

## ANIMAL HUSBANDRY, DAIRYING, FISHERIES AND FISHERMEN WELFARE DEPARTMENT

### **ANIMAL HUSBANDRY**

**POLICY NOTE** 2025 - 2026

**DEMAND No.6** 

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(C)

Government of Tamil Nadu 2025

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# ANIMAL HUSBANDRY DEPARTMENT POLICY NOTE 2025-26

#### 1. INTRODUCTION

Livestock rearing has been practised since time immemorial in the rural households. It plays an important role in supplementing the income of It also households. provides fulltime occupation to farmers at the location itself with better utilisation of human resources. Moreover, it provides balanced nutrition in the form of milk, egg and meat besides farm power. Cattle wealth is still considered as an index of wealth among community. Among rural employment sectors, Animal Husbandry plays a major role in providing employment especially self-employment high participation of women. Livestock with rearing offers employment throughout the year to agricultural labourers, small and marginal farmers irrespective of seasons.

Animal Husbandry Department involves in development of Cattle, Buffalo, Sheep and Goats, Piggery, Poultry through its Farms, besides providing Fodder resources and training. In addition, the department is conducting Quinquennial Livestock census and Integrated Sample Survey to assess the livestock population and estimation of major livestock products.

Veterinary services department is successful in serving the public with its vast network of various categories of Veterinary Institutions viz., Polyclinics, Clinician Centres, Veterinary Hospitals, Veterinary Dispensaries, Mobile Veterinary Units and Veterinary Subcentres spread throughout the State. It also provides first aid, treatment, artificial insemination, pregnancy verification, preventive vaccination, deworming, beneficiary-oriented socio-economic schemes and extension activities through 3,869 Institutions.

The significant contribution made by the Department is reflected in the impressive increase in productivity of livestock and its products.

In milk production, Tamil Nadu stands 11<sup>th</sup> in the country with 108.08 LMT of milk during 2023-24.

Likewise, Tamil Nadu stands 2<sup>nd</sup> in egg production with 22332.53 million number of eggs.

Tamil Nadu stands 6<sup>th</sup> in meat production with 7.68 LMT of meat.

The State's contribution to Nation's production in milk is 4.52%, in egg is 15.64% and in meat is 7.49%.

At present in Tamil Nadu, the per capita availability of milk is 384 gms /day against ICMR recommendations of 300 gms of milk/day and availability of egg is 291 Nos./year against ICMR recommendations of 180 Nos. of eggs/year.

The contribution of livestock sector to the Gross Domestic Product (GDP) is immense. During 2023-24, the Gross Value Added of Livestock (GVA) was Rs.1,34,785 crore at current prices. Livestock sector contributes about 5.41% to GSDP of the State and 42.63% to agriculture and allied activities.

In 2024-25, significant advancements are made in livestock breeding, disease control and poultry development, positively impacting rural livelihoods and the dairv The sector. Departmental Frozen semen stations have produced 51.65 lakh doses of frozen semen facilitating 45.15 lakh artificial straws, inseminations, leading to the birth of 20.91 lakh improved breeding efficiency calves. This generated an estimated hidden income of Rs.34,838 crore to farmers.

Consistent vaccination efforts, including Foot and Mouth Disease (FMD) and Lumpy Skin

Disease (LSD) covering for 85 lakh large animals, resulted in a sharp decline in disease outbreaks and mortality. This, in turn, contributed to a 4.91 million-tonne increase in milk production, strengthening the dairy sector and boosting farmer's income.

The poultry rearing program further bolstered rural entrepreneurship, with 38.06 lakh native chicks distributed to 41,583 beneficiaries. This initiative led to an increase of 77 crore eggs in total production, reinforcing the sector's role in economic development and rural self-sufficiency.

These collective efforts highlight the progress in livestock development, disease control, and income generation, playing a crucial role in enhancing rural prosperity.

Growth in human population, increase in urbanisation, rising domestic income and changing lifestyle have led to increased demand

for livestock products. The animal husbandry sector provides much-needed gainful employment for the rural poor and youth, thereby invigorating the rural economy and sustainable aggregate growth. This also contributes to social spin-offs like slowdown of rural-urban migration, women empowerment and protection of the environment. In total, livestock sector contributes significantly to achieve the Sustainable Development Goals (SDG) of eradicating extreme poverty and hunger.

#### 2. AIMS OF THE DEPARTMENT

- Upgrading local stock of cattle and buffaloes by artificial insemination using high merit exotic and crossbred semen for cattle and Murrah semen for buffaloes.
- Conserving and propagating indigenous breeds of livestock in their native tracts.

- Augmenting the production potentialities of livestock and poultry, and thus increasing the production of milk, egg and meat.
- Implementing animal husbandry practices on scientific lines for increasing production and productivity of livestock.
- Providing necessary and timely modern veterinary assistance and health cover to the livestock and poultry.
- Ensuring livestock health by preventing major livestock diseases through vaccination, surveillance and monitoring.
- Implementing various Union and State Government schemes for the upliftment of the economic status of rural poor.
- Protecting human health by detection and control of major zoonotic diseases of animals.

- Creating awareness among public on modern animal husbandry practices.
- Conducting training on basic and advanced animal husbandry practices to farmers and entrepreneurs.
- Developing and imparting entrepreneurial skills among youth.
- Augmentation of fodder production in departmental farms and farmers land through sustainable fodder development programme.
- Extension activities such as outreach programs, training sessions, demonstrations and advisory services are provided to farmers to improve livestock owners' knowledge, skills and practices related to animal rearing and management.

Jallikattu which is a traditional bull-taming sport of Tamil Nadu is conducted successfully by this Department.

#### 3. MILESTONE AND ACHIEVEMENTS

#### 1799

Veterinary aid in India started when East India Company of the British brought five Veterinary Surgeons from London to improve the breeding of horses and camels in India.

#### 1892

Civil Veterinary Department was inaugurated as a separate department manned by Military personnel.

#### 1903

Establishment of Madras Veterinary College.

#### 1924

Hosur Cattle Farm was taken over from army and cattle breeding station was established.

#### 1948

The Head of the Department was designated as Director of Animal Husbandry. Artificial Insemination using Liquid Semen was introduced in the State.

#### 1959

Mobile Veterinary Dispensaries established.

#### 1969

Directorate of Veterinary Education and Research was formed.

#### 1970

The Department was reorganized.

#### 1975

Introduction of Artificial Insemination with Frozen Semen.

#### 1977

Animal Disease Intelligence Units were established.

#### 1981

Poultry Disease Diagnostic Laboratory was established at Erode.

#### 1999

Directorate of Veterinary Services was formed.

#### 2003

Tamil Nadu Livestock Development Agency (TNLDA) was created under the National Project on Cattle and Buffalo Breeding (NPCBB).

#### 2005-2006

Infrastructure of Veterinary Institutions was strengthened through National Bank for Agricultural and Rural Development (NABARD) Rural Infrastructure Development Fund (RIDF) X.

#### 2006-2007

Livestock Insurance Scheme was introduced in five selected districts (Salem, Coimbatore, Erode, Namakkal and Vellore).

Tamil Nadu Veterinary Infrastructure Improvement Project (TANVIIP) was launched with funds sourced from NABARD RIDF XI.

#### 2008-2009

Livestock Insurance scheme was extended to five more districts (Dharmapuri, Tiruchirapalli, Thiruvannamalai, Tirunelveli and Villupuram).

#### 2009-2010

Livestock Insurance scheme extended to five more districts (Thanjavur, Madurai, Dindigul, Cuddalore and Krishnagiri).

- ➤ Hon'ble Chief Minister's Special Schemes viz., Free distribution of Milch Cows and Free distribution of Goats/ Sheep were inaugurated
- State Fodder Development Scheme (SFDS) launched to promote Fodder Production.

- ➤ 585 Veterinary Sub-Centres were upgraded as Rural Veterinary Dispensaries.
- The number of Animal Husbandry Divisions was increased from 65 to 76 to match the number of Revenue Divisions.
- Infrastructure improved in 360 Veterinary Institutions and 12 Livestock Farms through NABARD RIDF XVII.
- Upgrading Bacterial Vaccines Laboratory to Good Manufacturing Practices (GMP) standards at the Institute of Veterinary Preventive Medicine (IVPM) was sanctioned under NADP.

- Scheme for Poultry Development was launched.
- Five new Joint Director Offices of Animal Husbandry were created to match the number of Districts (except, Chennai).
- > Embryo Transfer Technology (ETT) was

- introduced successfully at District Livestock Farm (DLF), Hosur and at field level in eight districts.
- ➤ 19<sup>th</sup> Quinquennial Livestock Census was conducted
- Two new Veterinary College and Research Institutes were established under TANUVAS at Orathanadu of Thanjavur district and at Tirunelveli.

- Directorate of Animal Husbandry and Veterinary Services was awarded with the "Best Practices Award" for improvement of quality Delivery System ensuring Good Governance".
- > 100 Veterinary Sub-Centres were upgraded to Veterinary Dispensaries.
- ➤ 11 Cattle Breeding and Fodder Development Units (CBFDs) were created.

- ➤ 53 Ultra Sound scanning equipment were installed at Clinician Centres, Livestock Farms and Cattle Breeding and Fodder Development Units (CBFDs).
- Portable Ultrasound scanning equipment was provided to five Veterinary Polyclinics.
- Steps initiated for conservation of indigenous breeds of livestock such as Kangeyam, Umbalachery and Bargur.
- ➤ Slatted Floors were installed for rearing Goats at five Departmental Livestock Farms with funding under "Integrated Development of Small Ruminants and Rabbits" (IDSRR) Scheme.
- An acute and extensive outbreak of Foot and Mouth disease was effectively controlled through measures taken on a war footing.
- Rural Backyard Poultry Scheme was extended to all districts (except Chennai).

- ➤ Infrastructure of Dog Breeding Unit at Saidapet was strengthened.
- ➤ 450 Veterinary Institutions were constructed through NABARD RIDF XIX.
- "Stem Cell Research Centre for Animals", the first of its kind in the country, was established on 19.06.2013 at TANUVAS, Chennai.
- Silver Jubilee celebrations of TANUVAS.

- Assistant Director Offices of Animal Husbandry at Srirangam, Iluppur and Ambattur were created newly.
- Animal Disease Intelligence Units (ADIUs) at Pudukkottai and Thiruvannamalai were created.
- > 100 Veterinary Sub-Centres were upgraded to Veterinary Dispensaries.
- ➤ 50 new Veterinary Sub-Centres were created.

- ➤ 500 Rural Youth were trained on artificial insemination techniques and provided inputs for establishing Artificial Insemination Centres.
- Cattle Insurance Scheme expanded to all the districts of the State under National Livestock Mission.
- ➤ Buildings for 226 Veterinary Institutions were constructed through NABARD RIDF XX.

- Animal Mobile Medical Ambulance Scheme was introduced in five districts.
- ➤ 100 new Veterinary Sub-Centres were established.

- ➤ Establishment of Feed and Water Analytical Laboratory at Palladam, Tiruppur District.
- Animal Disease Intelligence Units (ADIUs) at Tiruppur and Tiruvallur were established.

- Veterinary Epidemiology Centre was created at Saidapet, Chennai.
- > 100 new Veterinary Sub-Centres were created.
- Animal Disease Intelligence Units (ADIUs) at Perambalur and Theni were established.
- Pulikulam Breed Research Station was established in Sivagangai District.
- Kangeyam Breed Research Station was established in Erode District.

- Tamil Nadu Animal Welfare Board (TNAWB) was established.
- Livestock and Poultry Feed Technology Centre at Tirunelveli was established.
- Alambadi Cattle Breed Research Station was established in Dharmapuri District.

- ➤ Establishment of Integrated Livestock Park along with Veterinary College & Research Institute at Chinnasalem.
- Animal Disease Intelligence Units (ADIUs) were established at Ariyalur, Kanniyakumari and Ramanathapuram.
- ➤ Facility for sex sorting of bovine semen was established at District Livestock Farm, Ooty.

- Establishment of Goat Research Station in Tenkasi district.
- > Trichy Black Sheep Research Station was established at Dharmapuri.
- Veterinary University Training and Research Centre was established at Thoothukudi.
- ➤ Two new Veterinary College & Research Institutes, one at Theni and another at Udumalpet were created.

Establishment of native Poultry Breeding Farm and hatchery unit at the Abhisekapatti District Livestock Farm, Tirunelveli District.

- "Vallalar Palluyir Kappagangal" scheme was launched to support NGOs who take care of abandoned and injured pet animals and strays.
- Procurement of 245 Mobile Veterinary vehicles for providing Veterinary Services to the farmers in remote villages.
- Establishment of Native chicken breeding farm, Hatchery unit and Feed mill at District Livestock Farm, Chettinad, Sivagangai District.
- Strengthening of quarantine station at District Livestock Farm, Udhagamandalam.

- Procurement of new genetic pool of 2490 livestock in Departmental farms is under way.
- ➤ A web portal for Jallikattu events has been developed through TNeGA.
- ➤ Setting up of conservation centre for native dog breeds with modern facilities and new infrastructure facilities at Saidapet, Chennai.
- Usage of sex-sorted semen has been initiated to produce more number of high merit heifer calves, thereby increasing the milk production of the State.
- ➤ 25 Veterinary Sub Centres were upgraded into Visiting Veterinary Dispensaries
- ➤ 50 New Visiting Veterinary Sub Centres were created.

- Ungal Thoguthiyil Muthalamaichar scheme upgradation of Alanganallur Veterinary Dispensary into Veterinary Hospital.
- MVU Services has been inaugurated by Hon'ble Chief Minister on 20.08.2024.
- ➤ 21<sup>st</sup> Livestock Census work is being conducted from 25.10.2024 by using mobile application.
- Advanced Institute for Integrated Research on Livestock and Animal Sciences started functioning from 13.01.2025.
- ➤ 100 small scale native chicken poultry units (250 birds / unit) were established.
- ➤ 38,700 rural poor women were provided with four week old 40 Native Chicks at 50% subsidy.
- ➤ 3000 power-driven chaff cutters (2HP) were distributed to farmers at 50% subsidy.

#### 4. LIVESTOCK WEALTH IN TAMIL NADU

Livestock has remained an integral part of one's life from the beginning of civilization. People consider animals as mobile assets as well as human companions. Products that are obtained through Livestock are useful for the economic upliftment of the people.

In Tamil Nadu, native breeds of cattle such as Kangayam, Umblachery, Alambadi, Bargur, Pulikulam and Toda buffaloes are being reared. Among these, Kangayam cattle are being reared in the Western districts viz., Tiruppur, Erode, Coimbatore and Karur, Umblachery cattle in the Eastern districts viz., Thanjavur, Tiruvarur, Nagapattinam and Cuddalore, Alambadi cattle in the Western districts viz., Dharmapuri, Erode and Salem, Pulikulam cattle in the Southern districts viz., Sivagangai, Madurai, Dindigul and Theni, Bargur cattle in Erode and Toda buffalo in The Nilgiris.

