	74	0	60	14	8	5	38
	2021	6	1	0	0	1	0	0	0
Total			158	0	117	41	18	7	80

Ph.D.

About the course

The three-year doctorate programme is offered in various disciplines.

Mode of admission

The admission to Ph.D. programme is through an entrance examination conducted by the University and an interview. Twenty-five per cent of seats in each department are earmarked for ICAR candidates who qualify in the entrance examination conducted by ICAR and are advised to the KVASU.

Total intake (2023-2024): 52

Year of study	Admission	Sem No./ year	Total	Drop-outs	Female	Male	SC/ST	EWS	OBC
First	2023	1	15	0	11	4	2	0	10
Second	2022	3	16	0	8	8	1	0	8
Third	2021	5	22	0	12	10	1	0	11
Total			53	0	31	22	4	0	29

Student Scholarships

1. **KVASU Merit Scholarship:** It is awarded for encouraging meritorious under graduate students to proceed with their studies. The scholarship is at the rate of Rs.3000 /year/student.

Amount spent during the year- Rs. 1,98,000/- ; Number of students benefited- 10 per cent of total strength.

2. **KVASU Merit cum Means Scholarship:** It is awarded to economically backward and meritorious undergraduate students other than those from SC/ST communities. The rate is Rs.20000/- per annum.

Amount spent during the year- Rs.1,20,000/-

Number of students benefited- Six

3. **Junior Research Fellowship:** For MVSc programme, a Junior Research Fellowship of Rs.9000/- per month is paid to all students admitted except candidates on deputation. In addition to the fellowship, postgraduate students are also granted Rs.25000/ student as a one-time research grant.

Amount spent during the year- Rs.9000/student/month

Number of students benefited- 61

4. **Senior Research Fellowship:** For Ph.D scholars, a Senior Research Fellowship of Rs.10,000 per month is paid to all students admitted except those under deputation. An additional amount of Rs.50,000/ student is also awarded as a one-time research grant.

Amount spent during the year- Rs.10000/student/month

Number of students benefited- Eight

5. **Residency Programme:** The MVSc cum Residency programme was introduced from the Academic year 2014-15 onwards in Clinical and Para Clinical subjects and in Livestock and Poultry Production and Dairy Technology. During the first four semesters the student can register 40 credits of course (Jr. Residency). Maximum credit load per semester shall not exceed 12 excluding non- credited courses. In the fifth and sixth semesters the student can register 12 credits of research. Senior Residency can be extended to the fourth and fifth years based on the recommendations of the Head of hospital, the Dean concerned and approval from

KVASU. The students are paid fellowship at the following consolidated rates.

First year (1st and 2nd semester) Rs 20,000/- per month

Second year (3rd and 4th semester) Rs 25,000/-per month

Third year (5th and 6th semester) Rs.30,000/- per month

Fourth year Rs 35,000/- per month

Fifth year (Optional) Rs.40,000/- per month

Number of resident positions are allotted as per requirement of the Heads of Departments, on completion of programme of senior residents in the departments concerned.

Amounts of scholarships provided to students (2023-2024)

Sl. No.	Name	Amount. (Rs.)	Amount Spent During the FY 2023-24 (Rs.)					Number of students
			BVSc & AH	MVSc	MSc	Diploma	PhD	
1	E-grantz	University & Hostel fees	4178081	1649481	674341	54885	0	189
2	KVASU Internship	Rs.17000/mnth	1676200	0.00	0.00	0.00	0.00	206
3	KVASU Merit Scholarship	Rs.3000/year	198000	0.00	0.00	0.00	0.00	30
4	KVASU Merit Cum Means Scholarship	Rs.20000/year	120000	0.00	0.00	0.00	0.00	6
5	KVASU Scholarship for MVSc Residency Programme	Rs.20000/mnth- I Year, Rs.25000/ mnth-II Year Rs.30000/mnth- III Year.	0.00	1379681	0.00	0.00	0.00	5
6	KVASU MSc-As-sistantship	Rs.5000/month	0.00	0.00	466372	0.00	0.00	9
7	KVASU -JRF	Rs.9000/ mnth	0.00	12306019	466372	0.00	0.00	123
8	KVASU -SRF	Rs.10000/mnth	0.00	0.00	0.00	0.00	223432	22
9	KVASU-Research Grant- (MVSc & PhD)	Rs. 25,000/once for MVSc Rs.50000/once for Ph.D.	0.00	0.00	0.00	0.00	2560092	87
10	ICAR- Internship	Rs.3000/month	1476000	0.00	0.00	0.00	0.00	82
11	ICAR-NTS-UG	Rs.3000/month	921300	0.00	0.00	0.00	0.00	23
12	ICAR-NTS-PG	Rs.5000/month	0.00	1100496	0.00	0.00	0.00	23
13	ICAR PG Scholarship	Rs.12640/mnth Contigen-cy-Rs.6000/year	0.00	321309	0.00	0.00	0.00	3

14	ICAR- JRF/SRF	Rs.31000/month, Contigen- cy-Rs.10000/year	0.00	0.00	0.00	0.00	382000	1
15	ICMR JRF Schol- arship	Rs.31000/month, Contigen- cy-Rs.20000/year	0.00	0.00	0.00	0.00	251706	1
16	Scholarship from Lakshadweep Administration	University Fees & Hostel fees as claimed from the College	316305	0.00	0.00	0.00	0.00	2
Total			23971686.00	16756986.00	1607085.00	548850.00	5428118.00	812

Internship programme

About the programme:

Every student of B.V.Sc & AH degree course is required to undergo compulsory rotating internship for a minimum period of twelve calendar months after passing the fourth professional examination to be eligible for the award of the degree and full registration with Kerala Veterinary Council.

Number of students

- Completed- 2017 and earlier admission students:117
- Undergoing- 2018 and earlier admission students: 82

Internship allowance

- Amount of Internship allowance is Rs 20,000/- per student per month
- Total amount disbursed (2023-2024): Rs.1,67,62,000/-

Study tour

There are two compulsory study tours for undergraduate BVSc and AH students, the South India and the All India study tours. The total duration of the two tours taken together is limited to 30 days. The tour/work diary and final report have to be submitted to the course teacher not later than 30 days from the date of completion of the tour. The performance of the student during the tour is evaluated by the course teacher considering the following:

- Regular participation and involvement: 30 marks
- Tour/work diary: 20 marks
- Final report:30 marks
- Viva-voce examination: 20 marks
- Total:100 marks

Academic Cell 2

Major activities

1. Academic matters of M.Sc. and Diploma programmes are coordinated by Academic cell-2
2. Registration formalities and transmission of grades are carried out through this unit
3. Classes on spoken English and general awareness are arranged on Saturdays for the benefit of M.Sc. and Diploma students

Academic programmes

1. Courses offered

- M.Sc. Quality control in Dairy Industry
- M.Sc. Applied Microbiology
- M.Sc. Applied Toxicology
- M.Sc. Animal Biotechnology
- M.Sc. Animal Science
- M.Sc. Biochemistry and Molecular Biology
- M.Sc. Biostatistics
- Diploma in Dairy Science
- Diploma in Laboratory Techniques
- Diploma in Feed Technology

2. Details of students for each course :

Sl. No.	Course	Year of Admission	Female	Male	SC/ST	EWS	OBC	Total
1.	M.Sc. Quality control in Dairy Industry	2021	2	0	0	0	2	2
		2022	2	0	0	0	0	2
		2023	4	2	0	1	0	6
2.	M.Sc. Animal sciences	2021	2	0	0	0	1	2
		2022	0	2	0	0	1	2
		2023	0	2	1	0	0	2

3.	M.Sc. Animal Biotechnology	2021	4	0	0	0	2	2
		2022	1	1	1	0	1	2
		2023	4	0	1	0	1	4
4.	M.Sc. Applied Microbiology	2021	4	0	2	0	0	4
		2023	9	2	6	1	2	11
5.	M.Sc. Biostatistics	2021	2	0	0	0	0	2
		2023	1	0	0	0	1	1
6.	M.Sc. Biochemistry and Molecular Biology	2021	8	1	0	0	7	9
		2022	6	2	1	1	4	8
		2023	14	0	0	0	10	14
7.	M.Sc. Applied Toxicology	2022	3	1	0	0	0	4
		2023	10	0	3	0	5	10
8.	Diploma in Dairy science	2021	18	8	3	0	12	26
		2022	7	7	3	3	7	14
		2023	14	13	8	0	7	27
9.	Diploma in Laboratory Techniques	2022	11	18	6	2	19	29
		2023	19	12	6	0	12	31
10.	Diploma in Feed Technology	2021	2	2	3	0	1	4
		2022	2	4	1	0	3	6
		2023	5	6	3	0	8	11

RESEARCH RESEARCH PROJECTS

I. EXTERNALLY AIDED PROJECTS - ONGOING

Sl. No.	Title	Funding agency	Total outlay	Name of PI, Co PIs	Research highlights
Animal Genetics and Breeding					
1	Network Project on Animal Genetics Resources of Kerala (2023)	ICAR	11 lakhs	Dr. R Thirupathy Venkatachalapathy, (PI) Dr. Marykutty Thomas (Co-PI) Dr. S. Pramod (Co-PI)	Characterisation of non-descript livestock and poultry population of Kerala
2	AICRP on Pigs (2023)	ICAR	84 lakhs	Dr. R Thirupathy Venkatachalapathy, (PI)	
3	Scheduled Caste Sub Plan Project on goat (2024)	ICAR	7.1 Lakhs	Dr. R Thirupathy Venkatachalapathy, (Co-PI)	
4	Genetic Improvement of Vechur and other dwarf cattle of Kerala (2024)	DAHD	199 Lakhs	Dr. Manoj M. Dr. R Thirupathy Venkatachalapathy, (Co-PI)	
5	ICAR-SCSP project for the socio-economic development of goat farmers in Parakode (Minor) Kollam district, Kerala	ICAR	7.1 lakhs	Dr. Marykutty Thomas	Project was successfully executed at Parakode Block, Kerala, benefiting forty scheduled caste goat farmers who received comprehensive support, including a Malabari buck, utensils, goat feed, mineral mixture, de-wormers, training manual, leaflets, and an anaemia check card. Skill development training program was also conducted
6	Field Progeny Testing (FPT) of Crossbred bulls	ICAR		Dr. Radhika G.	Genetically superior female progenies produced in the field and milk production potential improved
7	AICRP on Goat Improvement	ICAR		Dr. R. Thirupathy Venkatachalapathy	Genetic improvement of Malabari goats

Livestock Products Technology					
1	Development of Innovative Technologies for Meat Animal Appraisal and Meat Production, Value Addition and Waste for Augmenting Farmer's Income and Entrepreneurship	National Livestock Mission		PI- Dr. V. N. Vasudevan Co PI- Dr. Sathu T. Dr. Irshad A.	Started in March 2024
Veterinary Anatomy					
01	Role of parkin mediated mitophagy in metastatic melanoma in the <i>in vivo</i> mouse and <i>in vitro</i> anoikia models	SERB	18.3 lakhs	Dr Leena Chandrasekhar	Production of two new stable cell lines for studying mitophagy in live animals with minimal invasive techniques. B16-F10 melanoma cell line was used to develop cell lines with overexpressed Parkin by competent cell preparation and plasmid transformation utilizing E. coli strain, DH5 α . The plasmid was isolated by alkaline lysis and gravity column method. The isolated plasmid DNA was analysed by agarose gel electrophoresis and was transfected into the cells followed by selection and stable cell line preparation. Standardization of tumor development in mice and evaluation of tumor growth dynamics was done followed by evaluation of tumor tissues for mitophagy markers. Further the role of parkin in assisting tumor dissemination via the anoikia model and <i>in vitro</i> assays are being analysed. The transfected cell lines were found to be more resistant to certain drugs confirming that mitophagy promotes survival

Veterinary Microbiology					
1	Molecular characterisation, antibiogram and geospatial analysis of leptospiral isolates from Kerala	ICMR	37,24,480	PI - Dr. Ambily R. Co PIs Dr. Priya P.M. Dr. Binu K. Mani Dr. Surya Sankar Dr. Naicy Thomas	Microscopic agglutination test of serum samples of dogs revealed Grippotyphosa and Bataviae as most prevalent serovar. Hardjo was the most prevalent serovar in cattle.
Veterinary Parasitology					
1	KSCSTE - SRS project on “Development of recombinant protein based diagnostic kit for visceral schistosomosis and sero-epidemiological study of the infection in ruminants”	KSCSTE	Rs 12.57 lakhs	PI: Dr Bindu Lakshmanan Co PI: Dr M.N. Priya Dr. Ambily R Dr. Aravindakshan T. V.	Recombinant Tegumental protein of <i>Schistosoma spindale</i> expressed in prokaryotic system and characterised Ascertained the immunogenicity and utilised for Dot ELISA and Plate ELISA Copro PCR RFLP for detection and differentiation of <i>S.spindale</i> and <i>S.indicum</i> developed
2	Semiochemical based tick control strategies for the sustainable mitigation of haemoprotozoan and rickettsial diseases in ruminants” /-	D S T - SERB	Outlay Rs 29, 41,400	PI- Dr Asha Rajagopal Co PI- Dr Bindu Lakshmanan Dr S. Sujith	Tick sample collection from selected agroecological zones in pre monsoon period. <i>Haemaphysalis intermedia</i> , <i>Rhipicephalus annulatus</i> , <i>Rhipicephalus microplus</i> were identified. Resistance detection to Amitraz, deltamethrin and fipronil by AIT and LPT are being conducted
3	Socio-economic development of goat farmers in Parakode (Minor) Block, Kerala, under the ICAR-Scheduled Caste Sub Plan (SC-SP)Project Plan (SC-SP)	I C A R - N B A G R Scheduled Caste Sub Plan (SC-SP)Project	6.8 lakhs	Dr. Syamala K.-Centre PI	Skill development training (2-3 days) on goat rearing for 40 selected farmers of Parakode (Minor) in Kollam district of Kerala. Impact of the interventions will be assessed by comparing the performance such as body weight and kidding rate

Veterinary Pharmacology and Toxicology					
1	Development of an Eco-friendly smart Organogel based Drug delivery system for administration of antibiotics in Aquaculture and evaluation of its efficacy as targeted drug delivery system in fishes	KSCSTE-SRS	Rs. 17, 22, 000/-	<p>Dr Suresh N Nair, Associate Professor, Dept of Vety Pharmacology and Toxicology, CVAS, Mannuthy, Thrissur.</p> <p>Dr. Sanis Juliet</p> <p>Professor and Head</p> <p>Dept. of Veterinary Pharmacology and Toxicology</p> <p>College of Veterinary and Animal Sciences, Pookode</p> <p>Dr. Gijo Ittoop</p> <p>Assistant Professor,</p> <p>Dept of Aquatic Animal Health ,</p> <p>Kerala University of Fisheries and Oceanographic Studies, Panangad, Cochin</p>	<p>1. Standardised the protocol for preparation of organogel using Soyabean oil and beeswax and its characterization was done using FTIR</p> <p>2. Incorporated oxytetracycline into the prepared organogel and the incorporation was confirmed by FTIR</p> <p>3. Prepared the OTC – organogel incorporated fish feed and conducted the palatability studies in fishes</p> <p>4. Single dose oral pharmacokinetics was done in Anabas fishes</p> <p>5. It was found that oxytetracycline produces toxicity to aquatic arthropods and such toxicity is dependent on duration of exposure and not on concentration of OTC</p> <p>6. Standardized a modified protocol for anaesthesia in fishes using a combination of ethanol and clove oil</p> <p>7. Developed a protocol for assessment of Daphnia magna as a model organism for aquatic toxicity</p> <p>8. Developed Artemia salina as a model organism for aquatic toxicity</p>
2	Development of Small molecular weight bioactivities and polysaccharides from Marine and coastal bivalves to develop prospective nutraceutical products	I C A R NASF	33.0696 lakh	<p>Dr.Kajal Chakraborty: Lead Centre PI</p> <p>Co PI :Dr Bibu</p> <p>John Kariyil</p>	

Teaching Veterinary Clinical Complex					
1.	DST-SERB Start-up Research Grant-2022 Corroborating host-vector-pathogen interplay in subclinical forms of arthropod-borne hemoparasitic diseases in goats	Science and Engineering Research Board, Department of Science and Technology, Government of India	29.40 Lakhs	Dr. AJITH Y.	To map ectoparasitic arthropods identified from goats and probe the shreds of evidence on their emerging vector potential in hemoparasitic diseases. To characterize genetic variability of pathogenic species/strains in subclinical forms of vector-borne hemoparasitic diseases in goats.

II. EXTERNALLY AIDED PROJECTS - COMPLETED

Sl.No.	Title	Funding agency	Total out-lay	Name of PI, Co PIs	Research highlights)
Animal Genetics and Breeding					
1	ICAR FPT Scheme	ICAR	56 lakhs	Dr. K. Anilkumar PI Dr. Jamuna Valsalan Co PI (Dr. Radhika G. PI from 20-02-24 and Dr Elizabeth Kurien Co PI from Jan 1, 2024)	An advantage of 500kg milk produced per lactation for female progeny of ICAR field progeny testing programme, compared to contemporaries in first lactation. The age at first calving of progenies was recorded as 1136 ± 13 days in the progenies of first batch of bulls currently it 1018.23 ± 11.24 days The average first lactation yield of progenies increased from 1958.01 ± 26.4 Kg in the progenies of first batch of bulls to 3433.71 ± 32.43 Kg in progenies of 16th batch of bulls.

Veterinary Parasitology					
1	Sustainable parasite management in goats using Anaemia Eye card	N A B - ARD	5,93,600/-	PI: Dr. K. Syamala CoPI: Dr Bindu Lakshmanan Dr. Mary Kutty Thomas	Farmer awareness camps (9 in Thrissur and 5 in Palakkad) on reducing the dependence on anthelmintics for sustainable control of helminthosis in goats and popularized TST using anaemia eye colour charts. Analysed the status of anthelmintic resistance in Thrissur and Palakkad. Multiple anthelmintic resistance detected
Veterinary Pharmacology and Toxicology					
1	Bioactivity guided Fractionation and Isolation of Bioactive Compounds from <i>Thespesia populnea</i> medicinal plant with Anti-cancer potential against triple negative breast cancer	NMPB	2 1 . 3 2 8 lakhs	Dr Bibu John Kariyil Dr.Suja Rani S Dr.Sanis Juliet	
Teaching Veterinary Clinical Complex					
1.	D A A D - RISE World-wide - 2 0 2 3 scheme	DAAD	NA	Dr. Ajith Y.	Hosted German DVM student from LMU, Munich to carry out six week internship at KVASU with fellowship from DAAD
Centre for Animal Adaptation to Environment and Climate Change Studies (CAADECCS)					
1	Strengthening of Centre for Animal Adaptation to Environment and Climate Change Studies for thermal stress assessment of dairy cattle	R K V Y - RAFTA-AR 2019-20	170 lakhs	PI: Dr. V. Beena Co PIs: Dr. S. Hari-kumar, Dr. A. Prasad, Dr. Suraj P. T., Dr. K. Karthiayini, Dr. Aziz Zarina	Installed the Climate Controlled Research Complex (CCRC) for assessing thermal stress in animals The CCRC is inaugurated on 17 th April 2023

I. STATE PLAN PROJECTS - ONGOING

Sl.No.	Title	Department allocation	Name of faculty involved	Research highlights
Animal Genetics and Breeding				
1	Genetic Improvement of Malabari Goats (25% state share of AICRP on Goat) -132.25 lakhs		Dr. R. Thirupathy Venkatachalapathy (PI)	
2	A molecular approach in elucidating heat tolerance, disease resistance and reproductive robustness of indigenous cattle of Kerala	CASAGB	Dr T.V. Aravindakshan Dr Radhika G. Dr Shynu M.	Serum Proteomics data obtained for Vechur and Crossbred cattle Differentially expressed proteins (upregulated and downregulated) identified A set of relevant 10 genes chosen from Bioinformatics analysis and Wet lab studies on these genes planned

Animal Nutrition				
1	Strengthening of NABL accredited Feed Analysis Laboratory	5 Lakhs	Dr Ally K. Dr George Sherin K.	Function as state of art laboratory for feed quality assurance Accreditation procedures completed
2	Revamping of small animal breeding station	10.5 L	Dr Ally K. Dr.Ajith K.S.	Experimental sheds in new block were furnished for housing experimental animals with air condition and exhaust Solar panel created
3	Strengthening of feed mill	28 L	Dr. Shyama K .	StorageThe facility has increased output
Dairy Science				
1.	Augmenting the quality and safety of foods of animal origin and waste valorization for entrepreneurship facilitation	1	Dr. K. Radha and Dr. R. Geetha	1. Indigenous Lactic Acid Bacterial starters were screened for their production potential for B group vitamins. 2. Species Identification of the isolate. 3. Low fat paneer was developed by using different fat replacers. Inulin and whey protein concentrates were used as fat replacers. chemical and microbiological quality of the developed product was determined by standard methods.

Livestock Production Management				
1	Bottling of purified compressed biogas and production of bio-fertilizer from biogas plant slurry		Dr. Deepak Mathew	<ul style="list-style-type: none"> • Value added products developed • Compression of biogas in used tyres need further standardisation • Packed enriched slurry as organic manure
Livestock Products Technology				
1.	Augmenting the quality and safety of foods of animal origin and waste valorization for entrepreneurship facilitation	3,24,000/-	Dr. V.N. Vasudevan	
2.	Strengthening the meat production, preservation, value addition and capacity building facilities of Meat technology Unit		Dr. V.N. Vasudevan	
Poultry Science				
1	Standardisation of in-ovo nutrition and vaccination in chicken and development of strategies for enhancement of poultry welfare in production systems by resource integration in selected five districts of Kerala	1.3 Lakhs	Dr. Vimal Antony Muttathettu	<ul style="list-style-type: none"> • In-ovo inoculation in fertile broiler hatching eggs and their effect in the growth and immune status of the hatched out chicks were studied. • The feed conversion efficiency, antibody titre and the expression of genes coding for growth hormone were also studied in the project.
2	Conservation, Characterization and Popularization of Native varieties of Poultry in Kerala	2.2 Lakhs	Dr. P. Anitha	<ul style="list-style-type: none"> • Whole genomic sequencing of Telicherry Chicken
3	Hatchery Waste Disposal and its Effective Utilization	1.01Lakhs	Dr. Vimal Antony Muttathettu	<ul style="list-style-type: none"> • Technique for aerobic composting of hatchery waste including egg shells towards producing organic fertiliser was developed and standardised
4	Advanced mycotoxin testing facility for poultry feed	5 Lakhs	Dr. P. Anitha	<ul style="list-style-type: none"> • Estimation of aflatoxin B1 in feed ingredients/compounded feed samples using ELISA kits

Statistics				
1	Augmenting productivity of livestock through genomic and nutritional interventions	60,000	Dr. Gleeja V. L.	<p>Modelled productive lifetime and culling age of female goats</p> <p>Modelled time to preweaning mortality goat kids</p> <p>Preweaning mortality was less in Malabari kids.</p>
Veterinary Anatomy				
1	Investigations on the anatomical factors involved in different clinic-pathological conditions affecting various domestic species and its application in field conditions	5 lakhs	Dr K. B. Sumena	Examined the morphological characteristics of skin samples from various dog breeds, comparing normal and disease-affected tissues. Analysed the histological attributes of both healthy and afflicted skin samples across different breeds of dogs.
Veterinary Biochemistry				
1	Molecular markers for thermo-tolerance and strategies for alleviation of thermal stress in ruminants (Code R2SP/23-24/V-5)		Veterinary Biochemistry and Veterinary Physiology	<p>A research was carried out to study the effect of heat stress in milk fatty acid profile and expression of stearyl co-A desaturase gene (SCD) in crossbred and Vechur cattle.</p> <ul style="list-style-type: none"> • Milk composition analysis revealed no significant difference between breeds and selected periods. • The study depicted no significant difference in SCD expression in both breed wise and period wise comparison.
Veterinary Epidemiology and Preventive Medicine				
1	Comprehensive health care of farm animals and pets” (Scheme code No RSP/24-25/VI-6)	8,50,000/	Dr Tresamol P. V. Dr. K. Vinodkumar Dr. Justin Davis and Dr. Ancy Thankachan	<p>A. Seromonitoring of farm animals for the presence of infectious diseases</p> <p>B. Routine vaccination of farm animals against prevalent diseases FMD, HS, Anthrax and LSD</p> <p>C. Visits to the farm premises for disease diagnosis and control</p> <p>D. Technical consult and advice on control of infectious diseases to the various government and NGO agencies</p>

2	Prevalence of zoonotic diseases among companion animals and pet birds in Kerala	1,50,000/-	Dr Tresamol P. V. Dr. K. Vinodkumar Dr. Justin Davis and Dr. Ancy Thankachan	A. Screening of pet birds for the prevalence of avian chlamydiosis
3	Studies on awareness, molecular epidemiology and sero-conversion of rabies in domestic animals	1,75,000	Dr. Tresamol P. V. Dr. K. Vinodkumar Dr. Justin Davis and Dr. Ancy Thankachan	A. Estimation of post rabies vaccination antibody titre in dogs

Veterinary Parasitology

1	Novel diagnostic techniques for economically important bacterial, viral and parasitic diseases of small ruminants	Rs.100000/-	Dr. Priya M. N.	Equipped molecular Parasitology lab for recombinant protein research Molecular detection and surveillance of hameoparasites in bovines in different agroecological zones of Kerala
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Veterinary Pharmacology and Toxicology

1	Evaluation and development of antimicrobial and anti-inflammatory herbal formulation for dermatological diseases of livestock and pet animals	9.5	Dr Nisha A. R, Dr Suresh N. Nair, Dr Suja Rani S. Dr Bibu John Kariyil Dr Preethy John	1, Screening of plants for antimicrobial activity against antibiotic resistant bacteria isolated from dermatitis 2. In vitro assessment of anti-inflammatory activity of selected plants 3. <i>In vitro</i> assessment of wound healing of selected extracts 4. Phyto chemical analysis of identified plant extracts
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Veterinary Physiology

1	Molecular markers for thermotolerance and strategies for alleviation of thermal stress in ruminants	Veterinary Physiology and Veterinary Biochemistry	Dr. V. Beena Dr. Karthiayini K.	<ul style="list-style-type: none"> Assessed the heat stress in Holstein Friesian cross-bred cows of Kerala during their early lactation and found that there is an 18.5% reduction in the milk yield of animals due to heat stress Both temperature and humidity were found to contribute to the heat stress and it was also found that even at ambient temperature 27°C and relative humidity above 54% the animals were experiencing stress during early lactation
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				<ul style="list-style-type: none"> • So, it can be concluded that micro-environment manipulations suitable for different agro-climatic zones of Kerala should be adopted for alleviating thermal stress in cattle for sustainable production. • Studies to understand various thermoregulatory and adaptive responses of cattle to heat stress under climate-controlled environment in comparison with thermo-neutral condition.
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Veterinary Public Health				
1	Strengthening of NABL accredited Quality Control Laboratory	3,50,000/-	Dr. B. Sunil	NABL surveillance internal and external audit completed
2	Augmenting the quality and safety of foods of animal origin and waste valorization for entrepreneurship facilitation	3,25,000/-	Dr. B. Sunil	Three <i>Bacillus cereus</i> isolates from soil samples having highest keratinolytic activity were recovered, with potential degradation of chicken feathers.
3	Prevalence of zoonotic diseases among companion animals and pet birds in Kerala	6,00,000/-	Dr. K. Vrinda Menon	Occurrence of <i>Campylobacter</i> spp in pet birds was found to be 16.1 per cent and <i>Chlamydia</i> spp was not detected in pet birds by ELISA
Teaching Veterinary Clinical Complex				
1	Investigation on the impacts of vector-borne haemoparasitic diseases in goats	10 lakhs	Dr. Ajith Y.	Standardizing molecular diagnostic protocols for screening of hemoparasites in goats Clinical diagnostic services and maintenance of small ruminant examination facility in TVCC Mannuthy
2	Universal Veterinary Health Coverage for Optimizing Productivity of Livestock	14 lakhs	Dr. Preena P.	Diagnosis and treatment of production diseases in cattle and goats like post-partum metabolic and infectious diseases
Centre for Animal Adaptation to Environment and Climate Change Studies (CAADECCS)				
1	Livestock Advisory based on Weather Forewarning	18 lakhs	Dr. V. Beena	<ul style="list-style-type: none"> • Provided livestock advisory to the farmers • Provided weather data to different departments for research activities • Provided digital instruments to different departments for research activities • Attended workshops, seminars, meetings, etc.

				<ul style="list-style-type: none"> • Provided Climate Controlled Research Complex (CCRC) for PhD research work of Dr. A. Singaravadelan (21-DVM-09) from the Department of Livestock Production Management, entitled “Evaluation of heat tolerance responses in Murrah buffalo, Vechur and crossbred cattle based on farm and climate chamber studies” • Provided CCRC for MVSc work of Dr. Navin B. (22-MVM-57) from the Department of Veterinary Physiology, entitled “Impact of acute heat stress on crossbred calves under controlled climatic conditions”
2	Strengthening CAA-DECCS for Climate Change Preparedness in Livestock Sector	2 lakhs	Dr. V. Beena	<ul style="list-style-type: none"> • Installation of solar panels

II. STATE PLAN PROJECTS - COMPLETED

Sl. No.	Title	Department allocation	Name of faculty involved	Research highlights
Animal Genetics and Breeding				
1	Sustainable Ex situ Conservation of Vechur and Kasargode Cattle	48,56,669	Dr. Manoj M.	<p>Maintenance of the nucleus breeding scheme of Vechur and Kasargode Cattle</p> <p>Supply of chilled semen of Vechur and Kasargode bulls to the field units, NGOs</p> <p>Transcriptome analysis of Milk and Blood samples at peak production in Vechur cows</p> <p>Providing samples and data to support research scholars at different departments for Masters and PhD programmes.</p> <p>Studied the postpartum reproductive performance of Vechur cows</p> <p>Maintenance of germplasm repository of Vechur and Kasargode bulls for future use</p>
2	Genome wide scan for the identification of genetic markers related to economic and functional traits in livestock and poultry	8,00,000	Dr. Elizabeth Kurien	Screening of genetic markers in livestock

3	Scientific Approaches for Rabbit Productivity Improvement for Enhancing Farmer's Income in Kerala	11,03,452	Dr. Marykutty Thomas	Genetic improvement of rabbits, hands on training for rabbit farmers
4	Augmenting productivity of livestock through genomic and nutritional interventions	20 lakhs	Dr. R. Thirupathy Venkatachalapthy	Improvement of livestock
5	A molecular approach in elucidating heat tolerance, disease resistance and reproductive robustness of indigenous cattle of Kerala	10,00,000	Dr. Radhika G.	Proteomics profile of indigenous vechur and crossbred cattle obtained from serum Bioinformatics analysis for identifying differentially expressed proteins, genes and their characterization in progress.
6	Strengthening of Centre for Advanced studies in Animal Genetics and Breeding	7,90,083	Dr. Seena T.X.	Augmenting research facilities

Animal Reproduction, Gynaecology and Obstetrics				
1	Strengthening of Artificial Insemination Centre, Mannuthy	8 lakhs	Staff of the department	<ul style="list-style-type: none"> • Standardization of micro-encapsulation and preservation of buck spermatozoa under progress • Proteomic studies on the freezability of buck spermatozoa done • Fertility studies with chilled preserved micro-encapsulated buck sperm under progress • Strengthened the UG, PG and PhD teaching and training
2	Comprehensive health care of livestock and pet animals	2,85,900/-	Staff of the department	<ul style="list-style-type: none"> • Improved the diagnostic and therapeutic facilities for UG, PG and Ph.D clinical training • Research activities undertaken on diagnosis and management of CEH-Pyometra, TVT as well as whelping induction, timing and execution of Elective cesarean and predictive efficiency for whelping of sonographic determinants in dogs

Veterinary and Animal Husbandry Extension

1	Standardisation of in-ovo-nutrition and vaccination in chicken and development of strategies for enhancement of poultry welfare in production systems by resource integration in selected five districts of Kerala	Rs.98,600/-	Dr.Subin K. Mo-han	<ul style="list-style-type: none"> • Analysed training needs pertaining to the poultry sector among poultry farmers in Malappuram district, Kerala • Assessed the level of awareness among poultry farmers of KVASU's initiatives in the poultry development sector
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Veterinary Microbiology

1	23-24RSP/22-23/VI-7 “Novel diagnostic techniques for economically important bacterial, viral and parasitic diseases of domestic and pet animals”	4,25,000	Dr. Surya Sankar	Polymerase chain reaction was carried out for the detection of the bacterial pathogens, <i>Pasteurella multocida</i> , <i>Histophilus somnus</i> and <i>Mycoplasma mycoides</i> subsp. <i>mycoides</i> and viral pathogens, Infectious bovine rhinotracheitis virus, Bovine viral diarrhoea virus, Bovine respiratory syncytial virus and Parainfluenza virus-3 in cattle. None of the samples screened turned out to be positive for these pathogens.
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Veterinary Parasitology

1	“Novel diagnostic techniques for economically important bacterial, viral and parasitic diseases of large ruminants	Rs. 405628/-	Dr. Priya M. N.	Protocol for simultaneous detection of <i>Theileria</i> species and <i>Anaplasma</i> developed
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Veterinary Pathology

1	Prevalence of zoonotic diseases among companion animals and pet birds in Kerala	1,18,480/-	Dr Prasanna K. S.	<p>Rabies was diagnosed in 57 out of 128 dogs and 7, out of 53 cats.</p> <p>Parvo virus detected in 10 pups.</p> <p>Leptospirosis detected in 4 dogs.</p>
2	Investigations on the anatomical factors involved in different clinicopathological conditions affecting various domestic species and its applications in field conditions	5,50,000/-	Dr Prasanna K. S.	Samples were collected from carcasses of various species including zoo, wild animals and elephants. Gross, histopathological and immunohistochemical evaluations were conducted on selected samples. Clinical samples were also evaluated in various species

3	Novel diagnostic techniques for economically important bacterial, viral and parasitic diseases of small ruminants	4,50,000/-	Dr Devi S. S.	<p>Samples from 50 numbers of small ruminants (both necropsy and clinical cases) were examined, out of which definitive diagnosis was made in 41 cases. Diseases identified were mainly bacterial - 10 cases having Pasteurellosis, five cases with clostridial infections, four with Colibacillosis, five cases with mycoplasmosis and three cases with JD. Mixed bacterial infection was observed in four number of cases. Severe endoparasitism was noticed in six cases and hemoprotozoans like Theileria Sp. and Anaplasma Sp. were identified to be associated with different infections in eight cases.</p> <p>PPR could be diagnosed in four cases No other viral agents could be identified from the examined cases except for rabies virus in two cases. Rabies was also diagnosed positive in one cow.</p> <p>Immunohistochemistry was employed to study the role of surfactant protein SFTPA1 and the level variation of the protein was found to influence the pathology of respiratory illnesses in various species.</p>
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MAJOR RESEARCH HIGHLIGHTS

Department of Animal Genetics and Breeding

- Conducted work on genomics
- Conducted Next Generation Sequencing based research with rumen metagenomic and dd-RAD
- Identification of genome wide polymorphisms in Vechur and Kasargode cattle in stress and immune related genes
- Genotyping the Vechur and Kasargode population for the identified SNPs in the above functional traits using HRM
- Bioinformatic analysis of transcriptome data of Vechur PBMC exposed to different temperatures to assess the response to thermal stress and explored the genetic basis of the uniqueness of native

cattle breeds

- Proteomics profile of indigenous Vechur and crossbred cattle obtained from serum Bioinformatics
- Analysis for identifying differentially expressed proteins, genes and their characterization in progress
- Detection of selection signatures, single nucleotide variants and functional candidate genes for production traits based on whole genome re-sequencing of indigenous goat breeds of Kerala
- Comparison of whole blood transcriptome profiles of Vechur cattle and high and low milk producing crossbred cattle of Kerala. The identified SNPs were found to have significant effect on milk production traits. This work provided a comprehensive understanding of the transcriptome of bovine blood and milk in crossbred and Vechur cattle from Kerala in association with milk production.
- Studied the antineoplastic effect of *Semecarpus anacardium* nut milk extract and *Tinospora cordifolia* stem extract in tumour induced mouse model
- Expression profiling and molecular characterisation of different genes in native goat breeds of Kerala. A significant difference in the expression of BMP4 was observed between the tissues, viz. ovary and uterus of the Malabari goat breed.
- Identified DEPs between *Theileria annulata in vitro* infected Vechur and crossbred cattle PBMCs. The gene ontology analysis revealed that the DEPs were primarily involved in immune response, cellular proliferation, apoptosis and cholesterol metabolism. Transcriptome analysis revealed that 1858 transcripts were upregulated and 1884 transcripts were downregulated in *Theileria annulata* infected Vechur compares to infected crossbred cattle PBMCs. GO analysis revealed significant enrichment of cell division and PI3K-Akt signalling pathways.
- Genetic improvement of Malabari goats-Genetically superior female progenies produced in the field Milk production potential of progenies improved
- Characterisation of non-descript livestock and Poultry population of Kerala
- Successfully executed a project at Parakode Block, Kerala, benefiting forty scheduled caste goat farmers organized into 11 clusters.
- Maintenance of the nucleus breeding scheme of Vechur and Kasargode Cattle
- Supply of chilled semen of Vechur and Kasargode bulls to the field units, NGOs
- Transcriptome analysis of Milk and Blood samples at peak production in Vechur cows
- Studied the postpartum reproductive performance of Vechur cows
- Maintenance of germplasm repository of Vechur and Kasargode bulls for future use

Department of Animal Nutrition

- The department is involved in research for creating new knowledge, developing new techniques and processes, finding out ways and means for overcoming qualitative and quantitative deficiencies with regard to feedstuffs. Newer technologies in feed processing and preservation have been developed and disseminated to farmers and feed manufactures. Different strategies for augmenting milk production in dairy cattle have been developed and standardized. Densified complete feed block (DCFB) technology was standardized by incorporating unconventional feed ingredients like areca sheath. To overcome the constraints associated with profitability of goat farming, use of dairy based starter rations in Malabari kids were evaluated for practicing early weaning. Preliminary investigations on development of pet food were done. Maintenance energy requirement was assessed in medium sized nondescript dogs kept restrained. A nutritionally balanced diet to meet maintenance requirement was formulated for medium sized dogs. Various feeding strategies were adopted for refining the energy requirements of pigs during gestation and lactation.

Department of Clinical Medicine, Ethics and Jurisprudence

- Symmetric dimethyl arginine (SDMA) was identified as an early marker for kidney damage in dogs infected with sheathed microfilaria, potentially preceding changes in creatinine and BUN levels. Also, it suggested that sheathed microfilaria can lead to chronic kidney damage in dogs, highlighting the importance of early detection and intervention in cases of canine microfilariosis.
- Linear transducers were recorded as superior to phased array transducers in ultrasonographic diagnosis of superficial lung abnormalities and suggested that phased array transducer was better suited for deep parenchymal abnormalities.

Department of Dairy Science

- Low fat yoghurt from skim milk was developed by utilising exopolysaccharide (EPS) producing starter cultures. Five different strains of *Streptococcus thermophilus* and *Lactobacillus delbrueckii subsp. bulgaricus* cultures were screened for their exopolysaccharide production potential. The highest EPS production was observed in *Streptococcus thermophilus* (NCDC 076) and *L. bulgaricus* (NCDC 004).
- Functional yoghurt was developed using probiotic strain of *Lactobacillus rhamnosus* GG and carrot (*Daucus carota* L.) “juice”. Addition of carrot juice increased the β -carotene in functional yoghurt.
- Folate-enriched yoghurt was developed by incorporating lactic acid bacterial isolate obtained from natural sources. Molecular characterization, revealed that the isolate with maximum folate production was *Lacticaseibacillus paracasei*.

Department of Livestock Production Management

- Developed a calf rearing strategy that enhanced the growth and development of calves for

producing healthy replacement heifers

- Prepared a protocol for transition period interventions to prevent peri-parturient production diseases in cross-bred dairy cattle
- Identified Gompertz model as the best one to predict the growth curve in Malabari goats
- Documentation of the management practices adopted by dairy farmers of Thrissur district
- Identified forced aeration as the best intervention based on the manurial values in goat and poultry manure composting
- Assessed the socio-economic profile, extent of adoption of scientific practices and constraints in cattle and goat production system in Lakshadweep islands
- Identified that provision of bedding in pens has no effect on the growth of weanling piglets but can improve their welfare

Department of Poultry Science

- **Diversity analysis of Chara and Chemballi varieties Kuttanad ducks**

Assessed the genetic diversity of Chara and Chemballi varieties of Kuttanad ducks utilising morphological, quantitative traits and selected microsatellite markers. This study contributed valuable insights into the diversity between and within Chara and Chemballi duck populations, offering a foundation for informed breeding and conservation strategies for the unique varieties of Kuttanad ducks.

- **Effect of dietary supplementation of postbiotics derived from *Lactobacillus plantarum* on growth performance, immune status and intestinal salmonella spp. Count of broiler chicken**

The study showed that dietary supplementation of 0.45% postbiotics increased body weight gain in broiler chicken. Supplementation of postbiotics improved the gut status in broilers by improving the villi height and villi height to crypt depth ratio. Also the beneficial bacterial count got improved in postbiotics supplemented group. The study showed that dietary inclusion of postbiotic metabolites from *Lactobacillus plantarum* has resulted in higher body weight, weight gain and improved intestinal health.

- **Production performance of Tellicherry and red variety of desi chicken under intensive and backyard systems and determinants of knowledge and adoption of recommended practices by poultry farmers**

The study concluded that bird reared under intensive system led to better production performance in terms of body weight, age at sexual maturity and egg production while the backyard system had lower production cost per egg. The survey among farmers showed positive attitude from their side towards backyard poultry farming.

- **Effect of dietary supplementation of Vitamin e and selenium on semen quality and fertility in white pekin ducks**

The study concluded that supplementation of 200 mg vitamin E and 0.3 mg selenium/kg basal diet improved the microscopic and macroscopic parameters of semen. The antioxidant status of seminal plasma as well as the fertility per cent could also be improved by supplementing 200 mg vitamin E and 0.3 mg selenium per kg basal diet in White Pekin ducks.

Department of Veterinary Anatomy

- Production of two new stable cell lines for studying mitophagy in live animals with minimal invasive techniques.
- Investigations on the anatomical factors involved in different clinico pathological conditions affecting various domestic species and its application in field conditions.
- Structural integrity of digital cushion and its relevance as a predictor of claw horn disruption lesions in crossbred cattle of Kerala
- Structure and vascular pattern variations of the tumour microenvironment and associated lymph node in murine model of triple negative breast cancer

Department of Veterinary Microbiology

- The important research highlights were studies on the isolation and characterization of *Avibacterium paragallinarum* from poultry in Kerala, isolation and identification of bacteria from vagina of sub-fertile and fertile bitches and their antibiotic resistance pattern by phenotypic and genotypic methods, detection and isolation of fowl adenovirus among broiler flocks in the state followed by its genotypic characterization and investigation on the aetiological agents associated with respiratory infections in dogs. Testing of serum, blood and urine samples from dogs for Leptospirosis by microscopic agglutination test and PCR is also being carried out routinely. An inactivated vaccine for Reimerellosis has been developed under the leadership of Dr. Priya P.M., Professor and Head and patent for the vaccine has been granted.

Department of Veterinary Parasitology

- ***Anthelmintic resistance detection and mitigation:*** Targeted selective treatment for control of helminthosis in goats implemented in goat farms of Thrissur and Palakkad district. Multiple anthelmintic resistance detected against benzimidazoles, levamisole and ivermectin against *Haemonchus* spp. in goats. Benzimidazole resistance detected in *Haemonchus* spp. in cattle.
- ***Schistosoma diagnostics:*** Recombinant tegumental protein of *Schistosoma spindale* expressed in prokaryotic system and utilised for Dot ELISA and Plate ELISA. Copro PCR RFLP for detection and differentiation of *S.spindale* and *S.indicum* developed
- ***Acaricide resistance detection in ticks:*** The cattle tick, *R. microplus*, were found to be susceptible to amitraz..Detection of Amitraz resistance in brown dog ticks was done.

Genotyping of amitraz resistance was done for the first time in the country.

- **Semiochemical mediated tick control:** Pheromone based traps using calcium alginate beads and vapour patches developed to control dog and cattle ticks
- **Genotyping of *Theileria orientalis* across Kerala:** Chitose and buffeli genotypes of *T.orientalis* detected in cattle and in cattle ticks across Kerala.

Department of Veterinary Pathology

- The department has been actively engaged in molecular, immunohistochemical, toxicological and immunological research focused on infectious and toxicologic diseases in animals and birds as well as on veterinary oncology. The key researches include molecular detection of commonly encountered viral diseases and subsequent immunohistochemical localisation of inflammatory cytokines in porcines, molecular detection and immunohistochemical localisation of prevalent gastroenteric viral pathogens in canines and felines, immunological studies in single and combined viral infections in poultry, molecular detection of rabies virus in various species of animals, immunohistochemical localisation of tumour suppressor proteins and their role in tumour progression and metastasis, elucidation of EMT markers and stem cell markers in canine mammary tumours and toxicologic studies pertinent for translational research.

Department of Veterinary Pharmacology and Toxicology

- Development of antibiotic impregnated hydrogel and development of nano formulation of plant extract with antimicrobial activity
- Antineoplastic activity of apigenin possess against DLA cells through inhibition of HDAC when compared with standard HDAC inhibitor SAHA was identified which makes apigenin an ideal drug candidate for anticancer therapy
- Developed liposome and layered double hydroxide based praziquental to enhance its bioavailability and overall pharmacokinetics
- Assessed acute and subacute oral toxicity of indoxacarb in layer chickens
- Development of organogel incorporated oxytetracycline feed mix for the use of microbial diseases in fishes

Department of Veterinary Public Health

- Standardisation of isolation and identification of *Klebsiella pneumoniae*, *Acinetobacter baumannii* and *Pseudomonas aeruginosa* were done for soil, water and nasal and rectal swabs from animals (cattle, dog and goat). Standardisation of molecular identification of species-specific genes and virulence genes using PCR for the above organisms.
- Epidemiological study on the prevalence of antibiotic resistant foodborne pathogens and mitigation using natural antimicrobials of plant origin

- Identification of keratinase- producing bacterial strains from feather waste of poultry slaughter for eco-friendly biodegradation. Three *Bacillus cereus* isolates from soil samples having highest keratinolytic activity were recovered, with potential degradation of chicken feathers.
- The applicability of the developed helix loop-mediated amplification assay (HAMP) assay was assessed in field conditions by screening cow milk and chicken meat samples for natural contamination of *Listeria monocytogenes*. A total of 200 field samples which included cow milk (n=100) and raw chicken meat samples (n=100) were collected and screened using HAMP from local dairy farms and retail market outlets in Thrissur, Kerala, India. PCR. The occurrence of *L. monocytogenes* was found to be three per cent by HAMP.

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Abstracts/Papers in conferences/seminars

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6. Megha, P.S. and Ramnath, V. 2023. 'Phytoestrogens and their Implications in Health', in Vivek Agrawal and Jayanthi, R. (ed.) *Recent Research Trends in Veterinary Sciences and Animal Husbandry*. Delhi: AkiNik Publications, 18: 187-216. <https://doi.org/10.22271/ed.book.2477>
 7. Megha, P.S. and Ramnath, V. 2023. 'Hormones and Hormonal Anabolics: Residues in Animal Source Food and Potential Public Health Impacts', in Vivek Agrawal and Jayanthi, R. (ed.) *Recent Research Trends in Veterinary Sciences and Animal Husbandry*. Delhi: AkiNik Publications, 18: 163-186. <https://doi.org/10.22271/ed.book.2477>
 8. Megha, P.S. and Ramnath, V. 2023. Designer Eggs and their Marketability', in Sreedhar, S. (ed.) *Advances In Veterinary Sciences*. Delhi: AkiNik Publications, 19: 93-112. <https://doi.org/10.22271/ed.book.2476>
 9. Nisha, A.R. and Latha, C. 2024. Microscopical Methods for Evaluating the Nutraceuticals and Nanonutraceuticals Formulations. Springer nature. http://dx.doi.org/10.1007/978-3-030-69677-1_17-1

Popular articles

1. Athira, C.P, and Syamala, K. *Aadukalile virachikilsa-Karshakar ariyendathu*. Veekshanam Daily. 14.02.2024
2. Athira, C.P, and Syamala, K. *Aadukalkku venam samgra paraada chikilsa reethi*. Veekshanam Daily. 31.01.2024
3. Dr. Udayasree V. J. "Arumapakshikalk Arogyaraksha", Karshakasree, January 2024
4. Dr. Udayasree V. J. "Ariyam Thadayam Aadukalile Vilarcha" IVA
5. Krupa, R.J. and Vijayakumar, K. 2023. Pannikalil Bheeshaniyayi Neela cheviyan Rogham. Karshakan.
6. Manoj, S. and Deepthi, V. Veterinarian's role in countering antimicrobial resistance. *The Veterinarian*. 2023, 5 (2): 94-97.
7. Tresamol, P.V. 2023. Akiduveekkam Thadayam Vattukalachikilsa, Karshakan, July 2023.
8. Tresamol, P.V. and Vincy P. Villanakum Villuvatham. Karshakan, April 2023.
9. Vrinda, K.M. and Sriji, A.P. "Noothana Janthujanya rogangalude Aavirbhavam". In 'Mrigasamrakshanam Marunna Kalavastha, CADEECS, KVASU, Pookode.

DETAILS OF UNITS/HIGH END LABS/SPECIALIZED LABS IN DEPARTMENTS

Department of Animal Nutrition

NABL accredited feed and fodder analysis laboratory

- The department has a state of art NABL accredited feed analytical laboratory and routinely doing the proximate analysis of the samples and documentations for NABL accreditations. The Surveillance audit by NABL auditors were successfully completed in March 2023 and proficiency testing of feed analysis has been successfully completed for the year 2023-24. Currently the lab has analysed 607 samples and accrued a revenue of Rs.4,00,425/-

Department of Animal Reproduction, Gynaecology and Obstetrics

- Reproductive endocrinology laboratory
- Molecular reproduction laboratory
- Bull station and artificial insemination centre
- Portable Ultrasonography facility

Department of Livestock Products Technology

- **Meat Processing Laboratory:** This specialized lab is designed to facilitate the processing and analysis of various meat and meat products to enable researchers and students to explore different processing techniques and assess the quality attributes of meat and meat products.
- **Microbiology and Food Safety Laboratory:** The lab is equipped with advanced microbial analysis systems and microbiological culturing equipment to focus on the microbiological aspects of meat and meat products, emphasizing food safety and quality control.
- **Quality Analysis Laboratory:** This lab houses a wide range of analytical instruments used for the comprehensive analysis of meat and meat products using gas chromatography, liquid chromatography, spectrophotometry, and texture analysis.
- **Sensory Evaluation Rooms -** The sensory evaluation rooms are purposefully designed with standardized testing environment to ensure accurate and objective assessment of meat products.

Department of Poultry Science

- Avian Biotechnology/ Mycotoxin Lab

Department of Veterinary Parasitology

Molecular parasitology laboratory offers facility for PCR detection of parasites / drug resistance / cloning and expression of recombinant proteins

Department of Veterinary Pathology

Rabies cum molecular diagnostic lab, Histopathology lab, Post mortem unit

Department of Veterinary Public Health

● NABL Accredited Laboratory for Microbiological Testing of Water

The Department of Veterinary Public Health, College of Veterinary & Animal Sciences, Mannuthy is equipped with NABL accredited Quality Control Laboratory for water testing–ISO 17025:2017. The water testing for the public is carried out in the lab based on the public demand at different rates.

The microbiological quality assessment of water is being conducted for farmers, general public and food industry/caterers/ hotels/restaurants for FSSAI registration and licensing.

Scope of Accreditation:

- Total Coliform count
- *Escherichia coli* count
- Faecal streptococcal count

● Other Available Laboratory Facilities:

- a. Physical and Chemical Quality assessment of water
- b. Microbiological testing of foods of animal origin – Milk, meat, milk and meat products, egg and egg products
- c. Microbiological analysis of feed
- d. Physical and Microbiological analysis of effluents

Facilities available in Dr. K.R. Narayanan, Teaching Veterinary Clinical Complex

a) *Clinical Veterinary Medicine, Ethics and Jurisprudence*

- Large and small animal medicine out-patient units
- Large and small animal in-patient unit
- Haemodialysis unit
- Dermatology unit
- Blood transfusion unit
- Emergency and critical care unit*
- Advanced cardiology unit
- Advanced ultrasonography including doppler echocardiography
- Large animal downer lift
- Centralized oxygen supply

b) *Veterinary Epidemiology & Preventive Medicine*

- Large and small animal medicine out-patient units
- Disease investigation unit
- Vaccination unit
- Infectious disease ward
- Isolation ward

c) *Veterinary Surgery & Radiology*

- Surgical out-patient units
- Small animal surgical operation theatres with gas anaesthesia work station
- Large animal surgical operation theatre with gas anaesthesia machine
- Ophthalmology unit with separate theatre

- Orthopaedic surgery unit with separate theatre
 - Endoscopy
 - Radiology
- d) ***Animal Reproduction, Gynaecology and Obstetrics***
- Gynaecological out-patient units
 - Small animal gynecological operation theatre with gas anaesthesia work station
 - Large animal gynecological operation theatres with gas anaesthesia machine
 - Small and large animal infertility clinic
 - Laparoscopy, Neonatal care unit
- e) ***Veterinary Diagnostic Laboratory***
- Clinical Laboratory with advanced molecular diagnostics**
- f) ***Karshakamitra medical store***
- g) ***Registration counter and pharmacy***

h) Ambulatory Services

**The critical care unit is equipped with advanced lifesaving equipment such as defibrillator, ventilator, oxygen concentrator, CRI machine (Syringe pump and drip counter), blood pressure monitor and multi parameter monitor.*

***The clinical laboratory is equipped with haematological auto analyzer and semi auto biochemical analyzer. The PCR machine, gel-doc and chemiluminescent immunoassay add to the advanced molecular diagnostics.*

FACULTY DEVELOPMENT PROGRAMMES

Trainings conducted

Sl No.	Name of Faculty	Title of the Training Programme	Date and Venue
	Dr. Radhika G.	Training on “Skill Development Training on Molecular Biology and Bioinformatics Tools for Advanced Life Science Research”	3-10-2023 to 16-10-2023, SAAPBT, Mannuthy
		Training on “Skill Development Training on Molecular Biology and Bioinformatics Tools for Advanced Life Science Research”	31-10-23 to 10-11-23 SAAPBT, Mannuthy
		Training on “Skill Development Training on Molecular Biology and Bioinformatics Tools for Advanced Life Science Research”	30-1-24 to 9-2-24, SAAPBT, Mannuthy
	Dr. Marykutty Thomas	Hands on training on scientific rabbit production and processing	23-1-24, Rabbit Breeding Station, CASAGB, Mannuthy

Dr. Marykutty Thomas and Dr. Thirupathy V.	Skill development training program on goat rearing	4.3.24-5.3.24, Parakode Block, Kollam
Dr. Radhika G.	Basic Molecular Genetic Techniques and Bioinformatics Tools for Life Science Research	May 2023, SAAPBT
Dr. Radhika G.	Basic Molecular Genetic Techniques and Bioinformatics Tools for Life Science Research	Sept 2023, SAAPBT
Dr. Radhika G.	Basic Molecular Genetic Techniques and Bioinformatics Tools for Life Science Research	Dec 2023, SAAPBT
Dr Radhika G.	Basic Molecular Genetic Techniques and Bioinformatics Tools for Life Science Research	Feb 2024, SAAPBT
Dr. Sajith Purushothaman	Farmers training on formulation of ration and cattle feed production	October 27th 28th 2023 at SANFT Feed mill
Dr. Jayakumar C., Dr. Hiron M. Harshan, Dr. Shibu Simon, Dr. B. Bibin Becha, Dr. Abhilash R. S., Dr. Amritha Aravind, Dr. Benjamin E D., Dr. Magnus Paul K.	Three months training for Assistant Directors of Department of Animal Husbandry, Kerala- Reproductive Ultrasonography in Farm Animals	Academic Staff College, Mannuthy
Dr. Jayakumar C., Dr. Hiron M. Harshan, Dr. Shibu Simon, Dr. B. Bibin Becha, Dr. Abhilash R. S., Dr. Amritha Aravind, Dr. Benjamin E D., Dr. Magnus Paul K.	KSVC training on Current concepts on Bovine and canine infertility management	22 nd to 26 th May 2023, Department of ARGO, CVAS, Mannuthy
Dr. Jayakumar C., Dr. Hiron M. Harshan, Dr. Shibu Simon, Dr. B. Bibin Becha, Dr. Abhilash R. S., Dr. Amritha Aravind, Dr. Benjamin E D., Dr. Magnus Paul K.	KSVC training on reproductive ultrasonography in farm and companion animals	22/5/23 to 26/5/23 13/6/23 to 17/6/23 Department of ARGO, CVAS, Mannuthy

Dr. Jayakumar C., Dr. Hiron M. Harshan, Dr. Shibu Simon, Dr. B. Bibin Becha, Dr. Abhilash R. S., Dr. Amritha Aravind, Dr. Benjamin E D., Dr. Magnus Paul K.	KSVC training on current concepts on canine re-productive management	19/7/23 to 21/7/23 25/7/23 to 27/7/23 Department of ARGO, CVAS, Mannuthy
Dr Shibu Simon Expert Faculty	Fertility management in companion animals; KSVC	19.9.23, Thiruvananthapuram, 29.9.23, Ernakulam 5.10.23, Malappuram
Dr Shibu Simon Expert Faculty	Reproductive ultrasonography in farm and companion animals; SAMETI, Thiruvananthapuram	15-17 June 2023 SAMETI, Thiruvananthapuram
Dr. K. Radha	“Hands on training on the preparation of milk-based snack foods” Department of Dairy science, College of Veterinary and Animal sciences, Mannuthy	
Dr. Sabin George	National Training on Research Methodology using Chat GPT and Artificial Intelligence tools. KVASU	Academic Staff College, December 11-12,2023
Dr. Sabin George	100+ Smart Ways to Use ChatGPT for an Exciting Classroom; Empowering the Next Generation of Educators: Training on Pedagogical Excellence with Generative AI, KVASU	Academic Staff College, February 8,2024
Dr. Sabin George	Empowering Research-Mastering Internet search and AI tools, KVASU	CVAS, Mannuthy March 23,2024
Dr. Deepak Mathew D.K, LPM, CVAS, Mannuthy	Training for Kudumbasree District level community Resource Persons on Scientific Cattle and Fodder production	18/09/2023, Manjeri
Dr. Sathu T.	Meat Processing and Preservation	8/05/2023 - 12/05/2023, Meat Technology Unit
Dr. Irshad A.	Enhancing Skills in Processing and Marketing of Meat Based Pickles	12/06/2023, Meat Technology Unit
Dr. Irshad A.	Enhancing Skills in Processing and Marketing of Meat Based Pickles	07/07/2023, Meat Technology Unit
Dr. Irshad A.	Entrepreneurship Development in Fresh and Processed Meat	11/07/2023 &12/07/2023, Meat Technology Unit

Dr.Sathu T.	Training to Entrepreneurs on Rabbit Processing and Marketing	27/07/2023 & 28/07/2023, Meat Technology Unit
Dr. Sathu T.	Meat processing and preservation	04/01/2024 to 11/01/2024, Meat Technology Unit
Dr. Subin K. Mohan	Off campus training for poultry farmers on the topic “Advances in poultry production and management”	20.2.2024 Athavanad, Malappuram District.
Dr K. Vinodkumar	Class to farmers on ‘Prevention of Infectious Diseases of Livestock’. In the One Week Farmer Training Programme conducted by the Directorate of Extension, Kerala Agricultural University	08/06/23
Dr K. Vinodkumar	Class to veterinarians on ‘Canine Haemoparasitic Diseases’ at Koutralam, Tamil Nadu on 08/07/23, organised by Small Animal Practitioner Association, Tamil Nadu	Koutralam, TN on 08/07/24
	Handled a one-day international training session on feline medicine at the CVE Programme for Veterinarians at Goa conducted by World Veterinary Services	16/03/24
Dr Justin Davis K.	Handled training session on feline medicine at the CVE Programme for Veterinarians at Kottayam organised by KGVOA	23.7.23
Dr K. Devada Dr R. Radhika Dr Asha R. Dr K. Syamala Dr.M.N. Priya	One day workshop on Updates in the diagnosis of parasitic diseases for Medical post graduate students	16.12.23 CVAS, Mannuthy
Dr Sujith S.	Training on Laboratory animals as Experimental models	March 27-31, 2023
Dr Sujith S.	Training on Laboratory animals as Experimental models	May 2-6, 2023
Dr Sujith S.	Training on Laboratory animals as Experimental models	September 11-15, 2023
Dr Bibu John Kariyil	Training on Laboratory animals as Experimental models	March 18-22, 2024
Dr. K. Vrinda Menon	Training on biosafety ‘Culture of responsibility’	Smart class room, CV&AS, Mannuthy on March 23, 2023

	Dr. C. Sethulekshmi	Food safety and quality control of foods of animal origin, Dept. of Veterinary Public Health, CV&AS, Mannuthy	Academic staff College, Mannuthy, July 11-15, 2023
	Dr. Deepa Jolly	'Hands on Training in Laboratory Techniques in quality control of foods', Dept. of Veterinary Public Health, CV&AS, Mannuthy	Dept. of Veterinary Public Health, CV&AS, Mannuthy, Dec. 21-23, 2023
	Dr. Syam K. Venugopal Dr. Reji Varghese, Dr. S. Anoop Dr. Laiju M. Philip Dr. Soumya Raman-kutty Dr. Nijin Jos B. M.	Continuing Veterinary Education programme on "Current trends in Veterinary Ophthalmology-1: Hands on training and workshop on diagnostic ophthalmology" conducted by Indian Society for Veterinary Surgery, Kerala Chapter	3rd November, 2023 at Department of Veterinary Surgery and Radiology, College of Veterinary and Animal Sciences, Mannuthy, Thrissur.
	Dr. Preena P.	Three months training for Assistant Directors of Department of Animal Husbandry, Kerala- Infectious skin disease of dogs; Academic staff college, KVASU	27 th December 2023
	Dr. Preena P.	Laboratory animals as experimental models- Diseases of lab animals- Dept of Veterinary Pharmacology	19 th March 2024
	Dr. Preena P.	Exposure Visit and awareness class on First Aid for animals at KVASU of final year B.Sc. (Hons.) Forestry of College of Forestry, KAU, Vellanikkara	23 rd March 2024
	Dr. Preena P.	Six days training programme for "Imparting practical knowledge in canine cardiology to practicing veterinarians"	Online: 04/12/2023 to 06/12/2023 Offline: 14/12/2023 to 16/12/2023; University Veterinary Hospital & Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Thrissur, Kerala- 680 651

Dr. Preena P.	Six days training programme for “Imparting practical knowledge in canine cardiology to practicing veterinarians”	Batch 2: Online: 08/01/2024 to 10/01/2024 Of- line:18/01/2024 to 20/01/2023; University Veterinary Hospital & Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Thrissur, Kerala- 680 651
Dr. Preena P.	Six days training programme for “Imparting practical knowledge in canine cardiology to practicing veterinarians”	Batch 3: Online: 11/03/2024 to 13/03/2024 Of- line: 25/03/2024 to 27/03/2024; University Veterinary Hospital & Teaching Veterinary Clinical Complex, College of Veterinary and Animal Sciences, Thrissur, Kerala- 680 651
Dr Magnus Paul K.	PG Diploma in Small Animal Theriogenology-Doppler Ultrasonography	18.09.2023 to 16.03.2024), CVAS, Mannuthy
Dr Magnus Paul K.	Training to Dog breeders of Chalakudy, CVAS, Mannuthy and Chalakudy Veterinarians club	24 th March,2024, Chalakudy
Dr Magnus Paul K.	PG Diploma in Small Animal Theriogenology-Neonatology	1.04.2023 to 16.09.2023), CVAS, Mannuthy
Dr Magnus Paul K.	KSVC training on Current concepts on Bovine and canine infertility management	22 nd to 26 th May 2023, Department of ARGO, CVAS,Mannuthy
Dr Magnus Paul K.	Three months training for Assistant Directors of Department of Animal Husbandry, Kerala-Reproductive Ultrasonography in Farm Animals.	10/10/2023, Academic Staff College, Mannuthy
Dr K Syamala	CVE on current trends in management of GI strngylosis in goats By IVA	Thrissur 10.9.23

	Dr Bindu Dr M.N Priya	Sessions for Basic Molecular genetic techniques and bioinformatic tools for life science research	4.11.23 6.11.23
	Dr. Bindu Lakshmanan	Session on Haemoparasitic diseases in domestic animals-Diagnostic challenges “ in the pre-conference workshop on “Laboratory and Molecular Techniques for Diagnosis of Disease “ in association with 40 th Annual Convention of ISVM t	CVAS , Mannuthy on 21/02/2024
	Dr Bindu Lakshmanan Dr R. Radhika Dr M.N. Priya Dr Syamala	Sessions for the Three months training for AHD officers	26.9.23
	Dr Syamala K.	Diagnosis of parasitic disease in dogs IVA	Thrissur 9.12.24
	Dr K. Syamala	Prevention and control of diseases in rabbits	18.01.24 CVAS, Mannuthy

Trainings attended

Sl No.	Name of Faculty	Name of the Programme and Organizing Institution	Date and Venue
1	Dr. Radhika G.	Basic and Applied Bioinformatics in Animal Sciences organized by Centre of Advanced Agricultural Science & Technology Advanced Centre for Livestock Health, ICAR-Indian Veterinary Research Institute, Izatnagar (UP)	09th to 11th February, 2021. Online training conducted by IVRI, Izatnagar
2	Dr. Radhika G.	National Training on Research Methodology using Chat GPT and AI Tools	11-12-23 to 12-12-23, CVAS, Mannuthy, KVASU
3	Dr. C.N. Dinesh, Dr. Elizabeth Kurian, Dr. Marykutty Thomas, Dr. Rojan P. M.	National Training Program on “Research Methodology using ChatGPT and AI Tools”	11th and 12th of December, 2023. KVASU
4	Dr George Sherin K .	Practical Animal Nutrition for augmenting livestock and poultry productivity, TANUVAS	July 11 to August 31 2023, agMOOc
5	Dr. Deepa Ananth	Practical Animal Nutrition for augmenting livestock and poultry productivity, TANUVAS	July 11 to August 31 2023, agMOOc
6	Dr. Deepa Ananth	Research methodology using ChatGPT and Artificial intelligence tools organised by KVASU	11.12.23 to 12.1.23
7	Dr. Hiron M. Harshan Dr R. S. Abhilash Dr. Amritha Aravind	Participated MOOC course on “Practical animal nutrition for augmenting livestock and poultry productivity”	Six Week Online Course from July 11 - August 31, 2023 conducted by TANUVAS

8	Dr R. S. Abhilash	Participated Hands on training in “Molecular Biology and Bioinformatics Tools for Advanced Life Science Research”	July 11 to July 22, School of Applied Animal Production and Biotechnology, Mannuthy, KVASU
9	Dr Udayasree V. J.	1. Seven day National level online Faculty Development Programme on Outcome Based Education and Essential AI Tools For Teachers, IQAC Carmel College, Mala in association with Kerala State Higher Education Council 2. CAFT 21 days Training on Principles and Practices in Diagnostic Imaging, Endoscopy and Interventional Procedures in Farm and Pet Animal Medicine Veterinary Clinical Medicine and Therapeutics, Madras Veterinary College, TANUVAS	Online, August 24 to 30 , 2023 November 16 to December 6, 2024 Madras Veterinary College
10	Dr Sangeetha S. Gireesh	MOOC course on Digital learning Techniques by ICAR NAARM	1-31 October, ICAR NAARM
11	Dr R. Geetha	Training on pedagogical Excellence with Generative AI	Kerala Veterinary and Animal Sciences University
12	Dr. Balusami.C. Dr. N. Geetha	FDP on Competency Enhancement in Agricultural Research and Education& ICAR NAARM, Hyderabad and Kerala University of Fisheries and Ocean Studies, Panangad, Kochi, Kerala	20.11.2023 to 24.11.2023 and Kerala University of Fisheries and Ocean Studies, Panangad, Kochi, Kerala
13	Dr.Balusami.C.	Two days training on Beyond Traditional Practice: AI and Chat GPT’s Impact on Veterinary Service” organised by Kerala Veterinary and Animal Sciences Univeristy, Wayanad ,Pookode	19.01.2024 to 20.01.2024 and Academic staff College, Mannuthy, Thrissur, Kerala
14	Dr. Manju Sasidharan	100+ Smart ways to use ChatGPT for an exiting classroom	08.02.2024 at Academic Staff College, KVASU, Mannuthy
15	Dr. Sabin George	National level online faculty development programme on research methodology using ChatGPT and AI tools, Marian College,Kuttikkanam	September 21-29,2023 Online
16	Dr. Deepak Mathew D. K.	National training on “Research methodology using Chat GPT and Artificial Intelligence tools”.	12/12/23. Academic Staff College, KVASU

17	Dr. Binoj Chacko Dr. Shamna T. P.	National Training Programme on Research Methodology using ChatGPT and AI tools	11-12 December 2023 Mannuthy
18	Dr. Beena C. Joseph	100+ Smart ways to use ChatGPT for an Exciting Classroom; Empowering the Next Generation fo educators: Training on Pedagogical Excellence with Generativ AI Directorate of Enterprenuership, KVA-SU	08-02-2024 Mannuthy
19	Dr. Beena C. Joseph Dr. Suja C. S.	One month online training on “Artificial Intelligence in Agriculture” NAARM	01-03-2024 to 31-03-2024 Online
20	Dr. Shamna T. P.	Six week online training on “Practical animal nutrition for augmenting live-stock and poultry productivity” NAARM	11-07-2023 to 31-08-2023 Online
21	Dr. Shamna T. P.	Six week online training on “Current trends in treatment and control of parasitic diseases of livestock and poultry” NAARM	19-12-2023 to 09-02-2024 Online
22	Dr. Gleeja V. L.	Data analysis for Biologists , NPTEL online certification course (funded by MoE, Govt of India) under SWAYAM	January- March 2024 (8 weeks) , Online
23	Dr. Gleeja V. L.	Python for Data Science , NPTEL online certification course (funded by MoE, Govt of India) under SWAYAM	July-August 2023, (4 weeks) Online
24	Dr N. S. Sunilkumar	Training on Laboratory animals as experimental models- organized by Department of Veterinary Pharmacology and Toxicology, CVAS, Mannuthy	18 th to 22 rd March, 2024
25	Dr. Varuna P. Panicker	Techniques in Molecular Biology Kerala Agricultural University	19 Feb- 05 March 2024 KAU, Vellanikkara
26	Dr. Vidya P.	Online training programme on ‘GIS Basics in QGIS Platform’ organised by Centre for e-Learning, Kerala Agricultural University, Thrissur during	18th to 22nd March 2024 (online)
27	Dr Justin Davis K.	Basics of echocardiography and Doppler ultrasonography in animals, IVRI Izatnagar	5 th to 10 th Feb 2024
28	Dr. Shyma V. H.	Faculty development programme conducted by Research foundation of India 26-30 September 2023	26-30 September 2023
29	Dr. Shyma V. H.	Agmooc by TANUVAS	July11- August 31, 2023
30	Dr. Binu K. Mani	Advances in GIS applications in epidemiological analysis of livestock diseases in India	7 th to 16 th February 2024 at NIVEDI, Bengaluru
31	Dr. Surya Sankar	Training on “Analytical Instrumentation for high quality research in life sciences”, Academic Staff College, CVAS, Mannuthy	8/3/2023 to 21/3/2023, Academic Staff College

32	Dr. Ambily R.	21 day Winter school on “Development and translation of new generation vaccines and diagnostics for animal health from lab to land”	24th Jan., to 13th Feb., 2024, IVRI, Izatnagar
33	Dr M.N. Priya	Training on AMS , ICAR	15.09.23 CVAS Mannuthy
34	Dr Bindu Lakshmanan	FDP –OBE and AI tools St Alberts College, EKM	2.11.23- 9.11.23 Online
35	Dr K. Syamala Dr M.N. Priya	MOOC on Digital Teaching Techniques -NAARM	1-30 Oct, 23 Online
36	Dr Bindu Lakshmanan Dr Syamala K.	Two day training on Research Methodology using Chat GPT and Artificial Intelligence tools” organized by KVASU	11.12.23-12.12.23 Academic Staff College, KVASU
37	Dr K. Devada Dr Bindu Lakshmanan Dr M.N. Priya Dr K. Syamala	Two day training on “Beyond traditional Practice: AI and Chat GPT’s impact on Veterinary Services, organized by KVASU	Academic Staff College 19/01/24- 20/01/24
38	Dr K. Devada Dr Bindu Lakshmanan Dr R. Radhika Dr K. Syamala Dr.M.N. Priya	One day national training on “100 plus smart ways to use ChatGPT for an exciting classroom; empowering the next generation of educators-Training on pedagogical excellence with generative AI	Academic Staff College 08/02/24
39	Dr Asha Rajagopal Dr M.N. Priya Dr R. Radhika	AG MOOCS on Current trends in treatment and control of parasitic diseases of Livestock and poultry by TANUVAS	Online 9/12/23-9/02/24
40	Dr. Divya C.	21 Days Winter School on “Recent Advances in Veterinary Sciences and Animal Husbandry” (RAVSAH-2023) jointly organized by ICAR-Indian Veterinary Research Institute (IVRI), Regional Station, Palampur, H.P. and National Agriculture Development Cooperative Ltd. (NADCL) Baramulla, UT of J & K	November 02 to 22, 2023 online
41	Dr.Suja Rani S.	DBT sponsored Faculty Training Programme on Cell culture techniques for biotechnology applications- Focus on neurobiology and cancer	14.02.24 to 27.02.24, CUSAT, Kochi
42	Dr. K. Karthiayini.	6 week online course (agmooc) on practical animal nutrition for augmenting livestock and poultry productivity conducted by TANUVAS Chennai and Commonwealth of learning, Canada.	11.07.2023 to 31.08.2023.

