ANNUAL REPORT 2023

Department of Animal Production and Health

ANNUAL REPORT
2023

Department of Animal Production and Health
Peradeniya
Sri Lanka
Tel : 94 - 081 – 2388337 / 2388462
Fax: 94 – 081 - 2388619
Web Site: www.daph.gov.lk

ANNUAL REPORT – 2023

CONTENT

PREFACE

This 2023 Annual Report of Department of Animal Production and Health (DAPH) highlights the status of livestock sub-sectors and presented the progress of all programs/projects conducted by the department during the year 2023. Most of the livestock sector support services/programs are jointly implemented by the central DAPH and Provincial Departments of Animal Production and Health (PDAPH). Therefore, province-wise performance and the progress have been presented in this report wherever necessary, including progress of the technical divisions of the central department.

Department of Animal Production and Health is the leading technical organization for livestock production under the purview of Ministry of Agriculture and Plantation Industries. It is the main technical service provider in the country, responsible for ensuring food security & food safety of foods of animal origin, the major protein source of a healthy diet. Demand for animal protein is continuously rising up and it is quite challenging to cater for the national demand. In par with the demand DAPH has intensified its functions mainly in providing technical guidance and statutory functions related to livestock sector in the country.

Upgrading and maintaining a healthy animal population, providing required technical inputs, quality assurance of animal products, animal feeds and veterinary pharmaceuticals, and research and development are the main functions implemented by different divisions of DAPH with collaboration of provincial DAPHs and other livestock stakeholders. By conducting 17 different development programs, department facilitates for increased production and quality improvements in the livestock sector and thereby to achieve sector goals that are identified in the Government policy directives. Department also taken various remedial actions to smoothly run the industry activities by having discussions at higher authorities to ensure continuous production in the country.

Compared to the year 2022 chicken meat and pork production has increased while egg has showing slightly decrease in production. Beef and mutton production has no significant different in production compared to the year 2022. However, meat based value addition have been increased for pork, beef and mutton comparatively. Export of meat and meat products has been increased by three fold earning Rs. 1,331.32 million foreign exchange. However, milk and milk products imports bill further increased recording Rs. 88,620 million while total volume of 580,084.78 million liters of imports. Parallel to the cost of production all retail prices of livestock products except milk have been increased during the year reflecting the higher rate of input prices in the market due to fuel prices up and taxes imposed. Cow milk production has further decreased by 9.0 Million liters while no change in buffalo milk production, whereas total milk production decreased by 10.3 million liters. On the other hand, per capita availability was increased for milk and chicken meat compared to year 2022.

I am thankful to all directors and their staff in the department for extending their fullest cooperation for successful accomplishment of programs planned for the year 2023. Special word of appreciation goes to Dr. K.M.H.G. Sarath Priyantha, Director and the staff of Livestock Planning and Economics Division for taking efforts in compiling and publishing Annual Report in time.

Dr. (Mrs.) K. A. C. H. A. Kothalawala
Director General

DEPARTMENT OF ANIMAL PRODUCTION AND HEALTH

VISION

Be the premier organization leading the livestock sector towards socio - economic development of Sri Lanka

Mission

Provide technical guidance and support to achieve sustainable development in the livestock sector by maintaining a healthy animal population and enhanced productivity ensuring food safety and contributing to food security.

1. INTRODUCTION

The Department of Animal Production and Health (DAPH) was established under the Ministry of Rural Industrial Development in September 1978. At present DAPH functions under the Ministry of Agriculture.

Most of DAPH's field level functions have been devolved to nine Provincial Departments of Animal Production and Health (PDAPH) headed by the Provincial Directors.

The DAPH provides technical leadership, expertise and back-up services to Provincial Departments of Animal Production and Health (PDAPH) and other stakeholders in livestock industry. The department also implements a range of statutes pertaining to the livestock sector under the provisions of Animals Act, Animal Diseases Act and Animal Feeds Act. A total of 337 Divisional Veterinary Offices are scattered throughout the country to handle delivery services, which are managed by Veterinary Surgeons, under preview of PDAPH. Based on the policy decision taken by the government for expansion of veterinary service, divisional veterinary offices are currently being established at every divisional secretariat level to provide strong service delivery system at grass root level. Similarly, a policy initiative was taken in 2006 to expand veterinary investigation network by establishing a Veterinary Investigation Centre (VIC) at each district level. Twenty-five (25) VICs have been established at district level by end of 2018.

Objectives of the DAPH

1. To assure an efficient preventive and curative animal health service.
2. To promote optimal utilization of animal genetic resources.
3. To enhance utilization of quality animal feeds and feed resources.
4. To promote growth and development of the animal feed industry.
5. To conduct research and development towards a sustainable livestock industry.
6. To develop technically competent human resources.
7. To ensure efficient and effective information dissemination and technology transfer.
8. To formulate, monitor and evaluate livestock development projects and programs.
9. To assure safety of products of animal origin.
10. To promote and facilitate good animal husbandry practices.
11. To ensure welfare and wellbeing of animals.
12. To ensure efficient management of departmental activities.

The DAPH has eight (08) functional divisions; six (06) technical divisions and two (02) support service divisions. Sub-units of DAPH are mostly located peripherally, functioning under different divisions of the DAPH.

Animal Health Division

Main Responsibility: Surveillance, prevention and control of economically important and emerging animal diseases by implementing suitable control strategies and eradication programs.

Sub Units:
Veterinary Investigation Centers (VICs) located at:
Ampara, Anuradhapura, Badulla, Batticaloa, Chilaw, Matale, Galle, Jaffna, Hambantota, Homagama, Kalutara, Kegalle, Kundasale, Matara, Nuwara-Eliya, Pannala, Polonnaruwa, Ratnapura, Trincomalee, Vavuniya, Welisara, Wariyapola, Monaragala, Mankulam and Kilinochchi.

Animal Breeding Division

Main Responsibility: Development and improvement in livestock genetic and animal feed resources.

Sub Units:
Central Artificial Insemination Station – Kundasale.
Artificial Insemination Centre – Polonnaruwa.
Goat Breeding Stations –Imbulandanda and Thelahera.

Human Resource Development Division

Main Responsibility: Development of human resources through skills development and dissemination of information required for further growth of the livestock sector.

Sub Units:
Institute of Continuing Education for Animal Production and Health – Gannoruwa.
Sri Lanka School of Animal Husbandry– Kundasale and Seeppukulama.
Livestock Knowledge Centre, Gatambe.
Livestock Technology Park, Gannoruwa.

Veterinary Research Institute

Main Responsibility: Planning, designing and conducting research for improvement in livestock sector and provide, laboratory services biological products, and expertise to fulfill the needs of livestock industry.

Sub units:
Central Poultry Research Station – Karandagolla.
Animal Virus Laboratory – Polgolla.

Livestock Planning and Economics Division

Main Responsibility: Formulation of livestock development programs/ projects, submitting for funds and monitoring and evaluation of the progress of livestock development programs/ projects implemented by the central and provincial DAPH and other related agencies and maintaining the databases in livestock sector.

Veterinary Regulatory Affairs Division

Main Responsibility: Implementation of statutes pertaining to the livestock sector.

Sub units:
Animal Quarantine Stations (Colombo, Katunayake, Hambantota and Mattala)

Administration Division

Main Responsibility: Proper management of human resources and ensure smooth functioning of the Department

Finance Division

Main Responsibility: Efficient and effective management of funds allocated to the Department.

Members of the Directorate

Members of the Directorate in 2023 were as follows:

Dr. (Mrs.) K.A.C.H.A. Kothalawala - Director General (from 01.04.2021)
Dr. N. Jayaweera - Additional Director General/Animal Health (from 26.07.2021 to 2023.10.20)
Dr. (Mrs.) U.L.P. Mangalika - Additional Director General/ Livestock Development (from 26.07.2021 to 2023.03.29)
Dr. S. S. P. Silva – Additional Director General / Program Planning & International Affairs (from 26.07.2021 to 2023.09.03)
Mrs. Geetha Indrani - Additional Director General/ Administration (From 2019.05.27 to 2023.10.27)
Mrs R.A.D.T.N.Thennakoon - Additional Director General/Administration (From 2023.11.09)
Dr. P.G. Senevirathne – Director / Animal Breeding (from 25.11.2021 to 2023.11.24)
Dr. L.W.B. Epakanda - Director Animal Health (25.11.2021 – 2023.02.11)
Dr. (Mrs.) P.S. Fernando - Director /Livestock Planning and Economics
(From 25.11.2021)
Dr. (Mrs.) V.R.N. Munasinghe – Director / Veterinary Regulatory Affairs
(From 25.11.2021)
Dr. H. Kothalawala- Director / Veterinary Research (from 25.11.2021)
Dr. A. Liyanagamage – Director / Human Resource Development
(From 25.11.2021)
Mrs. V.P.K. Pilapitiya - Director/Administration (From 2014.04.10)
Mr. D.M. Ekanayake - Chief Accountant (From 2020.06.15 to 2023.09.29)
Mr. Lushantha Herath- Chief Accountant/cud (From 2023.03.30)

The Organization structure of the DAPH is shown in *Annexure I*.

2. LIVESTOCK SECTOR REVIEW

2.1. Dairy Sector

The dairy sector has been identified as the priority sector for development among other livestock sub sectors in the country. Cattle and buffalo population in the country in 2023 has been recorded as 1.57 million and 0.47 million respectively *(Source: LPE Division, DAPH) Domestic* milk production recorded as 370.32 million liters *(Source: LPE Division, DAPH).* It is an increase of 2.5% compared to the previous year.

Number of milk chilling centers in the year totaled up to 293. The amount of milk collected by 14 main milk processors in the formal milk market in the year amounted to 231.03 million liters, around 33.18%, 25.5% and 17.1% of milk collected in the country was from the Central province, North-Central province and the North-Western province respectively.

Average farm-gate price per liter of cow milk in 2023 was around Rs.152.03 and Rs.175.65 for buffalo milk. Average cost of production of one liter of milk in up country and mid country in 2023 was recorded as Rs. 80.92 under intensive management system. *(Source: LPE Division, DAPH)*

Form of powdered milk out of milk and milk products imported was 86.14% which had more than 1.5 % of fat.

Import of dairy products amounted to 71,180.20 MT in 2023 an increase of 32.3% over the corresponding figure of 53,797.85 MT in 2022 *(Source: Department of Customs).* Out of total dairy products imported into the country in 2023, full cream milk powder amounted to 61,320.87 MT which was a decrease of 63.92% when compared with 37,407.97MT in the year 2022. On the contrary, import of non-fat milk powder at 6219.16 MT in 2023 showed an increase of 48.68% from the 2022 import volume of 12,117.56 MT. Total import bill on dairy products reached Rs. 88.62 billion in the year 2023.

The average price including Cost, Insurance and Freight (CIF) prices (LKR) of imported dairy products in 202 and 2023 were as follows:

	2022 (Rs./MT)	**2023 (Rs./MT)**
Whole milk powder	1,288,339.74	1,251,602.06
Skim milk powder	1,263,028.06	1,173,642.06

(Source: Department of Customs)

International market prices of whole milk powder and skim milk powder were increased towards the end of the year. Comparison of prices in 2022 and 2023 are as follows:

International market prices of dairy products (2022 - 2023)

Product	Price USD/MT			
	2022 (Avg.)		2023 (Avg.)	
	Jan.	Dec.	Jan.	Dec.
Whole milk powder	4,856	4,469	4,123	4,088
Skim milk powder	3,894	3,150	2,988	2,894

(*Source:https://www.clal.it*)

Total availability of milk and milk products in the country had been 881.04 million liters of Liquid Milk Equivalent - LME (domestic production and imports) and the per-capita availability was recorded as 109.53 ml/day in year 2023 that accounted for 39.98 l/year.

2.2. Poultry Sector

Poultry industry was reviving from the economic setback during the year 2023. Still the inadequacy of feed raw materials and higher prices of raw materials were observed. Higher cost of production was noted as the result with a declining trend towards the latter part of the year.

2.2.1. Broiler Industry

Three (3) grandparent (GP) farms and 28 broiler parent farms were functioning during 2023. 46,121 grandparents DOC were imported by the GP farms. 1,159,834 parents DOC were produced by GP farms supplying 81% of the local parent bird requirement. The rest of the parent DOC requirement (282,891) was imported from New Zealand (41%), USA (24%), Malaysia (22%), and Australia (13%). Total procurement of parent birds reached 1,425,581. The imported strains were Cobb (43%), Ross (45%), and Indian River (12%). The local procurement consisted of Cobb (37%), Arbor Acres (24%), Indian River (22%) and Ross (17%).

Parent farms produced 166.78 Mn million broiler chicks recording 3% increment compared to 162.06 million broiler chick productions in 2022. Out of the total production of DOCs 166.45 (Mn) had been sold for broiler meat production. Chicken meat production increased by 4% resulting 236.11 ('000MT) in year 2023 compared to 228.53 ('000MT) in 2022.

Average price of a day-old broiler chick was reported as Rs. 216.00 in 2023 ranging from Rs. 156.00 in January to Rs. 274.00 in July. Average selling price of live broiler at Colombo market was recorded as Rs. 1,140.00 /kg with the lowest price of Rs. 992.00/kg in October & November to the maximum price of Rs. 1325.00/kg in July. Fresh chicken meat price at the Colombo market

ranged from Rs. 1112.00 in October to Rs. 1443.00 in July with an average value of Rs. 1260.00.

2.2.2. Layer Industry

Eleven (11) layer parent farms had been functioning during the year. Due to higher demand for commercial DOC, 116,935 layer parent birds were imported. Total layer DOC production was 7.29 Mn which was 38% increment compared to year 2022 (5.3 Mn). Out of the total production, 7.17 Mn chicks had been sold for egg production. As the commercial DOC production was not sufficient enough to cater the local demand in table egg production, 1.3 Mn commercial hatchable eggs were imported to hasten the recovery of the industry. 500.000 DOCs were produced out of imported eggs and distributed for table egg production. 168.52 Mn of table eggs were imported from India to supplement the market demand. This situation will lead to drastic reductions in table egg production in year 2023.

In 2023, layer parent birds were imported from Brazil (71%) and Netherland (29%). 64% of them were white strains while 36% consisted of brown egg laying strains. Bovans white (41%), Dekalb white (19%), Lohmann LSL lite (14%), Lohmann Brown (7%), Hyline White (5%), Hyline Brown (3%), H &N white (6%), H&N brown (3%), Lohmann White (1%) were the layer breeder strains imported.

Average pullet chick price was recorded as Rs. 481.82 and was ranging from Rs. 388.00 in January to 567.00 in July 2023. Average retail price of white and brown eggs at Colombo market was recorded as Rs. 46.00 and Rs. 49.00. White egg price ranged from 42.00 (November) to Rs. 56.00 (December). Brown egg price ranged from Rs. 45.00 (November) to Rs 59.00 (December). The egg production was decreased by 2.%, reaching 2047.05 Mn in 2023.

2.2.3. Poultry Feed Industry

The compounded feed production dropped by 6% during the year 2023 amounting to 1,227,856.5 MT. Ninety four percent (95%) of the total animal feed produced in the country is used for poultry industry. Fifty (50) registered poultry feed manufacturers were in operation during the year. The commercial poultry feed production in the country was estimated as 995,263.01 MT which is 19% Increase compared to 836,138 MT in year 2022. Total self-mixed poultry feed production has Decreased by 53% compared to previous year amounting 170,164 MT.

2.2.4. Poultry Processing Sector

Fifteen (15) processing establishments and thirteen (13) poultry further processing establishments registered under DAPH were in operation during the year 2023. Total value-added chicken meat products manufactured by further processing establishments amounted to 21,320.40 MT.

2.2.5. Exports

Export of chicken meat and meat products were recorded as 1,503 MT in

the year 2023, a 17% reduction compared to previous year volume of 1,805 MT. Bulk of the chicken meat and chicken meat products were exported to Maldives. Export of table eggs decreased by 27% reaching 14.13 million compared to corresponding figure of 17.91 million in 2022. A total of 0.08-million-day-old chicks and 21,600 hatching eggs were also exported during the year 2023 (Source: AQ Station, Colombo).

2.2.6. Imports

236.84 MT of poultry meat and meat products and 39 MT of liquid egg and Egg powder 20.87 MT were imported to the country during 2023 (Source: AQ Station, Colombo).

Key data pertaining to the industry in 2023 are given in Annexure II.

2.3. Swine Sector

Swine sector is one of the main livestock sub- sectors which placed next to the poultry and dairy sectors in Sri Lanka. Around five thousand farmers are engaged in swine farming as their main income generating activity.

It has been recorded that the pig population was 170,409 in the country and the estimated National pork production was 10.23 ('000) MT. The cost of production of pork recorded as Rs. 380.27 kg for live weight and 565.27 kg to dressed weight (Source: LPE Division, DAPH). Monthly average retail price of pork was recorded as Rs.1,626.99 per kg in the year 2023 ranging from Rs.1,520.06 kg (Minimum) in January to Rs. 1,697.18 kg (Maximum) in October (Source: HARTI).

However, local market price for curry pork was recorded as Rs. 1,700.00 kg. Total of 56.78 MT of pork and pork products have been imported into the country in 2023 and 20.25 MT of pork and pork products have been exported (Source: Department of Customs). Prices of piglings were recorded as Rs. 20,000.00 for naturally bred animals and Rs. 20,000.00 for piglings born by artificial insemination. (Source: NLDB).

2.4. Goat sector

Goat farming is concentrated mainly in dry and intermediate zones of the country where about 75% of goat population is distributed. Goat population in 2023 recorded as 750,987 *(Source: LPE Division, DAPH)* and number goat farms in the country recorded as 91,409 (Source: LPE Division, DAPH).

Average cost of production of mutton was Rs. 1,826.11 in year 2023. Average retail price of mutton in the country reported as Rs. 3,014.45/kg in the year 2023 ranging from Rs. 2,820.28/kg in January to Rs. 3,134.00/kg in November. (Source: HARTI).

A total of 279.07 MT of mutton had been imported into the country during the year 2023. (*Source: Department of Customs*).

3. ANIMAL HEALTH DIVISION

3.1. Introduction

The animal health division is one of the six technical divisions in the DAPH which is responsible for disease surveillance and control to ensure the animal health status to the development of the livestock industry in Sri Lanka.

The division provides technical guidance and services, to control, prevent and eradicate the existing diseases of the country, to prevent the entry of exotic diseases to the country and to prevent the occurrence of zoonotic diseases in the country. Further, the animal welfare and production to ensure the safety and security of animal originated foods has also become one of the main objectives of the Animal Health Division.

With the aim to provide above services to the country, the programs and project activities of the Animal Health Division are conducted via two main units, namely Veterinary Epidemiology Unit and Veterinary Public Health Unit. The field level implementation of them is done through the Veterinary Investigation Centers in each district of Sri Lanka.

3.2 Veterinary Epidemiology Unit

Veterinary Epidemiology Unit is mainly responsible for monitoring and maintenance of Animal Health status of Sri Lanka. All the activities of the unit are guided by the Chief Epidemiologist of the Department. Various projects, programs including surveillance are conducted under the Veterinary Epidemiology Unit along with animal disease information dissemination activities.

Island-wide passive animal disease surveillance is carried out by Veterinary Epidemiology Unit of Animal Health Division with the coordination of divisional government veterinary offices. Under this program, disease statuses of main livestock diseases of the country are monitored. This information is analyzed and feedbacks are sent to all central and provincial authorities to and respective field veterinary surgeons quarterly.

Providing technical recommendations for disease control, prevention, animal or animal originated products importation and exportation as well as veterinary regulatory activities are done by Veterinary Epidemiology Unit. These technical interventions are based on the observations of the continuous disease status monitoring programs through several active and passive surveillance activities which are conducted under this unit.

With the aim of disease control and prevention through immunization of susceptible livestock species in various disease endemic areas of the country is also a responsibility of the Animal Vaccination Program of the Veterinary Epidemiology unit.

Animal Health information dissemination is done by this unit mainly via Quarterly Veterinary Epidemiology Bulletin and Biannual reporting of animal disease status to the World Organization for Animal Health.

3.2.1 Animal Disease Situation

3.2.1.1 Bovine Diseases

a. Haemorrhagic Septicaemia (HS)

Haemorrhagic Septicaemia (HS) is an acute, fatal, septicaemic disease caused by the *Pasteurella multocida* of serotypes B: 2 and E: 2 of the Carter and Heddleston system, corresponding to 6: B and 6: E of Namioka-Carter system. It is a major disease of cattle (*Bos taurus* and *Bos indicus*) and water buffaloes (*Bubalus bubalis*) occurring as catastrophic epizootics in many Asian and African countries resulting in high morbidity and mortality.