Likewise, native sheep breeds Mecheri (Salem and Erode districts), Ramnad White (Thoothukudi and Ramanathapuram districts), Madras Red (Chennai, Kancheepuram and Tiruvallur districts), Kilakarisal (Ramanathapuram, Virudhunagr, Madurai and Dindigul districts), Vembur (Thoothukudi district), Tiruchy Black (Perambalur, Ariyalur, Tiruchirappalli and Villupuram districts), Coimbatore (Coimbatore and Tiruppur districts) and Nilgiri (The Nilgiris district).

Native goat breeds like Kanni Adu (Virudhunagar, Thoothukudi and Tirunelveli districts), Kodi Adu (Thoothukudi and Tirunelveli districts) and Salem Black (Salem, Dharmapuri and Krishnagiri districts) are being reared in Tamil Nadu.

Apart from these native breeds, in large animal's high milk yielding cattle such as Crossbred Jersey in plains and crossbred Holstein Friesian in hills are being reared by farmers.

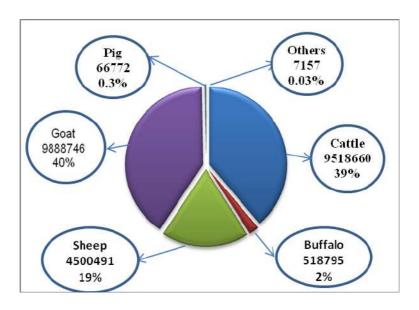
Breeds like Thelichery, Jamunapari are reared as small ruminants.

Table 1: Livestock and Poultry Population
As per the 20<sup>th</sup> Livestock Census in State

Species	<b>Population</b> (In lakh Nos.)			
Cattle	95.19			
Buffalo	5.19			
Sheep	45.00			
Goat	98.88			
Pigs	0.67			
Others (Horses,Ponies,Mules, Donkeys and Camel)	0.07			
Total Livestock	245.00			
Fowls and other birds (Farm)	995.16			
Fowls and other birds (backyard poultry)	212.64			
Total Poultry	1,207.80			

Tamil Nadu ranks 2<sup>nd</sup> in respect of Poultry, 4<sup>th</sup> in Sheep, and 7<sup>th</sup> in Goats, 13<sup>th</sup> in Cattle and 14<sup>th</sup> in Buffalo population in the country.

#### **Livestock census - Share of Major species**



#### 5. ADMINISTRATIVE SET UP

The Department of Animal Husbandry and Veterinary Services is headed by the Director in the cadre of Indian Administrative Service.

The Director is assisted on technical subjects by four Additional Directors, two Joint Directors, one Deputy Director and nine Assistant Directors at the Directorate.

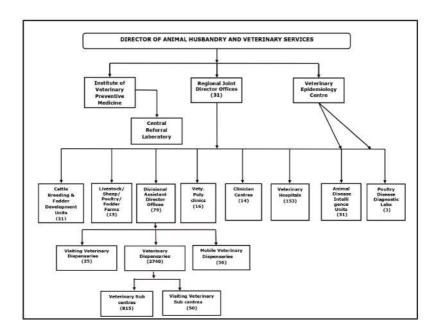
The Director is also assisted by one Joint Director (Admin), one Deputy Director (Personnel) and two Administrative Officers on administration.

A Financial Controller and a Chief Accounts Officer deputed from Finance Department, an Accounts Officer and Assistant Accounts Officer deputed from Treasuries and Accounts Department, Fodder Development Officer from Agriculture Department and Deputy Registrar from Co-operative Department provide assistance to the Director on the issues concerned.

Regional Joint Directors and Deputy Directors execute the activities of the Department at District level and Assistant Directors at Divisional level.

Institute of Veterinary Preventive Medicine (IVPM) at Ranipet, headed by a Director in the cadre of an Additional Director, manufactures vaccines and veterinary biologicals.

The Veterinary Epidemiological Centre (VEC), headed by a Joint Director, functioning at Veterinary Polyclinic campus, Saidapet, Chennai co-ordinates and monitors the work of the Animal Disease Intelligence Units (ADIUs) and Poultry Disease Diagnostic Laboratories (PDDLs).



#### 6. VETERINARY INSTITUTIONS

Veterinary services are provided through the wide network of Veterinary Institutions and Veterinary Sub-Centres located in all the districts.

They provide various services to the livestock and poultry in the State that includes medical, surgical, gynaecological, infertility treatments, deworming, immunization, disease diagnosis and control, breeding, fodder development, training to farmers and other extension activities. While veterinary services are provided by the professional work force, minor veterinary services and first aid are provided through para veterinarians.

Veterinary institutions have expanded from around 120 institutions during 1950-60's to 3,869 in 2024-25, which includes 16 Veterinary Polyclinics, 14 Clinician Centres, 153 Veterinary Hospitals, 2,740 Veterinary Dispensaries, 25

Visiting Veterinary Dispensaries, 56 Mobile Veterinary Dispensaries, 815 Veterinary Sub Centres and 50 Visiting Veterinary Sub Centres.

## Pattern and functioning of Veterinary Institutions

- Veterinary Polyclinic headed by Clinician and assisted by 4 Veterinary Assistant Surgeons with supporting staff functions round the clock and provides specialised services
- Clinician Centre headed by Clinician and assisted by a Senior Veterinary Livestock Supervisor with supporting staff provides specialized services.
- Veterinary Hospital headed by Veterinary Surgeon with supporting staff provides veterinary services to the farmers.

- Veterinary Dispensary headed by Veterinary Assistant Surgeons with supporting staff provides veterinary and outreach services and implements Government welfare schemes.
- Visiting Veterinary Dispensary -Veterinary Assistant Surgeon is deputed from nearby Veterinary Dispensary for two days a week during afternoon hours, provides veterinary services.
- Mobile Veterinary Dispensary- headed by Veterinary Assistant Surgeons, provides veterinary services to the farmers at village level as per schedule.
- Mobile Veterinary Units operating in PPP mode in which one Veterinarian, one para veterinarian and one Driver cum Attendant are conducting hamlet level camps, also attending emergencies on call.

- Animal Medical Mobile Ambulance: operating in Public Private Partnership mode in which one Veterinarian, one para veterinarian and one Driver cum Attendant attending emergencies on call.
- Veterinary Sub-Centre manned by Livestock Inspector, provides Artificial Insemination and first-aid services.
- Visiting Veterinary Sub-Centre manned by Livestock Inspector deputed from nearby Sub-Centre for two days a week, during afternoon hours, provides Artificial Insemination and first-aid services.
- ❖ State level call centre 1962 dedicated helpline number functioning 24 X 7 from the headquarters attending all animal emergencies throughout the State.

Table 2: District wise Field Units providing veterinary services

SI. No.	District	VPC	22	ΥН	ΛD	VVD	MVD	VSC	NVSC	Total
1	2	3	4	5	6	7	8	9	10	11
1	Ariyalur	0	0	2	44	1	1	8	2	58
2	Chennai	1	0	1	0	0	1	0	0	3
3	Coimbatore	1	1	15	98	0	2	26	0	143
4	Cuddalore	0	1	5	92	0	1	56	4	159
5	Dharmapuri	0	1	3	80	0	2	10	1	97
6	Dindigul	1	0	5	106	1	1	62	2	178
7	Erode	2	0	6	106	0	3	24	2	143
8	Kancheepuram	0	1	0	45	0	1	14	0	61
9	Chengalpattu	0	1	1	61	0	1	24	0	88
10	Kanyakumari	1	0	2	49	0	2	15	0	69
11	Karur	0	1	2	72	2	1	10	1	89
12	Krishnagiri	1	0	2	79	1	1	13	2	99
13	Madurai	1	0	5	95	1	1	52	0	155
14	Nagapattinam	0	0	3	34	1	1	13	2	54
15	Mayiladuthurai	0	2	1	38	1	1	6	0	49
16	Namakkal	0	0	5	105	0	3	8	1	122
17	Perambalur	0	0	0	37	0	0	5	2	44
18	Pudukottai	0	1	4	101	1	2	31	3	143

SI. No.	District	VPC	8	H	ΛD	VVD	MVD	NSC	VVSC	Total
1	2	3	4	5	6	7	8	9	10	11
19	Ramnad	0	0	4	55	0	0	14	0	73
20	Salem	1	0	7	149	0	6	9	0	172
21	Sivagangai	0	0	2	79	1	0	46	0	128
22	Thanjavur	1	1	7	105	0	3	28	2	147
23	Theni	0	0	3	53	1	1	45	0	103
24	The Nilgiris	0	1	2	29	0	3	7	0	42
25	Tiruppur	2	0	7	102	1	1	38	3	154
26	Tiruvallur	0	0	5	88	1	1	25	1	121
27	Tiruvannamalai	0	1	5	124	2	3	19	5	159
28	Tiruvarur	0	1	10	72	1	1	29	1	115
29	Thoothukudi	1	0	2	70	2	1	39	4	119
30	Tiruchirapalli	1	0	8	103	2	2	32	2	150
31	Tirunelveli	1	0	5	51	0	1	16	1	75
32	Tenkasi	0	0	3	61	1	0	18	2	85
33	Vellore	1	0	4	41	1	1	6	0	54
34	Tirupathur	0	0	2	34	0	2	9	0	47
35	Ranipet	0	0	2	46	0	1	10	1	60
36	Villupuram	0	0	5	99	0	2	9	3	118
37	Kallakurichi	0	1	2	55	2	2	13	2	77
38	Virudhunagar	0	0	6	82	1	0	26	1	116
TOT	TOTAL		14	153	2740	25	56	815	50	3869

*	VPC	Veterinary Polyclinics
	CC	Clinician Centres
	VH	Veterinary Hospitals
	VD	Veterinary Dispensaries
	VVD	Visiting Veterinary Dispensaries
	MVD	Mobile Veterinary Dispensaries
	VSC	Veterinary Sub centres
	<b>VVSC</b>	Visiting Veterinary Sub centres

The activity-wise work done by the above Veterinary Institutions during 2024-25 is as follows:

Table 3: Work done in the Veterinary Institutions during 2024-25

	ACTIVITIES	Numbers in lakh
1	Veterinary Treatment (including first aid)	409.15
2	Artificial Insemination(AI)	50.96
3	Vaccination	656.39
4	Castration & Spaying	8.65
5	Deworming	357.17
6	Calves Born	25.17

# 6.1. PROCUREMENT OF MEDICINES AND EQUIPMENT

The procurement of general medicines, equipments and surgical sutures is through Tamil Nadu Medical Services Corporation (TNMSC), Alternative medicines through Tamil Nadu Medicinal Plant Farms and Herbal Corporation Limited (TAMPCOL) and Mineral Mixture through Tamil Nadu Co-operative Milk Producers Federation Limited (TCMPF) / Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) for routine functioning of the veterinary institutions in the Department.

Table 4: The fund allocation details for 2024-2025 is as follows:

SI. No	Items	Fund Allotted (Rs. in Lakh)
1	Medicine	2250.27
2	Equipment, chemicals and surgical suture materials	287.82
3	Intensive health care (Deworming)	105.00

SI. No	Items	Fund Allotted (Rs. in Lakh)
4	Mineral mixture	501.35
5	Alternate medicine	161.53
6	Reserve fund to meet out emergencies	612.04
	TOTAL	3918.01

# 7.INSTITUTE OF VETERINARY PREVENTIVE MEDICINE, RANIPET (IVPM)

The Institute of Veterinary Preventive Medicine (IVPM), Ranipet is a state-run biological vaccine production unit for Livestock & Poultry operating under the Department of Animal Husbandry and Veterinary Services, Government of Tamil Nadu. IVPM plays a crucial role in safeguarding animal health by producing high-quality veterinary vaccines, diagnostic reagents, and diluents for use by veterinary institutions across the State.

#### Activities of the Institute

- Vaccine Production: IVPM manufactures four bacterial vaccines and five viral vaccines to prevent various livestock and poultry diseases.
- Vaccine Distribution & Sales: The institute not only supplies vaccines to veterinary institutions within Tamil Nadu but also sells vaccines to other States in India.
- Diagnostic Reagents & Diluents: The institute produces five diagnostic reagents and one diluent to support disease diagnosis and vaccination efforts.
- Targeted Vaccine Supply: Vaccines are produced based on the Assistance to State for the Control of Animal Diseases (ASCAD) vaccination targets, as well as the demand from farmers and veterinary institutions,

- especially during disease outbreaks and disasters.
- Foot-and-Mouth Disease (FMD) Surveillance:
   Through the FMD collaborative center under the National Animal Disease Control Programme (NADCP), the institute conducts sero-surveillance, sero-monitoring, and serotyping to monitor and control FMD.
- Biological Material Maintenance: IVPM ensures the preservation and management of seed and virulent biological materials.
- Quality Assurance & Control (QA-QC):
   Rigorous quality testing is conducted to ensure the safety and efficacy of vaccines.
- Timely Supply to Field Institutions: IVPM ensures the prompt distribution of biological products to veterinary institutions across the State.

- Pulse RDVK Programme: The institute supplies vaccines and diluents for the Pulse Ranikhet Disease Vaccination (RDVK) Programme in Tamil Nadu.
- Good Manufacturing Practices (GMP)
   Compliance: IVPM was the first Government veterinary biologicals institute to initiate the upgradation of vaccine production facilities to meet Good Manufacturing Practices (GMP) standards, as mandated by the Drug Licensing Authority.

By producing and supplying high-quality vaccines, IVPM plays a vital role in protecting the health of livestock and poultry. This effort aligns with Sustainable Development Goal (SDG) 3: Good Health and Well-being, ensuring a healthier future for animals and the communities that depend on them.

Table 5: Production details of Biologicals during 2024-25

SI. No	Biologicals produced	Doses
A.	Bacterial Vaccines	(in lakh)
1	Anthrax spore vaccine	33.479
2	Black quarter vaccine	0.734
3	Enterotoxaemia Vaccine	0.783
4	Haemorrhagic septicaemia vaccine	1.2465
В.	Viral Vaccines	(in lakh)
1	Sheep Pox vaccine	1.575
2	Duck Plague vaccine	118.836
3	Ranikhet disease vaccine `F'	22.050
4	Ranikhet disease vaccine 'K'	592.02
5	Ranikhet disease vaccine 'Lasota'	8.175
C.	Diagnostics	(in ml)
1	CMT Antigen	3400
2	Brucella abortus Coloured Antigen	1400

SI. No	Biologicals produced	Doses
3	Brucella abortus plain Antigen	2900
4	Brucella abortus MRT Antigen	1270
5	SPCA – Salmonella Pullorum Coloured Antigen	1040
D.	Diluent	(in litres)
1	Phosphate Buffer Saline	2077.4

### Recent Projects Implemented

**Upgradation to GMP Standards:** Facilities for Bacterial vaccines, Anthrax Spore Vaccine, and Poultry vaccines have been established and strengthened to meet Good Manufacturing Practices (GMP) standards.

# New Quality Assurance & Quality Control (QA-QC) Lab:

A state-of-the-art QA-QC laboratory has been set up in compliance with Good Laboratory Practices (GLP), in collaboration with TANUVAS and NDDB. This facility enhances vaccine

production capacity and ensures the uninterrupted upply of high-quality vaccines to field institutions within Tamil Nadu and other states.