43	Dr. Pratheesh M D	One month INSA Visiting scientist Programme at National Institute of Animal Biotechnology, Hyderabad	17th September, 2023 to 16th October 2023.
44	Dr. Pratheesh M. D.	Six-week online course (Agmooc) on Current trends in treatment and control of parasitic diseases of livestock and poultry conducted by TANUVAS Chennai and Commonwealth of learning, Canada.	19th December 2023 to 9th February 2024
45	Dr Binsy Mathew	Three day national level workshop on “Research methodology, techniques, analysis and presentation” organised by Ministry of Educations institution innovation council	July 17-19 2023 (Online)
46	Dr. K. Vrinda Menon Dr. Deepa Jolly Dr. C. Sethulekshmi Dr. Deepthi Vijay	Training program on “Principles and Practice of Epidemiology” organized under ICAR-NAHEP-CAAST Project entitled “Centre of Excellence for Advanced Research on Animal Food Safety” Offered by Dept. of VPH, MVC, Parel, Mumbai	Online Mode 3rd - 12th July, 2023
47	Dr. Binsy Mathew Dr. C. Sethulekshmi Dr. Deepthi Vijay	100+ Smart Ways to Use ChatGPT for an Exciting Classroom: Empowering the Next Generation of Educators: Training on Pedagogical Excellence with Generative AI”	February 8, 2024, Academic Staff College, Mannuthy
48	Dr Deepa Jolly	ICAR Short course on ‘Advances in GIS Applications in Epidemiology Analysis of Livestock Diseases in India’	07-02-24 to 16-02-24 at ICAR-NIVEDI, Bengaluru
49	Dr. Deepthi Vijay	ICAR Winter School on Applied Concepts in One-Health to address Zoonoses, Antimicrobial resistance and Food Safety’	19.02.24 to 10.03.24 at GADVASU, Ludhiana.
50	Dr. Ajith Y.	ICAR funded XXV National Training Programme on “ <i>Interdisciplinary approaches for the control of vector and vector borne parasitic diseases with special reference to climate change</i> ”	23 rd February to 14 th March 2024 Centre of Advanced Faculty Training (CAFT) in Veterinary Parasitology, Veterinary College, KVAFSU Regional Campus, Hebbal, Bengaluru-560024
51	Dr. Preena P.	UGC sponsored Faculty Induction Programme (Guru Dakshata)	08.11.2023 to 07.12.2023 in Hybrid mode at UGC- Malaviya Mission Teacher Training Centre, University of Calicut
52	Dr. Preena P.	Research methodology using chatGPI and Artificial Intelligence tools & Kerala Veterinary and Animal Sciences University.	11.12.2023 to 12.12.2023 at Academic Staff College, Thrissur, Kerala
53	Dr. Preena P.	Management of medical emergencies during the training programme of 15 th batch dog handlers	20.06.2023 at Kerala Police Academy, Ramavarnapuram, Kerala

54	Dr Magnus Paul K.	CAFT training “Advances in Anaesthesia, Surgery and Imaging in Farm and Companion Animals” ICAR, and Guru Angad Dev Veterinary & Animal Sciences University- Ludhiana -141004, Punjab, India	23 rd January to 12 February, 2024, Department of Veterinary Surgery & Radiology, (Centre of Advanced Faculty Training), College of Veterinary Sciences Ludhiana -141004, Punjab, India
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Workshops attended

SI No.	Name of Faculty	Name of the Programme and Organising Institution	Date and Venue
1	Dr. C.N. Dinesh	Harnessing AI and its Impact on Education and Research	28-10-2023, KVASU
2	Dr. Rojan P. M.	Harnessing AI and its Impact on Education and Research	28-10-2023, KVASU
3	Dr. C.N. Dinesh	Dual Day Workshop on Beyond Traditional Practice: AI and ChatGPT's Impact on Veterinary Services	19-01-24 to 20-01-24, KVASU
4	Dr. Deepa Ananth	MDP on new product development and design-based thinking	IIMK Kozhikode 4-6 th May 2023
5	Dr. Ajith K.S.	MDP on new product development and design-based thinking	IIMK Kozhikode 4-6 th May 2023
6	Dr Shibu Simon President, SAVAK	Career Choices and Excellence In Veterinary Science- brainstorming session organized by SAVAK for the budding vets of 2017 Batch, KVASU	June 3, 2023 Seminar Hall, CVAS, Mannuthy
7	Dr. Udayasree V. J.	CPD Programme- Workshop on “Canine Cardiology and Animal Behaviour”, CAPAK	30.07.2023 Kochi
8	Dr. Udayasree V. J. Dr Sangeetha S Gireesh	One day workshop on Harnessing Artificial Intelligence and its Impact in Education, Research and Entrepreneurship CVAS, Mannuthy	28 th October, 2023. CVAS, Mannuthy
9	Dr. Balusami.C. Dr. Manju Sasidharan Dr. Suraj P.T. Dr. Harikumar S. Dr. Biju S. Dr. Biya Ann Joseph	International workshop on Animal welfare and One health, Animal Welfare Board of India and DE, KVASU	22.01.2023 LRS, Thiruvizhankunnu,
10	Dr. Sabin George	Data analysis using AI, Skill Nation	January 21, 2024

11	Dr. Sabin George	International workshop on animal welfare and one health	January 22,2024
12	Dr. Balusami.C. Dr. Manju Sasidharan Dr. Suraj P.T. Dr. Harikumar S. Dr. Biju S. Dr. Biya Ann Joseph	Workshop and training on AMS and Blended Learning Platform	15 th and 16 th of September, 2023, CVAS, Mannuthy
13	Dr. Anil K.S. Dr. C. Balusami Dr. Suraj P.T. Dr. Deepak Mathew D.K. Dr. Manju Sasidharan Dr. Biya Ann Joseph	Feeding strategies and improving feed resources for sustainable milk production in Kerala. KVASU	19 th December 2023 VKIDFT Mannuthy Thrissur
14	Dr. Suja C. S.	Harnessing Artificial Intelligence's Impact in Education, Research and Entrepreneurship Directorate of Enterprenuership, KVASU	28-10-2023 Mannuthy
15	Dr. Varuna P. Panicker	One-Day workshop on Harnessing Artificial Intelligence impact in education Research Entrepreneurship-DE-Wayanad Pookode	28/10/23 Seminar Hall Mannuthy
16	Dr. Chinnu M. V.		
17	Dr. Uma R.	Beyond Traditional Practice: AI and Chat GPT's impact on Veterinary Services, KVASU	18 th – 19 th January 2024 Online mode
18	Reji Varghese	National workshop on Laboratory Animal Medicine organized by IVA, Kerala, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Thiruvananthapuram and Laboratory Animal Veterinarians Association (LAVA)	19 th and 20 th October, 2023 held at SCTIMST, Thriuvananthapuram
19	Dr. Reji Varghese	Continuing Veterinary Education programme on “Current trends in Veterinary Ophthalmology-1: Hands on training and workshop on diagnostic ophthalmology” conducted by Indian Society for Veterinary Surgery, Kerala	3 rd November, 2023 at Department of Veterinary Surgery and Radiology, CVAS, Mannuthy

20	Dr. Reji Varghese	Participated in the National workshop on Laboratory Animal Medicine organized by IVA, Kerala, Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Thiruvananthapuram and Lab Animal Veterinarians Association (LAVA)	19th and 20th October, 2023 held at SCTIMST, Thiruvananthapuram
21	Dr. Syam K. Venugopal Dr. Reji Varghese, Dr.S.Anoop Dr. Laiju M. Philip Dr. Soumya Ramankutty Dr. Nijin Jos B. M.	Participated in the Continuing Veterinary Education programme on “Current trends in Veterinary Ophthalmology-1: Hands on training and workshop on diagnostic ophthalmology” conducted by Indian Society for Veterinary Surgery, Kerala Chapter	3rd November, 2023 at Department of Veterinary Surgery and Radiology, College of Veterinary and Animal Sciences, Mannuthy, Thrissur.
22	Dr. Laiju M. Philip	One day workshop -Refinement of Animal Experimentation by Proper Anaesthesia, Analgesia and Euthanasia of Laboratory Animals	Sree Chitra Tirunal Institute of Medical Sciences, Thiruvanthapuram on 21.2.2024
23	Dr. Surya Sankar	1.“ Harnessing Artificial Intelligence’s impact in Education , Research and Entrepreneurship”, Directorate of Entrepreneurship, KVASU 2. “ Preventing Antimicrobial resistance together” Dept of Vet. Public health , CVAS, Mannuthy and school of zoonoses public health and pathobiology in association with ReAct Asia Pacific 3. “ Leptospirosis in animals-trends in diagnosis”, IVA, Kerala	28/10/2023, CVAS, Mannuthy 4/11/2023, CVAS, Mannuthy 10/9/ 2023, CVAS, Mannuthy
24	Dr. Ambily R.	1.“ Harnessing Artificial Intelligence’s impact in Education , Research and Entrepreneurship”, Directorate of Entrepreneurship, KVASU 2. National Workshop on Preventing Antimicrobial Resistance Together	28/10/2023, CVAS, Mannuthy 24/11/2023, Hotel Asoka Inn (organized by Dept. of VPH, CVAS, Mannuthy)
25	Dr. Anu George Dr. Subin K. Mohan Dr. Reeja George P. Dr. Senthilkumar R Dr. Jiji R. S. Dr. Vidya P.	One day workshop on harnessing Artificial intelligence’s impact on Education, Research and Entrepreneurship organised by DE, KVASU	28.10.2023 CVAS Mannuthy
26	Dr. Jiji R. S.	Workshop for IPR cell coordinators organised by KSCSTE, Sasra Bhavan, Pattom, Thiruvananthapuram	10.01.2024-11.01.2024, College of Engineering, Thiruvananthapuram

27	Dr. K. Vrinda Menon Dr. Deepa Jolly	Workshop on “Training need analysis-One Health’ organised by KILA, Thrissur	KILA, Thrissur on 12th May, 2023
28	Dr. Prasanna K. S.	Future Technologies in Healthcare and Biomedical Devices – 2023 organised by SCTIMST, DST & TIFAC	11/7/23 – 12/7/23 Thiruvananthapuram
29	Dr. Divya C.	Future Technologies in Healthcare and Biomedical Devices – 2023 organised by SCTIMST, DST & TIFAC	11/7/23 – 12/7/23 Thiruvananthapuram
30	Dr Bindu Lakshmanan Dr R Radhika Dr Asha Rajagopal Dr K. Syamala Dr M.N. Priya	Harnessing Artificial Intelligence’s impact in Education, Research and Entrepreneurship organized by DE, KVASU	CVAS ,Mannuthy 28.10.23
31	Dr Bindu Lakshmanan Dr.M.N. Priya	International workshop on Animal Welfare & One Health organised by KVASU & Animal Welfare Board of India	LRS, Thiruvazhamkundu on 22.01. 2024

Conferences attended

Sl No.	Name of Faculty	Name of the Programme	Date and Venue
1	Dr. K. Anilkumar	National Conference on Advances in Genetics and Genomics for Sustainable Livestock Transformation & XVII Annual Convention of ISAGB	ICAR-NBAGR, Karnal from 16-11-23 to 17-11-23
2	Dr. K. Anilkumar	National Symposium on “Animal production systems and its role in sustainable use of AnGR” and XXI Annual Convention of SOCDAB-2024	NTR College of Veterinary Sciences, Gannavaram (SVVU), Andhra Pradesh from 15-02-2024 to 16-02-2024
3	Dr. C.N. Dinesh	National Conference on Advances in Genetics and Genomics for Sustainable Livestock Transformation & XVII Annual Convention of ISAGB	ICAR-NBAGR, Karnal from 16-11-23 to 17-11-23
4	Dr. C.N. Dinesh	National Symposium on “Animal production systems and its role in sustainable use of AnGR” and XXI Annual Convention of SOCDAB-2024	NTR College of Veterinary Sciences, Gannavaram (SVVU), Andhra Pradesh from 15-02-2024 to 16-02-2024
5	Dr. Marykutty Thomas	38th Annual Convention of the Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology Research and Practice	6-12-23 to 8-12-23 at CVAS, Mannuthy

6	Dr. Deepa Ananth	20 Biennial International Conference of Animal Nutrition on Sustainable Animal Nutrition For Global Health And Production: Innovations And Directions organised by Animal Nutrition society of India, Dept of Animal nutrition, Madras Veterinary College TANUVAS Chennai – 600 007, Tamil Nadu (INDIA)	23 to 25 January, 2024 TANUVAS CHENNAI
7	Dr. C. Jayakumar Dr. Hiron M. Harshan Dr. Shibu Simon Dr. B. Bibin Becha Dr. Abhilash R. S. Dr. Amritha Aravind Dr. Benjamin E. D.	International Symposium on “Frontiers in Theriogenology – Research and Practice conducted by the Indian Society for Study of Animal Reproduction (ISSAR)	December 6 th to 8 th at CVAS, Mannuthy
8	Dr. C. Jayakumar Dr. Hiron M. Harshan Dr. Shibu Simon Dr. Abhilash R. S. Dr. Amritha Aravind Dr. Benjamin E. D.	National conference on ‘Multifaceted approaches for integrating veterinary medicine and one health for a holistic future’	Feb 22 nd to 24 th at CVAS, Mannuthy
9	Dr. Udayasree V. J.	1. International Conference on Global Perspectives in Ethnoveterinary Herbal Research for production of Residue Free animal products Indian Society of Ethno Veterinary Herbal Research, Veterinary College and Research Institute Thanjavoor and SAARC Regional Veterinary Association, Nepal 2. Indian Society for Veterinary Medicine, National Conference, CVAS, Mannuthy	July 19 to 21, 2023 Veterinary College and Research Institute Thanjavoor February 22 to 24, 2024 CVAS, Mannuthy
10	Dr. Sangeetha S. Gireesh	1. Indian Society for Veterinary Medicine, National Conference, CVAS, Mannuthy 2. ISSAR 2023 , CVAS Mannuthy	February 22 to 24, 2024, CVAS, Mannuthy December 6-8, 2023 CVAS Mannuthy
11	Dr. Anil K.S. Dr. Balusami.C. Dr. Suraj P.T.	National conference on ‘Optimisation of livestock farming for sustainable development in the era of climate change’ organised by ISAPM and TNAUVAS	22 th to 24 th February 2024

	Dr. Suraj, P.T.	20th Scientific Advisory Committee meeting, KVK Malappuram	14.02.2024 Krishi Vigyan Kendra, Malappuram, Kerala Agricultural University
12	Dr. Suja C. S.	IPSACON 2023, Division of Livestock Production and Management, SKUAST-Kashmir	Sep 13-15, 2023 Kashmir
13	Dr. Beena C Joseph	International Webinar on Veterinary Science Medicine and Research Scientex Conferences	11-12-2023 Online
14	Dr. V. Beena	SAPI Conference and National Symposium on Technology Driven Physiological Capacity Building in Livestock for Food Security and Sustainability organised by Division of Veterinary Physiology, Faculty of Veterinary and Animal Husbandry, SKUAST of Kashmir and Society of Animal Physiologists of India	3 rd May to 5 th May 2023 at SKUAST Kashmir
15	Dr. Ajith Y.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	22nd - 24th February 2024 CVAS Mannuthy
16	Dr. Preena P.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	22nd - 24th February 2024 CVAS Mannuthy
17	Dr Magnus Paul K.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	From 22nd - 24th February 2024, CVAS Mannuthy
18	Dr Magnus Paul K.	38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on "Frontiers in Theriogenology - Research and Practice" ISSAR and KVASU	December 6 th to 8 th 2023, CVAS, Mannuthy
19	Reji Varghese	International Conference cum Hands of Workshop in Biomedical Translational Research organized by the Kerala State Higher Education Council in collaboration with the Sree Chita Tirunal Institute for Medical Sciences and Technology, Trivandrum and Kerala Medical Technology Consortium (KMTC)	3- 4 August 2023, SCTMST, Thriruvanathapuram, Kerala.
20	Dr.Reji Varghese	38 th Annual convention of ISSAR (The Indian Society for Study of Animal Reproduction) and international symposium on Frontiers in Theriogenology-Research and Practice	6 th to 8 th December, 2023, CVAS, Mannuthy

21	Dr.Reji Varghese	40 th Annual convention of Indian Society for Veterinary Medicine and National conference on “Multifaceted approaches for integrating Veterinary Medicine and One health for a holistic future”	22-24 th February, 2024, CVAS, Mannuthy
22	Dr. Reji Varghese	Participated in the International Conference cum Hands of Workshop in Biomedical Translational Research organized by the Kerala State Higher Education Council in collaboration with the Sree Chita Tirunal Institute for Medical Sciences and Technology, Trivandrum and Kerala Medical Technology Consortium (KMTC)	3-4 August 2023, SCTMST, Thiruvananthapuram, Kerala.
23	Dr.Reji Varghese Dr. S. Anoop Dr. Nijin Jos B. M.	Participated in the 38th Annual convention of ISSAR (The Indian Society for Study of Animal Reproduction) and international symposium on Frontiers in Theriogenology-Research and Practice Co-author in a poster “Successful management of gangrenous mastitis in a full term American bully bitch”	6th to 8th December, 2023, College of Veterinary and Animal Sciences, Mannuthy
24	Dr.Reji Varghese Dr.S. Anoop Dr. Laiju M. Philip Dr. Soumya Ramankutty Dr. Nijin Jos B. M.	Participated in the 40th Annual convention of Indian Society for Veterinary Medicine and National conference on “Multifaceted approaches for integrating Veterinary Medicine and One health for a holistic future”	22-24th February, 2024, College of Veterinary and Animal Sciences, Mannuthy, Thrissur
25	Dr. Syam K. Venugopal Dr. Laiju M. Philip Dr. Nijin Jos	National Congress on Canine Practice and the National Symposium on ‘Recent Advances in Diagnostic, Therapeutic and Nutritional Management of Canines’	College of Veterinary and Animal Husbandry, Najora, Durg, Chattisgarh from 20th to 22nd April, 2023
26	Dr Soumya Ramankutty	46 th Annual Congress of Indian Society for Veterinary Surgery and National Symposium Emerging trends in farm companion and wild animal Surgery	held at CVSC and AH OUAT Bhubaneswar Odisha 6-8-december 2023
27	Dr. P.V.Tresamol	40 th annual convention of Indian Society of Veterinary Medicine & National conference	College of Veterinary and Animal Sciences, Mannuthy 22.02.2024 – 24.02.2024
28	Dr. K. Vinodkumar	40 th annual convention of Indian Society of Veterinary Medicine & National conference	College of Veterinary and Animal Sciences, Mannuthy 22.02.2024 – 24.02.2024

29	Dr. Justin Davis K.	40 th annual convention of Indian Society of Veterinary Medicine & National conference	College of Veterinary and Animal Sciences, Mannuthy 22.02.2024 – 24.02.2024
30	Dr. Shyma V.H.	40 th annual convention of Indian Society of Veterinary Medicine & National conference	College of Veterinary and Animal Sciences, Mannuthy 22.02.2024 – 24.02.2024
31	Dr. Ancy Thankachan	Kerala Veterinary Science Congress 2024, College of Veterinary and Animal Sciences, Pookode, Wayanad	18-19 th November 2024
32	Dr. Ancy Thankachan	40 th annual convention of Indian Society of Veterinary Medicine & National symposium	College of Veterinary and Animal Sciences, Mannuthy 22.02.2024 – 24.02.2024
33	Dr K. Vrinda Menon Dr. C. Sethulekshmi Dr. Deepa Jolly	International symposium on ‘Promotion of One Health: Opportunities, Challenges and Solutions’ & XIX Annual Conference of IAVPHS	7-8 th December, 2023 at LUVAS, Hisar
34	Dr. V. Ramnath Dr. V. Beena Dr. K. Raji Dr. Pratheesh M. D.	SAPI Conference and National Symposium on Technology Driven Physiological Capacity Building in Livestock for Food Security and Sustainability organised by Division of Veterinary Physiology, Faculty of Veterinary and Animal Husbandry, SKUAST of Kashmir and Society of Animal Physiologists of India	3 rd May to 5 th May 2023 at SKUAST Kashmir
35	Dr. Vidya P.	15 th Kerala Veterinary Science Congress-2023 and International Seminar organised by Indian Veterinary Association, Kerala	18 th and 19 th November 2023 at CVAS, Pookode, Wayanad.
36	Dr. Devi S. S.	International seminar on exploring the boundless horizons of Veterinary profession- unleashing a new era worldwide Organised by IVA	18/11/2023 – 19/11/2023 KVASU, Pookode
37	Dr. Divya C.	International seminar on exploring the boundless horizons of Veterinary profession- unleashing a new era worldwide Organised by IVA	18/11/2023 – 19/11/2023 KVASU, Pookode
38	Dr. Priya P.M.	XXVIII Annual convention of ISVIB National conference on Advanced concepts and strategies of immune biotechnology in disease diagnosis and control	11 th - 15 th December, 2023, State level diagnostic laboratory, SVVU, Tirupati

Seminars attended

Sl No.	Name of Faculty	Name of the Programme and Organising institution	Date and Venue
1	Dr Deepa Ananth	“New trends in Dairy farming for doubling farmers income- A practical Approach” , Dairy development Department , SAMETI.	11 th May 2023
2	Dr. Ajith K.S.	Feed formulation and feeding of pet animals at Keraleeyam as resource person	3-4 nov 2023
3	Dr. Ajith K.S.	Elephant Nutrition in Forest Dept	21.Nov 2023
4	Dr.Deepa Ananth	Innovations in livestock sector part of the sectoral introductions for innovations organised by KDISC	Talk at KDISC- via google meet
5	Dr. Shibu Simon	Case Based illustrations of Haematology Big Data Study, Importance of Reticulocytes and the value of SDMA (Small Animal Veterinary Association, Kerala-SAVAK)	19.06.2023 Cochin
6		Canine and Feline Oncology (Small Animal Veterinary Association, Kerala- SAVAK)	08 October 2023 Thrissur
7		Systematic approach to diagnosis of surgical conditions and decision making	17 Dec 2023 Cochin
8		Canine & Feline: Neurology, Cardiology, Dermatology and Anaesthesiology	8, 9 March 2024 Cochin
9	Dr. K. Radha	Convocation cum Scientific convention on Strategies for enhancing productivity of Dairy Animals	1-7-23 to 2-7-23 Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana
10	Dr. Manju Sasidharan Dr. N. Geetha Dr. Deepak Mathew D.K	15 th Kerala Veterinary Science Congress and International Seminar 2023 by Indian Veterinary Association, Kerala	18.11.2023 and 19.11.2023 ,College of Veterinary and Animal Sciences , Pookode, Wayanad
11	Dr. Deepak Mathew D. K.	38 th Annual convention of ISSAR and symposium on “Frontiers in Theriogenology: Research and Practice”, KVASU, ISSAR	6 th -8 th December 2023, CVAS, Mannuthy
12	Dr. V. N. Vasudevan	National Seminar on “One Health – A New A New Paradigm to Augment Livestock Productivity and Food Security”, organized by Association of Meat Scientists and Technologists	16.10.2023 to 18.10.2023, Chennai
13	Dr. Suja C. S. Dr. Beena C Joseph	Kerala Veterinary Science Congress and International seminar IVA Kerala	November 18-19, 2023 Pookode

14	Dr N. S. Sunilkumar	15 th Kerala Veterinary Science Congress	17 th to 19 th November 2023, College of Veterinary and Animal Sciences, Pookode
15	Dr K. M. Lucy	XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production”	5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati
16	Dr A. R. Sreeranjini	XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production”	5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science, Sri Venkateswara Veterinary University, Tirupati
17	Reji Varghese	Participated in the Continuing Professional Development (CPD) programme on canine and feline oncology organized by Small Animal Veterinary Association Kerala (SAVAK)	8 th October, 2023, Hyatt Regency, Thrissur
18	Reji Varghese	Participated in the Continuing Professional Development (CPD) programme on canine and feline cardiology, neurology, dermatology and anaesthesiology organized by Small Animal Veterinary Association Kerala (SAVAK),	8 th and 9 th March, 2024, Holiday Inn, Kochi
19	Dr. Vidya P.	Celebration of World IP Day -webinar-organised by IPRICK, Kerala & KSCSTE	April 26, 2023
20	Dr. Vidya P.	Women and IP-Accelerating Innovation and Creativity, organised by Turnip Innovations Pvt.Ltd., Kolkatta, India	April 26, 2023
21	Dr. Vidya P.	Chat GPT for Innovation Organised by Turnip Innovations Pvt. Ltd., Kolkatta, India	23 June, 2023
22	Dr. M. N. Priya	15 th Kerala Veterinary Science Congress	18-19, Nov 23 CVAS Pookode
23	Dr K. Devada Dr Bindu Lakshmanan Dr R. Radhika Dr Asha Rajagopal Dr K. Syamala	32 nd NCVP “Sustainable control of parasitic diseases for improved productivity of livestock in current scenario: organized by IAAVP	Bihar Veterinary College, Patna, 29.11.23-01.12.23
24	Dr Bindu Lakshmanan Dr R. Radhika Dr Asha Rajagopal Dr M.N. Priya Dr Syamala K.	37 th Annual convention of ISSAR and International Symposium on Advances in Theriogenology: Research and practice organized by ISSAR and KVASU	CVAS Mannuthy. 6-8 th December ,2023

25	Dr Bindu Lakshmanan Dr R. Radhika Dr Asha Rajagopal Dr M..N. Priya Dr Syamala K.	40 th Annual convention of ISVM and National conference on Multifaceted approaches for integrating veterinary medicine and onehelath for a holistic future. ISVM and KVASU	CVAS, Mannuthy 22-24, February, 2024
26	Dr. Reji Varghese	Participated in the Continuing Professional Development (CPD) programme on canine and feline oncology organized by Small Animal Veterinary Association Kerala (SAVAK)	8th October, 2023 held at Hyatt Regency, Thrissur
27	Dr. Reji Varghese Dr. Nijin Jos B. M.	Participated in the Continuing Professional Development (CPD) programme on canine and feline cardiology, neurology, dermatology and anaesthesiology organized by Small Animal Veterinary Association Kerala (SAVAK), Participated in the continuing Professional Development (CPD) programme on Systematic approach to diagnosis of surgical condition and decision making in small animal practice by Small Animal Veterinary Association Kerala.	8th and 9th March, 2024 held at Holiday Inn, Kochi 17 th December 2023, held at Marriot, Kochi
28	Dr. B. Sunil Dr. C. Sethulekshmi Dr. Binsy Mathew	National seminar on 'Advances in Functional foods and Nutraceuticals: Bioactive compounds, Fermentation and Value addition	28.02.24 at VKIDFT, Mannuthy
29	Dr. V. Beena Dr. K. Raji Dr. Pratheesh M. D.	15 th Kerala Veterinary Science Congress & International Seminar on "Exploring the Boundless Horizons of Veterinary Profession – Unleashing a New Era Worldwide" organised by Indian Veterinary Association, Kerala	18 th and 19 th November 2023 at College of Veterinary and Animal Sciences, Pookode
30	Dr K. Vinodkumar	International CPD Programme 'VETOPIA' conducted by the National Veterinary Foundation at Bengaluru	Bengaluru from 22 to 24 August, 2023
31	Dr K. Vinodkumar	International Seminar conducted by Federation of Small Animal Veterinarians, at Mumbai	Mumbai from 26 to 29, October 2023
32	Dr K. Vinodkumar	International Seminar and CVE Programme for Veterinarians at IV Indian VETEXPO-2024	New Delhi from 21 to 23, January, 2024
33	Dr Justin Davis K.	International Seminar conducted by Federation of Small Animal Veterinarians, at Mumbai	Mumbai from 26 to 29, October 2023
34	Dr Justin Davis K.	CPD Programme (4) for Veterinarians at Cochin, conducted by Small Animal Veterinary Association, Kerala	19 th June 2023

Conferences conducted

SI No.	Name of Faculty	Name of the Programme and Organising Institution	Date and Venue
1	Dr. Jayakumar C., Dr. Hiron M. Harshan, Dr. Shibu Simon, Dr. B. Bibin Becha, Dr. Abhilash R. S., Dr. Unnikrishnan M. P. Dr. Amritha Aravind, Dr. Benjamin E D., Dr. Magnus Paul K.	38 th Annual convention and International Symposium on “Advances in Theriogenology: Research and Practice”	College of Veterinary and Animal Sciences, Mannuthy, Thrissur, 6th to 8th December, 2023.
2	Dr.P.V.Tresamol	40 th annual convention of Indian Society of Veterinary Medicine & National conference	22-02-24 to 24-02-24
3	Dr. Preena P. and Dr. Ajith Y	XXXX Annual Convention of Indian Society for Veterinary Medicine	22nd - 24th February 2024; CVAS Mannuthy
4	Dr Magnus Paul K.	38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice”,ISSAR and KVASU	December 6 th to 8 th 2023, CVAS, Mannuthy

Workshops conducted

SI No.	Name of Faculty	Name of the Programme and Organising Institution	Date and Venue
1	Dr. B. Sunil Dr. K. Vrinda Menon Dr. Deepa Jolly Dr. C. Sethulekshmi Dr. Binsy Mathew Dr. Deepthi Vijay	Awareness workshop on zoonoses for high school students (150 students), Dept. of Veterinary Public Health, CV&AS, Mannuthy	Bethlehem Convent Higher Secondary School, Mukkattukara, Thrissur on 12 th July, 2023.
2	Dr. B. Sunil Dr. K. Vrinda Menon Dr. Deepa Jolly Dr. C. Sethulekshmi Dr. Binsy Mathew Dr. Deepthi Vijay	National Workshop on Preventing Antimicrobial Resistance together’, Dept. of Veterinary Public Health, CV&AS, Mannuthy in association with ReAct Asia Pacific	Hotel Asoka Inn, Thrissur on November 24, 2023
3	Dr. C. Sethulekshmi	Invited talk on JUBICON, 2023, National level medical students’ conclave on the topic “One Health in Focus”	Jubilee Mission Medical College and Research Institute, 19.10.23

4	Dr. Ajith Y. and Dr. Preena P.	Pre-conference Workshop on “Laboratory and Molecular Techniques For Diagnosis Of Disease” XXXX Annual Convention of Indian Society for Veterinary Medicine	21/02/2024 TVCC Mannuthy
5	Dr. Sabin George	Harnessing Artificial Intelligence’s Impact in Education, Research and Entrepreneurship	CVAS, Mannuthy October 28,2023
6	Dr. Sabin George	Beyond traditional practice: AI and chat GPT’s Impact on Veterinary Service	Academic Staff College, January 19-20,2024
7	Dr. Suraj, P.T Organising Secretary	Feeding strategies and improving feed resources for sustainable milk production in Kerala. KVASU	19 th December 2023 VKIDFT Mannuthy Thrissur
8	Dr.Jiji R. S.	Session on overview of Intellectual Property Rights with special emphasis on patent organised by IPR Cell, KVASU and IP-RICK, KSCSTE	09.01.2024 Seminar Hall,CVAS,Mannuthy
9	Dr Justin Davis K.	Served as resource person and course coordinator in the national level two-day workshop on “ALL About Dogs: A comprehensive workshop on health, treatment and management” organised by IVA, Kerala	9-10 th Dec 2023

Seminars conducted

Sl No.	Name of Faculty	Name of the Programme Organising Institution	Date and Venue
1.	Dr. Ajith Y.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	22nd - 24th February 2024, CVAS Mannuthy
	Dr. Preena P.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	22nd - 24th February 2024, CVAS Mannuthy
	Dr Magnus Paul K.	XXXX Annual Convention of Indian Society for Veterinary Medicine (ISVM)	22nd - 24th February 2024, CVAS Mannuthy
	Dr Magnus Paul K.	38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice”, ISSAR and KVASU	December 6 th to 8 th 2023, CVAS, Mannuthy Kerala
	Dr. P. Anitha Dr. Binoj Chacko Dr. Vimal Antony Muttathettu Dr. Suja C. S. Dr. Shamna T. P.	Farmer’s Seminar on Poultry Rearing Practices Department of Poultry Science, CVAS, Mannuthy	18-12-2023 Poultry Exhibition Hall, CASPS, KVASU, Mannuthy

Dr. B. Sunil Dr. K. Vrinda Menon Dr. Deepa Jolly Dr. C. Sethulekshmi Dr. Binsy Mathew	Seminar for school students as a part of 7 days NSS programme on 'Importance of zoonoses and water testing for high school students'	Adat Panchayath on 27.2.24
Dr. Deepa Jolly Dr K. Vrinda Menon	National seminar on 'Advances in Functional foods and Nutraceuticals: Bioactive compounds, Fermentation and Value addition	28.02.24 at VKIDFT, Mannuthy
Dr. Sabin George	Sensitisation seminar on Knimbus digital library system and effective management of resource on KVA-SU-Knimbus portal	CVAS, Mannuthy January 20,2024

EXTENSION AND OUTREACH ACTIVITIES

Department of Animal Nutrition

Formulation, manufacture and sale of feed for livestock, lab animals and pets

Department of Animal Reproduction, Gynaecology and Obstetrics

- It operates a Gynaecology and Obstetrics unit at the Mannuthy and Kokkalai Veterinary Hospitals run by the University.
- An Artificial Insemination Centre located at Mannuthy and Kokkalai premises, serving to the needs of cattle, buffalo and goat farmers.
- An ambulatory clinical service tending to the needs of farmers of Cherumkuzhy and Malamukku.
- The staff routinely perform radio talks, classes for veterinarians and farmer level classes.
- The department has facilities and has conducted training programmes for in service veterinarians and para veterinarians.

Department of Dairy Science

- Milk samples received from farmers are regularly tested for fat, SNF and for the presence of adulterants, preservatives and neutralisers
- Starter cultures of curd are supplied to the required farmers/entrepreneurs
- Hands on training on the preparation of milk-based snack foods is conducted for self-help group members/ entrepreneurs under revolving fund project

Department of Livestock Products Technology

The department offers comprehensive internship and in plant training programs, which provide

students with valuable opportunities to gain practical experience and exposure in leading meat industry companies.

Department of Poultry Science

- Production and supply of hatching eggs, day-old chicks and other poultry species like ducks, quail, turkey, goose, desi and fancy chicken of various ages through University Poultry and Duck Farm and AICRP on Poultry projects.
- Supply of table eggs for consumption.
- Production and supply of good quality Poultry/ animal feeds for various farms under AH Departments and farmers.
- Estimation of aflatoxin in the feed/ feed ingredients is being carried out under CAS in Poultry Science and the service is rendered to farmers/ various institutions.
- Technical guidance on various poultry management activities is being provided to farmers and entrepreneurs through counselling and training programs.

Department of Veterinary and Animal Husbandry Extension

- A capacity building programme was organised on advances in poultry production and management for the poultry farmers of Athavanad Panchayat of Malappuram District at LMTC, Athavanad on 20.02.2024.

Department of Veterinary Microbiology

Apart from the teaching and research activities, the staff members are also associated with various extension activities like imparting required technical knowledge to the officers of AHD and farmers through trainings, seminars, discussions and radio talks. Microbiological investigation of the clinical samples from livestock, pets and poultry, received from different districts of Kerala is carried out regularly. The major services include the investigation during disease outbreaks to know the causative agent, antibiogram studies to adopt appropriate field antibiotic regimen and diagnosis of leptospirosis in animals and humans.

Department of Veterinary Parasitology

- Organised camps for goat farmers for sustainable helminth control with Haem check card. As the part of outreach activity, cards were distributed to the farmers along with mineral supplements and anthelmintics.
- Clinical sample examination and advisory to farmers and veterinarians on parasite control: A total of 835 samples were examined for the diagnosis of parasitic infection/infestation.
- Published two popular articles on parasite control in goats
- Handled classes for veterinarians and dairy farmers on parasite management

- Associated with hands on training on disease management in rabbits in organized rabbit farmers

Department of Veterinary Pathology

- Post mortem examination and diagnosis in domestic, pet, wild, zoo animals and birds

Department of Veterinary Public Health

- The Department of Veterinary Public Health in Ollukkara Block has launched a commendable initiative by organizing free drinking water testing and rabies prevention awareness camps across various panchayats. This proactive effort aims to safeguard public health by ensuring access to safe drinking water and spreading awareness about the prevention of rabies, a significant concern in the region. Through these camps, the department not only addresses immediate health risks but also educates communities on sustainable health practices.

Teaching Veterinary Clinical Complex

- Right from its inception, the mandate of TVCC included teaching, research and extension. Apart from treating 100-120 cases from various parts Kerala state and bordering districts of Tamil Nadu daily, the hospital also caters to the needs of Police department, Army, Navy, NCC and Forest and wildlife departments. The TVCC, Mannuthy has become one of the state's premier veterinary hospital handling more than fifty thousand cases annually offering cutting-edge diagnostic and therapeutic services relative to large and small animal clinical services. In order to give rural exposure to the students, veterinary services are being provided to the farmers of Cherumkuzhy and Malamukku area in ambulatory vehicle in co-operation with the APCOS. A state-of-the-art ambulance equipped with all necessary facilities visits the rural hospital set-up every day and provide veterinary care to the animals free of cost. On request basis, farm visits are also conducted for screening of various infectious diseases and providing expert diagnostic facility. The ambulatory jeep purchased under the RKVY scheme is utilized for the purpose.

AWARDS

FACULTY AWARDS

Sl No.	Name of Faculty	Name of the programme and awarding institute	National/ International	Position
1	Dr. K. Anilkumar, Professor	Fellow of Indian Society for Animal Genetics and Breeding (ISAGB)	National	Fellow
2	Dr. K. Anilkumar, Professor	Fellow of Society for Conservation of Domestic Animal Biodiversity (SOCDAB)	National	Fellow
3	Dr C. N. Dinesh, Professor	National Conference on Advances in Genetics and Genomics for Sustainable Livestock Transformation & XVII Annual Convention of ISAGB held at NBAGR, Karnal from 16-11-23 to 17-11-23	National	Best Oral presentation

4	Dr. Elizabeth Kurian, Assistant Professor	Indian Association for Advancement of Veterinary Parasitology	National	Third prize
5	Dr. Elizabeth Kurian, Assistant Professor	National Conference on Advances in Genetics and Genomics for Sustain- able Livestock Transformation & XVII Annual Convention of ISAGB held at NBAGR, Karnal from 16-11- 23 to 17-11-23	National	First prize
6	Dr. Sajith Purushotha- man	Antimicrobial resistance at MES College Aluva	International	First
7	Dr, Deepa Ananth	20 th Biennial International Conference of Animal Nutrition organised by Animal Nutrition society of India, Dept of Animal nutrition, Madras Veterinary College, TANUVAS, Chennai – 600 007, Tamil Nadu (India)	International	Second
8	Dr. Sajith Purushotha- man	15th Kerala veterinary science cong- ress and international seminar held from 17-19 th Nov,2023	National	Second
9	Dr. K. Radha	University Merit day Dr. P.G. Nair Endowment Best teacher award	University level	
10	Dr. Anil K.S	30 th ISAPM Annual Convention	National	National fellow of Animal Production and management (FNAPM) award
11	Dr. Manju Sasidharan	15 th Kerala Veterinary Science Cong- ress and International Seminar 2023 by Indian Veterinary Association, Kerala	International	Third Prize for oral presenta- tion
12	Dr. N. Geetha	30 th Annual Convention of the Indi- an society of Animal Production and Management at Madras Veterinary College, Tamilnadu Veterinary and Animal Sciences University, Chen- nai-600007 22-24 February, 2024	National Research paper entitled 'Effect of bedding systems on hygiene and milk yield of crossbred dairy cows'	Dr.M.S Patel award for the best research paper published in the journal on participato- ry research in LPM

13	Dr. Suraj, P.T.	National Conference on “Optimization of Livestock Farming for Sustainable Development in the Era of Climate Change & 30 th Annual Convention of ISAPM 2024 held at Madras Veterinary College, Chennai from 22 – 24 th February 2024.	National	Third prize for oral presentation in the
14	Dr. Deepak Mathew D. K.	15th Kerala Veterinary Science Congress & International Seminar on “Exploring the Boundless Horizons of Veterinary Profession- Unleashing a New Era Worldwide” -Oral Presentation- Session V-Livestock and Poultry Production	International	First
15	Dr. V. N. Vasudevan	National Seminar on “One Health – A New Paradigm to Augment Livestock Productivity and Food Security,” organized by the AMST	National	First prize for oral presentation in the session on the “Food industry and Environment”
14	Dr. Suja C. S.	Poster Presentation in Kerala Veterinary Science Congress and International seminar IVA Kerala	International	Second
15	Dr K. M. Lucy	Dr V R Bamburkar IAVA Silver Jubilee Award for the Veterinary Anatomist of the year in the XXX-VII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production” from 5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science Sri Venkateswara Veterinary University, Tirupati	National	First
16	Dr. N.S. Sunilkumar	Best second oral presentation award in the Session 1: Basic Veterinary and Allied Sciences of the 15th Kerala Veterinary Science Congress- 2023 organized by Indian Veterinary Association, Kerala at College of Veterinary and Animal Sciences, Pookode on 17 th to 19 th November, 2023.	National	Second
17	Dr. A. R. Sreeranjini	Best Teacher Award constituted by Indian Veterinary Association, Kerala	State	First
18	Dr. Varuna P. Panicker	Scientist of the Year 2022 by SVBBI	National	

19	Dr Ancy Thankachan	Oral presentation at the Companion Animal Infectious diseases session in the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	Second
20	Dr. Priya P.M.	IVRI Mukteswar Albert Linghard Memorial Award 2023 (Inactivated oil adjuvant vaccine against rimerellosis)	National	I
21	Dr. Priya M.N.	IVA- Kerala Veterinary Science Congress	National	First Prize-Poster presentation
22	Dr R.Radhika	32 nd NCVP	National	2 nd - poster presentation
23	Dr.K. Syamala	32 nd NCVP	National	Third prize poster
24	Dr. Devi S. S.	Kerala Veterinary Science congress organised by IVA	International seminar on exploring the boundless horizons of Veterinary profession- unleashing a new era worldwide	Second in oral presentation
25	Bibu John Kariyil	Programme-Global Perspectives in Ethno Veterinary Herbal Research for Production of Residue Free Animal Products Institute- Veterinary College and Research Institute, Orathanadu	International Conference	First prize
26	Dr Nisha A. R.	Programme-Global Perspectives in Ethno Veterinary Herbal Research for Production of Residue Free Animal Products Institute- Veterinary College and Research Institute, Orathanadu	International Conference	First prize
27	Dr. V. Beena	Dr. G. Nirmalan award for the best research publication for the year 2019 institute by Veterinarian's Welfare Society, Kerala	National	NA
28	Dr. Pratheesh M. D.	INSA Visiting Scientist Fellowship 2023	National	
29	Dr. Binsy Mathew	Best Doctoral Thesis in The University in 2023 by Association of Indian Universities (AIU)	National	First
30	Dr. Baby Salini E.	Gold Medal: 100m Relay, Silver Medals: Long Jump and 100m Run, Bronze Medal: Triple Jump.		

PATENTS

- Patent application submitted for the invention titled “ **Flavoured Egg Drink**” through IPR Cell IUCIPRS (Docket ID 5604IN058- LexOrbis) and trial is under progress. Name of inventors- A.M. Abhilash, Beena C. Joseph, P. Anitha, T. Sathu and C.S. Suja.
- **Patents** - Vaccine against riemerellosis - Patent No. 447336, Date of grant - 25/08/2023

STUDENT AWARDS

M.V.Sc and Ph.D.

Sl No.	Name of student	Name of the programme and awarding institution	National/ International	Position
1	Vandana C. M.(19-DVM-17)	6th international conference, HITASA -2024, S.R. University, Warangal, SK-LSTHU, Hyderabad, 04-06 March 2024	National	Young woman scientist award
2	Haritha B. Pillai (20-DVM-01)	36 th Kerala Science Congress, 8-11 February 2024, Kasaragod	State	Best student oral presentation
3	Nayana	20 th Biennial International Conference of Animal Nutrition organised by Animal Nutrition society of India, Dept of Animal Nutrition, Madras Veterinary College Tamil Nadu Veterinary and Animal Sciences University Chennai – 600 007, Tamil Nadu (India)	International	First
4	Irishikesh K.	Appreciation from AHD	State	
5	Dr. Haleema H.	15 th Kerala Veterinary Science Congress conducted by Indian Veterinary Association, Kerala	International	First for oral presentation
6	Dr. Josline Naviya G.	30 th Annual Convention and National Conference on “Optimization of Livestock Farming for sustainable development in the era of climate change” instituted by TANUVAS and ISAPM	National	Third Prize for oral presentation
7	Dr. Praveen Kumar I.	30 th Annual Convention and National Conference on “Optimization of Livestock Farming for sustainable development in the era of climate change” instituted by TANUVAS and ISAPM	National	Second Prize for oral presentation
8	Dr. A. Singaravadelan	30 th Annual Convention and National Conference on “Optimization of Livestock Farming for sustainable development in the era of climate change” instituted by TANUVAS and ISAPM	National	Third Prize for oral presentation

9	Dr.Ameena Asharaf	National Seminar on “One Health – A New Paradigm to Augment Livestock Productivity and Food Security	National	Second prize for oral presentation in the session on “food industry and environment”
10	Dr. Jophil Thomas	National Seminar on “One Health – A New Paradigm to Augment Livestock Productivity and Food Security	National	Second prize for oral presentation in the session on “the impact on food processing and preservation on human health”
11	Dr. Bhattu Naveen Kumar	15 th Kerala Veterinary Science Congress and International Seminar on “Exploring the Boundless Horizons of Veterinary Profession – unleashing a new era world-wide,” organized by the IVA Kerala	International	Third prize for oral presentation in the session on “Live-stock and poultry production ”
12	Dr Pavizham G. Krishna	Third prize in oral presentation in the Session 4: Climate Change, Environment Health and Wildlife of the 15 th Kerala Veterinary Science Congress- 2023 organized by Indian Veterinary Association, Kerala at College of Veterinary and Animal Sciences, Pookode on 17 th to 19 th November, 2023.	National	Third
13	Dr Vaka Harideep	Best paper award in Forensic anatomy including archeological studies session in XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production” from 5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science Sri Venkateswara Veterinary University, Tirupati	National	First
14	Dr Vaka Harideep	National Veterinary Anatomy Quiz award in XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production” from 5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science Sri Venkateswara Veterinary University, Tirupati	National	First

15	Dr Vaka Harideep	Best paper award in Gross Anatomy session in XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production” from 5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science Sri Venkateswara Veterinary University, Tirupati	National	First
16	Dr Vaka Harideep	First prize in poster presentation in the Session 1: Basic Veterinary and Allied Sciences of the 15th Kerala Veterinary Science Congress- 2023 organized by Indian Veterinary Association, Kerala at College of Veterinary and Animal Sciences, Pookode on 17 th to 19 th November, 2023.	National	First
17	Dr J. Jayalakshmi	Best paper award in Clinical anatomy and multidisciplinary approach session in XXXVII Annual Convention & National Symposium On “Recent Advances in Veterinary Anatomy and their Applications for Improvement of Animal Health and Production” from 5 th to 7 th December, 2023 at Department of Veterinary Anatomy College of Veterinary Science Sri Venkateswara Veterinary University, Tirupati	National	First
18	Vinaya V.	Best Presentation Award, topic- ‘Management practices, descriptive economics, constraints and the scope of pigeon farming in Kerala’ conferred during the first National Seminar of the Society of Krishi Vigyan	National Seminar of the Society of Krishi Vigyan organized in online mode during 27 th -28 th of October 2023.	First
19	Dr. T. Vijaya Nir-mala	15 th Kerala Veterinary Science Congress, 2023, organised by Indian Veterinary Association, Kerala on 18 th and 19 th November 2023 at College of Veterinary and Animal Sciences, Pookode, Wayanad.	International seminar on “Exploring the boundless horizons of veterinary profession -Unleashing a new era worldwide”	Third prize in the poster presentation category

20	Krupa Rose Jose	Oral presentation at the Veterinary Dermatology session in the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	Third
21	Anusree K.	Poster presentation at the Companion animal infectious diseases session in the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	First
22	Athira K.	Oral presentation in companion animal non- infectious diseases and First prize in oral presentation in Avian Medicine the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	First prize
23	Athira K.	Oral presentation in Avian Medicine the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	First prize
24	Raina Varghese	Oral presentation at the Companion Animal Non-Infectious diseases session in the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	Second
25	Nithya G.	Poster presentation at the Farm Animal Non infectious diseases session in the 40 th annual convention of Indian Society of Veterinary Medicine & National symposium held during 22.02.2024 – 24.02.2024 at College of Veterinary and Animal Sciences, Mannuthy – 680651	National	Second
26	Athira C.P.	32 nd NVCP-IAAVP	National	First prize poster

27	Dr. Aravind K. Unni	Kerala Veterinary Science congress organised by IVA	International seminar on exploring the boundless horizons of Veterinary profession-unleashing a new era worldwide	First in Poster presentation
28	Dr. Nisna Niyas	Kerala Veterinary Science congress Organised by IVA	International seminar on exploring the boundless horizons of Veterinary profession-unleashing a new era worldwide	Second in oral presentation
29	Dr. Sruthi S.	Veterinary Pathology conference Indian association of Veterinary Pathology	International	Molecular oncology award
30	Divya R. Rajaselvi	Programme-Global Perspectives in Ethno Veterinary Herbal Research for Production of Residue Free Animal Products Institute- Veterinary College and Research Institute, Orathanadu	International Conference	Second prize
31	Aparna S. Sivapriya	Programme-Global Perspectives in Ethno Veterinary Herbal Research for Production of Residue Free Animal Products Institute- Veterinary College and Research Institute, Orathanadu	International Conference	Third prize –
32	Archana Raj	Programme-Global Perspectives in Ethno Veterinary Herbal Research for Production of Residue Free Animal Products Institute- Veterinary College and Research Institute, Orathanadu	International Conference	First prize
33	Dr Asif. M. Hebbal, Dr MSVB Ananya and Dr Sonali	Second prize - World Zoonoses Day-2023 in Division of Veterinary Public Health, ICAR- IVRI, Izatnagar on 6 th July, 2023	National	Second

MSc students

Sl No.	Name of student	Name of the programme and awarding institute	Mention whether National/ International	Position
1	Arya Gopal	14 th KVSC from 12-13, Nov, 2022 at CVAS, Mannuthy	State	Second
2	Arya Gopal	1st International Conference (GIRIS-DA-2022) organized by Guru Kashi University, Bathinda (ICAR Accredited) & AEEFWS, Punjab on 06-07-08, June 2022 at Guru Kashi University, Bathinda.	National	Excellence in Research for MSc research work

COLLEGE OF VETERINARY & ANIMAL SCIENCES, POOKODE

STAFF DETAILS

There are 20 departments and veterinary clinical complex and a total of 74 permanent teaching staff working in this college headed by the Dean. Among them 9 are Professors, 13 are Associate Professors and 52 are Assistant Professors and there are 41 non-teaching staff.

DEPARTMENTS AND OTHER UNITS OF THE COLLEGE

1. DEPARTMENT OF VETERINARY ANATOMY & HISTOLOGY
2. DEPARTMENT OF ANIMAL REPRODUCTION, GYNAECOLOGY & OBSTETRICS
3. DEPARTMENT OF ANIMAL NUTRITION
4. DEPARTMENT OF ANIMAL GENETICS & BREEDING
5. DEPARTMENT OF VETERINARY MICROBIOLOGY
6. DEPARTMENT OF VETERINARY PHYSIOLOGY
7. DEPARTMENT OF VETERINARY EPIDEMIOLOGY & PREVENTIVE MEDICINE
8. DEPARTMENT OF VETERINARY BIOCHEMISTRY
9. DEPARTMENT OF LIVETSOCK PRODUCTION AND MANAGEMENT
10. DEPARTMENT OF LIVESTOCK PRODUCTS TECHNOLOGY
11. DEPARTMENT OF VETERINARY EXTENSION
12. DEPARTMENT OF VETERINARY PUBLIC HEALTH
13. DEPARTMENT OF VETERINARY CLINICAL MEDICINE, ETHICS & JURISPRUDENCE
14. DEPARTMENT OF POULTRY SCIENCE
15. DEPARTMENT OF VETERINARY PARASITOLOGY
16. DEPARTMENT OF VETERINARY PATHOLOGY
17. DEPARTMENT OF VETERINARY PHARMACOLOGY & TOXICOLOGY
18. DEPARTMENT OF SURGERY & RADIOLOGY
19. DEPARTMENT OF STATISTICS
20. DEPARTMENT OF PHYSICAL EDUCATION
21. TEACHING VETERINARY CLINICAL COMPLEX

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4	Dr. E.M. Muhammed(on leave)	Asst. Prof.	muhammed@kvasu.ac.in	9447409406
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3	Dr. Rejitha Joseph (Study leave for Ph.D.)	Asst. Prof.	rejithaj@kvasu.ac.in	9496350185
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3	Dr. Janus. A	Asst. Prof.	janusa@kvasu.ac.in	9446039537
4	Dr. Rathish R L	Asst. Prof.	rathish@kvasu.ac.in	9387387023

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2	Dr. Renjith Sebastian	Asst. Prof.	renjithbiochem@kvasu.ac.in	9495626304
3	Dr. Naheef K.	Asst. Prof.	nahif@kvasu.ac.in	8281093584

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3	Dr. Deepak Mathew D.K.	Asst. Prof	deepak@kvasu.ac.in	9446956208
4	Dr. Sakkariya Ibrahim N. P	Asst. Prof.	sakkariya@kvasu.ac.in	9645677028
5	Dr. Roshin Anie Jose	Asst. Prof.	roshin@kvasu.ac.in	8547721961

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3.	Dr. Magna Thomas	Asst. Prof	magna@kvasu.ac.in	9447159119

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4	Dr. Jess Vergis	Asst. Prof.	jess@kvasu.ac.in	9446355683

DEPARTMENT OF VETERINARY CLINICAL MEDICINE, ETHICS & JURISPRUDENCE

No.	Name	Designation	Email	Mobile
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3	Dr Ambily V R	Asst. Prof.	Ambily.vr@kvasu.ac.in	9400447332
4	Dr Sindhu K Rajan	Asst. Prof.	sindhu.rajan@kvasu.ac.in	9496316769
5	Dr Umesh C G	Asst. Prof.(On Deputation for PhD)	umesh@kvasu.ac.in	9562179563
6	Dr Sindhu O K	Asst. Prof. .(On Deputation for PhD)	sindhuok@kvasu.ac.in	9447671984

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No.	Name	Designation	Email	Mobile
1	Dr. Aswathi P B	Asst.Prof.&Head (i/c)	aswathi@kvasu.ac.in	8547646917
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No.	Name	Designation	Email	Mobile
1	Dr. Reghu Ravindran	Prof.&Head	drreghuravi@yahoo.com, reghu@kvasu.ac.in	9447713422
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3	Dr. Deepa C. K	Asso. Prof.	deepack@kvasu.ac.in	9495928947
4	Dr. Anju Varghese	Asst. Prof.	anju@kvasu.ac.in	8690637955

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No.	Name	Designation	Email	Mobile
1	Dr.Ajith Jacob Geroge	Prof.&Head	pathpkt@kvasu.ac.in	9447128933
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4	Dr.Hamza Palekkodan	Asst. Prof.	hamza@kvasu.ac.in	9447131587

DEPARTMENT OF VETERINARY PHARMACOLOGY & TOXICOLOGY

No.	Name	Designation	Email	Mobile
1	Dr. Sanis Juliet	Prof. & Head	sanis@kvasu.ac.in	9446259510
2	Dr. Sujith S	Associate Prof.	sujith@kvasu.ac.in	9539511273
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DEPARTMENT OF SURGERY & RADIOLOGY

No.	Name	Designation	Email	Mobile
1	Dr. Sooryadas S	Assoc. Prof.& Head	sooryadas@kvasu.ac.in	9447462141
2	Dr. Dinesh P. T.	Asst. Prof.	dineshpt@kvasu.ac.in	9447144085
3	Dr. George Chandy	Asst. Prof.	chandy@kvasu.ac.in	8304073367
4	Dr. Jinesh Kumar N.S.	Asst. Prof.	jinesh@kvasu.ac.in	9447958763
5	Dr. Remya V	Asst. Prof.	remyav@kvasu.ac.in	9458407861

DEPARTMENT OF BIOSTATISTICS

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1	Dr. Bindya Liz Abraham	Prof & Head	bindya@kvasu.ac.in	9446714947
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DEPARTMENT OF PHYSICAL EDUCATION

No.	Name	Designation	Email	Mobile
1	Dr. Kanthanathan	Asst.Prof.&Head	kanthanathan@kvasu.ac.in	7560910292
2	Dr. Vinaya C.Damu	Asst. Prof.	vinaya@kvasu.ac.in	9562752569

TEACHING VETERINARY CLINICAL COMPLEX

No.	Name	Designation	Email	Mobile
1	Dr. Bipin. K.C.	Associate. Prof. & Head i/c Department of Veterinary Epidemiology & Preventive Medicine	bipinkc@kvasu.ac.in	9447153448

ACADEMIC PROGRAMMES/ACTIVITY**STAFF POSITION**

Sl. no	Teaching staff	Supporting staff	Class IV
1.	74	18	23

STUDENT STRENGTH (CVAS, POOKODE AS ON 31.3.2024)**RESEARCH**

BVSc & AH	Boys	Girls	TOTAL
2019	36	39	75
2020	15	48	63
2021	42	57	99

2022	18	73	91
2023	36	64	100
GRAND TOTAL	147	281	428
POST GRADUATE			
MVSc			
2022	14	29	43
2023	15	22	37
TOTAL	29	51	80
Ph.D			
2021	3	2	5
2022	2	2	4
2023	2	2	4
TOTAL	7	6	13
MS			
2022	4	1	5
2023	5	3	8
TOTAL	9	4	13
DIPLOMA			
2022	7	15	22
2023	15	22	37
TOTAL	22	37	59
Grand Total:			

MVSc – Completed Projects

Sl.No	Name	Adm No	Department	Thesis submitted
1.	Induja T R	20-MVP-18	Department of Veterinary and Animal Husbandry Extension Education	Ex-post facto research on Farmer Producer Organisations (FPOs)
2.	Alimudeen S.	21-MVP-02	Department of Veterinary and Animal Husbandry Extension Education	Descriptive analysis of livestock rearing practices among the tribals of Wayanad District, Kerala
3.	Arul Sabareeswaran T. A.	21-MVP-07	Department of Veterinary and Animal Husbandry Extension Education	Assessment of the status and job satisfaction of private veterinary practitioners in Kerala
4.	Dr. Ajay Kuriakose	20-MVP-01	Animal Nutrition	04.10.2023 (Result notified)
5.	Dr. Elangia N	21-MVP-14	Animal Nutrition	29.01.2024 (Result notified)
6.	Ayisha V. K	21-MVP-11	Animal Nutrition	23-11-2023 (Result notified)
7.	Dinsha TK	21-MVP-41	Animal Nutrition	7-2-2024 (Result notified)

8.	Gopikrishnan P.	21-MVP-17	Livestock Production Management	Thesis submitted
9.	Valavan P.	21-MVP-36	Livestock Production Management	Thesis submitted
10.	Varun Vijayan A.	21-MVP-37	Livestock Production Management	Thesis submitted
11.	K Kalaiyarasi	21-MVP-20	Animal Genetics and Breeding	Detection of polymorphisms of the olfactory receptor family 51 sub-family H member 1 gene and the association of different genotypes with Theileria infection in crossbred and Vechur cattle of Kerala
12.	Ramziya P. K.	21-MVP-27	Veterinary Physiology	Effect of Vitamin B12 and Folic Acid in Reversing the Tumorigenic effect of 2,3,7,8-Tetrachloridebenzo-P-Dioxin on the MCF-7 Cells
13.	Anagha R.	21-MVP-03	Livestock Products Technology	Standardisation and quality evaluation of kozhi ada, a Malabari shelf stable snack
14.	Arathy Anil	21-MVP-06	Livestock Products Technology	Development and quality evaluation of dehydrated porridge mix containing chicken meat powder
15.	Sneha Subhash Survase	21-MVP-32	Livestock Products Technology	Development and evaluation of selenium enriched dahi
16.	Sreelakshmi S.S.	21-MVP-33	Veterinary Surgery & Radiology	Clinical efficacy of procedural sedation combined with femoral and sciatic nerve blocks for stifle and tibial surgeries in dogs
17.	Mote Praveen Kumar	21-MVP-25	Veterinary Surgery & Radiology	Radio-graphic evaluation of the stifle joints in dogs affected with dysplasia
18.	Anu Dinesh	21- MVP- 05	Veterinary Surgery & Radiology	Polyvinyl alcohol-hydroxy apatite composite ceramic as a bone graft substitute in rat calvarial defect model
19.	Dr Rajalekshmi	20-MVP-35	Veterinary Clinical Medicine, Ethics and Jurisprudence	Nerve conduction studies for Localisation of neurological lesions in paralytic dogs and its therapeutic management
20.	Dr Shamly T M	21-MVP-31	Veterinary Clinical Medicine, Ethics and Jurisprudence	Clinico therapeutic studies on tracheal collapse in dogs

21.	Dr Asha K Saigal	20-MVP-10	Veterinary Clinical Medicine, Ethics and Jurisprudence	Clinico-biochemical and ultrasonographic evaluations of hepatobiliary disorders in domestic cats
22.	Dr Veni V	20-MVP-42	Veterinary Clinical Medicine, Ethics and Jurisprudence	Blood transfusion studies in Anaemic cats
23.	Dr. Kathiravan S	21-MVP-38	Veterinary Pharmacology and Toxicology	In vivo pharmacokinetics of meropenem alone and in combination with cationic antimicrobial peptide, cecropin A-(1-7) melittin in broiler chicken
24.	Dr. Immadi Srikanth	21 - MVP - 44	Veterinary Pharmacology and Toxicology	Modulation of octopamine receptors in <i>Rhipicephalus annulatus</i> by selective bioactive terpenoids
25.	Dr. Ayana S	21-MVP-10	Veterinary Pharmacology and Toxicology	In-vitro antineoplastic potential of <i>Aristolochia indica</i> and <i>Psidium guajava</i> leaves in MCF-7 cell line
26.	Dr. Reshma M. M.	21-MVP-28	Poultry Science	Comparative evaluation of the antimicrobial activity of <i>Kaempferia galanga</i> and <i>curcuma longa</i> against multi-drug resistant non-typhoidal <i>Salmonella</i> spp in broiler chicken
27.	Neelima P.	21-MVP-26	Animal Reproduction, Gynaecology & Obstetrics	Antifungal susceptibility profiling of mycotic isolates from reproductive tract of postpartum cows
28.	Anju Aravind	20-MVP-04	Animal Reproduction, Gynaecology & Obstetrics	Prognostic evaluation of uterine torsion based on haemato- biochemical and ultrasonographical changes due to multiple organ dysfunction syndrome in goats
29.	Roshni Ravindranath	21-MVP-29	Animal Reproduction, Gynaecology & Obstetrics	Evaluation of foetal survivability by analysing foetal maturity and foeto-maternal disproportion in dogs
30.	Athira R. S.	21-MVP-09	Animal Reproduction, Gynaecology & Obstetrics	Endometrial mRNA expression of receptors for oestrogen, progesterone, oxytocin and prostaglandin in crossbred cows exhibiting normal and prolonged oestrus

31.	Akhil K.	21-MVP-01	Veterinary Public Health	Source tracing of drug resistant <i>Klebsiella pneumoniae</i> causing human respiratory tract infections from domestic animals and environment
32.	Bibin Mohan	21-MVP-12	Veterinary Public Health	Evaluation of antibiofilm and photocatalytic potential of green synthesised nanoparticles against multi-drug-resistant bacterial pathogens of public health importance
33.	Sandeep N.C.	21-MVP-30	Veterinary Public Health	Efficacy of green synthesised zinc oxide-calcium oxide nanocomposites against multi-drug-resistant bacterial pathogens of public health importance
34.	Marita Dias	21-MVP-40	Veterinary Public Health	Risk assessment of drug resistant enteric bacterial pathogens of dairy cattle farms in Wayanad district of Kerala
35.	Sruthy S.	21-MVP-45	Veterinary Public Health	Investigation of Crimean-Congo hemorrhagic fever and Ganjam viruses among ticks and/or livestock surrounding the forest areas of Wayanad district of Kerala
36.	Dr. Jayanth K.V.	21- MVP -18	Veterinary Microbiology	Detection and molecular characterisation of important viral agents associated with respiration tract infections in pigs
37.	Dr. L.V.S. Sri Ramya	21- MVP -23	Veterinary Microbiology	Detection and molecular characterisation of rabies virus from animals in Kerala based on nucleoprotein and glycoprotein genes
38.	Dr. Madhanraj N.	21- MVP -24	Veterinary Microbiology	Detection and molecular characterisation of enteric viruses in chicken
39.	Devika	21-MVP-13	Veterinary Pathology	Assessment of traditional and molecular methods for the estimation of post-mortem interval in dogs
40.	Ansar Fasiludeen	18-MVP-24	Veterinary Pathology	Pathology of ocular and adnexal lesions in dogs with special reference to expression of atp-binding cassette g2 protein in corneo-conjunctival lesions

41.	Athira P Nair	21-MVP-13	Veterinary Pathology	Immunohistochemical evaluation of mutS homologue 2 protein in various cutaneous tumours in dogs
42.	Tamilvani	21-MVP-34	Veterinary Pathology	Immunohistochemical evaluation of the DNA mismatch repair system protein mutL- homologue 1 in mammary gland neoplasms of dogs

MVSc Projects ongoing during the period (Synopsis Approved)

Sl. No	Name of the Student & Admission No	Department	Project Title	Major Advisor
1.	Nitu Kujur	Department of Veterinary and Animal Husbandry Extension Education	Functional analysis of Dairy Milk Co-operative Societies of Wayanad District of Kerala	Dr. Bimal P. Basheer
2.	Dr. Amal M.S (22-MVP-06)	Animal Nutrition	Comparison of dietary nano Zinc and encapsulated nano Zinc on nutrient utilisation and semen characteristics of crossbred Malabari bucks	Dr.S.SenthilM-urugan
3.	Dr. Jyothy P. R. (22-MVP-20)	Animal Nutrition	Growth promoting and antimicrobial potential of bee pollen as a feed additive in broiler chicken	Dr. Jasmine Rani K
4.	Dr. Nand Kumar (22-MVP-48)	Animal Nutrition	Effect of supplementation of bael (Aeglemarmelos) fruit powder and probiotics on growth performance of broiler chicken	Dr. Jasmine Rani K
5.	Abhijith M.S (22-MVP-01)	Animal Nutrition	Effect of Dietary Incorporation of Kottamchukkadi Tailam Residue, 'An Ayurvedic Byproduct' on Growth Performance of Malabari Kids	Dr. Biju Chacko
6.	Dr. Prakruthi B.V. (22-MVP-28)	VETERINARY ANATOMY	Histomorphology and ultrastructure of the Harderian gland of White Leghorn birds during pre-hatch period exposed to coloured light	Dr.PatkiHarshad-Sudhir
7.	Manish M. (21-MVP-42)	Livestock Production Management	Effect of stress mitigation measures on the welfare during transportation of pigs	Dr. John Abraham

8.	Deepa P. (22-MVP-15)	Livestock Production Management	Effect of dietary supplementation of Zinc Oxide and Sodium Sulphate on wool production and growth parameters of Sandyno sheep in agroclimatic condition of Wayanad	Dr. Justin Davis
9.	Nimna S. (21-MVP-26)	Livestock Production Management	Comparison of the immunomodulatory effect of fish oil and vegetable oil on nursery piglets	Dr. Sakkariya Ibrahim N.P.
10.	Dr. Jochibet Lal-tranpuiiBasan (22-MVP-36)	Animal Genet-ics and Breed-ing	Genetic variability of Bone Morphogenetic Protein-2 gene and its association with body size and litter traits in Large White Yorksire sows	DrBindya Liz Abraham
11.	Dr. Binoy (22-MVP-13)	Animal Genet-ics and Breed-ing	Association of single nucleotide polymorphisms in selected genes with body weight and conformation traits in Malabari Goats	Dr Rojan P M
12.	Athulya Raj R.	Livestock Products Technology	Development and quality evaluation of cookies incorporated with chicken meat and jackfruit powder	Dr. Kavitha Rajagopal
13.	Aparna C. Babu (22-MVP-10)	Livestock Products Technology	Quality of chicken breast fillets packed in nanoparticle incorporated polylactic acid pouches	Dr. Renuka Nayar
14.	Lalzarzova Fanai (22-MVP-37)	Livestock Products Technology	Quality of pork chops packed in nanoparticle incorporated polylactic acid pouches	Dr. Kavitha Rajagopal
15.	Anju J R (22-MVP-09)	Veterinary Epidemiology and Preventive Medicine	Effect of selected essential oils and monosaccharides on the genotypic and phenotypic expression of major virulence factors of Pseudomonas isolates from canine otitis externa.	Dr. Bipin K.C
16.	Azhar D (22-MVP-12)	Veterinary Epidemiology and Preventive Medicine	Identification of bacterial agents associated with haemagalactia among cattle from Wayanad district	Dr. Janus A
17.	Neeraja E (22- MVP -25)	Veterinary Epidemiology and Preventive Medicine	In vitro assessment of the antibacterial activity of lactic acid bacteria against Staphylococcus spp isolated from the skin and ear of dogs	Dr. Rathish R L
18.	Vaisakhi Vikraman.S (22- MVP-33)	Veterinary Epidemiology and Preventive Medicine	Clinical and immunopathological profiling of oriental theileriosis in cattle	Dr.Deepa PM

19.	Vidhya Venugopal (22- MVP-43)	Veterinary Epidemiology and Preventive Medicine	Molecular identification and characterisation of selected infectious agents associated with thrombocytopaenia in dogs	Dr.Deepa PM
20.	Krishnakanth K (21-MVP-21)	Veterinary Surgery & Radiology	Bovine amniotic membrane derived extra cellular matrix scaffold for corneal wound healing in rabbit model	
21.	Saranya M. (22-MVP-41)	Veterinary Surgery & Radiology	Reparative efficacy of bovine amniotic membrane derived extra-cellular matrix scaffold in splinted excisional wound model on rats	Dr Remya V.
22.	Navya P shibu (22-MVP-24)	Veterinary Surgery & Radiology	Bio mimetic periosteal membrane and graft filler for the repair of critical size femoral defect in rat model	Dr Dinesh P.T.
23.	Roshna Sadali (22-MVP-30)	Veterinary Surgery & Radiology	Balanced total intravenous anaesthesia using fentanyl, midazolam, dexmedetomidine, ketamine, lignocaine and propofol in dogs	Dr Remya V.
24.	Lekshmi M R	Veterinary Clinical Medicine, Ethics and Jurisprudence	Ultrasonographic evaluation of Gall bladder and bile duct disorders in dogs	Dr Biju P Habeeb
25.	Malavika J (21-MVP-43)	Veterinary Clinical Medicine, Ethics and Jurisprudence	Clinical management of megaesophagus associated with hypothyroidism in dogs	Dr Biju P Habeeb
26.	Dr. Gnanesh M. K. (22-MVP-17)	Veterinary Pharmacology and Toxicology	Effect of benzaldehyde on the pharmacokinetics of the antiviral drug favipiravir	Dr. Sanis Juliet
27.	Vaishanavi Jagadeesh M (22-MVP-34)	Veterinary Pharmacology and Toxicology	Evaluation of reproductive toxicity of tolfenpyrad in male Wistar rats	Dr. Sanis Juliet
28.	Dr. Chintada Archana (22-BVP-18)	Veterinary Pharmacology and Toxicology	In-vivo antineoplastic potential of Magnolia champaca and Epipremnum aureum leaves	Dr. Preethy John
29.	Dr. Geethu R (22-MVP- 16)	Veterinary Parasitology	Pathotyping of Theileria orientalis in cattle of northern Kerala”	Dr. Deepa C. K
30.	Dr. Sreenidhi N C (22-MVP- 32)	Veterinary Parasitology	Comparison of microscopy, polymerase chain reaction and IgM based enzyme-linked immunosorbent assay for the detection of Babesia gibsoni in dogs	Dr. Deepa C .K

31.	Dr. Anaswara A (22-MVP- 08)	Veterinary Parasitology	Molecular characterization of Haemaphysalid ticks in Wayanad district and detection of haemoprotozoans in haemolymph	Dr. Ajith Kumar K. G
32.	Dr. Deepika Roy K.A. (22-MVP-14)	Veterinary Public Health	Evaluation of bioactive film loaded with essential oil entrapped green synthesised nanoparticles for antimicrobial packaging of chicken breast	Dr. Jess Vergis
33.	Dr. Shivaprasad Shivappa Desai (22-MVP-22)	Veterinary Public Health	Development of essential oil-laden metal-organic framework-based bioactive film for antimicrobial packaging of chicken breast	Dr. Jess Vergis
34.	Dr. Amalendu Renukuttan (22-MVP-07)	Veterinary Public Health	Occurrence of drug-resistant ESKAPE pathogens of seafoods retailed in Wayanad district.	Dr. Asha K.
35.	Dr. Arya V.S. (22-MVP-27)	Veterinary Public Health	Occurrence of drug-resistant ESKAPE pathogens in the broiler production chain in Wayanad district.	Dr. Asha K.
36.	Dr. Abhijith S. (22-MVP-02)	Veterinary Microbiology	Molecular characterisation and antifungal resistance of Malassezia spp. isolated from dogs	Dr. Chintu Ravis- hankar
37.	Dr. Vishnu P. (22-MVP-35)	Veterinary Microbiology	Detection and molecular characterisation of fungi and mycoplasma associated with bovine mastitis refractory to antibiotic treatment in North Kerala	Dr. Chintu Ravis- hankar
38.	Dr. Suprativ Sarma (22-MVP-39)	Veterinary Microbiology	Molecular detection, genetic characterisation and isolation of astroviruses of chicken	Dr. Rajasekhar R.
39.	Dr. Sandhiya K. (22-MVP-47)	Veterinary Microbiology	Mapping of genetic divergence in hexon and penton fibre gene of fowl adenovirus isolates from chicken	Dr. Rajasekhar R.
40.	Abin Jithu Paul (22-MVP-03)	Vet. Pathology	Evaluation of host tissue response to porcine tunica vaginalis based biomaterial scaffolds for abdominal wall reconstruction	Dr.Dhanush Krishna B
41.	Almas (22-MVP-05)	Vet. pathology	Evaluation of molecular techniques for estimating post-mortem interval in cats	Dr. Pradeep M
42.	Sneha M H (22-MVP-42)	Vet. pathology	Pathology of canine mammary gland neoplasm with reference to programmed cell death ligand -1 expression and tumour infiltrating lymphocytes.	Dr.Hamza Palek- koda

43.	Bexy Mathew (22-MVP-29)	ARGO	Blood metabolic markers and its association with postpartum resumption of ovarian activity in crossbred cows	Dr. K. Promod
44.	Guruvandan P. (22-MVP-19)	ARGO	Effect of modified Ovsynch protocol using human chorionic gonadotropin in repeat breeder cows	Dr. Abdul Azeez C.P.
45.	Arjun Vinayan (22-MVP-44)	ARGO	Post-partum endometrial changes and resumption of ovarian cyclicity following treatment with ecbolics in crossbred dairy cows	Dr. Abdul Azeez C.P.
46.	George Mathew (21-MVP-15)	ARGO	Efficacy of insulin-modified Co-synch protocol for the induction of oestrus in postpartum anoestrus crossbred cows	Dr. Abdul Azeez C.P.
47.	Vinay Shankar	ARGO	Influence of season on quality and freezability of Malabari buck semen	Dr. Lekshmi Bhai. K.
48.	Fathima Suhra Y. P.	ARGO	Cryo-tolerance and post-thaw characteristics of Malabari buck spermatozoa in Tris- based buck semen extender supplemented with autologous platelet rich plasma	Dr. Leeba Chacko

20.Ph.D Completed

SI No	Name of Student & Admission No	Department	Project Title	Major Advisor
1	Femi Francis (20-DVP-01)	Veterinary Physiology	The role of 2,3,7,8-Tetrachlorodibenzo-P-Dioxin as an Endocrine Disruptor in Granulosa Cells and the effect of Vitamin B12 and Folic acid on its reversal	Dr. K. Raji
2	Mr. Bijosh. M.G (18-DBP-01)	Livestock Production Management	Zoological anthropogenic and ecological factors contributing to the emergence of human tiger conflict in Wayanad district of Kerala.	Dr. John Abraham
3	SHYMA V.H. (20-MVP-03)	VEPM	Clinico-epidemiology and comparative evaluation of diagnostic assays for leptospirosis among livestock of Northern Kerala	Dr. Bipin KC
4	Asha K. (19-DVP-01)	Veterinary Public Health	Assessment of linkage of clones of drug-resistant Escherichia coli among broiler chicken and farmed fish and the efficacy of synthesised nanoparticles on recovered isolates	Dr. C. Sethulekshmi

Ph.D Projects ongoing during the period (Synopsis Approved)

Sl. No	Name of Student & Admission No	Department	Project Title	Major Advisor
1	Dr. Surjith K.P. (21-DVP-08)	Veterinary Anatomy	The effect of silver nanoparticles and ethion on the pre-hatch development of the liver in White Leghorn birds	Dr. Rajani C.V.
2	Harsh Jamda (22-DVP-01)	Veterinary Physiology	Effect of marigold derived Zinc Oxide nanoparticles on antioxidant capacity, production performance, quality and oxidative stability of eggs in layer chicken	Dr. Sreekumar T. R.
3	Dr Megnath K V	Animal Genetics and Breeding	Genetic diversity and population structure of Hanuman and Nilgirilangurs in the Western Ghats of Kerala	Dr. Muhasin Asaf V N
4	Dr Jemima Jasmine	Animal Genetics and Breeding	Identification of candidate genes for heat tolerance in crossbred and Vechur cattle in the tropical high lands of Kerala	Dr Lali F Anand
5	Dr. Raghu Naik K. (20-DVP-02)	Veterinary Anatomy	Histomorphological, ultrastructural and immunohistochemical studies on the skin of crossbred and Vechur cattle with special reference to thermal adaptation	Dr. Indu V. Raj
6	Dr. Vijin. V. L (19-DVP-04)	Livestock Production Management	Rearing of Large White Yorkshire pigs in different feeding systems for meat and biodiesel production from its fat	Dr. John Abraham
7	Chethan G. N. (21-DVP-02)	Department of Veterinary and Animal Husbandry Extension Education	Impact assessment of the livestock development for livelihood support programme in Wayanad District	Dr. R. Senthilkumar
8	Sarvadnya (21-DVP-07)	Livestock Products Technology	Development and quality evaluation of restructured chicken breast fillet	Dr. Renuka Nayar
9	Namratha Valsalan (22-DVP-03)	Livestock Products Technology	Comparison of carcass and meat quality characteristics of Tellichery and White Leghorn male chicken reared under free range system	Dr. Kavitha Rajagopal
10	Dr Jinesh Kumar N.S. (22-DVP-02)	Veterinary Surgery & Radiology	Bio-mechanical and Clinical evaluation of plate centric and rod centric plate rod constructs for management of fractures of femur in dogs	Dr Sooryadas S.
11	Dr Sindhu O K (22-DVP-04)	Veterinary Clinical Medicine, Ethics and Jurisprudence	Multiple organ dysfunction syndrome with special emphasis on serum biomarkers and single nucleotide polymorphisms of interleukin-6 gene in dogs affected with systemic inflammatory response syndrome	Dr Vinu David P

12	Dr Anju K Daniel (21-DVP-01)	Veterinary Clinical Medicine, Ethics and Jurisprudence	Clinicopathological and molecular evaluation of inflammatory bowel disease in dogs with special reference to microRNAs and perinuclear antineutrophilic cytoplasmic antibodies	Dr Vinu David P
13	Vigneshwaran B.	ARGO	Proteomic profiling of spermatozoa and seminal plasma in relation to semenfreezability and their association with in vitro sperm characteristics in Malabari bucks	Dr. Leeba Chacko
14	Dr.Hamza Palekkodan (22-DVP-03)	Vet. Pathology	Characterisation of canine cutaneous tumors by evaluation of histomorphology and expression pattern of immune checkpoint molecules in tumor microenvironment	Dr.Pradeep M

RESEARCH ACTIVITIES

Research in livestock and allied sectors is a mandate of the institute with top priority.