The disease was first confirmed in Sri Lanka in 1,955 when it broke out in epidemic proportion killing thousands of buffaloes and cattle. Since then, it was named as the most killer disease in domestic large ruminants and outbreaks were encountered in large herds mainly in the dry zone and also in the wet intermediate zone.

During the year 2023, HS outbreaks were not reported from Sri Lanka

The key factors in prevention and control of the disease are correct and timely reporting, accurate and rapid diagnosis, and strategic use of high-quality vaccines. Vaccination is practiced using locally produced alum precipitated and oil adjuvant vaccines. During the year 2023, animals in risk areas were vaccinated against the disease. Though the disease was not reported.

b. Foot and Mouth Disease (FMD)

FMD is endemic in Sri Lanka and recognized as one of the most economically important diseases affecting livestock industry. The serotype "O", topotype ME-SA lineage Ind-2001 and sub lineage "d" of FMD virus has been identified as the only serotype circulating in the country.

Foot and Mouth Disease was reported from 14 veterinary ranges of Sri Lanka during January, February, March and October months of 2023. The total number of cases reported is 728 cases with 08 deaths as depicted in Table 3.1. The total number of cases recorded in the previous year (2022) was 3,169 with 164 deaths.

FMD epidemics in Sri Lanka always commenced during the north-east monsoon between December and February. This coincides with the seasonal movement of livestock returning to the villages as a part of extensive livestock management practice especially in dry zone.

Figure: 3.1. FMD outbreak at Anuradhapura

With the aim of reducing the production and economic losses via improving immunity against the disease in susceptible populations, has been the main control strategy of this disease in Sri Lanka. Instead of bi-annual mass vaccination, currently FMD vaccination program is implemented as vaccination of susceptible animals to manage or seize disease outbreaks.

Every Veterinary Surgeon should follow the Animal Act and Animal Disease Act at time of animal transportation activities. Hence, implementation of legislative measures pertaining to animal movement has a key role in controlling FMD.

Table 3.2: Spatial and temporal distribution of FMD in 2023

No	District	No of affected VS ranges	Number of		Months of occurrence
			Cases	Deaths	
1	Anuradhapura	3	91	0	January, June
2	Mullativu	1	11	0	March
3	Kandy	1	2	0	January
4	Ampara	4	235	0	January, February, March
5	Batticaloa	3	177	0	January, February, October
6	Monaragala	2	212	8	January
	Total	**14**	**728**	**08**	

c. Lumpy skin Disease (LSD)

Lumpy Skin Disease (LSD) is a viral disease of cattle and buffalo typically characterized by nodules or lumps on the skin. The main symptoms are visible lumpiness nodular lesions in the skin, fever, loss of appetite, discharge from the eyes and nostrils, rapid decline in milk production, abortions, mastitis and impaired fertility.

Figure 3.2: Lumpy Skin Disease in Jaffna

The disease was initially reported from the Kopay Veterinary range of Jaffna district in 2020. Gradually, it has been spread throughout the country upto the prevailing endemic level.

As the disease is a vector borne disease which is transmitted by blood suckling mosquitoes, ticks and flies the control and prevention of the disease is challenging. The disease can be transmitted rarely by direct contact with infected cows, semen of infected bull, calf through the mother's uterus and milk.

LSD was reported in 141 veterinary ranges in 24 districts during the year 2023. The total cases number was 10,295 with 216 deaths as depicted in Table 3.2.

Table 3.3: Spatial and temporal distribution of LSD in 2023

No	District	No of affected VS ranges	Number of		Months of occurrence
			Cases	Deaths	
1	Anuradhapura	8	874	0	January , February, May, June,
2	Polonnaruwa	3	270	10	May, June,
3	Kurunegala	21	2,731	27	March, May, June, November
4	Puththalam	7	768	3	February,March,,Aprl, May
5	Gampaha	3	20	0	January, March,May
6	Kalutara	3	59	0	May June
7	Jaffna	7	160	13	January, Feb, March
8	Mullativu	5	154	2	February, March
9	Mannar	2	64	0	March
10	Vavuniya	4	511	3	March
11	Kilinochchi	2	465	48	January, March
12	Kandy	5	74	2	February ,June, July
13	Mathale	1	122	2	April
14	Nuwara Eliya	4	189	15	October, November, December
15	Ampara	11	769	23	March, May , June, July
16	Batticaloa	09	889	15	March, May, June, October
17	Trincomalee	08	343	17	May
18	Kegalle	03	33	2	May, June
19	Rathnapura	6	149	0	May, June, September, October
20	Badulla	11	506	26	May, June, July, August, October
21	Monaragala	10	1017	8	February, May, June, July
22	Hambantota	2	5	0	September, October
23	Matara	3	23	0	September, October
24	Galle	3	100	0	June, August
	Total	**141**	**10,295**	**216**	

d. Bovine Brucellosis

Bovine Brucellosis is an economically important disease of cattle and buffaloes which adversely affects their reproduction. It is also zoonotic in nature. Brucellosis has been prevalent in Sri Lanka for several decades and it was introduced to the country from India. Its prevalence varies considerably between herds, areas and countries.

The disease is endemic in certain parts of Eastern, Northern and North-Central provinces.

A Total of 246 cases with 4 deaths were reported during 2023 in Sri Lanka due to Bovine Brucellosis. In order to prevent the disease, a total of 3,666 numbers of susceptible animals were vaccinated with S19 vaccine during the last year.

e. Bovine Babesiosis

Five thousand one hundred ninety-six (5,196) cases of Bovine Babesiosis with 125 deaths were reported island wide during the year 2023. According to the data received from VS offices via monthly master returns, the majority of cases in neat cattle were reported from Kurunegala district of North Western province and Badulla district of Uva province.

An overall case-fatality rate of 2.4% was reported in the cattle population of Sri Lanka. When considering the disease occurrence of Sri Lanka, disease was reported from all nine provinces of the country throughout all four quarters of the year 2023.

f. Bovine Tuberculosis (TB)

A total of 38 cases without death were reported in the country due to Bovine Tuberculosis during the year 2023.

In the year 2023, 498 animals were screened for TB by Veterinary Investigation Centers. Comparative Intradermal Tuberculin Test was used to detect positive animals. The causative organism Mycobacterium bovis can cause disease in cattle and other domestic animals and wild animals as well.

Control program of Bovine Tuberculosis has been implemented at national level in Sri Lanka along with the surveillance program.

3.2.1.2. Swine Diseases.

a. Porcine Reproductive and Respiratory Syndrome (PRRS)

The disease is reported from a few districts of Sri Lanka during the year 2023. Though it is not a common disease in Sri Lanka. Due to the significant effect of the disease in reproduction of breeders, it has become one of the highly concerning diseases in the Swine industry of Sri Lanka.

During the year 2023, totally 434 number of cases were reported with 138 deaths. Majority of the cases were reported from North Western and Western provinces where have higher swine populations comparatively.

Disease investigations were carried out by the District Veterinary Investigation Officers and the disease was confirmed by the Veterinary Research Institute. It was revealed the feeding of untreated swill, introduction of new animals without proper quarantine procedures and poor/minimum biosecurity practices in swine farms are the main sources for disease introduction to those swine farms.

b. Foot and Mouth Disease (FMD)

Foot and Mouth Disease infected swine cases were not in Sri Lanka during the year 2023. According to the epidemiological data of the disease in the past few years, major causes for the infection in swine farms is introduction of new animals without proper quarantine procedures and illegal transportation of animals from infected zones..

3.2.1.3. Poultry Diseases

Poultry industry in Sri Lanka has expanded greatly in past years although it has to face so many challenges recently. Sri Lanka exports day old chicken, hatching eggs, Commercial eggs, chicken meat and processed meat. Now the DAPH is in a process to expand the exportation of poultry and poultry products through poultry health improvement and improving the food safety in poultry products.

Coccidiosis was the major poultry disease reported by field veterinary surgeons, in this year with a total of 133,727 cases and 5,374 deaths. Majority of cases were reported from North Western Province, Northern Province, Uva Province, Southern Province, Eastern Province and North Central Province.

Colibacillosis (79,065 cases with 1,555 deaths), Infectious Coryza (51,465 cases and 2,358 deaths), Fowl Pox (43,380 cases and 986 deaths), Newcastle disease (25,364 cases and 3,150 deaths) were the other major diseases reported during the year 2023.

a. Newcastle Disease (ND)

Newcastle disease is an economically important poultry disease in Sri Lanka. It is endemic in the country and outbreaks have been reported from all provinces during the year under review, as illustrated in Table 3.4. Major outbreaks have been reported from Eastern, North western and Northern Provinces.

Table 3.4: Distribution of Newcastle disease 2023

Province	Cases	Deaths
Central Province	655	104
Eastern Province	10,474	1,778
North central Province	372	160
Northern Province	4,706	465
North Western Province	6,599	412
Sabaragamuwa Province	552	14
Southern Province	1,260	146
Uva Province	432	26
Western Province	314	45
Total	**25,364**	**3,150**

b. Infectious Bursal Disease (IBD)

Total number of IBD cases reported is gradually reduced annually. Total of 12,372 cases with 482 deaths were reported in the year 2023 as summarized in Table 3.5. Major outbreaks have been reported from North Western, Uva, Eastern, Western and Northern provinces.

c. Infectious Bronchitis (IB)

Total 12,555 cases with 397 deaths of IB have been reported from all provinces as depicted in Table 3.6. Major outbreaks have been reported from Eastern province.

Table 3.5: Distribution of Infectious Bursal Disease – 2023

Province	Cases	Deaths
Central Province	12	14
Eastern Province	1,394	82
North central Province	25	6
Northern Province	948	160
North Western Province	4,710	84
Sabaragamuwa Province	517	18
Southern Province	337	54
Uva Province	3,120	22
Western Province	1,309	42
Total	**12,372**	**482**

Table 3.6: Distribution of Infectious Bronchitis – 2023

Province	Cases	Deaths
Central Province	1,326	13
Eastern Province	6,284	112
North central Province	129	4
Northern Province	1,690	60
North Western Province	1,083	69
Sabaragamuwa Province	226	0
Southern Province	1,753	9
Uva Province	55	3
Western Province	500	18
Total	**13,046**	**288**

3.2.2. Disease control and vaccination programs

Preventive vaccination programs have been carried out against economically important major livestock diseases such as Foot and Mouth Disease (FMD), Haemorrhagic Septicaemia (HS), Black Quarter (BQ), Newcastle disease (ND) and Bovine Brucellosis (S19 vaccine) according to the different vaccination strategies based on the disease prevalence, vaccination cost and economic impact of the disease.

BQ vaccine is mainly used based on the risk to disease occurrence and the animals in risk areas vaccinated annually against the disease. HS vaccine is two types: HS oil vaccine is used to vaccinate the animals in risk areas as a preventive measure and HS alum adjuvant vaccine is for use as an emergency pre requisite to be used in outbreaks. Foot and mouth disease vaccine (mono-valent, type 'O') is only to control the outbreaks as a control measure. S19

vaccine against Bovine Brucellosis is done only for the non-pregnant heifer calves in infected herds based on the results of surveillance programs.

3.2.2.1. Vaccination of Livestock

In order to control diseases like HS, BQ, FMD, ND and Brucellosis vaccines have been distributed and vaccinated the livestock in Sri Lanka. Spatial distribution of each vaccination is illustrated in the Table: 3.6 and 3.7

Table 3.6: Spatial distribution of FMD, BQ and HS vaccination during 2023.

Province	Number of Vaccine doses			
	FMD	BQ	HS (Oil)	HS (Alum)
Western	-	_	_	_
Central	2,280	_	_	1,452
Southern	10,080			
NCP	59,220	17,094	42,834	3,168
NWP		46,629		
Northern	1,500	50,259		
Eastern	63,420	27,522	97,368	56,110
Uva	10,200			
Sabaragamuwa				
NLDB and Other	21,240	1,221	1,518	
Total	**167,940**	**142,725**	**141,720**	**60,730**

Vaccination is the tool used in strategic control of Newcastle Disease in the country. Locally produced vaccine is freely distributed among backyard and small scale poultry farmers in the country. Total of 6.2 million doses of vaccine have been distributed among all provinces and 4 million birds have been vaccinated as illustrated in Table 3.8.

Table 3.7: Issuing of vaccines to the field in 2023

Province	Number of Vaccine doses			
	FMD	BQ	HS (Oil)	HS (Alum)
Western	10,200	_	_	_
Central	29,060	_	_	_
Southern	13,860	_	_	_
NCP	43,800	23,661	76,956	9,966
NWP	33,000	48,411	_	_
Northern	20,940	79,035	18,282	_
Eastern	65,800	30,195	212,784	39,864
Uva	5,160	_	_	_+
Sabaragamuwa	3,360	_	_	_
NLDB and Other	18,500	4,620	1,782	_
Total	**243,680**	**185,922**	**309,804**	**49,830**

Table 3.8: Spatial distribution of Newcastle disease vaccination using locally produced vaccine

Province	No. of Vaccinations
Central	4,790
Eastern	1,846,983
North Central	99,410
Northern	1,557,663
North Western	76,404
Sabaragamuwa	32,646
Southern	2,800
Uva	5,900
Western	408,289
Total	**4,034,885**

3.2.3. Projects and Programs

3.2.3.1. Livestock Health Improvement Project

This special project was initiated in 2007 and implemented in selected dairy farms in each district. Further their disease status is closely monitored and assistance to improve the animal health is provided through VIOs regularly with the aim to minimize the incidence of Mastitis and improve dairy health.

Under this project during 2023, 13744 milking cows have been subjected to California Mastitis Test (CMT) for early detection of sub clinical mastitis. Moreover, 4209 liters of teat dip solution and 960 liters of CMT Reagents were prepared at VICs and distributed among the famers and relevant divisional veterinary surgeons in order to improve the hygienic practices in these farms. Samples that have shown high positive reactions to CMT have been further tested to identify the causative organisms. Furthermore, isolated microorganisms are tested for Antimicrobial Susceptibility Test (ABST) to identify the most appropriate antibiotic for the treatments. Based on the results of the laboratory tests, Intramammary Infusions are prepared and distributed to control the Mastitis incidence in these dairy animals. According to that, 11255 lactating cow udder infusion vials and 3733 dry cow udder infusion vials were issued by the VICs in 2023.

3.2.3.2. Project Export Facilitation of Chicken Meat and Eggs through Poultry Health Management

Sri Lanka exports chicken meat, eggs, day old chicks and hatching eggs and contributed considerably to the gross domestic production from the agricultural sector. The project has been conducted from the year 2014 to facilitate the exportation of chicken meat and eggs through poultry health management. The project is focusing on control and prevention of poultry diseases including Avian Influenza, Salmonella and Newcastle diseases and other economically important poultry diseases, depending on the availability of financial allocations. Highly Pathogenic Avian

Influenza has not been reported from Sri Lanka and there is a risk of entry of disease into the country by the way of migratory birds, smuggling of live poultry, infections carried by international passages and importation of live poultry and poultry products. Therefore the early warning system against HPAI has been strengthened with the project. Continuous surveillance program for Avian Influenza is conducted by the department including clinical disease surveillance, sero surveillance and epidemiological surveillance. Sero surveillance is designed to detect the presence of antibodies against Avian Influenza in commercial layers and total of 6116 samples have been tested during the year 2023 and samples were tested with Enzyme Linked Immuno – Sorbant Assay (ELISA) at Animal Virus Laboratory of Veterinary Research Institute. All the samples were negative for Notifiable Avian Influenza (NAI). Epidemiological surveillance is conducted in high risk populations for Avian influenza. Fresh dropping samples of migratory birds, cloacal swabs of backyard poultry in the vicinity of migratory birds, serum samples and cloacal swabs of ducks, cage swab samples from live bird market and cloacal swabs from poultry processing establishments and pet bird breeding establishments are collected under the epidemiological surveillance. Total of 25119 fresh dropping and cloacal swab samples have been tested with embryonated chicken egg passage at Animal Virus Laboratory of Veterinary Research Institute, during the year under review and all the samples were negative for pathogenic Avian Influenza.

Salmonellosis is an economically important poultry disease due to its zoonotic potential, production losses and vertical transmission. Salmonella monitoring program is conducted in all registered breeder farms. There were 40 poultry breeder farms registered in DAPH in the year 2023. Total of 88 breeder farm visits and 107 hatchery visits were done by Veterinary Investigation Centers during the year and a total of 8,863 hatchery samples were collected. Three hatcheries were positive for motile Salmonella.

3.2.3.3. Upgrading of Regional (District) Veterinary Laboratories- Kurunegala, Puttalam and Gampaha Districts

But as the lack of human resources especially with technical skills became an issue for the targeted diagnostic activities, the flow of the project was directed towards bi annual inspection of export oriented ornamental fish farms from 2023. Under that focus, 68 locations of export oriented marine and freshwater ornamental fish farms were targeted to inspect during 2023, by two teams of Central Department of Animal Production and Health along with the relevant Veterinary Investigation Officers. During that inspection visits biosecurity practices were observed and recommendations were given to improve if any defective measures were observed. Further fish and water samples collected in order to check parasites of fish, viruses of fresh water fish – spring viremia, koi herpes virus and in marine water fish – Viral nervous necrosis, Red Sea bream

Poultry, shrimp and ornamental fish industries in Sri Lanka have shown a phenomenal growth over the recent past especially towards the export market. Considering the concentrated locations of poultry (Breeder & commercial farms) and shrimp in the North Western Province and ornamental fish farms in Western provinces; Wariyapola, Chilaw and Welisara VICs have developed to cater the demand of these industries under this project since 2018.

Figure 3.3: Marine fish aquarium in Colombo

Iridovirus, in addition to the samples collected for the detection of Salmonella and Vibrio in packing water that required for the bi annual health certification based on the health requirements of the importing country. For the Australian shipments, additional sample collection was performed for the detection of Megalocytivirus by the Australian Government. Under that 36 export oriented ornamental fish locations were inspected during 2023 and required sampling was done. Based on the results of the samples, bio security recommendations were submitted that were required for the registration process of those farms. Capacity building of VIOs in the districts in which export oriented fish farms were located were done both in the form of awareness and practical experiences were given by joining with inspection teams.

Figure 3.4: Freshwater fish aquarium in Kalutara.

3.2.3.4. The project "Mitigation of Disease Risks to Livestock and Humans through Targeted Wildlife Disease Surveillance"

The health of wildlife is strongly bound with the health of other animals including livestock, the environment and even humans. By protecting wildlife health, we assure the safety of biodiversity- and invest in a healthier, more sustainable future. This multidisciplinary project was initiated as a measure to minimize such disease risks and for the early detection and management of adverse impacts of these diseases on human and livestock health.

Under this project nine Veterinary Investigation Centers (Homagama, Rathnapura, Kundasale, Ampara, Hambanthota, Anuradhapura, Polonnaruwa, Maankulam and Dambulla) were identified and facilitated to perform Wildlife Disease Surveillance program. It is conducted and coordinated by the Animal Health Division of DAPH with the collaboration of Department of Wildlife

and Department of National Zoological Gardens.

Preliminary disease investigation activities are conducted by the Veterinary Investigation Officers of VICs with the aid of laboratory diagnostics. Further laboratory investigations and confirmatory diagnosis were done via Veterinary Research Institute.

In order to build capacities in human resources, training needs of staff were identified with the goal of improving the knowledge and skills of the people who are actively engaged in surveillance program. Selected VICs were supplied with consumable and inventory items to facilitate those regional laboratories more in disease diagnosing aspect. Fresh fecal samples were collected from migratory and resident wild birds at national parks for HPAI and ND surveillance.

Figure 3.5: Post-mortem training in Ampara Wildlife Center

During the year 2023, seventy-four (74) wild and zoo animal post mortems of wild and zoo animals were performed. Further 43 laboratory diagnostic tests via VICs and 26 laboratory tests via VRI were conducted for disease diagnosis purposes. Strengthening and capacity building of resources were done via conducting four training programs and infrastructure improvement of VICs.

3.3. Veterinary Public Health Unit.

Veterinary Public Health (VPH) Unit of Animal Health Division is mainly responsible for the control of zoonotic diseases which may affect human health and for the safety of food of animal origin which is produced in the country for human consumption. All the activities which are conducted by the VPH unit are led by the Veterinary Public Health Specialist of the Department under main three objectives as below.