#### Ongoing Projects at IVPM, Ranipet

- Establishment of GMP-compliant Pharmaceutical Division at Rs.10.00 Crore
- Establishment of GMP Laboratory for In-vitro Diagnostic Unit (Brucella and Diagnostic Reagents) at Rs.8.02 Crore

All these initiatives are aimed at improving vaccine production, quality control, and diagnostic capabilities, further strengthening IVPM's role in safeguarding animal health.

# 8. DISEASE DIAGNOSIS, PREVENTION, CONTROL AND ERADICATION

Livestock and poultry diseases caused by bacterial, viral, protozoal, and parasitic infections lead to significant economic losses for farmers. Effective disease control and eradication are crucial not only for profitable livestock production but also for ensuring the global acceptance of Indian livestock and livestock products.

#### Strategic Disease Management:

Understanding the prevalence rate and disease patterns among livestock population is essential for planning and implementing effective disease prevention and control strategies. Early detection of disease and effective surveillance helps to detect potential outbreaks and enable timely intervention in disease control. Creating awareness among farmers regarding timely reporting of disease also plays a crucial role in control of outbreaks. The Department of Animal Husbandry and Veterinary Services plays a key role in combating this issue through a systematic Disease Control Programme, which includes:

 Regular vaccination schedules based on endemic disease charts.

- Disease containment measures during outbreaks.
- Long-term eradication strategies to eliminate persistent diseases.

To achieve these objectives, the following specialized disease diagnostic and control units are operational across the state.

#### 8.1 Diagnostic units

### 8.1.1 Veterinary Epidemiology Centre (VEC), Chennai

The Veterinary Epidemiology Centre (VEC) serves as the Nodal center for disease surveillance, diagnostics, and intelligence within the Animal Husbandry sector of Tamil Nadu. It plays a critical role in coordinating and strengthening disease control efforts.

### **Key Functions**

Disease Diagnostics & Coordination:

- Oversees the activities of Animal Disease Intelligence Units (ADIUs) and Poultry Disease Diagnostic Laboratories (PDDLs) across the state.
- Investigates disease outbreaks and provides remedial measures to contain and prevent the spread of livestock and poultry diseases.

Poultry Farm Inspections & Biosecurity Compliance:

- Conducts bi-annual inspections of private poultry farms in collaboration with the Directorate of Animal Husbandry and Veterinary Services.
- Ensures compliance with compartmentalization regulations to prevent Avian Influenza outbreaks.

 Verifies adherence to World Organization for Animal Health (WOAH) biosecurity and biosafety standards.

#### **Stud Bull Disease Monitoring:**

- Coordinates health testing of stud bulls at departmental frozen semen production stations.
- Ensures that frozen semen straws used for artificial insemination originate from diseasefree herds.

### **Vaccination Monitoring:**

Oversees vaccination programs in districts to ensure effective immunization coverage and disease prevention.

# 8.1.2 Animal Disease Intelligence Units (ADIU)

The Animal Disease Intelligence Units (ADIUs) operate in 31 regions across Tamil Nadu, playing an important role in disease diagnosis,

surveillance, and rapid response to outbreaks. These units are essential for early disease detection and containment, ensuring minimal economic loss to farmers and safeguarding animal health.

#### **Key Functions**

### **Disease Diagnostics and Monitoring**

- Collect samples from affected animals and conduct laboratory tests.
- Perform post-mortem examinations to determine the cause of death.
- Send samples to specialized laboratories for further confirmatory diagnosis.

#### **Outbreak Investigation & Control:**

- Trace the root causes of disease outbreaks to implement effective control measures.
- Prepare endemic charts to monitor disease prevalence and guide prophylactic vaccination efforts.

#### **Field Interventions:**

- Provide on-the-spot diagnosis at mass contact programs and Special Livestock Health Camps.
- Visit slaughterhouses to collect samples and monitor for zoonotic disease transmission.
- Conduct routine health monitoring at Government and private farms.

### **Vaccine Efficacy Assessment:**

Collect pre- and post-vaccination serum samples for Foot and Mouth Disease (FMD), Peste des Petits Ruminants (PPR), and Brucellosis under various Central Sector Schemes.

#### **Strengthening of ADIUs**

Glanders Testing: The ADIUs in Tiruchirapalli and The Nilgiris have been upgraded to conduct Glanders testing in horses, donkeys, mules, and ponies.

# Diagnostic Activities of PDDL AND ADIU IN 2024-2025

The ADIUs conducted extensive disease surveillance and diagnostic testing, including:

- Dung/Feces Samples: 3,84,800
- Blood Smears: 22,116
- Impression Smears: 8,622
- Blood Wet Films: 2,325
- Intestinal Scrapings: 10,455
- Blood Analysis (TLC, DLC, Hb, ESR, etc.):8,001
- Biochemical Blood Analysis: 11,913
- Urine Samples: 11,386
- Milk Samples (Mastitis Testing): 13,322
- Brucellosis Milk Ring Tests: 7,998
- Antibiotic Sensitivity Tests: 10,822
- Other Specimens (e.g., sera samples from ducks): 17,328
- Tuberculosis Testing: 1,709 animals
- Johne's Disease Testing: 1,714 animals

During this period, 25 confirmed disease outbreaks were reported and effectively controlled by the ADIUs.

Table 6: Details of outbreak during 2024-25

Name of the Disease	No.of Districts affected	No.of outbreak
PPR	2	2
Anthrax	3	4
Lumpy skin disease	9	16
Blue Tongue	2	2
Foot and Mouth	1	1
Disease	Т	1
Total	25	

## 8.1.3 Poultry Disease Diagnostic Laboratory (PDDL)

The Poultry Disease Diagnostic Laboratories (PDDLs) operate in Erode, Namakkal and Tiruppur to serve the poultry farmers of Tamil Nadu, particularly in intensive poultry-rearing regions. These 3 laboratories play a crucial role in disease

diagnosis, prevention, and control, ensuring the health and productivity of poultry farms.

### **Key Functions of PDDLs**

### **Disease Diagnosis & Testing:**

- Collect droppings, blood samples, and tissue samples for detecting viral, bacterial, and parasitic diseases.
- Conduct post-mortem examinations and recommend appropriate preventive measures for emerging and existing poultry diseases.

#### Field Visits & Advisory Services:

Conduct regular visits to poultry farms to offer expert guidance on disease prevention, biosecurity and management practices.

### **Poultry Vaccine Supply:**

Facilitate the sale of poultry vaccines to ensure timely disease control.

#### **Avian Influenza Surveillance:**

The PDDLs in Namakkal and Erode are Biosafety Level II (BSL-II) compliant and conduct preliminary screening for Low Pathogenic Avian Influenza (LPAI).

#### Feed & Water Testing:

A dedicated feed and water analysis laboratory has been established in Palladam, Tiruppur district to monitor the quality of poultry nutrition and water sources.

#### **Diagnostic Activities in 2024-2025**

The PDDLs have examined 1,32,758 samples as part of their routine diagnostic and surveillance activities, including:

Rapid Plate Tests: 5,926

• E. coli Testing: 49,808 samples

• Salmonella Testing: 54,306 samples

• Water Quality Testing: 3,271 samples

- Feed Analysis: 1,428 samples
- Air Quality Testing (for microbial contamination): 8,469 samples
- Haemagglutination (HA) Tests for Ranikhet
   Disease: 35,090 samples
- Haemagglutination Inhibition (HI) Tests for Ranikhet Immunity Estimation: 46,165 samples
- Antibiotic Sensitivity Tests: 895
- Avian Influenza Antibody Testing (ELISA Method):
- Poultry Serum Samples: 40,679
- Duck Serum Samples: 812

#### 8.1.4 Central Referral Laboratory (CRL)

The Central Referral Laboratory (CRL), located at IVPM, Ranipet, serves as the apex laboratory for diagnosing livestock and poultry diseases in Tamil Nadu from the samples received from ADIUs. This laboratory plays a critical role in disease confirmation using techniques approved

by the World Organization for Animal Health (WOAH).

Through these initiatives, Tamil Nadu's Animal Husbandry and Veterinary Services Department is making significant strides in achieving Goal No. 3 – Good Health and Wellbeing under the United Nations Sustainable Development Goals (SDG), ensuring better animal health, food safety, and farmer prosperity Effective control strategies for livestock and poultry diseases.

#### **8.2 Disease Prevention Services**

Regular vaccination of livestock against economically significant diseases such as Foot and Mouth Disease (FMD), Brucellosis, Lumpy Skin Disease (LSD), Anthrax, Haemorrhagic Septicaemia (H.S), Black Quarter (BQV), Sheep Pox, and Peste des Petits Ruminants (PPR) is a key strategy in disease prevention. These

vaccinations, implemented under various Central Sector schemes, help:

- Develop immunity in livestock, reducing disease prevalence.
- Prevent disease outbreaks, minimizing economic losses for farmers.
- Improve overall livestock health, supporting sustainable animal husbandry practices.

Through these initiatives, the department significantly contributes to achieving Goal No. 3 – Good Health and Well-being under the United Nations Sustainable Development Goals (SDG).

### 8.2.1 National Animal Disease Control Programme (NADCP)

The National Animal Disease Control Programme (NADCP) is a Central Sector scheme aimed at eradicating Foot and Mouth Disease (FMD) and Brucellosis through systematic vaccination of the eligible bovine population.

# 8.2.1.1 Foot and Mouth Disease (FMD) Vaccination Programme under NADCP:

Foot and Mouth Disease (FMD) is a highly contagious viral disease affecting cloven-footed animals, causing severe economic losses due to reduced milk production, weight loss, and trade restrictions. The best preventive strategy is regular vaccination at six-month intervals.

- Since 2020, six rounds of FMD vaccination have been successfully completed.
- In the 6<sup>th</sup> round (December 2024 February 2025), 85.05 lakh eligible bovines were vaccinated across the state.

### 8.2.1.2 Brucellosis Vaccination Programme under NADCP:

Brucellosis is a bacterial disease affecting the genital tract of livestock, leading to abortions, infertility, and reduced productivity. The disease is controlled through one-time vaccination of heifer calves aged 4 to 8 months.

In Phase 4 of the Brucellosis vaccination program (September – February 2025), 4.09 lakh eligible heifer calves were successfully vaccinated under NADCP.

#### 8.2.2 Lumpy Skin Disease (LSD)

Lumpy Skin Disease (LSD) is an infectious viral disease of cattle and buffaloes characterised by high fever, skin nodules, and reduction in milk production, abortion and infertility. As a preventive measure, 59.32 lakh cattle were vaccinated between August and September 2024, following Government of India (GoI) guidelines.

Table 7: Vaccination done during 2024-25

Name of the Disease	Type of animals Vaccinated	No. of animals vaccinated (nos. in lakh)
Anthrax	Cattle, Buffalo, Sheep and Goat	28.63
Black Quarter	Cattle	0.30
Foot and Mouth Disease (5 <sup>th</sup> & 6 <sup>th</sup> Round during 2024-25)	Cattle, Buffalo	170.27
Haemorrhagic Septicaemia	Cattle and Buffalo	0.75
Peste des Petits Ruminants	Sheep and Goat	48.18
Sheep Pox	Sheep	0.68
LSD (using Goat pox vaccine)	Cattle	59.32
Brucellosis	Heifer calves 4-8 months	4.30
Tota	312.43	

#### 9. LIVESTOCK DEVELOPMENT

#### 9.1 Departmental Farms

The Department has 13 farms comprising:

- Eight livestock farms
- Three sheep farms,
- One poultry farm and
- One fodder seed production farm.

### **Objectives:**

- Demonstration and Awareness To serve as demonstration units for creating awareness among farmers about modern farming practices
- Best animal husbandry practices -To disseminate expertise for enhancing the production and productivity of livestock in the State
- Frozen semen Production- Three frozen semen stations viz, Eachenkottai, Hosur and

Ooty produce disease free, high genetic merit frozen semen straws including sex sorted semen straws

- Sale of genetically superior livestock –
  Breeding sale of genetically superior calves,
  lambs, kids, piglets and day old chicks to the
  farmers
- In-vitro Fertilization facility at Hosur To produce disease free, high genetic merit bull calves for frozen semen production
- Sex sorted semen production facility at Ooty
   to produce heifer calves
- Training and Capacity building at Naduvur and Hosur - To impart training to the farmers on best management practices and refresher training to Veterinarians and para veterinarians

#### 9.2 Conservation of Native breeds

- Native Cattle Breeds of Tamil Nadu Viz., Kangeyam, Bargur and Pulikulam are conserved at District Livestock Farm, Hosur and Umbalachery Breed at Livestock Farm, Korukkai.
- Other indigenous breeds like Red Sindhi is maintained at District Livestock Farm, Hosur, Tharparkar and Sahiwal breeds at District Livestock Farm, Chettinad and Sahiwal breed at District Livestock Farm, Abishekapatti.

Table 8: Location of Departmental Farms and the animals maintained

SI. No	Name of the Farm	Species	Breeds
1	Exotic Cattle Breeding Farm, Eachenkottai	Cattle	Jersey, Umbalachery, Crossbred Jersey, Sahiwal
	(Thanjavur District)	Buffalo	Murrah
2	District Livestock Farm, Hosur (Krishnagiri District)	Cattle	Crossbred Jersey, Red Sindhi, Crossbred Holstein Friesian, Kangeyam, Bargur, Pulikulam

SI. No	Name of the Farm	Species	Breeds
		Sheep	Mecheri
		Goat	Salem Black
		Pig	Large White Yorkshire
		Poultry	Aseel
		Horse	Kathiawar.
		Cattle	Crossbred Jersey, Sahiwal
	District Livestock	Sheep	Kilakarisal
3	Farm, Abishekapatti	Goat	KanniAdu
	(Tirunelveli District)	Pig	Large White Yorkshire
	(	Poultry	Vanaraja, Aseel, Nicobari
4	District Livestock Farm, Udhagamandalam (The Nilgiris District)	Cattle	Jersey, Crossbred Jersey, Holstein Friesian, Crossbred Holstein Friesian,Sahiwal
5	District Livestock Farm, Pudukottai	Cattle	Crossbred Jersey, Crossbred Holstein Friesian
		Sheep	Ramnad White
	(Pudukottai District)	Goat	Jamnapari
6	District Livestock Farm, Naduvur (Thaniavur District)	Cattle	Jersey, Crossbred Jersey, Crossbred Holstein Friesian
	(Thanjavur District)	Buffalo	Murrah
7	District Livestock Farm, Chettinad (Sivagangai District)	Cattle	Crossbred Jersey, Crossbred Holstein Friesian, Tharparkar, Sahiwal, Kangeyam
	(Sivagangai District)	Sheep	Ramnad White

SI. No	Name of the Farm	Species	Breeds	
		Goat	Tellicherry	
		Pig	Large White Yorkshire	
		Poultry	Aseel	
8	Livestock Farm, Korukkai (Tiruvarur District)	Cattle	Umbalachery	
	Sheep Farm,	Sheep	Mecheri, Madras Red	
9	Chinnasalem (Kallakurichi District)	Goat	Salem Black, Tellicherry	
10	Sheep Farm, Mukundarayapuram		Madras Red	
10	10 (Vellore District)	Goat	Kodiadu	
	Sheep Farm, Sathur	Sheep	Vembur	
11	(Virudhunagar District)	Goat	Kanni	
12	Poultry Farm, Kattupakkam, (Chengalpattu	Fowl	Vanaraja, Nicobari, Kadaknath, White Leghorn, Aseel, Guinea Fowl	
	District)	Turkey	Beltsville white	
		Quail	Japanese Quail	
13	Fodder Seed Production Farm, Padappai (Kancheepuram District)		Fodder Sorghum CoFS- 31, Cumbu Napier Co-4, Co-5, Desmanthus, Agathi	

During 2024-25, 228 number of calves, 757 lambs, 380 kids and 569 piglets have been sold to

the farmers for breeding purpose. 58964 poultry chicks and 3,02,460 eggs were sold to farmers.