EXTERNALLY AIDED PROJECTS

Sl No.	Project Title	Funding agency	Investigators	Financial Outlay (in lakhs)
1	Promoting Dairy heifer rearing practice for Sustainable Livestock farm based livelihoods to tribal youth in Wayanad District, Kerala	ICAR Scheduled Caste Sub Plan 23-24	Dr.S.Senthil Murugan (Principal Investigator)	40.0
2	Gene network and pathway analysis of the impact of heat stress in exotic Large White Yorkshire pigs	KSCSTE	Dr. Roshin Anie Jose (PI) Dr. Lali F. Anand (Co-PI) Dr. Deepa C.K. (Co-PI)	21.24
3	Genomic approach for genetic improvement and conservation of important aquaculture species, <i>Etroplus suratensis</i> and <i>Trachinotus blochii</i> under changing climate scenario (TAR/2020/000021)	DST-SERB	Dr. Lali F. Anand (Principal Investigator)	18.30
4	An Open Label Randomized Multi-centric Study to Assess Safety and Immunogenicity of Indian Immunologicals Limited Manufactured Infectious Bovine Rhinotracheitis Recombinant Vaccine (Inactivated) in Cattle.	Indian Immunologicals Ltd	Dr. Deepa PM (PI) Dr. Bipin. KC (Co-PI), Dr. Vishnu Savanth (Co-PI)	30.446
5	Oriental bovine theileriosis: characterization of pathogenic genotypes of <i>Theileria orientalis</i> from Kerala and development of recombinant protein-based diagnostics	KSCSTE-YIPB	Dr. Anju Varghese	21.02

6	Exploiting encapsulated nanoparticle conjugated phytochemicals to combat antimicrobial resistance in poultry	ICAR- National Agricultural Science Fund	Dr. Jess Vergis (Principal Investigator, Collaborating Centre)	48.281840
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PLAN PROJECTS

Sl No.	Project Title	Funding agency	Investigators	Financial Outlay (in lakhs)
1	“Enhancement of Productivity of livestock and poultry by optimizing the management strategies in different Agro-climatic regions of Wayanad district”	Govt. of Kerala	Dr. Bimal P. Bashir Dr. Anjali K. Babu	9.0
2	State plan 2023-24 project titled, “Nutritional and Genetic interventions for breed improvement of native Malabari goats of Kerala”- jointly implemented by the Departments of Animal Nutrition & AGB, CVAS, Pookode	Govt. of Kerala	1) Dr. Biju Chacko 2) Dr. Jasmine Rani. K 3) Dr. S. Senthil Murugan	5 lakhs expenditure from both Departments combined
3	Enhancement of Productivity of Livestock and Poultry by Optimizing the Management Strategies in Different Agro-Climatic Regions of Wayanad District	Govt. of Kerala	Dr. John Abraham, Dr. Justin Davis Dr. Deepak Mathew Dr. Sakkariya Ibrahim Dr. Roshin Anie Jose	4.803
4	Nutritional and Genetic Intervention for Breed improvement of Native Malabari Goats of Kerala	Govt. of Kerala	Dr. Muhasin Asaf V N	10.75
5	Physiological, Biochemical and Morphological variations due to environmental stresses in crossbred and indigenous farm animals	Govt. of Kerala	Dr. Divya P.D. Dr. Renjith Sebastian	3.0
6	Physiological, biochemical and morphological variations due to environmental stresses in crossbred and indigenous farm animals	Govt. of Kerala	Dr. Maya S.	2.5
7	Physiological, biochemical and morphological variations due to environment stresses in crossbred and indigenous farm animals	Govt. of Kerala	Dr. Raji K.	3.0
8	Development of a project model and strategies for effective management of infertility and augmenting milk production of diary cows in selected areas of wayanad district	Govt of Kerala	Dr. S. Sooryadas	20
9	Development of Functional Milk and Meat Products and Safety Assessment of foods of animal origin	Govt. of Kerala	Dr. Renuka Nayar	28.5

10	Comprehensive health care of livestock, pet animals and birds in Wayanad district	Govt. of Kerala	Dr. Deepa PM	9.5
11	Revamping and Maintaining Laboratory Animal and Large Animal Facilities at CVAS, Pookode Pookode	Govt. of Kerala	Laboratory Animal Facility, CVAS Pookode	10 lakhs Received- 8 lakhs Rs.8,21,076/-
12	Productivity enhancement of livestock and poultry by optimizing the management strategies in the changing agroclimate of Wayanad district.	Govt. of Kerala	LPM, Poultry Science and Extension Dept., CVAS, Pookode	28.0
13	Development of a model project and strategies for effective management of infertility and augmenting milk production of dairy cows in selected areas of Wayanad district	Govt. of Kerala	Dr. K. Promod Dr. Abdul Azeez C. P. Dr. Leeba Chacko Dr. Lekshmi Bhai K.	4,58,975
14	Development of Functional Milk and Meat Products and Safety Assessment of foods of animal origin (RSP/23-24/VII-12)	Govt. of Kerala	Dr. Vinod V.K. Dr. Asha K. Dr. Jess Vergis	9.0
15	“Early and definitive identification of disease emergence in the scenario of extreme climatic change in farm animals, poultry and pets to support the sustainable and healthy animal rearing in northern Kerala through strengthening of post mortem and diagnostic facilities and providing training for farmers”	Govt. of Kerala	Dr. Chintu Ravishankar, Dr. Rajasekhar R., Dr. Sumod K. (along with faculty from Department of Veterinary Pathology, CVAS, Pookode)	10.75
16	Early and definitive identification of disease emergence in animals and birds in the scenario of extreme climatic changes in farm animals, poultry and pets to support the sustainable and healthy farming in northern Kerala through strengthening of postmortem and diagnosis	Govt. of Kerala	Dr. Dhanush Krishna B	9.25

PUBLICATIONS

The faculty and students of the college had a total of 179 Research publications, during the period

1. Kujur, N., B.P. Bashir, R. Senthilkumar, G.P. Reeja, J.A. Roshin and R. Kavita. 2024. Working environment of employees of dairy cooperative societies of Wayanad. *J. Krishi Vigyan.* **12(3)**: 716-721.
2. Kujur, N and B.P. Bashir. 2024. Overview of dairy milk cooperative societies of Kalpetta Block, Wayanad, Kerala. *J. Krishi Vigyan.* **12(1)**:126-131.
3. Chethan, G. N., Senthilkumar, R., Bashir, P. B. Anjali, K. B. 2024. Role of veterinary extension

- advisory and tele health services during COVID- 19 pandemic period. *J. Krishi Vigyan.* **12(1)**:148-152.
4. Bashir, P. B., Senthilkumar, R. and Anjali, K. B.2023. Institutional level Policy initiatives on crisis management during pandemic situation in dairy sector. *Biological forum.* **15(5a)**: 558-562.
 5. Induja, T. R., Bashir, P. B., Anjali, K. B., Chethan, G. N., Alimudeen S. and Sabareeswaran, A. T. A. 2023. Knowledge index on scientific poultry farming among online trainees. *J. Krishi Vigyan.* **11(2)**:211-216.
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Books Published

- S.S Deshmukh, Muhammed E M, Bindya Liz Abraham, Muhasin Asaf and Lali FA (2023) E-book on Sustainable Livestock Production: Prospects for Innovation; organized by National Institute of Agricultural Extension Management (MANAGE) and Directorate of Entrepreneurship, KVASU Pookode Total pages: 108. ISBN: 978-93-91668-65-05.

Popular Articles Published

- Man- Animal Conflict: A Jumbo problem still unresolved. Femi Francis. The Science World. June, 2023; 3(06), 1107-1110
- Dioxins and their effects on the Female Reproductive System. Femi Francis and Namratha. Agrigate- An International Multidisciplinary e- Magazine. June 2023; 3(06), 21-27

Chapter published in training manuals

- Rejitha Joseph and Shiji S Saju 2023., Haematological evaluation of avian sample, Aswathy PB & Jess Vargis, Ed. Advanced training in poultry production with special emphasis on recent techniques in anti-microbial resistance & food safety. pp 53-59
- M. MadhavanUnny, Aziz Zarina and V. Beena. (2023). Fluid and Electrolyte Balance. Book chapter in Text Book of Veterinary Physiology. Pp 193-211. Springer Publication.

AWARDS AND HONOURS

The faculty have presented their research work in various national and international forums and won several awards for their work in different aspects of veterinary and animal sciences.

CAPACITY BUILDING AND TRAINING (Students and Faculty)

TRAININGS/WORKSHOPS/ SUMMER INSTITUTE/ SEMINAR/ HIGHER STUDIES IMPARTED

SEMINARS, CONFERENCES, AWARENESS PROGRAMMES AND TALKS

- Dr. Bimal P. Bashir & Dr. Anjali K. Babu participated in Fifteenth Kerala Veterinary Science Congress & International Seminar organized by Indian Veterinary Association, Kerala, College

of Veterinary and Animal Sciences, Kerala Veterinary and Animal Sciences University, Pookode, Wayanad from 18th to 19th November, 2023 at Pookode.

- Dr. Bimal P. Bashir, participated in Third National Seminar of the Society of Krishi Vigyan organized online on 23rd and 24th April 2024.
- Dr. Biju Chacko was honoured as Invited Resource Speaker on the Inaugural day (February 14th 2024) of the 7 days (14-2-24 to 20-2-24) Training cum International Workshop on “Future Technology in Veterinary Sciences in Viksit Bharat” organised jointly by the Agriculture Forum for Technical Education of Farming Society (AFTEFS), VITAL BIOTECH (Kota) and College of Veterinary Science and A.H, ANDUAT, Ayodya, UP. He delivered in the above International Workshop, the invited paper titled, “Precision Animal Nutrition (PAN) as an innovative tool in feeding of domestic ruminants”.
- Dr. Biju Chacko was Chairman of the Poster Committee and the Committee for the conduct of the Farmer’s Seminar of the 15th Kerala Veterinary Science Congress (2023) held at CVAS, Pookode, from 17-11-2023 to 19-11-2023
- Dr. Biju Chacko delivered an invited lead paper titled, “കവചശുക്കളുടെ ശാസ്ത്രീയമായ തിര്യം തിറ്റകമവും നൂതനസമ്പ്രദായങ്ങൾ” and led the panel discussion of the Farmer’s seminar organised as part of the “കർഷക സെമിനാർ & വനിതാ സംരംഭകത്വ സെമിനാർ” organised as part of the Kerala Veterinary Science Congress & International Seminar held at Kabani Auditorium of KVASU, Pookode from 9 AM to 1.30 PM on 17-11-2024.
- Dr. Biju Chacko, delivered an invited talk titled, “Increasing production and productivity in commercial broilers and layers by the adoption of optimum feed formulation and feed analytical strategies” in the “Advanced training in poultry production with special emphasis on recent techniques in antimicrobial resistance and food safety”, held from 19-26 July 2023 at CVAS, Pookode, under the Accelerate Vigyan Scheme, Science & Engineering Research Board (DST), New Delhi.
- Dr. Biju Chacko delivered the invited talk titled, “Human-elephant conflict- problems and solutions with special reference to the state of Kerala” in the ‘International Hands on Workshop on Wildlife Disease Investigation for Veterinarians’ sponsored by Asian Elephant Support and held from 27.11.2023 to 30.11.2023 at College of Veterinary and Animal Sciences, Pookode organized in association by the Department of Veterinary Public Health and COHEART, KVASU.
- The non-conventional feed factory of Thrissilery Milk Co-operative Society near Mananthavady in Thirunellypanchayath of Wayanad District, established at Muthumary, with technical knowhow provided by Dr. Biju Chacko, the Head of Department of Animal Nutrition, CVAS, Pookode of KVASU; using the funds of Dairy Development Department, Govt. of Kerala, and launch of their patented product, “ശുദ്ധി കാലിത്തീറ്റ”, a concentrate cattle feed for lactating dairy cows, using feed formulation provided by him, was carried out on 18-8-2023 at 10 AM, by Sri. O. R. Kelu, Honourable MLA of Mananthavady in Kerala Legislative Assembly and

Member of the Board of Management of KVASU. Animal Nutrition Dept., CVAS, Pookode. Dr. Biju Chacko, who provided the technical support for the establishment of the factory as well as the feed formulation for the concentrate mixture, represented the University in the function and delivered an invited talk titled, “Introduction of cattle feed (കാലിത്തീറ്റ പരിചയപ്പെടുത്തൽ) in the ceremony.

- Dr. Biju Chacko handled an invited session titled, “Recent advances in dairy cattle feeding” for the Deputy Director trainees on 20.12.2023.
- Dr. Jasmine Rani K was Rapporteur of the Poster Committee of the 15th Kerala Veterinary Science Congress and International Seminar (2023) held at CVAS, Pookode, from 18-11-2023 to 19-11-2023
- Dr. Anjali K Babu was Rapporteur of the Poster Committee of the 15th Kerala Veterinary Science Congress and International Seminar (2023) held at CVAS, Pookode, from 18-11-2023 to 19-11-2023
- ISAPM-30th Annual Convention and National Conference on “Optimisation of livestock farming for sustainable development in the era of climate change” held at Madras Veterinary College, Chennai, Tamil Nadu from 22-24th February 2024.
- Abraham, J. 2024. Animal farming for food and fuel. Lead paper presented in the 30th Annual convention and National Conference on “Optimization of livestock farming for sustainable development in the era of climate change” held from 22-24th February 2024 at Madras Veterinary College, Tamil Nadu.
- Dr. John Abraham, Dr. Justin Davis, Dr. Deepak Mathew, Dr. Sakkariya Ibrahim and Dr. Roshin Anie Jose participated in the 15th Kerala Veterinary Science Congress 2023 and International Seminar, 18th and 19th November, 2023, Wayanad, Kerala, India
- Dr. Shiji S. Saju attended the 15th Kerala Veterinary congress and International seminar “Exploring the boundless horizon of Veterinary profession – Unleashing a new era worldwide” and presented the paper entitled “Comparison of expression pattern of ANPT-1 in different categories of ovarian antral follicles in Malabari and Attappady Black breeds of goat”.
- Dr. Femi Francis attended and presented paper in Participation in 15th Kerala Veterinary congress and International seminar “Exploring the boundless horizon of Veterinary profession – Unleashing a new era worldwide”
- Dr. Femi Francis Participated in National Seminar on ‘Epigenetics Meets Metabolomics’ by Institute for Communicative and Cognitive Neurosciences (ICCONS) held in June, 2023
- Dr. Janus. A -Classes taken - Handled a session for farmers of mastitis prevention in Paalarivukal KVASU on 7th October 2023.
- Dr. Rathish RL and Dr. Deepa PM: Radio talk on Nipah Virus Infection- 15 may, 2024
- 15th Kerala Veterinary Science Congress -November 2023 held at CVAS, Pookode- Dr Vinu David P, Dr Biju P Habeeb, Dr Ambily V R, Dr Sindhu K Rajan, Dr Sindhu O K
- 36th Kerala Science Congress – February 2024 held at Govt. College, Kasargod, Kerala- Dr Ambily V R

- Annual ISVM Conference -February 2024, CVAS, Mannuthy- Dr Vinu David P, Dr Biju P Habeeb, Dr Ambily V R, Dr Sindhu K Rajan, Dr Sindhu O K
- International conference on “Advances in veterinary dermatology and emerging skin health challenges of animals” by WAVD and ICVD2 from 19-05-2023 to 21-05-2023 - Dr Vinu David P, Dr Sindhu O K and Dr Sindhu K Rajan
- Continuing professional development programme on “canine and feline oncology” on 08-10-2023 by Small Animal Veterinary Association of Kerala – Dr Sindhu K Rajan, Dr Sindhu O K.
- Participated and presented paper on “phylogenetic analysis of *Babesia gibsoni* isolates of South India using apical membrane antigen, 50kDa surface antigen, and 70 kDa heat shock protein genes” in 30th Swadeshi Science Congress held at NIT, Calicut from 25-05-2023 to 27-05-2023 (Faculty: Dr. Deepa C. K)
- Participated and presented paper on “molecular detection and phylogenetic characterization of *Hepatozoon felis* in tiger, leopard and a wild cat” in 30th Swadesi Science Congress held at NIT, Calicut from 25-05-2023 to 27-05-2023 (Faculty: Dr. Anju Varghese)
- Participated and presented paper on “Evaluation of recombinant *Babesia gibsoni* thrombospondin-related adhesive protein (BgTRAP) for the sero-diagnosis of canine babesiosis” in 32nd NCVP held at Bihar Veterinary College, BAU during 29- 11- 2023 to 01-12-2023 (Faculty: Dr. Deepa C. K)
- Participated and presented paper on “Study of genetic diversity among *Babesia gibsoni* isolates in dogs from South India” in 32nd NCVP held at Bihar Veterinary College, BAU during 29- 11- 2023 to 01-12-2023 (Faculty: Dr. Anju Varghese)

PARTICIPATION IN EXHIBITIONS

- Dr. Bimal P. Bashir & Dr. Anjali K. Babu participated in Poopoli 2024 – 1st to 15th January 2024 at RARS, Ambalavayal, Wayanad.
- Dr. Justin Davis participated in KVASU Exhibition Pavillion at Poopoli at Ambalawayal, KAU
- Dr. Sreekumar T. R. served as a resource person at the KVASU stall during Poopoli, the International flower show, organized by the Regional Agriculture Research Station in Ambalavayal.
- Dr.Hamza Palekkodan-Organised a stall at Pooppoli-Ambalavayal for KVASU

CONSULTANCY AND OTHER SERVICES

- Gave Technical Support to estimate the nutritional profile of ‘proximate principles’ by conducting ‘proximate analysis’ of samples of Dhanwantaramtaila and Ksheerabalataila from Dept. of DravyagunaVijnana, Vaidyaratnam P.S. Varier Ayurveda College, Kottakal as part of their PG research project titled, “Analysis of an ethnovetreinary practice: Mineral Composition of

Dhanwantaramtaila and Ksheerabalataila residues against mineral mixture feed” of their PG student Dr. Reshma S Menon.

- Delivered Technical Support as well as conducted analysis by in vitro gas production technique (IVGPT) to estimate the cumulative gas production and in-vitro digestibility of seven different formulated livestock feeds Centre for Rural Development and Technology, Indian Institute of Technology (IIT Delhi) as part of the doctorate research programme of their PhD. Student Prasanna Kumaran, in the Feed & Fodder Analytical Laboratory of Animal Nutrition Dept.
- Helped in the proximate analysis of *Derris scandens*, a rare variety of forest grass, from Kannur District, in order to explore the possibility of using it as non-conventional feed resource (NCFR) for ruminants, brought in by ThryambakSha, a student of Thottada Higher Secondary School, Kannur, under the guidance of eminent Biologist Sri. Prabakaran Master, Higher Secondary Teacher at AKG Memorial Higher Secondary School, Pinarayi, Kannur.
- Provided Technical Support to Sri. Navas, owner of ‘K Bakes’, a Bakery Chain in Ambalathara in Thiruvananthapuram district and helped in formulating rations utilising the bakery waste comprising of bread and cake waste as feed for cows, buffalo calves, pigs, poultry and dogs.
- Offers technical assistance and parasite disease diagnosis through clinical sample analysis, morphological and molecular characterization of different specimens obtained from human hospitals and field veterinarians.
- Microbiological analysis of drinking water samples from food safety establishments
- Molecular diagnosis of viral diseases of livestock and pet animals
- Antimicrobial susceptibility testing
- Isolation and molecular characterization of fungi

OUTREACH PROGRAMMES

- Dr. Jasmine Rani K.-Radio talk in JEEVANADHAM- Complete feed- A Newer trend in cattle feeding.
- Dr. Biju Chacko, participated as Expert in the TV Programme titled, “Talking point” broadcast by Manorama News channel on 19-5-2023 from 7.30 PM – 8.00 PM on the topic “നട്ടിൻ ആക്സനൻ ജീവിക്കുന്നു?” regarding the nutritional, psychological and wild life aspects of bison attacking human beings, on the same day in which two persons, were killed in bison attack at Kollam and Idukki Districts, respectively.
- Dr Sooryadas S; The Key Speaker Ophthalmology & Pain Management Workshop Under Nvf Outreach Programme 22-23, February, 2024 Aat RPS College of Veterinary Science, Hisar.
- Dr Soorydas S, Invited Speaker On Hands On Training Programme -Basics Of Small & Large Animal Anesthesiology 19-21, April 2024 at Mumbai Veterinary College

- Dr Soorydas S, lead Speaker, Small animal Anesthesia session, continuing Education Programme conducted by Small Animal Practitioners association Guwahati, 9-10 December 2023
- Dr Sooryadas S; Guest Faculty on CVE programme at Kozhikode conducted by Kerala State Veterinary Council, 18th April, 2023
- Dr. Rathish R L, Nominated as the regional coordinator of Kerala- Bird Count India Network
- Dr. Rathish R L, Nominated as the regional coordinator for Kerala- Avian Biodiversity conservation- Bombay Natural History Society (BNHS)
- Awareness and fertility camp’ by Kerala Veterinary and Animal Sciences University as part of Pashudhan Jagruti Abhiyan on 14.8.2023 (Dr. K. Promod and Dr. Lekshmi Bhai K.)
- ‘Awareness and fertility camp’ by Kerala Veterinary and Animal Sciences University as part of Pashudhan Jagruti Abhiyan on 19.10.2023 (Dr. Abdul Azeez C.P. and Dr. Lekshmi Bhai K.)
- KVASU, ICARP SC sub plan 2023-24: “Promoting dairy heifer rearing practice for sustainable livestock farm based livelihoods to scheduled caste clusters in Wayanad” Infertility camp on 12.3.2024 at Thelampatta (Dr. K. Promod and Dr. Lekshmi Bhai K.)
- KVASU, ICARP SC sub plan 2023-24: “Promoting dairy heifer rearing practice for sustainable livestock farm based livelihoods to scheduled caste clusters in Wayanad” Infertility camp on 19.3.2024 at Meenangadi (Dr. Abdul Azeez C.P. and Dr. Lekshmi Bhai K.)
- Awareness class on Cattle infertility on 27.01.2024 organised by Kuppadithara Milk Society, Wayanad district (Dr. K. Promod)
- Infertility camp at Koyilandi Panchayath, Kozhikode on 02.11.2023 as expert gynaecologist (Dr. Abdul Azeez C.P.)

OTHER EXTENSION ACTIVITIES

SI No.	Title of training
1	Dr. John Abraham: Farmer Scientist Interface of Kerala Veterinary Science Congress-2024- Housing modification in the era of climate change
2	Need based intervention for livelihood upliftment of Scheduled Caste clusters by supply of Heifer cow by Dr.S.SenthilMurugan organized training to Schedule caste beneficiaries for 5 days as part of ICAR SC SP 23-24 at CVAS, Pookode
3	Entrepreneurship and skill development training on Animal Husbandry and Veterinary Practices for Scheduled Caste beneficiaries for 14 days as part of ICAR SC SP 23-24 at CVAS, Pookode
4	Two-day Hands-on- training on Basic bioinformatics tools for life science research by Department of Animal Genetics and Breeding, CVAS, Pookode from 20/11/23 to 21/11/23
5	Two-day Hands-on- training on Basic bioinformatics tools for life science research by Department of Animal Genetics and Breeding, CVAS, Pookode from 29/11/23 to 30/11/23

6	Three month obligatory training for Assistant Directors of Animal Husbandry Department - Dr. Sreekumar T. R., handled a session on Physiological aspects of ECG
7	Dr Sooryadas S; Cardio- Thoracic surgery for correction for Persistent right aortic arch in a puppy at Vet Palms Animal centre- Malaysia; April 2024
8	KVASU “Paal Arivukal” Resource person - audio talk for farmers on “Low Milk fat Syndrome”- for livestock farmers of Kerala state Dr Ambily V R
9	Resource person - Training on capacity building programme to scheduled caste clusters – Part of ICAR, SC sub-plan Dr Vinu David P Dr Biju P Habeeb Dr Ambily V R Dr Sindhu K Rajan Dr Sindhu O K
10	Subject expert to deliver an invited full day lecture (4 sessions) on topic “Large animal internal medicine- a specialist’s focus on diagnosis and treatment” on 06.07.2023 for the Veterinary surgeons and senior veterinary surgeons of Kerala , organized by AHD, at IMG, Ernakulam Dr Vinu David P
11	Resource person- Training for field veterinarians on “Common Clinical Case presentations in Small Animal Practice” by KGVOA, Ernakulam Unit on 27/10/2023 Dr Vinu David P
12	Emergency consultation service to the K9-Dogs of Wayanad District Dr Vinu David P Dr Sindhu O K
13	Technical advices to farmers regarding scientific disease management, Disease prevention and control strategies Dr Vinu David P Dr Biju P Habeeb Dr Ambily V R Dr Sindhu K Rajan Dr Sindhu O K
14	Animal Handling sessions (Academic) to second year students of MIMS, College of Allied Health Sciences, Puthukode, Malappuram
15	Training for scheduled caste small and marginal farmers funded by ICAR SC SP 23-24 on “Scientific reproductive management of crossbred dairy cows and neonates” on 15 th November 2023 to 30 th November 2023-Classes handled by Dr. K. Promod, Dr. Abdul Azeez C.P., Dr. Leeba Chacko and Dr. Lekshmi Bhai K
16	Training for scheduled caste small and marginal farmers funded by ICAR SC SP 23-24 on “Scientific reproductive management of crossbred dairy cows and neonates” on 2 nd December 2023 to 19 th December 2023- Classes handled by Dr. K. Promod, Dr. Abdul Azeez C.P., Dr. Leeba Chacko and Dr. Lekshmi Bhai K
17	Training for scheduled caste small and marginal farmers funded by ICAR SC SP 23-24 on “Scientific reproductive management of crossbred dairy cows and neonates” on 2 nd January 2024 to 19 th January 2024- Classes handled by Dr. K. Promod, Dr. Abdul Azeez C.P., Dr. Leeba Chacko and Dr. Lekshmi Bhai K
18	Course co-ordinator of skill development in Veterinary Clinical Assistance and Animal Handling training for scheduled caste beneficiaries from 19.12.2023 to 05.01.2024 (Dr. Leeba Chacko)
19	Three days hands-on Training on Techniques in Small Animal Anaesthesia for Veterinary Practitioners organized by Dept. of Veterinary Surgery and Radiology, CVAS, Pookode from (24-04-2023 to 26-04-2023), (22-05-2023 to 24-05-2023), (07-06-2023 to 09-06-2023) and (09-08-2023 to 11-08-2023) Course Director: Dr. Sooryadas S. Faculties: Dr. Dinesh P.T., Dr. Jinesh Kumar N.S., Dr. Remya V.

DISTINGUISHED VISITORS

Sl. No.	Name and address of the visitor	Date of visit	Place of visit	Purpose of the visit	Remarks by the visitor
1	Obligatory 3 MONTH training for Assitant Directors, AHD	October, 2023	Departmental Museum, Dept. of Vet. Anatomy	Assitant Directors	25+ Assitant Directors were benefited
2	Department of Education, Wayanad district	3/02/2024	Departmental Museum, Dept. of Vet. Anatomy	Gifted children program	50+students were benefited
3	Department of Education, Malapuram district	14/02/2024	Departmental Museum, Dept. of Vet. Anatomy	Gifted children program	40+students were benefited
4	Dr. Sudha Kappalli, Professor, Department of Zoology, Central University of Kerala Kasargod	04-09-2023	Department of Veterinary Parasitology, CVAS, Pookode	Academic	

The College of Veterinary and Animal Sciences, Pookode, Wayanad, Kerala, welcomed more than 30 groups of visitors from all across the state as well as from outside the state during the academic year 2023-24. More than 1000 students, belonging to lower primary to higher secondary grades, visited the campus. The visitors included students from various educational settings, including vocational schools, student organizations, student dairy clubs, and government-sponsored initiatives.

More than 800 college students and 35 accompanying staff members from different colleges in the state also visited the campus during this period. The visit included college students from a variety of academic disciplines, such as post-graduates studying agriculture, basic sciences, paramedicine, MLT, zoology, etc.

During this financial year, more than 100 livestock farmers from both within and outside the state visited the campus. The visitors included livestock farmers who were primarily a part of the sponsored farmers' training initiative run by ATMA and the dairy department, registered members of several farmers' groups and societies as well as poultry and goat producers' organizations.



Visit by students & teachers of GHSS, Kuttiyadi



Students & teachers of ShihabThangal Academy of Paramedical science Tirur, Malappuram



Students and teachers of Govt. LP School, Achooranam



Students of Gifted children program from Vadakara educational district



Students and teachers of St Philomena's College, (Autonomous), Mysuru



BSc Agriculture degree students and faculty of Vanavarayar Institute of Agriculture, Manakkadavu, Pollachi, Tamil Nadu



Visit by MSc (Zoology) students of Central University of Kerala, Periya, Kasargode



Students and faculty of MES Institute of Paramedical Sciences, Perinthalmanna



Visit by farmers and officials of ATMA Payyannur block



Visit by farmers and officials of ATMA Chalakkudy block



Farmers and officials of ATMA Nilambur Block,



Farmers and officials of ATMA Kunnamangalam Block, Kozhikode

ADDITIONAL DUTIES OF FACULTY

As a part of institution building activities the following faculty members were assigned various additional charges during 2022-'23 as follows

Sl No.	Name	Additional Duties
1.	Dr. Bimal P. Bashir	Member of anti-ragging committee- CVAS, Pookode Member of Committee for Anti-Ragging inspection duty- CVAS, Pookode Resident Tutor, MH, Kalpetta
2.	Dr. Anjali K. Babu	Member, Academic cell UG, CVAS, Pookode Member, Documentation cell UG, CVAS, Pookode Member of Committee for Anti-Ragging inspection duty- CVAS, Pookode Internship Inspection team for Internship training of 2017 BVSc & AH batch- CVAS, Pookode
3.	Dr. Biju Chacko	Member of the Institutional Animal Ethics Committee (IAEC) of the College Member of the Anti-Ragging Squad of the College Member of Board of Studies under the Faculty of Poultry Science Chairman of Documentation Committee of the College
4.	Dr.S.Senthil Murugan	Goat and Sheep, Officer I/c, ILFC, COVAS,Pookode Assistant Warden, Men's Hostel, Kalpetta
5.	Dr. Jasmine Rani K.	Academic Officer (UG) Resident tutor (IH) Member of Committee for Anti-Ragging Inspection duty- CVAS, Pookode Internship Inspection team for Internship training of 2017 BVSc & AH batch- CVAS, Pookode
6.	Dr. John Abraham	Govt. of India Nominee of the Committee for the Control and Supervision of Experiments on Animals (CCSEA), Animal Welfare division, Ministry of Environment, Forest and Climate Change, member of IAEC of 1. ICAR-Indian Institute of Spice Research- Calicut 2. University of Calicut, Dept of Life Sciences
7.	Dr. Justin Davis	Working arrangement at Directorate of Entrepreneurship
8.	Dr. Deepak Mathew D.K.	1. Associate Professor and Head(i/c), ILFC 2. Assistant Warden Men`s hostel
9.	Dr. Sakkariya Ibrahim N.P.	1. Officer in charge of Pig Farm, Instructional Livestock Farm, Pookode 2. Secretary of PTA
10.	Dr. Roshin Anie Jose	1.Officer in charge of Rabbit Farm, Instructional Livestock Farm, Pookode 2. Joint Secretary of PTA 3. Officer in charge of documentation cell, CVAS, Pookode
11.	Sri. Pranav . O	Resident tutor of CVAS PookodeMen's Hostel kalpetta
12.	DrBindya Liz Abraham	Nodal Officer, K-DISC, CVAS, Pookode

		Head i/c, Department of Statistics, CVAS, Pookode
		Member, culling committee of ILFC, Pookode
13.	DrMuhasin Asaf V N	IT Nodal Officer, Officer (i/c) ARIS Cell
14.	DrLali F Anand	Officer i/c, AISHE, CVAS, Pookode
		Nodal Officer, Brain-Gain programme, CVAS, Pookode
15.	Dr E M Muhammed	Nodal Officer, YIP programme, CVAS, Pookode
16.	Dr. Divya P.D.	Nodal Officer, NAD DigiLocker, KVASU
		Member of Committee for Anti-Ragging Inspection duty- CVAS, Pookode
17.	Dr. Renjith Sebastian	Officer I/C, Computer Cell, CVAS, Pookode
		Assistant Professor, PG Academics, CVAS, Pookode
		Member of Committee for Anti-Ragging Inspection duty- CVAS, Pookode
18.	Dr S Maya	Dean (i/c)
19.	DrIndu V Raj	Controller of Examinations (i/c)
20.	DrRajani C V:	Presiding Officer, Internal Complaints committee, CVAS, Pookode
		Academic Officer, PG Academics
		Member, Anti-ragging monitoring committee
21.	Dr. Zarina Aziz	Internship inspection officer
		Anti-ragging duty
22.	Dr. Sreekumar T.R.	Academic officer of PG
		Anti-ragging duty
23.	Dr. Shiji S. Saju	Technical Assistant to ADR
		IT Cell Officer at college level
		Internship inspection officer
		Anti ragging duty
24.	Dr. Renuka Nayar	Professor (RC), Placement Officer, Centre for Students' Counselling and Placement, Convenor, Minimum Standards Assessment Cell, CVAS, Pookode, Convenor, Students' Grievance Redressal Committee, Member, Anti-ragging Squad, Member, University level IQAC for Career Advancement Schemes
25.	Dr. Kavitha Rajagopal	Academic Officer –UG, Member, Documentation cell, CVAS, Pookode- Member, Equity cell, CVAS, Pookode- member
26.	Dr. Janus. A	Academic cell
27.	Dr. Janus. A	Internal Complaints Committee
28.	Dr. Rathish R.L.	Programme Officer, NSS Unit-1, CVAS, Pookode
29.	Dr. Rathish RL	Officer In- charge of Horses, ILFC, Pookode
30.	Dr Remya V	TVCC duty, Treasurer, PTA, COVAS, Pookode
31.	Dr Sindhu K Rajan	Documentation cell
32.	Dr Ambily V R	Academic Officer 2019 and 2020 batch, Assistant Co Ordinator state plan KVASU
33.	Dr Vinu David P	Member of Institutional Animal Ethics Committee , KVASU

		Committee member of the Project Co ordination group-Companion animals and Pet birds of the KVASU, Pookode
		AMS officer in charge of the Dept of Veterinary Clinical Medicine, Ethics and Jurisprudence, CVAS, Pookode for the implementation of the Academic Management System in the college.
34.	Dr. Sujith S	Course Director MSc (Applied Toxicology)
		Assistant Professor (Academic Staff College)
		Member (e-tendering Committee)
		Member (Committee for Annual research report preparation)
		Member (NAAC accreditation committee- Convener Infrastructure and learning resources)
		Member- PC group
35.	Dr. Sanis Juliet	Professor and Head of University Department
		Implementing Officer, Central Instrumentation Facility
		Implementing officer, Centre for Ethnopharmacology
		Nodal Officer, e-Procurement, KVASU
		Convenor, Anti-ragging Squad
		Member, Students Grievance Redressal Committee
		Chairman, Project Co-ordination Group (Internal Medicine and Clinical studies)
		Member, (PCC, FRC, BOS)
		Member, Research Council
		Member, Examination Squad (until October,2024)
36.	Dr. Reghu Ravindran	Antiragging squad (Member)
		Canteen committee (Chairman)
		PC group (Chairman)
		Member (PCC, FRC, BOS)
37.	Dr. Ajith Kumar K. G	Purchase officer
		Internal complaint committee (Member)
		PC group (Member)
38.	Dr. Anju Varghese	Acad cell-2 (i/c)
		Internship wing (Member)
		Documentation cell (Committee member)
		PC group (Member)
		Annual Research Report preparation committee (Member)
39.	Dr. Deepa C. K	PC group (Member)
40.	Dr. Aswathi P B	1. Head (i/c), Dept. of Poultry Science
		2. Course Director, BSc PPBM Programme
		3. NSS programme officer, Unit II, CVAS, Pookode
		4. Member, PC group, Poultry Production and Management
		5. Member, Board of studies, Faculty of Poultry Science

		6. Advisorship of 6 students of 2022 batch
		7. Advisorship of 1 PhD student
		8. Advisorship of 2 MVSc students
		9. Member, Technology Innovation and Sales Centre, Pookode
41.	Asha K.	1. AMS College Admin
		2. Co-ordinator, College level Disaster Management Club
42.	Jess Vergis	1. Co-ordinator, COHEART (upto 16.01.2023)
		2. Officer-in-charge, COHEART (17.01.2023 onwards)
43.	Vinod V.K.	1. Member, Anti-ragging committee
		2. Officer-in-charge, Canteen
44.	Prejit	Officer-in-charge, COHEART (upto 16.01.2023)
45.	Dr. Chintu Ravishankar	Associate Director of Research, Kerala Veterinary and Animal Sciences, Pookode
46.	Dr. Chintu Ravishankar	Officer in charge of Telecommunications, CVAS, Pookode
47.	Dr. Rajasekhar R.	Academic Officer (UG), Treasurer, IVA, Pookode
48.	Dr.Ajith Jacob George	Anti-ragging squad
		Anti-ragging Committee
		Professor (Academics)
		College IQAC
		Examination squad
		Canteen committee
		PTA member
		Students Grievance Redressal Committee
		Bus purchase committee
		IAEC
		PC group Chairman
		Board of Studies
		Faculty Research Council
		Centre of Excellence in One Health
49.	Dr.Pradeep M	Associate course director, AD training, KVASU
		course coordinator, ASCAD training
		Joint organizing secretary, Kerala Veterinary Science congress, 2023
		College IQAC
		PC group member
		Associate editor, KVASU editorial board
		Nodal officer for college level disaster management club under wayanad district disaster management
		Antiragging member
50.	Dr. Kanthanathan. R	i/c Dept. of Physical Education, CDST, Pookode
		i/c Health and Fitness Centre, CVAS, Pookode
		Associate Patron, Students Union, CVAS, Pookode

		Assistant Warden, Men's Hostel, CVAS, Pookode
		Associate Director, Physical Education, KVASU
51.	Dr. Vinaya. C. Damu	ICC Chair Person, CVAS, Pookode
		Assistant Warden, Thushara Hostel, Lakkidi
		Campus Development Officer, CVAS, Pookode
		ICC Chair Person, ILFC, Pookode

PATENTS

AWARDS IN CURRICULAR, EXTRA- CURRICULAR ACTIVITIES/CO- CURRICULAR

The findings of the research of Five students, under the mentorship of Dr. Biju Chacko, who were successful in winning the Young Innovator's Project (YIP 2020) of Kerala Development and Innovation Strategic Council (KDISC), for Idea No. 1158 titled, "Characterisation of locally available unconventional feeds and its potential use as livestock feed in the post pandemic scenario" under the Theme, "Post Pandemic Innovations" and securing funding for the same, amounting to Rs. 71,000/- (Rupees Seventy-one thousand only), were presented by Oral Presentation on 19-11-2023, as a full paper titled, "Characterization of Senna spectabilis as a livestock feed" in the Session No. VII titled, "Budding Vets Session" of the 15th Kerala Veterinary Science Congress and International Seminar titled, "Exploring the Boundless Horizons of Veterinary Profession – Unleashing A New Era Worldwide" held at CVAS, Pookode. This was also included as a full paper in the Proceedings of the above Congress, with Yasir, one of the five students as the first author and **Biju Chacko** as co-author

• LIBRARY – ACTIVITIES AND FACILITIES, NEW ARRIVALS AND INFORMATION SYSTEMS

1. KVASU-Knimbus Web portal provided by the Kerala Higher Education Council as a part of University Library Support and Cooperation in Kerala implemented. Remote login services and access of Scopus database extended to all colleges under KVASU.
2. All professional staff members have been participated in the CeRA (ICAR Consortium for e-Resources in Agriculture) training programme for Southern Region Librarians and Information Scientists held on 17/10/2024 at Kerala Agricultural University, Thrissur
3. One day sensitization programme conducted for students and faculty to give awareness about the plagiarism related rules and regulations of UGC as well as KVASU at the time of submission of Theses/Dissertation .
4. Established KVASU e-document delivery services beneficial for the constituent colleges and centres of KVASU.
5. Uploaded 981 number of PG thesis and 98 number of PhD thesis to the ICAR Theses repository

KRISHIKOSH

6. Orientation classes were given to the newly joined BVSc, MVSc, MS Wildlife, B Tech Dairy and Diploma students
7. Library and Information services course (PG 605) was offered and taken classes for MVSc batch

New Arrivals

97 new arrivals were added to the CVAS Library Pookode

• NEW INFRASTRUCTURE CREATED

1. Oscillometric BP Apparatus
2. Hand held Pulse oximeter for Veterinary Use
3. Purchase of Gel Documentation System
4. RFID based security surveillance cum circulation system was implemented in the library for the smooth and speedy and the facilitated to library clientele of CVAS Library Pookode.
5. Self-Check in/Check out Kiosk implemented for assistance free circulation of Books
6. WebOpac for online library catalogue and providing awareness of book possession status of Library users.

• SCHOLARSHIPS

Sl. No.	Name of the Scholarships	Course	Number of students receiving scholarships
1	E-grantz	BVSc, DDS, MVSc, BSc PP&BM, PhD	325
2	National Scholarships -(MCM)	BVSc	25
3	National Scholarships -Post matric scholarships for students with disabilities	BVSc	2
4	National Scholarships- Prime Ministers scholarships scheme for central armed police forces & assam rifles	BVSc	1
5	Competency Stipend (Internship allowance)	BVSc	All students in 2018 batch up to August
6	Merit Scholarships (KVASU)	BVSc	25
7	Merit Cum Means scholarships (KVASU)	BVSc	15
8	Assistantship	MS Wild Life	2
9	South India Study Tour allowance	BVSc	All students in 2021 batch BVSc(3000 per head)

10	All India Study Tour allowance	BVSc	All students in 2020 batch BVSc (12000 per head)
11	Senior Research Fellowship (SRF)	PhD	11
12	Junior Research Fellowship (JRF)	MVSc	62
13	Residency Fellowship	MVSc	2
14	Research Grant	PhD, MVSc	2
15	ICAR NTS	BVSc, MVSc	16
16	ICAR JRF	MVSc	1
17	ICAR MCM	BVSc	36
18	ICAR Veterinary Internship	BVSc	79

• **HOSTEL AND HOUSING- FACILITIES, NEW INFRASTRUCTURE CREATED**

MENS HOSTEL	
Hostel	Strength
Main Hostel	136
Game villas (Total 3- 1 isolation)	-
PG hostel above Clinics (2 room)	10
Old Vythiri	-
Quarters (new)	26
Kalpetta	41
LADIES HOSTEL	
Hostel	Strength
Main Hostel	204
Annex	92
Thushara	98



• **STUDENTS COUNSELLING AND PLACEMENT SERVICES**

1. Routine visit of Counselling Psychologist twice in a month
2. “Life Enrichment Programme” by Shri. Joseph T.J., Life Coach and Mind Tuner, Director, SPACE, Wayanad for first year and second year BVSc&AH students in March 2023 in two days as two sessions from 10 am to 4.30 pm.
3. Routine intimation of job openings to the alumni is being done

- **STUDENT EXCHANGE PROGRAMMES**
- **ACTIVITIES OF THE STUDENTS UNION WITH PHOTOS**



1. Literary and Debate Club organized a debate on the topic of “Same-sex marriage in India” under the leadership of Dr. Bipin K.C.
2. The Students Union was able to organize an anti-rabies vaccination drive for the students of the college from May 5 to 29. A large number of students participated in this project organized in collaboration with the Preventive Medicine Department of the college and Vythiri Taluk Hospital. The students were divided into 7 batches and 3 doses of pre-exposure vaccine were administered.
3. Kerala Veterinary and Animal Sciences University and Social Service Club jointly organized a DIGITAL WORKSHOP at a summer camp called “Aral”.
4. On May 31, on the occasion of World No Tobacco Day, an anti-drug campaign called “Vimukthi” was organized for the workers at ILFC in collaboration with Wayanad Excise Department.
5. On the occasion of World Environment Day, a photography competition and a poster making competition were organized in collaboration with IVA Wayanad. Keeping in mind the concept of Green Campus Clean Campus, a waste bin was installed inside the campus and each batch took care of it on its own under the name of “A tree for a batch” and planted tree saplings to bring new life to the campus. A plan was formed for planting tree saplings by the new batches in conjunction with the Freshers’ Day of the following batches.
6. Film and Photography Club organized Film Fest at Periyar Hall from June 8 to 27.
7. Saathi Women’s Cell took up the initiative of “lets drive” in association with the Driving School in Vythiri and created an environment for students to learn driving.
8. A career orientation class organized by the students Union and Pookode IVA unit on July 5 under the name of Education Overseas led by Professor Dr. AP Usha, Director of farms KVASU.
9. A 24×7 helpline system was established under the Women Cell to help everyone on the campus.
10. An Interclass Debate competition was held under the Literary & Debate Club on August 8 and 9 under the name ‘Pratidhwani’.
11. A film & photography club was launched on Aug 8 under the name Obscura and a short film contest was organized for the students in connection with it.

12. A Drawing competition was held under the National Integration on the occasion of the 76th Independence Day.
13. Music Night was celebrated on the campus under the leadership of GROOVES Music Club on August 16.
14. Onam celebrations “Arpo-23” was organised on 22/08/2023
15. Organised a film quiz for students on 17/10/2023
16. Organised freshers day programme for 2023 BVSc admission on 14/11/2023



● PARENT TEACHER ASSOCIATION ACTIVITIES WITH PHOTOS





1. Conducted General body meeting to appreciate meritorious students and teachers.
2. PTA members participated in various meetings convened by college dean and other authorities.
3. PTA donated necessary items like washing machine, fridge, dining table and chairs, water purifiers and televisions for the use of students.

• **SPORTS AND GAMES WITH PHOTOS**

Runner up in KVASU Inter Collegiate Athletics 2023



May 27, 2023, Inter Class Volleyball



June 21, 2023, Inter Class Football



June 25, 2023, Inter Class Cricket



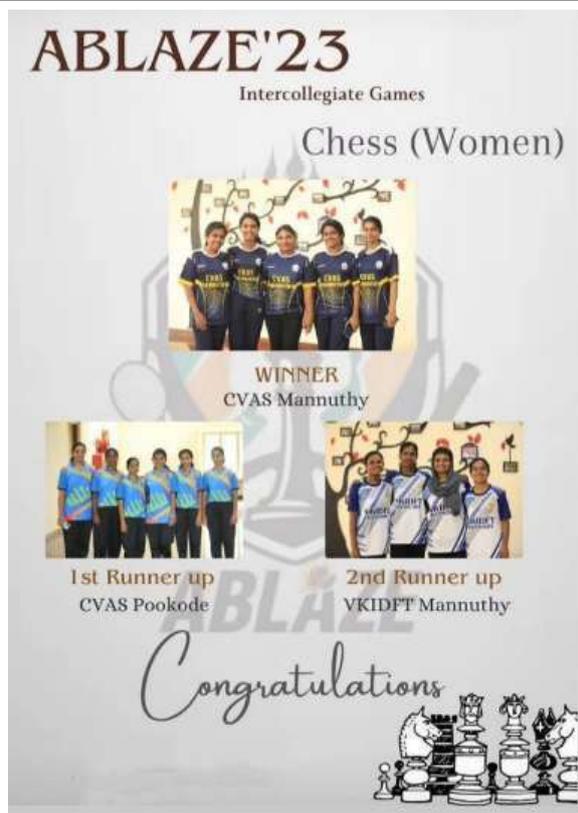
August 19 & 20, 2023, KVASU Inter Collegiate Table Tennis Men Tournament Winners



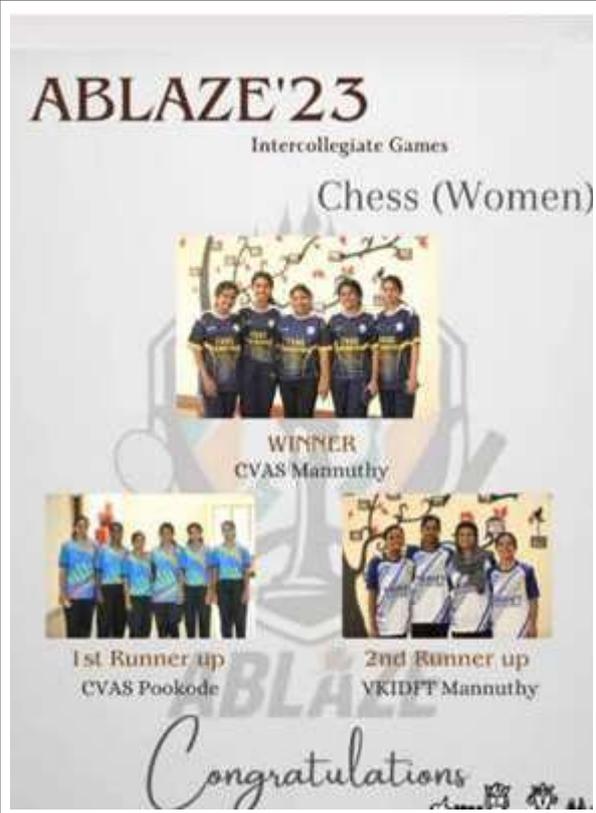
August 19 & 20, 2023, KVASU Inter Collegiate Table Tennis Women Tournament 1st Runner Up



August 19 & 20, 2023, KVASU Inter Collegiate Chess Women Tournament 1st Runner Up



November, 2023, IVA State Badminton Overall Championship IVA, Pookode. (All the players are students of CVAS, Pookode)



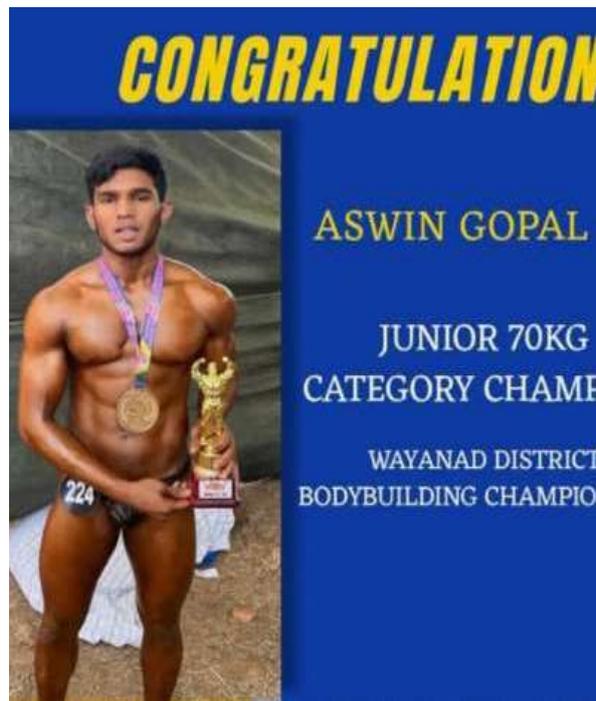
November, 14, 2023, Inter Class Badminton



December, 22-24, 2023, South Zone Inter University Table Tennis (W) Tournament at Chennai. Team Manager & Player from CVAS, Pookode



January, 31, 2024, Wayanad District Body Building Championship Champion in 70 kg Category



February, 16 & 17, 2024, Inter Class Athletics Meet



NSS ACTIVITIES WITH PHOTOS

Enrollment Day 2023-24

Date: May 29, 2023

Location: Kabani Hall, CVAS, Pookode

On May 29, 2023, our NSS Unit held an inspiring Enrollment Day event at Kabani Hall, CVAS, Pookode, with a remarkable turnout of 200 enthusiastic student participants. The event featured a captivating talk by Prof. K Balagopalan, a retired professor from St. Mary's College, Sultan Bathery, and a Central Committee member of KSSP. He eloquently spoke about the pivotal role of youth organizations in shaping the dynamic social context of Kerala. This enlightening session not only marked the commencement of the academic year 2023-24 but also motivated our students to actively engage in social change and community service throughout the year.

Blood Donation Drive

Date: June 15, 2023

Location: Periyar Hall, College of Veterinary and Animal Sciences (CVAS), Pookode

Collaborator: IMBA Blood Bank, Sultan Bathery Taluk Youth

Participants: Volunteers and members of Kerala Veterinary and Animal Sciences University, Pookode

On June 15, 2023, our dedicated NSS volunteers, along with other members of the Kerala Veterinary and Animal Sciences University (KVASU), Pookode family, joined forces in collaboration with the IMBA Blood Bank, Sultan Bathery Taluk Youth. This partnership marked a significant initiative, a blood donation drive held at Periyar Hall, College of Veterinary and Animal Sciences, Pookode.

The collective effort resulted in a blood donation drive, where individuals selflessly donated blood to support those in need. By coming together with our collaborators on this meaningful day, we not only contributed to saving lives through blood donation but also raised awareness about the pressing issue of elder abuse. Our NSS unit continues to prioritize the welfare of our community through such impactful endeavors, fostering a culture of compassion and social responsibility.



Path Improvement Project

Date: June 17, 2023

Location: Pookode Anganwadi

Collaborator: Teacher's Organisation of Veterinary University Kerala (TOVUK)

On June 17, 2023, the volunteers of the unit embarked on a remarkable path improvement project aimed at enhancing access to Pookode Anganwadi for the benefit of children. This meaningful initiative was made possible through the generous provision of materials by TOVUK.

The dedicated volunteers worked diligently to pave bricks along the steps leading to Pookode Anganwadi. By doing so, they not only improved the infrastructure but also ensured that children have safe and easy access to the facility. This project embodies our commitment to community development and reflects our dedication to making a positive impact on the lives of the residents in our community.



International Yoga Day Celebration

Date: June 21, 2023

Location: CVAS, Pookode Campus

Collaborator: Physical Education Dept., CVAS, Pookode

Participants: NSS Volunteers

On June 21, 2023, in celebration of International Yoga Day, NSS Volunteers of NSS Units of CVAS, Pookode organized an inspiring yoga session led by Dr. R. Kanthanathan Ass. Prof., Dept. of Physical Education, CVAS, Pookode.

This event, focused on holistic well-being and the practice of yoga, aimed to promote physical and mental health. It brought together students, faculty, and community members to experience the numerous benefits of yoga. Such activities contribute to our commitment to overall wellness, fostering a culture of health and self-care within the campus and the broader community.



Amphibian Monitoring Programme 2023

Date: June 2023

Location: CVAS, Pookode

The Amphibian Monitoring Programme, inaugurated by Dr. Anil Zacharia in June 2023, focuses on documenting amphibian species in Pookode to support ecosystem health and conservation. The program, extended due to unforeseen rain, included workshops led by KFRI experts and contributions from renowned biologists like David Raju. This collaborative effort, involving NSS CVAS, Pookode, Ratufa Nature Club, and KFRI, aims to deepen our understanding of local amphibian biodiversity and develop effective conservation strategies for long-term environmental sustainability.



State Programme Officers' Meeting

Date: July 1, 2023

Location: St. Joseph's College, Irinjalakkuda, Thrissur

Participants: Programme Officers of NSS Units of KVASU

On July 2, 2023, Programme Officers from the NSS Cell at Kerala Veterinary and Animal Sciences University, Pookode, actively participated in a significant State Programme Officers' Meeting. This meeting took place at St. Joseph's College, Irinjalakkuda, Thrissur. It provided a valuable platform for the exchange of knowledge, ideas, and experiences among Programme Officers from various institutions. The involvement of POs of NSS Units of CVAS, Pookode in this meeting underscores our commitment to staying updated and collaborating with fellow NSS Units, thereby enhancing the quality and impact of our community service initiatives.

Amrit Vatika Establishment

Date: July 20, 2023

Location: CVAS Pookode Campus, Kerala Veterinary and Animal Sciences University (KVASU), Pookode

Facilitated by: Dean, CVAS, Pookode, and Smt. Sheena, W/O Late Havidlar V.V. Vasanthakumar

Participants: Volunteers of NSS Units of CVAS, Pookode

On July 20, 2023, the dedicated volunteers of NSS Units of CVAS, Pookode established an "AmritVatika" at the CVAS Pookode Campus, which is home to Kerala Veterinary and Animal Sciences University (KVASU). This initiative not only enhances the natural beauty of our campus but also symbolizes life and prosperity.



The event was graced by the presence of the Dean of CVAS, Pookode, and Smt. Sheena, the wife of the late Havidlar V.V. Vasanthakumar, both of whom played a significant role in facilitating this memorable occasion. The creation of the Amrit Vatika serves as a poignant reminder of our commitment to honoring our martyrs, promoting national integrity, and supporting noble causes. It stands as a symbol of unity, growth, and well-being within our academic community.

Independence Day Celebration - NSS Guard of Honor



Swachhata Hi Seva on Gandhi Jayanti

Date: October 2, 2023

Location: College premises, Kerala Veterinary and Animal Sciences, Pookode

Participants: Volunteers of NSS Units of CVAS, Pookode

On October 2, 2023, in commemoration of Gandhi Jayanti, volunteers from the NSS Units of CVAS, Pookode, dedicated one hour to a “Swachhata Hi Seva” (Cleanliness is Service) initiative held within the college premises. This activity, inspired by Mahatma Gandhi’s ideals, aligns with

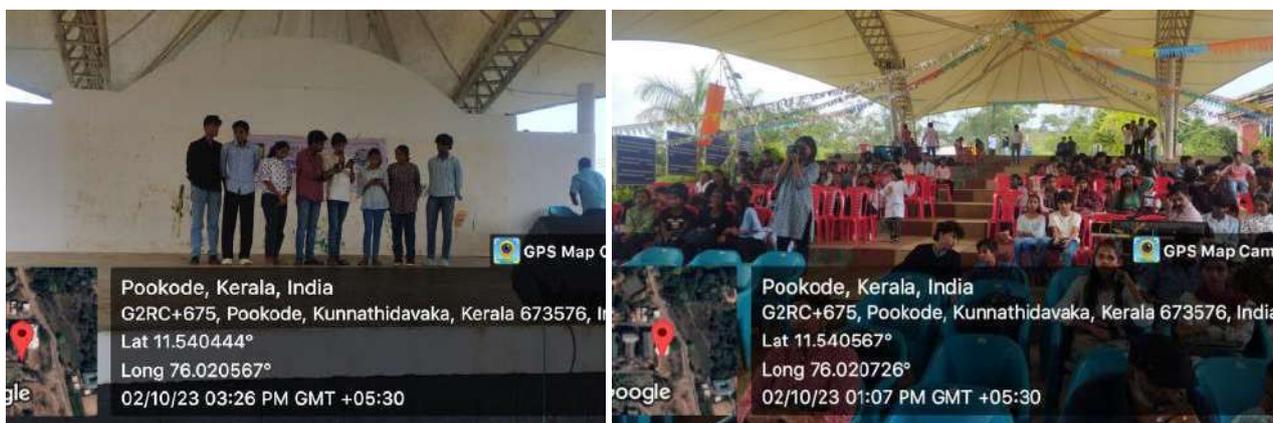
the Swachh Bharat Abhiyan and emphasizes our commitment to maintaining a clean and hygienic environment. By actively participating in this event, we pay tribute to the principles of Mahatma Gandhi, promoting the values of cleanliness and community service.

Children's Climate Parliament 2023

Date: October 2, 2023

Location: CVAS, Pookode

The Children's Climate Parliament, organized by the NSS units of CVAS, Pookode, in association with Hume Centre, engaged students from 21 schools in Wayanad to address local climate concerns and promote environmental awareness. The event featured insights from key speakers, including Mr. Shamshad Marakkar, District Panchayat President, and Dr. Anil Kumar, former Chairman of the Community Agrobiodiversity Centre. The program encouraged children to actively participate in climate solutions and fostered a sense of responsibility towards sustainable practices, empowering the next generation to tackle climate change.



Hands-On First Aid Training

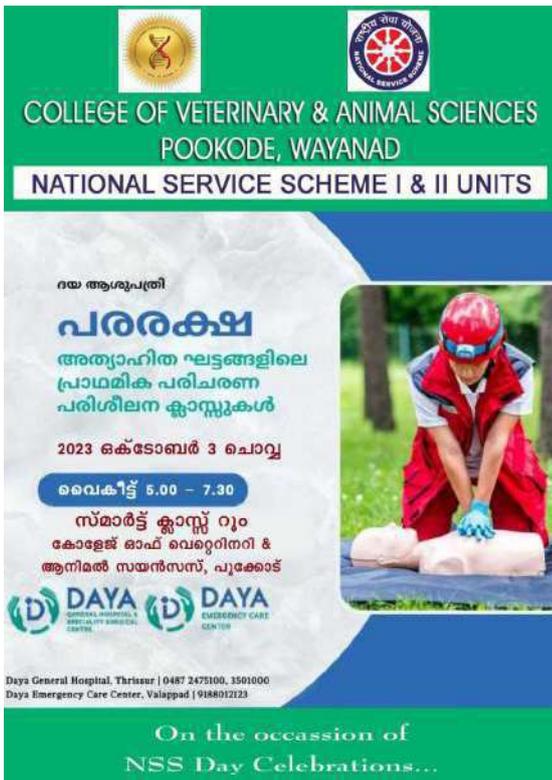
Date: October 3, 2023

Participants: NSS Volunteers of NSS Units of CVAS, Pookode

Trainer: Pararaksha, a CSR initiative of Daya Hospital, Thrissur

On October 3, 2023, a significant event unfolded in commemoration of NSS Day. NSS Volunteers of NSS Units of CVAS, Pookode, received hands-on training in First Aid. This valuable training was facilitated by Pararaksha, a CSR initiative of Daya Hospital, Thrissur.

First aid is a critical skill that equips individuals to provide immediate assistance in emergencies. It plays a vital role in alleviating the suffering of those in need, minimizing the impact of injuries, and potentially saving lives. In a world where accidents and medical crises can happen at any time, knowing how to administer effective first aid is not just beneficial; it is a fundamental life skill that can make a significant difference in times of need.



Amrit Kalash Yatra - Meri Maati Mera Desh

Date: October 12, 2023

Location: Kerala Veterinary and Animal Sciences University (KVASU) Campus, Pookode

Participants: Students from NSS Units of CVAS, Pookode

On October 12, 2023, the NSS Units of CVAS, Pookode, organized a significant event known as the “Amrit Kalash Yatra” at the Kerala Veterinary and Animal Sciences University (KVASU) Campus, Pookode. This event, titled MeriMaatiMeraDesh, saw enthusiastic participation from 200 students. The “Amrit Kalash Yatra” is a symbolic journey that celebrates the profound connection between the land and its people. It underscores the importance of preserving our environment and nurturing our nation. During this event, students took the “Panch Pran Pledge,” reaffirming their commitment to the well-being of our planet and its inhabitants. Additionally, participants captured this memorable occasion with photos uploaded to the website, ensuring a lasting record of their dedication to the cause.

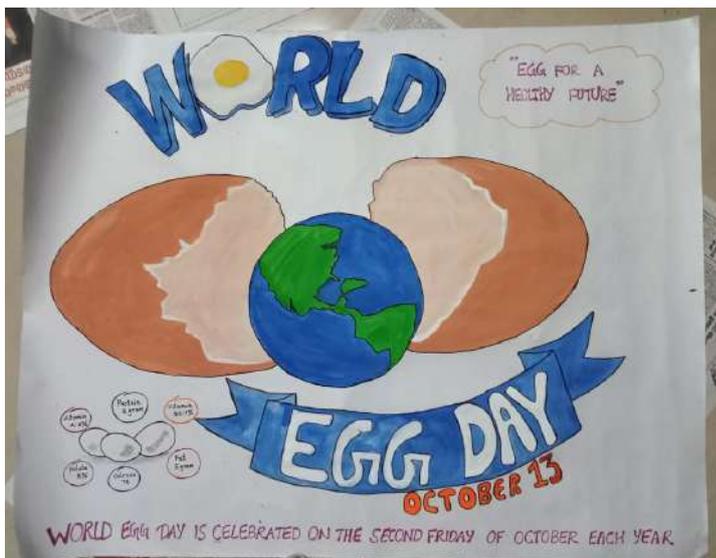




Collaboration: Department of Poultry Science, CVAS, Pookode

Event Overview: NSS units of CVAS, Pookode celebrated World Egg Day. The event aimed to promote the nutritional value of eggs and support the local community through the distribution of farmed eggs.. Volunteers from NSS units of CVAS, Pookode visited a nearby Anganwadi to distribute farmed eggs from ILFC, Pookode. This initiative not only raised awareness about the benefits of eggs but also contributed to the well-being of the local community. The event was shared and celebrated on social media platforms, with hashtags such as #WorldEggDay, indicating the organization’s active presence in global awareness campaigns.

This initiative demonstrates commitment of NSS units of CVAS, Pookode’s dedication to social welfare, community engagement, and the promotion of essential nutritional sources such as eggs. It serves as a positive example of active participation in global awareness campaigns while making a tangible impact on the local community.





Cattle Insurance Challenge - Collaboration with Mananthavady Dairy Co-operative Society

Date: October 13-15, 2023

Collaborator: Mananthavady Dairy Co-operative Society

Location: Mananthavady Taluk

Participants: 15 volunteers from NSS Unit of CVAS, Pookode

From October 13 to 15, 2023, the NSS Unit of CVAS, Pookode, collaborated with the Mananthavady Dairy Co-operative Society in a significant initiative known as the “Cattle Insurance Challenge.” This challenge aimed to insure approximately 500 cattle within the jurisdiction of the society.

The participation of 15 dedicated volunteers in this three-day event was instrumental in achieving the objectives. These volunteers visited the premises of local farmers, meticulously documented the livestock eligible for insurance, applied identification tags, and completed the requisite insurance forms. The collected data and documentation were then processed further by the insurance company.



Expert Talk on Career Development



Sneharamam Activity 2023

Date: December 17, 2023

Location: Old Vythiri Bus Stop, Wayanad

On 17th December, NSS volunteers of CVAS, Pookode, undertook the cleaning and painting of the Old Vythiri Bus Stop, Wayanad, as part of the “Sneharamam” initiative of Shuchitwa Mission, GOvt. of Kerala. This activity aimed to enhance public spaces and promote environmental responsibility, reflecting the unit’s dedication to community welfare and sustainable development.

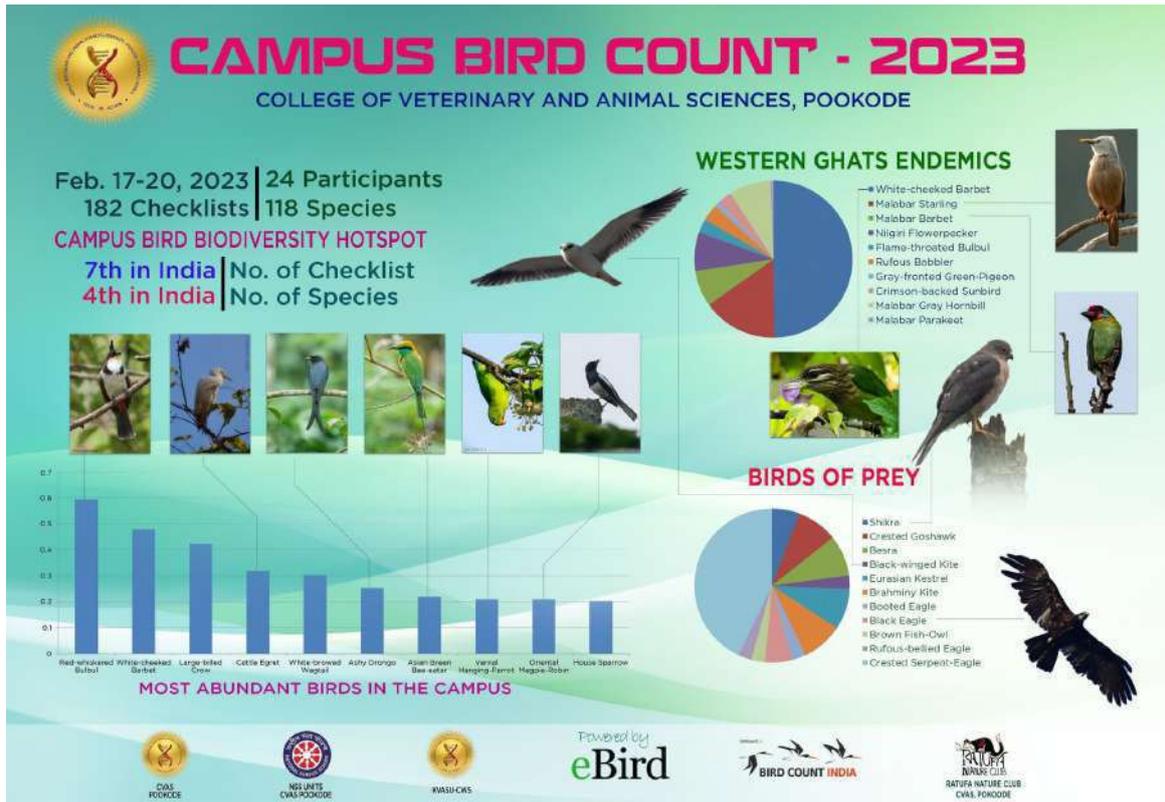


Bird Diversity of Campus - Poster Display at GSFK 2023

Date: 2023

Location: Global Science Festival Kerala

The avian diversity of the CVAS, Pookode campus, documented by NSS CVAS, Pookode, and Ratufa Nature Club members, is now proudly displayed at the Global Science Festival Kerala (GSFK 2023). This effort highlights campus biodiversity and promotes conservation awareness.



MyBharat Registration Drive 2024

Date: January 5-6, 2024

Location: CVAS, Pookode

NSS CVAS, Pookode, successfully conducted a MyBharat registration drive on January 5 and 6, 2024, to enhance state-level registration numbers. Out of 200 volunteers, 185 completed their registration during the two dedicated sessions, showcasing excellent participation and commitment to the initiative.



Participation in Wayanad Wetland Count 2024

Date: January 7, 2024

Location: Wayanad Wetlands

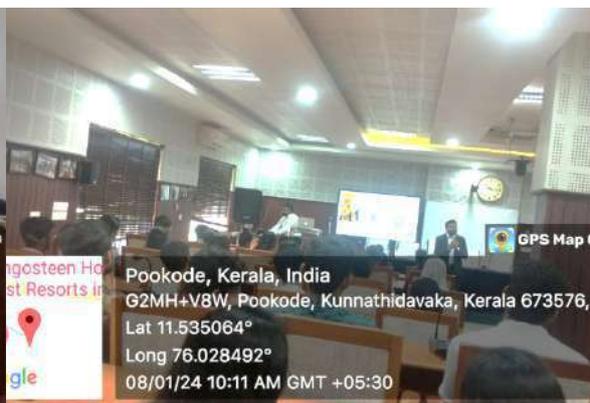
On January 7, 2024, NSS CVAS, Pookode, CWS, @KvasuPookode, and Ratufa Nature Club members from CBAS, Pookode, actively participated in the Wayanad Wetland Count. The event was part of the @WetlandsInt Asian Waterfowl Census, promoting conservation awareness and biodiversity monitoring.



One-Day Orientation Program 2024

Date: January 8, 2024

Location: CVAS, Pookode



On January 8, 2024, NSS, in collaboration with DSW and KVASU, organized a one-day training program for first-year students. The morning session, led by Mr. Mohammed Ikan, emphasized leadership, communication skills, and self-presentation for interviews. Students were equipped with essential tools for academic success and career development. In the afternoon, Dr. Bipin KC provided a comprehensive orientation on the BVSc and AH programs. Concurrently, Mr. Ikan conducted a special workshop for approximately 20 teachers, focusing on soft skill development, time management, and the use of technology in teaching. Dr. Sreeranjini, Director of Student Welfare, delivered the vote of thanks.

VERGHESE KURIEN INSTITUTE OF DAIRY AND FOOD TECHNOLOGY MANNUTHY, THRISSUR

1. Academic Excellence

The Verghese Kurien Institute of Dairy and Food Technology, formerly known as the College of Dairy Science and Technology Mannuthy, has been a pivotal institution in shaping the dairy and allied industries both in India and abroad for over three decades. Established in 1993, the College of Dairy Science and Technology Mannuthy was the first of its kind in the state, offering a four-year undergraduate program in Dairy Technology. In 2019, the institution celebrated its 25th anniversary and realized its dream of an independent building, marking the transformation into the Verghese Kurien Institute of Dairy and Food Technology (VKIDFT). In 2015, the B.Tech. Food Technology program was introduced at the College of Food Technology, Thumburmuzhy, under the Kerala Veterinary and Animal Sciences University. However, in August 2018, following severe flooding that affected both the Thumburmuzhy Cattle Breeding Farm and the College campus, the institution was relocated to the KVASU Mannuthy campus. In 2021, the College of Food Technology merged with the College of Dairy Science and Technology Mannuthy, and the institute was renamed Verghese Kurien Institute of Dairy and Food Technology Mannuthy. The institute now offers comprehensive undergraduate programs in Dairy Technology and Food Technology, as well as postgraduate and doctoral programs in Dairy Technology, Dairy Chemistry, and Dairy Microbiology. The B.Tech. programs in Dairy Technology and Food Technology are designed as job-oriented degree courses that emphasize the holistic development of graduates. The curriculum prepares students to tackle the challenges in the industry, equipping them with knowledge in production management, raw material procurement, personnel management, sales, and marketing through industrial in-plant training. The institute aims to provide top-tier education in the fields of food and dairy science, catering to the growing demand for skilled professionals in dairy and food processing industries across the nation. Both the B.Tech. Dairy Technology and Food Technology programs are accredited by AICTE, while the B.Tech. Dairy Technology, M.Tech. Dairy Technology, Dairy Microbiology, and Dairy Chemistry programs have received accreditation from ICAR. This recognition underscores the high quality of education and the caliber of students graduating from the institute.