With the aim of controlling zoonotic diseases of the country, several surveillance programs are conducted by VPH unit, to Bovine tuberculosis, Bovine brucellosis and in poultry especially Salmonellosis and High Pathogenicity Avian Influenza. Disease status of the aforementioned zoonoses in Sri Lanka under continuous monitoring through active and passive surveillance programs which are implemented through the network of Veterinary Investigation Centers. Private and State-owned livestock farms, Livestock markets, Poultry hatcheries, Dairy milk collecting centers are the places which are routinely subjected for monitoring and/or sampling, disease screening and further laboratory investigations under these surveillance programs.

Food safety related activities of the VPH unit are mainly focused on the microbiological quality of food of animal origin which is produced in Sri Lanka for local and international markets. The monitoring of meat processing establishments is to ensure the free status

and acceptable microbial counts of food pathogens and environmental compartment in contact with product/s. It facilitates the establishment of a high quality food production chain in the country. Current protocols on food safety assurance are being extended to cover chemical residues like antimicrobials and other chemicals like heavy metals, pesticides.

The continuous collaborative activities and information sharing programs of the VPH unit with the Ministry of Health provides a more broadened approach in different aspects of Public Health which helps to maintain effective consistency of the Veterinary Public Health sector in Sri Lanka.

3.3.1 Bovine Brucellosis Control Program

Brucellosis Control Program is consistent with active surveillance, passive surveillance, a pilot project and disease control activities. The program is aimed to minimize the Brucellosis prevalence in Sri Lanka. Brucellosis pilot project is a continuously expanding program which is currently implemented only in three provinces of the country. All the milk collecting centers of these high disease prevalence provinces are tested annually to detect Brucellosis in raw milk and identify the disease infected farms indirectly. Active and passive surveillances have been implemented in the whole country. Milk samples collection from randomly selected milk collecting centers and laboratory tests to identify infected farms are done under active surveillance.

Based on the passive surveillance is conducted. Field and laboratory diagnostic tests in VICs and confirmatory tests in VRI are performed to detect infected herds accurately. Non-pregnant heifer calves in identified infected herds are vaccinated for S19 vaccine continuously to prevent the vertical disease transmission.

Continuous farmer awareness on prevention of horizontal transmission of the disease is also done under this program.

In 2023, 818 milk collecting centers were screened for brucellosis by milk ring test (MRT) and 522 samples were tested positive. Serum samples from 1179 animals in 285 farms were collected and 8% of them were serologically confirmed as positive for brucellosis. Three thousand six hundred sixty-six (3666) animals in infected farms were vaccinated against the disease during this year.

3.3.2. Bovine Tuberculosis (bTB) Control Program

With the aim of reducing the bTB prevalence in Sri Lanka, bTB control program has been started and implemented island wide. This program is consistent with active and passive surveillance programs and disease control activities. Active surveillance has been implemented in selected government and semi-government farms. Animals of these farms are subjected to annual field screening tests and identification of

reactors. Passive surveillance is based on reporting suspected clinical cases. In order to reduce the bTB infected cattle population in the country, necessary recommendations to eliminate the infected animals are given under this control program.

In the year 2023, two hundred eighty-one (281) animals in five farms were screened for bTB with Tuberculin test (PPD test). Out of the fifty-two (52) of them were confirmed as presence of bTB.

3.3.3. Rabies Control Activities

Rabies is a vaccine preventable fatal viral infection for mammals. As a main preventive measure of the disease in humans and susceptible animals, vaccination is practiced in Sri Lanka. Control of Rabies in livestock and its risk to humans is concerned by the Animal Health Division of DAPH. With the aim of facilitating Rabies diagnosis, a training program on 'Brain sample collection technique from Rabid suspected canine carcass' was conducted in 2023 with the participation of Veterinary Investigation Officers in selected VICs with the collaboration of Wildlife Disease Surveillance Program.

3.3.4. Antimicrobial Resistance National Strategic Plan (AMR-NSP)

AMR-NSP is a collaborative activity with the Ministry of Health which helps to widen the approach towards Veterinary Public Health in different aspects. During the year 2023, the contribution of the Veterinary Public Health Unit was provided to finalize the 2023 to 2028 five year AMR-NSP as well as to review the progress of 2017 to 2022 AMR –NSP in Sri Lanka.

3.4. Veterinary investigation Centers

Animal Health Division has 24 peripheral units namely Veterinary Investigation Centers (VIC) which are established at each district of Sri Lanka to facilitate livestock industry mainly by disease investigations and laboratory diagnosis of animal diseases.

Further they play a major role in implementation of field level activities which are planned by the Veterinary Epidemiology Unit and Veterinary Public Health Unit.

This laboratory network is strengthened with most of the basic laboratory diagnostic facilities for bacteriological, parasitological tests to diagnose the common livestock diseases present in Sri Lanka. Further they are actively engaged in implementation of disease surveillance activities as well as disease control and preventive activities via routine testing, monitoring, vaccination of animals and providing technical recommendations to livestock farmers.

There are three upgraded Veterinary Investigation Centers which are designed to provide special services in addition to basic laboratory services.

They are,

- Wariyapola VIC is strengthened with poultry disease diagnostic facilities by PCR and ELISA technique.
- Welisara VIC is strengthened to perform water quality tests, fish and

poultry disease diagnostic tests with PCR technology and ELISA technique.

- Chilaw VIC is also strengthened to perform poultry and shrimp disease diagnosis activities using PCR technology and ELISA techniques.

In addition, 9 VICs namely, Anuradhapura, Pollonnaruwa, Ampara, Homagama, Rathnapura, Hambanthota, Kundasale, Maankulum, and Dambulla have been improved to conduct wildlife disease surveillance activities.

Veterinary Investigation Centers played the leading role in immunization of cattle against Bovine Brucellosis, Contagious Pustular Dermatitis vaccination in goats, Mastitis control programme in cattle, Salmonella control programme in poultry breeder farms, Avian Influenza surveillance programme at national level and Bi-annual surveillance program in Ornamental Fish farms of Sri Lanka. Detailed information on activities performed at Veterinary Investigation Centers during the year 2023 is indicated in Annexure III.

4. ANIMAL BREEDING DIVISION

4.1. Introduction

The Animal Breeding Division plays a crucial role in the national livestock sector by focusing on genetic improvement through the implementation of advanced breeding techniques and logistical support.

The division operates Kundasale and Polonnaruwa Artificial Insemination Centers to produce deep frozen semen for the AI of cattle, buffalo, and goats. This process ensures the availability of high-quality genetic material for breeding purposes. In addition to the production of semen at the centers, the division facilitates field AI programs by supplying semen with specific genetic merits imported from external sources. This initiative aims to diversify and improve the genetic pool of livestock in the country. Thereby Increases availability of high-quality genetic material for national artificial insemination programs. Provinces have the option to request local, imported or sexed semen as per their requirements. This service enables provinces to selectively breed livestock based on desired traits, contributing to the overall genetic improvement of the national livestock population. The national AI program is closely monitored and centrally assessed by the division to ensure its effectiveness and impact on livestock genetics. Regular evaluations help in identifying areas for improvement and optimizing the breeding strategies implemented by the division.

In addition, nutritionally balanced feeding and feed resource utilization for crossbred cattle and buffaloes in provincial level are promoted through supply and facilitation of high yielding planting materials.

Two goat breeding farms located at Thelahera and Imbulandanda maintain nucleus herds of Jamunapari and Boer goats respectively and generally issue stud goats for breeding purposes.

Main functions of the division

- Conservation and sustainable utilization of livestock genetic resources.
- Improving the genetic make-up through the use of animal reproductive technologies.
- Enhancing the available feed resource base through the introduction of fodder resources.
- Development of skilled human resources in order to strengthen the animal breeding services.

4.2. Special livestock development projects implemented during the year 2023

4.2.1. Livestock Breeding Project (LBP)

Livestock breeding project encompasses facilitate national AI service and natural service, procurement of germplasm, monitor changes in population trends of Animal Genetic Resources (AnGR), upgrading livestock and enhance feed resources production and utilization.

a. Production of semen

Table 4.1: No. of semen doses produced in 2023

Species/Breed	AI Center	
	Kundasale	Polonnaruwa
Jersey	61,268	-
Friesian	19,145	-
Sahiwal Cross	11,319	17,076
Sahiwal	6,423	-
Murrah	9,775	8,878
Girolanda Cross	3,987	-
Boer	4,705	-
Jamunapari	5,241	-
Saanan	61,268	130
Total	**121,863**	**26,084**

b. Importation of semen

Table 4.2: No. of semen doses imported in 2023

Breed	GOSL	GOSL (NCP)	Through JICA Project	Through MOD Project	Total
Friesian with slick gene				1,000	1,000
Girolanda			5000 (4500 doses for Northern Province project and 500 doses for NAI program		5,000
Jersey conventional	2,000			2,566	4,566
Jersey Sexed				3,438	3,438
Murrah		150			150
Niliraavi	1,000				1,000
Sahiwal	7,000	3,350	9999 (8999 doses for Northern province program and 1000 for NAI program)		20,349
Total number of semen imported					**35,503**

c. Distribution of semen

Table 4.3: Breed-wise distribution of semen –2023

Species	Breed	Locally Produced	Imported	Total
Cattle	Jersey	100,146	2,015	102,161
	Jersey (sexed)	-	1,235	1,235
	Friesian	35,574	10	35,584
	Friesian (sexed)	-	129	129
	Sahiwal	292	2,891	3,183
	AFS	5,950	-	5,950
	Giro lando Cross	36,163	1,515	37,678
	Sahiwal Cross	52,571	-	52,571
	Gir	-	430	430
Buffalo	Murrah	4,036	160	4,196
Goat	Jamunapari	4,795	20	4,815
	Saanan	2,365	140	2,505
	Boer	286	-	286
Total				**250,723**

d. Artificial insemination service

Artificial Insemination (AI) is the proven and efficient reproduction technique widely practiced in the island. Mainly cattle and less frequently buffaloes and goats are inseminated by the trained field staff of both state and private technicians. The role of the Animal Breeding division is to facilitate and monitor the program. Good quality semen is produced at Artificial Insemination Centers located at Kundasale and Polonnaruwa and distributed to the Veterinary Offices together with the liquid nitrogen which is required to maintain the keeping quality.

Table 4.4: Targets, performance and achievement of AI– 2023 (Cattle, Buffaloes and Goat)

Province	Target	Performance	Achievement (%)
Western	20,412	15,656	77%
Central	54,226	49,418	91%
Southern	14,697	9,444	64%
Northern	37,667	23,888	63%
Eastern	14,469	9,395	65%
North Western	57,308	46,007	80%
North Central	37,890	25,009	66%
Uva	24,972	21,256	85%
Sabaragamuwa	7,514	5,513	73%
Island Total	**269,155**	**205,586**	**76%**

e. Pregnancy Diagnosis (PD)

Pregnancy Diagnosis (PD) is performed by the range Veterinary Surgeons (VS), usually two months after insemination, manually by per rectal examination to confirm the pregnancy. National achievement in PD during 2023 was 74,519 (59%)

Table 4.5: Province-wise target, performance and achievement of PD- 2023

Province	Target	Performance	Achievement (%)
Western	11,053	6,907	62%
Central	29,223	13,495	46%
Southern	9,150	5,800	63%
Northern	12,019	5,048	42%
Eastern	8,873	4,485	51%
North Western	37,565	15,122	40%
North Central	8,180	4,370	53%
Uva	12,114	8,520	70%
Sabaragamuwa	4,457	2,032	46%
Total	**132,634**	**65,779**	**50%**

f. Calving

Calving resulted due to AI is usually reported by the field staff through the respective Veterinary Surgeons. Reported national such number of calving was 64,064 (64%).

Table 4.6: Province wise target, performance and achievement of calving – 2023

Province	Target	Performance	Achievement (%)
Western	5,152	6,079	118%
Central	18,076	16,349	90%
Southern	3,876	3,951	102%
Northern	10,400	4,189	40%
Eastern	6,155	2,975	48%
North Western	33,853	16,743	49%
North Central	10,685	5,346	50%
Uva	8,421	6,908	82%
Sabaragamuwa	3,354	1,524	45%
Total	**99,972**	**64,064**	**64%**

g. AI Training

Fresh training and refresher training are conducted by the DAPH to train and refresh both state and private AI technicians as per the requests made by the range Veterinary Surgeons. All the competent AI technicians are registered and code numbers are issued for easy monitoring purpose.

Table 4.7: Training on AI for field staff and students 2023

Technician Category	No of Trained
Livestock Development Instructors	41
Private Technicians	19
Total	60

h. Infertility investigations

Infertility cases are attended on request basis and required reproductive hormones are supplied to the provinces.

Table 4.8: Reproductive hormones issues to the provinces

Province	PGF2∝ (deses)	GnRH (doses)	Cumate	PMSG (doses)
Western	200	100	50	50
Central	250	125	50	50
Southern	200	100	50	50
Northern	200	100	50	50
Eastern	200	100	50	50
North Western	250	125	50	50
North Central	225	100	50	50
Uva	225	100	50	50
Sabaragamuwa	200	100	50	50
Total	**1950**	**950**	**450**	**450**

i. Pasture development

• Three acres (03) of Hybrid Napier cultivation was established at Central Insemination Centre Kundasale, to fulfill the year-round roughage requirement of semen donor bulls.

• Demonstration plots of high-yielding improved forage varieties were cultivated intercropping with coconut, nurseries at Coconut Cultivation Board (CCB)

• Consignment of Stylosanthes guianensis cv. guianensis legume seeds were imported from Thailand, under FAO project on "Improving smallholder dairy production through the introduction of quality forage varieties" and three experimental nurseries were established in the Wet zone (Gannoruwa), Intermediate Zone (Thelehera) & Dry Zone (Polonnaruwa) to observe there agronomic performances before introducing them to farmers.

j. Goat development

The Division of Animal Breeding operates two nucleus Goat Breeding centers, focusing on the high genetic merits of Jamunapari and Boer goat breeds. The primary objectives of these centers are to supply breedable goats to local goat farms for breeding purposes and to produce semen donor stud goats for the Central Artificial Insemination Centre in Kundasale.

64 Jamunapari goats, consisting of 19 males and 45 females, were issued from the Thelahera Goat Breeding Center in 2023.

k. Pedigree and Performance Recording Scheme (PPRS) - Sri Lanka

The Pedigree and Performance Recording Scheme (PPRS) in Sri Lanka aims to enhance the productivity of locally adapted dairy animals through strategic selection and breeding. The scheme focuses on improving the genetic merit of dairy cows to meet the growing domestic milk demand by leveraging both local and superior imported genetic resources.

By focusing on pedigree selection, the project will be able to evaluate and select semen donor bulls based on the productive and reproductive performance of their parents and grandparents. This strategic approach ensures the continuous improvement of the herd's genetic quality.

Primary objectives of this sub-project are:

I. Genetic Evaluation: Determine the genetic merit of cows to identify top performers in milk production.
II. Selective Breeding: Use superior imported semen to inseminate the best-ranked cows, enhancing the genetic potential of the next generation.
III. Bull Development: Produce bulls with high genetic potential to influence herd productivity positively.
IV. Pedigree Selection: Evaluate and select semen donor bulls based on the performance of their ancestors.

The PPRS initiative commenced with the registration of herds and the identification of breedable female animals.

- Registered Herds: A total of 55 herds were registered under the PPRS with 31 in the North Western Province and 24 in the North Central Province.
- 175 female animals suitable for breeding were identified, with 110 in the North Central Province and 65 in the North Western Province.
- 4 Awareness Programs were conducted engaging a total of 97 participants and aimed to enhance the understanding and capabilities of farmers and officers in managing genetic resources and improving dairy productivity. Additionally these programs have equipped farmers and officers with the knowledge and skills necessary to effectively participate in the PPRS. These sessions included:
    - ✓ Provincial Directors
    - ✓ Veterinary Surgeons
    - ✓ Veterinary Investigation Officers
    - ✓ Livestock Development Officers
    - ✓ Farmers
- Data Collection and Performance Recording - Pedigree and performance data were systematically collected to track and analyze the productivity and genetic merit of the registered animals. 614 milk yield records and corresponding fat and protein yield

and reproduction information were collected to guide breeding

- Monthly performance reports were compiled and disseminated to farmers. These reports helped farmers understand their herd's performance in comparison to regional and district standards A total of 143 monthly recording reports provided valuable insights into:

  - ✓ Herd Averages
  - ✓ Regional Averages
  - ✓ District Averages for daily milk yield, fat yield, and protein yield.

Looking ahead, the PPRS aims to expand its reach and impact by:

i. Increasing Herd Registration: Encouraging more herds to participate in the scheme.
ii. Enhancing Data Collection: Improving the accuracy and frequency of performance recordings.
iii. Strengthening Breeding Strategies: Continuously refining selection criteria to produce animals with the highest genetic merit.
iv. Expanding Awareness Programs: Broadening the scope of training and support to include more veterinary ranges and farmers

.

4.2.2. Heifer Calf Rearing (HCR) project

Overall outcome of the project is to optimum utilization of AI born heifer calves to raise them as dairy throughout their lifetime. It is an island-wide project and both cash incentives and calf starter feed are provided to the farm owners of such registered heifers for encouraging them to ensure proper feeding and care for the heifers.

Table 4.9: Physical achievements of Heifer Calf Rearing project – 2023

Payment of incentives		**Unit**	**Target**	**Achievement**
Farmer incentives	No. registered	No. of calves	4,900	4,937
	2nd Installment	No. of payments	1,150	478
	3rd installment		1,150	232
	4th installment		550	189
Random monitoring of registered calves			150	32

5. VETERINARY RESEARCH INSTITTUE

5.1. Introduction

Veterinary Research Institute (VRI) is the research arm of the DAPH and is involved in veterinary research, diagnostic and analytical testing, providing expertise for national and regional committees, regulatory and statutory functions, teaching and technology transfer activities in the livestock sector.

In view of improving animal health and livestock production in the country, a number of innovative veterinary biologicals such as vaccines, therapeutic and diagnostic reagents, starter cultures and other industry inputs have been developed and produced by the VRI to the farming community and other stakeholders of the industry. On the other hand, diagnostic and analytical testing, laboratory and advisory services are carried out by the VRI with the intention of uplifting socioeconomic status of the livestock farming community.

Basic and applied researches are conducted in collaboration with various other national and international institutions in order to explore the novel concepts and scientific advancements.

Main functions of the VRI

- Carryout animal production and health research
- Production of veterinary vaccines and other biological.
- Laboratory disease diagnostics and investigation
- Provide analytical facilities
- Provide referral laboratory facilities for the livestock industry and other institutions, both nationally and internationally.
- Provide inputs for dairy, poultry and other livestock sectors
- Provide technology expertise
- Support implementation of regulations and legislative enactments related to livestock sector.

5.2. Products and services

The details of manufactured and issued veterinary products by the VRI in 2023 are as follows.