#### 9.3 Frozen Semen Production

The Department has 3 Frozen Semen Production Stations functioning at:

- Exotic Cattle Breeding Farm, Eachenkottai,
- District Livestock Farm Hosur and
- District Livestock Farm Udhagamandalam.

As per the minimum standard protocol stipulated by Government of India, these semen stations have produced 51.65 lakh doses of disease free, high genetic merit frozen semen straws including 2.04 lakh doses of sex sorted semen during 2024-25 till February 2025. The Central Monitoring Unit of Government of India evaluates these semen stations periodically.

### 9.4 Artificial Insemination using sex sorted semen:

The Department has carried out 61686 artificial inseminations with sex sorted semen in 15 districts. A total calf birth of 2183 reported out of which 1872 were female calves (85%) with conception rate of 36%.

# 9.5 Assisted Reproductive technology- Invitro Fertilization ( IVF) laboratory

The Department has an exclusive In-Vitro Fertilization (IVF) laboratory functioning at District Livestock Farm, Hosur for producing disease free High Genetic Merit bull calves for semen production and elite heifer calves for milk production. The lab has produced 328 viable embryos of which 286 embryos were transferred, 36 animals became pregnant and 8 calf births.

Mecheri liquid semen station is being established at Salem district for the genetic improvement of Mecheri sheep.

### 9.6 Cattle Breeding and Fodder Development (CBFD)

The Department undertakes distribution of frozen semen straws produced by 3 frozen semen stations through 31 Cattle Breeding and Fodder Development (CBFD) Units to all Veterinary Institutions, Sub Centres across the State and other breeding inputs.

These units also supply Liquid Nitrogen (LN2) to the veterinary institutions, sub centres and private Artificial Insemination workers.

#### 9.7 Dog Breeding Unit, Saidapet

To conserve and propagate native breeds, a Dog Breeding Unit is functioning at Saidapet, Chennai since 1980. Puppies produced in this unit are being sold to the public. Knowing the importance of native breeds, Conservation centre with modern facilities and new infrastructure facilities is being established at a cost of Rs.595 lakh to breed and protect native dog breeds like

Kanni, Rajapalayam, Chippiparai and Kombai in Saidapet Dog Breeding Unit.

Karyotyping of the cells of indigenous dog breeds will be carried out and the best purebred indigenous dog breeds will be procured, bred and preserved in this centre.

#### 10. SCHEMES

The Department of Animal Husbandry is beneficiary-oriented implementing various schemes aimed at the economic upliftment and welfare of the poor and marginalized Effective implementation communities. of employment generation schemes plays a vital role in boosting economic activity, thereby fostering sustainable growth and development in rural areas.

#### **10.1 Fodder Development**

Livestock rely on three key sources for their fodder needs: cultivated fodder, crop residues

(primarily dry fodder), and fodder from common property resources such as forests, permanent pastures and grazing lands. The dairy sector plays a vital role in strengthening the rural economy and increasing milk production requires a strategic approach to ensure sustainable growth.

Green fodder serves as the most economical and nutrient-rich feed option for dairy animals, promoting overall health and enhancing reproductive efficiency. A higher proportion of green fodder in livestock ration helps to reduce milk production costs while improving profitability. This is especially crucial for crossbred animals, which require a well-balanced and nutrient-dense fodder for optimal performance.

With the growing demand for both green and dry fodder, addressing fodder scarcity particularly during lean periods has become essential. Dairy farms must adopt efficient conservation methods such as silage and haymaking to maintain a

steady fodder supply throughout the year. However, shrinking landholdings, especially among small and marginal farmers, limit the availability of land for dedicated fodder cultivation, discouraging many from expanding their dairy operations.

augment fodder production conservation, the Department has launched State Government and various centrally sponsored Schemes. These efforts aim to create awareness among farmers and livestock farmers about the importance of a well-balanced diet for livestock. Ideally, an optimal livestock diet should comprise approximately 60-70% green fodder, 20-30% dry fodder, and 5-10% supplementary feed to ensure adequate crude protein and fibre intake, ultimately contributing to improved productivity and sustainability in the dairy sector.

To enhance knowledge transfer in fodder cultivation and to introduce innovative practices

to the farming community, it is essential for Department officials to stay informed about the latest advancements in fodder production. To achieve this, officials undergo regular training at leading institutes across the country, ensuring are well-equipped with modern thev techniques and adaptive strategies. continuous skill development enables them to provide effective guidance and support to farmers, promoting sustainable and efficient fodder management. Accordingly, an advanced 5 Training on fodder production conservation was provided to 60 Veterinary /Agriculture officers in ICAR - Indian Grassland and Fodder Research Institute (IGFRI), Jhansi, at a cost of Rs.10 lakh during 2023-24.

In 2024-25, 120 Veterinary/Agriculture officers have been trained in a three days training in Latest Innovative technologies in fodder Development focussing on Improved Strategies

for fodder cultivation at Tamil Nadu Agricultural University Coimbatore at a cost of Rs.10 lakh.

Landless livestock farmers, along with small farmers, traditionally and marginal have depended on common grazing lands, such as Meikkal land, to fulfill a significant portion of their livestock's fodder needs. However, many village common lands and traditional grazing areas have repurposed for other developmental been activities, leading to a decline in available grazing land. This shrinkage poses a serious threat to the livelihoods of pastoral communities. Recognizing this challenge, the Department is committed in rejuvenating Meikkal land through a phased approach to ensure sustainable fodder availability.

To ensure the continuous availability of fodder at village level it is proposed to develop and restore the degraded meikkal land and providing employment opportunity to the Self-Help Groups (SHGs) to take up production of high

yielding fodder varieties i.e., Hybrid Cumbu Napier in commercial lines in five selected districts viz., Tiruvallur, Cuddalore, Tiruvannamalai, Villupuram and Salem districts in an area of 25 acres at the rate of 5 acres per district at a cost of Rs. 2.33 Crore.

Perennial high biomass yielding fodder grass Cumbu Napier will be propagated and maintained as cut and carry system. As the fodder units thus established through this project will act like fodder banks and fodder will be distributed to the needy farmers at a reasonable cost. In this scheme the women are engaged in the fodder production therefore contributing to SDG1 (No poverty), SDG2 (No Hunger) and SDG5 (Gender equality).

As a part of efforts to expand fodder cultivation, the Department is promoting alternative fodder production techniques. This includes intercropping perennial forage grasses

and cereals with perennial legume forage in well established gardens and orchards. This approach ensures a year-round supply of high-quality, nutritionally balanced cattle fodder. Intercropping of fodder in the Plantation/orchards has been taken up in 2000 acres by providing cultivation incentive of Rs.3,000 per acre during 2022-23 at a total cost of Rs.60 lakh. Based on the success, this scheme has been extended to 2023-24 in which 2000 acres have been covered. This scheme is also being implemented in 2024-25 in 5000 acres at a cost of Rs.1.66 crore. This scheme enhances the income of small-scale farmers and thereby contributing to SDG1 (No poverty) and SDG2 (No Hunger)

Recognizing the importance of both fodder production and conservation, the Department is prioritizing efficient utilization to bridge the gap between demand and supply. Given the challenges in fodder availability, efforts are

focused on minimizing wastage and optimizing Emphasis is placed on adopting resources. advanced conservation techniques to ensure yearround availability while also enhancing farm efficiency and reducing labor-intensive processes. To achieve these 3,000 numbers of Power-Driven Chaff Cutters (2HP) were distributed at 50% subsidy to farmers for feeding of chopped fodder to livestock at a cost of Rs.4.90 crore in the year 2023-24. In 2024-25 also 3000 numbers of power-driven chaff cutters are being distributed to small and marginal farmers at 50% subsidy at a cost of Rs.4.83 crores. In this scheme the livestocks which are fed with chaffed fodder will utilise the high net biological value of the fodder, which inturn will improve the digestibility of the thereby increasing the cattles and milk production. Thus, it contributes to farmer's economic growth, fulfilling SDG1 (No poverty) and SDG2 (No Hunger).

In the year 2021-22, 125 demonstrative silage units were established in the farmers field at an outlay of Rs. 1.17 crore in the rainfed areas for promoting farmers to produce silage by themselves by preserving the seasonal surplus green fodder and assuring the availability of green fodder during lean period to feed their cattle.

In the year 2022-23, to establish commercial silage bale making units, 25 percent subsidy of Rs.10.50 lakh per unit was provided as a back ended subsidy for the purchase of the required machineries to one beneficiary each in Coimbatore, Salem, Tirunelveli and Tiruvannamalai Districts at a total cost of Rs.42.00 lakh

In the year 2024-25, to augment the fodder production in 4000 acres of farmers land under irrigated condition, scheme is being implemented by giving the seeds, fertilizer cost and cost of intercultural operation at 50% subsidy to livestock

farmers at a cost of Rs.1.10 crore and to augment the fodder production in 10000 acres of farmers land under rainfed condition, scheme is being implemented at a cost of Rs.1.55 crores by giving the seeds and fertilizer cost at 50% subsidy to livestock farmers.

In State Fodder Development Schemes, Currently Cereal fodder Single cut sorghum varieties like Redchari and multicut sorghum varieties like COFS31, leguminous fodder varieties like Cowpea DC15 and Desmanthus local are being given to farmers and for intercropping perennial grass fodder like Cumbu Napier Hybrid varieties like CO4, CO5 are being given.

# 10.1.1 Fodder Development activities in Departmental Farms

The concept of fodder slip propagation has been popularized among the farmers due to the insistent efforts of the department for the past several decades. This resulted in the promotion of the production and supply / exchange of quality fodder slips among the farmers themselves. Further, to demonstrate the way of preservation cum conservation methods to the farmers, baler units were established in District Livestock Farm, Chettinadu, Naduvur and Exotic Cattle Breeding station, Eachenkottai to preserve the seasonal surplus fodder and usage during lean period. Around 75860 MT of green fodder were produced in 12 departmental farms and 77.25 lakh of fodder Slips were distributed to farm use and to the needy farmers at subsidized cost during the last four years.

In Departmental Farms Single cut cereal varieties like Maize African Tall, Oats Kent and Multicut Cereal fodder varieties like Sorghum COFS29, COFS31 and are being cultivated and in leguminous fodder varieties Cowpea, CO(FC)8, CO9, perennial leguminous fodder varieties like

Desmanthus local and perennial grasses like Cumbu Napier Hybrid CO4, CO5, CO6 are being produced. More over Guinea grass varieties CO1, CO2, Muyal Masal varieties like Stylosanthes hamata and Stylosanthes Scabra, Kolukattai grass cenchrus and tree fodder crops like Agathi, Subabul, Neem, and Glyricidia are being cultivated.

In the year 2024-25, to augment fodder production and to give fodder bales in subsidized rates to needy farmers, fodder production will be carried out in 100 acres of unutilized land of chettinadu District Livestock Farm in Sivagangai district at a cost of Rs.5 crores and it is proposed to produce 43800 fodder bales per annum.

#### 10.2 Poultry Development

### 10.2.1 Establishment of 100 Small Scale Native chicken farm units (250 birds / unit) in Rural Areas

Native Chicken Poultry farming is highly thriving and profitable business venture and it has become one of the major sources of revenue generation in rural areas also provide them with nutritious chicken egg and meat for own consumption

#### Year 2022-23

To boost the livelihood and economy of the rural marginal farmers, 100 small scale (250 birds / unit) native chicken farm units were established at 50 % subsidy in 10 Districts *viz.*, Ariyalur, Cuddalore, Perambalur, Ramanathapuram, Sivagangai, Tirunelveli, Tenkasi, Thoothukudi, Theni and Virudhunagar at a total cost of Rs.180 lakh.

#### Year 2023-24

100 small-scale (250 chickens/unit) native chicken farm units were established in the remaining 26 Districts (excluding Chennai and Nilgiris) at a cost of Rs. 170 lakh with 50 percent subsidy

#### Year 2024-25

During current year 100 small scale native chicken poultry units are being established in all Districts of Tamil Nadu except Chennai and Nilgiris at a cost of Rs. 160 lakh with 50 percent subsidy.

Under this scheme 50 % subsidy (Rs.1,46,880 / beneficiary) for the total cost required for construction of poultry shed, purchase of equipments(Feeder,waterer), and feed cost for 4 months i.e., upto grower stage will be given to beneficiary as a back ended subsidy. Remaining 50 % beneficiary contribution can be

mobilized from bank loan or farmers own fund can be utilised. 250 numbers of 4-week-old Native chicks are provided at free of cost to each beneficiary from District Livestock Farm, Hosur.

Through this scheme, each beneficiary will earn around two lakh rupees in a year by sale of eggs for table egg purpose and by sale of chicks and spent hens & cocks.

10.2.2 Upliftment of 38,700 Rural Poor Widows / Deserted / Destitute Women by providing four weeks old 40 Native chicks at 50% subsidy Scheme

To promote Native chicken poultry farming and to improve livelihood opportunities for the women and to empower them to become entrepreneurs in the long term enabling them to get sustainable income through poultry farming in rural areas, 4 weeks old 40 Native chicks are being provided at 50% subsidy to 38,700 rural poor widow / destitute / abandoned women

beneficiaries in all the blocks of Tamil Nadu except St. Thomas Mount in Chennai during current year. It is being implemented at the rate of 100 beneficiaries per block at a total cost of Rs.624 lakh and Rs.1600/- is provided to each beneficiary as 50% back-ended subsidy.

### 10.3 World Bank Assisted Tamil Nadu Irrigated Agriculture Modernisation Project (TN IAMP)

World Bank Assisted Tamil Nadu Irrigated Agricultural Modernization Project is under implementation in the State from 2017-18 involving 10 Departments, of which Animal Husbandry Department is one of the line department. Animal husbandry activities and Model Village Programme were implemented in four phases of 52 sub basins covering 34 districts at an outlay of Rs.40.50 crore over a period of seven years.

The Key objective is to improve the per animal milk production and production of 1.6 lakh high merit heifer calves

Under the project so far **124 Dairy Interest Groups (DIG)** consisting 3100 farmers (1970) Male and 1130 Female) have been formed; **35,550 heifer calves** have been dewormed; **35,550 heifer calves** have been provided with Mineralized salt licks; 57,174 cows have been covered under mastitis prevention and treatment; 6,088 fertility-cum-healthcare camps been conducted; **60,749 cows** have been covered under programmed breeding; 9,50,830 **Artificial Insemination** have been performed at the farmers' doorstep and 6,244 ha. of farmers land have been brought under fodder cultivation. Moreover, model village program has been carried out in 78 villages.