2. Admission Excellence

The college is offering professional B.Tech Programme (4 years) in Dairy Technology and Food Technology, M.Tech (2 years) and PhD in Dairy Technology, Dairy Microbiology and Dairy Chemistry. Candidates admitted to B. Tech (Dairy Tech.& Food Tech.) programme are selected through the Common Engineering Entrance Examination conducted by Govt. of Kerala. The candidates who have passed the Higher Secondary Examination, Kerala or examinations recognized as equivalent thereto, with minimum 50% marks in Mathematics separately, and 50% marks in Mathematics, Physics and Chemistry put together are eligible for admission. The college

also admits students from ICAR quota for the UG programme. The admission to M. Tech and Ph.D programmes is done through the Entrance examination conducted by the University. One seat in the M. Tech course is earmarked for student admitted under the Senior Residency programme

3. Myriad of Learning Pathways: Diverse courses and Departments

Courses Offered:

Sl. No.	Title of the Programme	Level	Duration (Yrs)	Year of Starting	Sanctioned annual intake
1	B.Tech (Dairy Technology)	UG	4	1993	46
2	B.Tech (Food Technology)	UG	4	2015	22
3	M.Tech (Dairy Technology)	PG	2	2012	2 regular+ 1resident
4	M.Tech (Dairy Chemistry)	PG	2	2017	2 regular + 1resident
5	M.Tech (Dairy Microbiology)	PG	2	2017	2 regular + 1resident
6	PhD (Dairy Technology)		3	2019	1
7	PhD (Dairy Chemistry)		3	2019	1
8	PhD Dairy Microbiology)		3	2019	1

Departments:

Sl. No.	Department
Dairy Technology	
1	Dairy Technology
2	Dairy Engineering
3	Dairy Microbiology
4	Dairy Chemistry
5	Dairy Business management
6	Dairy Extension
7	Dairy Husbandry
Food Technology	
8	Food Process Technology
9	Food Process Engineering
10	Food Safety and Quality Assurance
11	Food Business Management
12	Basic Sciences and Humanities

13	Food Plant Operations
14	Basic Engineering

Course Curriculum:**UG programme****Department-Wise Distribution of Courses for B.Tech (Dairy Tech) degree programme**

No.	Name of the Department	Credit Hours
1	Dairy Technology	34 (21+13)
2	Dairy Engineering	34 (21+12)
3	Dairy Business Management Dairy Extension & Dairy Husbandry	27 (20+7)
4	Dairy Microbiology	17 (11+6)
5	Dairy Chemistry	17 (11+6)
	Total	128

Non-Credit Courses			
No.	Catalogue No. of course	Name of the course	C r e d i t Hours
1	SREV 1201	Students READY Exposure Visit I -7 days	5 (0+5) *
2	SREV 2201	Student READY Exposure Visit – II -23 days	5 (0+5) *
3	DT 4112	Student READY In-Plant Training	15(0+15)
4	DT 4113	Student READY experiential Learning Module	15(0+15)
		Total	40 (0 + 40)

* - Non credit course (not included in the credit load)

** - Non credit optional course (not included in the credit load)

Total Class room credits (uptoVIIthsemester) = 128**Total credits for work experience = 30****Total credit load (excluding non creditcourses) = 128****Total credits for Non credit courses = 40****Department-Wise Distribution of Courses for B. Tech (Food Tech.) degree programme**

No.	Name of the Department	Credit Hours
1	Food Process Technology	43(28+15)
2	Food Process Engineering	32(22+10)
3	Food Business Management	16(11+5)
4	Food Safety and Quality Assurance	31(20+11)
5	Basic Science and Humanities	8(7+1)

6	Food Plant Operations	36(0+36)
7	Basic Engineering	15(7+8)
	Total	181(95+86)

No.	Name of the course	Credit Hours
1	Physical Education (Non-Credit Course)	1(0+1)
2	NCC/NSS (Non-Credit Course)	1(0+1)
	Total	2(0+1)

- Total Class room credits (upto VIIthsemester) = 91
- Total credits for work experience = 86
- Total credit load (excluding non creditcourses) = 181
- Total credits for Non credit courses = 02

PG programme

M.Tech (Dairy Technology, Dairy Microbiology and Dairy Chemistry) Course Structure – at a Glance

Major courses	20
Minor courses	08
Supporting courses	06
Common courses	05
Seminar	01
Research	30
Total Credits	70

PhD programme

PhD (Dairy Technology, Dairy Microbiology, Dairy Chemistry) Course Structure – at a Glance

Major courses	12
Minor courses	06
Supporting courses	05
Seminar	02
Research	75
Total Credits	100

Student Strength (as on 31.03.2024):

Total Student Strength	331	
UG Students (2023-24)	DT: 210	FT: 98
	Total: 308	
PG Students (2023-2024)		
Dairy Technology	7	
Dairy Microbiology	7	
Dairy Chemistry	3	
PhD Students (2023-2024)		
Dairy Technology	0	
Dairy Microbiology	3	
Dairy Chemistry	3	

Staff Strength (as on 31.03.2024):

Sl. No.	Department	Present Status				
		Prof	Asso. Prof	Asst. Prof.	TA	Total
1	Dairy Technology	1	0	2	5	8
2	Dairy Engineering	0	0	0	6	6
3	Dairy Chemistry	0	0	3	3	6
4	Dairy Microbiology	1	0	2	3	6
5	Dairy Husbandry	0	0	0	0	0
6	Dairy Business Management	0	0	0	4	4
7	Dairy Extension	0	0	1	0	1
8	Food Process Technology	0	0	0	3	3
9	Food Process Engineering	0	0	0	2	2
10	Food Safety and Quality Assurance	0	0	2	3	5
11	Food Business Management	0	0	0	1	1
12	Basic Sciences and Humanities	0	0	0	0	0
13	Food Plant Operations	0	0	0	0	0
14	Basic Engineering	0	0	0	0	0
15	Physical Education	0	0	1	0	1
	Total	2	0	11	30	43

Administrative Status (as on 31/03/2024)

1. Administrative and Supporting Staff						
Category	Sanctioned	Permanent	Temporary	Vacant	Total	Remarks
Administrative Officer	1	1	0	0	1	
Section Officer	2	2	0	0	2	
Office superintendent	1	1	0	0	1	
Assistant	6	6	0	0	6	
Computer Assistant	1	0	0	1	1	
Clerical Assistant	2	2	0	0	2	

Driver cum OA	1	0	1	0	1	
Class IV	6	3	3	0	6	
Hostel Attendant	1	0	1	0	1	
Matron	1	0	1	0	1	
Total	22	15	6	1	22	
2. Technical and Para Technical Staff						
Assistant Librarian	2	1	*1	0	2	*Engaged as Professional Assistant Gr.II (Library)
Farm Assistant Gr.II (Vety)	1	0	1	0	1	
Lab Assistant Gr.II	2	0	2	0	2	
Total	5	1	4	0	5	
Grant Total (1+2)	27	16	10	1	27	

SI No	DEPARTMENT	NAME	DESIGNATION	Contact No.	E mail ID
I DAIRY TECHNOLOGY					
1	Dairy Technology	Dr. S. N. Rajakumar	Professor & Head	9495882953	rajakumar@kvasu.ac.in nageshrajakumar@yahoo.co.in
2	Dairy Technology	Dr. Dinker Singh	Assistant Professor	9539449016	dinker.bhu@gmail.com
3	Dairy Technology	Ms. Divya K B	Assistant Professor	9495796738	kbdivya2002@gmail.com
4	Dairy Technology	Ms. Rashmi K.G	Assistant Professor (Deputation)	9895245661	rashmikg85@gmail.com
5	Dairy Technology	Ms. Gloria Jacob	Teaching Assistant	9744925057	gloriakjacob@gmail.com
6	Dairy Technology	Ms. JithuRappai	Teaching Assistant	9605331462	jithurappai@gmail.com
7	Dairy Technology	Ms. Vandhana P S	Teaching Assistant	9747544997	Vandhu1693@gmail.com
8	Dairy Technology	Mr. Mohammed Riyas	Teaching Assistant	8157059197	riyaskottukkara950@gmail.com
9	Dairy Technology	Ms. Ambili M V	Teaching Assistant	9497533946	ambilimala@gmail.com
II DAIRY ENGINEERING					
10	Dairy Engineering	Er. Aswin S Warriar	Assistant Professor KVASU Dairy Plant	7559067959	aswinwarrier@kvasu.ac.in
11	Dairy Engineering	Er. Amulya P R	Teaching Assistant, Dairy Engineering	9400608878	amulyapr45@gmail.com
12	Dairy Engineering	Dr. Antony P Pallan	Teaching Assistant,	9995351137	antony.paulpallan@gmail.com
13	Dairy Engineering	Er. Gritty P T	Teaching Assistant,	9496125855	grittyp@gmail.com

14	Dairy Engineering	Ms. Janice E J	Teaching Assistant	9496418831	jani0087@gmail.com
15	Dairy Engineering	Ms. Devikrishna P	Teaching Assistant	9496271085	devikrishnap95@gmail.com
16	Dairy Engineering	Ms. Ammu V K	Teaching Assistant	9400648692	ammuvkishor@gmail.com
III	DAIRY MICROBIOLOGY				
17	Dairy Microbiology	Dr. A K Beena	Professor & Head	9446293686	akbeena@kvasu.ac.in
18	Dairy Microbiology	Dr.Lijimol James	Assistant Professor	9567086007	lijimoljames@kvasu.ac.in ligi11@rediffmail.com
19	Dairy Microbiology	Dr. Aparna. Sudhakaran V	Assistant Professor	7558067959	aparna@kvasu.ac.in aparna.asv@gmail.com
20	Dairy Microbiology	Dr.Vinod Viswanath	Teaching Assistant	9895367266	vinodkomattil@gmail.com
21	Dairy Microbiology	Ms. Syama Mohan	Teaching Assistant	9349812789	Syma82@gmail.com
22	Dairy Microbiology	Ms.Sreya Unnikrishnan	Teaching Assistant	9446923673	Sreyaunni730@gmail.com
IV	DAIRY CHEMISTRY				
23	Dairy Chemistry	Dr. Divya M P	Assistant Professor	9895424209	divya@kvasu.ac.in
24	Dairy Chemistry	Ms. Indu B	Assistant Professor	9400503677	indubthayyil@gmail.com
25	Dairy Chemistry	Ms. Smitha J Lukose	Assistant Professor	9495866742	smitha.lukose@kvasu.ac.in
26	Dairy Chemistry	Ms. Anumol Devassykutty	Teaching Assistant	9847772617	jiioanumol@gmail.com
27	Dairy Chemistry	Mr. Vyshak V L	Teaching Assistant	8281850472	anujacob1995kpl@gmail.com
28	Dairy Chemistry	Ms. Anjumol Jacob	Teaching Assistant	9895951728	vlvyshak13@gmail.com
V	DAIRY BUSINESS MANAGEMENT				
29	Dairy Business Management	Bincy T.J	Teaching Assistant	8304808287	bincythattil@gmail.com
30	Dairy Business Management	Asha Alphonse	Teaching Assistant	9633994990	aachu1985@gmail.com
31	Dairy Business Management	Dr. Neethu Lazar	Teaching Assistant	9633003010	neethu.lazar@yahoo.co.in

32	Dairy Business Management	Kesiya Eliza Giji	Teaching Assistant	9497226154	elizakesiya99@gmail.com
VI	FOOD QUALITY ASSURANCE				
33	Food Safety and Quality Assurance	Dr. Athira S.	Assistant Professor (LWA)	9497888348	athira05dairy@gmail.com
34	Food Safety and Quality Assurance	Ms. Aysha C. H.	Assistant Professor	9605373428	chaysha@gmail.com, aysha@kvasu.ac.in
35	Food Safety and Quality Assurance	Ms. Simi M S	Teaching Assistant	9605775539	simimarottikkal@gmail.com
36	Food Safety and Quality Assurance	Ms. Suhaila A A	Teaching Assistant	7594848597	suhailasuhailariyadh@gmail.com
37	Food Safety and Quality Assurance	Ms. RittyKuriakose	Teaching Assistant	8589837371	rittykuriakose@gmail.com
VII	FOOD PROCESS TECHNOLOGY				
38	Food Process Technology	Mr. Faisal I	Assistant Professor (Deputation)	9947039755	ismailfaisal90@gmail.com
39	Food Process Technology	Dr. Arya K Salu	Teaching Assistant	9526287694	aryaksalu@gmail.com
40	Food Process Technology	Mr. Ajay R	Teaching Assistant	9895732516	ajaykarthika.ajay077@gmail.com
41	Food Process Technology	Mr. Subith C	Teaching Assistant	9562811011	subisubiyam@gmail.com
VIII	FOOD ENGINEERING				
42	Food Process Engineering	Er. Jithin Mohan K.	Teaching Assistant	8089353553	erjithinmk@gmail.com
43	Food Process Engineering	Er. Sasmila Bai S. M.	Teaching Assistant	8281016352	sasmila@gmail.com
IX	FOOD BUSINESS MANAGEMENT				
44	Food Business Management	Ms Radhika K S	Teaching Assistant	9048375488	radhikasobhanan@gmail.com
X	PHYSICAL EDUCATION				
45	Physical Education	Dr. Jose Mathew	Assistant Professor	9448743373	josemthew@kvasu.ac.in

Capacity building programs:

Name & Designation	Name of Event	Venue	Date
Dr. Dinker Singh Assistant Professor Dairy Technology	World IP Day Webinar 2023	Webinar	26/04/2023

Ms. Bincy T J Teaching Assistant Dairy Business Management	Two credit course on Research and Publication Ethics	St. Thomas College, Thrissur. (Online Mode)	18/05/2023 to 10/06/2023
Ms. Divya K.B. Assistant Professor Dairy Technology	Swadeshi Science Congress –” Indian Knowledge Systems”	NIT Kozhikode	25/05/2023 to 27/05/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	National Webinar on Food Safety- FOODSALVATIO”23	VKIDFT Mannuthy	09/06/2023
Ms. Smitha J Lukose Assistant Professor Dairy Chemistry	National Webinar on Food Safety- FOODSALVATIO”23	VKIDFT Mannuthy	09/06/2023
Ms. Aysha C. H Assistant Professor Food Safety & Quality Assurance	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Mr. Faisal I Assistant Professor DEO (on deputation) Food Process Technology	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Ms. Ritty Kuriakose Teaching Assistant Food Safety & Quality Assurance	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Ms. Radhika K Teaching Assistant Food Business Management	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Ms. Sasmila Bai S M Teaching Assistant Food Process Engineering	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Dr. Arya K Salu Teaching Assistant Food Process Technology	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Ms. Simi M S Teaching Assistant Food Safety & Quality Assurance	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023
Ms. Suhaila A A Teaching Assistant Food Safety & Quality Assurance	National Seminar in connection with World Food Safety Day 2023- Food Salvatio’23	VKIDFT, Mannuthy	09/06/2023

Mr. Ajay R Teaching Assistant Food Process Technology	National Seminar in connection with World Food Safety Day 2023- Food Salvatio'23	VKIDFT, Mannuthy	09/06/2023
Mr. Subith C Teaching Assistant Food Process Technology	National Seminar in connection with World Food Safety Day 2023- Food Salvatio'23	VKIDFT, Mannuthy	09/06/2023
Dr.Ligimol James Assistant Professor Dairy Microbiology	National Seminar in connection with World Food Safety Day 2023- Food Salvatio'23	VKIDFT, Mannuthy	09/06/2023
Dr. Dinker Singh Assistant ProfessorDairy Technology	National webinar on “Dairy cooperative for sustainable Development”	SMC College of Dairy Science, Anand	01/07/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	Sumananasam State NSS Programme Officers Meet	St. Joseph’s College Irinjalakuda	01/07/2023
DR. Ligimol James, Assistant Professor, Dairy Microbiology	National webinar on Food Safety	VKIDFT,Mannuthy	09/07/2023
Ms. Divya K B Assistant Professor Dairy Technology	National level online faculty development programme on ChatGPT and AI Tools for Educators, in line with OBE.	Webinar	19/07/2023 to 26/07/2023
Ms. Rashmi K G Assistant Professor DEO (on deputation) Dairy Technology	National Level online faculty development programme on ChatGPT and AI Tools for Educators in line with OBE.	Webinar	19/07/2023 to 26/07/202
Dr. Jose Mathew, Assistant Professor, Physical Education	National Level online faculty development programme on ChatGPT and AI Toolsfor Educators in line with OBE.	Webinar	19/07/2023 to 26/07/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	National level Online Faculty Development Program on ChatGPT & AI Tools for Educators	Online	19/07/2023 to 26/07/2023
Dr. Indu B Assistant Professor Dairy Chemistry	One day Workshop on preparation of Radio talks	Academic Staff College, Mannuthy	22/07/2023
Dr. Divya M.P Assistant ProfessorDairy Chemistry	One day Workshop on preparation of Radio talks	Academic Staff College, Mannuthy	22/07/2023
DR. Ligimol James, Assistant Professor, Dairy Microbiology	One day workshop on ‘Radio prakshepana parisheela paripadi’	Organized by Kerala Veterinary and Animal Sciences University	22/07/2023
Dr. Jose Mathew, Assistant Professor, Physical Educatio	Webinar on New Education Policy 2020	Organized by University Grants Commission, HRDC, Lakhmibai National Institute of Physical Education, Gwalior	27/07/2023

Dr. A.K. Beena, Professor and Head, Dairy Microbiology	14 days national level faculty development programme on “Innovative teaching strategies and tools in the digital age”	Ministry education’s institution Innovation Council (IIC GGI Ludhiana)	01/08/2023 to 14/08/2023
Dr. Aparna Sudhakaran V. Assistant Professor, Dairy Microbiology	14 days national level faculty development programme on “Innovative teaching strategies and tools in the digital age”	Ministry education’s institution Innovation Council (IIC GGI Ludhiana)	01/08/2023 to 14/08/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	Sensitisation workshop – “NAAC accreditation and high impact publications”	COVAS, Mannuthy	11/08/2023
Dr. Indu B Assistant Professor Dairy Chemistry	Sensitisation workshop – “NAAC accreditation and high impact publications”	COVAS, Mannuthy	11/08/2023
Ms. Ritty Kuriakose Teaching Assistant Food Safety & Quality Assurance	Sensitization workshop on NAAC accreditation and high impact publications	Indraneelam seminar hall, CVAS, Mannuthy	11/08/2023
Ms. Radhika K Teaching Assistant Food Business Management	Sensitization workshop on NAAC accreditation and high impact publications	Indraneelam seminar hall, CVAS, Mannuthy	11/08/2023
Dr. Arya K Salu Teaching Assistant Food Process Technology	Sensitization workshop on NAAC accreditation and high impact publications	Indraneelam seminar hall, CVAS, Mannuthy	11/08/2023
Dr. Jose Mathew, Assistant Professor, Physical Education	Two Days Workshop on Malinyamukthan Nvakeralam Campaign	organized by Kerala Institute of Local Administration, Thrissur	11/08/2023 To 12/08/2023
Ms. Smitha J Lukose Assistant Professor Dairy Chemistry	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Ms. Aysha C. H Assistant Professor Food Safety & Quality Assurance	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Mr. Faisal I Assistant Professor DEO (on deputation) Food Process Technology	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023

Ms. Ritty Kuriakose Teaching Assistant Food Safety & Quality Assurance	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Ms. Radhika K Teaching Assistant Food Business Management	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Ms. Sasmila Bai S M Teaching Assistant Food Process Engineering	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Dr. Arya K Salu Teaching Assistant Food Process Technology	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Ms. Simi M S Teaching Assistant Food Safety & Quality Assurance	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Ms. Suhaila A A Teaching Assistant Food Safety & Quality Assurance	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Mr. Ajay R Teaching Assistant Food Process Technology	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Mr. Subith C Teaching Assistant Food Process Technology	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Mr. Jithin Mohan K Teaching Assistant Food Process Engineering	Interactive session on Artificial Intelligence	VKIDFT Mannuthy handled by Mr. Razin from St.Thomas college, Thrissur	16/08/2023
Dr. Neethu Lazar Teaching Assistant Dairy Business Management	Virtual International Conference on Sustainable Evolution of Indian Economy	SKP Arts & Science College for Women, Chennai	30/08/2023

Dr. A. K Beena Professor Dairy Microbiology	Training on Academic Management System conducted by ICAR	COVAS, Mannuthy	15/09/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	Training on Academic Management System conducted by ICAR	COVAS, Mannuthy	15/09/2023
Dr. Indu B Assistant Professor Dairy Chemistry	Training on Academic Management System conducted by ICAR	COVAS, Mannuthy	15/09/2023
Ms. Anumol Devassy-kutty Teaching Assistant Dairy Chemistry	Training on Academic Management System conducted by ICAR	COVAS, Mannuthy	15/09/2023
Ms. Aysha C. H Assistant Professor Food Safety & Quality Assurance	Sensitization workshop on NA-HEP component to activities	VKIDFT, Mannuthy	15/09/2023
Ms. Ritty Kuriakose Teaching Assistant Food Safety & Quality Assurance	Sensitization workshop on NA-HEP component to activities	VKIDFT, Mannuthy	15/09/2023
Mr. Subith C Teaching Assistant Food Process Technology	Sensitization workshop on NA-HEP component to activities	VKIDFT, Mannuthy	15/09/2023
Ms. Vandhana P.S. Teaching Assistant Dairy Technology	National conference on “Millets: Harnessing ancient grains for modern sustainable development”	Anna University, Regional campus, Coimbatore	21/09/2023 to 22/09/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	MOOC Course on “Digital Teaching Techniques”	Online	01/10/2023 to 31/10/2023
Er. Devikrishna P Teaching Assistant Dairy Engineering	National Seminar on “Contemporary challenges in Processing, Quality and Safety of food”	Jointly organized by KSC-STE Thiruvananthapuram & KCAET Tavanur	16/10/2023 to 17/10/2023
Ms. Divya K B Assistant Professor Dairy Technology	Workshop on “Harnessing Artificial Intelligence’s impact in Education Research and Entrepreneurship” by DE, KVASU, Pookode	KVASU	28/10/2023
Dr. Aparna Sudhakaran Assistant Professor Dairy Microbiology	Workshop on “Harnessing Artificial Intelligence’s impact in Education, Research and Entrepreneurship” by DE, KVASU, Pookode	KVASU	28/10/2023

Dr. Jose Mathew , Assistant Professor, Physical Education	Workshop on “Harnessing Artificial Intelligence’s impact in Education, Research and Entrepreneurship” by DE, KVASU, Pookode	KVASU	28/10/2023
Ms. Aysha C H Assistant Professor Food Safety & Quality Assurance	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Mr. Faisal I Assistant Professor Food Process Technology	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Ms Ritty Kuriakose Teaching Assistant Food Safety & Quality Assurance	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Ms Simi M S Teaching Assistant Food Safety & Quality Assurance	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Ms Suhaila A A Teaching Assistant Food Safety & Quality Assurance	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Mr. Ajay R Teaching Assistant Food Process Technology	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Mr. Subith C Teaching Assistant Food Process Technology	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Dr Arya K Salu Teaching Assistant Food Process Technology	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Er. Sasmila Bai S M Teaching Assistant Food Process Engineering	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023

Mr Jithin Mohan K Teaching Assistant Food Process Engineering	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Ms Radhika K S Teaching Assistant Food Business Management	National Seminar on “Quality assessment of water and its public significance”	VKIDFT Seminar hall	30/10/2023
Er. Sasmila Bai S M Teaching Assistant Food Process Engineering	One week Faculty Development Programme on Future Foods: Embracing Cutting-Edge Technologies in Food Processing	KAU, Vellanikkara	27/11/2023 to 02/12/2023
Dr. Indu B Assistant Professor Dairy Chemistry	One week Faculty Development Programme on Future Foods: Embracing Cutting-Edge Technologies in Food Processing	KAU, Vellanikkara	27/11/2023 to 02/12/2023
Dr.Ligimol James Assistant Professor Dairy Microbiology	One week Faculty Development Programme on Future Foods: Embracing Cutting-Edge Technologies in Food Processing	KAU, Vellanikkara	27/11/2023 to 02/12/2023
Dr. Divya M.P Assistant Professor Dairy Chemistry	National Integration Camp Sponsored by Government of India, Ministry of Youth Affairs and Sports	Kavayitri Babinabai Chaudhari North Maharashtra University, Jalgaon	30/11/2023 to 06/12/2023
Dr.Ligimol James Assistant Professor Dairy Microbiology	MOOC course	ICAR- NAARM Hyderabad	01/10/2023 to 31/10/2023
Ms. Divya K B Assistant Professor Dairy Technology	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Ms Radhika K S Teaching Assistant Food Business Management	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Ms. Bincy T J Teaching Assistant Dairy Business Management	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Dr. Neethu Lazar Teaching Assistant Dairy Business Management	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023

Ms. Asha Alphonse Teaching Assistant Dairy Business Management	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Ms. Kesiya Eliza Giji Teaching Assistant Dairy Business Management	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Ms. Janice E J Teaching Assistant Dairy Engineering	Workshop on “JASP software for Data Analysis” organised by Dep. of Dairy Business Management and Computer Club, VKIDFT	VKIDFT Mannuthy	02/12/2023
Er. Jithin Mohan K Teaching Assistant Food Process Engineering	Faculty Development Programme on Internet of things	GEC Thrissur	03/12/2023 to 05/12/2023
Mr. Faisal I Assistant Professor Food Process Technology	International seminar - IFCON 2023	CFTRI, Mysore	07/12/2023 to 10/12/2023
Mr. Subith C Teaching Assistant Food Process Technology	International seminar - IFCON 2023	CFTRI, Mysore	07/12/2023 to 10/12/2023
Dr.A.K.Beena, Professor and Head Dairy Microbiology	Two days Training on “Research methodology using Chat GPT and Artificial Intelligence Tools” Organized by KVASU	Online	11/12/2023 to 12/12/2023
Ms. Vandhana P.S. Teaching Assistant Dairy Technology	Two days Training on “Research methodology using Chat GPT and Artificial Intelligence Tools” Organized by KVASU	Online	11/12/2023 to 12/12/2023
Er. Devikrishna P Teaching Assistant Dairy Engineering	Two days Training on “Research methodology using Chat GPT and Artificial Intelligence Tools” Organized by KVASU	Online	11/12/2023 to 12/12/2023

Ms. Bincy T J Teaching Assistant Dairy Business Management	3-day Online National Workshop on “Advanced Machine Learning Techniques”	Department of Statistics, Rajagiri College of Social Sciences, Kochi and Department of Statistics, Little Flower Degree & PG College, Hyderabad	22/12/2023, 23/12/2023 & 27/12/2023
Er. Gritty P T Teaching Assistant Dairy Engineering	Training programme on risk assessment and predictive microbiology for food safety organized by NIFTEM Tanjavur	Online	09/01/2024
Dr. Dinker Singh, Asst Professor, Dairy Technology	Participated in one-week National level online faculty development program on outcome-based education and essential AI tools for teachers	Internal Quality Assurance cell (IQAC) of St.Thomas College , Palai	10/01/2024 to 16/01/2024
Dr. Jose Mathew, Assistant Professor, Physical Education	National Seminar on Anti Doping & Nutrition	Organized by Department of Physical education HLM College, Ghaiozabad,	31/01/2024
Dr. Divya M P Assistant Professor Dairy Chemistry	Two Days Workshop on “Tech Driven Pedagogy: Research-led Insights into Teaching Innovations”	Woxsen University, Hyderabad	06/02/2024 to 07/02/2024
Dr.A.K.Beena, Professor and Head Dairy Microbiology	36 th Kerala Science Congress	Government College, Kassaragod	08/02/2024 to 11/02/2024
Dr. Jose Mathew, Assistant Professor, Physical Education	Certificate Course & Workshop in Sports Injury Rehabilitation	Organized by Physical Education Foundation of India	09/02/2024 to 11/02/2024
Dr. Jose Mathew, Assistant Professor, Physical Education	NEP 2020 Orientation & Sensitization Programme	Organized by UGC Malaviya Mission Teachers Training Centre, Sri Guru Tegh Bahadur Khalsa College, University of Delhi	20/02/2024 to 29/02/2024
Dr. Jose Mathew, Assistant Professor, Physical Education	National Seminar on Advances in Functional Foods and Nutraceuticals: Bioactive Compounds, Fermentation and Value Addition	Organized by Association of Food Scientist & Technologist, Thissur Chapter & Kerala Veterinary and Animal Sciences university	28/02/2024
Dr. Divya M P Assistant Professor Dairy Chemistry	National Seminar on Advances in Functional Foods and Nutraceuticals: Bioactive Compounds, Fermentation and Value Addition	Organized by Association of Food Scientist & Technologist, Thissur Chapter & Kerala Veterinary and Animal Sciences university	28/02/2024
Dr. Jose Mathew, Assistant Professor, Physical Education	One day National Webinar on Is air pollution responsible for increasing rate of lung cancer	Mission Teachers Training Centre, SGTB Khalsa College, University of Delhi	02/03/2024
Dr.A.K.Beena, Professor and Head Dairy Microbiology	50 th Dairy Industry Conference organized by Indian Dairy Association (South Zone) anchored by IDA Telengana chapter under the theme of Indian Dairying: Innovation and Entrepreneurship	Hyderabad	04/03/2024 to 06/03/2024

Dr. Aparna Sudhakaran V Assistant Professor Dairy Microbiology	50 th Dairy Industry Conference organized by Indian Dairy Association (South Zone) anchored by IDA Telengana chapter under the theme of Indian Dairying: Innovation and Entrepreneurship	Hyderabad	04/03/2024 to 06/03/2024
Dr. Jose Mathew , Assistant Professor, Physical Education	One Day National Webinar entitled Artificial Intelligence and Future of Education	Organized by UGC Malaviya Mission Teasers Training Centre, SGTB Khalsa College, University of Delhi	09/03/2024
Er. Devikrishna P Teaching Assistant Dairy Engineering	National seminar on Clean and Green milk production	Organized by IDA	14/03/2024
Er. Amulya P R Teaching Assistant Dairy Engineering	National seminar on Clean and Green milk production	Organized by IDA	14/03/2024
Er. Gritty P T Teaching Assistant Dairy Engineering	National seminar on Clean and Green milk production	Organized by IDA	14/03/2024

Faculty Achievements:

- **Mr. Vyshak V L**, Teaching Assistant, Department of Dairy Chemistry- cleared UGC NET- April 2023
- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry - evaluator for the Innovation Challenge - 2023 conducted by the Kerala Development and Innovation Strategic Council (K-DISC) as part of the One Local Government One Idea (OLOI) project held on 09/05/2023
- **Dr. Antony Pallan**, Teaching Assistant, Department of Dairy Engineering acted as Special invitee as technical expert for interview of Feed mill Supervisor and feed mill technician SANFT, Mannuthy held on 16/05/2023 & 17/05/2023
- **Ms. Divya K B**, Assistant Professor, Dairy Technology secured **first prize in Paper presentation** on the topic “Physico chemical and sensory characterization of Kaalan from Central parts of Kerala at Swadeshi Science Congress –” Indian Knowledge Systems” conducted at NIT Kozhikode from 25/05/2023 to 27/05/2023
- **Dr. S N Rajakumar**, Dean, VKIDFT Mannuthy as expert for selection of externship for Food and Dairy Technology students, Koduvally, TANUVAS, under NAHEP on 26/09/2023
- **Er. Devikrishna P**, Teaching Assistant, Department of Dairy Engineering-Secured 2nd rank for ICAR PhD Entrance Examination 2023- 30/09/2023
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Meri Matti Mera Desh Programme
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Federal Bank Kocji Marathon 2023
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Foodathon 237 km

Run conducted on 3rd June 2023 at Mannuthy

- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Published article titled “ Promoting Health Enhancing Physical Activity” on International Journal of Physiology, Exercise and Physical Education
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Khelo Masters State Athletic Championship held at Thope Stadium, Thrissur on 27th& 28th May 2023 and secured Second Position in Discus throw, Third Position in 100 m race & First Position in 200m Race
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Kerala State Masters Athletic Championship 2023 held at Calicut University Stadium on 5th August 2023 and secured Third Position in 400 m race
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Ageas Federal Kochi Spice Coast Marathon held at Kochi on 29th October 2023 with time of 2.02.3
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the Niveus Mangalore Marathon held at Mangalore on 5th November 2023 with time of 1.55.11
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the State Masters Athletic Meet 2023 held at EMS Stadium, Nilehwar on 2nd& 3rd December 2023 and secured First Position in 400m race, Second Position in 200 mtr race & Second Position in 800 mtr race.
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Participated in the 5th National Masters Athletic Championship 2024 held at Gochibowli Stadium, Hyderabad on 8th to 11th February 2024 and secured First Position in 400 mtr race, Second Position in 200 mtr race & Third Position in 800 mtr race
- **Dr. Jose Mathew**, Assistant Professor, Physical Education, Lead Author of an edited chapter entitled Comparative Analysis of Group Cohesion among Female Interuniversity Level Sports Persons from District Games. Edited book chapter published by Lulu Publication 3101 Hillsborough St. Raleigh NC27607, United States ISBN 978-1-304-95817-4
- **Mr. Subith C**, Teaching Assistant, Food Process Technology- Cleared GATE 2024 with Rank 37
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology, was selected as an evaluator for the Innovation Challenge - 2023 conducted by the Kerala Development and Innovation Strategic Council (K-DISC) as part of the One Local Government One Idea (OLOI) project held on 09/05/2023
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology, has presented a paper and won the 1st prize in one day KSCSTE co-sponsored National Seminar on “Emerging Trends in Biotechnology for Sustainable Development” held at St. Mary’s College, Thrissur on 1st March 2024, which was organized by Department of Biotechnology
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology Acted as Staff Coordinator for the National and World Milk Day Celebrations 2023 at VKIDFT
- **Dr. Ligimol James** Assistant Professor, Department of Dairy Microbiology was selected as evaluator of the YIP 5.0 district level evaluation at St. Anne’s convent girls high school, west fort organized by K-DISC in association with Samagra shiksha Kerala and Kerala startup mission on 14th October 2023

1. Prospering University Life: Vibrant Campus Experience

The Verghese Kurien Institute of Dairy and Food Technology (VKIDFT), Mannuthy, is renowned for its vibrant campus life, offering a rich array of cultural and technical events throughout the year. The college is home to numerous active communities that cater to a diverse range of interests, providing students with ample opportunities to engage in activities such as arts, sports, and NSS (National Service Scheme). Celebrations of important events like World Milk Day, National Milk Day, World Food Safety Day, and World Food Day further enrich the campus environment. These programs not only foster knowledge-sharing and skill development but also contribute significantly to the personal and professional growth of students. VKIDFT takes immense pride in the achievements of its students, many of whom have earned national-level recognition and prestigious awards. These accolades stand as a testament to the quality of education and the wealth of opportunities offered by the institution. Sports also play a vital role in shaping the college's dynamic atmosphere. The VKIDFT sports team includes talented athletes, including university and state-level players, who excel in a wide variety of sports such as football, cricket, and shuttle badminton, among others. The college places great emphasis on physical fitness and encourages a well-rounded education that extends beyond academics. In conclusion, VKIDFT provides a holistic educational experience, blending a rigorous academic curriculum with strong industry connections, excellent placement opportunities, and a vibrant campus life. With its dedicated faculty and supportive environment, the college nurtures the talents of its students and prepares them for successful careers in the field of dairy and food technology. The combination of academic excellence, extracurricular involvement, and a strong community makes VKIDFT an ideal choice for aspiring students.

6. Exploring Library Trends

Literary Activities

New Arrivals and Information Systems

Library Report

I. EDUCATION, STUDENTS WELLBEING, ENRICHMENT ACTIVITIES

1. Infrastructure created (2023-2024)

SI No.	Financial Year	Facilities
1	2023-24	Purchase & Installation of Wall Mount Fan and Electronic Weighing Scale at VKIDFT Office.
2	2023-24	Strengthening of laboratory facilities of various departments

2. Scholarships

SI No	Name of scholarship	Number of Students
		2023-24
1	Central sector scholarship	23

2	KVASU Merit cum means Scholarship	6
3	KVASU Merit scholarship	14
4	Other Scholarships	Nil

3. Hostel and Housing

Ladies Hostel:

Ladies' hostels of Verghese Kurien Institute of Dairy and Food Technology are located at five different sites inside the campus. A total of 168 students were accommodated in these facilities during the period 2023-2024. Hostel facility was provided to Ph.D., M.Tech. and B.Tech. Food Technology and Dairy Technology students of during 2023-2024.

Men's Hostel:

Men's hostels of the institute are located at two different building inside the campus. A total of 63 students are accommodated in these facilities with a capacity of maximum 72 students. Hostel facilities are provided to B.Tech. Dairy and Food Technology students. College Hostels offers comfortable accommodation for male students with modern amenities such as high-speed internet, TV, Room, Reading Room, Drinking water facilities and recreation facilities etc.

4. Outreach Program

Internship:

Dairy Technology

2019 Admission In plant Training Training Period - 24.04.2023 – 19.07.2023		
1	MRCMPU (Milma)	13
2	ERCMPU	03
3	TRCMPU (Milma)	01
4	Avin Dairy	03
5	Banas Dairy	04
6	Hatson	04
7	Amul	05
8	Verka	04
9	Lactalis	04
Total		41

2019 Admission Farm Training Schedule Training Period – 24.07.2023 – 05.09.2023		
1	ULF Farm, Mannuthy	07
2	KLDB Farm, Kulathupuzha	04

3	KLDB Farm, Kolahalamedu	06
4	KLDB Farm, Mattupetty	06
5	Dhoni	07
6	Livestock Research Station, Thiruvazhumkunnu	06
7	Cattle Breeding Farm, Thumboormuzhi	05
Total		41

Food Technology

2019 Admission In-plant training Training period – 10/08/2023 to 21/12/2023		
1	Symega	2
2	Mane Kancor	2
3	Cargil Foods	2
4	Nestle, Mysore	2
5	Del Monte , Hosur	3
6	Schreiber, Dynamix	4
7	Britannia	4
Total		19

Hands-on-training:

Dairy Technology

- As a part of final year course work of 2019 admission B. Tech Dairy Technology students, Three Days hands on Training programme -“Palmaduram- Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024. 23 farmers from different parts of Kerala participated in the programme. Classes and demonstration on preparation of various products such as Paneer, paneer pickle, Khoa, Gulabjamun, Ice cream, set curd and ghee was carried out as part of the training

Food Technology

- As part of the final year course work of 2019 batch B. Tech Food technology students, a Hands-on training program ‘SUBHIKSHAM- 23’ was conducted on value added food products at VKIDFT Mannuthy from 19/07/2023 to 21/07/2023

5. Sports, Physical Education and co- curricular activities

To maintain the health of the students, various indoor games, outdoor games, fitness centre and recreation facilities are available. The students are trained for inter-collegiate, inter-university, state level and national level competitions in various sports and games events. The practice and coaching sessions are conducted from 06:30 to 08:00 am and 4.30 to 6.30 pm. Recreation facilities are arranged in the college for engage the students during the leisure time. Every year, the stu-

dents are divided into four groups and interclass sports and games like Badminton, Chess Cricket, Football, Table tennis, Volley ball, and Athletics is being conducted.

Physical Education Activities

- Handled regular Physical Education Activities for B.Tech Dairy & Food Technology Students
- Involved in the preparation of courses/training outline and evaluation of student's performance of the courses/training
- Consultant to the various institutions and corporate life in sports training, health, fitness and wellness management, sports psychology and research
- Conducted selection trials and coaching camps for various games (Cricket, Football, Volleyball, Badminton, Table tennis, Chess and Athletic events etc) for Intercollegiate and Inter University Competitions.
- Formed teams for the Inter collegiate and other tournaments during this period.
- Acted as team manager and coach of KVASU Intercollegiate Sports and Games.
- Planning of Physical Education & Sports programmes (College calendar of events)
- Conducted Physical fitness programs
- Organized intra college competition of various games (Cricket, Football, Volleyball, Badminton, Table tennis, Chess etc) and Organized Annual Athletic Meet
- Acted as a key person in the overall maintenance and upkeep of playfields, sports and physical education facilities and always one among the forerunners for upgrading and elevating the standards of sports and physical training infrastructure
- Organized workshop on yoga demonstration and awareness in connection with International Yoga Day

Health and Fitness Programme

Considering the importance of health and fitness aspects of the whole community of the college, a health and fitness centre that houses modern equipment is set up in the college premises. The facilities are made available to students and faculty during all working days from 6.00 am to 9.00 am in the morning and 4.30 pm to 7.00 pm in the evening.

Students' achievements/awards in sports:

- Participated in intercollegiate Tournament (Badminton, Chess & Table Tennis M/W) was held on 19th to 20th August 2023 at CVAS & VKIDFT, Mannuthy.

Badminton (Women)	Winners
Badminton (Men)	Runners
Chess (Women)	II Runners
Chess (Men)	Runners
Table Tennis (Women)	IV Position
Table Tennis (Men)	IV Position

- Participated in intercollegiate Tournament (Cricket, Football & Volleyball M/W) was held on 14th to 15th September 2023 at Mannuthy Campus.

Cricket (Men)	II Runners
Football (Men)	II Runners
Volleyball (Women)	Winners

- 5 Participated in South Zone Interuniversity Volleyball (W) Tournament 2023-2024 will be held from 27th to 31th December 2023 organized by Sri Padmavathi Mahila Viswavidyalayam, Tirupati.

Sl.No	Name	Admission No	College
1	Anusree K	19-BDM-10	VKIDFT Mannuthy
2	Aleena Kadar	20-BFT-02	VKIDFT Mannuthy
3	Meghana Sajeev	20-BFT-12	VKIDFT Mannuthy
4	Amithajith A	19-BDM-05	VKIDFT Mannuthy
5	Shahana Sherin	19-BDM-36	VKIDFT Mannuthy

6. NSS/ NCC

NSS

The National Service Scheme unit 4 of Verghese Kurien Institute of Dairy and Food Technology, Mannuthy, has been functioning well with so many activities furnishing development of the volunteers as well as the community. There is one unit with 100 volunteers functioning in the college. Volunteers are enrolled from the first- and second-year students. A student volunteer who has completed 240 Hrs of work, and has attended a special camp during the course of two years, is eligible for N.S.S. certificate from the Kerala Veterinary and animal Sciences University. This certificate gives weightage to higher studies, and is an additional qualification for appointment in public service.

The Programme Officer Dr. Jose Mathew gives his best with the support of the Dean, Dr S.N Rajakumar and other faculties of the college. The NSS Unit has successfully completed one more year with more meaningful and community involvement programmes. The programmes are mainly aimed to inculcate the spirit of voluntary work among the volunteers through sustained community interactions and promote personality development. A new unit has been allotted to VKIDFT, Mannuthy with DR. Divya M.P as the Programme Officer. The activities and programmes are focused to identify the needs and problems of campus and community.

Sl. No	Date	Programme	No Of Volunteers
1	5 th June 2023	Organized various programmes on World Environment day	50
2	5 th June 2023	organized tree plantation programme	50
3	5 th June 2023	Based on the theme of Environment day 2023 World #BeatPlasticPollution Volunteers collected plastic wastes from the campus ground	50

4	5 th June 2023	eco-friendly seed paper pens on the occasion of World Environment Day	50
5	1 st June	celebrated World Milk Day by organizing a Flash mob by the students of VKIDFT. Flash mob was performed at various locations of Thrissur	100
6	3 rd April 2023	organized a blood donation camp in collaboration with Thrissur general hospital blood centre	40
7	19 th June 2023	Organized international Yoga day 2023 a poster competition	100
8	21 st June 2023	Yoga workshop was organized in the college auditorium on the occasion of International Yoga Day by the NSS Unit of VKIDFT in association with Isha foundation and Indian Dairy Association, Thrissur chapter on June 21,2023	100
9	19 th July, 2023	VKIDFT Mannuthy NSS Unit in association with Decathlon PLAY (Decathlon, Thrissur) conducted a Karate basic defense class lead by master Vinoop N S (International trainer, National chief instructor,WFSK – QATAR)on.	75
10	15 th August 2023	Celebrated 76 th year of Independence and organized cultural programmes include Patriotic songs, group dance and mime.	
11	August 19 to 29 2023	organized several games and competitions as a part of observing National Sports day which involved participation of volunteers in sports and fitness activities	100
12	24 th August 2023	NSS Unit purchased rice, vegetables and other essentials for 'Onasadya' and donated to 'Prathyasha' Trust (elderly day care-home), Viyyur, Thrissur on August 24	18
13	30 th October 2023	organized Swatchtha hi seva as per the directions of Ministry of Youth Affairs, Govt. Of India.	65
14	12 th October 2023	NSS volunteers of VKIDFT organized 'merimaati meradesh' activities on as per the instructions given. "Meri MaatiMeraDesh" envisions a unified celebration of India's soil and valour, commemorating the nation's journey of freedom and progress as a culminating event of 'AzadiKaAmritMahotsav'.	50
15	12 th October 2023	NSS volunteers collected Mitti and filled in the Mitti Kalash. The volunteers also took "Meri MaatiMeraDeshshapath" (pledge). It was then followed by the AmritKalashYatra. Subsequently, Mitti-Kalash having the soil would be carried to the Block level.	50
16	1 st October 2023	VKIDFT Mannuthy NSS Unit organized a visit to Old age day care centre 'Prathyasha Trust' Viyyur. Sponsored one day meal for the inhabitants of 'Prathyasha' and donated the clothes collected from ' Sparsham clothing drive'. The volunteers and faculty of VKIDFT contributed to the clothing drive. The drive was conducted September 23 to 30. We spent half day in ' PRATHYASHA' interacting with the inhabitants.	30
17	26 th October 2023	conducted an awareness programme aiming women empowerment in association with mission shakti by Department of women and child development, Government of Kerala	100
18	1 st November 2023	Celebrated "Keralapiravi" Various cultural programmes and games were also conducted related to the event	

19	21st November 2023	conducted “Power Quiz 2023” on at VKIDFT examination hall. The quiz was conducted in written form and the subject of the quiz was related to electricity, power and general affairs	34
20	24 th & 28 th November 2023	conducted 7 day programme named “PALVARAM ’23” in association with National Milk day (Nov.26). We had conducted two awareness programme (, an advertisement competition, a treasure hunt competition, an extempore competition, a skit based on dairy ,a case study competition(in association with AMUL) and expert talks	100
21	19 th December 2023	VKIDFT along with Directorate of student’s welfare, Kerala Veterinary and Animal Sciences University had conducted an orientation programme in the theme “DEVELOPMENT OF NEW DIMENSIONS” for the new batch of VKIDFT	50
22	26 December 2023 to 1 st January 2024	Conducted 7 days Special camp at GHSS Peechi and organized various programme like Sneharamam Nirmanan, Value addition of Milk and Food for better income & Farmers Interaction, Farmers Training, Dairy Farmers interaction, Survey and also conducted various sessions	76
23	26 th January 2024	celebrated republic day. The flag was hoisted. Followed by the flag hoisting ceremony there were cultural programmes organized by NSS volunteers. Both teaching and non-teaching staffs and volunteers were present on the occasion. The programme was concluded by sweet distribution.	80

NCC

The 1(Kerala) Remount and Veterinary Squadron NCC unit located in the Veterinary College, Mannuthy campus is one of its kind in the state. B.Tech (Dairy Technology) students can get trained in this unit for equestrian events. The interested students voluntarily join NCC through university system.

Training: All the cadets of NCC have to undergo training in a session for 40 days in the evening at Mannuthy units. The NCC training is the part time course and is of two years duration for Senior Division and Junior Division Cadets. After two years of training and attending one camp, the cadet is eligible to appear in B certificate examination with 75 % parade attendance. After the 3rd year the cadet is eligible for C certificate examination, if he/she has passed the B-certificate exam and has attended two camps.

The NCC camps: Camps are generally held including:

- Combined Annual Training Camp
- Army Attachment Camp
- NIC Camp etc.

7. Awards in curricular, extra-curricular/ co-curricular activities

- Post graduate students in Dairy Chemistry, **Ms. Sana Jose K** (2019 Admission DT) and **Ms. Aiswarya V G** (2020 Admission DT) received Gold Medal for securing First Rank in M Tech at the 4th Convocation of KVASU on 20/05/2023. Undergraduate students of Dairy Technology (DT) and Food Technology (FT), **Ms. Aiswarya Velekat Santhosh** (2018 Admission DT), **Ms. Anit**

Rose Antony (2017 Admission FT) and **Ms. Nithya P N** (2018 Admission FT) also excelled in the function by bagging Gold Medal in their respective streams.- May 2023

- A project named ‘Prototype of an equipment using hurdle technology to reduce microbial load in clarified juices’ developed by the final year students of B. Tech Food Technology course **got selected for incubation in Technology Business Incubator** for 2023-24 by TBI Government Engineering College, Thrissur – May 2023
- **Ms. Nazrin Nazer** (2021 Batch B. Tech Food Technology)- Radio talk on publicization of food safety day programmes and Foodathon at VKIDFT- Club FM- 02/06/2023
- **Ms. Sneha. K**, M. Tech Scholar, Department of Dairy Microbiology presented a paper on “Comparative evaluation of probiotic characteristics of potent indigenous *Lactobacillus* strains for food fermentations” in the National seminar on ‘*Microbiome-The Unseen*’ jointly organized by Department of Microbiology, Sreesankara College Kalady and Department of Marine Biology, Microbiology & Biochemistry, CUSAT on 22/08/2023 & 23/08/2023
- **Mr. Akshay Aravind**, M. Tech Scholar, Department of Dairy Microbiology presented a paper on “Identification, Isolation, Enumeration & pathogenic characterization of pink colony producing biofilm forming organism isolated from a market sample of pasteurized sample” in the National seminar on ‘*Microbiome-The Unseen*’ jointly organized by Department of Microbiology, Sreesankara College Kalady and Department of Marine Biology, Microbiology & Biochemistry, CUSAT on 22/08/2023 & 23/08/2023
- **Ms. Ansa Shaji** (2019 Batch B. Tech Food Technology)- –Talk in program with RJ Jeena about Project topic “ULTRA OZEINODE” – 13/09/2023
- **Mr. Akshay Aravind**, M. Tech Scholar, Department of Dairy Microbiology presented a poster on “Isolation and characterization of *E. coli* isolated from commercial pickled brine used for pickling vegetables and assessing its multiple drug resistance” in the International Conference on ‘Anti-microbial resistance’ jointly organized by Department of Biosciences, MES College Marampally and Department of Marine Biology, Microbiology & Biochemistry, CUSAT on 28/09/2023 & 29/09/2023.
- **Reji A.J** (M.Tech 2020 admission residency) cleared UGC NET- December 2023
- **Dharani M** (PhD 2022 admission) cleared UGC NET- December 2023
- **Reji A.J** (M.Tech 2020 admission residency) secured First Rank in the Kerala PSC examination to the post Dairy Extension Officer
- **Ms.Nithya P N** (2018 Admission) -secured 1st rank in ICAR AIEEA (PG)
- **Ms.V V Anu Jeslet, Mr. Abhinav Sasi, Ms. Ansa Shaji, Mr Ahammed Zainy N K and Mr Alan John** (2019 Admision) The best project award for the Hurdle Technology prototype equipment in 10th National level Technical Project Exhibition and Competition – SRISHTI 2024 This project was selected for incubating in Technology Business Incubator for 2023-24 by TBI GEC Thrissur for a grant of upto 1lakh rupees onl (Several newspaper recognitions for the same project.)
- **Ms.V V Anu Jeslet , Mr Mohammed Ameen and Ms. Jubairiya K**(2019 Admn) -GATE EXAM 2023 qualified
- **Mr Mohammed Ameen, Ms. Parvathy P S** GATE EXAM 2024 qualified.

- **Ms.Susan Eldhose** (2020 Admn)- GATE EXAM 2024 (Rank 410) qualified
- **Ms.Ansa Shaji** (2019 Admn)--Secured first prize in speech competition during internship at Car-gill India Pvt Ltd- November 2023
- **Ms. Karthika Raj-** (2019 Admn)-Participated and Presented Poster in the National level Sem-inar organized by Association of Food Scientists and Technologists (INDIA), Thrissur Chapter. -28/2/2024
- **Ms. Meghna Sajeev and Ms.Shehanaz S** (2020 Admission) Published a review article in NU-TRI- CEREALS magazine about nutritional and functional properties of millets : an overview
- **Ms.Sana Wilson , Ms.Wafa Navas** (2020 Admission) –popular article on “Exploring consumer acceptability of lab grown meat” in food infotech magazine”
- **Ms.Sana Wilson and Ms.Wafa Navas** (2020 Admission)- Review article on “ Probiotics and its therapeutic effects: a review” in International Journal For Multidisciplinary Research (IJFMR)
- **Ms.Sana Wilson and Ms.Wafa Navas** (2020 Admission) -Participated and presented a paper at 9th International food Convention-7/12/23 - 10/12/23
- **Ms.Wafa Navas**(2020 Admission) -Volunteered and presented a paper at 50th IDA Dairy Indus-try Conference. 3/3/24- 6/3/24
- **Ms. Wafa Navas ,Ms.Jessica Jose Motha , Ms.Gopika M G, Ms.Hamna P , Ms. Amrin Fathi-ma and Ms.Aleena Kadar** (2020 Admission) -Participated in Eat Right Seminar conducted by Food Safety Department, Thrissur-17/8/23
- **Ms. Wafa Navas**(2020 Admission) -Case study competition conducted by Amul - First prize-28/11/2023
- **Mr Irfan K E** (2020 Admission B.Tech Dairy Technology)- GATE EXAM 2024 qualified
- **MsGowry A.L**(2020 Admission B.Tech Dairy Technology)- GATE EXAM 2024 qualified
- **MsFarheen A**(2019 Admission B.Tech Dairy Technology)- GATE EXAM 2024 qualified
- **MrHarshit Raj**(2019 Admission B.Tech Dairy Technology)- GATE EXAM 2024 qualified
- **Ms. Aiswarya Velekat Santosh** (2018 Admission B.Tech Dairy Technology) - selected for Chief Ministers Student Excellence Award 2023for meritorious aggregate achievement in under gradu-ate examination- January 2024
- **Ms. Adrija R** (2018 Admission B.Tech Dairy Technology) - selected for Chief Ministers Student Excellence Award 2023 for meritorious aggregate achievement in under graduate examination- January 2024

8. **Students Union/ Hostel/ Sports Day Celebrations**

The college is working towards the overall development of the student community. The focus is not merely on the academic development, but the students’ physical, mental and social wellbeing are taken care through various organized forums and committees functioning under the College Students Union and with the able guidance of the Dean of the Institute. The Students Union provides the opportunity for every student to learn, express and develop their talent and skill in various arts/cultural and literary, debating as well as sports events. Each of these activities is per-formed under the banner of various clubs/committees/forums viz., literary &debating, arts club, nature club, sports committee etc. Every forum is led by an elected student representative who has interest, skill and exposure in the relevant field. The students themselves are given opportu-

nity to organize various programmes to express their talents and they are also supported well in participating in the events organized outside the campus, which includes competitions organized at University, District, Regional and State level.

Various activities carried out by the Student's Union during the reporting period are:

Sl.No	Date	Programme
1	4 th April 2023	Organized Iftar Party'
2	9 th March 2023	Celebrated Holi
3	21 st December 2022	Celebrated Christmas –Crib making competition, Carol competition was conducted
4	3 rd December 2022	Organized the Football competitions in name of world cup football competitions
5	22 nd & 23 rd June 2023	Celebrated reading week and organized book fair
6	23 rd June 2023	Organized badminton tournaments
7	3 rd June 2023	Organized Foodathon the 7KM run for the public in connection with world food safety day
8	3 rd to 9 th June 2023	Organized Foodsalvatio 23 in connection with world food safety day and organized awareness programme , survey etc
9	12 th to 17 th October 2023	Organized various programmes on the occasion of world food day- Food Expo, Awareness programmes , Flash Talk & Quiz etc
10	16 th 18 th March 2023	Organized –KANTARA-23 Interclass Arts Festival
11	25 th August 2023	Onam Celebration – organized flower carpet, Nazic dhol etc
12	30 th May 2023	Celebrated World Milk Day - flash mob performs various locations of Thrissur and awareness sessions was arranged
13	5 th September 2023	Celebrated Teachers day by distributing sweets and honoring the teachers
14	1 st Nov 2023	conducted Keralapiravi along with 30th Anniversary of dairy plant
15	1 st November 2023	students union Inauguration Programme
16	15 th November 2023	Conducted 'Flix n Fun' a movie presentation
17	16 th November 2023	Formed several clubs like music , drama, dance, literature, quiz, media ,games and athletics to encourage the talents of the students. As part of this, Music Club Inauguration "KATTANUM PAATTUM"
18	October 27,28 &30 2023	FOODZONE 23 as a part of world food day
19	24 th to 29 th November 2023	conduct the PAALVAARAM'23 as a part of National Milk Day
20	20 th December 2023	Conducted Christmas day celebrations
21	6 th January 2024	Conducted the fresher's day

22	16 th & 17 th February 2024	Conducted Interclass Athletic Meet
23	20 th to 24 th February 2024	Interclass Arts Festival

Students Exchange Program- Nil

9. Students Counselling and Placement services

The college has a separate Career Guidance and Placement Cell to provide information to the students on various employment opportunities available. The cell also offers advice, guidance and opportunities available to the students in building up their career. The placement cell maintains a library with books for those aspiring for civil services examination and other competitive examinations organized by various Government, Public Sector and Sponsored Agencies. The cell regularly updates the employment opportunities available, opportunities available for overseas education and employment as well as self-employment opportunities to the students. The placement cell makes arrangements for campus interviews through which many students have secured campus placements in various companies/ organizations of repute in the country and abroad. Placement of students in various Non-Governmental Organizations functioning in the State is also duly taken care. The placement cell arranges for special lectures on Personality Development and Career Prospects for the outgoing student.

Students Counselling and Placement cell activities during the reporting period:

- Placement Drive– Placement drive for 2018 batch students of B.Tech Dairy Technology and B.Tech Food technology continued on the months of April and May 2023.
- A placement Drive by TetraPak P Ltd. Was conducted for the post of Food protection Associate in campus during May 04 & 05, 2023. The programme was attended by around 50 students from 2018 batch and involved five sessions starting from screening test, followed by Group Discussion, Online Aptitude test, technical Interview, and an HR interview. The final short-listed candidates after the whole process were finally selected for an online interview later and Ms. Sreelakshmi was recruited by the company.
- Britannia Industries Ltd. Conducted a placement drives for their Ranjangaon plant for Production and Quality department on May 4, 2023. The session was conducted online and 3 students were selected in the process
- A placement interview for quality department in Manjilas Foods Pvt ltd was conducted during May 2023 for B.Tech Food Technology students. Ms. Anjaly Benny was selected in the process.
- An orientation programme for freshers– “Develop New Dimensions” – was conducted on December 19, 2023 in association with Directorate of Students welfare, KVASU for the first year students of B.Tech Dairy Technology and B.Tech Food technology at Seminar Hall, VKIDFT. The programme was led by Dr. Siju thottappilly, Trainer and motivational Speaker and was well received by the first-year students of the college.
- A Two-day placement orientation programme was conducted by the Students Counselling & Placement Cell, VKIDFT in association with the Directorate of students welfare, KVASU for

the final year Undergraduate students of B. Tech Dairy Technology and B. Tech Food Technology during 22nd and 23rd of December 2023 at Conference Hall, VKIDFT. The Two-day programme was led by Sri P L Jomy, Author, Career Columnist and Education Expert & Dr T N Jagadeesh Kumar, Former DSW, Kerala Agricultural University & Employability Coach and included interactive sessions on preparation of resume and appearing for interview as well as mock interview sessions for each student

- The linked in page of the college and placement cell was revamped and updated with various activities and events taking place in the college for better outreach and goodwill of the college.
- A placement brochure was prepared for the outgoing students of 2019 batch for placement purposes to be shared to various interested companies for the current year. As part of the current drive companies like Tetra Pak, Amul intimated interest in conducting placement drive at the campus

10. Corporate relations

Indeed, strong corporate relations can be highly beneficial for an educational institution like VKIDFT in finding Internships and Job Opportunities. Having good corporate relations can lead to opportunities for students to secure internships and jobs at prestigious multinational companies and cooperatives. This not only enhances the students' practical skills but also improves their employability. The outgoing batch has secured internships at prestigious multinational companies like Nestle, Abbott, Cargill, Delmonte, Symega, and Britannia as well as in co-operatives such as AMUL and MILMA. The collaboration with corporations allows the institute to stay updated on industry trends and requirements. This can lead to the development of a curriculum that is more closely aligned with the needs of the dairy industry, ensuring that students receive relevant and up-to-date education. The alumni who have a corporate background and who are experts in the field have joined VKIDFT by conducting guest lectures and workshops, exposing students to practical insights and knowledge beyond the classroom. Building relationships with corporations also means building a network of industry contacts. This network can be valuable for students seeking mentors, advice, or job connections after graduation. Collaborations with reputable companies can enhance the institute's reputation, making it more attractive to potential students, faculty, and future corporate partners. Overall, maintaining strong corporate relations can help VKIDFT in its mission to provide high-quality education and research in the dairy and food technology field, while also benefiting the industry through knowledge exchange and skilled graduates.

11. Alumni relation

The alumni of the college formed CDST Graduates' Association (CDSTGA) during 2003, providing a comprehensive platform to involve actively in the welfare of college alumni and work to support the milk producers and processors in the state. The alumni of the college are scattered across the globe. Some organizations where our alumni work include AMUL, NDDDB, DFRL, Mother Dairy, Cadburys, Reliance Industries, Almarai, Milma etc. and Banking institutions such as SBI, ICICI, HDFC, IOB, PNB, SIB etc. The alumni take active interest in the college and its activities.

12. Students' Performance

Student Details	No. of students in the final year (2022-23)		No. of students passed out (2022-23)	
	DT	FT	DT	FT
UG				
Students admitted	33 (2019 Admn)	19 (2019 Admn)	33 (2019 Admn)	19 (2019 Admn) + 1 (2015 Admn) +1 (2018 Admn)
PG				
Students admitted	7		7	
PhD				
Students admitted	2		2	

13. Students intake details

Student Intake Details (2023 Admission)

Student Details	No. of students admitted	
	DT	FT
UG		
Students admitted	40	21
PG		
Students admitted	10	
PhD		
Students admitted	3	

II. DEPARTMENT PROFILES

DEPARTMENT OF DAIRY TECHNOLOGY

1. Exploring Research Frontiers- Past achievements and current ventures

Ongoing projects:

Year	Name of PI & Department	Funding Agency	Title of Project	Total Outlay (Lakhs)
2022-23	Dept of Dairy Technology	State	Technological Interventions for improving socio economic condition of Dairy entrepreneurs through value addition of Dairy products—8.25 lakhs	22 (Received 8.25)

Implemented Projects: RSP/22-23/VII-4:

- Technological Interventions for improving socio economic condition of Dairy entrepreneurs through value addition of Dairy product -9.0 lakhs

Research work for Master's degree M.Tech:

SI No	Name of the student	Admission No.	Name of project	Department
1	Ms. Soumyasree P T	2021-MDM-02	Process standardization for development of herbal dietetic Gujiya	Dairy Technology

2	Ms. Anisha Das	2021-MDM-01	Process standardization of high protein functional cookies for women using composite flour pre mix and casein hydrolysates	Dairy Technology
3	Varun S Prakash	2020-MDM-02	Process standardization of dietetic functional <i>lassi</i> incorporating multifunctional ingredients	Dairy Technology
4	Akshay R	2022-MDM-02	Development of a functional dairy based fat spread incorporating turmeric and pepper	Dairy Technology
5	Salma Shaji	2022-MDM-05	Evaluation of nutritional parameters and suitability of different packaging materials for high protein composite flour functional cookies	Dairy Technology

Ph.D. Research Projects

SI No	Name of the student	Admission No.	Name of project	Department
1	Ms. Divya K B	2020-DDM-01	Instant Kaalan-Process optimisation and metabolomic studies	Dairy Technology
2	Ms. Aswathy V A	2021-DDM 03	Development of ready to cook geriatric food mix with enhanced functional properties	Dairy Technology

Research projects-External students:

Sl. No.	Name of the student & Institution	Title of project	Major Advisor	Department
1	Fousiya Ibrahim M.Voc Food processing and Technology, St.Teresas college, Ernakulam	Development of peda incorporated with green gram flour and pumpkin and pumpkin pulp	Ms. Rashmi K G	Dairy Technology
2	NafiyaFazal M.Voc Food processing and Technology, St.Teresas college, Ernakulam	Development of Ready to reconstitute breakfast smoothie powder mix	Ms. Divya K B	Dairy Technology
3	Sreelakshmi M N M.Voc Food processing and Technology, St.Teresas college, Ernakulam	Process Standardization for development of Sambharam	Dr.Dinker Singh	Dairy Technology
4	Nayana M N M.Sc Food science and Technology, Tharananelur Arts and Science College, Thanissery, Irinjalkkuda	Process standardization for development of ready to eat symbiotic sambharam	Dr.Dinker Singh	Dairy Technology

5	Namitha Rajesh M.Sc Food science and Technology Tharananellur Arts and Science College, Thanissery, Irinjalkkuda	Process standardization for development of symbiotic sambharam	Dr.Dinker Singh	Dairy Technology
6	Aleena Sunil St Theresa's College, Ernakulam	Development of functional Whey based Tomato soup incorporating Broccoli, Elephant foot yam, Paneer and Shallet	Dr. Dinker Singh	Dairy Technology
7	Ceona Joseph St Theresa's College, Ernakulam	Development of functional Whey based Tomato soup pre mix incorporating Broccoli, Elephant foot yam, Paneer and Shallet	Dr. Dinker Singh	Dairy Technology
8	Anjana K S St Theresa's College, Ernakulam	Development of Paneer from Vechur milk	Ms. Rashmi K G	Dairy Technology
9	Neha Balakrishnan St Theresa's College, Ernakulam	Development of Apple whey jelly incorporated with Hibiscus extract as a natural colouring agent	Ms. Rashmi K G	Dairy Technology
10	Krishnaveni A S St Theresa's College, Ernakulam	Protein enrichment in Herbal Whey jelly through Spirulina incorporation	Ms. Divya K B	Dairy Technology
11	Jisha P J School of Health science, Calicut university campus	Process optimization for development of burfi for growing kids based on ragi, kannamkaya, cocoa.	Dr. Dinker Singh	Dairy Technology
12	Abiya P P School of Health science, Calicut university campus	Process optimization for development of burfi for growing kids based on ragi, kannamkaya, Makkahana and skim milk powder	Dr. Dinker Singh	Dairy Technology
13	Muhammed Hisham PP MACFAST Thrivella Pathanamthitta	Development of Coconut milk Kulfi	Dr. Dinker Singh	Dairy Technology

2. Noteworthy attainments in Science and Technology

- Development of a ready to reconstitute breakfast smoothie powder mix
- Development of ready to eat symbiotic sambharam
- Development of peda incorporated with green gram flour, pumpkin and pumpkin pulp

3. Academic Manuscripts, Investigative Pursuits, Widely-read articles, Literary Volumes and Technical Documents, Details of research papers published

Research article:

- **M.V Ambili and Singh, D.** 2023. Optimisation of the formulation of fibre incorporated reduced calorie herbal Rasamalai . J. Vet. Anim. Sci. 54(3): 817-826.
- Haritha, C., **Singh, D., Rajakumar, S.N.**, Athira, S. and Ligimol, J. 2023. Optimization of value added Gulab Jamun by utilising dairy by-products. J. Vet. Anim. Sci. 54(3): 678-686.
- Aswathy, M. R., **Rajakumar, S.N., Singh, D.**, Divya, M.P and Aysha.C.H. 2023. Process standardization of fat replaced dietetic chhana kulfi using response surface methodology. J. Vet. Anim. Sci. 54(2):305-312.
- Archana, S., **Divya, K.B.**, Warriar, A.S., Arshath, M. and **Rajakumar, S.N.** 2023. Optimization of casein based edible coating for paneer using Response Surface Methodology. J. Vet. Anim. Sci. 54(2):552-561.
- **Rashmi, K.G.** and Rao, H.G.R. 2023. Development of Vitamin C enriched Amla Whey drink. J.Vet. Anim. Sci. 54(2):571-578.
- Rejeesh R, Beena A K, Ligimol James, Sudheer Babu P, **Rajakumar S N**, Rachana C R and Subith C. Techno textural characteristics of autochthonous lactic acid bacteria isolated from naturally fermented milks. The Pharma Innovation Journal .2023 SP-12(11).2191-2195
- P.S. Snigdha, **Dinker Singh and K G Rashmi.** Effect of vacuum packaging on the physico chemical and shelf life attributes of Herbal Paneer spread. Journal of Veterinary and Animal Sciences. 54(4).1052-1060
- Divya K B, Sujith P, Rajakumar S N, Beena A K, Divya M P, Sudheer Babu P and Ramnath V. Physico chemical properties of optimized Kaalan-A traditional dairy product. 2023 .Indian Journal Dairy science.77(1)-1-10
- Anuradha Kumari, Rashmi K G, Aparna Sudhakaran V, Aswin S Warriar and Nirak K Singh. Unveiling the health benefits of prebiotics-A comprehensive Review.2024. Indian Journal of Microbiology. <https://doi.org/10.1007/s12088-024-01235-4>.
- Fousiya Ibrahim and Rashmi K G. Optimization of green gram pumpkin peda by response surface methodology.2023. International Journal of Statistics and Applied Mathematics.SP-8(6)-1364-1369
- Ambili M.V., Dinker S., Rajakumar S.N., Beena R.L., Rejeesh R., James,L., Rashmi K.G.and Divya K.B. 2023. Shelf Life and Storage Studies on the Sensory Attributes of Dietetic Herbal Rasmalai. Environment and Ecology 41 (1A): 321—325.

Popular article:

- Akshay R, **Rashmi K G.** Membrane fouling and Mitigation strategies in Dairy industry.The Science World. Nov 2023 3(11),2912-2916
- Vandhana P S, Smitha J Lukose, Divya M P.“Arogyajeevithathinu attinpal-Sampoornaa poshanathinte swabhavika uravidam”.2024. Karshakasree.

Oral Presentations:

- Ms. Divya K B, Assistant Professor, Dairy Technology did Paper presentation on the topic “ Physico chemical and sensory characterization of Kaalan from Central parts of Kerala at Swadeshi Science Congress –” Indian Knowledge Systems” conducted at NIT Kozhikode held on 25/03/2023 to 27/05/2023
- Ms. Vandhana P S performed a oral presentation titled “Development of modified Peda with enhanced nutritional and fiber content using flaxseeds and oats” held at Anna University, Regional campus, Coimbatore on 21/09/2023 to 22/09/2023.
- Varun S Prakash, Akshay R, Rashmi K G presented poster entitled ”Development of Dietetic whey-coconut water based Jelly using Tulsi(Ocimum sanctum) leaf extract in 50th Dairy Industry Conference, Hyderabad.
- Ms. Rashmi K G, Asst Professor, Dairy Technology secured First Prize in poster presentation on the topic “ Value addition of peda by inclusion of Green gram flour and pumpkin pulp” at the National Seminar organised by AFSTI Thrissur chapter on 28/02/2024
- Ms. Divya K B, Asst Professor, Dept. Dairy Technology presented poster entitled “Bioaccessibility of phytochemicals in Kaalan” at the National Seminar organised by AFSTI Thrissur chapter on 28/02/2024.
- Ms. Ambili M V. Teaching Assistant, Dept. Dairy Technology and Ms. Rashmi K G ,Asst Professor, Dairy Technology presented e-poster on the topic “Development of Dietetic whey-coconut water based Jelly using Panikoorkka leaf extract” at the National Seminar organised by AFSTI Thrissur chapter on 28/02/2024
- **Ms. Vandhana P S** performed a oral presentation titled “Development of modified Peda with enhanced nutritional and fiber content using flaxseeds and oats” held at Anna University, Regional campus, Coimbatore on 21/09/2023 to 22/09/2023.
- **Ms. Divya K.B.** Asst Professor, Dept. Dairy Technology, presented a poster on topic “Bioaccessibility of phytochemicals in Kaalan” at National seminar on “Advancements of functional foods and Nutraceuticals exploring bioactive compounds, fermentation and value addition” by AFSTI Thrissur chapter on 28/02/2024
- **Ms. Rashmi K G**, Assistant Professor (DEO on deputation), Dairy Technology presented a poster on topic” Value addition of peda by inclusion of green gram flour and pumpkin pulp” at National seminar on “Advancements of functional foods and Nutraceuticals exploring bioactive compounds, fermentation and value addition” by AFSTI Thrissur chapter on 28/02/2024
- **Ms. Ambili M.V.** Teaching Assistant, Dept. of Dairy Technology presented a poster on topic “Development of Dietetic whey coconut water based jelly using panikoorka” at National seminar on “Advancements of functional foods and Nutraceuticals exploring bioactive compounds, fermentation and value addition” by AFSTI Thrissur chapter on 28/02/2024

4. Technological Advancements Crafted and Transmuted

- **Transfer of Technologies-** Nil
- **Dissemination of Innovations to society and institutions-** Nil

5. Consultancy and Public Advocacy

- In person -25
- Over telephone -21

6. Patents- Nil

7. Unveiling Human Resources: Unlocking Potential and Pursuits

- **Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School- Nil**
- **Training Program/ Short courses/ Any other program organized (details from each department)**
- Ms. Divya K.B. handled a session on “Popular varieties of Icecream” in a seminar organized by IDA-Kerala chapter and Department of Dairy Science, CoVAS Mannuthy on 21/09/2023 .
- Ms. Rashmi K G. handled a session on “Cheese varieties” in a seminar organized by IDA-Kerala chapter and Department of Dairy Science, CoVAS Mannuthy on 21/09/2023.
- Three day hands on training on “Preparation of Value Added Dairy Products for Small scale Entrepreneurs” was organized from 08.01.2024 to 10.01.2024 as part of Student READY programme of 2019 (DT) batch. (with 23 Participants)
- Mr. Muhammed Riyas, Teaching Assistant, Dept. Dairy Technology handled farmer interactive section at Vypin on 26/02/2024 as part of District level training component of ATMA, 2023-24, organized by Dairy extension office, Vypin (Dairy Development Department, Ernakulam District)

8. Strategic Resources additions- New/ innovative achievements- Nil

9. Awards and Honors/ Endowments (department wise)

Ms. Divya K B, Assistant Professor, Dairy Technology secured first prize in Paper presentation on the topic “ Physico chemical and sensory characterization of Kaalan from Central parts of Kerala at Swadeshi Sciene Congress –” Indian Knowledge Systems” conducted at NIT Kozhikode held on 25/03/2023 to 27/05/2023

10. Distinguished visitors in departments- Nil

11. Beyond the horizons: Exploring other activities- Nil

12. Other Academic activities

External Examiner/ Question paper Setter:

- Dr. S N Rajakumar, Head, Dairy Technology served as External examiner for the PhD Thesis, NDRI Karnal- July 2023

Reviewer of journal:

- External Examiner : Dinker Singh for Market Milk, Traditional Dairy Products, Condensed and Dried Milk, Fat Rich Products at SVVU, Tirupati
- Question Paper setter : Divya K.B. (By products Technology PVRNTVU, Hyderabad)
- Reviewer : Divya K.B. , Rashmi K.G., Dinker Singh reviewed JVAS articles
- Reviewer in JVAS journal-----Ms. Rashmi K.G.06/11/2023
- Reviewer in JVAS journal-----Rashmi K.G. 22/01/2024
- Reviewer in JVAS journal-----Rashmi K.G. 31/01/2024

- External Examiner---Dr. S N Rajakumar---PhD Thesis evaluator NDRI Karnal
- Question paper setters ----Dr S.N. Rajakumar, Divya K.B., Rashmi K.G.
- Reviewer in JVAS journal-----Rashmi K.G.
- Reviewer in JVAS journal-----Ms. Rashmi K.G. 22/01/2024
- Reviewer in JVAS journal-----Ms. Rashmi K.G. 31/01/2024
- Question paper setter for the college- Dairy Science college, Mahagaoa cross, Kalaburaji & Dairy Science college, Hebbal - Dr. S N RajaKumar

13. Other Research activities - Nil

14. Other Extension activities

- Radio talk by **Ms. Divya K.B.** Asst Professor, Dept. Dairy Technology on “**Kaalan**” in the programme ‘**Vayalum veedum**’ on 30/08/2023 at **Akashavani, Thrissur.**
- Exhibition stall organized by students at Puzhakkal Block Ksheera Sangamam on 18/09/2023
- **Ms. Divya K.B.** Asst Professor, Dept. Dairy Technology handled a session on “**Popular varieties of Icecream**” in a seminar organized by IDA-Kerala chapter and Department of Dairy Science, CoVAS Mannuthy on 21/09/2023 .
- **Ms. Rashmi K G.** DEO (on deputation), Dept. Dairy Technology handled a session on “**Cheese varieties**” in a seminar organized by IDA-Kerala chapter and Department of Dairy Science, CoVAS Mannuthy on 21/09/2023.
- Exhibition stall organized by ELP students at KAU Inter college arts Fest from 10/10/2023 - 13/10/2023
- **Mr. Muhammed Riyas**, Teaching Assistant, Dept. Dairy Technology handled training sessions for Micro enterprise development programme (MEDP) on Making Value added dairy products at Ideal Study Centre ,Thamarassery,Kozhikode from 07/11/2023 to 13/11/2023
- **Mr. Muhammed Riyas**, Teaching Assistant, Dept. Dairy Technology conducted training class on “**പാലുല്പന്ന നിർമ്മാണ പ്രായോഗിക ക്ലാസ്**” organized by Livestock Management Training Center, Aluva on 14/12/2023
- **Ms. Rashmi K G**, DEO (on deputation), Dept. Dairy Technology handled Farmers training session at Valakkavu Milk Society as part of NSS camp on 28/12/2023
- **Mr. Muhammed Riyas** ,Teaching Assistant, Dept. Dairy Technology handled Farmers training session at Vilangannur Milk Society as part of NSS camp on 28/12/2023
- **Ms. Gloria Jacob**, Teaching Assistant, Dept. Dairy Technology handled Farmers training session at Valakkavu Milk Society as part of NSS camp on 28/12/2023
- **Ms. Divya K B**, Asst Professor, Dept. Dairy Technology handled Farmers training session at Mannamangalam Milk Society as part of NSS campon 28/12/2023
- **Ms. Ambili M.V.** Teaching Assistant, Dept. Dairy Technology handled Farmers training session at Mannamangalam Milk Society as part of NSS camp on 28/12/2023
- **Mr. Muhammed Riyas**, Teaching Assistant, Dept. Dairy Technology handled the training session for ATMA Within District Training Programme on the topic” making value added Dairy Products” on 26/02/2024 at Vypin Block Panchayth.