5.2.1. Products issued

Table 5.1: Vaccines

Vaccine	Production (doses)	Issues (doses)
Hemorrhagic Septicemia (HS) (OA) Hemorrhagic Septicemia (HS) (APV)	141,720 60,730	141,720 60,730
Black Quarter (BQ)	53,229	53,229
Foot & Mouth disease (FMD)	157,340	157,340
Brucella S 19	10,000	10,000
Newcastle Disease (ND Primary) Newcastle Disease (ND Secondary)	3,614,200 1,005,000	3,614,200 1,005,000
Fowl Cholera	344,080	344,080
Swine Pasteurellosis	3,600	3,600

Vaccine	Production (doses)	Issues (doses)
Wart vaccine	08	08
Newcastle Disease OAV (experimental level New vaccine)	8,500	8,500
Rabbit Pasteurellosis vaccine (experimental level New vaccine)	4,860	4,860
Babesia bigemina irradiated vaccine (experimental level New vaccine)	180	180

Table 5.2: Diagnostic reagents

Reagent	Quantity issued
FMD transport medium (ml)	4,350
AI transport medium (ml)	6,000
CMT reagent (L)	63
Pullorum antigen (doses)	278,000
RBPT antigen (ml)	6,000
MRT (ml)	6,000

Table 5.3: Therapeutic reagents

Reagent	Quantity issued
Teat dip solution (L)	149
Udder infusion (Vials)	20,583

Table 5.4: Starter cultures

Starter culture	Quantity issued
Yoghurt culture (vials)	45
Curd culture (vials)	95

Table 5.5: Chicks issued from Central Poultry Research Station, Karandagolla

Chick type	Number issued
Table eggs	45,661
Embryonated eggs (vaccine production and lab purposes)	691
Day old chicks (Backyard poultry)	124,591

Table 5.6: Products Issued internally as Raw Materials

Product Type	Number of issues	Division Issued To
HS seed	7 batches	Vaccine Production
BQ seed	63 batches	Vaccine Production
Swine Pasteurellosis seed	2 batches	Vaccine Production
Fowl cholera seed	3 batches	Vaccine Production
ND Lasota seed	2 batches	Vaccine Production
NDV B1 seed production	3 batches	Vaccine Production

Table 5.7: Other

Product Type	Number of issues
Napier Planting materials	20726

5.2.2. Technical Services (diagnostic and analytical services)

Table 5.7: Parasitology samples

Parasite type	Species	Number of samples tested
Blood Parasites (*Babesia, Ehrlichia, Anaplasma*)	Bovine	252
	Caprine	211
	Ovine	10
	Equine	24
	Pet animals	307
Tissue parasites (*Neospora caninum*)	Bovine	159
	Caprine	14
GI Parasites	Bovine	32
	Caprine	404
	Ovine	4
	Avian	11
	Rabbit	84
	Equine	24
	Pet Animals	68
	Bovine	32
Skin Parasites	Pet Animals	1
Quarantine samples	All spp	127

Table 5.8: CVIC samples

Species	Tested disease/Test	Number of samples
Bovine	FMD	16
	HS	-
	BQ	-
	LSD	73
	Salmonella dublin	01
	BVD (Antibody)	-
	IBR (Antibody)	43
	Blue Tongue Virus (Antibody)	-
	Tuberculosis	4
	Mycoplasmosis	1
	Mastitis	97
Caprine	Enterotoxaemia	14
	Mastitis	23
	E.coli	05
	Blue Tongue antibody	66
	Blue Tongue pathology	01

Species	Tested disease/Test	Number of samples
Ovine	Enterotoxaemia	02
Poultry	*Salmonella*	
	E.coli	26
	Mareks disease	2
	MG	12
	Infectious Coryza	1
	IBH	26
	IB	1
	IBD	1
	Leucocytozoonosis	2
	Pseudomonas	2
Swine	*Salmonella choleraesuis*	5
	E.coli	3
	Mycoplasma	21
	PRRS	18
	African Swine Fever (in quarantine samples)	1
	Corynebacterium	1
Fish & Shrimp	Imported Shrimp-IHHNV, IMMNV,WSSV,TVS,YHV,EHP,NHPB,AHPND	40
	Ornamental Fish importation and exportation-SVP,KHV,	248
Other (Rabbit, horse, wild life)	Pasteurella multocida serogroup F, E.coli, Mycoplasma, Corynebacterium	179
	Hatching egg, Environmental samples, Vaccine seed, Harvest	134
	Feed	1,520
	Meat processing establishments	48
	Emergence of New serovar *Salmonella infantis Salmonella* , *Staphylococcus aureus*, E coli, APC	569
	Anti-Microbial Susceptibility Test	87
	Water for Coliform, E.coli	235

Table 5.9: Animal Breeding

Type of Test	Species	Number of samples tested
PCR Tests for spp identification of meat samples	Deer family	53
	Cattle	56
	Buffalo	05
	Goat	04
	Pig	13

Table 5.10: Animal Nutrition

Type of Test	Number of samples tested
Protein analysis	819
Fat analysis	735
Fiber analysis	701
Moisture	740
Ash	790
Sand	726
Calcium	90
Phosphorous	72
Available calcium	11
Available Phosphorous	15
Magnesium	33
Copper	23
Zinc	24
Cobalt	22
Manganese	23
Ferrous	21
Sodium	13
Potassium	11
Gross Energy	232
Aflatoxin (LC/MS/MS)	941
Field investigation into nutritional issues	6
Analysis for special requirement ADF, NDF, NPN, FFA, TIA, Rancidity, FFA etc.	141
Feed formulations	31

Table 5.11: Animal Virus Laboratory

Sample Type	Number of Samples
Quarantine samples	5,8631
Ruminants (Cattle, Buffalo, Goat)	4,337
Non ruminants (Poultry & Swine)	21,330
Migratory and pet birds	7,762

Table 5.12: Bacteriology

Tested Disease/Test type	Number of samples
Brucellosis	974
Leptospirosis	453
Salmonellosis	31
Tuberculosis	7
Pasteurellosis	36
Trichomoniasis	7
Salmonella verification in poultry Grandparent farms	4

Table 5.13: Pathology

Species	Number of Samples
Small ruminants	877
Large ruminants	275
Poultry	906
Swine	370
Zoo & wildlife	265
Marine/aquatic/fish	34
Companion animals	0
Lab animals & other	48

Table 5.14: Dairy Technology Laboratory

Type of Test	Number of samples
Composition analysis	244
Keeping quality testing	62
Testing for Adulterants	88
Microbiological analysis	304
Physical property	288
Crude protein	374
Field investigations	4

Table 5.15: Pasture Research

Type of Test	Number of samples tested
pH	198
Electric Conductivity	14
Salinity	10
Total Dissolved Solid	15
Soil-Nitrate	10
Phosphorus	10
Water-Nitrate	3
Plant-Nitrate	35
Alkalinity	3
Hardness	3
Organic matter digestibility	653
Metabolizable energy	653
Gas production	653
Lactic acid	181
Ammonia nitrogen	181
Soluble carbohydrate	231
Oxalate	35
Acid detergent fiber	113
Nutral detergent fiber	81
lignin	26
Dry matter	278
Ash	170
Crude protein	312
Crude fat	9
Crude fiber	105

Type of Test	Number of samples tested
Germination	6
Concentrate/TMR ration formulation for ruminants	11

5.2.3. Other Services

Table 5.16: Other Services

Service Type	Number of Trainings/Services
VIO/RA/farmer training programs	25
Student training	106
Services as a post graduate supervisor/resource person/consultant/advisory services/member or chairman of a DAPH or National Committee	Approx.: ~1200
Field investigations	28

5.3. Clients registered at VRI

Table 5.17: Clients registered at VRI

Place of registration	No. of clients
Coordinating unit	3,804
Central Pou ltry Research Station (CPRS)	1,042
Animal Virus Laboratory	888
Gannoruwa Farm	34

5.4. Research projects

Research projects conducted during the year 2023 are as follows:

1. Title: Development of a prototype and validation of a Heat Detection tool based on crystallization of cervical mucus of dairy cow.
   Principal Investigator: Dr. M.B.D.Lakmali
   Duration: 1 year
   Status of the project: Completed

2. Title: Validation of commercial lateral flow immune assay kit for rapid pregnancy diagnosis in cattle in Sri Lanka
   Principal Investigator: Dr. M.B.D.Lakmali
   Duration: 1 year
   Status of the project: Completed

3. Title: Isolate suitable vaccine strains of C. perfringens to develop a vaccine to immunize calves
   Principal Investigator: Dr. M.W.C.D. Palliyeguru
   Duration: 3 years
   Status of the project: Continuing

4. Title: Establish methodology to quantify hazardous chemicals and veterinary drug residues in animal feed and animal products (heavy metal, amino acids, antibiotic residues)
   Principal Investigator: Dr. M.W.C.D. Palliyeguru
   Duration: 4 years
   Status of the project: Completed

5. Title: Investigation of Aflatoxin in cow milk and trace back to feed aflatoxin concentrations
   Principal Investigator: Dr. S.S.K. Daluwattha
   Duration: 1 year
   Status of the project: Completed

6. Title: Characterization of fowl adenoviruses associated with inclusion body hepatitis in chickens in Sri Lanka.
   Principal Investigator: Dr. S.Puwanendiran
   Duration: 1 year
   Status of the project: Continuing

7. Title: Differentiating avirulent and virulent Newcastle disease virus strains
   Principal Investigator: Dr.W.M.A.D.Wanninayake
   Duration: 2 years
   Status of the project: Completed

8. Title: Antimicrobial resistant surveillance in commercial broilers in Sri Lanka: A pilot study to establish AMR surveillance and National repository for AMR in Sri Lanka
   Principal Investigator: Dr. M.A.R.Priyantha
   Duration: 2 years
   Status of the project: continuing every year as national AMR surveillance

9. Title: Isolation, Identification and characterization of *Avibacterium paragallinarum* and Pasteurella multocida clinical isolates in commercial layers
   Principal Investigator: Dr. M.A.R.Priyantha
   Duration: 2 years
   Status of the project: Completed

10. Title: Collection and Characterization of *Salmonella dublin* isolates for a potential bacterin vaccine seed
    Principal Investigator: Dr. N.Liyanagunawardana
    Duration: 2 years
    Status of the project: Completed

11. Title: Study the prevalence of *Salmonella* and *Campylobacter* in chicken meat and relationship between chlorine resistance and chlorination method
    Principal Investigator: Dr. K.M.S.G.Weerasooriya
    Duration: 2 years
    Status of the project: Continuing

12. Title: Formulation of Lactic Acid Bacteria starter culture for local cheese production
    Principal Investigator: Dr. A.P.D.G.Pathirana
    Duration: 3 years
    Status of the project: Continuing

13. Title: Prevalence of extended spectrum beta lactamase producing *Klebsiella* in dairy products in Central and North Western Provinces of Sri Lanka
    Principal Investigator: Dr. A.PD.G.Pathirana
    Duration: 3 years
    Status of the project: Continuing

14. Title: Coorelation of unstable nonacid milk (UNAM) with milk mineral composition, urine pH and body condition score during wet and dry seasons in Central Province
    Principal Investigator: Dr. A P D G Pathirana
    Duration: 3 years
    Status of the project: Completed

15. Title: Impact of adjusted management practices on livestock health and performance during recent economic constraint
    Principal Investigator: Dr. G.A. Gunawardena
    Duration: 3 years
    Status of the project: Completed

16. Title: Characterization of bacterial strains for new control strategies in bovine control mastitis
    Principal Investigator: Dr. G.A. Gunawardena
    Duration: 3 years
    Status of the project: Continued for 2024

17. Title: Cattle genotyping for offspring and parent identification
    Principal Investigator: Dr. G.A. Gunawardena
    Duration: 3 years
    Status of the project: Continued for 2024

18. Title: Zoonotic transmission of Leishmaniosis in 5 districts of Sri Lanka identification
    Principal Investigator: Dr.N.D.S.Dissanayake
    Duration: 3 years
    Status of the project: Completed

19. Title: Propagation of *Babesia bigemina* and *Babesia bovis* vaccine seed for Babesial vaccines
    Principal Investigator: Dr.S.S.Iddamaldeniya
    Duration: 2 years
    Status of the project: Continued for 2024

20. Title: Determination of Gamma irradiation dose for irradiated *Babesia bigemina* and *Babesia bovis* vaccine
    Principal Investigator: Dr.S.S.Iddamaldeniya
    Duration: 2 years
    Status of the project: Continued for 2024

21. Title: Investigation of genetic diversity of *Bovine Babesia* in Sri Lanka and establishment of haenoparasite propagation in primary cultures in the Division of Parasitology, VRI
    Principal Investigator: Dr.S.S.Iddamaldeniya
    Duration: 2 years
    Status of the project: Completed

22. Title: Molecular epidemiology and prevalence of pathogenic *Theileria* species in goats in dry and intermediate zones of Sri Lanka.
    Principal Investigator: Dr.P.D.I.G.Amarasiri
    Duration: 1 year
    Status of the project: Completed

23. Title: Survey on molecular prevalence of *T.yokoyoma* in cattle in Polonnaruwa district SL
    Principal Investigator: Dr.P.D.I.G.Amarasiri
    Duration: 2 year
    Status of the project: Completed

24. Title: Investigation of potential of hybrid fodder and legume varieties as cattle feed
    Principal Investigator: Dr.M.W.D.C.Weerasinghe
    Duration: 2 year
    Status of the project: Completed

25. Title: Evaluation of agronomic characters and nutritive values of Mulato 11 (B. ruziensis x *B. decumbens* x *B. brizantha*) in different harvesting intervals in Yala and Maha seasons at wet zone in Sri Lanka
    Principal Investigator: Dr. M.W.D.C. Weerathunga
    Duration: 2 years
    Status of the project: Completed

26. Title: Detection of pathogenesis, phenotypic and genotypic characterization of *Eimeria* species in Sri Lankan poultry
    Principal Investigator: Dr. G. I. S. Perera
    Duration: 3 years
    Status of the project: Continued for 2024

27. Title: Evaluation of the occurrence of infectious diseases, diagnosis, treatment and disease management to develop effective control measures in ornamental fishes in Sri Lanka
    Principal Investigator: Dr. S.M.T.S.Manchanayake
    Duration: 1 year
    Status of the project: Completed

5.5. Research Publications in 2023

Details in research publications are in *annexure V.*

5.6. Special Achievements

Table 5.18. Graduations, Awards and Marked Achievements in 2023

S.No	Name	Graduation/Award/Achievement	Thesis/Paper	University /Association
1	Dr. S.S.Iddamaldeniya Dr .I.Amarasiri Dr. N.D.S.Dissanayake H. Atapattu M. Aathiq	Best Paper in Animal Health	Development of an irradiated vaccine seed for bovine *B.bigemina* infection in Sri Lanka	SLVA
2	Dr. M.A.R.Priyantha	Biosafety and Biosecurity guidelines for VRI and VICs		DAPH
3	Dr. M.A.R.Priyantha	A member of development of National Strategic Plan for Combating Antimicrobial Resistance 2023-28 in Sri Lanka		Ministry of Health
4	Editorial board for VRN	Restarted VRN/Veterinary Research News printed and online version		VRI

5.6.1. Graduations and Awards

Table 5.19. Graduations and Awards

S. No	Name	Graduation/Award	Thesis/Paper	University /Association
1	Dr. Nilukshi Liyanagunawardene	PhD in Veterinary Science	Molecular Epidemiology of *Salmonella enterica* in poultry in Sri Lanka	Massey University, New Zealand
2.	Dr. Gayani Weerasooriya	Doctor of Philosophy in Veterinary Medicine and Animal Science	Food borne pathogens in poultry	University of Adelaide, Australia
3.	Dr. Shalika Perera	Best scientific paper	Detection of an outbreak of inclusion body hepatitis in commercial broiler chickens in North Western and Western Provinces in Sri Lanka	XXth Annual Scientific Sessions of World Poultry Science Association, Sri Lanka

S. No	Name	Graduation/Award	Thesis/Paper	University /Association
4.	Dr. M.W.D.C Weerathunga	Air Commodore Dr. R.M.P.H. Dassanayake award for best presentation in Animal Production	Isolation and Preliminary characterization of aerobic yeast from dry zone cattle in Sri Lanka as a potential feed additive	74th Annual Scientific Sessions of Sri Lanka Veterinary Association

5.7. Research Outcomes of VRI- 2023

Table 5.20. New Vaccines invented, products developed, and tests or methods established in 2023

S.No	Division	Vaccine/Product/Test/Method
1	Parasitology	*B.bigemina* + *B.bovis* irradiated combined vaccine (in trial) *Theileria luweshuni* PCR test *T.uilenburgi* PCR test *Leishmania* skin biopsy test
2	Bacteriology	Rabbit *Pasteurella* vaccine (Collaboration with CVIC and Vaccine Production division) Isolation and identification techniques established for *Campylobacter jejuni* and *C. coli*. (conventional and qPCR) Establishment of AMR national surveillance Establishment for National Foodborne pathogen surveillance
S.No	**Division**	**Vaccine/Product/Test/Method**
3.	DTL	In-bottle pasteurization (method) Greek yoghurt spread (method) development of a cho.coated snack based on curd and coconut (method)
4.	Molecular Biology	Bovine Mastitis 3 vaccines: *E. coli*, *Staphylococcus* and Combined vaccine Herbal Preparation with antibacterial activity against mastitis (product) Goat milk added value ice cream (product)
5.	AVL	New ND vaccine ND virulent/non virulent differentiation test, IBH PCR test in poultry
6.	CVIC	*Salmonella infantis* PCR test *Pasteurella multocida* sero group F PCR test Real time PCR test for LSD, *Mycoplasma* by PCR test
7.	Animal Nutrition	Aflatoxin B1, B2, G1 and G2 tests

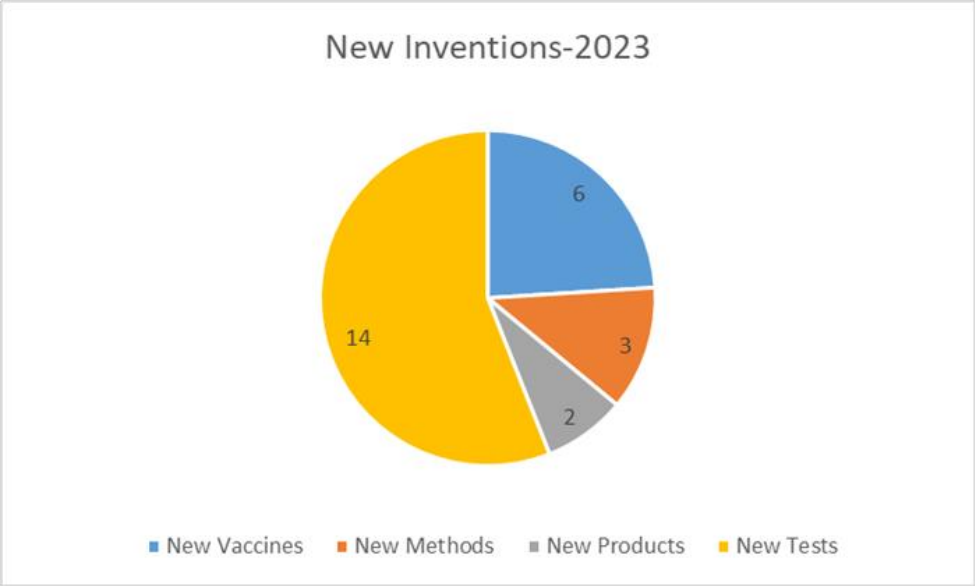
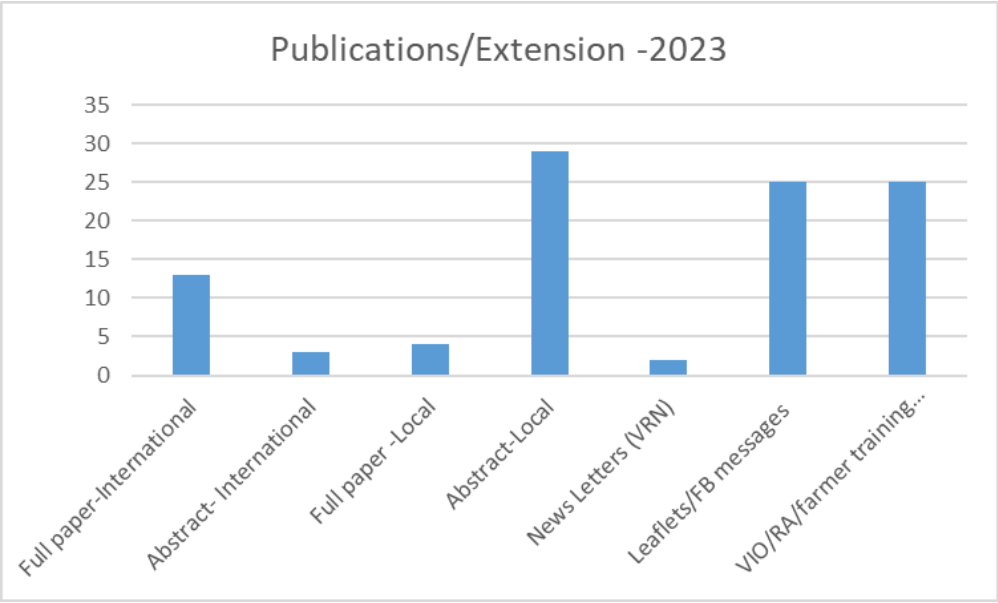


Table 5.20. Publications/Extension –Summary

Type	Number
Full paper-International	13
Abstract- International	3
Full paper -Local	4
Abstract-Local	29
News Letters (VRN)	02
Leaflets/FB messages	25
VIO/RA/farmer training programs	25



6. HUMAN RESOURCE DEVELOPMENT DIVISION

6.1. Introduction

The main responsibility of the Human Resource Development Division is shaping the workforce of the department and other stake holders to meet the evolving demands of the livestock sector. We strategically nurture and enhance the skills, knowledge, and capabilities of employees and stakeholders, ensuring they are well-prepared to contribute effectively and efficiently to the advancement of livestock sector development, food security, safety, and public health.