By the above activities, 4.03 lakh farmers have been benefitted and 2.15 lakh high merit

heifer calves have been born. Further, the above interventions have resulted in an additional increase of 6.50 Lakh Litres per Day (LLPD) in milk yield in the project area.

### 10.4 Establishment of Advanced Institute for Integrated Research on Livestock and Animal Sciences (AIIRLIVAS)

The Hon'ble Chief Minister of Tamil Nadu inaugurated the Advanced Institute for Integrated Research on Livestock and Animal Sciences (AIIRLIVAS) established at Thalaivasal Koot Road, Salem District in 1102.25 acres at a cost of Rs.564.44 crore on 13.01.2025.

#### 10.4.1 Objectives

- Establishment of livestock and poultry farms on proven scientific technologies to be adopted by the farmers
- Creation of opportunities to students and researchers to undertake research base on

the actual field demands and find suitable remedial measures

- Skill upgradation among farmers, field veterinarians and other stakeholders in the sector.
- To create a platform to nurture entrepreneurs / start-ups, technology holders, innovators and facilitate necessary forward and backward linkages for livestock enterprises.
- Establishment of an Advanced Centre of Excellence for Livestock and Animal Sciences
   AIIRLIVAS is proposed to become a world-reputed organisation with education, skill development and promotion of entrepreneurship for veterinary sector expansion under one umbrella. To carry out these activities, the following facilities are created:

**Livestock Farm Complex** comprising indigenous cattle unit, sheep and goat unit, piggery unit, native dogs unit, animal quarantine and isolation facilities, farm veterinary hospital, clinical lab and poultry units.

**Fisheries Demonstration Complex** comprising intensive fish seed rearing unit with aeration facility, Aquaponics unit, ornamental fishery unit and modern fish kiosk.

**Post Graduate Education Complex** comprising administrative block, academic block, laboratories, faculty rooms, hostels and staff quarters.

**Extension and Skill Development Complex** comprising skill development and training centre, instrumentation and fabrication centre, model livestock units, integrated farming systems and hostels for students and farmers.

**Research Complex** comprising livestock breeding and technology unit and research units.

**Business Incubation and Seamless Integration Complex** comprising business incubation centre and centre for seamless integration.

Meat Production and Processing Complex comprising separate slaughter and processing facilities for sheep and goat, poultry and pigs.

**Forage Research Zone** with demarcated areas for irrigated fodder, dry fodder, silage, silvipasture and fodder seed production.

In the first phase, 25 acres of land has been cultivated with Co.FS.29 fodder crop and distributed to District Livestock Farm Udhagamandalam (Ooty).

**Public Interaction Zone** comprising of Hi-Tech Diary Parlour that has been commenced and Bank with ATM is awaiting for RBI approval, car park, marketing facilities for livestock products.

#### 11. IMPROVING VETERINARY INFRASTRUCTURE

Veterinary Institutions have expanded from a humble beginning of 120 Institutions during 1959-60 to the present 2923 institutions. Keeping in mind that improved infrastructure (veterinary in rural areas will institutions) result in improved veterinary services including health coverage, disease prevention, clinical services, disease eradication, and breeding support as well as consequent increase in overall productivity, new permanent buildings were provided for 2280 veterinary institutions under NABARD Αt present these veterinary scheme. institutions are becoming a knowledge resource centre apart from rendering treatment to livestock. Hence it is crucial that all these institutions should be equipped with necessary infrastructures facilities, which are satisfied with assistance under various schemes from

State Government, Government of India and National Bank for Agriculture and Rural Development (NABARD) under Rural Infrastructure Development Fund (RIDF) in a phased manner.

Under these schemes, till 2024-25, 2280 buildings have been newly constructed at a total cost of around Rs.767.55 crores and 27 more institutional buildings (17.4 crores) are in progress. The remaining 616 veterinary institutions will be constructed in a phased manner on stability priority.

## 12. LIVESTOCK CENSUS AND INTEGRATED SAMPLE SURVEY

#### 12.1 Livestock Census

- Livestock Census is 100% Centrally Sponsored Scheme.
- Enumeration for Livestock Census was started during the year 1919-20
- Livestock Census is conducted all over India once in 5 years.

- ➤ The last census namely 20<sup>th</sup> Quinquennial Livestock Census was conducted during the year 2019 using software and tablets as per the guidelines provided by the GoI.
- Currently 21<sup>st</sup> Livestock Census was launched on 25th October 2024 and will be completed by March 2025 by using mobile application.
- ➤ In Tamil Nadu, 6191 Enumerators and 1297 supervisors are engaged for 21<sup>st</sup> Livestock Census enumeration work.
- Enumeration work has been completed in 2,27,94,400 Households.

### 12.2 Integrated Sample Survey (ISS) Scheme

Timely availability of reliable and correct data relating to various livestock indicators is essential for evolving, monitoring and evaluating various developmental Schemes. Reliable production estimates of Major Livestock Products are vital

for preparing estimates of value of output and estimates of Gross value added from this sector.

Annual Sample Surveys for estimation of major Livestock products viz., milk,egg, meat and wool are being conducted under the Centrall sector Scheme 'Integrated Sample Survey' with 50% financial assistance from Government of India.

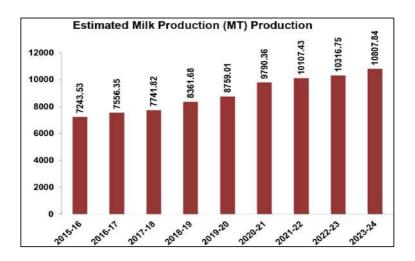
The survey is conducted in the entire rural and urban areas of the State, by selecting sample villages/urban wards. Non-household enterprise institutions like farm houses, slaughter houses, butcher shops pursuing animal husbandry activities are also covered.

The Survey is divided into 3 seasons of 4 months each viz., summer (1<sup>st</sup> March to 30<sup>th</sup> June) Rainy (1<sup>st</sup> July to 31<sup>st</sup> October) and Winter Season (1<sup>st</sup> November to 28<sup>th</sup> or 29<sup>th</sup> February) for studying the seasonal fluctuations. The traditional approach of using paper schedules for filling in information at field level is replaced by

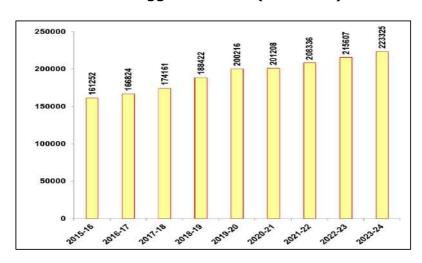
the computer Aided Personal interviewing method from 2023-24 onwards.

Table 9: ESTIMATES OF MAJOR LIVESTOCK PRODUCTS 2023-24

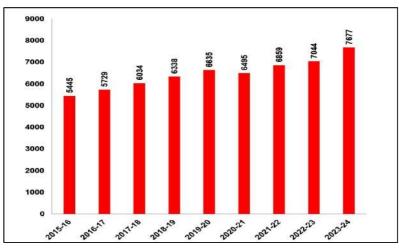
Item	G.O.I	Tamil Nadu	Tamil Nadu Share	Rank
Milk (Lakh Metric Tonnes)	2392.99	108.08	4.52%	11
Egg (Million Nos.)	142771.60	22332.53	15.64%	2
Meat (Lakh Metric Tonnes)	102.53	7.68	7.49%	6



#### **Estimated Egg Production (Lakh nos.)**



#### **Estimated Meat Production (Lakh kgs)**



### 13. JALLIKATTU - THE TRADITIONAL AND CULTURAL IDENTITY OF TAMIL NADU

Jallikattu is a traditional event of the rural people of Tamil Nadu particularly in southern part of the State. It has a 5,000-year-old tradition and a history associated with the socio-cultural ethos of Tamil Nadu. It represents the bond between the humans and the animals, the bravery of tamil youth and the agrarian way of tamil life. The bulls used for the event are the native breeds of the area; thereby the event also ensures that the native breeds are preserved. The event is the testimony to the harmony of Tamil culture as it is celebrated by Tamil people irrespective of religion or caste or creed.

The event is mainly associated with the annual Pongal festival and celebrations with specific reference to Mattu Pongal day. Besides, the Mattu Pongal festival, Jallikattu along with its other variants namely Manjuvirattu / Vadamadu /

Erudu Vidum Vizha are conducted during the pongal festivals of the local temple in the villages as per the tradition of the respective villages.

Because of incidents of injury and death associated with the sport - both to the participants and to the animals. Animal Rights Organizations called for a ban on the sport, resulting in the Hon'ble Supreme Court of India banning the conduct of the event several times over the past years. However, with protests from the people of the State against the ban, a new ordinance was enacted by the State in 2017 to continue the sport, which received the assent of the President of India to become an Act of Tamil Nadu Legislature namely, the Jallikattu Act 2017. The Hon'ble Supreme Court of India has upheld the validity of the Jallikattu Act based on the facts, Standard Operating Procedure (SOP), etc.

Since, then the conduct of Jallikattu events in the State has been streamlined. The conduct of each Jallikattu event is subject to the Tamil Nadu Prevention of Cruelty to Animals (Conduct of Jallikattu) Rules, 2017. Compliance to the Prevention of Cruelty to Animals (Tamil Nadu Amendment) Act, 2017 is ensured through adequate precautionary measures. The Government has framed a Standard Operating Procedure (SOP) exclusively for conducting Jallikattu / Manjuvirattu / Vadamadu / Erudu Vizha events and the District Administration have been instructed to ensure the conduct of event as per SOP.

Currently, Jallikattu events are to be conducted from January till May every year only in places notified in the State Gazette. Events conducted in places which are not notified in the State Gazette are considered illegal and First Information Reports (FIRs) are filed and

necessary action is initiated by the concerned District Administration against the violators.

Since 2017, an average of 350 events of Jallikattu / Manjuvirattu / Vadamadu / Erudu Vidum Vizha are notified every year.

From the year 2024, the entire system from submission of applications by the organisers to the issue of Government Order has been enabled through web portal - <a href="https://www.jallikattu.tn.gov.in">www.jallikattu.tn.gov.in</a> in order to ease the processing of the applications for conducting of Jallikattu / Manjuvirattu / Vadamadu /Erudu Vidum Vizha events. 214 events were conducted from January to May 2024. This year so far 192 events have been conducted from January 2025 to till date.

Kalaignar Centenary Eru Thazuvuthal Arangam, has been constructed in Keezhakarai in Madurai district to conduct Jallikattu events and Jallikattu events are hosted since January 2024.

#### 14. MOBILE VETERINARY UNIT (MVU)

The Mobile Veterinary Unit (MVU) scheme provides veterinary services to remote areas, covering two villages per day as per a scheduled program. Farmers can request doorstep veterinary care through the toll-free number 1962. The scheme focuses on improving livestock health and fertility through better management and artificial insemination (AI) while also educating farmers on veterinary practices to enhance productivity.

Each MVU covers approximately one lakh livestock and equipped with diagnostic tools, minor surgery equipment, and audio-visual aids. Each MVU team consists of one veterinarian, one para-veterinarian, and one driver-cum-attendant. A call centre with 4 veterinarians and 12 call executives manages farmer requests.

The scheme was launched by the Hon'ble Chief Minister of Tamil Nadu on 20.08.2024. Since the inception of the scheme has shown remarkable impact, treating 8,98,503 cases through 49,512 village camps as of 28.02.2025. It has significantly improved access to veterinary care, enhanced livestock productivity, benefiting farmers and strengthening the livestock farming sector.

#### 15. ANIMAL WELFARE MEASURES

## 15.1 Activities of Tamil Nadu Animal Welfare Board (TNAWB)

Article 51(A) (g) of the Indian Constitution emphasizes the importance of treating animals with compassion and in a humane manner. This constitutional provision underscores the moral and ethical responsibility of society towards animals and reflects the recognition of their intrinsic value and welfare.

The Government of Tamil Nadu has taken steps to reconstitute the Animal Welfare Board of Tamil Nadu to address animal welfare issues in the state. By doing so, the government demonstrates its commitment to upholding the constitutional directive of treating animals with compassion and ensuring their welfare.

The Hon'ble Chief Minister as the Chairman and the Hon'ble Minister for Fisheries, Fishermen Welfare and Animal Husbandry, as the Vice-Chairman of the Tamil Nadu Animal Welfare Board. Their compassion for animals provide the necessary direction and support to ensure that the board effectively addresses the various issues concerning animal welfare in the state.

Additionally, the Chief Secretary, Principal Secretaries of concerned Departments, Commissioners / Directors of concerned Departments, Registrars, and Honorary Members further strengthens the board's composition. The

Tamil Nadu Animal Welfare Board is well-positioned to formulate and implement policies, initiatives and programs that promote the well-being and protection of animals across the state.

During the year 2023-24, Rs.9.59 crore was sanctioned for strengthening of Tamil Nadu Animal Welfare Board and establishment of Animal Birth Control facilities in the state. During the Budget announcement for the year 2024-25, Rs.11.115 crore has been sanctioned subsequently.

#### 15.1.1 Vallalar Palluyir Kappagangal

The announcement of the "Vallalar Palluyir Kaapagangal" scheme in the 2022-23 budget speech reflects a commendable initiative by the Government to commemorate the 200th birth anniversary of Saint Vallalar, known for his profound compassion towards all living beings. The scheme's focus on supporting Non-

Governmental Organizations (NGOs) that care for abandoned, injured and rescued animals, aligns with Vallalar's philosophy of universal compassion and empathy "Whenever I see a wilted plant, I too wilt".

With an allocation of Rs. 20.00 crore for the year 2022-23. This funding can significantly enhance the capacity of NGOs to provide emergency service, medical treatment and rehabilitation shelter for vulnerable animals, thereby alleviating their suffering and promoting their well-being.

The funds are being utilized to support the following activities:

- Feeding and medical treatment for abandoned, sheltered, injured pet and stray animals.
- Providing ambulance to Society for the Prevention of Cruelty to Animals (SPCAs) /

AWOs / NGOs to ensure that emergency Veterinary care is provided at all times for the animals in distress.

- Providing infrastructure including provision of shelters on scientific basis in the name of 'Vallalar Palluyir Kaapagangal'.
- Animal Birth Control (ABC) and Immunization Program for stray and pet dogs and cats.

Out of Rs.20.00 crore allotted under Vallalar Palluyir Kaapagangal scheme, Rs.13.20 Crore has been released to 36 Animal Welfare Organizations / NGOs for provision of food, medical facility, ambulance and infrastructure. For the year 2024-25, Rs.15.00 crore has been sanctioned for implementation of Vallalar Palluyir Kapagangal scheme.

## 15.2 Society for Prevention of Cruelty to Animals

The establishment and regulation of SPCA in all districts is notified by the Ministry of Social

Justice and Empowerment No. S.O.271 (E) dated 26.03.2001 in the Gazette of India, under section 38, sub-section 1 of PCA Act 1960 (59 of 1960).

District Societies for the Prevention of Cruelty to Animals (SPCAs) play a crucial role in safeguarding the rights, freedom, and welfare of animals in district level. Under the leadership of the District Collector, these organizations are tasked with several key responsibilities aimed at promoting animal welfare and preventing cruelty within their respective jurisdiction.