15. Other activities

- **Dr. S N. Rajakumar**, Professor and Head, Dept. Dairy Technology served as Course Director of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Dr. Dinker Singh**, Asst Professor, Dept. Dairy Technology served as Course coordinator of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Divya K B**, Asst Professor, Dept. Dairy Technology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Rashmi K G**, Asst Professor (DEO on deputation) Dept. Dairy Technology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Ambili M V**, Teaching Assistant, Dept. Dairy Technology served as Assistant Course coordinator of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Jithu Rappai**, Teaching Assistant, Dept. Dairy Technology Assistant Course coordinator of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Gloria Jacob** Teaching Assistant, Dept. Dairy Technology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Vandhana P S**, Teaching Assistant, Dept. Dairy Technology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Mr. Muhammed Riyas** Teaching Assistant, Dept. Dairy Technology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Dr. Dinker Singh**, Asst Professor, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 27/12/2023
- **Ms. Divya K B**, Asst Professor, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 28/12/2023
- **Ms. Rashmi K G**, Asst Professor (DEO on deputation) Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 28/12/2023
- **Mr. Muhammed Riyas** Teaching Assistant, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 26/12/2023 and 28/12/2023
- **Ms. Ambili M V**, Teaching Assistant, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 26/12/2023 and 28/12/2023
- **Ms. Gloria Jacob** Teaching Assistant, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 26/12/2023 and 28/12/2023
- **Ms. Vandhana P S**, Teaching Assistant, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 31/12/2023
- **Ms. Jithu Rappai**, Teaching Assistant, Dept. Dairy Technology accompanied NSS camp held at Govt. High School, Peechi on 31/12/2023
- **Dr. S N. Rajakumar**, Professor and Head, Dept. Dairy Technology served as Course Director for the three days Hands on training Programme-Palmadharam- “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Dr. Dinker Singh**, Asst Professor, Dept. Dairy Technology served as Course coordinator for the

three days Hands on training Programme-Palmadhuram- “Preparation of valueadded dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.

- **Ms. Rashmi K G**, Asst Professor (DEO on deputation) Dept. Dairy Technology served as Assistant Course coordinator for the three days Hands on training Programme- Palmadhuram - “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Ms. Divya K B**, Asst Professor, Dept. Dairy Technology served as Assistant Course coordinator for the three days Hands on training Programme- Palmadhuram - “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Ms. Ambili M V**, Teaching Assistant, Dept. Dairy Technology served as Assistant Course coordinator for the three days Hands on training Programme- Palmadhuram - “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Ms. Jithu Rappai**, Teaching Assistant, Dept. Dairy Technology served as Assistant Course coordinator for the three days Hands on training Programme- Palmadhuram - “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Mr. Muhammed Riyas** Teaching Assistant, Dept. Dairy Technology served as Committee member for the three days Hands on training Programme- Palmadhuram - “Preparation of value-added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Ms. Gloria Jacob** Teaching Assistant, Dept. Dairy Technology served as Committee member for the three days Hands on training Programme- Palmadhuram - “Preparation of value added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.
- **Ms. Vandhana P S**, Teaching Assistant, Dept. Dairy Technology served as Committee member for the three days Hands on training Programme- Palmadhuram -“-”Preparation of value added dairy products for small scale Entrepreneurs” was conducted from 08/01/2024 to 10/01/2024.

DEPARTMENT OF DAIRY ENGINEERING

1. Exploring Research Frontiers- Past achievements and current ventures

Completed past plan projects:

- Application of Solar energy for the Preparation of Heat Desiccated Traditional Indian Milk Products
- Generation of fuel from Plastic Packaging Wastes from DairyIndustry
- Estimation of Thermal Properties of Milk and Milk Products available in Kerala
- Strengthening of laboratories in Dairy engineering department

2. Noteworthy attainments in Science and Technology-

3. Academic Manuscripts, Investigative Pursuits, Widely- read articles, Literary Volumes and Technical Documents, Details of research papers published

- P R Amulya, Rayees Ullzalm. (2023). Optimization of enzyme assisted extraction of anthocyanins from egg plant peel, Food Chemistry X

4. Technological Advancements Crafted and Transmuted

- **Transfer of Technologies-** Nil

- **Dissemination of Innovations to society and institutions-** Nil
- 5. **Consultancy and Public Advocacy-** Nil
- 6. **Patents-** Nil
- 7. **Unveiling Human Resources: Unlocking Potential and Pursuits**
 - **Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School-** Nil
 - **Training Program/ Short courses/ Any other program organized (details from each department)-** Nil
- 8. **Strategic Resources additions- New/ innovative achievements-** Nil
- 9. **Awards and Honors/ Endowments (department wise)**
 - **Dr. Antony Pallan**, Teaching Assistant, Department of Dairy Engineering acted as Special invitee as technical expert for interview of Feed mill Supervisor and feed mill technician SANFT, Mannuthy held on 16/05/2023 & 17/05/2023
- 10. **Distinguished visitors in departments-** Nil
- 11. **Beyond the horizons: Exploring other activities-** Nil
- 12. **Other Academic activities**
 - **Ms. Gritty P.T., Ms. Amulya P R and Ms. Sasmila Bhai**, Teaching Assistant, Dairy Engineering acted as the coordinators for AICTE accreditation of VKIDFT
 - **Ms. Ammu V K** Teaching Assistant, Dairy Engineering assisted Technical Officer to Dean
 - Er. Devikrishna P, Teaching Assistant, Dairy Engineering- Presented a seminar entitled “Optimization of electrodynamic process for encapsulation of *Lactocaseibacillus rhamnosus* in nanofibers” in the National Seminar on “Contemporary challenges in Processing, Quality and Safety of food” Jointly organized by KSCSTE Thiruvananthapuram & KCAET Tavanur on 16-17 October 2023
 - Dr. Antony Pallan, Teaching Assistant, Dairy Engineering- conducted practical sessions for the courses fluid mechanics and workshop technology for B tech Dairy Technology 2023 batch students, CDST Kolahalamedu, 13-14 January 2024
- 13. **Other Research activities-** Nil
- 14. **Other Extension activities**
 - **Dr. Antony Pallan**, Teaching Assistant, Department of Dairy Engineering conducted a session on “Basic review of waste practices across the state” at CDST Kolahalamedu on 20/05/2023 & 22/05/2023
 - **Dr. Antony Pallan**, Teaching Assistant, Department of Dairy Engineering- Training for Village Extension Officers at KILA-16/10/23 to 2/12/23
 - **Dr. Antony Pallan**, Teaching Assistant, Department of Dairy Engineering - Conducted a session on “Recent trends in waste management scenario” at LPM Department CVAS, Mannuthy

DEPARTMENT OF DAIRY CHEMISTRY

1. Exploring Research Frontiers- Past achievements and current ventures

Various research projects including State Plan, External aided projects and student research proj-

ects are being undertaken at the College. The department also offers facilities and guidance for students from other universities in research projects as part of their post graduate programme.

Past achievements:

- **Developed a Technique for Detection of presence of Cow milk in Goat milk**
A rapid platform test was developed for the detection of presence of cow milk in goat Milk
- **Developed adulteration test strips for milk**
Two different test strips were developed for the detection of neutralizers and glucose in milk
- Determination of safe extent of different cooking oils on repeated heating

Current ventures:

Details of research projects:

Name of Project	Funding Agency	Name of PI	Outlay (Rs.) lakhs
Modification of Milk components to increase the bio availability and nutritive value of Milk based products (RSP/23-24/VII-3)	Kerala State	Dr. Divya M.P	23

Research work for Master’s degree M.Tech:

SI No	Name of the student	Admission No.	Name of project	Department
1	Reji A J	2020-MDM-04	Technological characterization of functional paneer prepared from buffalo milk treated with β - cyclodextrin and thyme essential oil.	Dairy Chemistry
2	Aiswarya K Vijayan	2021-MDM-03	Effect of <i>Plectranthusamboinicus</i> on oxidative stability of Vechur ghee	Dairy Chemistry
3	Divya Valsan	2021-MDM-04	Process optimization for flavor enhancement of ghee	Dairy Chemistry

Ph.D. Research Projects:

SI No	Name of the student	Admission No.	Name of project	Department
1	Ms. Smitha J Lukose	2020-DDM-03	Formulation of hypoallergenic whey protein supplement with enhanced iron bioavailability	Dairy Chemistry

Research projects-External students:

Sl. No.	Name of the student & College	Name of Advisor	Title of project	Department	Duration
1	Devika Sudhevan MSc Food Technology and Quality assurance St George's College Kottayam	Dr. Divya M.P	Methods to reduce granule separation in ghee	Dairy Chemistry	February to April, 2023
2	Lakshmi Jayachandran MSc Food Technology and Quality assurance, St George's College Kottayam	Ms. Smitha J Lukose	Effect of iron fortification on coagulation efficiency of thermophilic curd and physicochemical properties of lassi prepared from fortified curd	Dairy Chemistry	February to April, 2023
3	Divya M.S. MSc Food Technology and Quality assurance, St George's College Kottayam	Ms. Smitha J Lukose	Effect of iron fortification on storage stability of iron fortified peda	Dairy Chemistry	February to April, 2023
4	Anjana M.R. Tharananellur Arts and Science College, Thanissery, Irinjalakkuda	Dr. Indu B	Preparation of Biscuits by incorporating Ghee Residue and Studying its physico chemical properties	Dairy Chemistry	March to May, 2023
5	Keerthi S Rajesh Tharananellur Arts and Science College, Thanissery, Irinjalakkuda	Dr. Indu B	Development of Kulfi incorporated with Hibiscus Flower	Dairy Chemistry	March to May, 2023
6	Amaniya K.S. Tharananellur Arts and Science College, Thanissery, Irinjalakkuda	Dr. Indu B	Standardisation of Instant coffee powder partially substituted with date seed powder	Dairy Chemistry	March to May, 2023
7	Sreelakshmi. M.S School of Health Science, Calicut University Campus	Dr. Indu B	Development of milk and walnut based spread enriched with millet	Dairy Chemistry	March to May, 2023

8	Ammu Lofyraj School of Health Science, Calicut University Campus	Dr. Indu B	Development of nutrient rich Horchata with poongar Rice	Dairy Chem- istry	March to May, 2023
9	Lisna Solomon School of Health- Science, Calicut University Campus	Dr. Indu B	Development of millet-based breakfast formula- tion enriched with pumpkin seed	Dairy Chem- istry	March to May, 2023
10	Reeha Rahim D.G.M.M.E.S, Mampad	Dr. Divya M.P	Development of Functional cow milk peda by in- corporating leaves	Dairy Chem- istry	April to June 2023
11	Misna Mustafa D.G.M.M.E.S, Mampad	Dr. Divya M.P	Detection limit of existing laboratory methods for added hydrogen peroxide and formaldehyde in milk	Dairy Chem- istry	April to June 2023
12	Ms. Sreenandhana A.Suresh, Vimala College, Thrissur	Dr. Divya M.P	Validation of for- mula method for deter- mining Total solids and SNF (Solids Not Fat) in milk	Dairy Chem- istry	November 2023 to January2024
13	Ms. Fidha Fathima M. S.Vimala College, Thrissur	Dr. Divya M.P	Modification of existing method for the determination of lactose content in fer- mented milk products	Dairy Chem- istry	November 2023 to January2024
14	Ms. Anagha K. P.Vimala College, Thrissur	Dr. Divya M.P	Comparison of different methods for the determination of Peroxide Value in Ghee	Dairy Chem- istry	November 2023 to January2024

2. Noteworthy attainments in Science and Technology

- Milk protein was modified by enzymatic hydrolysis to reduce allergenicity of known allergic whey proteins and freeze-dried iron fortified protein powder was prepared and analysed for physico-chemical characteristics. Bioavailability studies of fortified protein was done on animal models

- Fermented and heat desiccated milk products like curd, lassi and peda were prepared with added micronutrients
- Low Cholesterol paneer with enhanced functional properties was developed
- Enhanced oxidative stability of Vechur ghee by incorporating *Plectranthus amboinicus*
- A suitable starter culture combination and time temperature combination for flavour enhancement of buffalo ghee

3. Academic Manuscripts, Investigative Pursuits, Widely- read articles, Literary Volumes and Technical Documents, Details of research papers published

Research articles:

- Aswathy, M. R., Rajkumar,S.N., Singh, D., **Divya, M.P** and Aysha.C.H. 2023. Process standardization of fat replaced dietetic chhana kulfi using response surface methodology. *J. Vet. Anim. Sci.* 54(2):305-312. -30/06/2023
- Rose, H., Bakshi, S., Kanetkar, P., **Lukose, S. J.**, Felix, J., Yadav, S. P., Gupta , P. K. & Paswan, V. K. (2023). Development and Characterization of Cultured Buttermilk Fortified with *Spirulina plantensis* and Its Physico-Chemical and Functional Characteristics. *Dairy*, 4(2), 271-284.
- **Vyshak,V.L.**, Rahila,M.P., Faisal,I., **Lukose,S.J.**, **Divya,M.P.**, Sudhakaran,A. and Rajakumar,S.N. 2023. Extraction and characterization of nutmeg (*Myristica fragrans*) fruit pericarp essential oil to utilize as a surface coating material to improve the shelf life of paneer. *J. Vet. Anim. Sci.* 54(1): 144-152
- **Indu,B.** and Jaiprakash, H. M. (2023). Effect of Fractionation on the Composition, Physico-Chemical Properties, and Oxidative Stability Index of HF Ghee. *International Journal of Livestock Research*, 13 (2), 15-27
- Vishnu Suresh ., Ligimol James., A. K. Beena.,V. Aparna Sudhakaran and **M. P. Divya** .2023 Isolation, Identification and Characterization of Thermotolerant Psychrotrophic Bacteria from Market Samples of Pasteurized Milk Collected from Mannuthy, Kerala State, India. *Asian Food Science Journal*. 22(4), Page 10-23.
- Anupama, M.; Dharani Kumar, M., **Divya, MP.**, Davuddin Baig and Beena, AK. (2023). Storage studies on *Low calorie burfi* incorporated with *Sucralose* and *Costus speciosus* extract. *Indian Journal of Dairy Science* 76(3).
- Review paper on, Nanoemulsions: Potential Applications in Food, Health, and Cosmetics Industry- accepted for publication, **Dr. Indu.B**, Nishida N P., Soumyasree P T, Verghese Kurien Institute of Dairy and Food Technology, Kerala Veterinary and Animal Sciences University, *Journal of Tropical Agriculture*, Vol.61
- Aiswarya K Vijayan., Rachana C R., **Divya MP.**, Lijimol James and **Indu B.**2023. A comparative study on the effectiveness of *Plectranthus amboinicus* dried leaf powder and essential oil extract

on controlling oxidation in Vechur ghee. The Pharma Innovation Journal 2023; 12(11): 1460-1463

- Beena R L., Rajakumar, S N., Sajith Purushothaman, Sudheerbabu, P., Beena, A K and **Divya M P.** (2023). Assessment of growth responses of Wistar rats fed with a diet containing composite flour premix. Journal of Veterinary and Animal Sciences. 54(1):59-63
- Aiswarya V.G., Rachana C.R., Rejeesh R., Aisawrya S. Panicker., Rajkumar S N, **Divya M P.** and Rahila, M P. (2023). Effect of differential heat treatments on antibacterial activity of fermented goat milk. Journal of Veterinary and Animal Sciences. 54(1):102-114
- Reji A.J., **Divya M.P.**, Rajakumar S.N., Rejeesh R. and Beena A.K. 2024. Manufacture and characterization of Low Cholesterol Paneer Prepared from Buffalo Milk. Biological Forum – An International Journal. 16(1):161-165
- Divya KB, Sujith P, Rajakumar SN, Beena AK, **Divya M P**, Sudheer Babu P and Ramnath V. 2024. Physico-chemical properties of optimized Kaalan-A traditional dairy product. Indian J Dairy Sci 77(1): 30-39

Oral presentations and full paper

Abstracts presented in national and international seminars

- Vandhana P.S., Rasiya Tasni, **Divya M.P.**, “Development of Modified Peda with enhanced nutritional and Fiber content using Flax seeds and Oats”- Abstract in the National Conference on “Millets: Harnessing Ancient Grains for Modern Sustainable Development” held on September 21 & 22, 2023 at ANNA University, Coimbatore

Popular articles:

- Popular article published in The Hindu- on Kerala’s ‘Eat Right App’ to help people eat at hygienic places- **Dr. Indu B**, Assistant Professor, Department of Dairy Chemistry– 11/07/2023
- Vandhana P.S., **Smitha J Lukose.**, **Divya M.P.** 2024. ‘Arogya geevithathibbu aattinpal’ Popular article published in Karshakasree, February 2024.

Book Chapters:

- **M P Divya**, Y S Rajput, Rajan Sharma and K B Divya. CHAPTER 8: Molecularly imprinted polymers for the extraction and sensing of vitamins. IN Molecularly Imprinted Polymers for Environmental Monitoring. Fundamentals and applications IOP Publishing Ltd. August 2023 Pages 8-1 to 8-26.

4. Technological Advancements Crafted and Transmuted

- **Transfer of Technologies**- Nil
- **Dissemination of Innovations to society and institutions**- Nil

5. Consultancy and Public Advocacy

Department of Dairy Chemistry is providing Consultancy services to entrepreneurs and farmers in various areas of quality maintenance. Regular queries are answered by the experts of the department regarding chemical quality analysis of milk and milk products, calibration of laboratory glasswares as well as setting up of a quality control lab. Direct consultation as well as consultation over telephone is offered by the department.

Telephonic: 14

6. Patents- Nil

7. Unveiling Human Resources: Unlocking Potential and Pursuits

- **Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School- Nil**
- **Training Program/ Short courses/ Any other program organized- Nil**

8. Strategic Resources additions- New/ innovative achievements- Nil

9. Awards and Honors/ Endowments (department wise)- Nil

10. Distinguished visitors in departments- Nil

11. Beyond the horizons: Exploring other activities

Department of Dairy Chemistry has a fully functioning milk testing lab which offers its service to public for quality analysis of milk and milk products and calibration of laboratory glasswares. The faculty of the department is also providing consultancy service to the entrepreneurs and farmers. 34 samples (milk and various milk products) were analysed during the reporting period.

12. Other Academic activities

External examiner/ Question paper setter:

- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry- External question paper setter for Guru Angad Dev Veterinary and Animal sciences, Ludhiana- May 2023
- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry - External examiner for the conduct of Practical exam of Semester II of M. Voc Processing Technology at St. Theresa's College, Ernakulam on 23/06/2023
- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry - External examiner for evaluation of final semester theory examinations at Sri Venkateswara Veterinary Research Institute, Tirupati on 24/06/2023
- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry- External question paper setter for Guru Angad Dev Veterinary and Animal sciences, Ludhiana- July 2023
- **Dr. Indu B** Assistant Professor, Department of Dairy Chemistry - Question Paper Setter for Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar- Journal-December 23

Reviewer:

- **Dr. Indu B**, Assistant Professor, Department of Dairy Chemistry- Reviewer of Journal of Veterinary and Animal Sciences- July 2023

- **Dr Indu B**, Assistant Professor, Department of Dairy Chemistry- acted as Reviewer of ARCC journals- August 2023
- **Dr. Indu B**, Assistant Professor, Department of Dairy Chemistry-- Reviewer of British Food Journal-December

13. Other Research activities: Nil

14. Other Extension activities

- **Mrs. Smitha J Lukose**, Assistant Professor, Department of Dairy Chemistry handled a session on ‘Adulteration in milk and milk products’ for Assistant Directors from Animal Husbandry Department on 23/06/2023
- **Dr. Divya M.P**, Assistant Professor, Department of Dairy Chemistry- Radio talk on “പുലിപ്പിനെ ഗുണമേന്മ പരിശോധന” (Quality analysis of milk) in Jeevanadham-Talk show through All India Radio- Akashavani- Vayalum Veedum on 09/08/2023
- **Dr. Divya M.P.**, Assistant Professor, Department of Dairy Chemistry- handled a class for PG diploma in Food Safety and Quality Assurance Conducted by VPH Department COVAS Mannuthy on 14/09/2023
- **Dr. Indu B**, Assistant Professor, Department of Dairy Chemistry- Radio talk on “Importance of Ghee” in Jeevanadham-Talk show through All India Radio- Akashavani- Vayalum Veedum on 20/09/2023
- As per the direction of honorable Vice Chancellor, a committee of Five members including **Dr. Divya M.P** (Assistant Professor, Department of Dairy Chemistry) was constituted to study the quality parameters of milk from University Livestock Farm Mannuthy. The chemical quality analysis of milk from ULF Mannuthy was carried out during the period 20/09/2023 to 26/09/2023 in the Department of Dairy Chemistry
- **Mrs. Smitha J Lukose**, Assistant Professor, Department of Dairy Chemistry, - Talk on “Health benefits of milk” through Google Meet- Awareness class on Dairy Industry conducted by ‘Samagra Ksheera Karshaka Sangham” on 26/09/2023
- **Mrs. Smitha J Lukose**, Assistant Professor, Department of Dairy Chemistry & Ms. Anumol Devassykutty, Teaching Assistant, Department of Dairy Chemistry- handled a session for officers from Animal Husbandry Department on basic quality tests of milk and milk products & adulteration of milk on 23.11.2023
- **Mrs. Smitha J Lukose**, Assistant Professor, Department of Dairy Chemistry, - invited speaker in the International conference conducted by MES Kalladi in association with The Kerala State Higher Education Council on 24th & 25th January 2024

15. Other activities

- **Dr. Indu B**, Assistant Professor, Department of Dairy Chemistry served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Mr. Vyshak V L**, Teaching Assistant, Department of Dairy Chemistry served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023

DEPARTMENT OF DAIRY MICROBIOLOGY**1. Exploring Research Frontiers- Past achievements and current ventures****External aided projects:**

Sl No	Year	Principal Investigation officer	Funding Agency	Title of the project	Total outlay (Rs)
1	2023-24	Dr. A.K Beena Professor & Head Department of Dairy Microbiology	Kerala State	Multidisciplinary approach to combat concealed threats in dairy food chain- plan project 2023-2024-RSP/23-24/VII-2	22
2	2023-24	Dr. A.K Beena Professor & Head Department of Dairy Microbiology	Kerala State	Revolving fund starter culture	0.5
3	2023-24	Dr. A.K Beena Professor & Head Department of Dairy Microbiology	NAB-ARD	Developing & Establishing a cost Effective method to produce Dehydrated Dairy starters for Prospective Entrepreneurs of the State	13.32

Research work for Master's degree M.Tech:

Sl. No	Name of the student	Admission no	Name of the project
1	Aiswarya S.R	2020-MDM-06	An assessment of resistance and virulence of enterococcal isolates from dahi / thairu samples
2	Sneha . K	2021-MDM-06	Enzymatic profiling of indigenous lactic acid bacteria for food fermentations
3	Nishidha N.P	2021-MDM-05	Evaluation of autochthonous Lactobacillus sp. As adjunct cultures in improving the techno functional properties of feta type cheese from Malabari goat milk

4	Nimisha M (Ongoing)	2022-MDM-04	Associate action of lactic acid bacteria and yeast in the ecological niche of 'thayir' prepared by back slopping
5	Muhammed Salman PA (Ongoing)	2022-MDM-07	Assessment of Malabari goat milk feta type cheese as a matrix for the delivery of probiotics
6	Akshay Aravind (Ongoing)	2022-MDM-01	Characterization of biofilm forming micro flora isolated from organized dairy plants

Ph.D. Research Projects:

Sl. No	Name of the student	Admission No.	Name of project
1	Mr. Rejeesh R	2020-DDM-02	Rerouting of fermentative metabolism of Lactic acid bacteria to respiratory metabolism for improved performances as starter concentrates
2	Ms.Amrita .T.A (Ongoing)	2021-DDM-02	Metabolomic profiling of milk from Vechur-murrah and Malabari breeds fermented with wild strains of lactic acid bacteria

Research projects-External students:

Sl. No	Name of the student	Major Advisor	Name of the project	Time period
1	Ms. Aswini S Msc Microbiology Amrita School of Biotechnology, Vallikav	Dr. A. K. Beena	Functional characterization of <i>Lactocaseibacillus rhamnosus</i> and <i>Limosilatobacillus fermentum</i> isolated from indigenous sources	January-May-2023
2	Mr. Ananthakrishnan K.S Msc Microbiology Amrita School of Biotechnology, Vallikav	Dr.Aparna Sudhakaran V	Effect of <i>Withaniasomnifera</i> (Aswagadha) on the fermentation profile of probiotic lactic acid bacteria and development of probiotic fermented drink	January-May-2023
3	Ms. Asna Samad Msc Microbiology Amrita School of Biotechnology, Vallikav	Dr.Ligimol James	Assessment of techno functional properties of raw milk isolates of lactic acid bacteria for development of functional starter cultures	January-May-2023

4	<p>Ms. Sherrin Abraham</p> <p>Msc Food Technology and Quality Assurance</p> <p>Mount Royal College, Munnar</p>	<p>Dr.A.K. Beena</p>	<p>Thermal resistance of Multiple Drug Resistant lactic acid bacteria isolated from household curd</p>	<p>Feb-May,2023</p>
5	<p>Mr. Shojo Raj</p> <p>Msc Food Technology and Quality Assurance</p> <p>Mount Royal College, Munnar</p>	<p>Dr.Aparna Sudhakaran V</p>	<p>Development of whey based smoothie with the incorporation of corn cob</p>	<p>February-May,2023</p>
6	<p>Mr. Rahul Raja</p> <p>Msc Food Technology and Quality Assurance</p> <p>Mount Royal College, Munnar</p>	<p>Dr.Ligimol James</p>	<p>Assessment of kinetics of acidification and acid tolerance of low and high post fermentation acidifying lactobacilli cultures</p>	<p>February-May,2023</p>
7	<p>Ms. Akansha Sivarajan</p> <p>Msc Food Technology and Quality Assurance</p> <p>Mount Royal College, Munnar</p>	<p>Ms.Sreya Unnikrishnan</p>	<p>Development of a curd based dip using indigenous lactic acid bacteria</p>	<p>February-May,2023</p>
8	<p>Mr. Allwin Lowrance</p> <p>Msc Food Technology and Quality Assurance</p> <p>Mount Royal College, Munnar</p>	<p>Ms. Syama Mohan</p>	<p>Development of fermented milk products using indigenous lactic acid bacteria and herbs</p>	<p>February-May,2023</p>

9	Ms. Alfia K S MSc. Applied microbiology St. Thomas college, kottayam	Mr. Rajeeesh R	Stabilisation of culture premix using various matrices for improving viability during drying	April –July, 2023 (3 months)
10	Anjitha M Pullickal MSc. Applied microbiology St. Thomas college, kottayam	Ms. Aysha C H	Evaluation of bio functional potential of <i>pu-nics granatum</i> and its incorporation in value addition of yoghurt	April –July, 2023 (3 months)
11	Ajjal Thomas MSc. Applied microbiology St. Thomas college, kottayam	Dr. A K Beena	Thermo-tolerant lactic acid bacteria for preparation of dried starter cultures	April –July, 2023 (3 months)
12	Naseeha Farsana K P M.Sc Food Science and Technology, KUFOS, Kochi	Dr. A.K Beena	Process standardization and quality evaluation of millet incorporated kishk	May –August 2023 (3 months)
13	Adila C.K M.Sc Food Science and Technology, KUFOS, Kochi	Dr.Aparna Sudhakaran V	Millet incorporated symbiotic frozen yoghurt and its properties	May –August 2023 (3 months)

2. Noteworthy attainments in Science and Technology

- Development of well characterized starter cultures of industrial importance-Low acid producing Flavour producing and probiotic cultures
- Development of novel, innovative and value-added fermented milk products including frozen yoghurts and fermented beverages

3. Academic Manuscripts, Investigative Pursuits, Widely- read articles, Literary Volumes and Technical Documents, Details of research papers published

Research articles:

- Vishnu S., James,L., Beena,A.K., Aparna S.V.and Divya,M.P.2023. Isolation, Identification and Characterization of Thermotrophic Psychrotrophic Bacteria from Market Samples of Pasteurized Milk Collected from Mannuthy, Kerala State, India. Asian Food Science Journal. 22(4):10-23.
- Ambili M.V., Dinker S., Rajakumar S.N., Beena R.L.,

- Rejeesh R., James,L.,** Rashmi K.G.and Divya K.B. 2023. Shelf Life and Storage Studies on the Sensory Attributes of Dietetic Herbal Rasmalai. *Environment and Ecology* 41 (1A) : 321—325.
- Rajmohan, T. Sree Vishnu and **Beena, A. K. and James, Ligimol** and Babu, P. Sudheer and **Sudhakaran, Aparna and Rejeesh, R.** 2023. Evaluating the Effectiveness of Low Pressure Carbon Dioxide as a Hurdle in Raw Milk Storage. *European Journal of Nutrition & Food Safety*, 15 (4). pp. 10-15. ISSN 2347-5641
 - Silpa, R.K., **Ligimol, J., Beena, A.K.,** Divya, M.P., Aysha, C.H., **Aparna, S.V.** 2023. Effect of thermization of dahi on post fermentation acidification during refrigerated storage. *Vet. Anim. Sci.* 54(1):252-256.
 - Chandran A, **Beena AK,** Vaiyapuri M, John L, Rajakumar SN, Babu S, **James L** and Rahila MP. Detection of lytic phage infecting flavour-producing strain of *Lactocaseibacillus paracasei* in the dairy effluents of Kerala. *Journal of Dairy* <https://doi.org/10.1017/S0022029923000274>
 - Amrutha and **Beena** (2023). Assessment of probiotic properties of lactic acid bacteria isolated from passion fruit and potato in vitro j. *Indian vet. Assoc.* 21 (1) April 2023
 - Vyshak, V.L., Rahila, M.P., Faisal, I., Lukose, S.J., Divya, M.P., **Sudhakaran, A.** and Rajakumar, S.N. 2023. Extraction and characterization of nutmeg (*Myristica fragrans*) fruit pericarp-essential oil to utilize as a surface coating material to improve the shelf life of paneer. *J. Vet. Anim. Sci.* 54(1): 144-152
 - S. Mariya Divanshi, C. H. Aysha, **Aparna Sudhakaran V. and A.K. Beena.** 2023. Lactic Acid Bacteria – An Overview. 2023. In: Vignesh, S., Baskaran, N., Nambi V.E. and Loganathan, M. (ed.) *Prospective Research and Technological Advancements in Food and Health Sciences* (1st Ed.) Skyfox Publishing Group, US, pp. 229-247
 - K. Raj Silpa, **Ligimol James, A. K. Beena, R. Rejeesh,** C. H. Aysha, M. P. Divya. 2023. Assessment of pH variations during extended period of fermentation of cow milk with different lactic acid bacterial cultures. In: Vignesh, S., Baskaran, N., Nambi V.E. and Loganathan, M. ed. *Prospective Research and Technological Advancements in Food and Health Sciences*, Skyfox Publishing Group, US.
 - **Dr. A.K Beena** as co-author- Standardization and quality evaluation of barn yard millet incorporated probiotic yoghurt, *Indian journal of nutrition and dietetics* , Vol 60, II, Pg. 235-243
 - Rejeesh, R., **Beena, A. K., James, L.,** Sudheerbabu, P., Rajakumar, S. N., Rachana, C. R., & Viswanath, V. (2023). Characterisation of *Lactocaseibacillus rhamnosus* Isolated from Naturally Fermented Milk Product Samples of Tribal Regions of Thiruvananthapuram District of Kerala. *The Indian Veterinary Journal*, 100(10), 26-34.
 - **A.K.Beena., Ligimol James & Aparna sudhakaran V.** Probiotic Dairy foods as functional foods. Compendium of ‘Dairy products in human health and nutrition innovations opportunities’
 - S.R. Aiswarya., **A.K Beena., S.V. Aparna.,** C. Archana., C.H. Aysha. Antibio gram of *Enterococcus* sp. Isolated from house hold thayir sample. *Journal of Veterinary and animal sciences*
 - **Dr. A K Beena,** Professor and Head and **Dr. Aparna Sudhakaran V,** Assistant Professor, Department of Dairy Microbiology, Article –“The Evolving Role of Lactic Acid Bacteria as

Dairy Starters”, Souvenir, 50th Dairy Industry Conference from 4th- 6th March ,2024, page 73

- **Dr. A K Beena**, Dr. Rejeesh R, Department of Dairy Microbiology, article- “advancements in functional dairy products”, Souvenir, 50th Dairy Industry Conference from 4th- 6th March, 2024, page 111.

Abstracts:

- Dr. Rejeesh R,,Mr. Akshay Aravind, **Dr. A K Beena**, Department of Dairy Microbiology, - Abstract, “Developing Cost Effective Methodology For The Separation Of Lactic Acid Bacteria From Yeast- LAB Consortia”, Souvenir, 50th Dairy Industry Conference from 4th- 6th March ,2024, page 268
- Ms. Nimisha M, **Dr. A K Beena**, **Dr. Ligimol James**, Department of Dairy Microbiology, Abstract – “Isolation and Characterization of Non – Lactic Acid Bacteria from House Hold Curds”, Souvenir, 50th Dairy Industry Conference from 4th- 6th March ,2024, page 252

Oral presentation and paper:

- **Mr. Akshay Aravind**,M.Tech Scholar, presented a paper on “Identification, Isolation, Enumeration & pathogenic characterization of pink colony producing biofilm forming organism isolated from a market sample of pasteurized sample ” in the national seminar on *Microbiome-The Unseen* jointly organized by Department of Microbiology ,Sreesankara college kalady and Department of marine biology, Microbiology & Biochemistry ,CUSAT on 22.08.2023 & 23.08.2023.
- **Mr. Akshay Aravind** ,M.Tech Scholar presented a poster on “Isolation and characterization of E.coli isolated from commercial pickled brine used for pickling vegetables and assessing its multiple drug resistance” in international conference on” Antimicrobial resistance’ jointly organized by Department of Biosciences, MES College Marampally and Department of marine biology, Microbiology & Biochemistry ,CUSAT on 28.09.2023 & 29.09.2023.
- **Ms. Sneha.K** ,M.Tech presented a paper on “Comparative evaluation of probiotic characteristics of potent indigenous *Lactobacillus* strains for food fermentations” in the national seminar on *Microbiome-The Unseen* jointly organized by Department of Microbiology ,Sreesankara College Kalady and Department of marine biology, Microbiology & Biochemistry ,CUSAT on 22.08.2023 & 23.08.2023

Books/ Book chapters:

- S. Mariya Divanshi, C. H. Aysha, **Aparna Sudhakaran V.** and **A.K. Beena.**2023. Lactic Acid Bacteria – An Overview. 2023.In: Vignesh, S., Baskaran, N.,Nambi V.E. and Loganathan,M. (ed.) Prospective Research and Technological Advancements in Food and Health Sciences (1st Ed.) Skyfox Publishing Group,US,pp.229-247.
- K. Raj Silpa, **Ligimol James**, **A. K. Beena**, R. Rejeesh, C. H. Aysha, M. P. Divya. 2023. Assessment of pH variations during extended period of fermentation of cow milk with different lactic acid bacterial cultures. In: Vignesh, S., Baskatran, N.,Nambi V.E. and Loganathan,M. ed. Prospective Research and Technological Advancements in Food and Health Sciences, Skyfox

Publishing Group,US

Popular articles:

- Rejeesh, R., **Beena, A. K.**, Sudhir Kumar Tomar, S. K., & Archana Cand Akshay, P. K. (2023). Faecal microbiota transplantation-stool, a tool for wellness. *IJBS*, 5(1), 161-170
- Mariya Divanshi A S ,Sneha K and **Aparna S.V** Popular article on Emerging Concepts in the Probiotic field, Agritech Today Magazine,September,2023.
- **Aparna Sudhakaran.V** and Ms.Aysha C.H ,P65. Popular article on “Probiotics for intestinal disorders” in the souvenir of ‘Padavu’ 2022-23, Kerala state ksheerasangamam, Organized by Dairy Development Department, Kerala from 10/02/2023 to 15/02/2023. - Document No. 63
- A. K. Beena, **Aparna Sudhakaran.V** and Ms.Aysha C.H,P 71. Popular article on ‘Lactic Acid Bacteria an assessment, in the souvenir of ‘Padavu’ 2022-23, Kerala state ksheerasangamam, Organized by Dairy Development Department, Kerala from 10/02/2023 to 15/02/2023.

4. Technological Advancements Crafted and Transmuted

- **Transfer of Technologies-** Nil
- **Dissemination of Innovations to society and institutions-** Nil

5. Consultancy and Public Advocacy

- 64 (Over Phone calls and in person)

6. Patents- Nil

7. Unveiling Human Resources: Unlocking Potential and Pursuits

- **Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School**
- **National Seminar on “Antimicrobial resistance in probiotics-A food safety concern”:** Department of Dairy Microbiology, VKIDFT and Probiotic Association of India jointly organized a National Seminar on “Antimicrobial resistance in probiotics-A food safety concern” on 25th March, 2023 at VKIDFT, Mannuthy.

• **Training Program/ Short courses/ Any other program organized (details from each department)**

- Title:Preparation of fermented milk products and starter culture technology
Date: 25.07.2023 to 26.07-2023
Total participants: 18
- Demonstration on the preparation of fermented milk products for the farmers and small scale entrepreneur’s from Vypin block organised by dairy development department
Date: 20/12/2023
Total Participants: 25

8. Strategic Resources additions- New/ innovative achievements- Nil

9. Awards and Honors/ Endowments (department wise)

- **Amrita T A:** Participated and presented on the topic –Assessment of antibiotic resistance of thermoduric psychrotrophic bacteria isolated from market samples of pasteurized milk collected from Mannuthy, Kerala State, India- Pai, 25th March, 2023
- **Aiswarya S.R** Participated and presented poster in 29th Indian Convention of Food Scientists

and Technologists, 5-7 January, UHT Milk: a potential reservoir of MDR Bacteria.

- **Aiswarya S.R** Participated and presented in PAi, 25th March, An assessment of multiple drug resistant enterococci from household curd sample
- **Akshay Aravind** Secured 2nd prize in product innovation contest, Pai(25th March), idea: Lactose free low fat whey icecream
- **Akshay Aravind** Participated and presented on the topic: Isolation, enumeration and assessment of pathogenicity of pink colony producing, organisms from pasteurized milk
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology, has presented a paper and won the 1st prize in one day KSCSTE co-sponsored National Seminar on “Emerging Trends in Biotechnology for Sustainable Development” held at St. Mary’s College, Thrissur on 1st March 2024, which was organized by Department of Biotechnology.

10. Distinguished visitors in departments- Nil

11. Beyond the horizons: Exploring other activities

Revolving Fund starter culture

- Starter culture sales-45.70liters
- External MSc.Projects under RFSC-20 students

12. Other Academic activities

External Examiner/ Question paper setter:

- **Dr.Aparna Sudhakran V** As external examiner.- Mahatma Gandhi University, Kamdhenu University, Gandhinagar, Evaluator for the Innovation Challenge-2023(K-DISC)
- **Dr. A.K Beena:** expert identified by NTA, PSC expert
- **Dr.Aparna Sudhakran V.-** Sri Venkateswara Veterinary University , GADVASU, Ludhiana ,PSC Exams, PV Narasimha Rao Telegana Veterinary University, TNVASU, KUFOS, BIRSA, Agriculture University, Ranchi
- **Dr. Ligimol James:** PSC
- **Dr. Aparna Sudhakaran.V**, Assistant Professor, Department of Dairy Microbiology external examiner (Thesis evaluation-M.Tech), Khamdhenu university, Gandhi Nagar-17.07.2023 and 28.07.2023(PhD)
- **Dr. Aparna Sudhakaran.V**, Assistant Professor, Department of Dairy Microbiology acted as question paper setter for BIRSA Agricultural University, Ranchi -16th Dec 2023

Reviewer of journal:

- **Dr. A.K Beena:** JVAS(1), LWT, food science and technology(2)
- **Dr.Aparna Sudhakran V:** Journal of Applied Microbiology. Indian Dairy Man,
- **Dr. Ligimol James:** JVAS
- **Dr. A. K. Beena**, Professor & Head, Dairy Microbiology– Reviewer of the Journal LWT Food Science and Technology- July, September, 2023.
- **Dr. A. K. Beena**, Professor & Head, Dairy Microbiology– Reviewer of the Journal LWT Food Science and Technology, Journal of veterinary and Animal Sciences & Journal of Food Science and Technology, Dec. 2023
- **Dr. Aparna Sudhakaran.V**, Assistant Professor, Department of Dairy Microbiology, review-

13. Other Research activities

Sl No	Name of Microorganism	Accession Number	Source	
1	<i>Enterococcus faecium</i> strain DMAI03	OR105180	Curd	Aiswarya,S.R., Beena,A.K., Sudhakaran V,A., James,L. and Viswanath,V.
2	<i>Lactiplantibacillus plantarum</i> strain DMAG02	OR105028	Goat milk	T A,A., James,L., Beena,A.K., Sudhakaran V,A., Samad,A. and Viswanath,V.
3	<i>Lactiplantibacillus plantarum</i> strain DMAG03	OR105041	Goat milk	T A,A., James,L., Beena,A.K., Sudhakaran V,A., Samad,A. and Viswanath,V
4	<i>Lacticaseibacillus rhamnosus</i> strain DMPP01	OR105043	Pigeon pea	Sneha,K., Sudhakaran V,A., Beena,A.K., James,L. and Viswanath,V.
5	<i>Lactiplantibacillus plantarum</i> strain DMCD03	OR105050	Cow Dung	Sneha,K., Sudhakaran V,A., Beena,A.K., James,L. and Viswanath,V.
6	<i>Weissella confusa</i> strain DMWC02	OR105052	Green peas	Sneha,K., Sudhakaran V,A., Beena,A.K., James,L. and Viswanath,V.
7	<i>Pediococcus pentosaceus</i> strain DMAI01	OR105178	Curd	Aiswarya,S.R., Beena,A.K., Sudhakaran V,A., James,L. and Viswanath,V.
8	<i>Enterococcus faecalis</i> strain DMAI02	OR105179	Curd	Aiswarya,S.R., Beena,A.K., Sudhakaran V,A., James,L. and Viswanath,V.

14. Other Extension activities

- **Dr.Ligimol James**, Assistant Professor, Department of Dairy Microbiology -Handled a session on 'Quality control of milk and milk products' as part of the Five days of training on Food safety and quality control of foods of animal origin organized by the Department of Veterinary Public Health from 11.07.2023 to 15.07.2023
- **Dr. A.K .Beena**, Professor and Head, Department of Dairy Microbiology had given a talk on

‘Probiotic and prebiotics’ in “Sheeramekhala oru avabodham” organized by Samgra sheera karshaka sangam on 26th September ,2023

- **Dr. A.K .Beena**, Professor and Head, Department of Dairy Microbiology had given a talk on Probiotic dairy products as functional foods’- International conference on dairy products in human health and nutrition; innovations and opportunities organized by Indian Dairy Association Tamil Nadu chapter and Department of nutrition and dietetics Periyar University Selam on 14th December 2023
- **Dr. A.K .Beena**, Professor and Head, Department of Dairy Microbiology had given a talk on ‘ Fermented milk products the trend sectors in dairy industry’ organized by ICAR NAHEP,CAAST workshop at KAU on 16th December 2023
- **Dr. A K Beena**, Professor and Head, Department of Dairy Microbiology, as a Convenor in the National Seminar on Advances in Functional Foods and Nutraceuticals: Bioactive Compounds, Fermentation and Value Addition”, organized by the Association Of Food Scientists And Technologists (India), Thrissur chapter , in association with KVASU on 28th February 2024 at seminar hall, VKIDFT, Mannuthy, Thrissur
- **Dr .Ligimol James**, Assistant Professor, Department of Dairy Microbiology had given a talk on ‘Pulippicha palulpannangal’ Jeevanadham radio programme on 06.09.2023
- **Dr. Ligimol James** being the evaluator of the YIP 5.0 district level evaluation at St. Anne’s convent girls high school, west fort organized by K-DISC in association with Samagra shiksha Kerala and Kerala startup mission on 14th October 2023
- **Dr. Aparna Sudhakaran V** , Asst Professor, Dept. Dairy Microbiology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Ms. Sreya Unnikrishnan**, teaching Assistant , Dept. Dairy Microbiology served as mentor of ELP programme of 2019 Dairy Technology batch for the period of October- December 2023
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology, was selected as an evaluator for the Innovation Challenge - 2023 conducted by the Kerala Development and Innovation Strategic Council (K-DISC) as part of the One Local Government One Idea (OLOI) project held on 09/05/2023
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology **acted as convener for the World Milk Day Celebrations 2023**
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology **acted as acted as coordinator for the National Milk Day celebrations 2023**
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology acted as Act-ed as Coordinator of “Training on preparation of fermented milk products- yoghurt and starter culture technology from 01/02/2023 to 02/02/2023, organized by Revolving fund starter culture, Department of Dairy Microbiology, VKIDFT, Mannuthy in association with IDA Kerala chapter
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology acted as one of Training Co-ordinators, VKIDFT for the programme three month Departmental obligatory training programme for the first and second batch of Assistant Directors of the Dept. of Animal Husbandry, for the financial year 2023-2024

- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology acted as coordinator and resource person for the internship programme conducted for bachelor of vocation students under “Revolving fund project –Starter culture”, Department of Dairy Microbiology, VKIDFT 2022-2023
- **Dr. Aparna Sudhakaran V**, Assistant Professor, Department of Dairy Microbiology Coordinated the activities of KVASU Pavilion, Thrissur Pooram Exhibition on 07-05-2023

15. Other activities

- Celebrated international microorganism day on 20/09/2023 and conducted several activities such as quiz competition and games, at VKIDFT conference hall.

DEPARTMENT OF DAIRY BUSINESS MANAGEMENT

1. **Exploring Research Frontiers - Past achievements and current ventures-** Nil
2. **Noteworthy attainments in Science and Technology -** Nil
3. **Academic Manuscripts, Investigative Pursuits, Widely- read articles, Literary Volumes and Technical Documents, Details of research papers published**
 - **Dr. Neethu Lazar**, Geo Paul K and Nitha Unnikrishnan (2023). Perceived effectiveness of workplace counselling programme: A survey among the supervisors and employees of manufacturing industries in Central parts of Kerala. Humanities and Social Science Studies (HSSS), 12 (2).

Oral Presentations:

- **Dr. Neethu Lazar** has presented a paper entitled “Credit card - either a pro-active way to transact or an incursion into the spending habits” in the International Conference on ‘Banking, Finance and Accounting Research organized by FISAT Business School on April 17 th & 18 th , 2023.
- **Dr. Neethu Lazar** and Dr. Geo Paul K. have presented a paper entitled “Perceived effectiveness of workplace counselling programme: A survey among the supervisors and employees of manufacturing industries in Central parts of Kerala” in a Virtual International Conference on Sustainable Evolution of Indian Economy organized by SKP Arts & Science College for Women, Chennai on 30.08.2023.

4. **Technological Advancements Crafted and Transmuted**
 - **Transfer of Technologies-** Nil
 - **Dissemination of Innovations to society and institutions-** Nil
5. **Consultancy and Public Advocacy-** Nil
6. **Patents-** Nil
7. **Unveiling Human Resources: Unlocking Potential and Pursuits**
 - The Department of Dairy Business Management has conducted a one-day Workshop on “JASP Software for Data Analysis” on 02/12/2023. The faculty members including **Ms. Bincy T J (Coordinator)**, **Er. Janice E.J (Assistant Coordinator)**, **Ms. Keziya Eliza Giji (Assis-**

tant Coordinator), Committee members:- Dr. Neethu Lazar , Ms. Asha Alphonse have attended the workshop.

- Ms. Bincy T. J attended Two Credit Course on Research and Publication Ethics of 36-hours-duration (Department of Library and Information Studies and the Research and Development Cell of St. Thomas College (Autonomous) 18 May 2023 to 10 June 2023)
- “SAS Programming Course”(Department of Statistics, University of Lucknow, Lucknow (March 16, 2024 – May 04, 2024)-Workshop on JASP Software for Data Analysis. (02.12.2023) attended by **Ms. Bincy T J**

• **Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School- Nil**

• **Training Program/ Short courses/ Any other program organized (details from each department)**

• Department of Dairy Business Management organized a one day Workshop on “JASP Software for Data Analysis” in association with Computer Club on 02/12/2023

8. Strategic Resources additions- New/ innovative achievements- Nil

9. Awards and Honors/ Endowments (department wise)- Nil

10. Distinguished visitors in departments- Nil

11. Beyond the horizons: Exploring other activities- Nil

12. Other Academic activities

- Ms. Bincy T.J, Teaching Assistant, Dairy Business Management- member of Time Table Committee.
- Ms. Bincy T. J, Teaching Assistant, Dairy Business Management is providing advice and support for statistical analysis of both internal and external student projects using softwares such as MS Excel, SPSS etc.
- A computer lab is functioning under Dairy Business Management Department with 22 computers and the facilities for taking printouts and photocopies. Softwares like SPSS, R, AutoCad are installed. Students can avail these facilities for their academic purposes. The lab is accessible to all the students and faculty of the college. The functioning of the computer club typically revolves around creating a vibrant and supportive community for students who share academic, extension and co- curricular activities. The club is usually led by an Executive committee which includes Dean, Head of Dairy Business Management Department, faculty in charge of computer club and Students union members.

13. Other Research activities - Nil

14. Other Extension activities – Nil

15. Other activities

- Ms. Kesiya Eliza Giji, Teaching Assistant, Dairy Business Management- one of the tour officers of South India tour of 2021 Admission Students conducted from 02/08/2023 to 13/08/2023

FOOD TECHNOLOGY

1. **Exploring Research Frontiers- Past achievements and current ventures- - Nil**
2. **Noteworthy attainments in Science and Technology - Nil**
3. **Academic Manuscripts, Investigative Pursuits, Widely- read articles, Literary Volumes and Technical Documents, Details of research papers published**

Research Articles:

- **Arya K. Salu** (2023), “Effect of Starch and Honey Coating on the Shelf Life of Pomegranate Arils in Refrigerated Condition”, *International Journal of Trend in Scientific Research and Development*, 7(3): 611-617
- Sana Wilson, Wafa Navas, **Arya K. Salu** (2023), Probiotics and Its Therapeutic Effects: A Review, *International Journal for Multidisciplinary Research*, 5(6)

Popular Articles:

- **Subith. C ,Aysha C. H.**, 2023, Recent Advancements in Biosensing Strategies for Enhanced Food Safety Applications, Food infotech. <https://www.foodinfotech.com/recent-advancements-in-biosensing-strategies-for-enhanced-food-safety-applications/>
- **Subith. C ,Aysha C. H.**, 2023, Microbial Lipids in Food System; Future Trends, Food infotech. <https://www.foodinfotech.com/microbial-lipids-in-food-system-and-the-future-trends-an-overview/>
- Shehna S, Meghana Sajeev, **Subith C**, 2023, Nutritional qualities of millet protein, <https://www.foodinfotech.com/nutritional-and-functional-properties-of-millets-an-overview/>
- Wafa Navas, Sana Wilson, **Subith C**, 2023, Exploring Consumer Acceptability of lab grown meat: Bridging the gap between innovation and palatability, <https://www.foodinfotech.com/exploring-consumer-acceptability-of-lab-grown-meat/>
- Febit K. Saji, **Arya K. Salu** and Sasmila Bai S. M. (2023), Emergent Preservation and Packaging Techniques for Food Storage , *AgriTech today*, 1(7), 82-85

Abstract/ Poster presented in international seminar

- **Mr. Faizal I.**, Assistant Professor (On Deputation), Food Process Technology- presented poster on “A comparative study of vegan mayonnaise formulated from horse gram and green gram” on 09/12/2023 at IFCON, Mysore
- **Mr. Subith C.**, Teaching Assistant, Food Process Technology- presented poster on “Simulated growth effect of Lactococcus Lactis ssp. cremoris with Lactobacillus rhamnosus GG in Blueberry based finger millet probiotic drink under aerobic condition” on 09/12/2023 at IFCON, Mysore
- **Mr. Subith C.**, Teaching Assistant, Food Process Technology- presented poster on “Degradation of oxalates by fermentation of Averrhoa carambola and pearl millet based probiotic drinks” on 09/12/2023 at IFCON, Mysore

4. **Technological Advancements Crafted and Transmuted**

- **Transfer of Technologies- Nil**
- **Dissemination of Innovations to society and institutions- Nil**

5. **Consultancy and Public Advocacy**

- Analytical & Technical Consultancy given to KUDUMBASREE by **Dr. Indu B., Ms Simi M S** and **Ms Suhaila A A** of Department of Food Safety & Quality Assurance- June 2023
- Technical Consultancy given to Ananthapadmanabhan, Romal hot foods by **Dr. Indu B** and **Dr Arya K Salu** of Department of Food Processing Technology- April 2023
- Analytical & Technical Consultancy given to ESTOM healthmix by FSQAC **Dr. Indu B., Ms Simi M S** and **Ms Suhaila A A** of Department of Food Safety & Quality Assurance - May 2023
- Technical consultancy to CaiCo on tomato sauce by **Mr. Faizal I.** of Department of Food Processing Technology- May 2023
- Production for expansion for Neera based Products, Ollur farmers producers company by **Mr. Faizal I.** of Department of Food Processing Technology- May 2023
- Technical support provided to Farmers producers company, Mala on minimal produced vegetables by **Mr. Faizal I.** of Department of Food Processing Technology- May 2023
- Compositional analysis of new products developed by St. Joseph school Thrissur by Mrs. **Suhaila A.A.** and **Mrs. Simi M.** of Department of Food Safety & Quality Assurance- May 2023

6. Patents- Nil

7. Unveiling Human Resources: Unlocking Potential and Pursuits

Seminars/ Workshops/ Summer Institutes/ Symposium/ Winter School

- National Seminar in connection with, FOODSALVATIO'23 was organized by VKIDFT in association with Food safety department and Association of Food Scientists and Technologists on 09/06/2023
- National level seminar on topic "Quality assessment of water and its public significance", FOOD ZONE'23 was organized by VKIDFT from 27/10/2023 - 30/10/2023
- **Training Program/ Short courses/ Any other program organized (details from each department)- Nil**
- Hands on training program conducted by students of 2019 batch on value added food products - SUBHIKSHAM '23 – 19/07/2023 to 21/07/2023
- Experiential learning program of 2019 batch food technology students was conducted from 24/05/2023 to 21/07/2023
- Ms Aysha C H, Mr Faisal I, Ms Ritty Kuriakose, Ms Sasmila Bai S M, Dr Arya K Salu, Ms Simi M S, Ms Suhaila A A, Mr Ajay R, Mr Subith C have attended National Seminar in connection with World Food Safety Day 2023- Food Salvatio'23 conducted at VKIDFT, Mannuthy on 09.06.23
- Ms Aysha C H, Mr Faisal I, Ms Ritty Kuriakose, Ms Sasmila Bai S M, Dr Arya K Salu, Ms Simi M S, Ms Suhaila A A, Mr Ajay R, Mr Subith C, Ms Radhika K S, Mr Jithin Mohan K have attended Interactive session on Artificial Intelligence organized by VKIDFT taken by Mr. Razin from St.Thomas college, Thrissur on 16/08/2023
- Ms Sasmila Bai S M, Dr Arya K Salu, Ms Simi M S, Ms Suhaila A A, Mr Ajay R, Mr Subith C, Ms Radhika K S have attended International Webinar on «Emerging Approaches in Food Processing Technology» organized by DSLD- College of Horticultural Engineering and Food Technology, Devihosur, Haveri, Karnataka, India, on 6/10/2023

- Ms Aysha C H, Ms Ritty Kuriakose, Mr Subith C have attended Sensitization workshop on NA-HEP component to activities conducted at VKIDFT, Mannuthy on 15/09/2023
- Ms Ritty Kuriakose, Ms Radhika K S, Dr Arya K Salu attended Sensitization workshop on NAAC accreditation and high impact publications organized at Indraneelam seminar hall, CVAS, Mannuthy on 11/08/2023
- Mr Faisal I, Ms Ritty Kuriakose, Ms Sasmila Bai S M, Dr Arya K Salu, Ms Simi M S, Ms Suhaila A A, Mr Ajay R, Mr Subith C, Ms Radhika K S have attended National Seminar on “Advancements in Functional foods and Nutraceuticals” conducted at VKIDFT, Mannuthy on 28/02/2024
- Ms Ritty Kuriakose attended National Seminar on Emerging Trends in Biotechnology for Sustainable Development conducted at St Mary’s College Thrissur on 01.03.24
- Mrs. Radhika K S has participated in Workshop on ‘JASP Software for Data Analysis conducted at VKIDFT on 02/12/2023
- Mr. Faizal I. and Mr. Subith C. participated in International seminar - IFCON 2023 conducted at CFTRI, Mysore on 07/12/2023 - 10/12/2023
- Mrs. Sasmila Bai has taken part in Faculty development program happened in KAU, Vellanikkara on 27/11/2023-02/12/2023
- Mr. Jithin Mohan has taken part in Faculty development program happened in GEC, Thrissur from 03/12/2023-05/12/2023
- Mr. Jithin Mohan has taken part in Faculty development program happened in RIT, Rajaramnagar from 5/02/2024-10/02/2024

8. Strategic Resources additions- New/ innovative achievements- Nil

9. Awards and Honors/ Endowments (department wise)

- Project –Prototype of an equipment using hurdle technology to reduce microbial load in clarified juices selected for incubating in technology business incubator for 2023-24 by TBI GEC Thrissur.
- Nithya P N of 2018 batch secured 1st rank in ICAR AIEEA (PG)
- Project –Prototype of an equipment using hurdle technology to reduce microbial load in clarified juices secured 1st prize in 10th National Level Technical Project Exhibition and competition – SRISHTI 2024

10. Distinguished visitors in departments- Nil

11. Beyond the horizons: Exploring other activities- Nil

12. Other Academic activities

External Examiner/ Question paper Setter:

- Question paper Moderator – FAISAL I - TNJFU-U.G- B.Tech (FT) Degree - Moderation of question paper for IV Semester Final Theory Examinations – July 2023

13. Other Research activities - Nil

14. Other Extension activities

Food Safety Awareness programme for students conducted at

- Lourdes Up School, Eastfort, Thrissur – 05-06-23
- Don Bosco School – 06/06/23
- AUP School kannara -06/06/23

Food Safety Awareness programme for public

- Gandhi Square, mannuthy – 07/06/23
- Sakthan Stand, Thrissur – 08/09/23

15. Other activities

- Exhibitions organized- Students exhibition stall and demonstration –PADAVU 2023
- Organising World Food Day programmes – Foodzone ‘23 by Mr. Faizal I. Attended “Paal Vaaram” duties by different staffs at VKIDFT from Nov 24th to 29th
- Interactive session conducted CDSTGA Alumni association with Dr. Sodhi was attended by Mrs.Aysha C. H., Mr. Faizal I and Mr. Subith C.

PHYSICAL EDUCATION

Department of Physical Education, the full-fledged department that manages physical education programmewas established with one Assistant Professor in 2015. Department conducts various tournaments which not only improve the sporting talent of the students, but also help them to improve their organizational and leadership qualities. Department conducts extension activities for the benefits of students and society. The Department is fully dedicated to prepare promising sports persons and to mould physically fit, mentally sound, emotionally balanced and socially responsible youngsters for the society.

Major activities of the department:

To maintain the physical fitness of the students, various indoor games, outdoor games, fitness centre and recreation facilities are made available. The students are trained for inter-collegiate, inter-university, state level and national level competitions in various sports and games events. The practice and coaching sessions are conducted from 06:30 to 08:00 am in the morning and 4.30 to 6.30 pm in the evening. Recreation facilities are arranged in the college to engage students during the leisure time. Every year, the students are divided into four groups and interclass sports and games like Badminton, Chess Cricket, Football, Table tennis, Volley ball and Athletics are conducted.

Physical fitness training is provided to B.Tech students from 6.30 am to 8.00 am & 5.00 pm to 6.30 pm. This helps the students to improve their physical fitness components, motor abilities and to maintain good health.

The Department provides coaching to selected students of the College in various disciplines like athletics, volleyball, football, shuttle badminton, table tennis and cricket. The training is given in a scientific and systematic manner as to prepare students for the highest level of performance.

Health and Fitness facilities:

Considering the importance of health and fitness aspects of the whole community of the college, a health and fitness centre that houses modern equipment is set up in the college premises. The facilities are made available to students and faculty during all working days from 6.00 am to 9.00 am in the

morning and 4.30 pm to 7.00 pm in the evening.

Facilities available:

The sports facilities in Mannuthy Campus are open to all students of the University and are as given below:-

Games & Sports	Equipment and Infrastructure	No.
Outdoor sport		
Athletics	400 mts Track and Field	1
Cricket	Cricket Field	1
Football	Football Ground	1
Volleyball	Volleyball Court, 2	2
	Cricket Nets	2
	Practice Area	-
Basketball	Basketball Court	1
Indoor sport		
Table Tennis	Table	2
Shuttle Badminton	Shuttle Badminton Court	2
Health and Fitness Centre (Gym)	Equipment Like Treadmill, Upright Cycle, Lat Pull with Mid Row, Lying Leg Curl, Leg Extension, Smith Machine, Ab Conditioner Ladder, Fid Bench 90 Degree Pro Style Dumbells-285kg, Olympic Weight Plates-290kg, Rods-7	1

COLLEGE OF DAIRY SCIENCE AND TECHNOLOGY KOLAHALAMEDU, IDUKKI



1. ACADEMIC EXCELLENCE

B. Tech. (Dairy Technology) is a unique job oriented professional degree programme which leads to the overall development of graduates and make them capable to face various situations in the field of dairy and food industry. The total credits have been apportioned to Dairy Engineering, Dairy Technology, Dairy Chemistry, Dairy Microbiology and Dairy Business Management disciplines with due weight age for each. The students are also required to undertake a South Indian study tour and an All India study tour as a part of the course curriculum during which they are required to visit the important institutions and commercial dairy plants across the country. The last semester of the B. Tech programme is set apart for In-plant training and Farm training.

Students are exposed to the entire gamut of operations taking place in professionally managed dairy processing units, which help them to acquire the required skill-set and confidence to work as highly motivated professionals for the emerging dairy industry. They are also enriched with entrepreneurial qualities to start their own industrial units. For this, they have to successfully complete an 'Experiential Learning Programme' during the seventh semester. All the students are required to undergo hands on training in the experimental dairy plant during the seventh semester and undergo Internship during the final semester. The Internship programme is organized in dairy farms for a period of 30 days and in commercial dairy plants for a period of 70 days. The programme provides every student, the required practical exposure in scientific management of organized dairy farms and also in the operation, maintenance

and management of large scale commercial dairy processing units. Apart from this they also undergo a field extension training for a week.

2. ADMISSION EXCELLENCE

The college is offering four year professional B.Tech. programme (4 years) in Dairy Technology. The candidates admitted to B. Tech (Dairy Technology) programme are selected through the Common Engineering Entrance Examination conducted by Govt. of Kerala and admission is for 20 students per year which is increased to 22 per year from 2020. The course curriculum for B.Tech. (Dairy Technology) is as specified by the Indian Council of Agricultural Research (ICAR), New Delhi. The college has presently admitted 4 batches of students comprising a total of 53 students into the B. Tech. programme through KEAM. College is functioning with well infrastructure facilities and student amenities.

3. MYRIAD OF LEARNING PATHWAYS: DIVERSE COURSES AND DEPARTMENTS

The candidates admitted to B. Tech (Dairy Technology) residential programme are selected through the Common Engineering Entrance Examination (KEAM) conducted by Govt. of Kerala. They should have completed Class XII or its equivalent examination with Chemistry, Physics and Mathematics as optional subjects and should have secured an aggregate of 50% marks or above in these subjects in the qualifying examination. The candidates can choose their option for this course among other graduate courses in Engineering.

Title of the Programme	Level	Duration (Years)	Year of Starting	Sanctioned annual intake
B. Tech (Dairy Technology)	UG	4 (8 Semesters)	2017	22 students (from 2020 inwards)

As on 31-03-2024, there are 7 teachers and 6 non-teaching staff in the college.

STRENGTH OF STUDENTS AND GENDER DISTRIBUTION

Presently, there are 4 batches of students admitted for the programme. 2019 Batch (15 students) passed out by March 2023.

Year of Study	Admission	Semester	Total	Male	Female
			B. Tech (DT)		
1 st Year	2023	I	12	2	10
2 nd Year	2022	III	11	3	8
3 rd Year	2021	V	11	3	8
4 th Year	2020	VII	15	3	12
Total			49	11	38

DEPARTMENTS:

Sl. No.	DEPARTMENT
	Dairy Technology
1	Dairy Technology
2	Dairy Engineering
3	Dairy Microbiology
4	Dairy Chemistry
5	Dairy Business management
6	Dairy Extension
7	Dairy Husbandry

COURSE CURRICULUM:

UG PROGRAMME

DEPARTMENT-WISE DISTRIBUTION OF COURSES FOR B.TECH (DAIRY TECH) DEGREE PROGRAMME

No.	Name of the Department	Credit Hours
1	Dairy Technology	33 (21+12)
2	Dairy Engineering	34 (21+13)
3	Dairy Business Management Dairy Extension & Dairy Husbandry	27 (20+7)
4	Dairy Microbiology	17 (11+6)
5	Dairy Chemistry	17 (11+6)
	Total	128

Non-Credit Courses			
No.	Catalogue No. of course	Name of the course	Credit Hours
1	SREV 1201	Students READY Exposure Visit I -7 days	5 (0+5) *
2	SREV 2201	Student READY Exposure Visit – II -23 days	5 (0+5)
3	DT 4112	Student READY In-Plant Training	20(0+20)
4	DT 4113	Student READY experiential Learning Module	10(0+10)
		Total	40 (0 + 40)

* * - Non-credit course (not included in the credit load)

** - Non-credit optional course (not included in the credit load)

Total Class room credits (up to VIIth semester) = 128

Total credits for work experience = 30

Total credit load (excluding non-credit courses) = 128

Total credits for Non-credit courses = 40

STRENGTH OF STUDENTS AND GENDER DISTRIBUTION

Presently, there are 4 batches of students admitted for the programme. 2017 batch (18 students) passed out by February 2022.

Year of Study	Admission	Semester	Total	Male	Female
			B. Tech (DT)		
1 st Year	2023	I	12	2	10
2 nd Year	2022	III	11	3	8
3 rd Year	2021	V	11	3	8
4 th Year	2020	VII	16	3	13
Total			50	11	39

1. Tapestry of Expertise and Dedication: Empowering Faculty

FACULTY MEMBERS

Sl. No.	Name of the Teaching Staff	Discipline/ Department	Designation	Email ID
1	Ms. Asha Ashok	Dairy Engineering	Special Officer/ Assistant Professor	spocdstklmd@kvasu.ac.in
2	Mr. P Nandagopal	Dairy Technology	Assistant Professor	nandagopal.p@kvasu.ac.in
3	Ms Prema K S	Dairy Microbiology	Teaching Assistant (Daily Wages)	prema11may@gmail.com
4	Ms Rinchu S Rajan	Dairy Business Management	Teaching Assistant (Daily Wages) (re-signed october)	rinchu.srajan123@gmail.com
5	Vidya Mol V V	Dairy Business Management	Teaching Assistant (Daily Wages) (Joined october 2023)	Vidyavv91@gmail.com
5	Ms Rinjumol K R	Dairy Chemistry	Teaching Assistant (Daily Wages)	rinjukr1994@gmail.com
6	Mr. Anas P	Dairy Engineering	Teaching Assistant (Daily Wages)	anaspottayil0@gmail.com
7	Ms. Milu Emmanuel	Physical Education	Teaching Assistant (Daily Wages)	

OFFICE AND NON-TEACHING STAFF

Sl. No.	Name of the Teaching Staff	Designation	Email ID
1	Mr. Sanoje Kumar A.C	Administrative Officer	officecdstklmd@kvasu.ac.in
2	Ms. Sona S	Assistant	
3	Mr. Shan S	Assistant	
4	Mr. Ajal P	Computer Assistant Sel Gr.	
5	Ms. Preethy Prasannan	Assistant (Daily Wages)	
6	Ms. Arya Chandran	Assistant (Daily Wages)	
6	Mr. Sajjan C S.	Reference Assistant (Daily Wages)	cdstklmdlibrarian@kvasu.ac.in
7	Ms. Reenu Anna Mathew	Reference Assistant	
8	Aparana K S	Farm Assistant	appuaparnaks98@gmail.com
9	Dhanya T P	Lab Assistant	dhanyatp99@gmail.com

2. PROSPERING UNIVERSITY LIFE: VIBRANT CAMPUS EXPERIENCE

WORLD ENVIRONMENT DAY

As part of the celebrations of World Environment Day 2023, the students of the college undertook a cleanliness campaign of the college campus on 5th June 2023. The cleanliness campaign was initiated by the NSS Unit of the college.

The NSS volunteers gathered to clean the surroundings of the individual buildings in the campus. NSS volunteers enthusiastically collected plastic wastes, tea cups, weeds, and dry leaves spread over the surrounding areas. The volunteers gathered all the waste and trash bags to the place where the college arranged for the removal of collected wastes. The whole cleaning drive was quite inspiring and motivating for the NSS team members.

Also, as part of World Environment Day, planting of saplings was carried on in the college premises. In order to make the campus green, NSS volunteers plant saplings regularly campus-wide on various occasions.



COLLEGE OF DAIRY SCIENCE & TECHNOLOGY, KOLAHALAMEDU



World Environment Day

05 June 2023



NSS UNIT NO.: 08

INTERNATIONAL YOGA DAY 2023

The international yoga day is celebrated on 21st June since 2015 to bring peace, harmony, happiness and success to every soul in the world. The date was assigned for the occasion as it is the longest day when the sun is out at it most compared to every other day of the year. Yoga rejuvenates our body and mind. This year we had celebrated the 9th International yoga day by College of Dairy Science and Technology, Kolahalamedu. Theme for the day was “Vasudhaiva Kutumbakam”.

The programme started at 10:00 AM. The welcome speech was given by P.Nandagopal Assistant Professor, Department of Dairy Technology. Dr Muralidharan, Yoga trainer was the resource person for the day. He had taken a very informative class regarding the importance of yoga and the relevance of yoga in our day to day life. Students got the chance to know how yoga embodies unity of mind and body. The practice helps a lot to refine the students and make them realize the importance of mental and spiritual health and stress-free life. The programme ended with a vote of thanks by Gauri Parvathy (Batch 2020).



Yoga day celebrated at CDST, Kolahalamedu with Dr. Muralidharan

WORLD MILK DAY 2023

On 1st June 2023, College of Dairy Science and Technology Kolahalamedu celebrated World Milk Day. College of Dairy Science and Technology celebrates this day with full enthusiasm. This year, on this occasion a Quiz competition and Speech competition was conducted.

The Special officer hoisted the flag on the college campus by 10:00 AM and delivered the speech on dairy industry focus on reducing its environmental footprint, while also providing nutritious foods and livelihoods, to raise awareness of the messaging and action towards Dairy Net Zero.

Quiz competition was held at College Auditorium. The programme was coordinated by P.Nandagopal Assistant Professor, Department of Dairy Technology. The students showcased their brilliance by rapidly answering the questions. The student teams participated actively. It was very informative and knowledge enriching competition for the participants along with the audience. The students also conducted a flashmob in front of the college to raise awareness and importance of the Milk Day.



Flash Mob by CDST, Kolahalamedu students as part of World Milk Day celebration



Flag hoisting by The Special Officer, Ms. Asha Ashok as part of World Milk Day celebration



Quiz conducted by Sr. Nandagopal P., as part of World Milk Day Celebration

NATIONAL MILK DAY CELEBRATION 2023

The College Of Dairy Science and Technology, Kolahalamedu celebrated 102nd anniversary of the Milkman of India, National milk day on 26th November 2023. The Dairy Expo “JEEVANEEYAM’23” was scheduled from November 24th to 26th, 2023 at the college incubation Centre, Kolahalamedu. The programme featured a lively flashmob, a competitive poster-making event, and “JEEVANEEYAM 23” Dairy Expo. On November 24th, a vibrant flash mob took place at Elappara Town, featuring the enthusiastic participation of the students. “JEEVANEEYAM’23” Dairy Expo was inaugurated on 25th November 2023 by Prof. Dr. M. R Saseendranath, The Honourable Vice Chancellor, KVASU. Additionally, there was a tribute to Dr. Verghese Kurien. The programme included a welcome speech by Suhada Saheed (Secretary), a presidential address by The Special Officer Asha Ashok, felicitation by Nandagopal. P (Associate patron) and vote of thanks from Sheethal Simon (joint secretary). The dairy expo consisted of 7 stalls. The first stall exhibited an introduction, basic awareness about the university and the college. The second stall dedicated for the sale of desiccated milk products like chocolate peda, carrot halva etc. The third stall was dedicated to provide awareness to general public regarding adulteration of milk. The fourth stall was that of the final year students ELP programme it include sale of gulab jamun, butter cookies, ragi cookies, chocolate cookies, palada payasam mix, whey drink, carrot peda etc. The fifth stall was provided to High Range Honey, Kattapana for sale of honey products. The sixth and seventh stall consisted sale of snacks, confectionery drinks and kulfi.

On 26th November 2023 the dairy expo was inaugurated by Hon. District Collector and District Magistrate (Idukki), Smt. Sheeba George, who paid tribute to Dr. Verghese Kurien. Smt. Sheeba George expressed her grief over the tragedy at CUSAT, where four students lost their lives. The programme briefed the importance of dairying and role of Dr. Verghese Kurien in development of self-sufficiency in India. The collector distributed prizes to the prize winner of the competitions. The poster making competition was conducted across different schools, the first prize was awarded to Lana Mary Tom from St Pius X English School, Kuttikanam and the second prize to Alona Angel From St Antonys H.S, Vellikulam. Chaithra Hari, 2020 batch secured the 2nd prize in Malayalam recitation, and Sreeshnu M from 2020 batch won the 2nd prize in Kuchipudi and the 1st prize in Bharathanatyam at university Arts Festival. Award was also presented to Mr. Rohit (2018 admission) for securing placement at Amul, India and to Sreelekshmi (2018 admission) for securing placement at Tetra Pak, Pune, India. As taken of appreciation, a memento was presented to the chief guest, Smt. Sheeba George by The Special Officer, Asha Ashok.