HRD division administers following seven (07) units.

1. Institute of Continuing Education, (ICEAPH),Gannoruwa, Peradeniya.
2. Sri Lanka School of Animal Husbandry (SLSAH), Karandagolla, Kundasale.
3. Sri Lanka School of Animal Husbandry(SLSAH), Seeppukulama, Anuradhapura.
4. Extension Support Centre, DAPH, Peradeniya.
5. Examinations Unit, DAPH, Peradeniya.
6. Media unit, DAPH, Peradeniya.
7. Livestock Knowledge Center, Gatambe, Peradeniya.
8. Livestock Technology Park. Gannoruwa, Peradeniya.

Main functions of the division

- Extension and technology transfer
- Training and career development of staff of the department and other stake holders
- Diploma level education on livestock and poultry production
- Entrepreneurship development and self- employment support services
- Conduct the department and animal husbandry diploma school exams

6.2. Training and transfer of Technology

6.2.1.Training conducted at ICEAPH

The ICEAPH strives to conduct year-round training programmes, workshops and seminars to upgrade the knowledge and improve the skills of the officers of the department and personnel of other organizations who are involved in the livestock industry activities.

In 2023, ICEAPH organized a comprehensive array of training programs, hosted several special webinars focusing on diverse topics, and facilitated numerous meetings organized by DAPH and other organizations. The details of these programs held at ICEAPH in 2023 are outlined in Tables 6.1, 6.2, 6.3, and 6.4 respectively

Table 6.1. Details of training conducted at ICEAPH in 2023

Category	No. of programs planned	No. of programs conducted	
		(online)	(On ground)
AP&H service officers	32	14	18
Research Assistant, Livestock Development Officers/ Instructors	13	05	06
Development Officers	07	0	04
Management Service Officers	07	0	02
Others	05	0	04
Total	**64**	**19**	**34**

Table 6.2. Number of trainees and man days for the training programs conducted by ICEAPH in 2023

Item	Target	Achievement
Number of trainees/ participants	1,535	1,835
Number of training man days	2,899	2,521

Table 6.3. Special webinars conducted by ICEAPH in 2023

S/No	Name of the program
1.	Semen Handling and Artificial Insemination
2.	Livestock Extension – "What I Learnt as a Field Veterinary Surgeon"
3.	Investigating Bovine Abortions
4.	Quantitative Assessment Of Biosecurity Levels in Ornamental Fish Farms in Sri Lanka .
5.	Infectious Disease and Management in Export Aquaculture Establishments
6.	An Overview of Avian Influenza A Virus
7.	Study for the Performance Evaluation of Slick Gene In Sri lanka
8.	The Use Of Detergents & Sanitizers in Dairy Farm Sanitation -An Updated Perspective - Article from Journal of the South African Veterinary Association
9.	Nipah Virus Infection
10.	Safe Handling of Liquid Nitrogen

Table 6.4. Facilitated Meetings / Programs by ICEAPH

Category	No. of programs	No. of participants
Meetings/Programs on ground	84	2,921
Meetings/Programs online	29	419

6.2.2 Training programmes at Sri Lanka School of Animal Husbandry (SLSAH), Seeppukulama

Other than the trainings conducted at ICEAPH, SLSAH, Seeppukulama conducted the Dairy Farm Assistant Course at NVQ Level 4, accommodating 25 students, with a duration of 4 months and one-day training programs, as listed below.

1. Livestock production training for university students [7 Students]
2. Animal husbandry training for school students [73 Students]
3. Goat management training for farmers [50 Farmers]
4. Livestock production training for nurses [250 Nurses]

6.3. Educational and career development

6.2.1. Sri Lanka School of Animal Husbandry (SLSAH) Karandagolla, Kundasale

Thirty-two (32) students from the 2019/2022 batch have successfully concluded their academic activities for the Higher National Diploma in Livestock Production Technology Course. They completed six (6) months of on-the-job training in various fields of the livestock sector under the supervision of NAITA.

Thirty-one (31) students have successfully completed their viva examination conducted by TVEC.

The batch of 2022/2024 students enrolled in the Higher National Diploma in Livestock Production Technology have completed their final assessments for the second semester of their second year. Currently, fifty (50) students are progressing with their courses in the second year second semester.

6.3.2. Sri Lanka School of Animal Husbandry (SLSAH) Seeppukulama , Anuradhapura

Sixty (60) students are enrolled in the Higher National Diploma in Livestock Production Technology (NVQ 5,6) course at SLSAH, Seeppukulama, for the academic years 2022-2024. They sat for their first-year second-semester final exam and their second-year first-semester final exam in 2023. Currently, they are progressing with their studies in the second year second semester.

Figure 6.1: Diploma Award Ceremony-2023

6.3.3. Internship training for veterinary graduates

One internship program for the BVSc degree holders was conducted and successfully completed during the year 2022/23. Further details regarding this program are provided in the Table 6.5 below.

Table 6.5. Details of the Internship Training programme conducted in 2023

Batch Number	No. of Internees
DAPH/HRD/ICE/INT/2022/23 (01.12.2022 -31.05.2023)	67

6.3.4. Foreign trainings

Information regarding foreign scholarships and programs in which DAPH officers participated during the year 2023 is detailed in Annexure V.

6.3.4.1. Support for Post Graduate Training

The Human Resource Development Division sponsored 3 members of the department for Post Graduate Training in this year.

6.4. Examinations

The Examinations Unit within the HRD Division bears the responsibility for administering examinations for officers within the Department as well as for the exams of SLSAH. Comprehensive details regarding the examinations conducted by HRD in 2023 are provided in Table 6.6.

Table 6.6. Details of the Examinations administered by the Examinations Unit in 2023

S.No.	Name of the Exam	No. of Exams	No. of Candidates
1	1st Efficiency bar examination for the officers in Sri Lanka animal production and health service	1	42
2	2nd Efficiency bar examination for the officers in Sri Lanka animal production and health service	1	48
3	Efficiency bar examination for LA/FA	1	3
4	Efficiency bar examination for legal officers	1	2
5	End semester examinations for the students in SLSAH, Seeppukulama and Karandagolla	6	257

6.5. Information Dissemination and Publications

6.5.1. Publications in 2023

a. Number of reprints -2023

Leaflets (Nipah Virus) 5,000

6.5.2. Sale of publications in 2022

a. Free Issues

1. Leaflets - 11,713
2. "Kiri Aswanu" Filed set of leaflets- 6,255

b. Sales 2023

Booklets and leaflets 18,408

6.5.3. Mass media activities

The division persisted in broadcasting, telecasting, and publishing programs and articles across a spectrum of radio stations, TV channels, and newspapers. Comprehensive details are outlined in Table 6.7.

Table 6.7. Mass media activities in 2023

Type of Product	No. of programs (planned)	TV/ Radio channel and program	No. of Telecasts/ Broadcasts/ Releases	Remarks
Audio	Sinhala-60	SLBC – Lakhada Radio – Sathwa palanayai obey arthikayayi	19	Done by Department fund
		SLBC – Kadurata FM - Sathwa Govipola	13	
		SLBC – Non Allocation Radio program Krushi FM WEB Radio Haritha Mansala	16	
Video	20	Youtube	23	
		TV Programs	01	
Media coverage	On request	Video, Photos and Sounds	25	
		MOD Extension message	Tamil 138 Sinhala 18	
Photography	On request	Graphic designing & Invitations	89	
Mass Media	On demand	coordination	10	
Web Page	12	DAPH Extension web page	10	
Face Book	12	DAPH Extension Face Book page	07	

6.5.4. Exhibitions

Exhibitions conducted / participated in 2023

The Human Resource Development division contributed to exhibitions held at various venues,

- "Mage Deshaya Awadi Karanu Mana" University of Peradeniya
- Industrial Exhibition at BMICH- Colombo
- Agriculture Exhibition in School of Agriculture, Kundasale
- Livestock Show by NLDB Farm- Malsiripura

Figure 6.2: Exhibition stalls

6.6. Extension Support Center

In 2023, the "Extension Support Centre" was launched as an e-extension initiative, dedicated to offering advisory services to the livestock farming community in Sri Lanka. Our goal is to assist farmers with their day-to-day livestock challenges through easily accessible and reliable phone consultations and other e-communication means.

The Extension Support Centre operates on weekdays during office hours, from 8:30 a.m. to 4:15 p.m. for expert guidance on any livestock-related issues.

Farmers can easily reach out to us through the following channels:

Telephone	:081 2320320
WhatsApp	:071 2320320
Face Book	:DAPH Extension
Email	:daphcallcenter@gmail.com
Web	:www.daphextension
You Tube	:Livestock Television

Table 6.8. Activities done by Extension Support Center in 2023

S/N	Activity	Progress
01	Summary of Communication I. No: of Calls received II. No: of Calls answered III. No: of Calls unable to answered IV. No: of Calls satisfied by public V. No: of Calls from 0812388463 VI. No: of Calls from 0812320320	 466 464 0 464 01 463
02	Formats/Materials/Videos/Sent to callers	52
03	Transfer of New technology by fact sheets (uploaded to FB page)	21
04	Transfer of New technology by Video Script writing	1
05	Transfer of New technology by General Public messages(uploaded to FB page)	4
06	Collecting information from DAPH/ Livestock Organizations	2
07	Collecting information from field visits	6
08	Collecting information from news papers	7

6.7. Livestock Technology Park

Table 6.9. Livestock Technology Park - details of performance in 2023

Project/Program	Activities	Expended activities	Progress at the end of the year
Demonstration for Park Visitors	Tech park visitors (Random)	Facilitation of visitors	12,484
	Instructing animal husbandry & conduct demonstration practicals	Pasture and Fodder demonstration sessions for university students	143

7. LIVESTOCK PLANNING AND ECONOMICS DIVISION

7.1. Introduction

The Livestock Planning and Economics (LPE) Division is responsible for planning, monitoring and evaluation of livestock development programs and activities implemented by the department to support development of the livestock sector in Sri Lanka. LPE division also maintains the national level database to collect and compile livestock statistics and data which are accessible to the public and to policy makers, researches, university students. The data processing unit is responsible for data entry, analysis and preparation of reports/ documents to the relevant authorities.

Main functions of the division

- Identification and formulation of livestock development programs and projects.
- Monitoring, evaluation and economic analysis of livestock development programs and projects of the department.
- Conduct economic studies to assess feasibility and viability of livestock development programs and projects.
- Periodic review of livestock industry and identify issues that need to be addressed for policy formulation.
- Management of livestock database at National level.
- Coordinate livestock development programs with provincial DAPH and other state institutions and organizations.
- Coordinate implementation of e-government policy in the department.

7.2. Identification and designing of livestock development programs and projects

LPE division is responsible for identification and formulation of livestock development projects and forwarding them to funding agencies. Funding could either be through the National budget or foreign donor agencies.

7.2.1. Projects for the National Budget - 2024

Five new project proposals for the year 2023 were formulated in collaboration with Veterinary Regulatory Affairs division, Veterinary Research Institute, Human Resource Development division and Livestock Planning & Economics division. These project proposals were forwarded to relevant authorities during the year 2023.

Furthermore, 17 on-going projects of the DAPH for continuation for coming years were reviewed; proposals forwarded and necessary approvals were obtained.

7.3. Monitoring, evaluation and economic analysis of livestock development programs and projects

7.3.1. Physical and financial progress review of departmental programs

a. Action plan and progress

Action plan 2023 of DAPH was implemented successfully. The physical and financial progress was monitored and reported monthly on the basis of thrust area. At the end of 2023, action plan of the DAPH was prepared for the year 2024 considering the budget allocation.

Capital expenditure utilization of the DAPH was 57% in 2023 which was lower than the previous year (87.99%) The progress of recurrent fund utilization was 89.73% in 2023, which was lower than the corresponding figure of 97.13% in the year 2022. The details are given in *Chapter 10,* under the Finance division.

b. Progress review meetings of the department

Physical and financial progress of departmental programs is reviewed at progress review meetings represented by respective directors and relevant officers of divisions. LPE division organised and facilitated to conduct such reviews throughout the year.

7.3.2. Monitoring of animal production, health and extension activities in provincial DAPH

a. Monitoring through master returns

Activities of provincial DAPH are monitored through master returns submitted monthly by divisional veterinary surgeons in the country. Data were processed and analysis reports were prepared and communicated to provincial DAPH as well as all divisions of the DAPH and the Ministry as well.

Analysis of selected data is given in *Annexure VII.* Data on animal health activities are given separately under section on animal health division.

7.4. Review of livestock industries and management of livestock database at national level

Availability of reliable statistics is one of the main pre-requisites for any planning and monitoring pertaining to the livestock sector. This is also one of the main responsibilities of the LPE division.

7.4.1. Data collection, compilation and management

Data collection systems have been further improved during the year. Data on livestock population, production, prices, imports and exports etc. were collected on industry basis. The analyzed data are preserved in electronic livestock statistics databases. Ten-year livestock data has been updated.

a. Milk collection

Data were collected from leading milk processing organizations in the formal milk marketing in the year 2023. Total milk collection by 14 key organizations was 243.45 million liters. Central Province, North Central Province and the North Western Province contributed for this total as 33%, 25% and 17% respectively. District–wise milk collection data for the year 2023 is given in *Annexure VIII.*

b. Import and export of animals / animal products and feed ingredients

Quantities and the value of import of animals, animal products and feed ingredients in 2023 was obtained from Sri Lanka Customs and analyzed. Quantities of dairy products, meat and meat products imported into the country in 2023 is totaled 71,180.20 MT and 622.15 MT with the value of Rs.88.62 million and Rs.743.97 million respectively. Imported quantity of dairy products have been an increased during the year 2023 and Imported quantity of meat products have been decreased during the last year when compared with the year 2022.

Total of 1,581.06 MT of milk and milk products and 1,871.62 MT of meat and meat products have been exported to other countries during year 2023.

c. Data bank

LPE division maintains the National databank containing all livestock data, statistics and related documents, reports, and bulletins which can be used by DAPH and other state officers, students from university and other educational institutes, and private entrepreneurs.

d. Dissemination of data/ statistics

Important livestock statistics collected from various organizations, other divisions of DAPH, regional veterinarians, private companies, farms, etc., by division of LPE, are analyzed, compiled and published on website as Poultry Forecast 2023, Livestock Statistical Bulletin, Dairy bulletin and Livestock outlook for the year 2023. It was disseminated to all the relevant organizations and other stakeholders in 2023.

e. Sector reviews

Poultry industry monitoring

A poultry industry monitoring committee was established in the department to monitor the poultry industry in Sri Lanka in year 2012. This committee is consisted of industry representatives and officers from the department as well. Department of Agriculture is also representing the meeting to facilitate and overcome the issues related to poultry industry. This committee was chaired by the Director General of the Department.

Number of committee meetings held per year was reduced as more frequent stakeholder meetings were conducted during the year 2023 for separate segments of the industry. As the result one main committee meeting conducted

was one meeting with poultry processors, three meetings with poultry breeders and six meetings on feed supply and cost of production issues.

7.5. Coordination of development programs with provincial DAPH and special development projects

Several development programs were jointly implemented by the national and provincial DAPH and technical back-up services and inputs were mostly provided by the national DAPH.

7.5.1. Provincial director's meetings

LPE division organizes and coordinates Provincial Directors' meetings to review on-going livestock development programs and to discuss on administrative and financial matters. Three meetings were held during the year 2023.

7.5.2. Special livestock development projects

a. Improvement of veterinary service delivery system of field veterinary offices

Aiming at improving infrastructure facilities of Veterinary offices of nine provinces, Veterinary Service Improvement Projects was initiated in year 2008. However, the veterinary office construction activities which were identified under the project were withheld according to the circular No: 3/2022 issued by the Ministry of Finance on 2022.04.26, but DAPH web development activities and repairs of veterinary offices were supported by the project.

b. Programme to mitigate environment issues pertaining to livestock industry

Since the environmental issues are one of the constraints which hinder the development of the Livestock sectors in Sri Lanka, it has been given the priority in year 2023 too; also the technical backup system which was established has been given positive results. Following activities were conducted and implemented by Livestock Planning and Economics Division of the Department in year 2023.

Based on the nature of the environmental problems reported, other organizations, institutions and relevant officers were informed and coordinated. Furthermore, follow-up activities of the issues were addressed.

Joint field visits were organized with respective technical experts from relevant institutions, alone with the respective Veterinary Surgeons and provided necessary guidance and advised them to overcome the issues prevailed. The joint visits were participated by officers form Central Environmental Authority, Ministry of Health, Local government and Sri Lanka Police etc. To assess the Environmental Impact three (03) field visits were done to livestock farms (Poultry, Dairy) with relevant institutions.

7.6. Publications

The division compiled following publications/reports during the year 2023.

- Action Plan DAPH -2023
- Action Plan 2023- LPE Division
- Annual Report -2022
- Annual Performance report -2022
- Livestock Statistical bulletin -2022
- Poultry Sector Forecast 202
- Dairy Bulletin -2022
- Livestock Outlook -2022
- Poultry monthly bulletins

7.7. Other activities

7.7.1. E -Government program

Livestock Planning and Economics Division (LPE) is responsible to liaise with ICTA and to handle correspondences regarding Lanka Government Network (LGN) and Government Information Centre (GIC). Dr. (Mrs.) P.S. Fernando of the LPE division serves as a Chief Innovative Officer (CIO) for ICTA. (for the year 2023)

The LPE division holds the responsibility of managing and updating the department website www.daph.gov.lk. Livestock data, statistics, maps, departmental activities and details of each division have been incorporated into the web site. Regular updating of news and the events of the department is a valuable feature in the department web site. The online application service (e-service) for import and export of animals is also an additional service provided by the department web site.

8. VETERINARY REGULATORY AFFAIRS DIVISION

8.1. Introduction

Implementation of statutes made under the provisions of Animals Act, Animal Diseases Act and Animal Feeds Act and amendments of the Acts and regulations pertaining to livestock & poultry sector are handled by the VRA division.

Main functions of the division

- Strengthen animal quarantine management system in Sri Lanka to prevent entry of exotic animal diseases and illegal imports.
- Trade facilitation of import and export of animals and animal products of animal origin and other inputs.
- Quality assurance of processed, further processed poultry meat, frozen fish, animal feed ingredients, veterinary drugs and biological / products.
- Safeguard and protect productive national herd to accomplish a traceability system and to achieve objectives of the master plan.

8.2. Animal quarantine and inspection service

8.2.1. Import of animals and animal products and post-import quarantine activities

Animal quarantine service is one of the essential services provided by the DAPH. It mainly deals with the inspection and quarantine of import and export of animals, animal products and by-products.

a. Quarantine holdings

In year 2022 & 2023 shrimp bloodstock consignment and 28 Day old chick consignment were subjected to their own farm quarantine under the supervision of animal quarantine officers. Twenty-two numbers of horses (Two consignments) and Two (02) Pigeon consignments were held and quarantined at Katunayake quarantine station.

b. Import and quarantine surveillance

Details of imported Animal products and Animal Feed and Veterinary drugs and biological which were subjected to quarantine surveillance in 2023 are given in *Annexure IX*.

c. Sampling of imported poultry (HPAI surveillance program)

Consignments of Day-Old Chicks (DOC) are released to importers under the quarantine surveillance agreement and monitored by the weekly reports sent by the importer. Serum samples and cloacal swabs are taken at the point of entry and during the farm inspections. If the mortality rate exceeds four percent (4%) during the quarantine period, the relevant farms are visited by Animal Quarantine Officers (AQO) immediately to investigate and to rule out the possibility of HPAI infection. As part of the active surveillance program carried out against HPAI, imports were closely monitored clinically and laboratory testing were done during the surveillance perio

Table 8.1 Animal Quarantine Surveillance program and laboratory test results – 2023

No of farm visits	No. of samples dispatch to laboratory	Test results
Animal Quarantine Station- Colombo Fish Farm -56 Meat Exports- 08	 Packing Water samples - 29 Fish Samples –327 Samples- 48	 Negative Negative Negative
Animal Quarantine Station - Katunayake DOC – 55 Pet birds (Holding)- 02 Horse-02(Consignment-17 horses)	HPAI -2210 Salmonella - 376 Serum Samples – 1127 HPAI - 29 Salmonella - 01 Feed Samples-14 Blood-34 Blood Smear-34 Fecal -34 Serum-34 Nasal Swabs-34	Negative
Animal Quarantine Station- Mattala Pet birds- 80 Fish Farm- 04 **Safari Park- 06**	 Pooled fresh dropping Sample 540 swabs -108 bottles Pet bird post mortem samples- 02 Live Fish –65/ Water Samples-08 Live Fish-25/Water samples-02 Fecal Samples-02	 Negative Negative Gold Fish- Positive for Gill flukes,Skin flues, Digenean trematode metacercaria & tricodina. Carp- Positive for skin Flukes,Tricodina & Digenean trematode metacercaria Water- Negative for Salmonella spp. and Vibrio spp. Note: Tested, negative after the treatments. Negative

d. Consignment detained / destroyed / re-exported in the year 2023

Number of consignments of animals and animal products were detained/ destroyed/ re-exported in the year 2023 are given in Annexure X.