The activities of District SPCAs are overseen and monitored by the District Management Committee, which helps to coordinate efforts, allocate resources, and evaluate the effectiveness of animal welfare initiatives within the district. Through collaborative efforts and proactive measures, District SPCAs strive to create a more compassionate and responsible community that values and protects the well-being of all animals.

- Emergency treatments
- Ensuring Animal Rights
- Addressing Animal Cruelty
- Regulation of pet shops, Dog hostels,
   Kennels, breeders and Goshala
- Setting up and maintenance of Animal
   Shelters for rescued animals.
  - Health camps
  - Awareness programs

### 15.3 Animal Birth Control Programme

This programme is being implemented to prevent the indiscriminate breeding of stray dogs and reduce incidence of Rabies. The Union Government has formulated the Animal Birth Control Rules (2023) to control the stray dog population by the Corporations, Municipalities and local bodies.

Under this programme, stray dogs are caught in a humane manner, sterilized, vaccinated

against rabies and released in the same place from where they were caught.

The scheme will be implemented by all Corporations, Municipalities and local bodies after receiving Project Recognition Certificate from Animal Welfare Board of India.

The construction of a model ABC centre, funded by TNAWB, at a cost of Rs.2.00 crore is under implementation, at Kelampakkam Veterinary Dispensary Campus, Chengalpattu District.

### 15.4 Pet Shop Registration

As per the Union Government Ministry of Environment, Forest and Climate Change, under notification G.S.R.844 (E) dated 06.09.2018 and Prevention of Cruelty to Animals (Pet Shop) Rules 2018, regulating pet shops is an essential step towards ensuring the welfare and well-being of animals sold and kept as pets. Without

regulations, there is a risk of exploitation, neglect, and mistreatment of animals in these establishments.

The registration process, which involves submitting an application and affidavit along with a non-refundable fee of Rs. 5000, serves as a mechanism for monitoring and regulating the operations of these establishments.

By reaching out through press releases and raising awareness about the registration process, TNAWB is ensuring that pet shop owners understand their obligations and responsibilities towards animal welfare. Till date, 450 pet shops have already registered demonstrates a positive response from the pet shop community.

#### 15.5 Dog breeding policy:

Tamil Nadu Animal Husbandry Department/Tamil Nadu Animal Welfare Board (TNAWB), released the dog breeding policy on 27.09.2024. The objectives are:

- To conservation the native breeds from extinction.
- To register and regulate thewelfare of dogs kept in breeding premises/establishments.
- To extend powers to Tamil Nadu Animal Welfare Board (TNAWB) for inspection of such premises / establishments.
- To regulate the sale of inadaptable breeds dogs in India.
- To control indiscriminate breeding and abandoning of dogs.

## 16. TAMIL NADU LIVESTOCK DEVELOPMENT AGENCY (TNLDA)

Tamil Nadu Livestock Development Agency (TNLDA) was established vide G.O.Ms.No.18 Animal Husbandry and Fisheries (AH4) Department dated 9.2.2002 to pursue bovine breeding activities with diligence and to implement the programme of Cattle and Buffalo Breeding

### 16.1 Objectives of the Agency

The Primary Objective of the Agency is to bring all the breedable cattle and buffaloes under defined breeding and increase the milk production and productivity of the animals.

### 16.2 Programmes implemented

The primary programmes implemented by Tamil Nadu Livestock Development Agency are Rashtriya Gokul Mission and National Livestock Mission.

#### 16.3. RASHTRIYA GOKUL MISSION

## 16.3.1 Strengthening of Frozen Semen production stations

The strengthening of the semen production facility at the District Livestock Farm, Hosur, District Livestock Farm, Udhagamandalam and The Exotic cattle Breeding Farm, Eachenkottai Thanjavur have been taken up by procurement of laboratory Water bath (30 litres), Biological freezer for freezing of semen doses, bovine semen Dilutor, Bovine photometer, Auto dispenser for dilutor, Cold Handling Cabinet (high precision for equilibration of semen doses), Computer Assisted Semen Analyzer (CASA) with mandatory Software, Automatic Straw filling sealing and printing machine with standard accessories, Ultra water purification system,

Phase contrast microscope and differential interference contrast microscopes, frozen semen containers of 48 Litres capacity and 320 Litres capacity at an estimated cost of Rs.7.09 crore.

### 16.3.2 Facilitating availability of High Genetic Merit Bulls

The distribution of the High Genetic Merit Bulls was facilitated under the Rashtriya Gokul Mission. A total of 81 bulls were allotted and 67 crossbred Jersey and 5 Sahiwal High Genetic Merit Bulls were lifted for Exotic Cattle Breeding Farm, Eachenkottai and 5 crossbred Jersey and 4 Sahiwal bulls were lifted for District Livestock Farm, Hosur.

Under the Crossbred Jersey Field Performance Recording programme 12 crossbred Jersey male calves were lifted for Exotic Cattle Breeding Farm, Eachenkottai, and 1 crossbred Jersey male calves was lifted for District Livestock Farm, Udhagamandalam.

## 16.3.3 Strengthening of Artificial Insemination centres

The strengthening of Artificial Insemination centre is taken up by procurement and supply of 3818 Automatic Electric Thawing Unit for Artificial insemination at an estimated cost of Rs.1.24 crore.

### 16.3.4 Sex Sorted Semen production facility

Sex sorted semen production facility has been established at the District Livestock Farm, Udhagamandalam to produce 7.20 lakh sex sorted semen doses over a period of three years for production of female calves with a total outlay of Rs.47.50 crore. A total of 5.06 lakh doses have been produced and 1.10 lakh doses have been distributed for the programme of Artificial Insemination with sex sorted semen doses. The programme is being implemented in the districts of Coimbatore, Erode, Kanyakumari, Krishnagiri,

Madurai, Namakkal, Perambalur, Ranipet, Thanjavur, The Nilgiris, Thiruchirapalli, Tirunelveli, Thirupathur, Thoothukudi and Vellore. A total of 58,110 Artificial Inseminations with sex sorted semen has been reported.

# 16.3.5 Invitro fertilisation and Embryo Transfer technology

In-Vitro Fertilization and Embryo Transfer programmes have been started at the District Livestock Farm, Hosur, Krishnagiri District at a cost of Rs.4.55 crore. An invitro fertilization laboratory has been established. A total of 1012 embryos have been collected, and 950 embryos have been transferred to recipient cows and 105 calves (Red Sindhi -88, Kangeyam-14 and Pulikulum -3) have been produced.

## 16.3.6 Nationwide Artificial Insemination Programme (NAIP)

The Nationwide Artificial Insemination Programme is being implemented in 13 districts namely Thiruvannamalai, Virudhunagar, Villupuram, Chennai, Cuddalore, Kanchipuram, Nagapattinam, Pudukkottai, Ramanathapuram, Sivagangai, Salem, The Nilgiris and Thiruvallur with an aim of providing Artificial Insemination services to all breedable females of reproductive age at the farmer's doorstep.

The fourth phase of the scheme was sanctioned for implementation from 01.08.2022 to 30.09.2023. The implementation period has been extended and is being continued. Under this scheme, so far, 25.14 lakh animals of 18.73 lakh beneficiaries have been covered through 37.07 lakh Artificial Inseminations.

#### 16.4 NATIONAL LIVESTOCK MISSION

The Realigned National Livestock Mission is being implemented from 2020-21.

## 16.4.1 Entrepreneurship Development Programme

The programme consists of Establishment of Entrepreneurs for breed development of Rural Poultry, Establishment of Entrepreneur for breed development in small ruminant sector (sheep and goat farming), Promotion of Piggery Entrepreneur and Entrepreneurial activities in feed and fodder. Under the programme upto 50% of the capital expenditure is provided as subsidy.

Table 10: PROJECT SIZE AND MAXIMUM ELIGIBLE SUBSIDY

S. N o	Category	Unit size	Maxim um subsidy eligible (Rs. in lakh)
		100+5	10.00
		200+10	20.00
1	Sheep/Goat farming (female+male)	300+15	30.00
		400+20	40.00
		500+25	50.00
2	Rural Poultry (female+male)	1000+100	25.00
3	Piggery	50+5	15.00
	(female+male)	100+10	30.00
4	Silage making / Total Mixed Ratio (TMR)	2400 MT per year / 30MT per day	50.00

### 16.4.1.1 Eligible entities

Individuals / Self Help Group (SHG)/Farmers Producer Organizations (FPO)/Farmers Cooperatives (FCOs)/Joint Liability

Groups (JLGs) and Section 8 companies are eligible to apply under the programme.

Table 11: PROJECTS APPROVED UNDER
NLM-EDP

		Total	Subsidy
Category	Projects	project cost	approved
Category	approved	(Rs. in	(Rs. in
		crore)	crore)
Sheep	56	32.49	14.58
Goat	75	52.23	23.34
Piggery	6	5.29	1.53
Poultry	4	2.74	1.00
Silage making / TMR	1	0.42	0.21
Total	142	93.17	40.66

### 16.5 Others

## Participation of livestock farmers in Republic Parade at New Delhi on 26.1.2025

Invitation was extended to the State by the Department of Animal Husbandry and Dairying,

Ministry of Fisheries Animal Husbandry and Dairying, Government of India to participate in the Republic Day parade on 26.1.2025 at New Delhi along with beneficiaries of the Rashtriya Gokul Mission with their spouses to showcase the remarkable work carried out and the significant contribution to the success of the Rashtriya Gokul Mission. A total of 26 beneficiaries along with their spouses (52 persons) consisting of National Gopal Rathna Award winners, farmers involved in high genetic merit bull production programme, the beneficiaries under Nationwide Artificial programme, Insemination the Artificial Insemination with sex sorted semen programme and Multipurpose Artificial Insemination Technicians for Rural India Programme (MAITRI) participated in the programme.

## 17. TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY (TANUVAS)

India's first Veterinary University was established in 1989 by the then Honourable Chief Minister οf Tamil Nadu, Kalaignar Dr. M. Karunanidhi to make Tamil Nadu as a pioneering state by providing quality healthcare for animals. With the following objectives, TANUVAS has been a frontrunner in veterinary clinical sciences and continues to lead the nation in veterinary education, research and extension:

- To impart education in different branches of Veterinary and Animal Sciences as the university may determine;
- To further the advancement of learning and prosecution of research in Veterinary and Animal Sciences; and
- To undertake the extension of such sciences to the rural people in co-operation with the government departments concerned

### 17.1 Units of TANUVAS

### 17.1.1 Constituent colleges of TANUVAS

S. No.	Colleges
1.	Madras Veterinary College, Chennai
2.	Veterinary College and Research Institute, Namakkal
3.	Veterinary College and Research Institute, Orathanadu
4.	Veterinary College and Research Institute, Tirunelveli
5.	Veterinary College and Research Institute, Salem
6.	Veterinary College and Research Institute, Theni
7.	Veterinary College and Research Institute, Udumalpet
8.	College of Food and Dairy Technology, Koduveli
9.	College of Poultry Production and Management, Hosur

## 17.1.2 Research Stations, Laboratories and Centres of TANUVAS

S. No.	District	Research Stations / Laboratories / Centres
1.	Chennai	<ul> <li>Poultry Research Station, Madhavaram</li> <li>Livestock Farm Complex, Madhavaram</li> <li>Central University Laboratory, Madhavaram</li> <li>Viral Vaccine Research Centre, Madhavaram</li> <li>Bacterial Vaccine Research Centre, Madhavaram</li> <li>Madhavaram</li> </ul>
		<ul> <li>Zoonoses Research Laboratory, Madhavaram</li> <li>Laboratory Animal Medicine, Madhavaram</li> <li>Pharmacovigilance Laboratory for Animal Feed and Food Safety, Madhavaram</li> </ul>

S. No.	District	Research Stations / Laboratories / Centres	
		<ul> <li>Translational Research         Platform for Veterinary         Biologicals,         Madhavaram</li> <li>Biosafety Level III         Laboratory,         Madhavaram</li> <li>Centralised Clinical         Laboratory, Vepery</li> <li>Centralized         Instrumentation         Laboratory, Vepery</li> <li>Centre for Stem Cell         Research and         Regenerative Medicine,</li> </ul>	
2.	Chengalpattu	Vepery  ➤ Post graduate Research Institute in Animal Sciences, Kattupakkam  ➤ Institute of Animal Nutrition, Kattupakkam  ➤ Central Feed Technology Unit, Kattupakkam  ➤ Krishi Vigyan Kendra,	

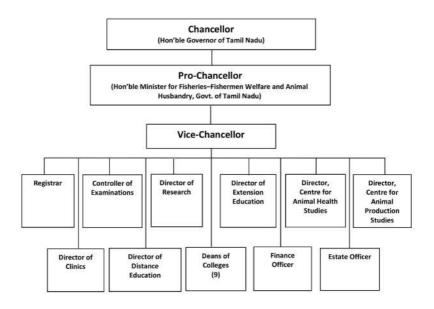
S. No.	District	Research Stations / Laboratories / Centres
		Kattupakkam  Veterinary University Training and Research Centre, Melmaruvathur
3.	Kancheepuram	<ul><li>Farmers Training</li><li>Centre, Kancheepuram</li></ul>
4.	Dharmapuri	<ul> <li>Alambadi Cattle Breed Research Centre, Hanumanthapuram</li> <li>Tiruchy Black Sheep Research Centre, Hanumanthapuram</li> <li>Veterinary University Training and Research Centre, Dharmapuri</li> </ul>
5.	Villupuram	<ul><li>Veterinary University Training and Research Centre, Villupuram</li></ul>
6.	Salem	<ul> <li>Mecheri Sheep         Research Station,         Pottaneri</li> <li>Avian Disease         Laboratory, Thalaivasal</li> </ul>

S. No.	District	Research Stations / Laboratories / Centres
		<ul><li>Veterinary University Training and Research Centre, Salem</li></ul>
7.	Erode	<ul> <li>Bargur Cattle Research Station, Bargur</li> <li>Kangayam Cattle Research Station, Sathyamangalam</li> <li>Veterinary University Training and Research Centre, Erode</li> </ul>
8.	The Nilgiris	<ul><li>Sheep Breeding</li><li>Research Station,</li><li>Sandynallah, Ooty</li></ul>
9.	Namakkal	<ul> <li>Poultry Disease         Diagnostic and         Surveillance         Laboratory, Namakkal</li> <li>Animal Feed Analytical         and Quality Assurance         Laboratory, Namakkal</li> <li>Ethnoveterinary Herbal         Research Centre for         Poultry, Namakkal</li> </ul>

S. No.	District	Research Stations / Laboratories / Centres
		Krishi Vigyan Kendra, Namakkal
10.	Sivagangai	<ul><li>Pulikulam Cattle</li><li>Research Station,</li><li>Manamadurai</li></ul>
		Krishi Vigyan Kendra, Kundrakudi
11.	Pudukottai	<ul><li>Regional Research and Education Centre, Pudukottai</li></ul>
12.	Madurai	<ul><li>Veterinary University Training and Diagnostic Centre, Madurai</li></ul>
13.	Kallakurichi	<ul><li>Krishi Vigyan Kendra, Kalasamuthiram, Kallakurichi</li></ul>
14.	Theni	> Farmers Training Centre, Theni
15.	Tiruvarur	> Farmers Training Centre, Tiruvarur
16.	Ramanathapuram	Veterinary University
17.	Kanyakumari	Training and Research
18.	Vellore	Centres