Students flash mob at Elappara bus stand, Idukki



Dairy Expo 23 'Jeevaneeyam 23' inauguration by Hon Vice Chancellor Prof. (Dr) M.R. Saseendranath



Dairy Expo 23 'Jeevaneyam 23' lamp lighting by Hon Vice Chancellor Prof. (Dr) M.R. Saseendranath



Hon Vice Chancellor Prof. (Dr) M.R. Saseendranath and the Registrar Prof. (Dr) P. Sudheer Babu visiting the exhibition stalls and interacting with students



Hon. District Magistrate Smt. Sheeba George visiting the exhibition stalls and interacting with students



Hon. District Magistrate Smt. Sheeba George presenting awards to winners



Memento presented to The Chief Guest Smt. Sheeba George IAS by the Special Officer, Asha Ashok

SEXUAL HARASSMENT AWARENESS AND PREVENTION PROGRAMME

The college of Dairy Science and Technology in Kolahalamedu , Idukki organized a seminar on “Gender Sensitization and Awareness of Sexual Harassment in Higher Education”. The session was conducted by Lintamol Devasia in the college auditorium on 28/12/2023, focused on addressing sexual harassment issues. The seminar commenced at 11.00AM. Ms. Asha Ashok, special Officer extended a warm welcome to Ms. Lintamol Devasia. The seminar aimed to enhance awareness and sensitize both faculty and students on gender related issues and sexual harassment within the higher education context. The significance of the Internal complaint committee serves as a confidential platform for addressing complaints, ensuring a fair investigation process and taking necessary actions to curb harassment. The seminar concluded at 12.00 PM after an engaging Q/A session Martin George, a 3rd year B.Tech. student, delivered the vote of thanks, expressing gratitude to the organizers and participants. Following the seminar, a counseling session was conducted to provide support to students who may have experienced or witnessed harassment. The seminar served as a crucial platform to educate students about sexual harassment, empower them to recognize and prevent such incidents, and establish a supportive system through the internal complaints committee.



Sexual Harassment Awareness and Prevention Class for faculty and students conducted by Ms. Lintamol Devasia at CDST, Kolahalamedu

ANTI RAGGING ORIENTATION PROGRAMME FOR STAFF, STUDENTS AND PARENTS

College of Dairy Science and Technology has conducted an orientation program for the consequences of ragging. The anti-ragging orientation program was conducted on 05/10/2023 by Mr. Aji Aravind Sub inspector Kerala Police, for CDSTK students as a part of transitional curriculum addressing 1st year students. Special officer of institution Ms. Asha Ashok spoke on the occasion and talk about on discipline, code of conduct, rules and regulation and institution’s aim of ragging free campus.

Mr. Aji Aravind delivered the message that any kind of physical, mental, verbal and sexual abuse is punishable offense. The National Commission and governing bodies are very strict and clear to have a ragging free campus in every teaching and learning institution. Mr. Aji Aravind also added on hazards of drug and substance abuse, rise in criminal incidences due to social media, mobile phones, and internet crimes and warned the students on its inappropriate use. Mr. Naushad, SI Vagam-

on police station was also present during the program along with all teaching and nonteaching faculty and students. Mr Sajjan C.S Reference Assistant delivered the Vote of thanks.



Anti-ragging and Anti-drug awareness class conducted by Sri. Aji Aravind (Sub-Inspector of Police) and Sri Noushad (Sub-Inspector of Police), Police Station, Vagamon, Idukki

TRAINING PROGRAMME

The College of Dairy Science and Technology, Kolahalamedu, Idukki under Directorate of Students Welfare, KVASU organized a comprehensive training programme for the faculty and students. The training programme consisted of two sessions. A Faculty Training programme titled “The

Art of Facilitating Minds” and a student’s placement Training programme titled “Unleash the power within One Day Life Training Programme for Students”. The sessions were conducted by Sri. Sujith Edwin Pereira, Director, Lives Facilitator and Mentors Mentor, NaITER (National Institute for Training and Educational Research) in the college auditorium on 21/12/2023.

FACULTY TRAINING PROGRAMME: “THE ART OF FACILITATING MINDS”

The training session started at 9:30 A.M. It started with an introductory speech by Ms. Vidyamol V V., Teaching Assistant, Department of Dairy Business Management. Ms. Asha Ashok, Special officer extended a warm welcome to Sri. Sujith Edwin Pereira. The training commenced with engaging activities, including ice-breaking sessions. The trainer emphasized about the self-awareness, empathy, self-assertiveness, listening and social relations. The teaching and the non-teaching faculty actively participated in the session. He also highlighted the 4C’s in life i.e. communication, critical thinking, collaboration and creativity. The session came to an end by 10:30 A.M. The session received positive feedback from various faculty members, highlighting the effectiveness of the content and the engaging delivery by Sri. Sujith Edwin Pereira. The vote of thanks was delivered by Sri. P Nandagopal.



Students Training Programme: “Unleash the power within One Day Life Training Programme for Students”

The training session started at 10:30 A.M. It started with an introductory speech by Ms. Sheetal Simon, 3rd year B. Tech. student. Ms. Asha Ashok, Special officer extended a warm welcome to Sri. Sujith Edwin Pereira. The training commenced with engaging activities, including ice-breaking sessions. The trainer emphasized to students about the life skills like Focus and Self-Control, Perspective-Taking, Communication, Making Connections, Critical Thinking, Taking on Challenges, Self-Directed and Engaged Learning. The overall training included development of communication skills, personality development, aptitude and finishing school skills training. The session came to an end by 2:30 P.M. The session received positive feedback from students highlighting the effectiveness

of the content and the engaging delivery by Sri. Sujith Edwin Pereira. The vote of thanks was delivered by Martin George, 3rd year B. Tech. student.



PLACEMENT TRAINING PROGRAMME

The College of Dairy Science and Technology, Kolahalamedu, Idukki under Directorate of Students Welfare, KVASU and Placement cell CDSTK jointly organized a comprehensive training programme for students. The Training Programme was titled “How to get Your Dream Job”. The session was conducted by Dr. Brijesh George John Career and Placement Expert, International Trainer, Author and Social Media Influencer, and Jaison Mathew (Training and Placement Officer, Marian College Kuttikkanam and MIM (Marian Institute of Management), in the college auditorium on 05/03/2024 and 06/03/2024. The training session was conducted from 10:00 AM to 5:00 PM on these days. It started with an introductory speech by Mr. Anas P., Teaching Assistant, Department of Dairy Engineering. Ms. Asha Ashok, Special Officer inaugurated the training programme and Associate Patron cum Placement Cell, Nodal Officer, P. Nandagopal, delivered a warm welcome. The programme covered various essential aspects for students aiming to secure the dream job. The speaker delved into the key aspects of securing a job placement. The major topics of discussion were How to get placed; Interview preparation; Resume Tips; How to find job opportunities, 10 ideas to make profile rich and

Employability Skills. The trainers also conducted one to one mock interview for the final year students. At the end of the session, the students delivered the feedback of the training programme. The training session concluded with vote of thanks from Special Officer, Ms. Asha Ashok and Placement Cell Officer, Sri. P Nandagopal.



Placement Training Programme by Dr. Brijesh George John (Career and Placement Expert, International Trainer, Author and Social Media Influencer) and Jaison Mathew (Training and Placement Officer, Marian College Kuttikkanam at CDST, Kolahalamedu

STUDENTS UNION/HOSTEL/SPORTS DAY CELEBRATIONS

The college Students' Union elected on democratic basis consist of a President, Secretary, Vice President, Joint Secretary, Arts Club Secretary, two University Union Councillors, Editor, Athletic Captain and Secretaries for Social Service, Hobby Centre and Planning Forum. It also includes the class representatives. Mr. P Nandagopal, Assistant Professor, Dept. of Dairy Technology is the Associate Patron. Mr. Kevin Shaji (2020 batch) is the elected President and Ms. Suhada Saheed (2021 batch) is the elected Secretary for the academic year 2023-2024.

STUDENTS COUNSELLING AND PLACEMENT SERVICES

The Students Counselling Centre provides counselling to students during admission as well on monthly basis. A Counsellor is engaged for monthly counselling classes and students are getting assistance on the same from teachers and their advisors. The in-charge of Counselling Centre is Mr. Nandagopal. P., Assistant Professor.

STUDENTS' PERFORMANCE

STUDENTS JOINED FOR HIGHER EDUCATION

Sl. No.	Name of the Student	Batch	Qualified Exam	Rank	Admitted College
1	Sahla P	2019 admission	ICAR PG Entrance	22	NDRI, Haryana
2	Meghna P	2019 admission	ICAR PG Entrance	49	NDRI, Bengaluru

OUTGOING STUDENTS PLACEMENT DETAILS

Sl. No.	Name of the Student	Batch	Placed Organization	Designation
1	Fathima S	2019 admission	ABT Foods	Supervisor (Dairy Division)
2	Muneesa K S		Milma	Assistant Dairy Officer
3	Akhila Sebastian		Madhumita Dairy	Quality Controller
4	Divya Murali		Elanadu Dairy	Dairy Production Officer
5	Sreelakshmi M V		Safa Farm Fresh	Dairy Technologists
6	Naseera P		Aamro Dairies Pvt. Ltd.	Executive-Processing Unit
7	Shilpa K V		Central Products Dairy, Milma, Alapuzha	Technical Superintendent
8	Amruthesh		Atheena	R and D Department
9	Sanid K M		Muralya	Supervisor
10	Sanjay Babu C		Amul	Supervisor

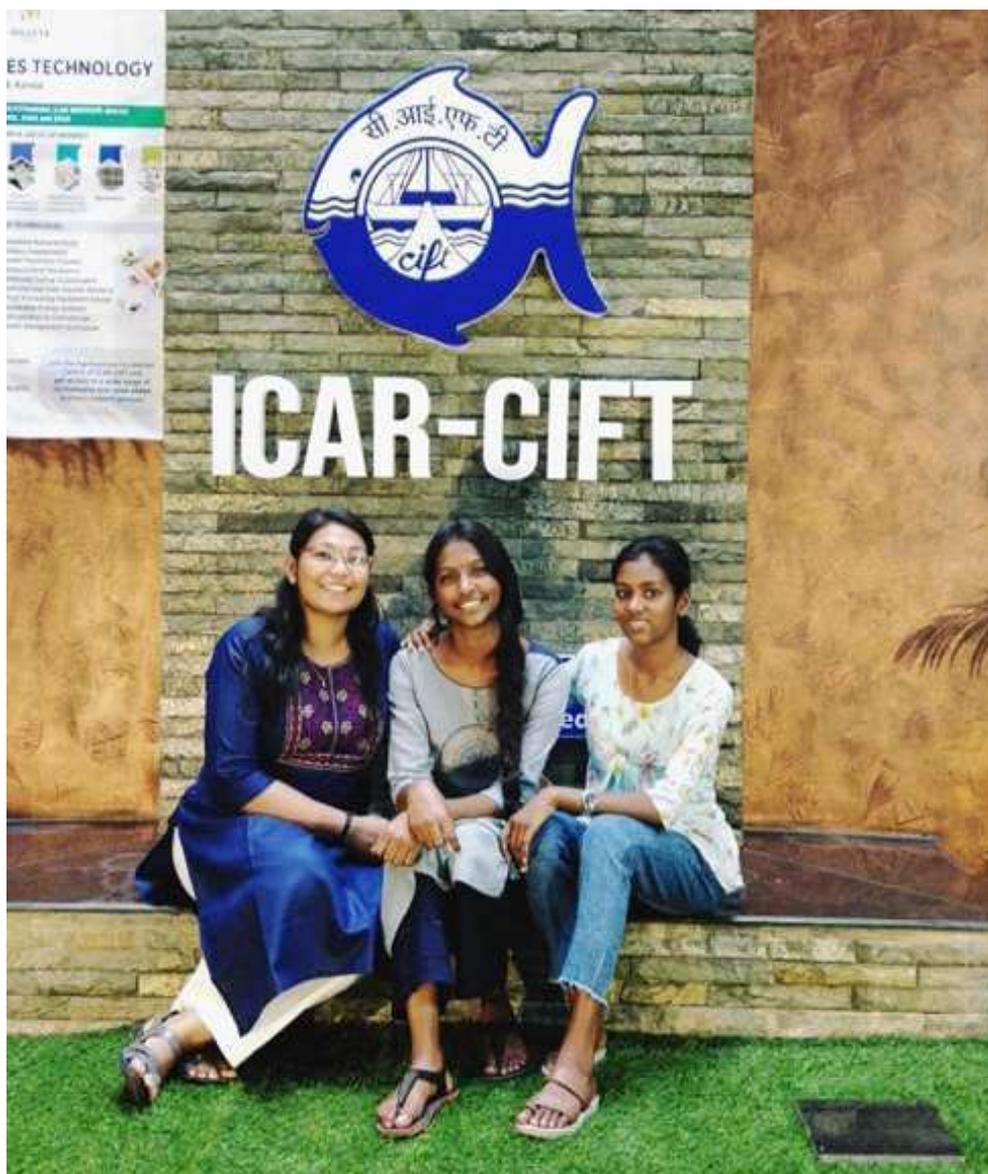
INDIAN DAIRY ASSOCIATION 50TH DAIRY INDUSTRY CONFERENCE

The 50th Dairy Industry Conference was held in Hyderabad, Telangana from 4th to 6th March 2024. The conference brings together industry leaders, dignitaries and key stakeholders to discuss challenges, celebrate achievements, and plan the future of the dairy sector. The students from the college volunteered for the conference.



HANDS ON TRAINING PROGRAM

“Advanced Microbiological and Molecular Techniques for Improving the Competence of Students in Biological Science” was conducted from 5th to 11th December 2023 under the Scheduled Class Sub Plan (SCSP) at Microbiology Fermentation and Biotechnology Division of ICAR-CIFT. The training was attended by the students Megna P (2019 batch), Divya Murali (2019 batch) and Maya Darshini (2020 batch).



ENTREPRENEURSHIP DEVELOPMENT PROGRAMME

Entrepreneurship Development Program on the “Start-Up Opportunities in the Dairy Sector” was held at Southern Regional Station (SRS) National Dairy Research Institute from 13th to 22nd December 2023. The programme was attended by six students from 2020 batch.



STATE KSHEERASANGAMAM – PADAVU 2024 Kerala Dairy Expo organized by the Dairy Development Department 18,19,20 February -2024

The Ksheerasangamam - Padavu 2024 was conducted at Anakkara, Idukki Dist from 18th February to 20th February 2024.

The programme was organized by Dairy Development Dept, Government of Kerala. The three day programme was aimed to develop and promote self-reliant Dairy Farmers thereby increasing the overall State Milk Production. It aims at providing welfare programmes to Dairy Farmers along with scientific interventions.

State Ministers, Dairy Officials, University Staff, Dairy Farmers, Government Officials etc attended the programme. The programme was officially inaugurated by Smt. J. Chinchu Rani, Hon’ble Minister Animal Husbandry & Dairy Development.



Smt. J Chinchu Rani, Hon’ble Minister Animal Husbandry & Dairy Development interacting with students of CDST, Kolahalamedu

As per the Order No. DD/TVM/62/2024-DFI G dtd. 06.02.2024 Deputy Director, Dairy Development Department, Trivandrum a request letter was forwarded to CDST, College to allow 30 students as volunteers from 18th to 20th February 2024. The permission was granted and the students volunteered the programme during the mentioned days.

University Stall was also organized during the event. Posters & Flex detailing the university and college activities as well as an awareness flex and videos was also displayed for the general public.



Certificate awarded to College Officials, CDST, Kolahalamedu by Dairy Development Department Officials for participating in Kerala Dairy Expo – 2024



Kerala Science Congress (കാട്ടിലെ ശാസ്ത്രം) presentation conducted on stage with Dr. TS Rajeev as Moderator

On 19th February 2024, Kerala Science Congress (കാട്ടിലെ ശാസ്ത്രം) was organized by the Department. Dr. T.S. Rajeev, DE, KVASU was invited as moderator for the programme. In this programme one farmer was selected from each district in Kerala and was asked to present the scientific finding made by them.



Kerala Science Congress (കേരള ശാസ്ത്രം) Judging Panel

The programme was judged by Dr. Justin Davis, Associate Professor, College of Veterinary and Animal Sciences, Mannuthy, Ms. Asha Ashok, Special Officer, College of Dairy Science and Technology, Kolahalamedu and Smt. P Nandagopal, Assistant Professor, CDST Kolahalamedu. The program ended with selecting three of the best findings made by the farmers. The farmers were felicitated by Dr. T.S. Rajeev, DE, KVASU

III- DEPARTMENT PROFILES

DAIRY ENGINEERING

The Department of Dairy Engineering deals with instrumentation and process control required for automation of basic processes. It covers wide areas dealing with Dairy and food Engineering, Dairy Machinery, Food Process Engineering, Electrical Engineering, Fluid Mechanics, and Refrigeration & Air Conditioning etc.

A well-furnished drawing hall with 22 drawing board and a set of basic hand tools including welding set and work table is being set up for workshop practice. An Experimental Window Air Conditioning integrated to PC and various models of vertical and horizontal type Boilers and other machine parts are availed for practical study in the department. The lab is also equipped with food engineering testing equipment’s like Viscometers, Freeze Dryer etc. for conduct of practical and research work. Various machineries like skid mounted milk processing equipment with installed Homogenizer, Cream Separator, batch type Ice Cream Freezers etc. are readily available for in hand training to students.

DAIRY CHEMISTRY

The Department of Dairy Chemistry is one of the key departments in the College of Dairy Science and Technology, Kolahalamedu. The mission of this department is to impart comprehensive knowledge and skills in dairy chemistry to students, enabling them to contribute to the growth and devel-

opment of the dairy sector. The Department is responsible for teaching various courses related to Dairy Chemistry, Food Chemistry and Quality Assurance at Under Graduate level. Our department is equipped with one laboratory and experienced faculty members.

Activities

- 1) Physical Chemical analysis of milk and milk products
- 2) Continuous analysis of milk samples from nearest farms
- 3) Fat and SNF testing of milk from nearby farms and provide results.
- 4) Chemical and quality control analysis of food and food products
- 5) Proximate analysis of food and food products
- 6) Biochemical analysis of organic compounds

Facilities and Equipment

Our department consist of one laboratory equipped with various equipment's for the analysis of milk and milk products include,

- 1) Kjeldahl apparatus for protein estimation
- 2) UV-Visible spectrophotometer
- 3) Abbe Refractometer
- 4) pH meter
- 5) muffle furnace
- 6) hot air oven
- 7) soxhlet apparatus
- 8) RM value apparatus
- 9) Centrifuge
- 10) Conductivity meter
- 11) Milk analyser
- 12) Hot plate

DEPARTMENT OF DAIRY MICROBIOLOGY

The scope of Dairy Microbiology stretches right from the production of raw material till it is utilized by the consumers. In other words, the contamination of milk and milk products with spoilage and disease producing micro-organisms can occur at any stage of production, processing, marketing and utilization. In view of the possible presence of spoilage and pathogenic micro-organisms in milk and milk products, their microbial quality needs to rigorously controlled / monitored with regard to both number and the type of micro flora present. A microbiological analysis is of these contaminating sources and taking up of the adequate measures to reduce their microbial load, are the effective steps of a quality control programme in Dairy Industry.

The instruments required for practical classes of various courses occupy significant space. The lists of major instruments procured in the department are Micro Centrifuge, BOD Incubator, Laminar Air Flow Units, Biosafety Cabinet, Compound Microscope, Distillation Unit, pH Meter,

Weighing Balance, Colony Counters, Water bath, Autoclaves, Incubators, Hot air oven, Auto-pipettes of various capacities, Refrigerators, Hot Plate, Microwave Oven, Hotplate with magnetic stirrer.

DAIRY TECHNOLOGY

Technology is the practical application of scientific knowledge. Department of Dairy technology is involved in the manufacture, standardization and testing of various dairy products. Courses are designed in such a way that students are provided exposure in all aspects of dairy production such as Market milk, Traditional dairy products, Cheese technology, condensed and dried dairy products, By-product technology, Packaging etc. The experimental Dairy plant under the department provides hands-on exposure to the students in the industrial manufacture of different dairy products. The plant is installed with various equipment like skid-mounted pasteurization unit, BMC, Milk packing machine, Ice cream freezer, Kulfi machine, cheese vat etc. The student ready experiential learning module under the department instils entrepreneurial skills in the students by the development, standardization and marketing of various innovative dairy products.

DAIRY BUSINESS MANAGEMENT

The objective of the department is to impart theoretical and practical knowledge of dairy business-related activities such as accounting, financial management; marketing management, economic concepts, ICT tools and technology.

DEPARTMENT OF PHYSICAL EDUCATION

The department of Physical Education seeks to become a centre of excellence –molding students into citizens of physically active, emotionally mature, intellectually analytical with moral values and social responsibility. It aims to inculcate healthy minds in the healthy bodies of students. It is responsible for the conduction of sports and games activities of the college.

LIBRARY AND INFORMATION SCIENCE

ACIVITIES

1. KVASU-Knimbus Web portal provided by the Kerala Higher Education Council as a part of University Library Support and Cooperation in Kerala implemented. Remote login services and access of Scopus database extended to all colleges under KVASU.
2. One day sensitization programme conducted for students and faculty to give awareness about the plagiarism related rules and regulations of UGC as well as KVASU at the time of submission of Theses/Dissertation
3. Actively participating the KVASU e-document delivery services providing by KVASU Library information system.
4. Orientation classes were given to the newly joined B. Tech. Dairy Technology students.
5. All professional staff member have participated in the CeRA (ICAR Consortium for e-Resources in Agriculture) training programme for Southern Region Librarians and Information Scientists held on

17/10/2024 at Kerala Agricultural University, Thrissur

Online access to the core journals in dairy science and allied subjects is made available through the consortium CeRA (Consortium of e Resources in Agriculture) which include both national and international journals. Like previous years, this year also focus was on the strengthening of collection and implementation of latest information and communication technologies in its service.

Technological Leap:

In the digitally advanced scenario, libraries cater to user needs in a blended atmosphere, from print to electronic, acquisition to access, subscription to perpetual, and physical to virtual mode.

- a) CDST library is primarily concerned with conservation and dissemination of right knowledge to its users. Library follows Dewey decimal classification for classification of books and developed online catalogue using the KOHA software, an open source integrated Library Management software. Koha Library Management System, Linux
- b) The library’s catalogue of books and other reading material can be accessed through library intranet (OPAC). The library catalogue is searched by author, title, publisher, keyword and year of publication.

LIBRARY COLLECTIONS

Collection	No.
Total Number of Books	1096
Reference Collections	78
Newspaper (English)	1
Newspaper (Malayalam)	1
Magazines	3
Journals	3
Question Papers	Past 8 years

PUBLICATIONS BY STUDENTS

Sl. No.	Name of the student	ശബ്ദം	Magazine/ Newspaper
1	Suhada Saheed	പാലിന്റെ സുസ്ഥിരതയും പരിസ്ഥിതിപ്രാധാന്യവും	Veekshanam
2	Hanan Abdul Kareem	കൊഴുപ്പിനെ എരിച്ചുകളയും, ചുഗനിനെയും നിലയ്ക്കുനിർത്തും: വണ്ണകുറയ്ക്കാൻ ആഗ്രഹിക്കുന്നുണ്ടോ? ഫലപ്രദം ഈ ചിയ യോഗർട്ട് മിക്സ്	Vanitha
3	Nayana Joseph	പശുവിന്റെ ആഹാരരീതിയും പാലുത്പാദനവും	Timely news, Thodupuzha

4	Safrin S	പശുവിൻ പാലിനുണ്ട് ജൈവബദലുകൾ; ലാക്ടോസ് ഇൻടോളറൻസ് ഉള്ളവർക്കും ഉപയോഗിക്കാം	Karshakasree Manorama Online
5	Sai Kumar	കന്നുകാലികളിലെ ശ്വാസതടസം മൂലമുണ്ടാകുന്ന അപകടങ്ങൾ ഒഴിവാക്കാം	Krishi Jagran
6	Martin George	ഒരു പോഷകാഹാര പവർഹൗസ്	Krishi Jagran
7	Najwa P	നല്ലവളർച്ചയ്ക്കും പാലുൽപാദനത്തിനും വേണം കന്നുകുട്ടികൾക്ക് ശരിയായ പരിചരണവും പോഷകാഹാരവും	Manorama Online
8	Sruthilaya	അന്ന് മാലിന്യം, ഇന്ന് അമൂല്യവിഭവം; വേയ് ക്ഷീരമേഖലയിലെ ഗെയിം ചേയ്ഞ്ചർ	Karshaka Sree
9	Sooraj	ചിസും മലയാളിയും	Timely News, Thodupuzha
10	Aparna V Nair	വേയ് പ്രോസീയിൻ അപകടകാരിയോ???	Kerala Karshakan
11	Keerthana S	Strategies for improved cattle feed	Kerala Karshakan

COLLEGE OF DAIRY SCIENCE AND TECHNOLOGY KAIMANAM, THIRUVANANTHAPURAM

A BRIEF INTRODUCTION

The Government of Kerala made a budget provision of Rs. 25 lakhs in the financial year 2013-14 for setting up a new Dairy Science College in Chettachal, Nedumangad Taluk (Thiruvananthapuram district). Accordingly, the Kerala Veterinary and Animal Sciences University (KVASU) headquartered at Pookode in the Wayanad district decided to start the College of Dairy Science and Technology (CDST), Chettachal (Vithura). College of Dairy Science and Technology, Thiruvananthapuram (presently functioning at Academic Block, BSNL - RTTC, Kaimanam, Thiruvananthapuram -695040) under the faculty of Dairy Science and Technology of Kerala Veterinary and Animal Sciences University started functioning on 14.09.2015 to advance, disseminate and foster the developments in the field of Dairy Science and Technology. The College offers 4-year undergraduate B. Tech. (Dairy Technology) the degree programme, with intensive training in processing, quality control and engineering of milk and milk products.

OBJECTIVES OF THE INSTITUTION

- To undertake appropriate academic programmes at the undergraduate and postgraduate professional levels in various branches of Dairy Science and Technology.
- To create the necessary infrastructure to house classrooms, laboratories, library, computer lab, sports amenities and other allied facilities.
- To set up an Experimental Dairy plant for students with the state of art facilities for undertaking academic, research and training activities related to dairy processing.
- To provide R&D support to the Dairy and Food processing industry for developing value-added products and to take problem-oriented research based on feedback from different extension agencies and field feedback from dairy farmers.
- To develop new energy-efficient production systems utilizing emerging technologies in the processing of value-added dairy products for minimizing processing costs energy management etc.
- To undertake collaborative research projects with industries and renowned research institutions to develop products and technologies for entrepreneurs.
- To organize training programmes, farmer-scientist interactions, dairy clinics, seminars, technology demonstrations and print and visual media programmes for dairy plant personnel, researchers, small entrepreneurs and others in the field of Dairy and Food Processing
- To publish books, booklets and popular articles for the dissemination of new technologies to the dairy farming community and dairy processing industry.

ADMISSION PROCEDURE

The candidates admitted to the UG course are selected through the Common Engineering Entrance Examination conducted by the Government of Kerala. The candidates should have completed Class XII or its equivalent examination with Chemistry, Physics and Mathematics as optional subjects and should have secured an aggregate of 50% marks or above in these subjects in the qualifying examination. The candidates can choose their option for this course among other graduate courses in Engineering.

COURSES

The course curriculum for B. Tech (Dairy Tech.) programme is prepared in line with the pattern specified by the I.C.A.R, New Delhi. The course is offered for a total duration of eight semesters. The total credits have been apportioned to Dairy Engineering, Dairy Technology, Dairy Chemistry, Dairy Microbiology, Dairy Business Management and Dairy Husbandry disciplines with due weightage for each. The students are also required to undertake an All Kerala Exposure Visit (7 days) and an All India Exposure Visit (23 days) as a part of the course curriculum during which the students are required to visit the important institutions and commercial dairy plants across the country. The last two semesters of the B.Tech programme are set apart for Experiential Learning, In-plant training and Farm training. Students are exposed to the entire gamut of operations taking place in farms and dairy processing plants, which help them to acquire the required skills set and confidence to work as highly motivated professionals for the emerging dairy industry. They are also enriched with entrepreneurial qualities to start their own industrial units as part of the “Experiential Learning Programme (90 days)” during the final year. The students are also trained to enrich the extension capacity by Extension Training Programme (7 days) and Hands on Training Programme (3 days). The Internship programme comprising of In-plant training and Farm training is organized in dairy farms for a period of 30 days and in commercial dairy plants for a period of 70 days. These programmes provide every student, the required practical exposure in scientific management of dairy farms and also in the operation, maintenance and management of large scale commercial dairy processing units like Amul, Schreiber Dynamix, Mother Dairy, Milma etc.

Sl. No.	Programme	Level	Duration (Yrs)	Sanctioned annual intake
1	B.Tech (Dairy Technology)	UG	4	20 students 2 (EWS)

Note: Sanctioned annual intake temporarily reduced from 40 to 20 students with effect from 2016 admission onwards and an additional 10 % reservation made to economically weaker section students

PTA ACTIVITIES

The College PTA coordinates the maintenance and upkeep of Students hostel at BSNL-RTTC campus. The College PTA is taking care of the service and periodic maintenance of Water Purifier to ensure purified drinking water to staff and students. PTA is also providing practical records to students at

nominal rates. The association extends financial support to various union and college programmes with the concurrence of Executive Committee.

DEPARTMENTS

TEACHING DEPARTMENTS

The academic activities of the college are harnessed through the following six departments:

1. Dept. of Dairy Technology
2. Dept. of Dairy Engineering
3. Dept. of Dairy Chemistry
4. Dept. of Dairy Microbiology
5. Dept. of Dairy Business Management
6. Dept. of Dairy Husbandry
7. Dept. of Dairy Extension

STAFF STRENGTH

Faculty Status (Regular Faculty as on 31st March, 2023)

Faculty Rank	No:of Sanc-tioned Regu-lar posts	Present Status: Number in position by Highest Qualification			Total Regular Faculty in po-sition	Total Va-cancies
		Doctoral Degree	Masters Degree	Bachelors Degree		
Professor	N.A.	0	0	0	0	N.A.
Associate Professor	N.A.	0	0	0	0	N.A.
Assistant Professor	N.A.	5	1	0	6	N.A.
Dairy Extension Offi-cer on Deputation to KVASU	N.A.	0	1	0	1	N.A.
TOTAL	N.A.	6	2	0	7	N.A.

DEPARTMENT WISE DETAILS

FACULTY DETAILS

Sl. No.	Name and designation of the Teaching Staff	Discipline	Residential Address	Email ID	Contact No.	
					Land line (Res.)	Mobile
1	Dr.RachanaC.R. Special Officer Asst.Professor & Head	Dairy Chemistry	Ponnili, Near Town Hall, Attingal P.O, Trivandrum - 695101	rachana@ kvasu.ac.in	0470- 2794401	9497682168
2	Dr.Beena R.L Asst.Professor	Dairy Technology	V. G bhavan Kallayamp.o Trivandrum 43	beenarl@ kvasu.ac.in	0471 2371135	9947367580

3	Dr. K. Lalu Asst. Professor & Head	Dairy Husbandry	Prarthana Neeleswaram P.O., Kottarakkara - 691505	lalu@kvasu. ac.in	0474- 2450910	9447150267
4	Sri. Rejeesh R. Asst. Professor on deputation PhD	Dairy Microbiology	Reshmi, TC 36/631 (3) , Perunthanni, Trivandrum- 695 008	rejeeshrnair@ rediffmail.com	0471- 2452583	9497849625
5	Dr. G. R. Jayadevan Asst. Professor	Dairy Business Management	Sangeeth K.E.R.A -175. Muttakkad Post Venganoor Thiruvananthapur- am-695523	jayadevan@ kvasu.ac.in	0471- 2481980	9496369816
6	Smt. Maureen Jacob Thomas, Dairy Extension Officer on deputation to KVASU	Dairy Business Management	Kochupurackal, TC 30/53(1), Sugath- anRoad,Kudavoor, Anayara P O, Thiruvananthapur- am-695029	maureen- jacobt@gmail. com	0471- 2743057	9400058641
07	Dr. Shyam Suraj S.R Asst. Professor	Dairy Extension	3D Heera Central, Pattom, Trivandrum 695004	shyamsuraj @ kvasu.ac.in	0470- 2794401	6282990775

STUDENT STRENGTH

Sl. No.	Programme	Level	Duration (Yrs)	Batch	Sanctioned annual in-take	Turn out	Pass out (No of students)
1	B.Tech (Dairy Technology)	UG	4	2015	40 students	35	35 on 2020
2	B.Tech (Dairy Technology)	UG	4	2016	20 students	18	18 on 2021
3	B.Tech (Dairy Technology)	UG	4	2017	20 students	16	16 on 2022
4	B.Tech (Dairy Technology)	UG	4	2018	20 students	19	19 on 2023
5	B.Tech (Dairy Technology)	UG	4	2019	20 students	20	20 on 2024
6	B.Tech (Dairy Technology)	UG	4	2020	22 students	21	

7	B.Tech (Dairy Technology)	UG	4	2021	22 students	18	
8	B.Tech (Dairy Technology)	UG	4	2022	22 students	17	
9	B.Tech (Dairy Technology)	UG	4	2023	22 students	14	
Total students						178	
Total students pass out as on 31/3/2023						108	
Total students currently present within the campus as on 31/3/2023						70	

INTERNSHIP

2019 Batch Training Details:

Dairy Extension Training: Various Dairy Extension Service Unit of Dairy Development Department, Kerala.

In-Plant Training: Organizations include MRCMPU, TRCMPU, KCMMF, Mother Dairy, Anand, NDRI, Hatsun, BAMUL, KMF, Heritage, and KC Das.

Farm Training: Conducted at Kodappanakunnu farm Mattupatty farm, Dhoni farms.

INFRASTRUCTURE FACILITIES

With regard to infrastructure, facilities created in the temporary campus are sufficient to support the basic theory and practical sessions of the B.Tech degree programme. The Dairy Microbiology, Dairy Technology and Dairy Chemistry laboratories are strengthened with sophisticated equipments to meet the academic/research requirements of the concerned departments. A spacious drawing hall is arranged on the campus to facilitate the Engineering Drawing course prescribed in the B.Tech curricula. A well-equipped Computer Lab with 14 Desktop PCs (Pentium i3-4160 CPU@3.60 GHz processor) having an Internet connection is also present. BSNL Landline facility (Telephone No. 0471-2491288) and Broadband connection (FTTH 4999- multi-user facility intended for Institutions) have been subscribed by the college. The College Library has been set up with excellent infrastructure and a good collection of books and journals required for the B.Tech (DSc. &Tech.) students. The lecture hall is equipped with an LCD projection facility, Computer and Public Address Lectern. The college has made arrangements with the Sree Chitra Thirunal College of Engineering, Pappanamcode for the conduct of practical sessions prescribed for General Engineering courses in B.Tech curricula. The rates and remuneration charges are fixed as per the G.O (Ms) No. 42/2014/H.Edndated 23/01/2014.

EDUCATION, STUDENT AMENITIES AND ACTIVITIES

Students Union Activities and CURRICULAR, CO-CURRICULAR AND EXTRA-CURRICULAR ACTIVITIES (01/04/2022to 31/03/2023)

Serial No	Program	Date
01	World Milk Day	1.06/2023
02	Theme: “Pure Foods for a Healthy Future: Unveiling Adulteration-Awareness class on adulteration on milk and milk products agricultural college Vellayani, Thiruvananthapuram	07/06/2023
03	Induction training program B.Tech (DT) 2023 Students	11.10.2023
04	Career advancement and job opportunity by Prof. (Dr). R Rajendra Kumar	11.10.2023
05	Anti ragging awareness class by adv Pradeep T	12/10/2023
06	Amruth Kalash Yathra as part of Meri Meti, MeraDesh Campaign	13.10.2023
07	Kerala piravi day celebration	1/11/2023
08	State Ksheroslavam Seminar, Dairy development department	02.11.2023
09	Swachh seva cleaning program	04.11.2023
10	Breast Cancer Awareness Seminar by Dr Nirmala Thilakan and Dr Muhsina	06.11.2023
11	Ethnic Day ‘Tasta’	13.11.2023
12	EKTA Student’s Union 2023-24 Inauguration ceremony “Heiwa” by Sri Sujai Kumar	15.11.2023
13	Food Safety 101: an Intro orientation class by Sri Sibimon B	20.11.2023
14	National Milk Day celebration	27.11.2023
15	‘Life skills training programme for freshers’ by Prakash Ramakrishnan	16.12.2023
16	Prospects of dairy technologist in egg industry seminar by anantha Krishnan K	19.12.2023
17	Christmas celebration ‘Festive Fiesta’	20.12.2023
18	YIP orientation programme by Sri Akhil Kdisc	16.02.2024
19	‘Sexual Harassment and Grievance Redressal’orientation program by Dr. Shyam Suraj S.R	21.02.2024
20	‘Freshers program 2K23’	17.02.2024
21	Valedictory Function and Farewell-“Take off 2K19 farewell party	01.03.2024
22	Blood Donation Camp, Kerala blood donation charitable society	02.03.2024
23	Quick Job Opportunities for Graduates by Mr. Ajmal Shah S.,	6/03/2024
24	Job Opportunities in Dairy and Food Industry Mr. Roopesh M P, Milma	11.03.2024
25	Skill Development Seminar on Food Safety Act: “Guardian of Quality” by Mr. Adarsh C, Milma	12.03.2024
26	“Psychological Counselling by Sri Siddeek, M A,	14.03.2024

STUDENT SCHOLARSHIPS

S l No	Name of scholarship	Number of Students
1	Central sector scholarship	1
2	C H Muhammed Koya	Nil
3	Fisheries department	3
4	E-grants	33
5	KVASU -Merit cum means	05
6	KVASUMerit scholarship	10
7	National Scholarship-Merit cum means	6

8	Other Scholarships	Nil
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LIBRARY REPORT

The library is equipped with the latest and most useful books and journals purchased under the State Plan 2021-22. Details of library books are digitalized and have been entered in the KOHA library management system of KVASU, enabling students to access information of all the library books 24X7. The library also provides the facility of online journals to students and teachers. The infrastructure facilities such as bookshelves, computers and printers purchased utilizing the state plan funds 2021-22 have strengthened the Library.

RESEARCH: ONGOING PROJECT DETAILS

Sl no	Name of Project	F u n d i n g agency	Name of PI	Outlay
1	Impact of chemical and microbial contaminants on milk quality	State plan	Dr. Rachana C.R Dairy Chemistry	3000000/-
2	ICAR-NCVTC Network Project on Dairy Microbes. 'Techno textural studies and molecular characterization of lactic acid bacteria from indigenous fermented milk product samples collected across Kerala' Total Submission: 41 Submission for reporting year attached Below	ICAR	Sri. Rejeesh R Dairy Microbiology	2,00,000/ -
	Lactiplantibacillus pentosus WYD 0122 ON 014410 VTCC DM000726B 2 Lactiplantibacillus pentosus IDK 0122 ON 014411 VTCC DM000727B 3 Enterococcus durans TSR 0222 ON 191533 VTCC DM000775B 4 Lactocaseibacillus paracasei sp. tolerans TVM 0222 ON 191566 VTCC DM000776B 5 Lactobacillus delbrueckii sp. lactis TVM 0422 OP 437724 VTCC DM000779B 6 Lactobacillus delbrueckii sp. lactis TVM 0522 OP 437801 VTCC DM000780B 7 Weissella confusa TVM 0622 OP 437771 VTCC DM000778B 8 Weissella cibaria TVM 0722 OP 437908 VTCC DM000777B 9 Limosilactobacillus fermentum TCRDM13 KY 379153 VTCC DM000781B 10 Lactobacillus helveticus TCRDM 53 MH 191154 VTCC DM000782B	ICAR	Sri. Rejeesh R Dairy Microbiology	2,00,000/ -

ACHIEVEMENTS OF FACULTY

Awards:

1. Dr. Shyam Suraj S.R received the Best Oral Presentation Award at the First International Extension Education Congress 2023, organized at the Rajasthan Agricultural Research Institute, Jaipur, Rajasthan.

PUBLICATIONS:RESEARCH ARTICLES

1. Aiswarya V G., and Rachana C R.,Effect of differential heat treatments on the antibacterial activity of fermented goat milk .Journal of Vet. Anim Sci., 54(1),2023, pp 38-47.
2. Shyam Suraj S.R. Dairy Entrepreneurial Ecosystem of Kerala, India. Journal of Extension Education, 35(1),2023.
3. Aiswarya V.G., Rachana C.R., Rejeesh R., Aiswarya S.P., Rajkumar S.N., Divya M.P., and Rahila M.P. Effect of differential heat treatments on antibacterial activity of fermented goat milk. Journal of Veterinary and Animal Sciences, 54(1), 2023: 105-114.
4. Prasad K.A.A., Dipu M.T., Mathew J.J., Ally K., Mathew D.K.D., and Rejeesh R. Sensory and chemical evaluation of laboratory ensiled hybrid Napier grass prepared using *Lactobacillus plantarum* and propionic acid as additives. Journal of Veterinary and Animal Sciences, 54(2), 2023: 516-523.
5. Ambili M.V., Singh D., Rajakumar S.N., Divya K.B., Rejeesh R., James L., Rashmi K.G., and Beena R.L. Shelf life and storage studies on the sensory attributes of dietetic herbal Rasmalai. Environment and Ecology, 41(1A), 2023: 321–325.
6. Shyam Suraj S.R. It's time to nurture the entrepreneurial ecosystem in dairy sector. Indian Dairyman, May 2023.
7. Rejeesh R., Beena A.K., Sudhir Kumar Tomar, S.K., Archana C., and Akshay P.K. Faecal microbiota transplantation-stool, a tool for wellness. Indian Journal of Biological Sciences, 5(1), 2023: 161-170.
8. Rajmohan T., Sree Vishnu, A.K. Beena, Ligimol James, P. Sudheer Babu, Aparna Sudhakaran, and Rejeesh R. Evaluating the effectiveness of low-pressure carbon dioxide as a hurdle in raw milk storage. European Journal of Nutrition & Food Safety, 15(4), 2023: 10-15.
9. Rejeesh R., Beena A.K., James L., Sudheerbabu P., Rajakumar S.N., Rachana C.R., and Viswanath V. Characterisation of *Lactocaseibacillus rhamnosus* isolated from naturally fermented milk product samples of tribal regions of Thiruvananthapuram District, Kerala. The Indian Veterinary Journal, 100(10), 2023: 26-34.
10. Shyam Suraj S.R., K.S. Kadian, and Khusboo Raj. Future scenario of Dairy Entrepreneurial Ecosystem of Kerala. Indian Journal of Dairy Science, 76(5), October 2023.
11. Rejeesh R., Beena A.K., Ligimol James, S.P., Rajakumar S.N., Rachana C.R., and Subith C. Techno-textural characteristics of autochthonous lactic acid bacteria isolated from naturally fermented milks. The Pharma Innovation Journal, SP-12(11), 2023: 2191-2195.
12. Shyam Suraj S.R. Rewinding the dairy culture of India. Indian Dairyman, November 2023.
13. Divya V., Divya M.P., Rejeesh R., Smitha J.L., and Indu B. Effect of different starter culture combination and ripening period on free fatty acid profile and physicochemical characteristics of buffalo cream. International Journal of Progressive Research in Science and Engineering, 5(1), 2024: 21-24.

14. Peediekal N.N., Malayanakath M.S., Chandran A., Suresh A., Rejeesh R., and James S. Optimisation of brine concentration in feta-type cheese made using Malabari goat milk. *International Journal of Veterinary Science and Animal Husbandry*, SP-9(1), 2024: 549-553.
15. Reji A.J., Divya M.P., Rajakumar S.N., Rejeesh R., and Beena A.K. Manufacture and characterization of low-cholesterol paneer prepared from buffalo milk. *Biological Forum – An International Journal*, 16(1), 2024: 161-165.
16. Sana Jose and Rachana C.R., Gross compositional analysis of milk from Vechur and Kasargod Dwarf breeds of cattle., *The Pharma innovation Journal.*, 12 (5) 2023; 4581-4585.
17. Sana Jose., Rachana C.R., and J.S. Pooja., Characterization of milk proteins from Vechur and Kasargod dwarf breeds of cattle using SDS polyacrylamide gel electrophoresis, *International Journal of Science and Research.*, 12 (6) 2023;
18. Aiswarya K Vijayan , Rachana C.R., Divya M.P, Lijimol James., Indu B., A Comparative study on the effectiveness of *Plectranthusamboinicus* dried leaf powder and essential oil extract on controlling oxidation in Vechur ghee., *The Pharma innovation Journal.*, 12 (11) 2023; 1460-1463.

Popular Articles

1. Aiswarya V G., and Rachana C R., Impact of differential heat treatments on the biofunctional properties of fermented goat milk (2023). *Indian dairy and food industry in amritkaal: opportunities and challenges*, 10th National Seminar, National Dairy Research Institute , Karnal
2. Rejeesh R., Shyam Suraj S.R., Jayadevan G.R., and Beena A.K. (2024). *Advancements in Functional Dairy Products*. Compendium, DIC, Hyderabad.
3. Jayadevan G.R., Rejeesh R., and Shyam Suraj S.R. (2024). *Functional Beverages in India: Consumption and marketing trends*. Compendium, DIC, Hyderabad.
4. Jayadevan G.R., Rejeesh R., and Shyam Suraj S.R. (2024). “Functional Beverages in India: Consumption and Marketing Trends”. *Souvenir of the 50th Dairy Industry Conference (DIC) - 2024 organized by the Indian Dairy Association (South Zone), Hyderabad, Telangana, March 4-6, 2024*, pp. 146-149.
5. Rejeesh R., Shyam Suraj S.R., Jayadevan G.R., and Beena A.K. (2024). “Advancements in Functional Dairy Products”. *Souvenir of the 50th Dairy Industry Conference (DIC) - 2024 organized by the Indian Dairy Association (South Zone), Hyderabad, Telangana, March 4-6, 2024*, pp. 111-114.
6. Shyam Suraj S.R., Maureen Jacob Thomas, and Jayadevan G.R. (2024). “Dairying in Kerala – Constraints and Opportunities”. *Souvenir of the 50th Dairy Industry Conference (DIC) - 2024 organized by the Indian Dairy Association (South Zone), Hyderabad, Telangana, March 4-6, 2024*, pp. 161-166.
7. Surendranath B., Rachana C.R., and Shilpashree B.C., Ghee preparation, physico chemical characteristics and sensory attributes., *National workshop on technological interventions in the production of ghee with desired flavor and texture.*, Dairy science , KVAFSU, Bangaluru, July 2023., 13-24.

Reviews

1. Shyam Suraj S.R. Reviewed the book – ‘The Seaweed Revolution’ by Vincent Doumeizel in www.aesanetwork.org.

Book Chapters

1. Rejeesh R. and Archana C. Enumeration of important types of microorganisms in milk. Analytical methods for milk and milk products, Apple Academic Press, USA.
2. Jayadevan G.R. and Jayapal J. (2023). “Artificial Intelligence Reshaping the Indian Dairy Sector: Better Days Ahead”. In Hemachandran, K. and Rodriguez, R.V. (Eds.), Artificial Intelligence for Business: An Implementation Guide Containing Practical and Industry-Specific Case Studies (First Edition). CRC Press Taylor & Francis.
3. Jayadevan G.R. (2023). “Functional Dairy Beverage Market in India: Exploring Growth Horizons in the Post-COVID Scenario”. In Deshmukh, S. S. et al. (Eds.), Sustainable Livestock Production: Prospects for Innovation (First Edition, pp. 50-57), ISBN 978-93-91668-65-5. MANAGE Publications, Hyderabad.

TRAININGS/ SEMINARS AND CONFERENCES ORGANIZED

1. Dr.Rejeesh R Course coordinator for two days NABARD Farm Sector Programme Fund training programme on FMP and Starter culture technology at VKIDFT

TRAININGS/ SEMINARS AND CONFERENCES ATTENDED

1. Dr. Shyam Suraj S.R: Participated in the Online Training Programme on ICTs for Agricultural Extension: Advances and Trends by MANAGE, Hyderabad.
2. Dr. Shyam Suraj S.R: Attended a 3-day online training on Statistical Analysis using XLSTAT by Numerical Analysis Instruments Pvt. Ltd.
3. Dr. Shyam Suraj S.R: Participated in the workshop Harnessing AI’s Impact in Education, Research, and Entrepreneurship by KVASU.
4. Dr. Shyam Suraj S.R: Participated in the NEP 2020 Orientation and Sensitization Programme by UGC (Nov 16–29, 2023).
5. Dr. Rejeesh R: Participated and presented a poster in the 29th ICFoST organized by AFST (I) at Thiruvananthapuram (Jan 5–7, 2024).
6. Dr. Shyam Suraj S.R: Attended Massive Open Online Course on Artificial Intelligence in Agriculture by ICAR-NAARM (March 1–31, 2024).

OTHER OUTREACH PROGRAMMES OF FACULTY AND INSTITUTION

I. Newspaper articles

1. Shyam Suraj S.R published Hydroponics – Mathrubhumi
2. Shyam Suraj S.R published Silage – Kerala Karshakan
3. Shyam Suraj S.R published Milking tips – Mathrubhumi
4. Shyam Suraj S.R published Fodder Cultivation – Mathrubhumi
5. Shyam Suraj S.R published Straw Utilization – Mathrubhumi
6. Shyam Suraj S.R published Vegan and Milk _ Mathrubhum

II. Radio/ YouTube talk

1. Dr. Shyam Suraj S.R attended Phone-in programme at AIR on 23.03.2023

2. Dr. Shyam Suraj S.R attended Discussion programme at Krishidarshan of Doordarshan on July 17 and 18, 2023.

III. **Other notable activities:**

IV. **Sessions Handled**

1. Dr.Shyam Suraj S.R handled a session at Padavu – KsheeraKarshakaMughamugham on 15.02.2023.
2. Dr.Rejeesh R handled a session in EnteKeralam, Idukki District, organized by GoK, on 30.04.2023.
3. Dr.Rejeesh R handled a session in EnteKeralam, Thrissur District, organized by GoK, on 10.05.2023.
4. Dr.Rejeesh R handled a session on *Entrepreneurship Development Focused on Dairy Innovation* for officers of Animal Husbandry and Dairy Development, organized by SAMETI, on 12.05.2023.
5. Dr.Rejeesh R represented KVASU at a workshop on *Increasing the Productivity of Cattle*, organized by the Animal Husbandry Department, GoK, in Thiruvananthapuram, on 23.05.2023.
6. Dr.Shyam Suraj S.R handled a session at KVASU-LIFE Programme, Kadakkal, Kollam, on 17.06.2023.
7. Dr.Rejeesh R handled a session on *Food Safety and Quality Management – Present and Beyond* for officers of Animal Husbandry and Dairy Development, organized by SAMETI, on 18.07.2023.
8. Dr.Rejeesh R handled a session for progressive farmers and society staff organized by SamagraKsheeraKarshakaSangham on 26.09.2023.
9. Dr.Shyam Suraj S.R handled a session at Pathanamthitta District KsheeraSangamam on 03.11.2023.
10. Dr.Shyam Suraj S.R handled a session at SAMETI Kerala on *Approaches to Value Addition: Recent Trends in Dairy Sector* on 22.11.2023.
11. Dr.Shyam Suraj S.R handled a session at KVASU-LIFE on *Milk Products* on 28.11.2023.
12. Dr.Shyam Suraj S.R handled a session on *Social Entrepreneurship* at CSIR-NIIST on 13.12.2023.
13. Delivered a lead talk on *Value Addition of Dairy, Milk, and Milk Products* during Food Tech Kerala 2024 at Ernakulam on 10.01.2024.
14. Dr.Rejeesh R handled a session on *Importance of Value-Added Dairy Products*, organized by DDD, on 17.01.2024.

HOSTEL FACILITIES

- Under the aegis of the College Parent Teacher Association, the hostelling of students was arranged in the BSNL-RTTC campus. PTA coordinates the maintenance and upkeep of the student's hostels. The BSNL-RTTC management has extended the services of their Staff Canteen for the staff and students of CDST as well.

AWARDS IN CURRICULAR, CO-CURRICULAR AND EXTRA-CURRICULAR

ACTIVITIES

NIL

ALUMINI AND PLACEMENT

The Fifth batch (2019) of CDST Trivandrum has completed their degree.

- Details of placement

Sl.No	Organisation	No of students	Remarks
1.	Dandy Dairy	1	
2.	MILCH FARM PVT LTD	2	
3.	MILMA Ernakulam	1	

LIBRARY FACILITIES (01/04/2022to 31/03/2023)

Brief outline of the center

The college library is fully automated and stocked with all subject related text and reference books, journals and magazines. We have been using the international integrated library system “KOHA” for total library management. The web-based Online Public Access Catalogue(WEB OPAC) helps users to know the availability and status of the documents of the library @24x7 any time any where basis. (<https://covas-opac.l2c2.co.in>). The library also provides full text accessibility of more than 3000 national/international journals through the ICAR journal consortium CeRA. The provision of 250 e-books from leading publishers helps to cater the information needs of the students and faculty of this college.

Detailed note on stock of books, journals (print and online)

Total number of Books as on 31/03/2024: 1317

Total number of journals as on 31/03/2024: 02

Books purchased during 2023 to 2024: 83

Digitization status of library and others

Details of all the books are entered at the KOHA integrated library system of KVASU.

No. Of Users in Library: Total users:100













COLLEGE OF AVIAN SCIENCES AND MANAGEMENT, THIRUVAZHAMKUNNU



1.1. Academic Excellence

The College of Avian Sciences and Management is established at Thiruvazhamkunnu, Palakkad District with the aim of providing quality education in all aspects related to poultry science, to meet the increasing demand of skilled personnel required in the poultry science and business management. The college is offering B.Sc. degree in Poultry Production and Business Management, a three-year graduate programme from 2014 Academic year onwards. The course is designed with the objectives of creating human resource in poultry science and business management. The college also aims at conducting need-based research in poultry science for helping the farmers. An Avian Research station is also located in the campus, which comprises of various poultry farms and hatchery. The college established a commercial Feed Mill under Revolving Fund Poultry Project (RFPP) in the year 2017. Through the RFPP, we produce and distribute different types of poultry feed to the Avian Research Station, Regional Poultry Farms, District Poultry Farms and to private poultry and duck breeding farms.

1.2. Admission Excellence

B.Sc. PPBM (Poultry Production and Business Management): - The college is offering B.Sc. PPBM (Poultry Production and Business Management), a three-year graduate programme from 2014 Academic year onwards. The Board of Studies of Poultry Faculty makes timely modifications in the academic curriculum and recommend the same to the Academic Council of Kerala Veterinary and Animal Sciences University for approval.

Objectives of the course

- Craft human resource in poultry science and business management
- Develop entrepreneurial skills among the students

Highlights of the course

- Poultry Science domain: Layer and breeder production, broiler production, poultry nutrition, feed mill technology, automation in poultry production, poultry processing, hatchery management, climate change adaptation of poultry, management of pet birds and diversified poultry species
- Business Management domain: Business communication, computer application for poultry business, Accounting and financial management, marketing strategies, human resource management, risk management and insurance
- Work experience: Hands on training in leading poultry farms for 12 weeks.

Significance of the course

Presently, poultry industry is lacking professionals with adequate knowledge on poultry science and business management combined. Acquaintance knowledge on both the subjects will help to manage the commercial poultry industry efficiently. With this vision, B.Sc. PPBM (Poultry Production and Business Management) course was launched by combining both poultry science and business management. Hands on training in collaboration with leading industries of the country and exposure visit to various farms, hatcheries, processing plants and feed mills coupled with sound theoretical and practical knowledge in poultry science as well as business management will help to mold the students to fit them into poultry industry in India and abroad.

The curriculum of the course is developed and finalized through a brain storming workshop with scientists, researchers, academicians, entrepreneurs and industrialists related to the sector. The list of participants is given as Annexure II. The duly recommended curriculum was placed in various Statutory bodies of the University including Board of Studies, Academic Council and finally in the Management Council for approval.

Employment potential

The graduates from this institution are currently employed in the firms like

- i. Poultry Research Stations of Kerala Veterinary and Animal Sciences University
- ii. Poultry Farms cum Hatcheries of Kerala State Animal Husbandry Department
- iii. Kerala State Poultry Development Corporation (KSPDC)
- iv. Brahmagiri Kerala Chicken Project - A joint venture by Kerala Govt and NGO (Brahmagiri development Society, Wayanad, Kerala)
- v. Kudumbasree Kerala Chicken Project
- vi. Zilla Panchayat Hatchery, Ollur, Thrissur, Kerala

- vii. Baiada group, Australia
- viii. Poultry farms in United Arab Emirates
- ix. Almarai company, Soudi Arabia
- x. Houbara bustard farm at Qatar ministry
- xi. Venkateshwara Hatcheries Pvt. Ltd., Hosur.
- xii. Suguna Institute of Poultry Management, Udumalpet, Tamilnadu
- xiii. Suguna Foods, Tamil Nadu
- xiv. Sreenivasa poultry farms Ltd, Andhra Pradesh,
- xv. Farms India chicken, Pollachi
- xvi. VIRBAC Animal Health Pvt. Ltd.
- xvii. Poultry Farms in United States of America for One Year Poultry Work Experience Programme
- xviii. Swami Feeds, Hosur
- xix. Vangili Poultry, Krishnagiri and
- xx. become entrepreneurs in poultry industry

Students are also pursuing higher education courses like MBA, MBA (Agribusiness Management), MSc. Animal Science and M.S. Wild Life.

Mode of selection	:	KVASU entrance examination
Duration	:	6 semesters
Eligibility Criteria	:	10+2/VHSE in science stream with at least 50% marks
Annual intake	:	40+4
Evaluation	:	Semester wise examinations, assignments and project work
Scope of course	:	Placements in various farms, hatcheries, processing plants and feed mills located inside and outside the country and entrepreneurial development

Staff Position

Department wise faculty profile

Total sanctioned posts : 9

Posts in position : 4

	Professor	Associate Professor	Assistant Professor	Teaching Assistants
No. of posts sanctioned	2	2	5	
No. of posts in position	-	-	6	3

Student Position as on March 2023

Batch	2019 Batch	2020 Batch	2021 Batch	2022 Batch	2023 Batch	Total
Boys	18	15	08	12	23	76
Girls	02	14	13	11	21	61

Staff Position as on March 2023

Teaching Faculty - 9 (including Teaching Assistants)

Non-Teaching Staff - 12

Department wise faculty Profile

Sl. No	Department	Faculty
1	Poultry Breeding and Genetics	Dr. Stella Cyriac
2	Avian Nutrition	Dr. Harikrishnan S
3	Poultry Production Management	Dr. Harikrishnan S
		Dr. Abhin Raj K.P.
4	Avian Disease Management	Dr. Stella Cyriac
		Dr. Vineetha P. G. (on study leave)
5	Poultry Processing and Technology	Dr. Prasoon S
6	Poultry Business and Entrepreneurship	Dr. Stella Cyriac
7.	Physical Education	Sri. Sameer T

Myriad of Learning Pathways: Diverse Courses and Departments

Course	Departments	Name of Faculty	Number of Students
BSc. PPBM	Poultry Breeding and Genetics	Dr. Stella Cyriac	137
		Mrs. Anila P.	
	Avian Nutrition	Dr. Harikrishnan S	
		Dr. Junaid N.	
	Poultry Production Management	Dr. Harikrishnan S	
		Dr. Abhin Raj K.P.	
	Avian Disease Management	Dr. Stella Cyriac	
		Dr. Vineetha P. G. (on study leave)	
Poultry Processing and Technology	Dr. Prasoon S		
Poultry Business and Entrepreneurship	Dr. Stella Cyriac		
	Mr. Muhammed Aarsal T.K.		
	Mrs. Sheeja A.P.		
Physical Education	Sri. Sameer T		

Tapestry of Expertise and Dedication: Empowering Faculty (Faculty details, Capacity building programs, Faculty achievements, outstanding faculty)

Sl. No	Name	Qualification
	Dr. Harikrishnan S.	MVSc., PhD.
	Dr. Stella Cyriac	MVSc., PhD.
	Dr. Prasoon S.	MVSc., PhD.
	Dr. Abhin Raj K. P.	MVSc.
	Dr. Junaid N.	MVSc., PhD.
	Muhammed Aarsal T. K	MBA, M.Com., NET

	Sheeja A. P.	M.Com, NET
	Anila P.	M.Tech, NET

Prospering University Life: Vibrant Campus Experience (Sports, Games, Co-curricular activities, Union, travel, Performing Arts and Aesthetic development)

Playground and recreation facilities: The College has adequate sports and games facilities to support the physical development of students. There is an outdoor multipurpose playground (70m×70m) for sports like football, cricket and athletics activities. Courts for volleyball (18m×9m) and shuttle badminton (13.4m×5.18m) are established for the students. An indoor area offers facilities for table tennis, carrom and chess. Sports goods are also made available for students for the conduct of various sports activities like cricket, football, volleyball and athletics. A Physical Education Teacher (PET) guides the students in various sports activities. Students are actively participating in inter collegiate and inter-Agri sports meets every year. A college yoga club was started with a one-week yoga training programme and the students are practicing yoga regularly.

Fitness Centre for students and faculty: A fitness Centre, equipped with various modern equipment like multi gym, treadmill and weight lifting equipment, has been established in the campus to help the students and faculty for improving their physical health.

Inter class games and sports: The college has been organizing annual inter class games and sports meet every year. The winners will be selected for participating in inter collegiate level meets.

Student's Union: As in every college, the Students' Union of CASM, Thiruvazhamkundu is dedicated to social, organizational and co-curricular activities of students. Union encourages the spirit of comradeship, secularism and patriotism, and inculcate democratic values in students. There are various associations like Athletic Association, Social Service League, Arts Club, Planning Forum, Literary and Debating Club, Film and Photography etc. subordinate to the College Union to achieve the objectives of the Union. Different clubs work together to organize debates, seminars, work squads, tour parties and other important activities.

1.3. Exploring Library Trends

1. EDUCATION, STUDENTS WELLBEING, ENRICHMENT ACTIVITIES

1.1. Infrastructure created

Renovation of library and Smart Class room of College of Avian Sciences and Management

The construction work of the second floor of the academic block of CASM was completed with the assistance of 180 lakh received under the plan scheme of the State Government. College library, smart classroom, meat science laboratory and feed analytical laboratory have been set up. With the help of the National Agricultural Higher Education Project - Innovation Grant of Indian Council of Agriculture and Research (ICAR), the necessary equipments have been procured and entire floor was made fully operational. The floor and the facilities were inaugurated by Smt.

J. Chinchurani, Hon. Minister for Animal Husbandry and Dairy Development and Pro-Chancellor of Kerala Veterinary and Animal Sciences University.

1.2. Scholarships

Merit Scholarship : No. of Students awarded scholarship is 8

Total scholarship amount: Rs. 24000 (8 x 3000)

Merit Cum Means Scholarship : No. of Students awarded scholarship is 3

Total scholarship amount: Rs. 15000 (3 x 5000)

E grants scholarships : SC/ST/OEC and OBC Students

1.3. Hostel and Housing

Ladies hostel

College of Avian Sciences and Management provides hostel facilities for girls within the campus itself. A matron and a resident tutor are residing in the hostel to take care of the students. The hostel is established with fully furnished rooms. The hostel has all the facilities like electricity and water connection, 24-hour security guard supervision, fencing, easy road access, water purifiers for each floor, first aid box, TV, newspaper and magazines, computer, refrigerator, induction cooker, napkin destroyer etc.

Men's hostel

The College of Avian Sciences and Management has a well-furnished men's hostel with ample space for accommodation along with recreational facilities. The hostel building has facility to house 48 inmates. There are 14 rooms of which, 12 are double rooms and two are dormitories. There are sufficient toilet facilities attached to the hostel. The students are provided with a TV room, carrom boards, Table tennis court and floodlit badminton court for their recreation. A resident tutor is extending academic support to the students in the hostel.

Hostel Annex

This facility is used to accommodate first year boys during anti-ragging period. It has the capacity to accommodate 20 students.

1.4. Outreach Program

The college has been undertaking various extension activities to benefit the farming community and to solve the problems faced by the farmers. Various training programmes are being conducted for the farmers. The faculty members have been undertaking various kinds of trainings and other workshops as a part of the extension programmes. The farmers have been visiting the campus for obtaining technical advises and other consultancy services for making their business

more profitable.

Farm visit: The CASM team visited the broiler farm of Sri. Hussain at Edathanattukara as part of farmer's friendly extension programme



Palliative Day

In connection with the palliative care day, 'Arike'- Scientific patient care training campaign, an awareness class and practical training session was organized by the NSS unit of CASM in association with Edathanattukara Palliative Care Society on 03.01.2024. The programme was inaugurated by Mannarkkad MLA, Adv. N. Samsudheen. Dr. Harikrishnan S., Special Officer of this college presided over the programme. Mrs. Shamna, Head Nurse, Edathanattukara Palliative Care Society handled the practical training session. Mr. Rahees, Edathanattukara demonstrated various equipment used for home care. Mr. Rasheed Master, Vice President, Edathanattukara Palliative Care Society, Dr. Prasoon S., NSS Programme Officer, Dr. Abhin Raj, Associate Patron, students and staffs were present for the programme.



Blood Donation Camp

A blood donation camp was organised at the College of Avian Sciences and Management, Thiruvazhamkundu by National Service Scheme (NSS) unit and Vyuha Students Union of CASM in association with Blood Bank of Taluk Head Quarters Hospital, Mannarkkad on 26/06/2023. Students, staffs and laborers actively participated in the camp. Thirty units of blood were collected from 41 voluntary blood donors.



1.5. Sports, Physical Education and co-curricular activities

For the promotion of physical education and other co-curricular activities among the students, college has been organising various games and arts fest every year among the students. The events are organised at inter-class level and the winners are being selected for the inter-collegiate level competitions. The college organises football, cricket, volleyball, badminton, chess and other games and also athletics for the students.

Inter-class games: The inter-class games of 2022 was conducted on 25th and 26th July 2023. The programme was inaugurated by Dr. Harikrishnan S, Special Officer. Active participation from the students made the days colorful.





1.6. NSS/ NCC

The NSS unit of CASM has organized the following events:

Street Drama: In connection with World AIDS Day, the NSS unit of CASM has organised a street drama at Thiruvazhamkundu centre for creating awareness on AIDS and HIV among the public on 01.12.2023. The programme was inaugurated and AIDS day message was given by Dr. Harikrishnan S., Special Officer of the College. Dr. Prasoon S., NSS programme officer, Dr. Stella Cyriac, Dr. Abhin Raj K.P. and other faculty, students and staffs were present for the programme.



Yuva Samvad @2047: The Hon'ble Prime Minister has gifted the Panch Pran to the nation during his Independence Day Speech on 15th August, 2022. In order to popularize the same among the youth of the country, Yuva Samvaad- India@2047 on the theme "India's Panch Pran- A Youth Dialogue/Bharat Ke Panch Pran- Ek Yuva Paricharcha" was organised at CASM by the NSS unit on 19.02.2024. The programme was inaugurated by Dr. Harikrishnan S., Special Officer. The expert talk on Panch Pran was handled by Mr. Nissamudheen, State level master trainer and career coach. Following the expert talk, Yuva Vichar Manch and Yuva Samvad was organised among the students. Certificates were distributed among the participants and prizes were distributed for the best performers.



NSS Camp

CASM NSS Unit has organized a seven days special camp at KLDB, Dhoni, Palakkad. The camp was conducted from 18.03.2024 to 24.03.2024. About 50 NSS volunteers, 2 faculties and 2 teaching assistants were participated in the camp.



1.7. Awards in curricular, co-curricular and extra-curricular activities

Second runner up in 7th intercollegiate athletics: The students of CASM participated in the 7th Intercollegiate Athletics held at Mannuthy on 14th and 15th of September 2023. The college has bagged third position in the programme among 7 colleges under KVASU. **CASM is the First Runners up for the Intercollegiate Cricket, Football and Volleyball for Men. And also the**

First Runners up for Intercollegiate Volleyball for Ladies.



1.8. Students Union / Hostel/ Sports Day Celebrations

Computer Awareness session: In connection with World Computer Literacy Day, CASM NSS Unit and Yukta Students' Union have organised a computer awareness session for the labourers of Avian Research Station, Thiruvazhamkunnu with the aim of inculcating computer literacy. This programme was inaugurated by Dr. Harikrishnan S., Special Officer of the College. The training session was handled by Mrs. Anila P., Teaching Assistant CASM. Dr. Praseon S., NSS programme officer, Dr. Stella Cyriac, Dr. Abhin Raj K.P. and other faculties, students and staffs.



Participated in “Vanamaholsavam”: Under the aegis of the Students union of College of Avian Sciences and Management, the students and faculty members participated in the “Vanamahotsavam” celebration of Thodukap Ecotourism, which was sponsored by the Kerala Forest Department and the Mannarkkad Forest Development Agency. The guest of honour for the celebration was Padma Shri Lakshmykutiamma. Experts discussed the need for the protection of tribal communities and reforestation. The main draws of the fair include the display and commercialization of crafts, medications, saplings, medicinal plants, and diverse cereals. Additionally, students had the chance to participate on an ecotourism trek up at Thodukap Hills.



World Egg Day Celebration: As part of the World Egg Day celebration at the College of Avian Sciences and Management, the students union has organised Quiz, poster making, slogan and egg shell art competitions. The key note address for the programme was delivered by Dr. Harikrishnan S., Special Officer of the college. Prizes for the winners were distributed in the event and the prizes were sponsored by Virbac Animal Health.



Health Camp for students and staffs: The College of Avian Sciences and Management, Thiruvazhamkundu, Palakkad and Atlas Opticals, Thiruvazhamkundu jointly organised an eye examination and cataract diagnosis camp on June 22, 2023 at the college campus. The students, teachers, non-teaching staffs, office staffs and farm workers actively participated in the camp.



Inauguration of Students union 2023-24: The 'Yuktha' students union 2023-24 of CASM was inaugurated on 08.11.2023 by, Mr.Sreechithran M.J, famous writer, art critic and orator. On the same day, prizes were distributed to the winners of various events organized by the student's union 2021-22. Dr. Prasad, Teaching and non-teaching staffs and students were present in the programme. Followed by the inaugural session, various cultural programmes by the students and DJ night was conducted.



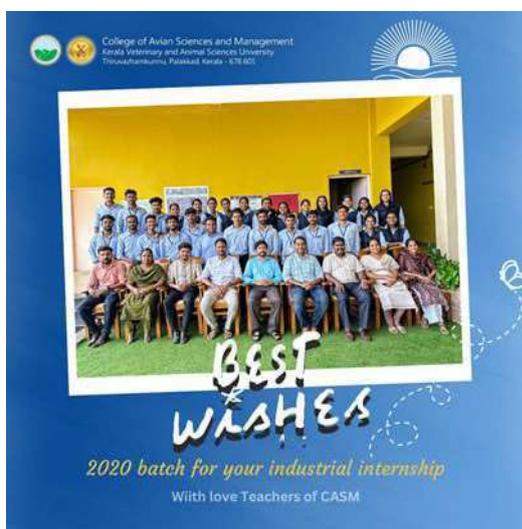
1.9. Students Exchange program : NIL

1.10. Students Counselling and Placement services

Conducted Campus Placement Drive: For the first time CASM Placement Cell has initiated a placement drive in poultry industry exclusively for women alumni to break the notion “women are not suited for poultry industry”. Out of 10 applications, six have attended the interview and all have got placement in **leading poultry firms at Pollachi.**



Industrial Internship: From last year onwards, CASM has introduced industrial internship along with the traditional internship. However, this year all students were interested to opt for industrial internship and accordingly various firms were invited for on campus placements. All 40 students of final year batch (2020 and earlier admissions) were placed into various poultry firms in south India. The students will complete their internship with the respective firms and interested students can continue working with them after their final viva voce. The companies associated with the campus placements are Venkateshwara hatcheries, Vangili poultry, Sreekrishna, Aysha, RMP, Supreme, Swasthik breeding farms.



1.11. Corporate relations

The college is maintaining a strong linkage with various firms under poultry industry for ensuring better placement and internship facilities for the students of CASM. Opportunities have been provided for the students to attend internship programme at reputed organisations of poultry industry.

1.12. Alumni relation

Alumni Connect: As part of the ‘Alumni connect’ initiative, Mr. Joel Babu (2014 batch), work-

ing as supervisor of Houbara bustard farm at Qatar ministry, interacted with faculty and students of CASM.



Interactive Sessions: An interactive session as part of Alumni connect was organised at CASM on 5th September. Miss Archana Venugopal was the resource person for the programme and the topic was ‘Pursuing higher education abroad’.



An interactive session as part of Alumni connect was organised at CASM on 7th September. Mr Hrishikesh M Nair was the resource person for the programme and the topic was ‘Opportunities at the feed mill industry’



1.13. Students' performance:

- Ms.Hridya Das N, 2018 batch BSc PPBM student bagged Chief Ministers scholarship award worth Rs.1 Lakh. This is for the second consecutive year, college is getting this prestigious award instituted by the Government of Kerala.
- Ms. Dhanya Prasad, 2014 batch BSc PPBM student got graduated in MSc Management from University of South Wales, UK.

1.14. Students' intake details

Course : BSc. Poultry Production and Business Management

Annual intake : 44 students

III- DEPARTMENT PROFILES

DETAILING DEPARTMENTS

1. Exploring Research Frontiers - Past Achievements and Current Ventures:

- Carried out research to develop a meat-line of Kuttanad ducks with the financial support from State plan project and DBT funded research project, and an improved meat-line of Kuttanad duck named Chaithra was released in 2022.
- A research project entitled "*Interdisciplinary Research in Poultry Science for Developing Climate Resilient Birds for Kerala and to establish a cost effective Production System through Breeding, Nutritional and Management Interventions*" under State plan scheme has been carried out to produce a cross-breed chicken having good adaptability and production in terms of egg and meat for backyard rearing. During this year, cross-bred birds were evaluated for its production performance. The effect of supplementation of *Lactobacillus plantarum* in the production performance of chicken was also evaluated .
- Carried out postgraduate research of M.VSc scholars from Dept. of Poultry Science, CVAS, Mannuthy.

2. Noteworthy attainments in Science and Technology (in 2-3 bullet points)

- Carried out research to develop a meat-line of Kuttanad duck with the financial support from State plan project and DBT research project and an improved meat-line of Kuttanad duck named Chaithra was released in 2022.

3. Academic Manuscripts, Investigative Pursuits, Widely-read articles, Literary Volumes and Technical Documents, Details of Research papers published.

- S. Sankaralingam, P. Anitha, Binoj Chacko, T.V. Aravindakshan and V.N. Vasudevan.

2023. Effect of pre incubation storage on hatchability and embryonic mortality in Kuttanad duck eggs. *J. Indian Vet. Assoc.* 21(1): 110-115.

- S. Sankaralingam, P. Anitha, Binoj Chacko, Stella Cyriac, Aravindakshan, T.V. and V.N.Vasudevan, 2023. Comparison of production performance of Pekin duck, control population and meat line of Kuttanad duck. *J. Vet. Anim. Sci.* 54(3):663-669.
 - Reshma, R., Binoj Chacko., P. Anitha, Prasoon. S. and Chandrasekhar, L. 2023. Effect of probiotics and rice on ileal microbial count and intestinal morphometry in broiler chicken. *J. Vet. Anim. Sci.*54(2) : 443-449.
 - Vineetha P.G, Shamna T.P. and Prasoon, S. 2023. Documentation of Indigenous Traditional Knowledge (ITKs) system prevalent among poultry farmers of Palakkad District, Kerala. *Indian J. Tradit. Knowl.* 22 (3): 505-513.
 - Stella Cyriac and Abhinraj K.P. 2023. *Kozhikalkumaavam mazhakkala samrakshanam.* Krishiyankanam 6(4): 35-37.
- 4. Technological Advancements Crafted and Transmuted - Nil**
- **Transfer of Technologies - Nil**
 - **Disseminations of Innovations to society and institutions - Nil**
- 5. Consultancy and Public Advocacy**
- Actively participated in providing consultancy services to farmers on various aspects of poultry farming
 - Provided facilities in the Demonstration Unit for familiarizing various breeds and species of poultry
 - Arranged facilities for exposure visits from students of various schools and colleges as well as for poultry farmers and entrepreneurs
- 6. Patents - Nil**
- 7. Unveiling Human Resources: Unlocking Potential and Pursuits**
- **Seminars/ Workshops/ Summer Institutes/ Symposium/Winter School:**

Awareness Workshop: The Directorate of Students Welfare, KVASU in association with the placement cell of CASM, has organised an awareness workshop at CASM Thiruvazhamkunnu on 12.03.2024. The programme was inaugurated by Dr. Harikrishnan S., Special Officer. Dr. Stella Cyriac, Academic Officer welcomed the gathering. The session was handled by Mr. Sujith Edwin Pereira, Director, National Institute for Training and Educational Research (NaITER). The session was mainly oriented with various activities to improve mental health, life skills and soft skills, people management and leadership skills. About 75 students and teaching staffs attended the programme.