8.2.2. Export of animals and animal products

a. International veterinary health certificates for meat

Details of export health certificates issued by the Chief Animal Quarantine Officer (CAQO) in 2023 are given in Table 8.2

Table 8.2: Health certificates issued for exports (2022-2023)

Item	No. of health certificates issued	
	2022	2023
Ornamental fish	2,905	3,341
Dogs	355	206
Cats	156	113
Poultry -DOC	24	18
Hatching eggs	03	3
Pet birds	43	68
Zoo animals	-	01
Elephant	-	01
Rabbit/Rat/Hamsters/G. Pig	01 (G.Pig)	01
Animal products (meat & meat products)	2,306	2,308
Table eggs	1,010	962
Animal by-products	78	91
Leather	-	-

b. Exports

Details on consignments of animals and animal products that were subjected to animal quarantine inspections and approved for export in 2023 are given in *Annexure XI.*

8.3. Regulatory activities – livestock industry

The VRA division facilitates international trade in animals and animal products through review and recommendations of request for imports.

a. Poultry

The regulatory activities carried out in 2023 in related to poultry industry are given in Table 8.3.

Table 8.3: Regulatory activities carried out in 2023

Activity	Description	Number
New Registration	Registration of new processing centers	02
Renewal of Registration	Renewal of breeder farms	77
	Renewal of hatcheries	50
	Renewal of grandparent farms	03
	Renewal of processing centers	16
	Renewal of further processing centers	10
Facilitation of imports	Issuing pre clearance approvals (No. of consignments)	252
	Revision/ preparation of import health requirements	01

b. Other animals, animal products and animal by products

Regulatory activities carried out during the year 2023 in respect to livestock and livestock products are given below.

Table 8.4: Pre-clearance approvals

Activity	No. of Applications received	Number Approved	Number of animals / Quantity
1. Live animals			
Pets - Dogs & Cats	439	439	529 Animals
Horse		2	18 Animals
Rabbit		01	01 Animal
Guineapigs		01	01Animal
Live Fish	52	52	52 Consignments
2. Genetic Material (Semen)			
Cattle	13	13	37,026 Doses
Goat	00	00	000 Doses
Day Old Chicks	56	56	56 Consignments
3. Animal Products			
Meat and Meat Items			
Beef	21	21	63.72 MT
Mutton	10	10	271.21 MT
Pork	05	04	53.53 MT
Lamb	14	14	103.37 MT
Edible Fat/Tallow/Casing	03	03	03 Consignments
Poultry Meat	46	46	46 Consignments.
Frozen Fish – Bait	48	48	79 MT
Table Eggs	28	28	28 Consignments
Hatching eggs	35	35	35 Consignments
4. Animal by products			
Fur/ Wool/ Hair/ Bristles	48	48	24,462.47 Kg
Leather	92	92	92 Permits
Gelatin	150	150	1,217.482 MT
Feathers	24	24	24 consignments.
5. BSE (Hide Glue, Yoghurt Cultures, Veterinary Equipment)	134	134	134 Consignments

8.4. Veterinary Drug Control Authority

Veterinary Drug Control Authority (VDCA) was promulgated under the provision of the Animal Disease Act No. 59 of 1992 and related regulation. VDCA is responsible for regulating manufacture, import, re-packing, export, marketing and use of veterinary pharmaceutical and biological products to safeguard animal health and thereby the public health aspects as well.

VDCA is also responsible for maintaining marketing authorization information, inspection of manufacturers (GMP), antimicrobial usage and resistance (AMU and AMR) leading for animal health sector.

VDCA committee members for the year 2023 and their fields of expertise are as stated below.

01. Dr. (Mrs).Hemali Kothalawala– Chairman
02. Dr. Ruchika Fernando – Vet. Pharmacology
03. Dr. A. Arulkanthan – Vet. Parasitology
04. Prof. Anil Pushpakumara – Vet. Reproduction
05. Prof. (Mrs) Nayana Wijayawardhana – Vet.Clinical Practice
06. Dr. H. Kothalawala – Vet. Microbiology
07. Dr. (Mrs) Chamari Palliyaguru– Animal Nutrition
08. Dr. Sujith Sudusinghe – Special member representing Local manufactures
09. Dr. H.P.V.D.S.Bandara, Registrar

Five committee meetings of VDCA and twelve User Permit Panels were conducted. A system for registration of Veterinary test kits and devices was initiated during this year.

a. New products registered in VDCA

New veterinary pharmaceutical and biological products registered in 2023 as follows.

Table 8.5: Imports for free sales

Pharmacological type	Dosage Form	Number Registered
Antibiotics	Injectable	6
	Oral preparations	8
	Topical application	4
Antiparasitics - Ectoparasiticides	Topical application	2
Antiparasitics- Ecto and Endoparasiticides	Injectable	4
Antiparasitics – Anthelmintics	Oral	6
Antiparasitics -Antiprotozoals	Injectable	4
	Oral	5

Pharmacological type		**Dosage Form**	**Number Registered**
Antihistamines		Injectable	3
Anesthetics and Sedatives		Injectable	4
Supplements	Vitamin	Injectable	4
	Vitamin and Mineral	Injectable	2
	Mineral	Injectable	2
Biological	Poultry Vaccines	Injectable	15
	Feline Vaccines	Injectable	2
	Canine Vaccines	Injectable	4
	Swine Vaccines	Injectable	2
Hormones – Reproductive		Injectable	4
NSAIDs		Injectable	3
Herbal-Wound Spray		Topical application	5
Herbal-Antiparasitic Spray		Topical application	3
Herbal- Reproductive		Oral	5
Herbal- Analgesic		Oral	1
Total			**98**

Table 8.6: Local manufacture for free sales

Pharmacological type	**Dosage Form**	**Number registered**
Antiprarsitics– Anthelmintics	Oral	3
Antiprasitics – Endo and Ectoparasiticides	Oral	2
Chelating Agents (Aquarium)		2
Herbal –Shampoos	Topical application	6
-Sprays	Topical application	5
Total		**18**

a. Invoice approvals

During the year, 625 invoices were approved by VDCA, to import veterinary pharmaceuticals and biological products for the worth of approximately 5,000 million Sri Lankan rupees.

b. User permit approvals

Table 8.7: User permit approvals

Species	**Pharmacological type**	**Issued**
Poultry	Vaccine	22
Equine	Antiparasitic	3
	Topical application	4
	Hoof treatment	2
Fish	Hormone	4
Dog and Cat	Supplement-Energy	3
-	Test kits	48
Total		**76**

8.5. Implementation of Animal Feed Act

With the view of ensuring the quality of available animal feed in local market, the Animal Feed Act No.15 of 1986 and its regulations were implemented to regulate, supervise and control the manufacture, sale, distribution of animal feed and import of animal feed and feed ingredients.

Subsequent amendments for Animal Feeds Act have been carried out and published as Animal Feed Act No.15 of 2016 to further strengthen the activities carried out under the act.

8.5.1 Animal Feed Advisory Committee

Under the provisions of the Animal Feed Act, the Animal Feed Advisory Committee has been established and it comprises with five persons who have technical knowledge and experience in animal nutrition and animal feed, one feed industry representative. The Animal Feed Advisory Committee has been appointed during the year 2022 for the period of three years.

8.5.2 Registrations and Renewals

Under the provisions of the animal feed act, all feed manufacturers and feed/feed ingredients/additive importers should be registered. After submission of all necessary documents with relevant application, comprehensive evaluation of submitted documents and inspection of premises is carried out by appointed authorized officers prior to the registration. After registration licenses are issued and valid for the period of one year.

After submission of respective application with turn over returns at the end of each calendar year, the licenses are renewed.

Table 8.9: Number of Registration of Feed Manufacturers and Importers – 2023

Activity	Total Number of Registered Manufacturers/ Importers	Newly Registered Manufacturers/ Importers in 2023	Number of Registered Products in 2023
Number of Manufacturers	22	28	336
Number of Importers	57	80	601
TOTAL	**79**	**108**	**937**

Table 8.10: Number of Renewals of Feed Manufacturers and Importers – 2023

Activity	Number of Manufacturers /Exporters/ Importers	Number of Products
Number of Manufacturers	98	4,148
Number of Exporters	7	
Number of Importers	192	
TOTAL	**297**	

8.5.3 Animal Feed Production – 2022 & 2023

Based on turn over returns, animal feed production of registered feed manufacturers was compiled.

Table 8.11: Compound Animal Feed Production by Type – 2022 / 2023

Type of Feed	Quantity 2022 (MT)	Quantity 2023 (MT)
Poultry Feed	836,138.22	995,263.01
Cattle Feed	46,023.68	48,880.24
Calf Feed	3,248.52	6,813.92
Pig Feed	4,447.55	4,540.58
Shrimp/Fish Feed	1,214.5	1,212.65
Horse Feed	42.78	167.67
Goat Feed	44.35	71.95
Other Feed	1,358.56	25.35
Pet Food & Supplement		717.51
Feed production from Registered Manufacturers	892,518.16	1,057,692.88
Self-mixed	259,846.36	170,163.62
Total Feed Production	**1,152,364.52**	**1,227,856.50**

** Source: TOR -2023 (by Registered Animal feed)*

Total animal feed production as well as the total poultry feed production by registered feed manufacturers has decreased during the year 2023. The quantity of feed produced by self-mixers (especially poultry feed producers) has been remained unchanged.

However, commercial feed production has been reduced and the reasons behind the reduction may be the reduction of raw material importation that leads to shortage of raw materials in the country and high costs in available raw material. Therefore, self- mixers tend to mix their required quantity by themselves using available feed raw material and alternative feed stuffs.

Graphical illustration of total feed production is given in the *Annexure XII.*

Table 8.12: Poultry Feed Production by Category -2022/2023

Type of poultry Feed	Quantity 2021 (MT)	Quantity 2022 (MT
Chick Starter	10,364.77	18,810.25
Layer Grower	22,019.57	47,595.14
Layer	135,612.40	249,056.99
Total Layer Feed	**167,996.74**	**315,462.38**
Broiler Booster & Starter	193,636.04	204,775.34
Broiler Finisher & Grower & Withdrawer	394,306.63	387,800.02
Total Broiler Feed	**587,942.67**	**592,575.36**

Type of poultry Feed	Quantity 2021 (MT)	Quantity 2022 (MT
Broiler Breeder	76,535.50	79,328.44
Layer Breeder	3,663.31	7,896.83
Total Breeder Feed	**80,198.81**	**87,225.27**
Total Layer Feed	167,996.74	304,420.38
Total Broiler Feed	587,942.67	592,575.36
Total Breeder Feed	80,198.81	87,225.27
Total Poultry Feed	**836,138.22**	**995,263.01**

** Source: TOR -2023 (by Registered Animal feed manufacturers)*

Vitamin Mineral Premix Production -2023

Based on turn over returns of vitamin and mineral premix manufacturers and exporters, production of vitamin & mineral mixtures was quantified.

Table 8.13: Vitamin and Mineral Premix Production – 2023

Type	Quantity
Vitamin/Mineral Premix for Local Use (Powder) MT	1,650.585
Vitamin/Mineral Premix for Export (Powder) MT	27,594.32
Vitamin/Mineral Premix for Export (Liquid) m^3	208.99

8.5.5. Usage of Raw Materials – 2023

Locally purchased as well as imported raw materials are used for animal production. Details of the raw materials used by the registered feed manufacturers are given in *Annexure XIII.* Wheat importation has been limited in 2023 and imported maize was used as the main energy supplement in poultry feed production. Some quantity of wheat as an energy supplement has been imported by the commercial feed manufacturers during the first quarter of the year 2023.

a. Use of Meat and Bone Meal for Animal Feed Production

With the view of implementing BSE regulations on animal feed production, screening verified and approval was given to import 21,638.38 Metric Tons of Meat and Bone Meal from the countries which were declared as low risk in Bovine Spongiform Encephalopathy by OIE.

8.5.6. Import of Animal Feed

Animal feed such as prawn/shrimp feed, fish feed, bird feed and pet feed (Dog & Cat) have been imported. Prawn/Shrimp and fish feed are used in shrimp and ornamental fish farming while pet food is imported to cater the customer requirement.

Table 8.14: Import of Animal Feed – 2023

Type	Quantity (MT)
Prawn/Shrimp Feed	10,610.37
Fish Feed	1,264.96
Pet Food (Dog & Cat)	1,665.09
Bird Feed	211.48

8.5.7. Export of Animal Feed

Vitamin and Mineral premixes, Vitamin E and other feed additives were manufactured and exported to the south Asian and African countries by nine registered premixing manufacturers.

Table 8.15: Issuance of Veterinary Export Certificates – 2023

Number of Veterinary Export Certificates Issued	Quantity of Vitamin/Mineral and other products exported (MT) as powder	Quantity of Vitamin/Mineral and other products exported (m^3) as liquid
115	27,594.32	208.99

8.6 Animal identification and traceability program

Necessary inputs including 70,052 ear tags and fuel to implement the program at field level were provided to the provinces to facilitate implementation of this program. A total of 118,142 cattle were ear tagged during the year 2023.

09. ADMINISTRATION DIVISION

9.1. Introduction

The key responsibility of this division is to maintain and coordinate the organizational and operational activities of the department continuously & to provide required infrastructure facilities, while ensuring the proper management of the department and providing services to clients of the department in order to achieve the objectives of the organization.

Main functions of the division

- Attend to establishment matters related to all staff of the Department of Animal Production and Health.
- Handling correspondences regarding implementation of service minutes of technical services of DAPH.
- Attend to matters regarding the pensions/ loans/ quarters/ lands/ Agrahara scheme and legal issues of the department.
- Handling correspondences regarding recruitments, promotions, transfers and appraisals of the staff.
- Office management.

9.2. Present cadre positions of the Department

The present approved cadre positions of divisions(Animal Health, Animal Breeding, Veterinary Research, Human Resource Development, Livestock Planning and Economics, Veterinary Regulatory Affairs, Administration and Finance) of the department amounted to 965 and actual cadre position was 755 *(Project I: 204 Project II: 337 and Project III: 214*)

Details of cadre positions are given in the *Annexure XV*.

9.3. Appointments

Development Officer-12

9.4. Recruitments

Multitasking Development Assistant – 35

9.5. Promotions

Lab Assistant- 04
Field Assistant- 02
Driver- 06
Office Employment Service- 05
Field Assistant - 03

9.6. Retirements

Details of staff members who have retired from the service in 2023 are as follows;

Additional Director (Admin)	01
Additional Director(Animal Health)	02
Livestock Development Officer	02
Director	01
Research Assistant	03
Office employee service	01

9.7. Resignations

Livestock Development Officer - 02

9.8. Vacation of Post

Management Services officer- 01

Field Assistant- 01

9.9. Loans Approved

Type of loan	No.	Amount (Rs.)
Distress Loan	110	22453,524.00

10. FINANCE DIVISION

10.1. Introduction

The Departmental Head pertaining to the financial activities is 292. The activities of the department were performed under two (02) programs and three (03) projects. Financial allocations and the expenditure summary for the year 2023 are as in *Annexure XV*.

A sum of Rs. 802.10 million for the recurrent expenditure and Rs. 867.00 million for the capital expenditure was received by the Department for the year 2023, totaling Rs. 1,669.10 million.

10.2. Allocations

a. Departmental Allocations

Head: 292

	Estimated allocation (Rs.)	**Supplementary allocation received from the Treasury (Rs.)**	**Net allocation (Rs.)**	**Expenditure (Rs.)**	**Percentage of the expenditure**
Recurrent (Rs.)	802,100,000		802,100,000	719,742,884	89.73 %
Capital (Rs.)	867,000,000		867,000,000	509,823,733	58.80 %
Total (Rs.)	**1,669,100,000**	-	**1,669,100,000**	**1,229,566,617**	**73.66 %**

Allocations received from other Ministries and Departments

Vote	**Allocation (Rs.)**	**Expenditure (Rs.)**	**Percentage of the expenditure**
No allocations received from other Ministries and Departments -			

10.3. Public Servants' Advance Account "B"

	Limits of the Annual Estimates (Rs.)	**Actual Value (Rs.)**
Balance as at 01.01.2023		**85,400,491.92**
Maximum debit limit	35,000,000.00	26,450,579.85
Minimum credit limit	24,000,000.00	31,221,728.53
Maximum limit of the debit balance	130,000,000.00	
Credits not affecting the limits		
Balance as at 31.12.2023		**80,629,343.24**

10.4. General Deposit Account

The balance of the General deposit account of the Department as at 31.12.2023 was Rs. **18,326,650.16**

The breakdown of the deposit accounts as follows

6000-0-0-1-0-110	116,233.70
6000-0-0-13-0-106	8,621,928.60
6000-0-0-16-0-98	8,529,180.71
6000-0-0-2-0-153	1,059,307.15
Total	**18,326,650.16**

10.5. Departmental Income

The income collected by the Department for the year 2023 is given in *Table 10.1.*

Table 10.1: Income collected – 2023

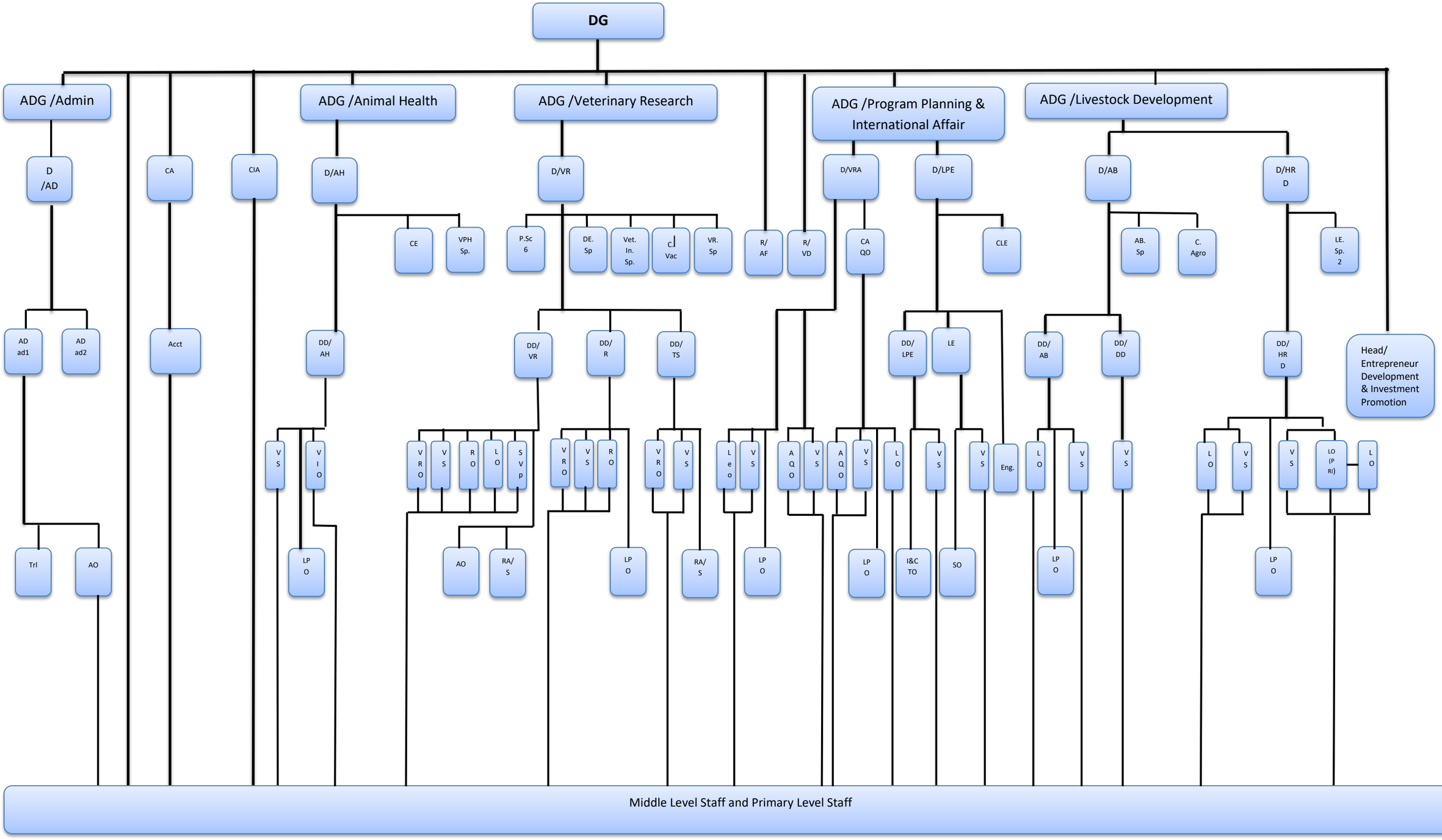
Income Subject No.	Particulars of the income	Total income received * (Rs.)
2002-01-01	Building rent	8,985,318.68
2002-02-99	Loan interest to Public Servants	3,153,437.88
2003-01-00	Departmental sales	361,882.50
2003-02-99	Sundries	1,067,170.00
2003-99-00	Other receipts	91,023,864.67
	Total	**104,591,673.73**

*Revised

Rs. 1,109.84 million was obtained from the Treasury for the activities of the department and Rs. 104.59 million received as income, miscellaneous revenue.