S. No.	District	Research Stations / Laboratories / Centres
19.	Thiruvannamalai	
20.	Krishnagiri	
21.	Cuddalore	
22.	Perambalur	
23.	Tiruppur	
24.	Coimbatore	
25.	Thanjavur	
26.	Nagapattinam	
27.	Dindigul	
28.	Tiruchirappalli	
29.	Virudhunagar	
30.	Tenkasi	<ul> <li>Goat Research Centre, Chinnakovilankulam</li> <li>Regional Centre for Conservation of Native Dogs, Pavoorchathiram</li> </ul>
31.	Karur	<ul> <li>Veterinary University         Training and Research             Centre, Karur             Backyard Poultry             Research Centre,             Malaikovilur, Karur</li> </ul>

### 17.1.3 Organogram



#### 17.2 Education

The various degree and diploma courses offered by the University with admission strength are detailed below:

Degree and diploma Courses	Admission strength
Bachelor of Veterinary Science and	660
Animal Husbandry	000
Bachelor of Technology	40
(Food Technology)	70
Bachelor of Technology	20
(Dairy Technology)	20
Bachelor of Technology	40
(Poultry Technology)	
Master of Veterinary Science	160
Master of Technology	10
(Food Technology)	10
Master of Technology	6
(Poultry Technology)	
Master of Technology	3
(Dairy Technology)	3
Master of Technology	3
(Dairy Chemistry)	
Master of Science (Biotechnology)	3
Doctor of Philosophy (Veterinary)	105
Doctor of Philosophy (Biotechnology)	5
Doctor of Philosophy	5
(Food Technology)	J
M.Sc. (Biotechnology)	10
Post Graduate Diploma –	31
Regular mode (4 courses)	31
Post Graduate Diploma –	240
Distance mode (22 courses)	240

#### 17.3 Research

The University has 12 research stations and 15 research laboratories dedicated to research in animal production, animal health, zoonoses, livestock feed analysis, disease diagnosis and surveillance, ethnoveterinary medicine, pharmacovigilance etc. With the assistance from various funding agencies, TANUVAS has secured 36 new projects amounting to Rs.873.28 lakhs during the year 2024. In total, 218 schemes are in operation at TANUVAS. During the year 2023-24, TANUVAS faculty members have published 670 research articles.

### 17.3.1 Salient schemes in progress

S. No.	Title of the scheme	Funding Agency	Budget (Rs. in lakh)
1.	Socioeconomic upliftment of SC farmers in different zones of Tamil Nadu via augmenting productivity of their livestock and poultry	Indian Council of Agricultural Research, New Delhi	110.00
2.	Strengthening and development of Higher education in India	Indian Council of Agricultural Research, New Delhi	12.00
3.	Special project on "Burn free village - Large scale adoption of composting technology is a best way to generate wealth from waste	ICAR- Agricultural Technology Application Research institute, Hyderabad	5.00
4.	Determination of suitable sampling size of maize lot for near-precise Aflatoxin B1 quantification	GOI - National Livestock Mission	50.21
5.	Enhancing the livelihood of tribal farmers through livestock farming in four districts of Tamil Nadu - As a pilot study	Directorate of Tribal Welfare, Government of Tamil Nadu	202.08

S. No.	Title of the scheme	Funding Agency	Budget (Rs. in lakh)
6.	Novel functional feed additives using biogenics to enhance broiler production	Department of Science and Technology, New Delhi	42.63
7.	Evaluation and validation of nutritive and feeding value of silkworm ( <i>Bombyx mori</i> ) pupae meal in broiler and layer chicken	Central Silk Board, Mysore	31.25
8.	Application of aptamer, microfluidics and protein-targeted approaches for sexspecific spermatozoa enrichment in bovines and technology development thereof	Department of Biotechnology, New Delhi	82.66
9.	All India network program on Challenging and emerging diseases of animals (AINP-CEDA) – Bluetongue	of Agricultural Research, New Delhi	26.75
10.	All India Network program (AINP) on One Health approach to zoonotic diseases	Indian Council of Agricultural Research, New Delhi	7.00

S. No.	Title of the scheme	Funding Agency	Budget (Rs. in lakh)
11.	All India network program on Challenging	Indian Council of Agricultural	11.33
	and emerging diseases	_	
	of animals (AINP-CEDA)	Delhi	
	on Theileriosis		
12.	Empowering SC farmers	ICAR-National	5.27
	through dissemination of	Institute of	
	scientific dairy farming	Veterinary	
	practices and TANUVAS	Epidemiology	
	technologies for	and Disease	
	sustainable dairy	Informatics,	
	farming	Bengaluru	

### 17.3.2 Technologies

TANUVAS is actively engaged in developing new vaccines and diagnostic kits to enhance the health and productivity of livestock and poultry, as well as in the production of value-added meat and dairy products. During 2024, the technologies developed by the faculty members of TANUVAS include:

Inactivated vaccine for Lumpy Skin Disease in cattle

- Indirect ELISA for detection of Lumpy Skin Disease antibody
- MycoID Multiplex PCR Kit for identification of Mycobacterium orygis strain and its differentiation from M. tuberculosis and M. bovis
- Value added products, including:
  - ✓ Functionally enriched pasta using non-conventional ingredients
  - ✓ Whey-based pre-workout supplement.
  - ✓ Chicken meat-based biscuits.
  - √ Herb-incorporated chicken soup powder

#### 17.4 Clinical services

The University's teaching veterinary facilities provide clinical services for both farm and companion animals. A total of 3,15,457 animals were treated during the year 2024. The teaching veterinary hospitals offer referral services, including ultrasonography, endoscopy, electrocardiography, orthopaedics, haemodialysis,

ophthalmology, dermatology and a canine blood bank. CT scan facility is also available at Madras Veterinary College and Veterinary College and Research Institute, Namakkal.

During the reporting period, 14 training programmes on the latest clinical service advancements were conducted, benefiting 142 veterinarians from the Department of Animal Husbandry and Veterinary Services, Government of Tamil Nadu and private companies.

#### 17.5 Extension Activities

TANUVAS, through its 27 outreach centres, conducts capacity -building programmes, frontline demonstrations and on-farm trials on scientific livestock and poultry farming methods for the benefit of farmers, farm women, rural youth, school dropouts and self-help groups, aiming to improve their livelihoods. The technologies developed by TANUVAS were also promoted

through print, electronic, and e-extension activities.

In 2024, TANUVAS organized 1,706 training programs benefiting 69,135 farmers, and provided 61,651 advisory services to farmers through its various outreach units. Additionally, inputs for livestock farm activities were offered.

Some of the important events organised for the farming community in 2024 include:

- In coordination with Kalnadai Ariviyal Thamizh Iyakkam, a national conference on "Kalnadaikalin nalam vivasaikalin valam" was organized at the Veterinary College and Research Institute, Namakkal, on 28.06.2024 and 29.06.2024, benefiting 155 farmers.
- A state-level workshop on "Enlightening the farmers on various financial support to empower sheep and goat farming in Tamil Nadu" was organized at the Veterinary

University Training and Research Centre, Salem, on 26.06.2024, benefiting 87 farmers.

- In coordination with the National Commission for Women, TANUVAS organized four skill development training programmes on animal husbandry activities, benefiting 120 self-help group women.
- A state level training on "Empowering farmers economy: a multidisciplinary approach to monitor livestock health, traditional remedies, disaster management and value addition of milk and meat products" was conducted at TANUVAS-Regional Research and Education Centre, Pudukottai, from 23.09.2024 to 27.09.2024, benefiting 30 farmers and unemployed youths.
- A total of 15 sponsored training programmes were conducted by TANUVAS through its peripheral centres. Of these, 11 programs

were sponsored by ATMA, benefiting 344 farmers; three programs by NABARD, benefitting 88 farmers; and one program by MANAGE, benefiting 28 farmers.

#### 17.6 Distance Education courses

The Directorate of Distance Education offers 22 Postgraduate Diploma courses for the veterinarians to update their knowledge and skills in the latest technologies in animal husbandry and veterinary sciences. In addition, 10 skill development and 10 self-employment courses in the animal husbandry sector are offered to farmers and rural youth to boost livestock and poultry production, thereby improving rural income.

During the year 2024-25, a total of 94 students enrolled in 18 Postgraduate Diploma courses, 15 individuals in three skill development courses and 414 farmers and unemployed youths

in seven self-employment courses offered through the distance education mode.

### 17.7 Capacity building programmes

TANUVAS conducted various capacity-building programs for students as well as for faculty members to enhance their knowledge on the latest advancements in Veterinary and Food Sciences. In the year 2024, the university conducted 16 workshops, 10 conferences, two seminars, and 30 trainings for the development of Human Resources.

### 17.7.1 Initiatives for Students

 B.Tech (Dairy Technology) students from the College of Food and Dairy Technology, Koduvalli, underwent a 24 week in-plant training with a stipend from 21.05.2024 to 04.11.2024 at various dairy plants of the Tamil Nadu Co-operative Milk Producers

- Federation and District Co-operative Milk Producers Unions.
- A National conference on 'VET SPARKS 2024:
   Venturing into entrepreneurship through
   student pre-incubation and resourceful
   knowledge support' was organized by
   VIF@TANUVAS at Madras Veterinary College
   from 11.06.2024 to 13.06.2024, with a total
   of 161 students participating.
- A training program on 'Laboratory animal management and handling' was organized by the Laboratory Animal Medicine Unit, TANUVAS, for 22 B.V.Sc. students from 05.08.2024 to 07.08.2024.
- An International conference and Clinical Conclave in veterinary cardiology and interventional medicine was held at Madras Veterinary College, Chennai, from 14.10.2024 to 16.10.2024, benefitting both undergraduate and postgraduate students.

### 17.7.2 Initiatives for Faculty members

- A Certificate course in laboratory animal sciences was organized by the Laboratory Animal Medicine Unit, Madhavaram Milk Colony, Chennai, from 18.06.2024 to 28.06.2024 for 20 veterinarians.
- In coordination with the Laboratory Animal Scientists Association, India, a national conference on "Laboratory animal welfare and nutrition in bio-medical research" was organized at the Veterinary College and Research Institute, Udumalpet, on 25.07.2024. A total of 176 participants from various colleges attended and benefited from the event.
- A National workshop on "Recent advances and applications on Thoraco abdominal Ultrasonography in farm animal practice" was organized at the Veterinary College and Research Institute, Orathanadu, on

- 23.10.2024 and 24.10.2024 for 20 veterinarians.
- A National Workshop on "Cloning and expression of recombinant proteins for vaccine and diagnostics development" was organized at the Vaccine Research Centre – Viral Vaccines, Madhavaram Milk Colony, Chennai, from 12.11.2024 to 14.11.2024 for nine veterinarians.

#### 17.8 Awards / recognitions

- Tamil Nadu Veterinary and Animal Sciences
   University ranked 17<sup>th</sup> among all the
   Agricultural Universities in India in the NIRF ranking 2024.
- TANUVAS participated in the felicitation function of Higher Education of Tamil Nadu held at Raj Bhavan on 13.09.2024. The Honourable Governor and Chancellor felicitated TANUVAS for achieving the 17<sup>th</sup>

- rank in the NIRF 2024 under the Agriculture and Allied Sector category.
- Selvi M. Thulasimathi, an undergraduate student of the Veterinary College and Research Institute, Namakkal, represented Indian Badminton team in the SU5 category at the Paralympics 2024 held in Paris, France, from 28.08.2024 to 08.09.2024. She won a silver medal in the women's singles category. She was also honoured with the Arjuna Award-2024 by the Honourable President of India for her outstanding performance in para-badminton.
- To commemorate the 121<sup>st</sup> Foundation Day of Madras Veterinary College, a special cover on 'Madras Veterinary College' was released by the Postmaster General, Chennai City Region and received by the Vice-Chancellor of TANUVAS on 12.11.2024.

- In 2024, a total of six patents were granted for the following technologies developed by TANUVAS.
  - ✓ An animal Ambulance unit and a method of shifting sick recumbent animals for transportation
  - ✓ An improved Electrical stunner for stunning animals before slaughter
  - ✓ A device and method for the soilless cultivation of the fodder
  - ✓ A portable apparatus for the storage and supply of liquid food to lambs/kids of multiple sizes
  - ✓ A portable table top device for monitoring the embryo growth in a poultry egg
  - ✓ A chute device for enclosing the injured cattle during diagnosis.

### 17.9. Sustainable Development Goals - TANUVAS

The Sustainable Development Goals (SDGs) framework quarantees economic growth, environmental preservation, social and cohesiveness. Sustainable development requires innovation, research and education, all of which implemented by TANUVAS for are its accomplishment. Through the transformative of the university, TANUVAS is processes affirmative to achieve the SDGs either directly or indirectly, more specifically, Goal 1: No poverty; Goal 2: Zero Hunger; Goal 4: Quality Education; Goal 5: Gender equality and Goal 12: Reasonable consumption and production. The activities carried out by the University are presented in section as follows:

### **17.9.1 SDG Goal# 1:** No poverty

#### **Action of the University:**

 To help the farming community reach the goal of "ending poverty in all its forms everywhere," TANUVAS has been actively promoting livestock farming as a means of improving their financial standing and fostering resilience.

During the year 2023-24, a total of 33,722
nos. of day old chicks, 1,28,244 no. of day
old Japanese quail and 19,472 nos. of
hatching eggs have been distributed to the
farmers to improve their livelihood through
poultry production.

### **17.9.2 SDG Goal# 2:** Zero Hunger **Action of the University:**

This Goal aims to "end hunger, achieve food security and improved nutrition and promote sustainable agriculture". Realising the importance of animal husbandry on achieving the Goal that also aims at promoting sustainable agriculture as a mean to end the hunger, TANUVAS promotes animal husbandry through its educational, research and outreach activities. As conservation

and propagation of native germplasms in their tract would facilitate for sustainability in the long run, TANUVAS in coordination with the Government has established centres for conserving the native breeds. The following schemes are currently in operation at TANUVAS for conserving native breeds of livestock and sustainable livestock production:

- Establishment of Goat Research Centre at Tenkasi
- Establishment of conservation centre for Nattukuttai cattle
- Establishment of backyard poultry research and development centre at Karur district
- Conservation of Umblachery breed through multi-disciplinary approach in the breeding tracts of Tamil Nadu

### **17.9.3 SDG Goal# 4:** Quality Education **Action of the University:**

As the Goal envisages to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all", TANUVAS provides opportunities to acquire knowledge and expertise in the fields of veterinary, animal and food sciences. Besides regular campus education, the University promotes and instils skills on the through people off-campus common its programmes also. In order to imbibe quality education to its students and the farming community and entrepreneurs, TANUVAS is implementing the following:

- Earn while you learn Experiential Learning programme to the students
- 15 Skill development and 10 selfemployment programmes on various livestock enterprises/ activities

### 17.9.4 SDG Goal# 5: Gender equality Action of the University:

This Goal aims to "achieve gender equality and empower all women and girls". The university acknowledges that gender equality is essential to both its success and the well-being of society at Through large. its governance, research, partnerships, teaching and learning, and community participation, TANUVAS is dedicated to pursuing this objective. Through its network of outreach centers located throughout the State, TANUVAS also organizes various programs and makes steps to empower women, acknowledging the unquestionable role that women play in the animal husbandry industry.