One Day Workshop: CASM has organised ‘Sparkle, Discover Your Passion’ - one day workshop for the final and pre-final year students of CASM on 13.12.2023. The programme was mainly intended to improve the soft skills of the students and to equip them to face interviews. The programme was inaugurated by Dr. Harikrishnan S., Special Officer of the college. Mr. Mohammed Ikan was the resource person for the workshop. Dr. Stella Cyriac, Academic Officer, Dr. Abhin Raj K.P., Assistant Professor, Mr Evin Scaria, CEO, IEDC, staffs and 48 students attended the programme.



- **Training programs/ short courses/ any other program organized** (detail from each department separately)

Obligatory Training for the Assistant Directors in the Department of Animal Husbandry, Government of Kerala: A technical session was conducted on 30.10.2020 to the Assistant Directors of the Department of Animal Husbandry, Government of Kerala as part of Three months Obligatory Training at College of Avian Sciences and Management. Dr Harikrishnan S, special officer of the college briefed about the activities and achievements of CASM & ARS.

He also briefed about the current update of poultry industry in India. Dr. Prasoon S, officer i/c ARS demonstrated current management of commercial poultry with a farm visit.



Obligatory Training for Assistant Directors in the Department of Animal Husbandry:

As part of three months obligatory training programme for Assistant Directors of AHD, a session on ‘Initiatives of CASM’ was conducted on 14.06.2023 at College of Avian Sciences and Management. The session was handled by Dr. Stella Cyriac, Assistant Professor, CASM. A Visit was arranged to various farm units of Avian Research Station. Dr. Harikrishnan S, Special Officer and Dr. Prasoon S., Officer i/c, farms explained the various activities of CASM and Avian Research Station.



Training for Entrepreneurs: A group of 40 farmers from Mannarkkad Block visited the campus on 05.12.2023 as part of their field visit. Dr. Harikrishnan S., Special Officer interacted with the team and explained the myths and facts regarding poultry meat and egg. Dr. Prasoon S., Officer i/c, ARS explained the practices for making poultry production economical. The farmers were taken to various farm units of Avian Research Station.



Animal welfare experts, Dr Cathy Dwyer and Emily Gorman from University of Edinburgh, Scotland visited CASM and ARS, Thiruvazhamkundu.



Training for School Students: 58 students and 5 teachers from GVHSS, Pullanur visited the campus on 05.12.2023. Dr. Harikrishnan S., Special Officer of the college briefed about the activities and achievements of the college as well as ARS. Dr Praseon S., also interacted with the students on poultry enterprise. They visited various farm units of Avian Research Station.



A team of 95 students and 5 teachers from ALP School, Mannarkkad visited the campus on 28.11.2023. Dr. Prasoon S., delivered a talk on commercial poultry rearing. They have visited various farm units of Avian Research Station.



YIP sensitization Programme: In order to create an awareness on various programmes of Young Innovators Programme (YIP) and to promote entrepreneurship and innovation among students, a sensitization programme was organised at CASM on 19.02.2024. The students got proper advice and technical support to become a part of YIP and they have completed the ideator registration with the support of the resource person, Suryakiran, YIP intern.



Training for Kudumbasree Resource Persons: A training session was organised to 40 Kudumbasree Community Resource Persons of Mannarkkad, Attapady and Sreekrishnapuram block as part of their Annual Plan Capacity Building training. Participants visited LRS and ARS and got acquainted to various aspects of cattle, goat and poultry rearing. Dr. A. Prasad, Head, LRS inaugurated the valedictory session. Dr. Stella Cyriac, Dr. Prasoon S. and Dr. Abdu offered felicitations.



Training for thullyatha students: 38 Students plus one students and 2 teachers from Thullyatha centre (GMUPS, Mannarkkad) visited CASM & ARS as part of the internship field trip. Dr Harikrishnan S, Special officer and Dr Prasoon S, officer i/c has taken classes. Mr Arshil, Hatchery assistant assisted them for the field trip.



8. Strategic Resources additions- New/ innovative achievements -Nil

9. Awards and Honors/ Endowments (each departments wise detailing)

Ms.Hridya Das N, 2018 batch BSc PPBM student bagged Chief Ministers scholarship award worth Rs.1 Lakh. This is for the second consecutive year college is getting this prestigious award instituted by Government of Kerala .



10. Distinguished visitors

- Animal welfare experts, Dr Cathy Dwyer and Emily Gorman from University of Edinburgh, Scotland visited CASM and ARS, Thiruvazhamkunnu.
- Hon'ble minister of Animal Husbandry and Dairy Development, Kerala Smt. J Chinjurani
- Hon'ble Mannarkkad MLA Adv. Samsudheen
- Animal welfare board of India Chairman Dr. O.P Chowdhari

11. Beyond the Horizons: Exploring other activities- Nil

12. Other Academic activities

13. Other Research Activities- Nil

14. Other Extension Activities- Nil

M- EVENTS UNDER UNIVERSITY

University Celebrations

Foundation Day celebration, Family get together and IFTHAR meet: College of Avian Sciences and Management, the fourth constituent College of KVASU celebrated its 10th foundation day on April 5, 2023. The farm day of Avian Research Station was also celebrated along with it. Sri. Krishnadas V.A., DYSP, Mannarkkad, inaugurated the programme. Family get-together, IFTHAR meet and Campus night were the major attraction of the programme. Programmes of students and staffs made the day a special one.



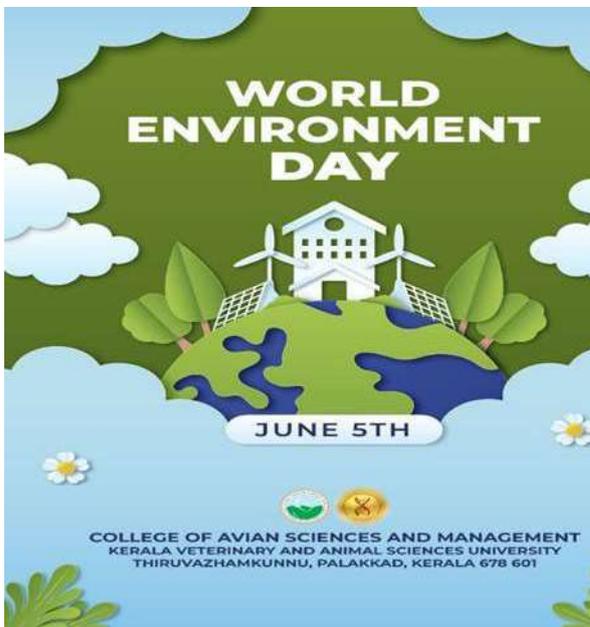


World Anti Tobacco Day: CASM, Thiruvizhamkunnu NSS Unit and Students Union jointly conducted tobacco awareness program in connection with World Anti-Tobacco Day on 3rd June 2023. Students pledged to make the CASM as anti-tobacco campus by embracing message “Instead_of using tobacco, use good food”. NSS Program Officer Dr. Prasoon S., Dr. Stella Syriac, Dr. Abhin Raj K.P., Mrs. Sheeja A.P., gave anti-tobacco day messages to students.



Environmental day celebration:

Three institutions CASM, LRS and ARS of Veterinary University's Thiruvizhamkundu campus celebrated World Environment Day together. Honorable Mannarkad MLA Advocate Sam-suddin inaugurated the construction of cashew model farm in cooperation with the Cashew Cocoa Development Office. Kottoppadam Panchayat President Smt. Jasina Akkara presided the programme. The planting festival conducted by the members of the Employment Guarantee Project, farm workers, teachers, non-teaching staffs and the students of college of Avian Sciences and management became very successful. Madakkathara Cashew Research Center Head Dr. Jalaja S. Menon delivered speech in the workshop related to Agriculture. Special Officer of CASM, Dr. Harikrishnan. S., Head of Cattle Research Center Dr. Prasad .A., Cashew Cocoa Development Office Administrative Officer PA Parameswaran, District Panchayat Member Smt. Meharban, Block Member Manikandan Vadassery, Member Irshad O, Agronist Dr. Akhila and Thambi participated in the environmental day programme.



Reading day celebrated at CASM: College of Avian Sciences and Management celebrated Reading Day on 19th June 2023. The programme was inaugurated by Dr. Harikrishnan S, Special Officer, CASM. Mr. K.P.S. Payyanedam, famous Malayalam writer was the chief guest of the programme. The chief guest delivered a thoughtful speech on the significance of reading in the development of an individual and the society. Mr. Sameer S, Assistant Librarian welcomed the gathering. In connection with the reading day, debate, reading and quiz competitions were organised by the students union. Prizes were distributed for the best library users. Miss. Thajunnisa, President, Vyuha students Union, Dr. Abhinraj K.P, Associate Patron, Miss. Gopika K.P, Secretary, Literature Club, Students, Teaching and non-teaching staffs have participated in the programme.



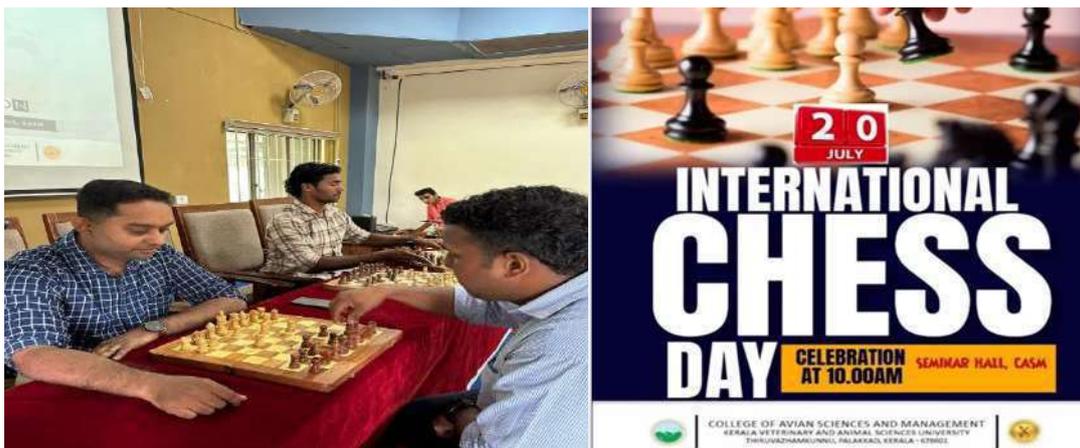
World Blood donor awareness day: World Blood donor awareness day was celebrated at CASM on 14.06.2023. In connection with the celebration, a blood donation awareness class was organised in association with Kottopadam Family Health Centre. The programme was inaugurated by Dr. Stella Cyriac, Special Officer i/c. The session was handled by Mr. Toms Varghese, Health Inspector, Kottopadam FHC. He emphasised the importance and benefits of blood donation. The NSS unit of CASM has also planned a blood donation camp on 26.06.203.



International Yoga Day celebrated at CASM: The College of Avian Sciences and Management celebrated International Yoga Day on 21.06.2023. The programme was inaugurated by Dr. Harikrishnan.S., Special Officer, CASM. A special yoga awareness session was arranged by Brahmakumari's Meditation Centre. The representatives from Brahmakumari's centre explained the importance and benefits of practicing yoga in modern life. A practical session was also organised for the students and staffs. Dr. Prasoon S., Dr. Abhinraj K.P., Sameer T., students and staffs were present. Kum. Honey George, Secretary, Vyuha Student's Union delivered vote of thanks for the programme.



International chess day: The College of Avian Sciences and Management celebrated International Chess Day on 20.07.2023. The programme was inaugurated by Dr. Harikrishnan S., Special Officer of the college. A Chess competition was also conducted for the students, teachers and staffs as part of the celebration.



Independence day celebration: College of Avian Sciences and Management, Thiruvazhamkunnun Celebrated the 77th Independence Day with great enthusiasm and respect. The ceremony started at 9.05 AM in the campus with the flag hoisting by Dr. Harikrishnan S., Special Officer of the college. The Special Officer delivered a speech emphasizing the unity in diversity and democratic sovereignty of India. The salient achievements of our nation and the contributions of the great leaders in our independence struggle was remembered. Independence Day messages were delivered by Mr. Sajeev kumar, Senior Farm Supervisor, Mr. Harinandan, Student representative and Mr. Ashraf, Labourer.



Onam Celebrations: Onam 2022 was celebrated at CASM on 22.8.2023. The students union has organized various cultural programmes for the students and faculty members on the same day. The active presence and participation of the students and staffs made it a special one.



Gandhi Jayanthi celebration: Gandhi Jayanthi was celebrated at CASM on October 2nd. The N.S.S students have cleaned the surroundings of the campus and hostels.



World Egg Day celebration: As part of the World Egg Day celebration at the College of Avian Sciences and Management, the students union has organised Quiz, poster making, slogan and egg shell art competitions on 13th October 2023. The keynote address for the programme was delivered by Dr. Harikrishnan S., Special Officer of the college. Prizes sponsored by Virbac Animal Health, were distributed to the winners.

World Egg Day Awareness campaign was conducted at Govt. LP School, Thiruvizhamkundu on 17.10.23 by CASM, Thiruvazhamkundu. Eggs were distributed to the students as part of egg day.





World Egg Day campaign was conducted at Thiruvizhamkunnu Anganwadi by CASM team on 18.10.2023.



Keralapiravi celebration: The 67th Kerala piravi day was celebrated at College of Avian Sciences and Management on 1st November, 2023. The programme was inaugurated by Dr. Harikrishnan S., Special Officer of the college. Various cultural programmes and traditional fashion show were organized for the students and staffs on the same day.





Republic day celebration: The 75th Republic Day was celebrated with pride and patriotism at College of Avian Sciences and Management, Thiruvazhamkundu. The celebration started with unfurling of the National Flag by Dr. Harikrishnan S, Special Officer. It was followed by National Anthem and an inspiring speech by the Special Officer on the significance of the occasion. The faculties, staffs, students and labourers were present for the programme.



Major Events conducted by the University

Inauguration of University Union 2023-24 of KVASU: The inauguration of the 2023-24 University Union at Kerala Veterinary and Animal Sciences University (KVASU) took place at the College of Animal Science and Management (CASM), Thiruvazhmkundu. The event was graced by the esteemed presence of Prof. M.R. Saseendranath, the Vice Chancellor of the University, who officially inaugurated the Union. A key highlight of the event was the unveil-

ing of the Union logo by the renowned film director, Jio Baby. The unveiling ceremony was an exciting moment for the students and faculty, marking a new chapter for the Union. The event was supported by a team of facilitators, including Dr. T.S. Rajeev, Dr. A.R. Sreeranjini, Dr. A. Prasad, Dr. S. Harikrishnan, and Dr. Abinraj, who contributed significantly to the organization and success of the event. The event began with a welcome speech by Ajay Suresh, the Union General Secretary, who addressed the gathering and set the tone for the celebration. The Vote of thanks was delivered by Anees Manaf, the Programme Convener, who expressed gratitude to all the participants and guests. In addition to the inauguration ceremony, the event also featured cultural programs organized by the students. These performances added to the vibrant atmosphere, showcasing the artistic talents of the student community.



1. I - Library and Information Sciences (College Library)

1. Unraveling the Elegance of Library and Information Sciences

2. Center Overview: A Snapshot of Excellence

1. CASM College Library stands as a beacon of knowledge and academic excellence within the institution. It serves as a critical resource hub for students and faculties alike. The library fosters

learning, research and intellectual exploration.



1. I - Books Anew

1. a) Host of New Arrivals

In the past years, Library has enriched its collection with an impressive array of new books and resources across various disciplines, ensuring a dynamic and up-to-date repository.

1. b) Subjects and Genres

Library's collection caters to a broad spectrum of academic interests, with a particular focus on aviation and management sciences. Additionally, holdings in Literature, History, Biography and general sciences ensure that diverse intellectual pursuits are well-supported.

2. c) Latest Trending Collections

Curated collections reflecting current academic trends and research interests enable users to access the most relevant materials.

2. II - Novel Engagements

1. a) Reading Engagements

To promote a culture of reading, library organized Reading Day celebration, quiz programs, and awards for the best readers to encourage reading. Library hours are included in the students' timetable to ensure that they have sufficient time to spend in the library.

2. b) Literary Fairs

Library actively participates in literary fairs, fostering a sense of community and celebrating the written word.

3. c) Training

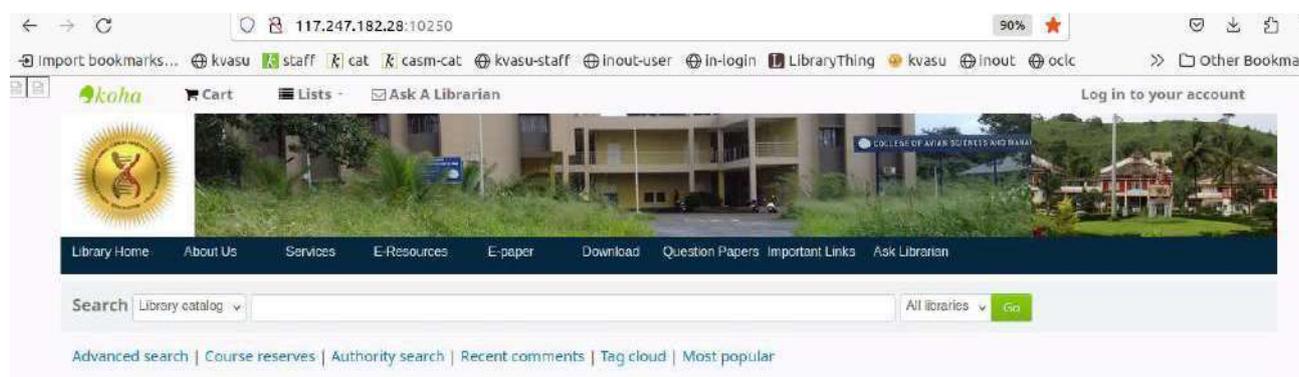
Training sessions and orientation programs empower users with the skills to navigate library resources efficiently. Orientation programs are provided to each batch from time to time to ensure a proper understanding of the library system. Personalized assistance further enhances their experience.

3. III - Technological Leap

1. a) Stepping into the Digital Age: Brief Profile

Library has embraced the digital age, providing online access to an extensive collection of e-books, journals, and databases. We utilize KOHA, an integrated Library Management System with RFID

support, to offer all the necessary services to our user community. The Online Public Access Catalog (OPAC) is accessible to the entire user community 24/7 via the following web address: <http://117.247.182.28:10250/>



2. b) List of Upgraded Systems

Library systems have undergone significant upgrades, resulting in improved efficiency and an enhanced user experience. Currently, we are using Koha version 22.05 and Ubuntu Server version 22.04.

3. c) Improvement of Search Capabilities

Advanced search functionalities in Koha simplify the discovery of resources through logical operators (and, or, not). User accounts provide access to borrowed items, due dates, fines, and search histories. The content pages of all subject books have been digitized and linked to their respective entries in Koha, enabling users to view them during searches. Additionally, an innovative Python-based application allows users to search content pages for specific topics. This feature helps identify all books containing relevant terms, providing unparalleled access to focused academic content.

4. d) User Experiences and Feedback

User feedback highlights improved accessibility and satisfaction with the library's digital advancements.

4. IV - Enriching Services

1. a) Research Services and Assistance

Dedicated research services and assistance team provides invaluable support to students, facilitating to their academic activities.

2. b) Reference Section

Library's reference section serves as a vital resource for knowledge seekers, and providing comprehensive expertise and guidance.

5. V - Library in Focus

1. a) Snapshot of the Library's Evolution

Over the years, library has evolved and expanded to meet the evolving needs of the academic community. College library commenced its journey in 2014 on the ground floor of the college building with limited space and features. Subsequently, it relocated to the first floor, providing more room but still within constrained space. In 2022, the library made a significant move to the second floor of the building, affording ample space and state-of-the-art infrastructure facilities.



b) Services Offered

Library persistently strive to broaden its services and ensures that library stand at the forefront of providing academic support. The core services offered are as follows:

- Collection Development and Management
- Cataloging and Classification
- Reference and Information Services
- Circulation Services
- Interlibrary Loan (ILL)
- User Orientation and Training
- Reprographic Services.

2. c) Stock

Library's collection has experienced substantial growth, with a steadfast emphasis on quality and relevance. As an academic library specializing in avian and management sciences, the majority of our holdings consist of materials in these disciplines. Additionally, library maintains a substantial collection of books in literature, history, biography and general sciences. In total, its' collection comprises over 2,600 books, 40 CDs, and IT equipment including 20 computers and 3 printers. Library

has also implemented RFID technology. Furthermore, library is well-equipped with various types of furniture, including tables, chairs, shelves, and air conditioning units.

d) Growth Projection

Library anticipate continued intellectual exploration and academic growth, with plans to expand its collection further.

e) Number of Users/ Subscribers

Library serves an expanding number of users and subscribers, underscoring its significance within the academic ecosystem. Currently, library has 150 users, including 130 students.

f) Quantifying Library Engagement

Library actively track the time invested by students and faculties in utilizing library resources, demonstrating its vital role in academic life.

6. VI - Financial Vitality

1. a) Library's Financial Standing and Revenue

Library's financial stability is primarily dependent on state plan fund and non-plan fund. Thus library is in a healthy financial position. To enhance the library further additional funding is required.

2. b) Resources Allocation

Funds are allocated strategically to ensure the continuous improvement of library services and collections.

3. c) Operational Cost

Library has maintained cost-effectiveness in its operations, optimizing resources for maximum impact.

7. VII - Bibliophile's Delight

1. a) A Glance at Our Extensive Collection

Library boasts an extensive and diverse collection, catering to all types of readers and students.

2. b) Classic Masterpieces

Library treasures classic masterpieces, ensuring they remain accessible to all who seek their wisdom.

3. c) Scholarly Works

Library's commitment to scholarship is evident in its collection of scholarly works, supporting academic excellence.

8. VII - Infrastructure Elegance

The library's modern infrastructure fosters an inspiring and comfortable environment, promoting academic and intellectual pursuits.

DIRECTORATE OF FARMS

(ANIMAL PRODUCTION- LIVESTOCK/POULTRY PRODUCTION)

1. Introduction

Animal farms are the backbone of Veterinary Universities as they play a major role in education and research for Undergraduate and Postgraduate students as well as for extension activities by the scientific staff to the farmers. They also form the face of the University in the sense that farmers under the animal husbandry sector receives quality seed material in terms of livestock and poultry as well as training in most modern practises in animal husbandry. Apart from providing seeds, the farms under this University provide products like Milk, meat, egg, fodder slips, organic manure etc. to the farming community of Kerala thereby ensuring its indebtedness to the animal husbandry and agriculture sector of the State and Country. Moreover, these farms are also involved in conserving the valuable germplasms of indigenous livestock and poultry.

Hence, due importance is given to the development and maintenance of animals and infrastructure in the farms of the Veterinary Universities.

2. Present Stock

Details of stock in animal/poultry farms & allied units of Kerala Veterinary and Animal Sciences University

Kerala Veterinary and Animal Sciences University harbours 13 farms at 5 different locations spread over 4 districts in Kerala, the details of which are provided below:-

Farms and Plants under Kerala Veterinary and Animal Sciences University

Campus	Name of Farms / Plants
Mannuthy	AICRP on Poultry for Eggs, Mannuthy
”	Centre for Pig Production and Research, Mannuthy (CPPR)
”	Vechur Farm, Centre for Advanced Studies in Animal Genetics and Breeding, Mannuthy (CASAGB)
”	Dairy Plant, Mannuthy
”	Feed Mill, Mannuthy
”	Goat and Sheep Farm, Mannuthy
”	Meat Technology Unit, Mannuthy (MTU)
”	Rabbit Breeding Station, Mannuthy
”	Small Animal Breeding Station, Mannuthy (SABS)
”	University Poultry and Duck Farm, Mannuthy (UPDF)
”	University Livestock Farm & Fodder Research and Development Scheme, Mannuthy (ULF & FRDS)
Thumburmuzhy	Cattle Breeding Farm, Thumburmuzhy (CBF)
Kolahalamedu	Base Farm, Kolahalamedu
Thiruvazhamkunnu	Avian Research Station, Thiruvazhamkunnu (ARS)

”	Livestock Research Station, Thiruvazhamkunnu (LRS)
Pookode	Instructional Livestock Farm Complex, Pookode (ILFC)

It can be observed that the farms under KVASU harbours 973 crossbred cattle, 266 Vechur & other indigenous cattle, 131 buffaloes, 1369 pigs, 631 sheep & goats, 12,033 chicken, 933 ducks, 57 turkey, 2946 quails, 43 goose, 47 guinea fowl, 3 emu, 2 ostrich, 476 rabbit and 1491 small animals like experimental rats, mice, guinea pigs and hamsters is on 31.03.2024.

3. Production and Reproduction Data of the report year

4. Germplasm and Input Supply: Farmers and Institutions

An abstract of the tremendous social commitment of farms of KVASU to the farmers in the animal husbandry and agricultural sector is depicted below:-

Sl. No.	Name of the farm	farmers	institutions
1	UPDF, MANNUTHY	Chicken egg - 206100, Duck Egg - 38793, Japanese Quail, Turkey & Guinea Fowl egg - 92187, chicks - 305669, Adult - 498, Meat - 8228 Kg., Manure - 68854 Kg.	Regional Poultry Farm, Mundayad, Kannur - 5730 Chicks, Hatchery complex, Thottathara, Ayoor - 5450 chicks, Regional Poultry Farm, Kudappanakkunnu, Trivandrum - 2565 chicks, Central Hatchery, Chengannur, Alappuzha - 9940 chicks, Regional Poultry Farm, Manarcaud, Kottayam - 1080 chicks, IAH & VB, Palode, Trivandrum - 100 chicks, Seed garden complex, Munderi, Malappuram - 33 chicks, Regional Poultry Farm, Malampuzha - 5890 chicks, AICRP, Mannuthy - 716 Hatching eggs, Directorate of Entrepreneurship, KVASU, Pookode - 430 chicks, Agricultural state Seed Farm, Aluva - 137 chicks - District Poultry Farm, Kolani, Thodupuzha - 2885 chicks - Regional Poultry Farm, Koovappadi, Kuruppampadi - 2630 chicks, Kerala State Poultry Development Corporation, Kottiyam - 4400 chicks, ETR Co-ordinator, CVAS, Mannuthy - 600 chicks, ETR Co-ordinator, CVAS, Pookode - 200 chicks, KVK, Palakkad - 560 chicks, KVK, Thrissur - 1185 chciks, Regional Poultry Farm, Chathamangalam, Kozhikode - 3214 chicks, District Poultry Farm, Athavanad, Malappuram - 4800 chicks. Meat Technology Unit, KVASU, Mannuthy - 660 Kg. Meat.

2	AICRP ON POULTRY FOR EGGS, MANNUTHY	1,13,598 (day old chicks and hatching eggs) 5457 (adult birds) 2,18,878 table eggs	Directorate of Poultry Research, Hyderabad -150 Tellicherry hatching eggs KVK, Pattambi - 1100 native / Thriveni chicks KLDB, Maattupetty -3000 table eggs
3	ARS, THIRU-VAZHAM-KUNNU	"Chicken egg : 259004 Duck egg : 28576 Quail egg : 79750 Guinea Fowl egg : 4265 Turkey egg : 2533 Goose egg :14 Adult Birds sold Chicken : 2788 Duck : 4177 Quail : 21809 Guinea Fowl : 35 Turkey : 10 Duck : 317 Quail : 2643 Guinea Fowl : 12 Chicks sold Chicken : 103974 Duck : 4177 Quail : 21809 Guinea Fowl : 35 Turkey : 10 Turkey : 15 Grown up Birds Sold Chicken : 1578 Duck : 988 Quail : 408 Guinea fowl : 0 Turkey : 21"	Nil

4	ILFC, POOKKODE	<p>"Chicken egg: 1,59,104 Duck egg: 2,588 Quail egg: 15,911 Emu egg: 19 Ostrich egg: 70 Milk -Cattle+Buffalo: 1,02,752 L Milk - Goat: 11.5 L Young stock sold - Cattle: 26 Piglets: 807 Rabbit: 21 Adult Stock sold- Cattle: 3 Pigs: 30 Rabbit: 6 Goat: 10 Pig manure: 9.1 ton Poultry manure: 4960 kg Cow dung: 261869 kg (wet) + 687.3 kg (dry) Green grass : 27693 kg Cow urine: 555 L Fodder slips : 700"</p>	<p>"Wistar rat: 278 Meat Technology Unit - Cattle: 11 Pigs: 69 Rabbit: 12 "</p>
5	BASE FARM, KOLAHALA- MEDU		
6	CBF, THUMBUR- MUZHI	Cattle sale: 38 numbers; 15.2 T Fodder grass and 36,786 number of fodder slips	Meat Technology Unit- Cattle 42 no.; 6000 number of fodder slips to Christ College Irinjalakuda and 60 numbers to Little Flower School
7	ULF&FRDS, MANNUTHY	<p>"46 YOUNG COWS 5 ADULT CALFS 13 YOUNG BUFFALOES 5 ANIMALS FOR CULLING Urine 517 L Vermicompost 1015 Kg Raw Cow dung sold 146431Kg Fodder slips 22995 Numbers(CO3, CO5) Dry Cow dung Powder 1378 bags of 20 kg each and 332 bags of 2Kg each. Gunny Bags 6203 Nos"</p>	<p>"Total Cow milk sold: 2608727.42 Ltr. (to Dairy Plant and SABS) Total Buffalo milk sold: 49712.02 Ltr. (to Dairy plant) 20 animals to MTU Green grass sale:170694 Kg(to SABS,NCC,Vechur farm,Rabbit farm,Goat farm,AI Centre)"</p>

8	LRS, THIRU- VAZHAM- KUNNU	Goat: 119, Male calf: 40, Heifers: 20, Fodder slips: 19460,	Cattle to MTU: 19 Buffalo to MTU: 8, Milk sales (MILMA): 284168.2 L, Milk Local sale: 14171 L Cow dung powder (State seed farm, Chokkad): 10,000 Kg
9	SABS, MANNUTHY		Supply of laboratory animals to colleges, research institutions, R & D centres of companies etc in Kerala and Tamilnadu
10	RABBIT FARM, MANNUTHY		
11	CPPR, MANNUTHY	sale of fattening piglets 579 no.; sale of culled pigs 238 no.; sale of breeding pigs 77 no.pig manure 1520 kg	sale of breeding female pigs to Amritha institute of medical sciences, Kochi 104 no.
12	GOAT AND SHEEP FARM, MANNUTHY	Sale of Goat kids- 214 Nos., Goat milk-8095 L, Goat manure-20,652.5 kg	Sale of Goat kids-34 Nos.
13	VECHUR FARM, MANNUTHY		

During the financial year 2022-23, these farms provided 18,31,734 eggs (chicken, duck, quail, Guinea fowl, Turkey, emu), 10,48,872 litres of cow milk, 32,505 litres of buffalo milk and 7184.3 litres of goat milk. They also supplied 5,29,965 nos. of chicken, 3441 duck, 25,655 quail, 365 Guinea fowl, 91 turkey, 2558 piglets, 495 rabbits, 308 goats, 213 cattle and 2,23,448 fodder slips as seed material to the farmers. The farms also supported the agricultural sector by providing 142.3 tonnes of manure, 142.1 tonnes of dried cow dung, 382 tonnes of fresh cow dung and 1923 kg of vermicompost.

5. Breakthrough Strain Variants: Unveiling New Species and Varieties (attached)

AICRP on Poultry, Mannuthy had developed a new variety of crossbreed chicken named “Thriveni” which is a cross of Thalassery white leghorn and Rhode Island Red breeds of chicken. This variety has been found to produce 205 eggs in a year. The AICRP centre had earlier done the genetic characterisation of Thalassery breed which played an important role in getting national recognition. **Sales Revenue from animals and Product Offerings**

Apart from supporting the educational institutions of the University viz. Veterinary, Dairy Science and Poultry production colleges, these farms and associated plants & mills also fetches valuable revenue to the university. In addition to this, about 40 Revolving fund projects are operating in different farms/Departments and a revenue of Rs.3.2 crores have been generated in the last FY.

6. Capturing Innovations: Photos of New Strains, Varieties, Synthetics, and Farm Activities

(attached)

7. **Training Endeavors:** Insights into Conducted Programs (attached)

(Details of training conducted)

8. Fodder development: Kerala Veterinary and Animal Sciences University (KVASU) has been actively engaged in a diverse range of fodder development initiatives over the past decade. A key aspect of their work is cultivating various fodder types, including grasses, cereals, legumes, and tree fodders. This multifaceted approach ensures a diverse and nutritious feed supply for livestock.

The university's commitment to fodder development is evident in its establishment of five livestock farms dedicated to fodder production. These farms are strategically located across Kerala and serve as vital hubs for research, development, and production of high-quality fodder.

KVASU's dedication to innovation is evident in its implementation of several key projects. These include the establishment of a hydroponic center at CVAS, Pookode, and the construction of a tower silo at LRST. These initiatives demonstrate KVASU's commitment to exploring and implementing cutting-edge technologies for enhancing fodder production and preservation.

Beyond production, KVASU is actively involved in research and development activities. This includes analyzing soil and fodder samples to optimize nutrient composition, testing the utility of coir pith blocks for water conservation in fodder cultivation, and rigorously assessing the performance of various fodder varieties under different conditions.

Looking towards the future, KVASU has outlined a series of initiatives to further strengthen fodder development. These include conducting regular training programs for farmers and entrepreneurs on modern fodder production techniques, with a focus on maximizing forage production and identifying new and promising forage resources.

The university also plans to significantly increase fodder seed production and promote the utilization of intercropping, a sustainable method involving growing different crops simultaneously, with horticulture and silviculture crops. This approach optimizes land use and promotes biodiversity, further enhancing the sustainability of fodder production.

KVASU's work extends to promoting the use of fodder trees and legumes, recognizing their significant role in providing a cost-effective source of protein supplementation for livestock while also improving soil fertility. The university actively practices what it preaches, having planted trees like Subabul, Caliantra, and Moringa on its campuses. These trees are regularly harvested and added to fodder grasses to provide a balanced and nutritious feed for cattle and buffaloes.

In addition to the initiatives mentioned above, KVASU has undertaken other innovative fodder development activities. This includes the establishment of a hydroponics center dedicated to producing high-quality fodder and the introduction of new Hybrid Napier varieties like Co-6, known for its high yield and nutritional value.

KVASU's commitment to fodder development is not limited to research and production. The university also places a strong emphasis on knowledge sharing and capacity building.

This is exemplified by the Stipendiary Training Programme-Fodder crop Development Army (FCDA), a one-year training program designed to equip participants with the knowledge and skills necessary for effective fodder production.

Furthering its outreach efforts, KVASU has submitted a project proposal to the Local Self Government Department for a comprehensive three-month hands-on training program on scientific fodder production and management. This program is specifically designed for livestock entrepreneurs and dairy farmers, empowering them to adopt sustainable and efficient fodder production practices.

9. Satellite units : Three satellite units of All India Coordinated Research Project (AICRP) of ICAR viz ON POULTRY , AICRP ON PIGS and AICRP ON GOATS are operating in KVASU.
10. Any other report of the year

INSTRUCTIONAL LIVESTOCK FARM COMPLEX, KVASU, POOKODE

The farm was established in 2004 as instructional farm under the Kerala Agricultural University. In 2013 it was renamed as Instructional Livestock Farm complex, CVAS, Pookode under Kerala Veterinary & Animal Sciences University.

The farm acts as a center for practical training of UG students (BVSc & AH, BTech, Diploma) and for post graduate research in various disciplines. Many nutritional trials and other relevant research by the faculty and students have utilized the resources in the farm. It also forms the training center for the programmes like Dairy Diploma, Livestock Assistant, and Farmers Training etc. The farm also acts as a conservation unit of various indigenous breeds of cattle.

Present stock: (March, 2024)	Goat and Sheep Farm	
	Malabari	100
	Sheep	50
	Cattle, Buffalo, Vechur and Indigenous units	
	Cross Breed cattle	98
	Buffalo	25
	Vechur	50
	Indigenous	8
	Poultry unit	
	Chicken – layer	1896
	Duck – layer	108
	Quail	85
	Turkey	4
	Emu	4
	Guinea fowl	2
	Ostrich	4
	Pig farm	
	Large White Yorkshire	142
	Landrace	0
	Duroc	41
Cross breed Pig	09	
Rabbit farm		
Rabbits – NZW, WG, SC, GG, Angora	104	

<p>Production and Reproduction data:</p>	<p>Milk : 1,02,752 litre</p> <p>Eggs</p> <p>Chicken : 1,59,104</p> <p>Duck : 2,588</p> <p>Quail : 15,911</p> <p>Emu : 19</p> <p>Ostrich : 70</p> <p>Birth</p> <p>Calves : 50</p> <p>Kits : 214</p> <p>Piglets weaned : 923</p> <p>Kids : 64</p> <p>Lambs : 23</p>
<p>Details of supply of germplasm and other inputs to the farmers and institutions</p>	<p>Young stock</p> <p>Calves : 26</p> <p>Kits : 21</p> <p>Piglets : 807</p> <p>Adult stock</p> <p>Cattle : 3 + 11 MTU</p> <p>Pigs : 30 + 69 MTU</p> <p>Rabbit : 6 + 12 MTU</p> <p>Goat : 10</p> <p>Wistar rat : 278</p> <p>Manure</p> <p>Wet : 2,61,869 kg</p> <p>Dry : 687.3 kg</p> <p>Poultry : 4960 kg</p> <p>Pig : 9100 kg</p> <p>Urine : 555 ltr</p> <p>Fodder : 27,693 kg</p> <p>Fodder slips : 700 nos</p>
<p>Breakthrough Strain Variants: Unveiling New Species and Varieties</p> <p>(Details of new strains/ varieties / developed)</p>	<p>Nil</p>

Sales Revenue from animals and Product Offerings

Rs 1,00,38,305/-

Capturing Innovations: Photos of New Strains, Varieties, Synthetics, and Farm Activities



Improved fodder production and sale



Stall at Pooppoli exhibition



Hands on training for the students on fodder production

<p>Training Endeavors: Insights into Conducted Programs (Details of training conducted)</p>	<ul style="list-style-type: none"> • 14 organized farm visits by farmers and students • 724 visitors • 3 months obligatory training from AHD • Hands on training programme for tribal youth of Wayanad on Dairy production – two batches • Participated in Pooppoli exhibition at KAU, Ambalavayal • Conducted farmers training programme with District Panchayat, Wayanad 	
<p>Fodder development</p>	<p>Extended by two acres, new plots initiated, improved slurry pumping mechanisms adopted to hill top with 20 HP motor, slurry tankers renovated, pathways to fodder fields created, sprinkler facility extended, fencing repaired.</p>	
<p>Satellite units</p>	<p>Nil</p>	
<p>Any other report of the year</p>	<p>Additional facilities created during the year</p>	<ul style="list-style-type: none"> • Slurry management system to hill top fodder plots • Additional fodder plots for 2 acres • Introduced new Duroc breeding pairs • Arecanut planting extended • Pathways to fodder plots created • Fire safety equipments installed • Incubator facility for piglets installed • New A3 printer installed at office
<p>Mechanisms and methods adopted to improve the functioning of the farm (Ten points minimum)</p>	<ul style="list-style-type: none"> • Chaff cutter repaired for efficient functioning • Sprinkler facility extended • Fencing of fodder plots • Two slurry tanker made functional • Automatic drinker at pig farm • Improved animal/bird housing facilities • Irrigation pumps renovated • Hydroponics shed renovated • Screening for Theileriosis • Screening for Brucellosis • Facelifting of farm buildings • Vaccine trial for IBD with dept. of Preventive Medicine, TVCC Pookode and IIL, Hyderabad 	
<p>Student research during the year</p>	<p>MVSc : 13 PhD : 1 MSc : 1</p>	
<p>Student training during the year</p>	<p>Internship training, farm clinics, farm practice, entrepreneurship training for BVSc and AH students, Training for BSc and diploma dairy and poultry students, VHSE on the job training</p>	

ULF & FRDS, MANNUTHY

No	Particulars	2023-24
1	Year of Establishment	May 1917
2	Total area of the farm	80 Ha
3	(Sanctioned strength/in position as x/y) with designation of each post	
i	Scientific staff	3 (1 on working arrangement)
	Professor	2 (1 on working arrangement)
	Associate Professor	
	Assistant Professor	1
ii	Administrative staff (Total)	6
	Assistant Registrar	1
	Section officer	1
	Office Assistant	3
	Computer Assistant	1
iii	Farm Supervisors	4
vi	Class IV	2
v	Labourers - permanent	94
vi	Labourers - casual	4
vii	Others- Specify	
	a. Pump Operator	1
	b. Tractor Driver	1
4	Total number of permanent staff	
	Employment staff	4
	Daily wage employees	5
5	Whether the farm land/part is occupied by any agency/govt. dept in last five years, if yes details with area	1 acre land for KSEB sub-station, Mannuthy
6	Details of Budget allocation and Expenditure	

	Fund released (Non Plan + Plan + EAP)	15181992+7811213=2,29,93,205/-
	Expenditure (Non Plan + Plan + EAP)	70834174+7810580=7,86,44,754/-
	Revenue Generated	1,77,20,240/-
	Cost benefit ratio	0.22
7	Objectives of running the farm	<ul style="list-style-type: none"> • To act as a Instructional farm for teaching UG, PG, Doctoral and Diploma students of KVASU • To act as a Research and Development centre for scientific cattle & buffalo husbandry, nutrition, genetics, reproduction and other avenues • To act as a nodal centre for fodder seed supply and research on fodder cultivation • To impart training to dairy farmers, entrepreneurs, women self help groups, field veterinarians and livestock farm assistants
	Level of achievement of above objectives	Achieved
8	Status of maintenance of mandatory registers in the farm (up to date/pending)	Up to date
9	Suggestions/recommendation of the superior officers who have visited the farm	
10	Details of farm produce	
	Milk/Year Total Cow milk produced: 285663Kg Total Buffalo milk produced:58028.9Kg Total Cow milk sold: 2608727.42 Ltr. Total Buffalo milk sold: 49712.02 Ltr.	Rs. 14924654/- generated vide sale of milk @ Rs 46.98/48.72 per Litre for cow milk & Rs 49/50.75 per Litre for buffalo milk
	Animals sold/year (Young Stock)	46 Young Cattles (Amount: 97500/-), 13 Young Buffalo (Amount: 398100/-)
	Animals sold/year (Adult Stock)	4 Adult Cow (Amount: 102000/-)
	Others (specify)	
	a. Urine 517 L @ Rs.8.5/10	5170/-
	b. Vermicompost 1015 Kg @ Rs 16/Kg	16240/-
	c. Raw cow dung Total Production 913931 Kg Cow dung sold 146431 Kg@ 1.25/Kg	183067/-
	d. Fodder slips 22995 CO3, CO5 @ 1.30 rs & 1000 Guinea @ 1 rs	30894/-

	e. Dry Cow dung Powder 1378 bags, 20 kg bag@ 290/bag- & 332 bags, bag@ 55/bag	417091/-
	f. Green Grass Sale Total Production: 1988539 Kg Green grass sale:170694 Kg@4.95/kg	844935/-
	g. Culled Animals 25 Nos.	408047/-
	h. Gunny Bags 6203 Nos@ 5/7/bag	42421/-
	i. Other miscellaneous items	250121/-
	Other Benefit From Farm (sum of (a) to (i))	2274166/-
	Total Benefit	1,77,20,240/-
11	Mechanism adopted for the sale of the farm produce	1. Milk sold to Dairy Plant 2. Dung sold as dry and fresh as per public demand 3. Fodder slips sold as per public demand
12	Method of purchase of feed	Purchased on credit basis from KVASU Feed mill
	Source of purchase of feed	KVASU Feed mill run by School of Animal Nutrition
A	Cattle Pellet Feed (type 2)@ Rs.30 & 31/kg for 402500 kg	12301250/-
B	Calf starter @Rs. 36 & 37/kg for 12450 kg	453450/-
C	Green grass @Rs.4.95/kg for 217840 kg	1078308/-
D	Paddy straw @ Rs 10.5 & 7.35/kg for 175250 kg	1579120/-
E	Broken Maze @ Rs.31/kg for 4500 Kg	133400/-
F	Mineral Mixture @ 110/Kg for 750 Kg	82500/-
G	Experiment Feed	
	i. Type I (Total- 3100 Kg) (Dr. B.Om Prakash Reddy – 500 Kg, Dr. Lasna Sahib-650 Kg, Dr.Sreelakshmi M -1950 kg)	106850/-

	ii. Type II (Total- 3450 Kg) (Dr. B.Om Prakash Reddy – 500 Kg, Dr. Lasna Sahib-400 Kg, Dr.B. Reghupathy -600 Kg, Dr.Sreelakshmi M -1950 kg)	130050/-
	iii. Type III (Total- 800 Kg) (Dr. B.Om Prakash Reddy – 500 Kg, Dr. Lasna Sahib-300 Kg)	25400/-
	iv. Cattle block(TMR) (Total- 8010 Kg) (Dr. Lasna Sahib)	225575/-
	v. Control Feed (Total- 2000 Kg) (Dr. Sreelakshmi M)	55800/-
	vi. Milk Replacer (Total – 150 Kg) (Dr. Rohini Rajaram Karade)	42750/-
	Total Cost (a+b+c+d+e+f+g)	1,62,14,453/-
	C: B ratio	0.91
13	Additional facilities created during the year	<ol style="list-style-type: none"> 1. Establishment of two fenced open paddocks with adlibitium watering facility on either side of milch cattle shed 2. Establishment of comfort station and waiting rooms for farm labourers on hill top area of fodder production 3. Establishment of Scientific staff office room and facilities at Buffalo farm 4. Establishment of rain water harvesting tank at Cattle farm 5. Renovation of rain water harvesting tank at buffalo farm 6. Establishment of Golden Jubilee Forage Garden with 26 varieties of High yielding Fodder Crops (AICRP of IGFRJ Jhansi) at ULF &FRDS, Mannuthy

14	Mechanisms and methods adopted to improve the functioning of the farm (Ten points minimum)	<ul style="list-style-type: none"> • Scientific ration balancing and feeding and management of dairy cattle, Murrah buffaloes and crossbred calves and buffalo calves • Improvement in conception rate by better reproductive management • Breeding of dairy cattle using sex sorted semen for superior HF female calves • Cultivation of Fodder Maize African Tall variety in 2 acres of land and waste lands. • Therapeutic hoof care management of dairy cattle • Annual vaccination of cattle and buffaloes for HS, LSD, Anthrax, Brucella and biannual vaccination for FMD • Fodder Crop Development Army has been established to improvise in house fodder production and conservation • RFID tagging of Dairy cattle for Dairy farm herd management software • Intensive Hybrid Napier silage preparation in 500 kg silage bags by Internship students as part of ETR Programme
15	Student research during the year	<ol style="list-style-type: none"> 1. <i>“Effect of feeding rumen protected methionine and lysine on antioxidant status and expression of inflammatory biomarkers in crossbred transition dairy cattle”</i>- Dr. B. Ragupathi (21-MVM-72), Veterinary Physiology 2. <i>“Evaluation of fortified milk replacer on growth and health status in crossbred calves”</i>.- Dr. Rohini Rajaram Karade (2022-MVM-58), Animal Nutrition 3. <i>“Dietary evaluation of feeding Garden Cress Seed (Lepidium Sativum) in the ration on growth and puberty in crossbred heifer calves”</i>.- Dr. Sreelekshmi M (2022-MVM-08), Animal Nutrition 4. <i>“Assessing the correlation of thermal stress and oxidative status during the late gestation period in cross-bred dairy cattle”</i> – Ms. Anupama (2019-20-006), MSc Climate Studies-CAADECCS 5. <i>“Assessment of correlation between mineral status and thermal stress during late gestation of cross-bred dairy cattle”</i>- Ms. Devamali B S (2019-20-013), MSc Climate Studies-CAADECCS 6. <i>“Evaluation of responses to heat stress in Murrah Buffalo, Vechur and crossbred cattle based on farm and climate chamber studies”</i>.- Dr. A. Singaravadelan (21-DVM-09), PLD-LPM

		<ol style="list-style-type: none"> 7. <i>“Transcriptome profiling of peripheral blood mononuclear cells from crossbred and Vechur cattle in response to thermal stress”</i>- of Dr. Anupama Pranab Bhattacharya (21-MVM-02), Animal Breeding & Genetics 8. <i>“Climate comfort of dairy cows in relation to housing provisions in hot humid climate of Kerala”</i> - Mr. Sachin B Patil (21-DVM-08), LPM-PLD Research 9. <i>“Influence of dietary levels of rumen undergradable on growth of crossbred calves”</i>- Dr. B.Om Prakash Reddy (21-MVM-08), Animal Nutrition 10. <i>“Impact of heat stress on dairy cows in late gestation and their new born calves”</i>- Mr.Mathew J Kulamkuthiyil (21-MVM-70), Veterinary Physiology 11. <i>“Impact of heat stress on physio-biochemical parameters during early lactation of cross bred dairy cattle”</i> - Ms.Athulya Swaminathan (21-MVM-71), Veterinary Physiology 12. <i>“Impact of acute heat stress on crossbred calves under controlled climatic conditions ”</i>- Dr. B. Navin (22 MVM 57), Veterinary Physiology 13. <i>“Standardisation of nutrient content of straw based total mixed rations for crossbred dairy cows”</i>- Dr. Lasna Sahib (21 DVM 04), Ph.D Animal Nutrition 14. <i>“Evaluation of the welfare of crossbred dairy cows reared under conventional tie barns and loose housing system”</i> - Dr. Josline Naviya G (22- MVM-16), LPM 15. <i>“Carbapenem Resistance in Klebsiella Pneumoniaefrom Dairy Farm”</i>- Dr. MSVB Ananya (2022-MVM-72), Veterinary Public Health
		<ol style="list-style-type: none"> 16. <i>“Characterisation of Anti-Millerian Hormone gene of Crossbred & Vechur Cattle”</i>-Anjali Anil(21-MSVM-12), Msc.Biochemistry. 17. <i>“Exploration of the genetic basis of mastitis resistance in crossbred cattle of Kerala using double digestion restriction site associated DNS sequencing”</i> -Dr. Valarmathi R (21-MVM-01) 18. <i>“Metabolomic profiling of milk from Vechur, Murrah & Malabari breeds fermented with wild strains of lactic acid bacteris”</i>-Amrutha.T.A(2021-DDM-02), Dairy Microbiology

		<ol style="list-style-type: none"> 19. "Analysis of aminoacid profile of milk and milk products of Cattle and buffalo using HPLC" – Arya.K(20-MSVM-14), MSc Biochemistry 20. "Effect of Heat Stress on Milk Fatty Acid Profile and Expression of Stearoyl Co-A desaturase gene in Crossbred and Vechur Cattle"- Dr. Roshna K.(21-MVM-38), Veterinary Biochemistry 21. "Efficacy of autologous platelet rich fibrin(PRF) gel for treatment of sole ulcer in dairy cattle"- Dr.Karthika.A(21-MVM-83) , Veterinary surgery & Radiology 22. "Assessment of temperature humidity index threshold for thermal stress in crossbred dairy Heifers in Kerala using climate controlled chamber"Dr.Praveen Kumar(22-MVM-17) LPM 23. "Efficiency of low dose porcine follicle stimulating hormone treatment on oocyte yield, maturation rate and in vitro embryo production in crossbred dairy cattle"- Dr.YNagendra Reddy (22-DVM-15), Animal Reproduction Gynaecology & Obstetrics. 24. "Progesterone nano cream treatment for reducing inter-calving interval in crossbred dairy cows"- Dr.Rini Maria Manual(22-MVM-15), Animal Reproduction Gynaecology & Obstetrics 25. "Effect of letrozole intravaginal administration in the management of prolonged estrus in crossbred dairy cows"- Dr.Aravind Suresh(22-MVM-11), Animal Reproduction Gynaecology & Obstetrics
16	Student training during the year	<ul style="list-style-type: none"> • Livestock farm practice for 3rd year BVSc & AH 2020 admission. • Dairy Technology practical class for BTech Dairy students. • Veterinary Clinical Practice for BVSc & AH 2019 admission. • 2018 BVSc & AH Internship Training for 7 students from CVAS Mannuthy. • BTech Dairy VKIDFT 2019 batch one month farm Training. • 2019 batch BTech Dairy Technology, CDST, Pookode farm training for 5 students • Diploma in Dairy Science Farm Training • Fodder Crop Development Army Training for 3 trainees (2024 batch) • BTech Dairy Technology 24 days Farm Training to 1 student.

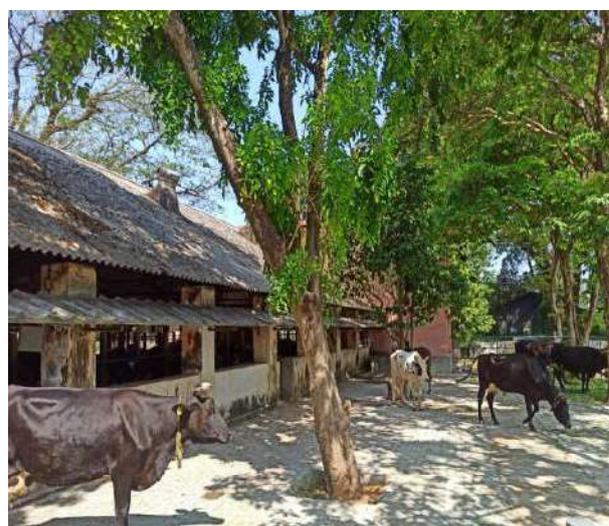
17	Farmers training during the year	<ul style="list-style-type: none"> • Ksheera sangamam 2023-24 dairy farmers Seminar, Puzhakkal Block Panchayath for training 60 farmers of Kaiparampu Panchayath on "Karava pashukkalil shasthreeya theta kramathinte prashakthiyum avashyakathayum"- by Surej Joseph Bunglavan, Asst. Professor dtd.18.09.2023 at Mundur, Thrissur. • Athma mala block, dairy farm training to 34 farmers on October 3, 2023 @ ULF cattle farm. • Field demonstration of dry cow dung powdering unit & hands on training for 12 visiting dairy farmers from KAU on 22.01.2024.
18	No. of farmers visited the farm during the year	668
19	Number and type of publications during the year	<ul style="list-style-type: none"> • A chapter entitled "Fertilizers and its scheduling in Fodder Corps" in book named "Advances in Agronomy" vol:25 May 2023. Page:142 (Authors- Dr.Durga.C, Dr.Surej Joseph Bunglavan, Dr.K.M.Syam Mohan) • Publication of popular article entitled "ssktePv Idh]ip;fpsS DXv]mZ\ £aX hÀ²n,n;p¶ [pfn,n"] ,pÁv" in kalpadhenu Magazine, KAU. • Book Chapter entitled "Fertilizers & its scheduling in Fodder Crops" Authers Durga.C, Surej Joseph Bunglavan, K.M.Syam Mohan in "Advances in Agronomy" Vol-25 2023 (ISBN No: 978-93-5570-730-7) Page No: 93-122 • "Effect of varying levels of dietary degradable protein on blood biochemical parameters in crossbred calves" year: 2023 in the Pharma Innovation Journal 12(9): 2661-2663
20	Details of Professional trainings Attended/Conducted	<ul style="list-style-type: none"> • "Reproductive ultrasonography in farm and companion animals" -Dept. Of ARGO at ULF & FRDS for Field Veterinarians on 3rd July to 7th July 2023. • One day training on "Advanced techniques in fodder production & allied farming practices" to 4 agricultural officers of Kerala Livestock Development Board deputed from KAU on 11th December 2023. • Dr.Surej Joseph Bunglavan, Asst. Professor attended National Seminar on "Advance in functional foods and Nutraceuticals: Bioactive Compounds, Fermentation and Value Addition" organized by AFST(I) Thrissur chapter on 28th February 2024
21	Present stock position of animals/birds category wise	
A)	Total number of Cattle	265

Milch animals	84
Dry animals	27
Pregnant Animals	31
Heifers	68
6 months – 1 year	20
3 -6 months	17
0-3 months	18
Total number of Buffaloes	84
Milch animals	23
Dry animals	15
Pregnant Animals	8
Heifers	15
6 months – 1 year	13
3 -6 months	7
0-3 months	3

7. Capturing Innovations: Photos of New Strains, Varieties, Synthetics and Farm Activities



Golden Jubilee Forage Garden



Open paddock with fencing and watering facilities for milch cows



Construction of Assistant Professor's Office room, Buffalo farm



Construction of Fodder Labourer's waiting Room at hill top



Renovated rain water harvesting tank at buffalo farm



New Rain water harvesting tank at cattle farm



Frieswal Crossbred Cattle



Murrah buffaloes

CENTRE FOR PIG PRODUCTION AND RESEARCH, MANNUTHY

No	Particulars	2023-24	
1	Year of Establishment	1965	
2	Total area of the farm	10.5 acres	
3	(Sanctioned strength/in position as x/y) with designation of each post	Sanctioned	In position
	Scientific staff		
	Professor	1	1
	Associate Professor	0	0
	Assistant Professor	2	1+1 (working arrangement)
	Administrative staff	4	4
	Farm Supervisors	2	2
	Class IV	2	0
	Labourers - permanent	28	26
	Labourers - casual	2	-
	Others- Specify (Farm Assistant)	2	1
4	Total number of permanent staff	43	36
	Contract staff	0	0
	Daily wage employees (Plan+ICAR)	1	4
5	Whether the farm land/part is occupied by any agency/govt. dept in last five years, if yes details with area	No	
6	Details of Budget allocation and Expenditure (Non Plan + Plan + EAP)	479.3+115+51.95= 646.25 lakh	
	Fund released (Non Plan + Plan + EAP)	283.694+ 106.38+39.492= 429.567 lakh	
	Expenditure (Non Plan + Plan + EAP)	283.694+ 106.38+39.492= 429.567 lakh	

	Revenue Generated	118.322 lakhs
	Cost benefit ratio	33 per cent of expenditure
7	Objectives of running the farm	<ul style="list-style-type: none"> • To conduct research on different aspects of pig production • Operate as an instructional farm to students and demonstration unit to farmers • Maintain purebred nuclear stock of animals for supply of quality piglets to farmers • Conserves indigenous pigs and evaluate the performance of indigenous as well their crosses with exotic pigs
	Level of achievement of above objectives	Achieved
8	Status of maintenance of mandatory registers in the farm (up to date/pending)	Up to date
9	Suggestions/recommendation of the superior officers who have visited the farm	Follow stringent bio-security measures to prevent infectious diseases by VC, KVASU
10	Details of farm produce	Pigs, piglets and manure
	Total Egg/Year	NA
	Milk/Year	NA
	Birds sold/year (Chicks)	NA
	Birds sold/year (Adult)	NA
	Animals sold/year (Young Stock)	1276
	Animals sold/year (Adult Stock)	247
	Others (specify) Breeding sale	181
	Manure (kg)	1520
	Green grass (kg)	750
	Coconut (nos)	260
	Used plastic bag (nos)	8639
	Firewood (kg)	105
11	Mechanism adopted for the sale of the farm produce	Booking, local enquiry, MTU

12	Method of purchase of feed	Direct
	Source of purchase of feed	SANFT
13	Additional facilities created during the year	<ul style="list-style-type: none"> ➤ Electrical works of two farrowing pens ➤ Water harvesting technologies to reduce the water foot print in collaboration with Ground water department
14	Mechanisms and methods adopted to improve the functioning of the farm (Ten points minimum)	<ul style="list-style-type: none"> ➤ Established Effluent treatment and Water harvesting technologies to reduce the water foot print ➤ Strengthened bio-security methods against swine ➤ Electrical works of two farrowing pens
15	Student research during the year	PhD-3 MVSc- 3
16	Student training during the year	Internship training Farm training
17	Farmers training during the year	NIL due to ASF
18	No. of farmers visited the farm during the year	NIL due to ASF
19	Number and type of publications during the year	2 Research papers
20	Present stock position of animals/birds category wise	
	Large White Yorkshire 0-2 m	55
	2-3 m	31
	3-5 m	99
	Adult	148
	Landrace 0-2 m	8
	2-3 m	2
	3-5 m	10
	Adult	46
	Duroc 0-2 m	07
	2-3 m	24
	3-5 m	0
	Adult	32
	Desi 0-2 m	10
	2-3 m	02
	3-5 m	05
	Adult	47
	Cross bred Pigs 0-2 m	144

	2-3 m	09
	3-5 m	08
	Adult	204
21	Other major activities	<p>Conservation of Ankamali pig breed Three EAPs funded by ICAR and Industry</p> <p>a) AICRP on Pigs- ICAR funded</p> <p>b) Pilot study on effect of oral supplementation of Turmeric extract on production performance of pigs-Arjuna Naturals Pvt Ltd. Aluva- ongoing</p> <p>c) Evaluation of wound healing efficiency in castration wounds using topical sprays in piglets- Initiated- Natural Remedies,</p> <p>Bangalore</p>

UNIVERSITY GOAT AND SHEEP FARM, MANNUTHY

1. Introduction

The University Goat and Sheep Farm was established in the 1965 with the total area of 4.10 acres. The objectives of the farm is to promote and undertake research on all aspects of goat production and health, operate as an instructional farm to students and conduct extension activities in the field of goat farming.

2. Present Stock

Farm strength as on March 2024

Species / Breed	2024	
	Male	Female
Goat		
Malabari	23	68
Attappady black	20	80
Crossbred	21	96
Sheep	23	48
Total	87	292
Total stock	379	

3. Production and Reproduction Data of the report year

Production

<i>a. Total milk production (L)</i>	2023-24
	11536.85

Reproduction

Species/Breed	No. of Kidding	Male	Female	Total
Malabari	61	53	45	98
Attappady Black	55	31	41	72
Crossbred	93	78	88	166
Sheep	52	31	22	53
Total	261	193	196	389

4. Germplasm and Input Supply: Farmers and Institutions

Month	Farmers			Institutions		
	Male	Female	Total	Male	Female	Total
Total	143	69	212	9	25	34

5. Breakthrough Strain Variants: Unveiling New Species and Varieties

(Details of new strains/ varieties / developed)-Nil

6. Sales Revenue from animals and Product Offerings

Month	Goats	Miscellaneous	Milk Coupon	Total
Total	11,50,590	1,29,052	7,65,270	20,44,912

7. Capturing Innovations: Photos of New Strains, Varieties, Synthetics, and Farm Activities

Present facilities

1. *Milking machine*

Milking machine in goats increases the efficiency of milking and reduces labour. The milking machine performs two basic functions. It takes 2-3 minutes to milk 2 goats at a time. It helps to reduce stress during the lactation process, which creates a good milking and hygienic routine.



Milking machine

2. *Dipping tank*

Dipping of goat and sheep in water containing ectoparasiticides, facilitates the removal of ectoparasites like ticks, lice, mites and flies which is more effective and less labour intensive. Each animal is allowed to pass through the dipping tank.



Dipping tank

3. **Feeding bottle stand**

The kids are weaned at 4 days of age and the milk is fed in bottles. The milk bottle stand helps to feed the kids in group and reduces the labour.

4. **Chaff cutter**

The chaff cutter is used for chopping the fodder which increases the efficacy of feeding.

5. Pressure washer

The pressure washer increase the efficiency of cleaning with regard to the time spent and effort, reduces water usage and improves cleanliness.

6. Installation of CCTV camera

The CCTV camera enhances effective monitoring of routine activities in the farm and thereby increase efficiency of work output.

7. Automatic waterer

Automatic waterers are installed to provide adlibitum water to goats

8. Manure pulverizer

Manure pulverizer is used to powder the goat manure.

9. Grooming mats

Grooming mats are provided for the welfare of goats.

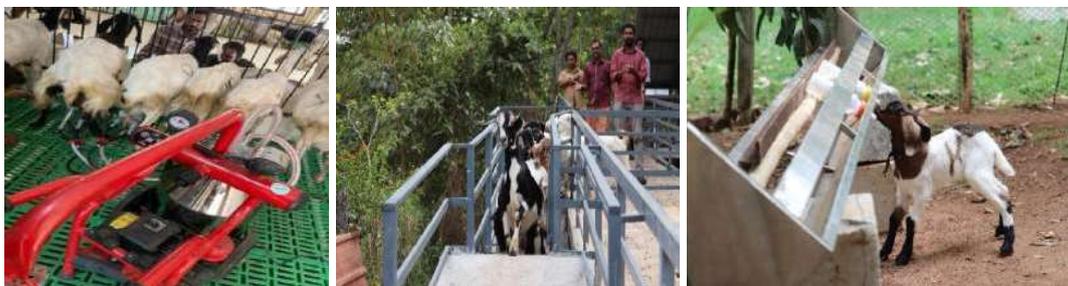
10. Deep freezer

Deep freezer is used to store surplus milk and provide ice water for kids during summer stress

11. Locker facility for labourers

Provided individual locker facility for labourers to keep their valuables.

Photos of the farm & animals



Machine milking Dipping tank Milk feeding bottle



Chaff cutter Pressure washer Manure pulverizer



Grooming mat Automatic waterer Deep freezer



Almirah with 12 lockers

8. Training Endeavors: Insights into Conducted Programs (Details of training conducted)

One day farmers training on ‘Capacity building programme in goat production and entrepreneurship’ was conducted at the University Goat and Sheep farm, Mannuthy on 13.10.2023. Nineteen goat farmers actively participated. Sessions on housing, nutrition, silage making, vermi composting, vaccination, deworming, disease management, reproduction and pregnancy diagnosis were handled.

Professional trainings conducted: Animal Husbandry trainees attended one day training in goat farm (30 Numbers)

- 9. fodder development- Nil
- 10. Satellite units - Nil
- 11. Any other report of the year- Nil

UNIVERSITY POULTRY AND DUCK FARM, MANNUTHY

1. Introduction

The University Poultry and Duck Farm (UPDF) established in 1955 under the erstwhile Cochin State, serves as a key hub for research and practical training for undergraduate, postgraduate and doctoral research students. Currently, the farm houses 32 diverse breeds of poultry, including chicken, ducks, turkey, guinea fowls, Japanese quails and geese. The hatchery unit of the farm has a weekly capacity to hatch 15,000 eggs. It plays a pivotal role in supplying parent stock chicks of the Gramasree chicken breed to Regional Poultry Farms managed by the Animal Husbandry Department of Kerala. Additionally, the farm provides day-old chicks of various breeds to farmers across Kerala and neighboring states. Beyond its production activities, the UPDF extends training and consultancy services to farmers and entrepreneurs, supporting the growth of sustainable and profitable poultry farming practices.

2. Present Stock

2023-24	
Birds	Number
Chicken	8854
Duck	534
Turkey	15
Goose	53
Guinea Fowl	23
Japanese Quail	694

3. Production and Reproduction data of the report year

2023-24	
Birds	Total Egg per year
Chicken	206100
Duck	38793
Japanese quail, Turkey & guinea fowl	92187

4. Germplasm and Input Supply

2023-24	
Birds	Number
Chicks	3,58,214
Chicken (Egg)	2,06,100

5. Breakthrough Strain Variants: Unveiling New Species and Varieties.

University Poultry and Duck Farm played a significant role in the R&D of newly released Chaithra ducks

6. Sales Revenue from Animals and Product Offerings.

2023-24	
Birds	Number
Chicks	3,58,214
Adult	498
Meat	8,888 Kg.
Others (Manure)	68,854 Kg.

University Poultry and Duck Farm had a revenue generation of Rs. 1,93,51,375 in the financial year 2023-24

7. Capturing Innovations

Introduction of new fancy turkey breed parent stock- Bourbon Red and Royal Palm



8. Training Endeavors

B.V.Sc. & A.H. year round Internship

MVSc, PhD practical classes

B.Sc. Poultry Production & Business Management Internship

V.H.S.E. – On Job Training

Farmers training programme in association with CASPS

9. Fodder Development

NIL

10. Satellite Units

NIL

11. Any Other Report of the Year

University Poultry and Duck Farm plays a major role in disseminating the knowledge of Poultry Husbandry to the public. There are regular visitors from schools, colleges, societies and NGOs to learn and understand the basics of Poultry Production.

AICRP POULTRY ON EGGS, MANNUTHY

1. Introduction

A centre of All India Co-ordinated Poultry Improvement Project for eggs was sanctioned by Indian Council of Agricultural Research (ICAR) at College of Veterinary and Animal Sciences Campus of Kerala Veterinary and Animal Sciences University, Mannuthy in the year 1976. This centre is being involved in selective breeding of IWN and IWP strains of White Leghorn for egg production through intra-population selection. The technical programme assigned to this centre with time to time modifications over the years was adhered strictly in refining these populations. From 2014 onwards pedigree hatching is followed in Desi chicken also as per the guidelines received from Directorate of Poultry Research, AICRP for the conservation of Native Germplasm.

2. Present Stock

Present stock as on 31.03.2024 position of animals/birds category wise	Number
IWN (Female)	458
IWN (Male)	293
IWP (Female)	401
IWP (Male)	264
CP (Female)	183
Crossbred (Female)	394
Black desi (Female)	353
Black desi (Male)	152
Red desi (Female)	595
Red desi (Male)	484

3. Production and Reproduction Data of the report year

In 2023-24, AICRP on Poultry Breeding, Mannuthy Center, KVASU evaluated the S-7 generation of native chicken germplasm from 28 to 40 weeks of age. The egg weight at 28 weeks of age was 43.04g. The hen day egg production up to 40 weeks of age was 89.44, which increased by 13.69 compared to the previous generation. The center has also evaluated the S-34 generation of IWN and IWP strains of White Leghorn up to 28 weeks of age. The egg weight at 28 weeks of

age was 48.84 and 49.34 for IWN and IWP strains, respectively, which increased by 0.83g and decreased by 0.61g, respectively. This center has produced 1,13,598(day old chicks and hatching eggs) 5457 (adult birds) 2,18,878 table eggs

4. Germplasm and Input Supply : Farmer and Institutions

The center has supplied 1,19,055 germplasms during the year. The number of farmers who benefitted through the germplasm supply from the center during the current year was 840. Details of distribution as follows - Directorate of Poultry Research, Hyderabad -150 Tellicherry hatching eggs KVK, Pattambi - 1100 native / Thriveni chicks KLDB, Maattupetty -3000 table eggs

5. Breakthrough Strain Variants: Unveiling New Species and Variants: Unveiling New Species and Varieties

As per the directions from DPR, a location specific chicken variety was developed by incorporating the germplasm of three pure breeds namely White Leghorn, Desi and Rhode Island Red and named as “**Thriveni**”

6. Sales Revenue from animals and Product Offerings:



3 way cross (Triveni) birds in backyard

8. Training Endeavors :

Nil

9. Fodder Development

Nil

10. Satellite Units

Nil

11. Any other report of the year

Nil

LIVESTOCK RESEARCH STATION (LRS), THIRUVAZHAMKUNNU

No	Particulars	2023-24
1	Year of Establishment	08/04/1950
2	Total area of the farm	399 Acres
3	(Sanctioned strength/in position as x/y) with designation of each post	
	Scientific staff	
	Professor	1/0
	Associate Professor	0/1
	Assistant Professor	1/2
	Assistant Professor (Agronomy)	0/1 (Working arrangement)
	Administrative staff	Administrative Assistant :1/1; Section Officer: 1/1; University Assistant: 3/3; Clerical Assistant: 2/2; Lab Assistant: 1/1; LDV Driver:1/1; Pump operator: 0/1; Tractor Driver: 1/1; Office Superintendent: 0/1, Computer Assistant 1/1
	Farm Supervisors	5/5 (3 permanent & 2 from employment exchange)
	Class IV	5/5
	Labourers - permanent	68/77
	Labourers - casual	35/35
	Others- Specify	
4	Total number of permanent staff	68 labourers, 14 administrative staff, 7 farm staff & 3 faculty
	Contract staff	Nil
	Daily wage employees	2
5	Whether the farm land/part is occupied by any agency/govt. dept in last five years, if yes details with area	No Land acquisition procedure by NHAI for green field highway project is progressing.
6	Details of Budget allocation and Expenditure	

	Fund released (Non Plan + Plan + EAP)	2,04,75,433
	Expenditure (Non Plan + Plan + EAP)	7,44,35,554
	Revenue Generated	2,26,50,351
	Cost benefit ratio	0.2386
7	Objectives of running the farm	<ol style="list-style-type: none"> 1. To evolve a crossbreeding strategy for sustainable dairy cattle production in different agro-climatic conditions in the state 2. Conservation and improvement of native livestock and poultry breeds adaptable to the region 3. To undertake problem oriented research projects in feeding, breeding and management of Livestock 4. Technology transfer and imparting training 5. Establishment of model animal farm demonstration units 6. Research on fodder production and conservation 7. Conservation and eco-studies in the natural forest in the station 8. Establishment of production units of livestock and birds 9. To undertake research in livestock based farmer oriented production systems 10. Bio energy and waste management
	Level of achievement of above objectives	Diverse activities were planned and implemented to meet the objectives. The station was successful in achieving the objectives.
8	Status of maintenance of mandatory registers in the farm (up to date/pending)	Updated and up to date
9	Suggestions/recommendation of the superior officers who have visited the farm	Nil
10	Details of farm produce	
	Total Egg/Year	-
	Milk/Year	316231.3 L
	Birds sold/year (Chicks)	-
	Birds sold/year (Adult)	-

	Animals sold/year (Young Stock)		32
	Animals sold/year (Adult Stock)		49 cattle 10 buffaloes
	Others (specify)		
	Goats		122
	Fodder slips		19460
	Cow dung powder		76967 Kg
11	Mechanism adopted for the sale of the farm produce		Rates fixed by Director of Farms, KVASU, Public auction
12	Method of purchase of feed		Feed mill operated by SANFT under KVASU
	Source of purchase of feed		Feed mill operated by SANFT under KVASU
13	Additional facilities created during the year	1	Researchers Hostel was opened
		2	Freezer, UPS facility in laboratory
		3	Installed water filter/ coolers in farm/ office
		4	Fencing of sensitive boundary areas
		5	Repaired water delivery pipelines, shed in free stall for vechur cattle
		6	Purchased furniture for farm, office and researchers hostel
		7	Installed curtains and mosquito nets in researchers hostel
		8	CCTV surveillance near office building
		9	Installed display boards at Kottoppadam junction, over researchers hostel
		10	Slatted flooring material was purchased for goat shed
		11	Purchased spares for milking machine, new wheel barrows and brush cutter
		12	Freezer in form to store colostrum and washing machine to wash clothes used to wipe udder
14	Mechanisms and methods adopted to improve the functioning of the farm (Ten points minimum)	1	Utilization of MGNREGS work component of Kottoppadam Panchayath for maintenance of cashew plantations

		2	Chest freezer facility was introduced for storing colostrum to ensure nutrition of new born calves
		3	Washing machine was installed in the farm for washing clothes used for cleaning udder of cows during milking, so as to promote clean milk production
		4	Water supply PVC pipes were replaced at critical points to prevent frequent failure using iron pipes.
		5	Liaison work and proper land documentation with the help of revenue department to ensure that compensation (Rs. 23 crore) was sanctioned to University for the land being acquired by NHAI for green field highway
		6	Capacity building training was given to labourers to improve efficiency of grafting of cashew saplings
		7	Revised rates for farm produce and got approval from University.
		8	Approval was granted by the University for organizing training programmes under RF mode
		9	Silage and hay production were undertaken to manage fodder scarcity during summer months
		10	Researchers hostel was opened for use of students at LRS
15	Student research during the year		M.V.Sc: 4 students M.Sc : 2 students Ph.D research: 1 student
16	Student training during the year		D.Sc (Diploma): 6 B.V.Sc & AH: 65 D.Tech: 6
17	Farmers training during the year		2 Training Programmes
18	No. of farmers visited the farm during the year		1083

19	Number and type of publications during the year		Research Articles: 3
20	Present stock position of animals/ birds category wise		
	Crossbred cattle		274
	Vechur cattle		41
	Murrah buffalo		30
	Malabari goat		109
	Attappady Black goat		92
21	Other major activities		Organized international workshop of animal welfare and one health on 22/01/2024 with the support of Directorate of Entrepreneurship, KVASAU and Animal Welfare Board of India

Introduction

Livestock Research Station (LRS), Thiruvazhamkundu started functioning as District Livestock Farm in 08/04/1950 at Perinthalmanna under erstwhile Madras State. It was transferred to Kerala State Government's Department of Animal Husbandry following reorganisation of states in 1956. The station was attached to Kerala Agricultural University in 1972 and was renamed as Livestock Research Station on 14/08/1978. Administrative control of the station was transferred to Kerala Veterinary and Animal Sciences University in December 2010. Total area of the station is 397.4 acres and is the largest campus of Kerala Veterinary and Animal Sciences University. Fodder lands cover 125 acres while crops like coconut, arecanut, cashew etc. and agro-forestry plantations occupy considerable area. It is located in Kottopadam Panchayath of Mannarkkad Taluk, at a distance of about 6 Km from Kottopadam Junction in Mannarkkad- Manjeri road. The nearest railway station is Melattur located at a distance of 25 km.