Annexures

Organizational Structure



Other Staff: DO, DA, Le.Ass, Pro.Ass., TO, Drftm, RA, MSO, LIB, LDO

Dri, Tra.Ope., LA, Mech, BO, Car, Elec, Ban.Kee, Watc, BBC, MM, GtC, AG, LM, KKS, ACA, GL, SL, FA

DG	-Director General – Dept. of Animal Production & Health
ADG	-Additional Director General
D/AD	-Director, Administration
D/VRA	-Director, Veterinary Regulatory Affairs
D/LPE	-Director, Livestock Planning and Economics
D/HRD	-Director, Human Resource Development
D/AB	-Director, Animal Breeding
D/VR	-Director, Veterinary Research
D/AH	-Director, Animal Health
CA	-Chief Accountant
CLE	-Chief Livestock Economist
CE	-Chief Epidemiologist
VPH.Sp.	-Veterinary Public Health Specialist
P.Sc	-Principal Scientist
DE.Sp.	-Dairy Engineering Specialist
Vet.In.Sp.	-Veterinary Investigation Specialist
C.Vac	-Chief Vaccinologist
R/AF	-Registrar/ Animal Feeds
R/VD	-Registrar/ Veterinary Drugs
CAQO	-Chief Animal Quarantine Officer
AB.Sp.	-Animal Breeding Specialist
VR.Sp.	-Veterinary Reproduction Specialist
LE.Sp.	- Livestock Extension Specialist
C.Agro.	-Chief Agronomist
CIA	-Chief Internal Auditor

Acct.	-Accountant
DD/AH	-Deputy Director, Animal Health
DD/VR	-Deputy Director, Veterinary Research
DD/R	-Deputy Director, Research
DD/TS	-Deputy Director, Technical Service
DD/LPE	-Deputy Director, Livestock Planning and Economics
DD/HRD	-Deputy Director, Human resource Development
DD/AB	-Deputy Director, Animal Breeding
DD/DD	-Deputy Director, Dairy Development
LE	-Livestock Economist
AD. Ad	-Assistant Director/ Administration
SVP	-Superintendent of Vaccine Production
AQO	-Animal Quarantine Officer
VRO	-Veterinary Research Officer
VIO	-Veterinary Investigation Officer
VS	-Veterinary Surgeon
LO	-Livestock Officer
RO	-Research Officer
Leo	-Legal Officer
Eng.	-Engineer
AO	-Administrative Officer
RA/S	-Research Assistant/Special
LPO	-Livestock Promotion Officer
Trl	-Translator
I & CTO	-Information & Communication Technical Officer
SO	-Statistical Officer

Other Staff	
DO	-Development Officer
DA	-Development Assistant
Le.Ass	-Legal assistant
Pro.Ass.	-Programming Assistant
TO	-Technical Officer
Drftm	-Draftman
RA	-Research Assistant
MSO	-Management Services Officer
LIB	-Librarian
LDO	-Livestock Development Officer
WR	-Warden
Dri	-Driver
Tra.Ope.	-Tractor Operator
LA	-Laboratory Assistant
Mech	-Mechanic
BO	-Boiler Operator
Car	-Carpenter
Elec	-Electrician
Ban.Kee.	-Bungalow Keeper
Watc	-Watcher
BBC	- Bast Bullock Care-taker
MM	-Milk Man
GtC	-Goat Caretaker
AnC	-Animal Caretaker

AG	- Animal Guardian
LM	-Lawn Mower
KKS	-Office Employment Service
ACA	-Animal Control Aide
GL	-Garden Laborer
SL	-Sanitary Laborer
FA	-Field Assistant

Annexure II

Key Data on the Poultry Industry (2022-2023)

Activity	2022	2023	Growth (%)
1. Procurement of Grand Parent and Parent stock			
Grand Parent Stock (Broiler)	33,564	46,121	27
Parent Stock ('000)			
Broiler	1,247.67	1,425.58	12
Layer	34.35	116.94	71
2. Production of Day - Old Chicks (Mn)			
Broiler	161.37	166.45	3
Layer	5.3	7.23	27
3. Production of Poultry Feed (1000 MT)	836.14	995.26	16
4. Export of Poultry Products			
Day- Old Chicks	106,384	86,918	22
Chicken and Chicken Products (MT)	502.76	1,812.52	72
Table Eggs	17,916,455	14,137,580	27
Hatching Eggs	19,800	21,600	8
5. Import of Poultry Products			
Chicken and Chicken products (MT)	171.15	236.84	28
Egg Products (MT)- Egg Powder/Egg Albumin	-	20.87	100
- Liquid Egg	54.02	39	39
Table eggs (Mn)	-	168.53	100

Activities Performed at Veterinary Investigation Centers - 2023 *Annexure III*

Programme	Activity	2023	Total	%
1. Disease Investigation in field	1.1 Field Investigation	585	518	89
	1.2 Sample collection for testing	2,900	3,155	100
	1.3 Investigation Reports	585	397	68
	1.4 Follow-up / further investigation	309	189	61
2. Laboratory Service for disease diagnosis	2.1 Post-mortem examinations			
	- Poultry (No. of birds)	4,260	3,243	76
	- Other Species	382	197	52
	2.2 Testing of samples			
	- Bacteriological (Culture)	5,050	3,833	76
	- ABST	2,430	1,799	74
	- Parasitological - Blood	7,275	9,073	100
	- Fecal Sample	3,395	2,588	76
	- Skin	180	89	49
	- Molecular (PCR)	160	4	3
	2.3 Milk analysis (including PPRS)	1,677	1,295	77
	- CMT on request	6,150	6,226	100
	2.4 Samples dispatch for further testing	1,246	2,080	100
3. Vaccine Production & Vaccination	3.1 CPD Vaccine (No. of farms)	267	63	24
	3.2 Wart Vaccine (No. of Animals)	730	582	80
	3.3 Babesiosis Vaccine (No. of Animals)	1,610	10	1
4. Supply of lab. Inputs to Veterinary Offices	4.1 CMT reagent (Liter)	495	960	100
5. Dairy Farm Health Improvement Project	5.1 New farm registration	194	222	100
	5.2 No. of total registered farms	2,306	2,359	100
	5.3 Farm Visited	2,500	1,793	72
	5.4 Mastitis screening (CMT)	16,850	13,744	82
	5.5 Milk sample testing (ABST)	2,040	1,000	49
	5.6 No. of sample tested for Helmenthiosis	8,650	5,770	67
	5.7 Teat dip solution issued (L)	4,290	4,209	98
	5.8.Issuing of Udder infusion vials (free issue)			
	Lactating Cow	22,050	11,255	51
	Dry Cow	5,555	3,733	67
6. Brucellosis control Programme	6.1. No. of Milk collecting centers	1,452	806	56
	6.2. Screening dairy herds (MRT)	3,490	4,152	100
	6.3. Animal screening in suspected herds (RBPT)	2,660	1,331	50
	6.4. No. of samples submitted for CFT	680	351	52
	6.5. Vaccination of Animals S19	7,425	3,666	49
7. Salmonella Control Programme	7.1 No of Breeder farm to be monitored	67	121	100
	7.2 No of Breeder farm visits	134	94	70
	7.3 No of Hatcheries to be visited	49	309	100
	7.4 No of Hatchery visits	196	116	59
	7.5 No of Hatchery samples tested	14,700	9,783	67
8. Avian Influenza surveillance Programme	8.1 No of serum samples	5,190	4,348	84
	8.2 No of dropping samples at Hotspots	9,600	8,011	83
	8.3 No of cloacal swabs (Backyard)	9,750	8,568	88
	8.4 No. of sample (live bird market)	1,530	1,159	76
	8.5 No of cloacal swabs (pet bird Establishment)	210	640	305
	8.6 No. of Samples (Poultry Processing Establishment)	5,760	3,711	64
	8.7 Duck serum sample	900	759	84
	8.8 No of cloacal swabs (Duck)	900	870	97
9. No. of Animals Tested for TB	9.1 No. of animal tested for Tuberculin Skin test	900	498	55
10. Aquaculture	10.1 Shrimp Farms		7	
	10.2 Food fish Farms		0	
	10.3 Ornamental fish farms		550	
11. Poultry Processing /further processing Establishment Inspection and monitoring	11.1 No of Poultry Processing Establishment annual inspection		12	
	11.2 No of visits of poultry /processing/further processing establishment visits		34	
	11.3 No of sample collection		686	

Annexure IV

Research Publications 2023

1. Amarasiri, P. G. I. D. and Alexander, P. A. B. D. (2023) Comparative evaluation of performance of calves born through Sex-sorted semen and conventional semen in Sri Lanka. Journal of Science of South Eastern University, Sri Lanka – Vol 4, (01), pp. 16-20 http://ir.lib.seu.ac.lk/handle/123456789/6774

2. Amarasiri, P. G. I. D., Iddamaldeniya, S. S., Senasinghe, N. D., Madugalla, S., Dharmawardena,J., Athapaththu., A. M. H., Aathiq, M. R. M. and Hapuarachchi, L. (2023). Efficacy of Levamisole and Ivermectin against gastrointestinal helminthes in a semi-intensively managed dry zone goat farm. (In) Proceedings of 75th Annual Scientific Sessions 2023 of Sri Lanka Veterinary Association. p 24

3. Amir-Danial, Z., Zamri-Saad, M., Amal, M. N. A., Salleh, A., Mohamad, A., Sutra, J., Manchanayake, T., Ali, A., Ina-Salwany, M. Y. 2023. Field efficacy of a feed-based inactivated vaccine against vibriosis in cage-cultured Asian seabass, Lates calcarifer. Vaccines, 11, 9. https://doi.org/10.3390/vaccines11010009

4. Ariyawansa S., Gunawardana K.N., , Muditha M. Hapudeniya M.M. , Manelgamage N.J., Karunarathne C.R., Madalagama R.P. , Ubeyratne K.H., Wickramasinghe D. , Tun H.M., Wu P. , Lam T.T.Y., & O. S. K. Chan (2023) One Health Surveillance of Antimicrobial Use and Resistance: Challenges and Successes of Implementing Surveillance Programs in Sri Lanka. Antibiotics 12:446., https://doi.org/10.3390/antibiotics12030446

5. Beligala B.A.L.S., Palliyeguru M.W.C.D., Daluwatta S.S.K., Nayananjalie W.A.D.,(2023 Effect of supplementation of exogenous microbial enzymes into dairy cow feed on their milk production, 15th Annual Research Symposium - Faculty of Agriculture, Rajarata University of Sri Lanka, 2023

6. D.B.N. Pushpakumara, J.K.H.Ubeyratne, D.G.S.S. Bulumulla and G.A.T. Prasad (2023) Strong evidence suggests that Foot and Mouth Disease among cattle could potentially cross-infect wild elephants (Elephas maximus maximus) in Sri Lanka. Proceedings of 75 th Annual Scientific Sessions of Sri Lanka Veterinary Association 15 th September 2023. Pp 7.

7. D.P. Karunanada, M.W. C. D. Palliyeguru, N.B.K. Thotagodawaththa and S.M.A.C.U. Senararathne 2023, Evaluation of selected sweet potato varieties for yield and nutrient composition. proceedings of International Postharvest Research Symposium, PP32.

8. Daluwatta, S.S.K., Palliyeguru, M. W. C. D., Chandima, R.A.T., Ranasingha, R.A.I.M., Kularathna, K.W.G.S.M., 2023. Preliminary screening of imported food rejects before utilizing them for animal feeding: To prevent aflatoxin M1 in milk, 75th Annual Scientific Sessions of the Sri Lanka Veterinary Association 2023, pp 28

9. De Alwis K.K.J.S, Pathirana A.P.D.G, Preasadini D.R.T., & Kumari M.V.I. Assessing the suitability of in-bottle pasteurization techniques for small-scale dairy production. 2023. In proceedings of 79th Annual sessions (part 1) of SLAAS. pp 134

10. Devindi K.M., Priyantha R., Liyanagunawardena N., Weerasinghe W.M.P.B. and M.B.P. Kumara Mahipala (2023). Assessment of the effect of freeze-dried Lactobacillus inoculants on ensiling fodder Sorghum and Guinea grass. Proceedings of the International symposium on agriculture and environment, University of Ruhuna, Sri Lanka. ISBN No: 1800-4830. Pp. 120.

11. Devindi K.M., Priyantha R., Liyanagunawardena N., Weerasinghe W.M.P.B. and M.B.P. Kumara Mahipala (2023). Production of freeze-dried Lactobacillus inoculants and evaluation of the effect of inoculation rate on ensiling of forage maize. Proceedings of the International symposium on agriculture and environment, University of Ruhuna, Sri Lanka. ISBN No: 1800-4830. Pp. 135.

12. Dunuwila D.M.U.N.K., Daluwatta, S.S.K., Kumudinie D.L.N., Evaluation of the impacts of Covid- 19 pandemic and the present economic crisis on the animal feed industry in Sri Lanka. 75th Annual Scientific Sessions of the Sri Lanka Veterinary Association 2023, pp 14

13. G.A.D.K.K. Gunathilaka, M. A. R. Priyantha, D.V.P. Prasada, G.M.C.R. Karunarathne, D.R.A. Dissanayake. (2023). Phylogroup, antimicrobial profiles and occurrence of qnr genes in ciprofloxacin resistant avian pathogenic Escherichia coli isolated from commercial chickens in Sri Lanka. The proceeding of 75th Annual Scientific session, Sri Lanka Veterinary Association, Kandy, Sri Lanka,Pp: 16.

14. Gayani Weerasooriya, M.A.R. Priyantha, Damer BlakeGuillaume Fournie, Nilukshi Liyanagunawardena P.S.Fernando, P.S de Alwis Sandun Bandara K.R.P.S.PremarathneH.M. Madushi ThakshilaP.A. Udeshika Sewwandi, Hemal Rasanjana Peiris, Ruwani Kalupahana(2024)The prevalence of poultry-related foodborne pathogens along the farm-to-fork continuum in the poultry industry in Sri Lanka. Conference: UKRI-GCRF ONE HEALTH POULTRY HUB FINAL HUB MEETING 7-9 FEBRUARY 2024 NEW DELHI, INDIA

15. Gunathilake, G.A.D.K.K.,Priyantha M.A.R., Prasada,D.V.P., Karunarathne G.M.C.R., D. R. A. Dissanayake (2023)Phylogeny, antimicrobial profiles, virulence determinants, biofilm formation and occurrence of qnr genes in ciprofloxacin resistant avian pathogenic E.coli isolated from commercial chickens in Sri Lanka.XXIIth World poultry science association Sri Lanka Branch,03-11-2023.

16. Iddamaldeniya, S. S., Amarasiri, P .G. I. D., Senasinghe, N. D, Athapaththu., A. M. H., Aathiq, M. R. M., Anupama, N. M. T., Nizananthan, K. and Rajapakse, R. P. V. J. (2023). Development of an irradiated vaccine seed for bovine Babesia bigemina infection in Sri Lanka. (In) Proceedings of 75th Annual Scientific Sessions 2023 of Sri Lanka Veterinary Association. p 44

17. Ina-Salwany, M. Y., Manchanayake, T., Mohamad, A., Monir, M. S., Azmai, M. N. A., Annas, S., & Zamri-Saad, M. (2023). Role of Adjuvants in Vaccination Studies. In Fish Vaccines: Health Management for Sustainable Aquaculture, 101. https://doi.:10.1201/9781003388548-10

18. J.K.H.Ubeyratne (2023). Emergence of Salmonella Infantis: Food safety and hygienic practices to eliminate Salmonellosis. Veterinary Research News. ISSN2961-5887. Pp4.

19. J.K.H.Ubeyratne, D.G.S.S. Bulumulla, T, Mayurathi, P.L. Kumarawadu, R. Gawurithilagan and A.Prabaharan (2023) Significant mortality of ruminants due to acute hypothermia in Northern and Eastern regions in Sri Lanka. Proceedings of 75 th Annual Scientific Sessions of Sri Lanka Veterinary Association 15 th September 2023. Pp 23.

20. Jayasekara, P. P. , Kaushalya A. U. K., Sandamali M. G. L., Siriwardana, D. L. B. S., Jayasinghe, C. P., Weerasundara, S. K.,. Weerasinghe, N. N, Gunawardana, G. A. (2023) Antibiotic susceptibility of bacterial isolates from dairy cattle and the farm environment in Ella, Sri Lanka, In proceedings of International Conference on Sustainable Animal Agriculture for Developing Countries, Nov 21-24, University of Laos, Laos, pg 171

21. Jayasekara, P. P., Gunawardana G. A., Amarasinghe, K. M. U. M., Keerthi Kumara, M. P., Muthuwatte, G. C., Nanayakkara, G. I., and Palliyeguru, M. W. C. D. (2023) Use of allele specific PCR to differentiate A1 and A2 variants of milk ß casein gene among cattle in North Central Province, Sri Lanka, In Proceedings of Multidisciplinary Research Conference 2023, Nov 20, KIU, Sri Lanka 11A

22. K. H. M. S. M. Herath, P. S. Fernando, K. M. S. G. Weerasooriya, N. C. M. Cooray, N. G. N.Samarakoon, P. S. De Alwis, M. I. Wijemuni, D. M. S. N. B. Dissanayake, N. Liyanagunawardena, C. D. Gamage, M. A. R. Priyantha (2023) Detectable immunological response in Brucella abortus S 19 vaccinated herds herds of cattle in Vilachchiya veterinary range, North Central Province, Sri Lanka. Sri Lanka Veterinary Journal 70: 2., 27-33. Sri Lanka Veterinary Journal., DOI: https://doi.org/10.4038/slvj.v70i2.80.

23. K. Ubeyratne., R. P. Madalagama., X. Liu., S. Pathorage., S. Ariyawansa., M.K.L. Wong., H.M.Tun (2023) Phenotypic and genotypic characterization of antibiotic-resistant Salmonella isolated from humans, aquaculture, and poultry in Sri Lanka: A retrospective study. Journal of infection and Public Health.16:1., 203-209. https://doi.org/10.1016/j.jiph.2023.10.028

24. K.K.J.S De Alwis, A.P.D.G Pathirana and W.M.A.I.K Bowatta. 2023. Development of chocolate coated snack based on curd and coconut. Presented in "A path for commercialization of Research Findings-Inventions and innovations of value-added Tea, Spice, Dairy products, Gem and jewelry, packaging industries". Ministry of Industries.

25. K.M. Devindi, R. Priyantha, N. Liyanagunawardena, W.M.P.B Weerasinghe., M.B.P. Kumara Mahipala (2023) Assessment of the effect of freeze-dried Lactobacillus inoculants on ensiling fodder Sorghum and Guinea grass. Proceeding of the international symposium on agriculture and environment, Faculty of Agriculture, University of Ruhuna, Sri Lanka P-120.