During 2023-24, a total 1,204 On and Off campus training programmes were conducted benefitting 20,901 women.

### **17.9.5 SDG Goal# 12:** Reasonable consumption and production

#### **Action of the University:**

This Goal emphasises to "ensure sustainable consumption and production patterns". By reducing energy and water use, practicing responsible management, and minimizing waste, the institution is dedicated to preserving the environment and implementing sustainable practices. According to studies, between field and work, one-third of all food produced is lost or squandered. Understanding this, the university has undertaken several studies to reduce losses and wastes in the supply chain, which can lead to increased sustainability and efficiency. The All India Co-ordinated Research Project on Post Harvest Engineering Technology in Meat Science is in operation at TANUVAS. During the year 2023-24, the following works were carried out:

- Development of Functional Meat Products to make use of low valued cuts of meat.
- Development of pet food, pet treats,
   Japanese quail feed and keratin biofilms
   using abattoir by-products, to ensure
   valorisation of slaughter house by-products.
- A nano calcium fortified value added meat spread was developed which will provide a nutritional high protein alternative to butter and cheese spread to its consumer.

## **17.9.6 SDG Goal# 13 :** Take urgent action to combat climate change and its impacts

#### **Action of the University:**

The target for achieving the above goal is to improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning. TANUVAS is involved in achieving this goal by implementing the World Bank-funded project on "Sensitizing farmers on nutritional supplemental strategy developed at TANUVAS to

increase productivity in dairy cattle and mitigate methane emission". Under this project, a total of 56,400 cows were provided with TANUVAS GRAND supplement, which indirectly mitigates methane emission.

#### 17.10 Start-ups in Livestock sector

Veterinary Incubation Foundation (VIF)@TANUVAS was established in 2019 with financial support of the Entrepreneurship Development and Innovation Institute (EDII), Government of Tamil Nadu, Chennai, to nurture Start-ups and entrepreneurs in the fields of veterinary, animal sciences and allied sectors.

#### Salient activities of VIF during 2024:

- A total of 15 start-ups were incubated at VIF@TANUVAS in 2024, focussing on the development of novel animal husbandrybased products/technologies.
- VIF @ TANUVAS was recognized for its outstanding contribution in supporting new

- start-ups and was awarded with a scale-up grant of Rs. 5.00 lakh at the Umagine TN 2024 summit held on 24.02.2024.
- StartupTN also provided funding support of Rs.2.00 lakhs each to two women-led startups incubated at VIF @ TANUVAS namely Tmt. Madhava Selvi, M/s. Mass Biotech Private Limited, and Tmt. Hemamalini, M/s. Women SHG Enterprise.
- During the event, "Quadmastest," a device for detecting subclinical mastitis, developed by M/s. Chimertech Private Limited, an incubatee of VIF @ TANUVAS, was launched by Dr. Palanivel Thiaga Rajan, Honourable Minister for Information Technology and Digital Services, Government of Tamil Nadu.
- M/s. Chimertech Private Limited, an incubatee of VIF@TANUVAS, won the FORT Industrial Innovation & Scaleup Grant of Rs.10.00 lakh from SIPCOT and Forge Innovation & Ventures.

- The second National Conference on "Venturing into Entrepreneurship through Student Pre-Incubation and Resourceful Knowledge Support" was organized at Madras Veterinary College, Chennai from 11.06.2024 to 13.06.2024.
- A training program on "Vet Bio Innovate 2024" was organised at Madras Veterinary College on 19.08.2024 aimed at bridging the gap between entrepreneurs, pioneer farmers and startups. A total of 110 farmers, entrepreneurs and students of TANUVAS benefitted from the program.
- During 2024, four zonal workshops on "Bridging farmers and innovation -Demonstrate VIF@TANUVAS innovative products" were organized across four zones: Kancheepuram, Tiruchirappalli, Madurai and Coimbatore, benefiting 403 farmers, veterinarians and entrepreneurs.

 VIF@TANUVAS facilitated its incubatees in obtaining patents for their innovations in 2024, including: M/s. VV Canine Foods Pharma Private Limited, Chennai for an innovative animal nutrition formula and M/s. Ariviya Deep Tech Private Limited, Thanjavur for a nano-formulation designed to prevent and treat mastitis.

#### 17.11 Industry-Institute Linkage

To foster collaborative research and educational programs between industries and academic institutions, TANUVAS has executed Memorandums of Understanding (MoUs) with the following national institutes during the year 2024-25.

- Directorate of Tribal Welfare, Government of Tamil Nadu
- Tamil University, Thanjavur
- Madras Crocodile Bank Trust, Chennai
- Brookes India Ltd., Noida

- National Foundation of Liver Research,
   Chennai
- BAIF Development Research Foundation,
   Pune
- Tamil Nadu Corporation for Development of Women, Government of Tamil Nadu
- Indian Immunologicals Ltd, Hyderabad
- National Institute of Siddha, Tambaram,
   Chennai
- Remount Veterinary Services, New Delhi
- Tamil Nadu Dr. J. Jayalalithaa Fisheries
   University, Nagapattinam
- ICMR-National Institute of Epidemiology, Chennai
- Government Siddha Medical College,
   Arumbakkam, Chennai

### 17.12 Important events of TANUVAS during 2024

The Honourable Minister for Fisheries,
 Fishermen Welfare and Animal Husbandry,

- Government of Tamil Nadu, visited the Veterinary College and Research Institute, Orathanadu, on 11.01.2024.
- An International conference on "Sustainable animal nutrition for global health and production: Innovations and directions" was conducted at Madras Veterinary College, Chennai from 23.01.2024 to 25.01.2024, benefitting 264 participants.
- The Foundation Stone for the establishment of a new Veterinary University Training and Research Centre at Tiruchendur, Thoothukudi district, funded by the Government of Tamil Nadu, was laid by the Honourable Minister for Fisheries, Fishermen Welfare and Animal Husbandry, Government of Tamil Nadu on 29.01.2024.
- A national conference on "Moving towards sustainability: Livestock production systems and adaptive strategies in the era of climate

- change" was organised at Madras Veterinary College, Chennai on 01.02.2024 and 02.02.2024, with the participation of 90 faculty members.
- The Second national veterinary practitioners' conference on "Recent advances in small animal practice" was organized on 08.02.2024 and 09.02.2024 at Madras Veterinary College, Chennai. "VET GUIDE" Expert Tele Guide App was launched by the Vice-Chancellor, TANUVAS during the event.
- In coordination with the Indian Society of Animal and Production Management, a national conference on 'Optimization of livestock farming for sustainable development in the era of climate change' was organized at Madras Veterinary College, Chennai from 22.02.2024 to 24.02.2024.
- The 23<sup>rd</sup> Convocation of TANUVAS was held at Madras Veterinary College, Chennai, on 13.03.2024. The Honourable Governor of

- Tamil Nadu and Chancellor of TANUVAS, Thiru R.N.Ravi, conferred degrees and medals upon 1166 graduands.
- An International conference on "Innovative education, research and extension approaches for transmitting scientific knowhow to augment livestock production in the contemporary scenario" was organized at Veterinary College and Research Institute, Orathanadu from 10.07.2024 to 12.07.2024. A total of 169 faculty members, including foreign experts, participated in the event.
- An International conference on "Impact of climate change on biodiversity: A global perspective" was organized at Madras Veterinary College, Chennai, from 11.07.2024 to 13.07.2024, benefitting 182 scientists from across India.
- The 14<sup>th</sup> Clinical case conference on "Farm and companion animal practice for

veterinary students" was conducted at Madras Veterinary College, Chennai on 01.08.2024 and 02.08.2024. A total of 366 students from eight states participated in the conference.

- An International conference on "Global approaches of herbal research in livestock and poultry for green animal production, healthcare, and farmer's livelihood" was organized at the Veterinary College and Research Institute, Tirunelveli, on 03.08.2024 and 04.08.2024, benefitting 155 delegates.
- An International conference on "Small holders' goat production in tropical countries

   opportunities and constraints" was organized at the Post Graduate Research Institute in Animal Sciences, Kattupakkam on 08.08.2024 and 09.08.2024, benefitting 200 scientists.

- The Honourable Chief Minister of Tamil Nadu inaugurated newly constructed buildings of TANUVAS at a total cost of Rs.33.12 crore on 20.08.2024, including:
  - Viral Vaccine Research Laboratory (Rs.0.75 crore); Office room, Store room and Poultry Houses for Indigenous Siruvidai Chicken (Rs.0.77 crore); and Strengthening Infrastructure of TANUVAS University Innovation and Instrumentation Centre (Rs.2 crore) at Madhavaram Milk Colony, Chennai
  - Laboratory Animal House (Rs.1.5 crore),
    Additional Lecture halls and Exam Hall
    Building (Rs.3.35 crore) at Veterinary
    College and Research Institute,
    Orathanadu

- Additional Academic Block (Rs.5.04 crore) at Veterinary College and Research Institute, Tirunelveli
- Alambadi Cattle Breed Research Centre (Rs.1.17 crore) at Dharmapuri District
- Processing Technology Laboratory, Food
  Processing Engineering Laboratory, and
  Food Safety and Quality Assurance
  Laboratory" (Rs.14 crore) at College of
  Food and Dairy Technology College,
  Koduvalli
- Livestock Farm Complex and Fodder Production Unit (Rs.4.54 crore) at Veterinary College and Research Institute, Theni.
- The 24<sup>th</sup> Convocation of TANUVAS was held at Madras Veterinary College, Chennai, on

20.11.2024. The Honourable Governor of Tamil Nadu and Chancellor of TANUVAS, Thiru. R.N.Ravi conferred degrees and medals upon 588 graduands.

#### 17.13 Priorities and future thrust areas

TANUVAS has identified the following priority areas:

- Strengthening the One Health approach
  - ✓ Addressing transboundary zoonotic diseases in India through a One Health approach
  - ✓ Identifying antimicrobial resistance in humans, pets, and the environment to promote human health
- Conservation of native germplasm of Tamil
   Nadu
  - ✓ A Native Dog Conservation Center has been established in Tenkasi to protect native dogs. Breeding of Rajapalayam, Kombai, Chippiparai and Kanni breed

- dogs will be carried out and supplied to the needy pet lovers
- ✓ Conservation of Bargur buffalo through preservation of male germplasm and utilization in the field
- Artificial Intelligence in the field of Veterinary, Animal and Food Sciences
  - Rapid diagnosis and monitoring in dairy cattle using artificial intelligence technology
  - ✓ Artificial Intelligence-based weight estimation and monitoring in sheep
- Popularization of TANUVAS GRAND supplement to augment dairy production and to mitigate milk fever in dairy cattle of Tamil Nadu
  - ✓ Under the World Bank-funded
    "Supplemental Nutrition Approaches Phase II" project, 67,100 cows will be
    provided with TANUVAS GRAND
    supplement

- Identifying livestock diseases and implementing disease control measures
  - ✓ Vaccines for Lumpy Skin Disease and ORF Ecthyma will be taken to the field application
- Enhancing e-governance initiatives through the development of management systems and user-friendly apps
  - ✓ Developing student management / administrative management / farmrelated applications / precision farm management applications
- Forging International collaborations in academic and research programmes
  - ✓ Conducting clinical trials on laboratory animals of Siddha medicines in collaboration with the Government Siddha Medical College
  - ✓ To undertake education, research and extension work in collaboration with the National Institute of Epidemiology

- Capacity building for field veterinarians on Animal Birth Control
- Development of animal health and medical technologies, modern farm equipment, and sustainable agriculture and environmental technologies
- To popularize and disseminate TANUVAS technologies among livestock farmers with the help of extension experts through livestock health camps, exhibitions and livestock farmers' meets
- Addressing infertility and repeat breeding in cattle and buffaloes through assisted reproductive techniques

#### 18. THE WAY FORWARD

The Government of Tamil Nadu has placed special emphasis on rural economic improvement through initiatives in the Animal Husbandry sector. The Livestock Policy, implemented through

targeted programs and strategic investments, has significantly contributed to a higher growth rate in milk, meat, and egg production. This has ensured the availability of essential animal protein to the rural poor.

Moreover, the sector holds immense potential to generate employment, provide nutritional security, and enhance household incomes by improving productivity. This, in turn, plays a crucial role in poverty reduction and rural transformation. By empowering asset-less individuals to become income-generating, asset-owning entrepreneurs, the Animal Husbandry sector serves as a key driver in poverty alleviation and sustainable rural development.

Likewise, the Tamil Nadu Veterinary and Animal Sciences University (TANUVAS) is committed to advancing education, research, and extension services in veterinary, animal, and food sciences. Through innovative academic programs,

cutting-edge research, and farmer-centric extension initiatives, TANUVAS strives to enhance livestock productivity, promote indigenous germplasm conservation, and support sustainable farming practices, ultimately improving the livelihoods of the farming community.

# ANITHA R. RADHAKRISHNAN Minister for Fisheries - Fishermen Welfare and Animal Husbandry



The Hon'ble Chief Minister of Tamil Nadu launched Mobile Veterinary Units on 20.08.2024 to deliver Veterinary Services to remote areas.

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The Advanced Institute for Integrated Research on Livestock and Animal Sciences (AIIRLIVAS) has been established at Thalaivasal Koot Road, Salem District in 1,102.25 acres with 25 km perimeter area at a cost of Rs.564.44 Crore and inaugurated by the Hon'ble Chief Minister of Tamil Nadu on 13.01.2025.



The Hon'ble Chief Minister of Tamil Nadu inaugurated 28 buildings of Animal Husbandry Department constructed at a cost of Rs.22.32 crore on 20.08.2024.



Distribution of chaff cutter under State Fodder Development scheme by Hon'ble Deputy Chief Minister to beneficiary Mr.Muthusamy, Musiri, Trichy District.



Veterinary Incubation Foundation @ TANUVAS (VIF @ TANUVAS) receiving scale-up grant of Rs. 5.00 lakh for its outstanding contribution at the Umagine TN 2024 summit held on 24.02.2024.

#### **NATIVE BREEDS OF CATTLE**



ALAMBADI



KANGEYAM



**BARGUR** 



**PULIKULAM** 



**UMBLACHERY** 



**TODA BUFFALO** 

#### **NATIVE BREEDS OF SHEEP**



TRICHY BLACK



**KILAKARISAL** 



MADRAS RED



**NILGIRI** 



CHEVAADU



**MECHERI** 



**VEMBUR** 



KATCHAIKATTY BLACK

#### **NATIVE BREEDS OF GOATS**





KANNI ADU

SALEM BLACK



**KODI ADU** 

#### **NATIVE BREEDS OF DOGS**



RAJAPALAYAM



**CHIPPIPARAI** 



KANNI



**KOMBAI** 

#### **POULTRY BREEDS RAISED IN TAMILNADU**



ASSEL



KADAKNATH