1. Present Stock

The livestock in the station as on March 2024 totals 475 animals, encompassing a diverse range of species and breeds. The large ruminant stock included Crossbred cattle, buffaloes, Vechur cattle and Buffaloes. Besides, the station also maintains groups of Malabari and Attappady Black goats. A summary of stock strength is presented in the table given below.

Table 1: Stock strength of LRS as on March 2024

Species/ Breed	No of animals
Crossbred Cattle	274
Vechur	41
Buffalo	30
Malabari Goat	75
Attappady Black Goat	72
Total Stock	475

2. Production and Reproduction Data of the report year

During 2023-24, 316,231.3 liters of milk was produced, along with 2,531,206 kilograms of fodder and 76,967 kilograms of cow dung powder. Additionally, there were 273 inseminations, leading to 124 calvings. There were 94 kiddings in the goat farm.

Table 2: Summary of production and reproduction data

Sl No	Item	Quantity
1	Milk	3,16,231.3 L
2	Fodder	2531206 Kg
3	Cow dung powder	76,967 Kg
4	Inseminations	273
6	Calving	124
7	Kiddings	94

3. Germplasm and Input Supply: Farmers and Institutions

Input materials were provided to farmers as well as to the meat technology unit, Mannuthy. Goats, heifers, male calves and fodder slips were given to farmers. A summary of the input materials supplied is presented below.

Table 3: Summary of germplasm and input supply form

Sl No	Type of animal/ Item	Number/ Quantity
1	Goat (Female)	119
2	Male calf	40
3	Heifers	20
4	Cow to MTU	19
5	Buffalo to MTU	8
6	Fodder slips	19460

4. Breakthrough Strain Variants: Unveiling New Species and Varieties

(Details of new strains/ varieties / developed)

5. Sales Revenue from animals and Product Offerings

The sales and revenue from the station is split between dairy and agri sections. From the dairy section, the most important products are milk, cow dung, and animals, which contribute significantly to the overall revenue. In the agriculture section, timber, auctioned crops like

coconut and mango stand out as major earners. A summary of revenue earned during 2023-24 is presented below.

Table 4: Revenue generated from LRS

Section	Item	Revenue
DAIRY SECTION	Milk	13491734
	Calf	94800
	Heifers	709800
	Goats	662435
	Culled animal	517274
	Cow dung	1107132
	goat manure	49055
	Biogas	111916
	Dairy- Miscellaneous	15935
	AGRI SECTION	Green grass
Fodder slips		27475
Hay		86990
Auction/Sale of coconut, areca-nut, mango, tamarind etc		2294075
TIMBER		3021571
FISH		12900
Agri- Miscellaneous		4990
	Total	22237118

6. Capturing Innovations: Photos of New Strains, Varieties, Synthetics, and Farm Activities

The practice of making pots from cow dung has been prevalent for few years. The basic operation includes the desiccation of cow dung and shaping the semi dry material into a pot in a pressure mould. The pots may be prepared in various sizes and can replace nursery poly bags used to plant vegetables and fruit trees. The pot can be buried directly in the ground, eliminating the need for cutting and manual removal of plastic nursery bags. The dung pots being organic will disintegrate in to the soil within a period of few months. The pot will also provide NPK in the ratio 3-2-1 which is suitable for most types of plants. Preparation of pots from dung will bring about value addition and provide additional income to the farmers. This activity therefore is eco friendly and aligns well with the objectives of the agricultural policies of central and state governments to increase farmer's income. The station successfully demonstrated the technique to prepare pots exclusively out of cow dung.



Figure 1: Pots being prepared from cow dung

7. **Training Endeavors:** Insights into Conducted Programs

The training programs conducted for students included Internship training for BVSc & AH students, on-the-job training for VHSE students, Farm training programs catered to both BTech Dairy Science and Diploma in Dairy Science students. Additionally, a farmers' training program on fodder production and silage preparation was attended by 80 individuals. These programs demonstrate a strong emphasis on skill development and practical learning for the participants. A summary of the programmes offered and number of participants is presented in Table 2.

Table 2: Summary of training programmes offered from LRS

Name of the Training programme	Course	No of participants
Internship training	BVSc & AH	65
Farm training	BTech Dairy Science	6
	Diploma in Dairy Science	6
On the job training	VHSE	60
Farmers	Fodder production and preparation of silage	80

fodder development

8. Satellite units
9. Any other report of the year





AVIAN RESEARCH STATION, THIRUVAZHAMKUNNU

1. Introduction: The Avian Research Station under the Veterinary University at Thiruvazhamkunnu started functioning in 2014. The activities of the institution have been carried out using casual workers throughout this time. The services of 14 female workers and 4 male workers are utilized here. In addition, an assistant professor from CASM College supervises this institution. This institution has sheds that house various species of domestic birds of different ages. The sheds in this farm are used for research, experimental observations, housing birds of different ages from the maternal and paternal collections, and for entrepreneurial skill development training activities of students at the university. Since biosecurity must be strictly followed to properly maintain the health of the chickens on the farm, special sheds that have been disinfected should be used for brooding of chicks, growing chickens and laying hens. It is for biosecurity reasons that domestic birds are not kept in all sheds at the same time. Starting new initiatives in Thiruvazhamkunnu, the largest campus of the university, according to the human resource and financial capacity of the university, will be good for the development of the country. New initiatives should be started with plans to overcome the water limitation on this campus. As per the National Education Policy, new courses/trainings can be started by modifying the existing course, considering the need and possibilities of new courses, availability of building and residential complexes, water limitation, etc.

2	Present stock	
	Chicken	3661
	Japanese Quail	2198
	Ducks	543
	Turkey	60
	Guinea Fowl	32
	Goose	4
	Pigeon	81
3	Production and Reproduction	

	Total Egg/Year	Chicken : 259004 Duck : 28576 Quail : 79750 Guinea Fowl : 4265 Turkey : 2533 Goose : 14
4	Germplasm and Input Supply	
	Birds sold/year (Adult)	Chicken : 2788 Duck : 317 Quail : 2643 Guinea Fowl : 12 Turkey : 15
	Birds sold/year (Chicks)	Chicken : 103974 Duck : 4177 Quail : 21809 Guinea Fowl : 35 Turkey : 10
	Grown up Birds sold/year	Chicken : 1578 Duck : 988 Quail : 408 Guinea fowl : 0 Turkey : 21
5	Break Through Strain Variants	Nil
6	Sales Revenue	Rs. 54,56,238/-
7*	Capturing Innovation	
8	Training Endeavors	Visitors: 1260 Individuals Trainees: 110 nos Training: ETR & Internship BSc PPBM & B.VSc students
9	Fodder Developments	Nil
10	Satellite units	Nil

11	Any other report of the year	Nil
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***Capturing Innovation**

	
Duck shed –constructed in 2016	Chicken Breeder shed – constructed in 2016
	
Chicken Brooder shed – constructed in 2016	Quail shed – constructed 2016
	
Feedmill Unit – constrected in 2016	Farmers training centre -constructed in 2018
	
Hatchery Unit- constructed in 2018	New poultry shed- 2021



Anaswara Project- 2015



Aiswarya Project- 2015

Biogas Unit



Deenabandhu type biogas unit installed in the poultry farm can utilize 500 Kg organic waste per day. Manure collected from duck shed to the sedimentation tank can be pumped to the unit using a slurry pump. Manure from Quail shed is mixed with 3 times water and allowed to drain to the inlet by gravitational force.

Thumboormuzhi model Aerobic Compost Unit



Thumboormuzhi model compost unit installed in poultry farm is used for composting of organic waste materials.

Incinerator



Incinerator installed in the poultry farm doesn't require fossil fuels or electricity for its functioning. All the solid wastes collected from the college and farm are segregated and burned regularly in this unit.

CATTLE BREEDING FARM, THUMBURMUZHY

1. Introduction :

The farm was established in the year 1957 and is located in Pariyaram Panchayath near Chalakudy. The farm is spread across an area of 64 acres and is located at the foot of Kumblammudy hills. The valathukara canal from Thumburmuzhy irrigation project travels adjacent to the farm. The farm houses mainly Frieswal cows for production along with some Vechur cows as part of its conservation. The farm aims to provide training facilities for the entrepreneurs, Post Graduate research scholars and farm training to Veterinary and Dairy Science students. The farm acts as a regional centre for the transfer of technology and demonstration unit for farmers. CBFT maintains a gene pool of various improved foddors and supplies fodder slips to farmers. There are 45 permanent and 30 casual labourers in the farm.

2. Present Stock (as on 31.3.2024):

Calves - 87
Heifers – 58 (Including pregnant heifers)
Milch animals – 99 (Including pregnant milch animals)
Pregnant animals – 55 (<i>pregnant animal no. includes pregnant heifers, Milch and dry animals</i>)
Dry animals – 29 (Including pregnant dry animals)
Total – 273 (265 Frieswal and 8 Vechur)

3. Production and Reproduction Data of the report year

Production Details	
Total milk (L)	3,23,377
Animals sold (Young)	28
Animals sold (Adult)	50
Fodder grass sold kg (T)	15.23
Fodder slip sold no.	42,846
Dry dung sold kg	830
Fresh dung sold m ³	44
Aerobic compost sold kg	104
Reproduction Details	
Total Inseminations	345
Total calvings	111

4. Germplasm and Input Supply: Farmers and Institutions: 28 male calves and 50 adult animals were sold to farmers and institutions, 42,846 nos of fodder slips were sold to farmers

5. Breakthrough Strain Variants: Unveiling New Species and Varieties: Nil

6. Sales Revenue from animals and Product Offerings : Rs.1,53,49,718/- from sale of milk, animals, fodder manure and farm products

7. Capturing Innovations: Photos of New Strains, Varieties, Synthetics, and Farm Activities

8. Training Endeavours: Insights into Conducted Programs

1. Training for four VKIDFT B. Tech (Dairy Tech.) students for 24 days from 01.03.2024 to 28.03.2024 & Compensatory Farm training for five B.V.Sc & AH students of CVAS, Mannuthy-March, 2024
2. Internship training for one B.V.sc & AH Student, CVAS, Pookode for 15 days duration-May 2023
3. Farm training for three B.Tech Dairy Technology students of CDST, Kolahalamedu for 15 days (01.07.2023 to 15.07.2023)
4. Farm training for five 2019 admission B.Tech (D.Tech) students of VKIDFT, Mannuthy from 24.07.2023 to 05.09.2023
5. Farm training for five 2019 admission B. Tech (Dairy Tech.) students of VKDFT, Mannuthy during 24.07.2023 to 05.09.2023 and three B. Tech (D.Tech) students of CDST, Thiruvananthapuram during 23.09.2023 to 12.10.2023
6. Farm training for three B. Tech (Dairy Tech.) students of CDST, Thiruvananthapuram from 23.09.2023 to 12.10.2023.
7. Two batches of farmers were trained in Scientific Livestock Production
8. AD trainees from AHD visited the farm on November 29, 2023 as part of their training

9. Fodder development: The fodder cultivation was protected from wild animals by repair and maintenance of compound wall and fencing, Sprinkler system for fodder irrigation extended to cover more fodder plots

10. Satellite units: Nil

11. Any other report of the year: Nil

Culling committee team headed by Dr. Aravindakshan. T.V, Professor and Head, Dept. of AGB, CVAS, Mannuthy visited CBFT on 24 July, 2023



Within state training & Exposure visit- ATMA 2022-23 Nedumbassery block on June 20, 2023- 40 dairy farmers visited CBFT and class on dairy farming and management of cattle farm conducted by DR. Swapna, RA, CBFT



Visit by Soil conservation dept. to Cattle Breeding Farm Thumburmuzhy on 05st Oct, 2023 -Exposure visit of 45 officers of Soil conservation dept. Chadayamangalam, IWDP studied in detail the landslide area hit during 2018 floods, and farm activities



CBF, Thumburmuzhy visit, on Nov 29, 2023, as a part of Obligatory 3 months training for 25 no.s of Assistant Directors, Animal Husbandry Department, Kerala.



BASE FARM, KOLAHALAMEDU

No	Particulars	FY: 2023-24
1	Year of Establishment	The Base Farm was established in the year 1962 under Indo-Swiss Project Extension Unit. In 1976, it was handed over to Kerala Livestock Department and Milk Marketing Board and later on to Kerala Livestock Development Board (KLDB) in 1984. It was taken over by Kerala Agricultural University (KAU) for establishing College of Dairy Science and Technology in 2000. In 2011, the farm was transferred to Kerala Veterinary and Animal Sciences University (KVASU) as Base Farm Complex by the Act3/2011 of Kerala Legislative Assembly.
2	The total area of the farm	Around 175 acres under possession
3	(Sanctioned strength/in position as x/y) with the designation of each post	
	Scientific staff	
	Professor	
	Associate Professor	1/1
	Assistant Professor	2/1
	Administrative staff	Administrative Officer 0/1 (on working arrangement for 2 days per week from CDST Kolahalamedu) Assistant – 2/1
	Farm Supervisors	3/3 (Senior Farm Supervisor - 1, Farm Supervisor Gr. I- 1, Farm Supervisor Gr. II- 1)
	Class IV	1/0
	Labourers - permanent	20/20

	Labourers - casual	18/18
	Others- Specify	PTS -1/1
4	Total number of permanent staff	27+ 1 on working arrangement
	Contract staff	Class IV –1 (Employment Hand)
	Daily wage employees	Assistant -1
5	Whether the farmland/part is occupied by any agency/govt. dept in last five years, if yes details with area	NA
6	Details of Budget allocation and Expenditure	
	Fund released (Non Plan + Plan + EAP)	Non Plan: - Rs. 5910443/- (Excluding online gross salary) Plan:- Rs. 28,00,000/- EAP:-Nil
	Expenditure (Non Plan + Plan + EAP)	Non Plan: - Rs. 23318341/- (Including online gross salary) Plan:- Rs. 2800000/- EAP:-Nil
	Revenue Generated	Non Plan: - Rs. 74,93,781/- Plan:- Rs. Nil/- EAP:- Nil
	Cost-benefit ratio	
7	Objectives of running the farm	Provide farm training to BVSc & AH, B Tech (Dairy) and Diploma students of the university. Conduct training programs for Farm Assistants, self-help groups, women and

		<p>farmers.</p> <p>Produce hygienic quality milk from high bred cattle.</p> <p>Produce quality fodder and planting materials.</p> <p>Provide research facilities in dairy cattle production for students and faculties.</p> <p>Bio-energy conservation and Bio-waste management with value addition of bio-waste.</p> <p>To act as a family farming and self-learning cum home stay centre for inculcating the interest in livestock and poultry farming in general public.</p> <p>Conservation and improvement of native livestock and poultry breeds adaptable to the region.</p> <p>Cater technical and resource input for sustainable organic farming and water conservation system.</p> <p>To act as a regional center for the transfer of technology to farmers.</p>
	Level of achievement of the above objectives	Satisfactory
8	Status of maintenance of mandatory registers in the farm (up to date/ pending)	Maintained up to date
9	Suggestions/recommendations of the superior officers who have visited the farm	Suggestions/recommendation were given to improve the overall productivity of farm.
10	Details of farm produce	
	Total Egg/Year	Nil

	Milk/Year	105057 litres
	Birds sold/year (Chicks)	Nil
	Birds sold/year (Adult)	Nil
	Animals sold/year (Young Stock)	15 Nos
	Animals sold/year (Adult Stock)	25 Nos
	Emergency Culling	06 Nos
	Wet Cow Dung	61 cubic meters
	Rent	Rs. 45600/-
	Miscellaneous	Rs. 2674540/-
	Fodderslip/Feed Sac	3566 Nos
11	The mechanism adopted for the sale of the farm produce	Milk Sale – Coupon sale Bulk sale to Milma Other farm produce – Direct sale to public as per the price list
12	Method of purchase of feed	Purchase from Govt. institutions
	Source of purchase of feed	Kerala Feeds, KVASU Feed mill
13	Additional facilities created during the year	Construction of new office building almost completed New training hall and conference room established in the farm Guest room facility established for farmers and public The parking ground facility is extended Dung powdering unit established
14	Mechanisms and methods adopted to improve the functioning of the farm (Ten points minimum)	<ul style="list-style-type: none"> • Infrastructure facilities are strengthened, with new office building, farm road, culverts etc. • Improving fodder cultivation

			<ul style="list-style-type: none"> • Improved facilities for visitors, farmers and public • Improved water storage and irrigation facilities through constructing check dams and installing sprinkler • Land issue with KLD Board settled and demarcation done. • Fencing of fodder fields • Adoption of controlled grazing in • Fenced fodder plots. • Improved care and management of animals • Training to BVSc& AH/ BTech, DSc internees
15	Student research during the year	0	
16	Student training during the year		Farm Training for BTech (DT) and Dairy Diploma students, Internship training for BVSc & AH students and Training for BTech Students
17	Farmers training during the year	Nil	
18	No. of farmers visited the farm during the year	250	
19	Number and type of publications during the year		Journal articles - 10
20	Present stock position of animals/birds category wise		

Cross Breed Cattle	100
Indigenous Cattle	12
Total	112

DIRECTORATE OF CLINICS, KVASU

The Directorate of Clinics of KVASU hold the overall supervision of the clinical services rendered at various hospitals under KVASU. Directorate offers financial and establishment and infrastructure support to the clinically related forums under various units. The wing offers monitoring and co-ordinating of research and training activities of various units. The directorate has the technical control of the veterinary hospitals and teaching veterinary clinical complex of the university. Also, co-ordinates various camps for livestock and awareness classes for farmers and pet owners and pet practitioners of state. The Directorate provided the required support to the ambulatory clinics of the university at Kakkavayal (Wayanad) and Malamukku and Cherumkuzhi (Thrissur).

Five trainings on techniques in small animal anaesthesia with Dr Sooryadas, Assoc Professor, Dept of Vet Surgery and Radiology as the Course Director was conducted under the revolving fund project, 'clinical training and allied activities' of the Directorate. The training was immensely helpful for the veterinarians who attended the programme from Kerala and other states of the country. Directorate is compiling the data of revenue of various hospitals, disease report and case reports of all hospitals and farms under KVASU.

The Directorate played a key role with regard to moderating the Farmers Science Congress on 17.08.2023 at CVAS, Pookode under the aegis of DE, KVASU. The introductory lecture session associated with Pashudhan Jagruthi Abhiyan campaign of farmer awareness on infertility in cattle funded by Govt of India at Kakkor, Pozhuthana and Ambalavayal (Wayanad District) during September, 2023 were handled by Director of Clinics, KVASU.

Directorate is instrumental in inviting tenders for rate contract of medicines, suture materials, disposables and vaccines for farms and Karshakamithra Marginless Medical Store of University

UVH & TVCC, MANNUTHY (TEACHING VETERINARY CLINICAL COMPLEX)

1. Unveiling Services, Programs, and Facilities: A Detailed Overview

1. Introduction

The University Veterinary Hospital and Teaching Veterinary Clinical Complex (UVH & TVCC), Mannuthy congregates the services of all clinical departments viz. Veterinary Clinical Medicine, Ethics and Jurisprudence, Veterinary Epidemiology and Preventive Medicine, Veterinary Surgery and Radiology and Animal Reproduction, Gynaecology and Obstetrics under one umbrella providing integrated tertiary veterinary healthcare. disease investigation aid, ambulatory facility and consultancy services to the public.

2. Veterinary Teaching Hospital -Internship – Study abroad program – continuing Veterinary Education

UVH & TVCC is the distinctive platform imparting quality training on clinical practice to the undergraduate, post graduate and doctoral students of the college along with conducting scientific research in the field of Veterinary clinical sciences. This unit also provides advanced trainings on the diagnostics to veterinarians and the disease control measures in profitable livestock farming to entrepreneurs and farmers. It is also offering a stipendiary training to VHSE pass outs in “Animal handling, veterinary laboratory techniques, pharmacy and nursing” which equips the selected candidates in all supportive para-veterinary duties enabling them to secure jobs in veterinary hospitals/ farms in public as well as private sector. Veterinary clinical Practices, tracking program, Veterinarian in Society etc are offered for UG students. Several PG and PhD courses are being offered by other departments and training is given at TVCC. Trainings/webinars were conducted for field veterinarians & Additional Directors of AHD.

3. Clinical meetings – Hospital Services

Clinical investigations and therapy for all types of diseases. An average of 4554 cases is being handled per month. Summary of cases handled is given below:

Sl No.	Item	April 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Total
1.	Bovine	84	116	135	101	115	123	194	149	128	103	115	94	1457
2.	Caprine	171	148	202	210	232	220	279	242	166	250	149	208	2477

3.	Small Animals (Canine & Feline)	1757	2121	1522	1860	1805	1960	1875	1822	1937	1909	1764	2098	2243
4.	Equine	3	2	31	0	8	3	6	5	10	5	8	5	86
5.	Porcine	0	0	0	0	0	0	0	0	0	14	5	3	22
6.	Birds	38	47	31	24	29	30	29	43	59	74	83	64	551
7.	Others	7	10	7	8	3	0	6	19	5	9	5	16	95
Total		2060	2444	2137	2203	2192	2336	2389	2280	2305	2366	2124	2488	27324

4. **vaccination** – Around 900 vaccination per month.

5. Pharmacy

Hospital pharmacy dispenses common drugs and other emergency medicines free of cost. The revolving fund pharmacy attached to the hospital dispenses all medicines and disposables at a subsidized rate.

6. Referral Units

Most of the cases will be referred to the various units like Clinical Medicine, Ethics and Jurisprudence, Veterinary Epidemiology and Preventive Medicine, Veterinary Surgery and Radiology and Animal Reproduction, Gynaecology and Obstetrics.

Sl No.	Item	April 2023	May 2023	June 2023	July 2023	Aug 2023	Sep 2023	Oct 2023	Nov 2023	Dec 2023	Jan 2024	Feb 2024	Mar 2024	Total
1	Minor Surgery I (Rs.300)	1	2	2	8	4	6	6	5	3	2		1	40
2	Minor Surgery II (Rs.800)	4	3	6	9	2		3	4	5	1			37
3	Major Surgery I (Rs. 1000)	4	5	0	3	5	6	13	3	3	2	2	5	51
4	Major Surgery II (Rs. 1250)	0	0	0	0	1								1
5	Major Surgery III (Rs. 1500)	5	8	4	10	7	13	9	2	8	2	4	5	77
6	Major Surgery IV (Rs. 2000)					1		1	1	3	1		1	8

7	Major Surgery V (Rs. 2500)					1							2	3
Total		14	18	12	30	21	25	32	15	22	8	6	14	217

7.

a. Theatre services

Month-wise list of minor & major surgeries conducted.

- b. Emergency and critical care:** Casualty and emergency services are provided in the critical care unit attached to the TVCC. Average 70-80 cases/day is being attended.
- c. Mobile Veterinary Services:** Ambulatory clinic is functioning at selected rural milk societies (Cherumkuzhy and Malamukku) in the ambulatory vehicles engaged solely for this purpose. The experienced faculty extends their service to the farmers of Cherumkuzhy and Malamukku on routine basis, conducting infertility camps and awareness programmes. Average of 150 cases/month is attended. Field farm visits for special expert diagnostic aid is also provided on request from the Animal Husbandry Department.

8. Veterinary Medical Record System

Monthly reports and disease reports are being submitted to the university on monthly basis. Around 160 clinical cases were studied and presented by the students and faculty at various Seminars, workshops and webinars.

9. Publications

Articles in peer reviewed journals

1. Ajith, Y., Adithya, S., Panicker, V.P., Athira, N., Beena, V., Safeer, M.S., Preena, P., Nisha, A.R., Divya, C., Sangeetha, S.G. and Umesh, C.G., 2023. Biometeorological analysis on the molecular incidence of babesiosis and ehrlichiosis in dogs. Theoretical and Applied Climatology, pp.1-10. (Ajith Y- first author)
2. Preena, P., Ronald, B.S.M., Balakrishnan, S., Murugan, M., Kumar, K.A. and Ganesan, P.I., 2024. Serological, bacteriological, and molecular detection of brucellosis in pigs of Tamil Nadu, India. Emerging Animal Species, 10, p.100041. (Preena P- first author)
3. Mevin, S.M., Ajith, Y., Adithya, S., Amal, R.V., Athira, N., Sonaa, M., Siji, S.R. and Ancy, T., 2023. Therapeutic management of osteodystrophia fibrosa in early weaned Malabari male

goat kids. *Veterinary Research Communications*, pp.1-8. (Ajith Y- corresponding author)

4. Bharti, D., Ajith, Y., Sharun, K., Banu, S.A., Kumar, A., Bhardwaj, A. and Sidar, S.K., 2023. Therapeutic applications of canine platelets and their derivatives: a narrative review. *Topics in Companion Animal Medicine*, p.100840. (Ajith Y- corresponding author)

5. Edana, G.G., Preena, P., Balan, C., Sarangom, S.B. and Vijayakumar, K., 2023. Hematological characteristics of autochthonous hypermicrofilaremic dirofilariosis in dogs in Kannur District of Kerala. *J. Parasitic Dis.*47: 787-792. (Preena- corresponding author)

6. Devi, G., Singh, P., Dimri, U., Jacob, S.S., Jairath, G., Kattoor, J.J., Preena, P., Ajith, Y., Mal, G., Sharma, R. and Kumar, S., 2024. Diversity of haemoparasites in migratory small ruminants of Himalayas, India. *Small Ruminant Research*, 234, p.107255.

7. Balakrishnan, N., George, A., Jameel, A.J., Ajith, Y., Abdulla, K.S. and Pillai, U.N., 2024. Canine distemper with myoclonus and tonic-clonic seizures in a domestic cat (*Felis catus*) in Kerala, India. *Comparative Clinical Pathology*, pp.1-3.

8. Varghese, S., George, A., Ajith, Y., Jameel, A.J. and Mani, B.K., 2024. Emphysematous spontaneous bacterial peritonitis and renal azotemia due to *Escherichia coli* infection in a saint bernard dog. *The Microbe*, p.100056.

9. Mathai, V.M., Sarangom, S.B., Preena, P., Dominic, S., Baburaj, N.K., Sundaran, S. and Krishna, D.B., 2023. Reliability of two-dimensional B-mode ultrasonographic imaging for the detection of intra-abdominal pathologies in dogs. *J. Anim. Res.* 13: 173-181.

10. Gireesh, S.S., Preena, P., Rabha, C. and Mukherjee, R., 2023. Evaluation of prophylactic and therapeutic potential of bovine recombinant Lactoferrin in MRSA associated mice mastitis model. *Pharma Innovation J.* SP-12: 196-200

11. Asharaf, A.M., Sarangom, S.B., Iqbal, A., Preena, P. and Mathai, V.M., 2023. Repair of Supracondylar Fracture of Femur by Cross Intramedullary Pinning in a Calf. *IVJ.*, 100: 37-38.

12. Magnus P K, Jayakumar C , Naicy T , Lali F A , Hiron M Harshan , Abhilash R S , Ajithkumar S. 2023.Etiology behind canine uterine inertia: Role of uterine expression of MLCK4, MYH2, and PKC genes. *Animal reproduction science.* 256: 107298. (Magnus PK- first author)

13. J. Princy, P. K. Magnus, C. Jayakumar, Shibu Simon and Arun George, 2023. Combined thickness of uterus and placenta, foetal heart rate oscillations and progesterone concentration in last week of canine gestation. *J. Vet. Anim. Sci.* 54(2):472-476

14. S. V. Udharwar, M. P. Unnikrishnan, S. S. Nair, L. M. Philip, R. Varghese, S. Ramankutty,

B. M. Nijin Jos, P. P. Gokuldas, S. K. Venugopal and K. D. John Martin. 2023. Evaluation of the pinhole castration technique in piglets compared to the traditional open castration method. *Indian J. Anim. Health.* 62(1): 114-120. DOI: 10.36062/ijah.2022.14122

15. Reji Varghese, Deny Jennes, Nijin Jos, B. M., Anoop, S., Syamala, K., Soumya Ramankutty, Sudheesh S. N., Abhiram, M. J. and John Martin K. D. 2023. Surgical management of equine ocular setariosis – Report of four cases. *J. Indian Vet. Assoc.* 21 (1): 90-96 <https://doi.org/10.55296/JIVA/21.1.2023.90-96> (Reji Varghese- first author)

16. Jayakrishnan, V., Sudheesh Nair, S., Reji, V., Soumya, R. Preethy, J. and John Martin, K.D. 2023. Effects of intravenous lignocaine on anaesthetic parameters in cattle under dexmedetomidine butorphanol-ketamine-midazolam-isoflurane anaesthesia. *J. Vet. Anim. Sci.* 54(1):198-203 DOI: <https://doi.org/10.51966/jvas.2023.54.1.198-203>

17. Rahul, B., Venugopal, S.K., Reji, V., Chandrasekhar, L. and John Martin, K.D. 2023. Effects on blood gas and haematological parameters during butorphanol-dexmedetomidine-tiletamine zolazepam anaesthesia in cats. *J. Vet. Anim. Sci.* 54(1):214-217 DOI: <https://doi.org/10.51966/jvas.2023.54.1.214-217>

18. Deny Jennes, Sudheesh S. Nair, Soumya Ramankutty, Reji Varghese, Giggin T., Rahul B., Navya Elizabeth Sajeev and John Martin K. D. 2023. Surgical management of ocular squamous cell carcinoma in dairy cows - report of two cases. *J. Indian Vet. Assoc.* 21 (2): 114-119. <https://doi.org/10.55296/JIVA/21.2.2023.114-119>

19. Deny Jennes, Sudheesh S. Nair, Soumya Ramankutty, Tamaraiselvi P., Shehasina K.A., Reji Varghese and John Martin K. D. 2023. Diaphragmatic hernia in a two-month-old kitten and its successful surgical management. *J. Indian Vet. Assoc.* 21 (3): 74-79 <https://doi.org/10.55296/JIVA/21.3.2023.74-79>

Abstracts/Papers in conferences/seminars

1. Sanjeevi Wilson, Vinod Kumar K., Preena P., Javed Jameel A. and Tresamol P.V. 2024 Management of Ventricular tachycardia in a seven years old Labrador Retriever dog with concurrent Canine Babesiosis. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. Pp 187.

2. Mevin Sabu Mathews, Udayasree V. J., Javed Jameel, Arun George, Preena P. 2024. Diagnosis and treatment of microfilariosis in a cat. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 Febru-

ary 2024. Pp 82-84.

3. Neha R., Athira S., Preena P. and Tresamol P.V. 2024. Cobra envenomation and its management in a Dachshund dog. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. p131-132.

4. Athira K., Preena P., Vijayakumar K. and Tresamol P.V. 2024. Therapeutic Management and Control of Pigeon Malaria in a European Lahore Pigeon Loft. Annual convention of Indian Society for Veterinary Medicine and National Conference on “Multifaceted Approaches for Integrating Veterinary Medicine and One Health for a Holistic Future”. Mannuthy, Kerala. 22-24 February 2024. p167.

5. Venkata Manoj R., Raina Varghese, Basil C. Varghese, Ajith Y., Preena P., Manoj M., Justin Davis K. and P.V. Tresamol. Viral Epidemic “Lumpy Skin Disease” Threatening the Life of Indigenous Vechur Cattle. 35th Kerala Veterinary Science Congress. Pookode, Wayanad. 10-14 November 2023. pp 100

6. Aparna P. A., Athira Sajeendran, Arun George, Preena P., Justin Davis K., Tresamol P V. Successful medical management of localised tetanus in a dog. 35th Kerala Veterinary Science Congress. 10-14 November 2023. pp 335.

7. K.P. Magnus, C. Jayakumar, Naicy Thomas, Lali F. Anand, Abhilash.R.S., Hiron M. Harshan. and S. Ajithkumar. 2023. Transcriptome-based differential gene expression analysis of canine uterus in primary uterine inertia and obstructive dystocia. 38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice. December 6th to 8th 2023, held at college of Veterinary and Animal Sciences, Mannuthy Thrissur, Kerala

8. K.P. Magnus, C. Jayakumar, Naicy Thomas, Hiron M. Harshan., R.S. Abhilash, Princy Johnson., Elizabeth Kurian. and S. Ajitkumar. 2023. Relative expression of hormone receptors, hormone and electrolyte profile in canine uterine inertia. 38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on “Frontiers in Theriogenology - Research and Practice. December 6th to 8th 2023, held at college of Veterinary and Animal Sciences, Mannuthy Thrissur, Kerala

Books edited

1. Laboratory and molecular techniques for diagnosis of disease. Y. Ajith, Varuna P. Panicker, K. S. Athira, Sasi Adithya, Justin Davis K., P. Preena. Publication date 2024/2/24 Pages 1-68

2. Echocardiography in dogs. Preena P., Sindhu K. Rajan, Ajith Y., Justin Davis K., Ajithkumar S., Athira Sajeendran, Aiswarya A. Publication date 2024/2/24 Pages 1-29.

10. Other achievements

11. Evening Clinic

Evening clinic and advisory call center provides clinical, surgical and diagnostic services to the public during the evening hours. Working hours: 04.00 PM to 10.00 PM on working days and 1.00 PM to 09.00 PM on holidays. A total of 2500 number of cases were attended in 2023-24.

12. Any other activities

2. Revenue Generation- A financial overview

Three Revolving fund projects are currently running under UVH & TVCC, Mannuthy.

Sl. No.	Name of the RF project	Annual Revenue generated	Annual expenditure	Net Margin
1.	To provide comprehensive Services & Health care at University Veterinary Hospital Mannuthy	65,08,098	48,71,229	16,38,869
2.	Karshakamitra Medical Store, Mannuthy	77,09,664	82,25,289	14,77,945
3.	To provide comprehensive Services & Health care at evening clinic, Mannuthy	18,74,943	15,95,442	2,79,501
Total		1,60,92,705	1,46,91,960	33,96,315

3. Activities of the laboratories associated with the units

A molecular biology laboratory and a veterinary diagnostic clinical laboratory are functioning in the TVCC. Following diagnostic services are routinely carried out in these labs:

1. Molecular diagnostics for hemoparasites
2. Routine faecal sample examination
3. Urinalysis
4. Complete blood count and hematological evaluation, Blood smear test
5. Skin scrapings and impression smear examination
6. Serum biochemistry (ALP, ALT, AST, Total protein, Albumin, Bilirubin, Blood Urea Nitrogen, Creatinine, Calcium, Phosphorus, Magnesium)

7. Microbiology (Culture and sensitivity examination of bacterial pathogens)
8. Cytopathology of fine needle aspirate and biopsy samples.

UNIVERSITY VETERINARY HOSPITAL, KOKKALAI

1. Unveiling Services, Programs, and Facilities: A Detailed Overview

1. Introduction : Initially known as Cochin State Veterinary Hospital and founded in 1904, University Veterinary Hospital, Kokkalai is presently a stand-alone station under Kerala Veterinary and Animal Sciences University since 2011. Erstwhile, when State of Kerala was formed, the hospital became a part of Animal Husbandry Department of Kerala and functioned as under Kerala Veterinary College from 1955. Later it was transferred to Kerala Agricultural University in 1972, on its formation. The hospital occupies an area of 1.19 acres. The outpatient clinic of the hospital (OP Clinic) works from 9.00A.M to 1.00 noon (OP registration up to 11.30 AM) and there after casualty service is being provided up to 4.00 P.M. on all working days and from 9 A.M to 12.00 noon on all holidays. Hospital handles about 110 to 120 cases daily with an annual increase of about 10%.

Major Mandates of the Station

1. Providing expert treatment, health checkup and preventive vaccinations and breeding management to animals, supported by modern diagnostic facilities
2. Clinical teaching of undergraduates, post graduates and doctoral students.
3. Facilitating postgraduate and doctoral research and under taking External Aided Research Projects
4. Referral services and emergency clinical cases referred by veterinarians and providing treatment
5. Providing training to VHSE (Dairying and Animal Husbandry) Certificate holders and farmers, conduct of continuing veterinary education programme
6. Consultancy services to govt. and private agencies

Major Facilities: Ultrasonography, Computed Radiography with networking to units, Operation theatre with gas anaesthesia, digital monitoring, ventilator, oxygen administration, Ultrasound massager facility for soft tissue, orthopaedic, gynaecological, dental and ophthalmic surgeries. ECG, emergency and critical care with defibrillator, breeding advice with EVC, gynaecological operation theatre, Laboratory with five-part Auto-haematology analyser, semi-automatic serum chemistry analyser, Arterial Blood gas analyser, Dark field microscope, Fluorescent antibody microscope, automated progesterone analyser, facilities for routine haematological and microscopical examination, blood transfusion, Vaccinations for pets and birds on discounted rates, pharmacy with common drugs, emergency medicines and i/v fluids and Karshakamithra medical store and an office to support all.

1. Veterinary Teaching Hospital –
Internship – Supports internship training pro-

grammes of the BVSc & AH students of KVASU, TNUVAS, RIVER, Pondicherry and other veterinary institutions of southern states of India.

- | | | |
|---|---|-----|
| Study abroad program | – | NIL |
| Continuing Veterinary Education | – | NIL |
| 2. Clinical meetings | – | NIL |
| 3. Hospital Services (No. of cases attended – species wise; in-patient facilities) No. of cases admitted and quarantined) | | |

No. of cases attended – (species wise)

Canine	:	23437
Bovine	:	1653
Caprine	:	1804
Feline	:	5411
Avian	:	744
Others	:	127
TOTAL	:	33194

In-patient facilities	:	NIL
No. of cases admitted and quarantined	:	NIL

4. vaccination –

▪ Multi component Vaccine in dogs	:	2211
▪ Anti-rabies Vaccination	:	2305
▪ Cat Vaccination	:	345
▪ Ranikhet Disease Vaccine	:	0

5. Pharmacy – The Hospital is attached with a Pharmacy which supports the farmers with all common drug preparations, dewormers and essential vaccines. Apart from this a Karshaka

6. Referral Units (No. of cases attended) : 245

7. Theatre services –

Operation Theatre services : Major: 482 Minor : 546

Emergency and Critical Care Service – 326

Mobile Veterinary services : NIL

8. Veterinary Medical Record System – Case studies carried out with a Nominal Register, case sheets, case distribution registers maintained at the Units. All the major equipments are provided with log books, and equipments maintain a digital log of the work done automatically.

9. Published – Details of Project works carried out by students.
10. Other achievements
11. Evening Clinic : NIL
12. Any other activities : New Revolving Fund at UVH,
Kokkalai
Karshakamithra Medical Store, UVH, Kokkalai

2. Revenue Generation – A Financial Overview

Non-Plan	: Rs. 4,07,410.00*
Revolving Fund	: Rs. 11,45,000.00*
Revolving Fund Karshakamithra	: Rs. 17,48,000.00*

(*The amounts remitted to the Finance Officer only accounted)

3. Activities of the Laboratory associated with the units

Carry out the activities examination of clinical samples like blood, skin scrapings, faeces, urine and others. Equipped with 5-part automated haematology analyser, semi-automatic biochemistry analyser, blood gas analyser, dark field microscope, F. A. microscope, high quality as well as student microscopes, centrifuges etc. Apart from the regular clinical samples sent from the clinical units of the hospital, the Clinical Laboratory supports the animal house of Jubilee Mission Medical College, Thrissur and near-by farms.

CENTRE FOR ADVANCED STUDIES IN POULTRY SCIENCE, MANNUTHY

PROFILE

Centre for Advanced Studies in Poultry Science was established in 1985 as recognition for its contribution in various fields of activities. The centre has successfully completed 12 External Aided Projects. Release of crossbred chicken for backyard- Gramasree & Gramalakshmi, release of high yielding ILM-90, Establishment of ICAR Revolving Fund Poultry Project, implementation of NATP on productivity enhancement of Ducks and successful conduct of IV World Water Fowl conference, IPSACON 2015, RKVY project etc. are the significant milestones of the Centre.

OBJECTIVES

- Academic programmes of the Poultry Science and Veterinary faculty.
- Research on advanced areas in Poultry Science
- Implementation of Externally aided projects.
- Transfer of Technology (ToT) programmes.

ADMINISTRATIVE DETAILS

ADMINISTRATIVE STAFF

Director- Dr P Anitha, Professor

Assistant –Smt Akhila

SUPPORTING STAFF

Office Attendant

ANNUAL FINANCIAL DETAILS

NON PLAN

Total financial outlay – Rs 52.15 Lakhs

STATE PLAN

Title of the Project	Name of the Principal Investigator	Funding Agency	Fund Allocated	Duration of the Project
Conservation, Characterization And Popularization of Native Varieties of Poultry in Kerala	Dr P. Anitha	Govt. of Kerala	5 Lakhs	Continuing Since 2018
Advanced Mycotoxin Testing Facility for Poultry Feed	Dr P. Anitha	Govt. of Kerala	5 Lakhs	Continuing Since 2018

Hatchery Waste Disposal and its Effective Utilization	Dr Vimal Antony Mut-tathettu	Govt. of Kerala	3 Lakhs	Continuing Since 2018
Standardisation of In-Ovonutrition and Vaccination in Chicken and Development of Strategies for Enhancement of Poultry Welfare in Production Systems by Resource Integration in Selected Five Districts of Kerala	Dr Vimal Antony Mut-tathettu	Govt. of Kerala	28.5 Lakhs	2023-24

REVOLVING FUND POULTRY PROJECT, CASPS, MANNUTHY

PROFILE:

The Revolving Fund Poultry Project operating under CAS in Poultry Science was originally sanctioned by ICAR vide order No.F.7-15/95/ASR II Dt.17.07.96 in the name 'Establishment of a Commercial hatchery'. The project started functioning w.e.f. 03.03.1998 under Kerala Agricultural University with a capital investment of Rs. 25 lakhs as the corpus amount and one time grant. The corpus fund was fully repaid in five installments and the project was carried out successfully under Kerala Agricultural University and transferred to Kerala Veterinary and Animal Sciences University vide order no. KVASU/DAR/R2/2011 dated 11.07.2011 of Director, Academics & Research with name as 'Revolving Fund Poultry Project'.

The Revolving Fund Poultry Project (RFPP) is a prestigious project under the Kerala Veterinary and Animal Sciences University, functioning as an autonomous project without incurring Non-Plan expenditure. Presently it is being operated as per the new guidelines formulated by KVASU.

OBJECTIVES

- To produce balanced poultry feeds to cater the requirements of research stations under University and farms under AHD, Govt. of Kerala
- To facilitate advanced research in frontier areas of Poultry production and technology

ADMINISTRATION DETAILS

Principal Investigator

Dr. P. Anitha Director

Co- PIs

Dr. Binoj Chacko. Associate Professor & Head, UPDF

Dr. Vimal Antony Muttathettu, Assistant Professor, Dept of Poultry Science, Mannuthy

Dr. Beena c Joseph, Assistant Professor, Dept of Poultry Science, Mannuthy

Name Of Supporting Staff	Position
Dr. Afsal S	Feed mill Manager
Mrs. Reshma P Raj	Accountant
Mrs. Raji. P.G	Assistant
Shuhaila K P	Feed mill Assistant

Mr. Nitjin Rajan	Feed mill Assistant
Mr.Joshine Joy	Feed Mill Technician/Fitter
Miss.Neethu Suresh K	Lab Assistant
Mr.Rajith C.P	Driver cum office attendant

Financial Details:-

Corpus Fund	:	1,00,00,000/-
Total Income	:	7,82,91,737/-
Total Expenditure	:	7,11,68,770/-
Net Profit for the period		
01.04.2023 to 31.03.2024	:	71,22,967/-
Closing Balance as on 31.03.2024		
SBI (A/C. No. 57036603289)	:	1,00,00,739.55/-
Interest from SB A/C	:	2,54,074/-.

DEPARTMENT OF LIVESTOCK PRODUCTS TECHNOLOGY MEAT TECHNOLOGY UNIT



Department Profile

Almost two decades ago, Kerala Agricultural University conceived the idea of establishing a modern Meat Plant to fulfill roles in teaching, research, and extension. This vision materialized in 1992 with the creation of infrastructure supporting a multi-species abattoir, meat processing unit, and essential laboratories. These facilities were utilized to provide practical training to various stakeholders, including veterinary students, unemployed individuals, entrepreneurs, and veterinary officers, through the Continuing Education Programme. Several externally aided projects were undertaken by the unit including the establishment of a Carcass Utilization Plant with financial support from Ministry of Agriculture, Government of India. The regular production, processing, and marketing of meat and meat products fostered collaborations with various entities, including public bodies, State Agricultural Universities, Veterinary Officers, local authorities, and the Animal Husbandry Department.

In 1994, the Meat Technology Unit in Mannuthy evolved into the Department of Livestock Products Technology. The department's Human Resource Development (HRD) programs gained attention from universities, State Animal Husbandry Departments, NGOs, and private agencies. Significant research initiatives undertaken by the department's scientists have yielded valuable outcomes for the Indian Meat Industry. This pioneering work led to the Indian Council of Agricultural Research (ICAR) recognizing the unit as a Center of Excellence in Meat Science and Technology in 2001, a first among Indian veterinary universities. Subsequently, the department initiated MVSc and PhD programs in 2004 and 2011, respectively. Moreover, the department achieved ISO 22000:2018 certification for beef processing, a notable achievement for a government university department in India. The overarching vision is to become a global hub for training and knowledge dissemination in meat science and technology, guided by a comprehensive mandate encompassing teaching, research, extension, training, entrepreneurship, meat and meat products production, and by-products utilization.

Mandate of Department of Livestock Products Technology and Meat Technology Unit

- Teaching
- Research
- Extension
- Training and entrepreneurship
- Meat and Meat products production
- By- products utilization

Major Activities

1. The regular mandate of the Meat Technology Unit and Department of Livestock Products Technology includes undergraduate and post-graduate teaching, research and extension on various aspects of meat production and processing
2. Development of quality management programmes in the area of hygienic animal slaughter and processing of meat
3. Evolving suitable methodologies for improving the organoleptic qualities of meat and meat products
4. Development of Eco-friendly slaughter house and meat processing unit waste utilization methods
5. Development of adaptable processing technologies and formulations for value addition of livestock products
6. Standardization of packaging technique for fresh and processed meat and poultry for medium scale entrepreneurial adoption
7. Identification, promotion and validation of indigenous knowledge of local butchers and workers in meat sector
8. Regular production, processing and marketing of meat and meat products and by-products and close interaction with State Agricultural Universities, Veterinary Officers, Local Self Govern-

ment authorities, Industries Department, Suchitwa Mission, Health professionals, FSSAI, Animal Husbandry Departments etc.

9. Technical advice to entrepreneurs, Food Safety Commissionerate
10. Conducting classes to Nursing, Pharmacy, MBBS, BAMS and Food Technology students
11. Hands-on training on slaughter practices and meat inspection to Vet. Officers and on meat processing to Self Help Groups. The meat species identification laboratory developed at this centre is being utilized by judiciary, forest authorities, wild animal protection agencies, and consumer redressal forums, Government Departments, Veterinary Surgeons, entrepreneurs and the public.

Turn-over and Revenue Generation

Rs. 2,58,51,637/- (Two Crore Fifty-eight Lakh Fifty-one Thousand Six Hundred and Thirty-seven Only)

Animal Culling by Species

Number of Animals Slaughtered

	Cow/ bull	Buffa- lo	Pig	Goat / sheep	Broiler chicken	Broiler duck	Rabbit	Spent chicken	Naadan chicken	Quail
No. of Animals slaughtered	338	7	365	139	6703	2309	282	1050	300	2905

Sales Revenue: Meat (Frozen and Products)

Sales Revenue: Meat By-products } 2,58,51,637/-

Plant Facilities

Multispecies abattoir, well equipped quality control labs. Carcass utilization plant of European standards for the dry rendering of inedible by products to yield feed-grade meat-cum-bone meal/organic fertilizer. Gamma Chamber 5000 for gamma irradiation of meat and meat products.

The Department of Products Technology and Meat Science focuses on several thrust areas within Livestock Products Technology. These include: slaughterhouse by-product utilization for value-added applications; fresh meat technology for quality preservation and food safety; biomaterial development from animal tissues for medical applications; pet food and fertilizer development using meat and by-products; meat product development for improved quality and consumer acceptance; meat packaging and preservation technologies for extended shelf life; and waste management for environmental sustainability in slaughterhouses and meat processing plants.

Consultancy services

Nil

Projects

EAPs

Sl.No.	Title	Funding agency	Name of PI, Co PIs
1	Development of Innovative Technologies for Meat Animal Appraisal and Meat Production, Value Addition and Waste for Augmenting Farmer's Income and Entrepreneurship	National Live-stock Mission	PI- Dr.V.N.Vasudevan Co PI- Dr.Sathu T Dr. Irshad A

State plan projects

Sl.No.	Title	Name of faculty involved
1.	Augmenting the quality and safety of foods of animal origin and waste valorization for entrepreneurship facilitation	Dr.V.N.Vasudevan
2.	Strengthening the meat production, preservation, value addition and capacity building facilities of Meat technology Unit	Dr.V.N.Vasudevan

Training

	Trainings conducted	Visitors	Students from other universities
No of trainings/ internships/ projects conducted	6	211	31

Courses

Courses offered by the Department (PhD/MVSc/BVSC/MSc)

Degree Programme	Course No.	Course Title	Credits
UG	LPT	Livestock Products Technology	2+1
PG	LPT 601	Abattoir practices and meat plant operations	2+1
	LPT 602	Fresh Meat Technology	1+1
	LPT 603	Processing and preservation of meat	2+1
	LPT 604	Processing of Milk and Milk Products	1+1
	LPT 605	Packaging and marketing of livestock products	1+1
	LPT 606	Microbiology and Quality Control of Livestock Products	1+1
	LPT 607	Slaughter house byproducts Technology	1+1
	LPT 608	Implant Training	0+2

	LPT 609	Egg and Egg Products Technology	1+1
	LPT 610	Market milk processing and dairy plant practises	2+1
	LPT 611	Processing and Marketing of Wool	1+1
	LPT 612	Biotechnology of Foods of Animal Origin	1+1
	LPT 613	Fish and Fish Products Technology	1+0
PhD	LPT 701	Modern Abattoir Practices and Animal Byproduct Technology	1+1
	LPT 702	Advances in meat production and fresh Meat Technology	1+1
	LPT 703	Developments in Processed Meat Technology	1+1
	LPT 704	Current Trends in Processed Milk and Milk Products Technology	1+1
	LPT 705	Biotechnological Techniques and Quality Control of Livestock Products	1+1
	LPT 706	Ethnic and organic meat and milk products	1+1
	LPT 707	Industrial and Entrepreneurial Training	0+2
	LPT 708	Current trends in disposal and utilisation of waste from meat and dairy industry	1+1
	LPT 709	Advances in Egg and Egg Products Technology	1+1

PHOTOS OF RESEARCH FACILITIES



Multispecies abattoirs



Poultry Processing Lines



Quality Control Labs



Carcass utilization plant



Meat processing facility



Irradiation Unit
(Gamma Chamber-5000)

Gamma Irradiation Chamber

100%
NATURAL PRODUCT

AEROBIC COMPOST
(എയറോബിക് കമ്പോസ്റ്റ്)

Contents:
Cow dung, Dried tree leaves, Slaughter house waste

DOP: Qty: Rs:

Manufactured by:
MEAT TECHNOLOGY UNIT
KERALA VETERINARY & ANIMAL SCIENCES UNIVERSITY
Mannuthy P.O., 680 651, Thrissur, Kerala
Customer care: 0487 2370956 e-mail: meatechunit@kvasu.ac.in



Aerobic composting unit



Animal Carrier



Sensory Evaluation Facility Sales counter



Pet food and Dermal Substitutes as biomaterials



Newly Released Products during the Financial Year
(Chicken Spring Roll, Chicken Pops, Chicken Crunch, and Premium Chicken Curry Cut)



Photos of Training Organized during the Financial Year





KVASU CENTRE FOR WILDLIFE STUDIES (KVASU-CWS), POOKODE

I. KVASU Centre for Wildlife Studies, Pookode

KVASU Centre for Wildlife Studies (KVASU-CWS) started functioning at the Pookode Campus of the university in Wayanad during the National Wildlife Week of 2011 with one permanent faculty and 5 Master of Science (Wildlife Studies) students. By 2023 the Centre grew into a team of one permanent faculty, two adjunct faculty from other departments, 7 daily wage staff (teaching and non-teaching), one labourer, 13 Master of Science (Wildlife Studies) students and several beneficiaries of the social welfare projects of the university.

Presently, the Centre is in the process of being transformed into the 'Centre of Excellence in One Health: Western Ghats Biodiversity, Wildlife-Human Interface, and Zoonotic Diseases', having been selected under the Centres of Excellence Project of Government of Kerala in 2022. The project is being implemented at the Pookode campus of KVASU, having received Administrative Sanction from the Government of Kerala worth 33 crore rupees with funding from KIIFB (GO. (Rt) No. .498/2023/AHD dated 27.10.2023).

i. Abstract of status of Master of Science (Wildlife Studies) course

- First batch (2011): 5 students
- Number of students who have completed till date : 79
- Current student status: 13 (Female: 4, Male: 9)
- National level post graduate exams cleared by alumni: GATE: 6, UGC NET: 1, CSIR NET: 2
- Alumni who completed M. Phil.: 1 (IIITMK, Thiruvananthapuram)
- Number of alumni undergoing/completed PhD: 9 (KVASU, IISER, IIITMK, CUK *etc.*)
- Alumni selected for Young Woman Scientist Scheme of DST: 1
- Number of alumni working as Conservation Biologists: 5 (Forest Department)
- Alumni working as zoo vets: Mumbai Zoo Vet - 1
- Alumni working in Wildlife Institute of India, Dehradun: Great Indian Bustard Breeding Programme - 1
- Alumni working as Research Assistants: 16 (WII, SACON, KSBB, KFRI, KVASU *etc.*)
- Alumni who are preparing for IFS: 2
- International awards/recognition received by alumni: 3
- NGOs founded by alumni: 2 (FORCE, MARC)
- Start-ups initiated by alumni: 1
- Currently one of the most popular post graduate courses of KVASU

ii. Abstract of socially relevant activities of KVASU-CWS

- Implementation of Gothra Mission, the tribal welfare project of KVASU
- Awareness programmes and support for mitigation of human-wildlife conflict for farmers of Wayanad (Karshakar Bhoomiyude Bhashaguarar).

Report of Activities and Achievements for the year 2023-24

1. “Karshakar Bhoomiyude Bhashaguarar”

Workshop conducted on 20.12.2023



2. Reptile and Amphibian Workshop on 11.06.2023



3. Chembra Study Visit on 14.10.2023



4. Panamaram Heronry Study visit 21.09.2023



5. **“Karshakar Bhoomiyude Bhashagarar”**

Workshop conducted on 24.01.2024



6. **“Karshakar Bhoomiyude Bhashagarar”**

Workshop conducted on 23.02.2024



7. Aralam Bird Survey, Kannur District 08.03.2024



8. “Karshakar Bhoomiyude Bhashagarar”

Workshop conducted on 23.03.2024



BIOSCIENCE RESEARCH AND TRAINING CENTRE, THONNAKKAL, THIRUVANANTHAPURAM

I. Major activities

- Implemented the State Plan projects ‘Enhancement of animal health and productivity through development of rapid accurate disease control measures for infectious diseases of viral aetiology’ and ‘Strengthening of Bioscience Research and Training Centre Thiruvananthapuram’.
- Implementation of external funded project entitled ‘Evaluation of maternal antibody transfer against Infectious bronchitis and Infectious Bursal Disease in chicken’ funded by Department of Animal Husbandry, Government of Kerala

II. Staff Details

Sl. No.	Designation	Number of positions
1	Co-ordinator (i/c) (Assistant Professor on working arrangement)	01
2	Assistant Professor	01
3	Research Assistant (Contract/ Daily wages)	02
4	Assistant Section officer	01
5	Security (Contract)	02
5	Office Attendant (Daily wages)	01
6	Daily Wage Labourer (Daily wages)	01

CENTRE FOR LIVESTOCK DEVELOPMENT AND POLICY RESEARCH & REGIONAL RESEARCH AND TRAINING CENTRE, THIRUVANANTHAPURAM

1. Introduction of the Centre

The CLPR had been set up as independent centre of the Kerala Veterinary and Animal Sciences University (KVASU) at Thiruvananthapuram in June 2013. CLPR envisages strengthening policy research in livestock sector and conducts need based capacity building activities for the stakeholders.

2. Objectives

The centres organize capacity building programmes for the various stakeholders of livestock sector, such as farmers and extension workers.

Organise exhibitions and seminars on behalf of the University.

Conduct need based researches in different fields.

Provide consultancy services for farmers and entrepreneurs and sell publications of the University on request.

Act as an intermediary between the headquarters of University and the Government departments at the Secretariat, Thiruvananthapuram.

3. Details of Administration activities

File management related to Non plan (salary of the KVASU employees) and State Plan fund from Government secretariat is monitored through this centre. Attended several meeting with Minister of Animal husbandry and Secretary of the Animal husbandry in connection with the animal husbandry sector in Kerala. A fully functional Guest house for University official is also managed by this centre.

4. Significant School Accomplishments-

5. Major Achievements

Act as co implementing agency of ICAR- NBAGR Scheduled Caste Sub Plan (SC-SP) Project for the socio-economic development of goat farmers in Parakode (Minor) Block, Kerala, under the ICAR- Scheduled Caste Sub Plan (SC-SP). The project was formally inaugurated on 5th March, 2024 by **Sri. Chittayam Gopakumar**, Deputy Speaker of the Kerala Legislative Assembly. As the part of the project forty scheduled caste goat farmers were meticulously selected and organized into 11 clusters. Each cluster was equipped with a Malabari buck of high genetic worth for breeding, sourced from the Kerala Livestock Development Board goat farm. All forty beneficiaries received a comprehensive support package including utensils, goat feed, mineral mixture, de-wormers, a training manual, leaflets, and an anaemia check card.

A) Training Programme and feed distribution for Dairy farmers of Kattaikkonam DCS of Trivandrum Corporation.

As part of the state plan (2023-24), a training programme organized for dairy farmers on feeding of dairy cattle at dairy cooperative society of Kattaikkonam TVM. As a part of the programme mineral mixture from Feed mill of COVAS mannuthy were distributed to 30 farmers. The programme was inaugurated by Sri D Ramesan Councillor trivandrum corporation. Sri Suseelan President DCS Kattaikkonam and Smt Bindu secretary DCS Kattaikkonam were also present during the programme.



6. Development Profile

The centres organize capacity building programmes for the various stakeholders of livestock sector, such as farmers and extension workers. This centre need full time coordinator and supporting staff for optimum function. It also need permanent establishment facilities.

CENTER FOR ONE HEALTH EDUCATION, ADVOCACY, RESEARCH AND TRAINING (COHEART)

1. Introduction of the Center

The Kerala Veterinary & Animal Sciences University (KVASU) has established “Center for One Health Education, Advocacy, Research and Training (COHEART)” in the year 2014 to serve as a base for the rapidly expanding concept of “One Health” in India as well as to act as a hub for encouraging One Health activities over the globe. The One Health Initiative is a global movement dedicated to improving the life of all species – human and animal - through the integration of human medicine, veterinary medicine and environmental science. COHEART is the first of its kind in the country and aims at capacity building of various professionals for a holistic, multifaceted solution of zoonoses threats and global health challenges through collaboration, cooperation and partnership between different disciplines.

The centre is located in scenic hilly terrain of Pookode in Wayanad district of Kerala, India. Wayanad district stands in the southern tip of the Deccan Plateau, north-eastern part of Kerala and its chief glory is the majestic Western Ghats with lofty ridges interspersed with dense forest, tangled jungles and deep valleys along the human habitations- a place ideal for co-existence of man and animal with nature, which will make the centre shine as a beacon of excellence.

2. Objectives

1. **EDUCATION** of a new cadre of health professionals about One Health- the linkages between animal, human and environmental health. We do this by offering 3 courses- PG Diploma in One Health, PG Certificate courses in One Health Surveillance and PG Certificate in Community Based Disaster Management. All the courses are suitable for health-related professionals interested in integrating the knowledge and application of human medicine, veterinary medicine and public health. The exploration of interconnectedness helps us to realize various factors and conditions of healthy co-existence.
2. **ADVOCACY** for collaboration as an encouragement for professionals to work together in order to attain “Optimal health for people, animals and the environment”. Advocacy is through our online technology-oriented portals and most importantly through our YouTube channel named as Dr. Coheart where a virtual 2D character educates general public, farmers and professional on emerging health threats and control measures.
3. **RESEARCH** to understand the health threats and disease processes that occur at the interface of human and animal activities and their effects on the environment. We conduct research to improve health outcomes of human and animal populations and their surrounding environment. The major research focusses on Animal Health Hazards, Antimicrobial Resistance, Human Animal Conflict, Environmental Health Hazards, Food Safety, Infec-

tious and Zoonotic Diseases, Occupational Health Hazards, Public Health Hazards and Wildlife Research

4. TRAINING AND CAPACITY BUILDING to improve our community's preparedness and response to hazards affecting man, animal and the environment. As a part of capacity building activities, the Centre organizes series of awareness programmes, camps, interface meets, important day commemorations, seminars, workshop, student event etc. on cross-cutting topic areas.

3. Details of Administration activities

Faculty

Dr. Jess Vergis : Officer-In-Charge, COHEART

Associate faculty

Dr. Vinod V.K.: Associate Professor & Head (i/c), Department of VPH

Dr. Asha K. : Assistant Professor, Department of VPH

Courses

Sl. No	Name of course
1	PG Diploma in One Health
2	PG Certificate in One Health Surveillance

4. Significant Accomplishments

External-Aided projects:

1. *Improving Animal Health Practices of Veterinarians and Livestock farmers to contain Antimicrobial Resistance and Promote One Health (Bangladesh, India, Nepal & Sri Lanka)*
(Principal Investigator: Dr. Jess Vergis; Funding Agency: Asian Development Bank through Sathguru Management Consultants; Project Outlay: Rs. 5,50,000/-)

State-plan funded projects:

1. Addressing One Health priority areas through research, capacity building and development of knowledge products (RSP/23-24/VIII-2)

5. Major Achievements

Training Programmes:

1. Asian Elephant Support hands-on training program for wildlife veterinarians from 27.11.2023 to 30.11.2023.



2. Experts from the COHEART were actively involved in one health activities within the state (State One Health Committee; Standing committee on Zoonoses)
3. Technical Expertise was provided for the Centre for One Health-Kerala institutionalised by the Ministry of Health and Family Welfare, Government of Kerala.
4. Professionals from various disciplines were trained in PG Diploma in One Health. This year 10 scholars have registered for the course and appeared for the course.

Awareness session

1. World Zoonoses Day was commemorated on 06/07/2023 at CVAS, Pookode with awareness drive on zoonotic diseases and the ways to prevent the spread in association with the Students' Union, CVAS, Pookode.



CENTRE FOR ANIMAL ADAPTATION TO ENVIRONMENT AND CLIMATE CHANGE STUDIES (CAADECCS), MANNUTHY

BACKGROUND OF CAADECCS

Climate change is an undeniable reality. As stated by the Intergovernmental Panel on Climate Change (IPCC), if global warming continues unabated, temperatures are projected to rise by 1.5°C between 2030 and 2052. Over the past few decades, the frequency of marine heatwaves has doubled, while the shrinking cryosphere and ocean warming have led to accelerated sea level rise. These changes in weather patterns and intensified climate extremes are pushing both natural and human systems beyond their capacity to adapt, resulting in irreversible impacts on livelihoods, agricultural productivity, human health and food security (IPCC AR6, 2022).

The outcomes of climate change are felt globally, prompting attention from various scientific disciplines. Agriculture, as the cornerstone of economic development, is particularly vulnerable to fluctuations in climatic conditions. The livestock sector, a vital component of agricultural growth, serves as a primary source of income for many poor and marginal farmers worldwide. Paradoxically, while contributing to climate change, this sector also faces significant impacts from it. The escalating levels of greenhouse gas emissions exacerbate global warming, posing a threat to livestock production. Evidence indicates a notable increase in greenhouse gas concentrations over the past century, posing serious concerns for the dairy sector, a crucial livelihood for disadvantaged farmers. The current trajectory of global warming is expected to alter breed composition, compromise nutritional security and facilitate the emergence and re-emergence of pests and diseases.

In anticipation of the challenges confronting the livestock sector in a changing climate, the Kerala Veterinary and Animal Sciences University (KVASU) has established the 'Centre for Animal Adaptation to Environment and Climate Change Studies (CAADECCS)' under the Directorate of Academics and Research with ICAR special grant during XI Plan. This Centre aims to advance climate change education, research and extension activities in the field of animal agriculture.

CAADECCS stands as a pioneering institution among the State Veterinary Universities nationwide, functioning as the focal point for research and capacity building across all facets of climate change risk management concerning animal agriculture. The overarching goal is to devise and implement strategies aimed at mitigating the adverse impacts of climate change and variability, thereby sustaining and bolstering rural livelihoods through effective livestock production and management.

Central to its mission, the centre endeavours to establish Livestock Advisory Field Units (LAFUs) across all livestock farms. These units will address location-specific challenges related to climate change adaptation and mitigation, providing tailored Livestock Advisory services based on medium-range weather forecasting. By doing so, the centre aims to empower livestock farmers with

the knowledge and tools necessary to navigate climatic uncertainties effectively.

The outcomes generated by the centre will not only have local and regional significance but will also contribute to national and global efforts in climate change adaptation and mitigation within the domain of Animal Agriculture, particularly in the Humid Tropics. Through its comprehensive approach, CAADECCS seeks to foster resilience and sustainability across livestock systems, thereby safeguarding livelihoods and promoting agricultural resilience in the face of a changing climate.



1. Faculty Position:

- 1.1. Implementing Officer: **Dr. V. Beena** (Professor, Department of Veterinary Physiology)
- 1.2. Associate Professor: **Dr. S. Harikumar** (Associate Professor and Head, ILFC, Pookode)

2. Education

2.1. P.G. Diploma in Climate Services

Offers two P.G. Diploma Programs in ‘Climate Services’ and ‘Climate Services in Animal Agriculture’. No student has been enrolled in the academic year 2023-24.

2.2. Ph.D. in Climate Change and Animal Agriculture

No student has been enrolled in the academic year 2023-24.

2.3. Continuing Education

Provided training to Officers of the Animal Husbandry Department on climate change and animal husbandry as a part of their three-month training programme. Dr. V. Beena took a class on the topic “An introduction to the activities of CAADECCS” and Dr. S. Harikumar on “Thermal stress management in dairy cattle”.

3. Research Activities

Various collaborative research projects have been submitted to external funding agencies like **National Livestock Mission** and **Department of Environment and Climate Change**.

Externally Aided Projects: In the year 2019-20, **RKVY-RAFTAAR** project with a total financial outlay of 170 lakhs was sanctioned to CAADECCS and the Centre has established a Climate Controlled Research Complex (CCRC), a high-tech research facility for assessing

thermal stress in animals in a fully controlled environment. The facility comprises two major chambers, a climate chamber in which the temperature and relative humidity can be adjusted from 5°C to 50°C±1°C and 20% to 95% ±3% respectively and a comfort chamber in which the temperature is always kept in the comfort zone (i.e., from 20- 27°C) of the animal. Each chamber can accommodate six large animals like cattle and buffaloes. Besides, there is an animal holding facility to keep 12 animals in ambient conditions outside the chamber. In all three conditions, the physiological and behavioural alterations can be observed and monitored continuously. In the climate chamber, an artificial climate can be created with different combinations of temperature and relative humidity with the help of air conditioners and dehumidifiers supported by appropriate software. There is also a provision for controlling the diurnal lighting, optional elevated humidity, air exchange control, and tight performance tolerances. There are facilities to monitor methane, carbon dioxide and ammonia gases discharged from animals in the chamber. It is an ultimate research facility of international standards for assessing the impact of thermal stress in animals and also for finding out the alleviation strategies to be adopted for sustainable livestock production. The uniqueness of this facility is that it can be used for large and small animal research. On 17th April 2023, CCRC was inaugurated by the Honourable Minister for Animal Husbandry and Dairy Development, Smt. J. Chinchurani and that was included as Chief Minister’s 100 days action programme.





വെറ്ററിനറി സർവകലാശാലയുടെ മണ്ണുത്തി ക്യാമ്പസിൽ സ്ഥാപിച്ച കാലാവസ്ഥാ ഗവേഷണ സമുച്ചയം മന്ത്രി ജെ. ചിഞ്ചുറാണി ഉദ്ഘാടനം ചെയ്യുന്നു.

കാലാവസ്ഥാ ഗവേഷണങ്ങൾക്ക് സാർവദേശീയ പ്രാധാന്യം: മന്ത്രി

മണ്ണുത്തി • മൃഗസംരക്ഷണ മേഖലയിൽ കാലാവസ്ഥാ വ്യതിയാനം സംബന്ധിച്ചുള്ള ഗവേഷണങ്ങൾക്കു സാർവദേശീയ പ്രാധാന്യമുണ്ടെന്നു മന്ത്രി ജെ. ചിഞ്ചുറാണി വെറ്ററിനറി സർവകലാശാലയുടെ മണ്ണുത്തി ക്യാമ്പസിലെ പരിസ്ഥിതി കാലാവസ്ഥാ വ്യതിയാന പഠനകേന്ദ്രത്തിനു കീഴിൽ സ്ഥാപിച്ച ലോകോത്തര നിലവാരത്തിലുള്ള നിയന്ത്രിത കാലാവസ്ഥാ ഗവേഷണ സമുച്ചയം ഉദ്ഘാടനം ചെയ്യുകയായിരു

ഗിക പ്രഖ്യാപനം നടത്തി. സർവകലാശാല അക്കാദമിക്സ് ആൻഡ് റിസർച്ച് ഡയറക്ടർ പ്രൊഫ. ഡോ. സി. ലത പദ്ധതി വിശദീകരണം നൽകി. കോർപ്പറേഷൻ കൗൺസിലർ രേഷ്മ ഹൈമേജ്, വൈസ് ചാൻസലർ പ്രൊഫ. ഡോ. എം. ആർ. ശശീന്ദ്രനാഥ്, സംസ്ഥാന വെറ്ററിനറി കൗൺസിൽ പ്രസിഡന്റ് ഡോ. വി.എം. ഹാരിസ്, സർവകലാശാല സംരംഭകത്വ വിഭാഗം ഡയറക്ടർ



Controlled Research Complex (CCRC)



Climate-controlled chamber



Comfort chamber



Animal Holding Facility



Control Room

State Plan Projects: These are being implemented every year. The preliminary research projects are focused on the assessment of thermal stress in animals. The students and faculties of CAADECCS have published articles in various national and international journals. Two projects entitled “Livestock Advisory Based on Weather Forewarning (RSP/23-24/IX/4)’ and ‘Strengthening of CAADECCS for Climate Change Preparedness in Livestock Sector (RSP/23-24/XII-13)’ with a financial outlay of Rs. 20,00,000/- (Rupees twenty lakhs only) and Rs. 10,00,000/- (Rupees ten lakhs only) respectively have been sanctioned to CAADECCS under the State Plan Schemes for the year 2023-24. The released amount has been utilized for the good conduct of activities of CAADECCS.

CAADECCS has installed a meteorological observatory with the equipment and technical support of IMD, Pune in the year 2018. CAADECCS also has an Automatic Weather Station (AWS) which records hourly and daily weather parameters. Weather data which are recorded manually at the Surface Weather Observatory and automatically at the AWS are used for various weather-related research of the campus.

The Centre is also equipped with some digital instruments such as loggers for tem-

perature and humidity, barometer, lux meter, infrared thermometer and thermal imager. These instruments were being used by the students and Ph.D. scholars from various departments for their research.

Four students from the College of Climate Change and Environmental Science (CCCES), Kerala Agricultural University, Vellanikkara are carrying out their postgraduate dissertation at CAADECCS.

4. Publications

4.1. Articles Published in Research Journal

Swaminathan, A., Beena, V., Babitha, V., Parvathy, V.S., Shynu, M., Greeshma, J., Gleeja, V.L., Megha, P.S., Kulamkuthiyil, M.J., Ragupathi, B. and Ramnath, V., 2024. Impact of heat stress on physio-biochemical parameters during early lactation of crossbred dairy cattle. *Theoretical and Applied Climatology*, pp.1-19.

Ajith, Y., Adithya, S., Panicker, V.P., Athira, N., Beena, V., Safeer, M.S., Preena, P., Nisha, A.R., Divya, C., Sangeetha, S.G. and Umesh, C.G., 2023. Biometeorological analysis on the molecular incidence of babesiosis and ehrlichiosis in dogs. *Theoretical and Applied Climatology*, pp.1-10.

Astuti, P.K., Ayooob, A., Strausz, P., Vakayil, B., Kumar, S.H. and Kusza, S., 2024. Climate change and dairy farming sustainability; a causal loop paradox and its mitigation scenario. *Heliyon*.

4.2. Book chapters

Madhavan Unny, N., Zarina, A. and Beena, V., 2023. Fluid and Electrolyte Balance. In *Textbook of Veterinary Physiology* (pp. 193-211). Singapore: Springer Nature Singapore.

Beena, V., 2023. Excretory Physiology. In *Textbook of Veterinary Physiology* (pp. 213-231). Singapore: Springer Nature Singapore.

4.3. Books Published

Book entitled "Birds of the Campus - Illustrated List of Birds of College of Veterinary and Animal Sciences, Mannuthy, Kerala" edited by Dr. V. Beena and Dr. S. Harikumar with ISBN 978-93-91716-08-0 was released on 05.06.2023

5. Training/seminars/workshops and conferences attended/organised

- Dr. V. Beena attended and presented a paper at SAPI conference at SKUAST Kashmir from 3rd May to 5th May 2023
- Dr. V. Beena participated in the KSAPCC 2.0 on 19th January 2024 organised by Department of Environment and Climate Change in online mode
- Dr. V. Beena acted as a panellist in the workshop on Development of Decarbonisation Strategies and Pathways towards Carbon-neutral Kerala by 2050' organized by Vasudha Foundation and hosted by Energy Management Centre, Government of Kerala on 9th February 2024 from 12:20 PM to 1:15 PM at Tagore Theatre, Thiruvananthapuram



- Dr. V. Beena attended the VIIIth QRT Review of AICRPDA & AICRPAM centres in Southern Region on 19th February 2024 in the Centre for e-learning located inside ITBT Complex of Kerala Agricultural University, Vellanikkara
- Dr. V. Beena attended 15th Kerala Veterinary Science Congress & International Seminar on “Exploring the Boundless Horizons of Veterinary Profession-Unleashing a New Era Worldwide” organised by Indian Veterinary Association, Kerala on 18th and 19th November 2023 at College of Veterinary and Animal Sciences, Pookode

6. Other activities

- Dr. V. Beena and Dr. S. Harikumar have taken classes for Animal Husbandry Department Officers. In the afternoon practical session, the officers were acquainted with various facilities and equipment at CAADECCS
- Dr. V. Beena attended a review meeting for the GHG inventory of Kerala State on 26th May 2023 at Hotel Dimora, Thiruvananthapuram organised by Directorate of Climate Change and Department of Environment
- Celebrated Environment Day (5th June 2023) by organising a painting competition for upper primary and high school students and a photography competition for the students of KVASU on the topic “biodiversity of your campus”. The book entitled “Birds of the Campus - Illustrated List of Birds of College of Veterinary and Animal Sciences, Mannuthy, Kerala” edited by Dr. V. Beena and Dr. S. Harikumar was released in the official function arranged at the College of Veterinary and Animal Sciences, Mannuthy. Prizes were distributed to the winners.
- Dr. V. Beena participated in the meeting for presenting research project under National Livestock Mission on 16th June 2023 at secretariat, Thiruvananthapuram.

7. Extension Activities

- Provided weather-based livestock advisory to farmers
- Dr. V. Beena delivered a radio talk



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