26. K.M. Devindi, R. Priyantha, N. Liyanagunawardena, W.M.P.B Weerasinghe., M.B.P. Kumara Mahipala (2023) Production of freeze-dried Lactobacillus inoculants and evaluation of the effect of inoculation rate on ensiling of forage maize Production of freeze-dried Lactobacillus inoculants and evaluation of the effect of inoculation rate on ensiling of forage maize. Proceeding of the international symposium on agriculture and environment, Faculty of Agriculture, University of Ruhuna, Sri Lanka P-135

27. Karunadhipathi, U.L., Malawiarachchi, M.A.P.W.K, Weerasinghe W.M.P.B. and M.B.P. Kumara Mahipala (2023). Effect of reduced fertilizer rate, increased plant density and extended irrigation interval on hybrid fodder sorghum yield in low land paddy fields. Proceedings of the third International conference of the center for environmental sustainability, University of Peradeniya, Sri Lanka. ISBN No: 978-624-5709-38-0. Pp. 39.

28. Karunarathne C.R., Madalagama R.P. , Ubeyratne K.H., Wickramasinghe D. , Tun H.M., Wu P. ,Lam T.T.Y., & O. S. K. Chan (2023) One Health Surveillance of Antimicrobial Use and Resistance: Challenges and Successes of Implementing Surveillance Programs in Sri Lanka. Antibiotics 12:446., https://doi.org/10.3390/antibiotics12030446

29. Kumara, K.P.S.A., Pathirana, A.P.D.G., Vidanarachchi, J.K. and Prasanna, P.H.P. 2022. Assessing cow urine pH as an indicator to detect unstable non acid milk. In proceedings of Faculty of Agriculture Undergraduate Research Symposium 2021/22. University of Peradeniya. P 156.

30. Liyanage L.B.U.V., Palliyeguru M.W.C.D. and Nayananjalie W.A.D., Cassava peel as a poultry feed ingredient: nutrient composition, metabolizable nutrients, and anti-nutrient factors, 2023, 15th Annual Research Symposium 2023,Faculty of Agriculture, Rajarata University of Sri Lanka

31. M.A.R.Priyantha (2023). Francisella tularensis-Zoonotic pathogen among wild rodents and arthropods-a possible threat in future, Sri Lanka Veterinary Journal,70:1., 13-21. DOI: 10.4038/slvj.v70i1.76
32. M.A.R.Priyantha (2023). Food born pathogen associated with milk, meat and eggs: Technical discussion of diarrheic diseases in human. Proceeding of 12th Annual scientific session of Sri Lankan Society for Microbiologist. 27th October 2023.Pp:19.

33. Manchanayake, T., Salleh, A., Amal, M. N. A., Ina-Salwany, M. Y., Zamri-Saad, M. 2023. Pathology and pathogenesis of Vibrio infection in fish: A review. Aquaculture Reports, 28, 101459. https://doi.org/10.1016/j.aqrep.2022.101459

34. McWhorter, A. R., Weerasooriya, G., Kumar, S., & Chousalkar, K. K. (2023). Comparison of peroxyacetic acid and acidified sodium chlorite at reducing natural microbial contamination on chicken meat pieces. Poultry Science, 102(11), 103009.

35. Mohd Ali, N. S., Zamri Saad, M., Azmai, M. N. A., Salleh, A., Z. M. Zulperi, Manchanayake, T., Zahaludin, M. A. D., Basri, L., Mohamad, A., M. D. Ina Salwany. 2023. Immunogenicity and efficacy of a feed-based bivalent vaccine against Streptococcosis and Motile Aeromonad Septicemia in red hybrid tilapia (Oreochromis sp.). Animals, 13, 1346. https://doi.org/10.3390/ani13081346

36. NCM Cooray, GMTM Herath, PS Fernando, MAR Priyantha, KHMSM Herath, CD Gamage. (2023). Serological evidences of the presence of multiple serovars of leptospirosis among dairy farms situated in Nochchiyagama Divisional Secretariat Division, in North Central Province of Sri Lanka. The proceeding of 75th Annual Scientific session, Sri Lanka Veterinary Association, Kandy, Sri Lanka, Pp: 18

37. O. De Silva, N. Liyanagunawardena, A. B. S. Pabasara, D. L. Daluwatta, K. W. D. M. Y.W. Wickramasinghe, K. M. S. G. Weerasooriya, M. I. Wijemuni, D. M. S. N. B.Dissanayake , P. S. De Alwis, N. Samarakoon, M. A. R. Priyantha (2023) Antimicrobial resistance including ESBL and carbapenemase in fecal E. coli isolates from bats. . Sri Lanka Veterinary Journal 70: 2., 39-47. DOI: https://doi.org/10.4038/slvj.v70i2.82

38. Pathirana A.P.D.G, De Alwis K.K.J.S, Weeragalla W.A.P.P, & Kumari M.V.I. 2023. Development of strained yogurt spread incorporated with fresh mint leaves and coriander leaves and evaluation of its quality parameters. In proceedings of 79th Annual sessions (part 1) of SLAAS. pp133

39. Pathirana APDG, Weeragalla WAPP, Kumari MVI and Mangalika ULP. 2023. Assessing the appropriateness of ethanol stability as an indirect measure of heat stability in cow milk. In proceedings of 75th Annual Scientific Sessions of SLVA. P13

40. Perera, G.I.S. (2023). Inclusion body hepatitis – an emerging infectious disease of poultry in Sri Lanka. Veterinary Research News-Veterinary Research Institute, 2023 July, Vol 02 (01), 3.

41. Raju, T., Manchanayake, T., Danial, A., Zamri-Saad, M., Azmai, M.N.A., Md Yasin, I.S., Mohd Nor, N., Salleh, A. 2023. Evaluating the intestinal immunity of Asian seabass (Lates calcarifer, Bloch 1790) following field vaccination using a feed-based oral vaccine. Vaccines, 11, 602. https://doi.org/10.3390/vaccines11030602

42. Sandamali M. G. L. , Gunawardana G. A. Bio film formation in milk collecting containers of selected areas (2023), Annual Research Symposium, Rajarata University of Sri Lanka

43. Sani, B., Yusoff, M. S., Ina Salwany M. Y., Abd Karim, M. M., Matori, M. F., Amal, M. N. A., Manchanayake, T., Zahaludin, A-D., Mohamad, A. 2023. Pathogenicity of Aeromonas hydrophila in high-value native Pangasius catfish, Pangasius nasutus (Bleeker). Preprint. https://doi.org/10.47836/pjtas.46.2.01

44. Senevirathna J.W.Y., Jayasekera N.K, Iddamaldeniya S.S., (2023) A PRELIMINARY STUDY ON THE PREVALENCE OF Babesia bigemina IN THREE VETERINARY RANGES IN KANDY DISTRICT. Proceedings of Undergraduate Symposium, Faculty of Veterinary Medicine and Animal Science, Peradeniya

45. Siriwardana, D. L. B. S, Gunawardana G. A. (2023) Development and Quality Evaluation of Goat Milk Ice Cream with Kithul (Caryota urens) Jaggery. , Annual Research Symposium, Rajarata University of Sri Lanka

46. Thusithran M., Jayasekera N.K, Iddamaldeniya S.S., (2023) A PRELIMINARY STUDY OF MOLECULAR PREVALENCE OF Theileria annulata IN THREE VETERINARY RANGES OF KANDY DISTRICT. Proceedings of Undergraduate Symposium, Faculty of Veterinary Medicine and Animal Science, Peradeniya

47. Weerasinghe, W.M.P.B., Herath, H.M.G.P. and Mahipala, M.B.P.K. (2023). Effects of Two Levels of Dietary Energy Content on Milk Production and Serum Metabolites in Early Lactation Temperate Crossbred Dairy Cows Fed Guinea Grass (Panicum maximum) Based Diets. Tropical Agricultural Research, 34(3): 200-211. DOI: https://doi.org/10.4038/tar.v34i3.8582 .

48. Weerathunga D, Udagama D, Campbell S, Barber D, Weerasinghe P. Performance of the Napier Hybrids Cultivars CO-5 (Pennisetum glaucum × P. Purpureum schumach) and Sampoorna (Pennisetum pedicillatum × P. americanum) Harvested at Five Intervals. Grasses. (2023); 2(3):156-167. https://doi.org/10.3390/grasses2030013

49. WesleyJ.J., Jayasekera N.K, Iddamaldeniya S.S., (2023) A PRELIMINARY STUDY ON THE PREVALENCE OF Theileria orientalis IN THREE VETERINARY RANGES IN KANDY DISTRICT. Proceedings of Undergraduate Symposium, Faculty of Veterinary Medicine and Animal Science, Peradeniya.

Annex V

Names of Officers Attended Overseas Training/ Meetings/ Workshops/ Visits – 2023

S No	Name	Designation	Programme	Country & Duration
1	Dr. (Ms.) Gayani Weerasooriya	VRO, VRI	Nomination to attend the Practical Training Program on "Molecular Techniques to Monitor and Investigate Antimicrobial Resistance".	12th to 21st Jan. 2023 India
2	Dr. G.D.N. Kumarasingha	VS, Animal Health Division	WOAH Sub Regional Training Workshop on Animal Rabies Diagnosis for South Asia.	18th to 21st Jan.2023 India
3	Dr. (Ms) P.I.P. Perera	Veterinary Surgeon VRA Division	Regional Training Workshop on the Use of the Traces System	16th to 19th January 2023 India
4	Dr.(Ms) J. K.H. Ubeyrathne	Veterinary Surgeon	Regional Training Course on Verification of sops for New Serological and Molecular Techniques.	6th to 10th February 2023 Republic of Korea
5	Dr. H.P.V.D.S. Bandara	Registrar/ Veterinary Drugs	Regional ANIMUSE Training for WOAH Focal Points for Veterinary Products	21st to 26th February 2023 Thailand
6	Dr. (Ms) S. A. A. P. Samarasundara	Veterinary Surgeon	Workshop on IOT Application Livestock Management	20th to 23rd February 2023 Thailand
7	Dr. G.G.I.A. Jayawickrama	Director/ Animal Health Chief Epidemiologist	Meeting of the South - East Asia Regional GOARN(Global Outbreak Alert and Response Network) Partners	15th to 16th March 2023 Nepal
8	Dr. (Ms) K.A.C.H.A. Kothalawala	Director General	Invitation to attend the WOAH Global Conference on Emergency Management " Tacking shared threats for a safer world"	3rd to 5th April 2023 Paris (France)
9	Dr.(Ms) P.G.I.D. Amarasiri	VRO, VRI	Applied Epidemiology Professional Development Practical Course	15th to 19th May 2023 New Zealand
10	Dr. H. Kothalawala Dr.(Ms) Puvanendiran Dr. P.L. Kumarawadu	Director (VR) Head, Animal Virus Lab Deputy Director	1st South Asia TADs Coordination Meeting of GF-TADs for Asia and the Pacific.	8th to 13th May 2023 Bhutan

S No	Name	Designation	Programme	Country & Duration
11	Dr. G.G.I.A. Jayawickrama Dr. S. Puvanendiran	Director (AH) Head, Animal Virus Lab	Inspection of registered Poultry Farms to import Eggs.	18th to 21st May 2023 India
12	Dr. K.H.D.T .Kasagala	National Focal Point for Aquatic Animals	Regional Workshop for WOAH National Focal Points for Aquatic Animals.	26th to 28th June 2023 Republic of Korea
13.	Dr. D.R.K. Perera	Veterinary Surgeon	The World Organization for Animal Health (WOAH) disease notification training for WOAH national focal points for animal disease notification.	21st to 23rd June 2023 Japan
14.	Dr. N.D.T. Sirisena	VIO, Welisara	Regional training Workshop on Strengthening leadership in multi sectorial coordination for implementation of national action plan on AMR.	25th to 27th July 2023 New Delhi, India
15.	Dr. D.L.N. Kumudini Dr. Anushka Lenagala Dr. WMSS Wansekara	Veterinary Surgeon Veterinary Surgeon Veterinary Surgeon	Intermediate Poultry Course.	24th to 26th July 2023 Thailand
16	Dr. H. Kothalawala	Director (VR)	Coordination Meeting of the Veterinary Diagnostic Laboratory Network (VETLAB Network) with Directors of African and Asian Veterinary Laboratories.	21st to 25th August 2023 Vienna, Austria
17	Dr. (Mrs.) Gnana Gunawardene	VRO, Principle Scientist (Veterinary Biotechnology)	Training Course for Veterinary Diagnostic Laboratory Network Partners on Multipara metric Detection of Pathogens Causing Major Trans boundary Animal Disease and Zoonosis.	25th Sep. to 6th Oct. 2023 Vienna, Austria
18	Dr. P.G. Senevirathna	Director (Animal Breeding)	Participation in 1st Edition of international Food and Agricultural (FOODAG) Exhibition.	10th to 14th Sep. 2023 Pakistan
19	Dr. K.A.C.H.A. Kothalawala	Director General	Invitation to WOAH Regional Workshop for Avian Diseases Prevention and Control in Asia and the Pacific.	29th to 31st August 2023 China

S No	Name	Designation	Programme	Country & Duration
20	Dr. S.K. Samanthi Rathnasiri Dr. Kalpana Suthaharan	VIO, Homagama VIO, Vavuniya	10th Workshop on Diagnosis of Animal Diseases in the Republic of Korea.	16th to 26th October 2023 Republic of Korea
21	Dr. Gayani Weerasooriya	VRO, VRI	Training course on EU rules applicable to authorization and Placing on the Market of Novel Foods and traditional Foods Coming.	the 31st Oct. to 3rd Nov. 2023 New Delhi, India
22	Dr. W.M.A.D. Wanninayake	VRO, Polgolla	Regional Training course on Next Generation Sequencing (NGS) Using illumina Platform.	10th to 14th September 2023 Bangladesh
23	Dr. S.S.K. Daluwatta	Research Officer	Advance Feed Milling Course.	28th to 30th August 2023 Bangkok, Thailand
24	Dr. S.S.K. Daluwatta	Research Officer	Dairy Farming Techniques to Improve Quality and Quantity of Milk for Food and Nutrition Security.	25th Sep. to 21st Nov.2023 Japan
25	Dr. A.M.D.N. Abeykoon Dr. K.H. Wellappili Dr. P.G.R.L. Bandara Dr. S.A.U.M. Sinhalagoda	Veterinary Surgeon Veterinary Surgeon Veterinary Surgeon Veterinary Surgeon	Seminar on Technologies for Dairy Products and Food Processing for Developing Countries.	27th September to 17th October 2023 China
26	Dr. A.G. Liyanagamage Dr. S. Iddamaldeniya	ADG (LD)/ D (HRD) DD (VR)	Eighth Meeting of SAARC Chief Veterinary Officers (cvo's) Forum.	9th to 11th Oct. 2023. Dhaka, Bangladesh
27	Dr. D.M.U.N.K. Dunuwila	Veterinary Surgeon	Seminar on Animal Feed Formula Extension for Developing Countries.	18th to 31st Oct. 2023 China
28	Dr. K.A.C.H.A .Kothalawala	Director General	82nd APHCA Executive Committee meeting & 44th Business Session / 33rd Conference of the Regional Commission for Asia and the Pacific.	13th to 17th Nov. 2023 New Delhi, India
29	Dr. M.A.R. Priyantha	Principle Scientist	Invitation to the Inagural Plenary Assembly AMR Multi - Stakeholder Partnership Platform.	15th to 16th Nov. 2023 Rome, Italy

S No	Name	Designation	Programme	Country & Duration
30	Dr. L.M.P. Wijemanna	Dairy Engineering Specialist	The Regional AMR Technical Advisory Group (TAG) Meeting for the Animal Health Sector.	29th to 30th Nov. 2023 Bangkok, Thailand
31	Dr. K.A.C.H.A .Kothalawala PD – Northern PD – Uva Dr. Sagarika Sumanasekara	Director General	Emergency Preparedness tool and Strategies to Support Regions and Countries to Strengthen Animal Health Emergency Preparedness.	28th to 30th Nov. 2023 Bangkok, Thailand
32	Dr. Nilukshi Liyanagunawardena	Veterinary Research Officer	Regional hands - on training on isolation, identification and antimicrobial susceptibility testing for Enterococcus spp.	22nd to 24th Nov. 2023 Bangkok, Thailand
33	Dr. GGIA Jayawickrama	Chief Epidemiologist	6th meeting of the Peste des petits Ruminants Global Research and Expertise network.	28th to 30th Nov. 2023 India

Annexure VI

Details of Examinations Conducted in 2023

No	Name of the exam	Number of applicant	Number of exams
01	Coordination of efficiency bar exams of AP&H service	90	2
02	Conducting departmental exams & EB exams for other services (On request)	17	1
03	Conducting recruitment exams for LDOs & RAs	66	2
04	Conducting semester exams for Diploma Students	151	8
05	Conducting semester exams (Repeat) for Diploma Students	06	3

Provincial Activities *Annexure VII*

Progress of Services / Activities of Provincial DAPH - 2023

Dispensary Cases	**WP**	**CP**	**SP**	**NP**	**EP**	**NWP**	**NCP**	**UP**	**SP**	**Total**
Cattle/ Buffalo	5,843	4,454	3,271	21,160	14,641	20,613	18,542	4,686	2,056	95,266
Goat/ Sheep	6,171	2,553	1,806	27,142	13,771	6,957	2,563	952	2,464	64,379
Pig	1,114	537	105	3,608	740	3,471	904	92	152	10,723
Poultry	4,274	2,235	5,939	22,620	10,706	4,149	2,916	2,640	1,874	57,353
Pet Animal	3,494	1,239	2,020	2,154	246	1,148	408	406	1,430	12,545
Other	47	11	114	50	27	2	6	0	6	263
Total	**20,943**	**11,029**	**13,255**	**76,734**	**40,131**	**36,340**	**25,339**	**8,776**	**7,982**	**240,529**

Field Cases	**WP**	**CP**	**SP**	**NP**	**EP**	**NWP**	**NCP**	**UP**	**SP**	**Total**
Cattle/ Buffalo	16,149	14,812	15,377	20,123	16,990	33,487	12,489	10,244	7,018	146,689
Goat/ Sheep	11,536	6,333	5,507	10,421	11,694	7,680	3,018	934	3,600	60,723
Pig	3,363	476	637	285	1,050	3,310	551	106	2164	11,942
Poultry	414	202	789	1,001	11,352	142	1,694	4,380	1,840	21,814
Pet Animal	2	0	20	0	1	2	0	0	10	35
Other	0	1	0	30	0	0	0	0	1	32
Total	**31,464**	**21,824**	**22,330**	**31,860**	**41,087**	**44,621**	**17,752**	**15,664**	**14,633**	**241,235**

Issue of Health Certificate	**WP**	**CP**	**SP**	**NP**	**EP**	**NWP**	**NCP**	**UP**	**SP**	**Total**
Cattle/ Buffalo	682	1,314	278	3,329	1,368	562	782	1,296	179	9,790
Goat/ Sheep	685	885	331	805	694	273	366	452	275	4,766
Pig	165	76	8	340	57	705	36	58	39	1,484
Other	2	2	14	51	5	51	4	1	0	130
Total	1,024	2,813	1,067	10,470	3,564	1,380	1,692	1,504	594	24,108

Annexure VIII

Milk Collection by Main Milk Collecting Organizations 2022 – 2023

Province	District	Milk Collection (Liters)	
		2022	2023
Western	Colombo	1,273,490	1,074,006
	Gampaha	2,724,304	3,005,889
	Kalutara	891,512	1,080,083
	Total	**4,889,306**	**5,159,978**
Central	Kandy	8,522,207	8,025,345
	Matale	9,615,049	16,899,197
	Nuwara-Eliya	53,899,838	56,285,628
	Total	**72,037,093**	**81,210,171**
Southern	Galle	620,144	636,335
	Hambantota	4,016,872	396,132
	Matara	417,214	2,298,305
	Total	**5,054,230**	**3,330,772**
North Central	Anuradhapura	46,670,301	51,302,418
	Polonnaruwa	11,136,493	10,899,993
	Total	**57,806,794**	**62,202,411**
North Western	Kurunegala	34,162,991	34,722,735
	Puttlam	5,733,138	5,989,588
	Total	**39,896,129**	**40,712,323**
Northern	Jaffna	3,655,515	4,298,256
	Kilinochchi	2,332,103	1,100,167
	Mannar	1,386,133	2,867,258
	Mullativu	3,016,982	3,058,128
	Vauniya	2,742,521	2,506,381
	Total	**13,133,254**	**13,830,190**
Eastern	Ampara	8,564,882	2,327,266
	Batticaloa	5,092,215	9,924,150
	Trincomalee	4,878,971	4,821,624
	Total	**18,536,068**	**17,073,040**
Uva	Badulla	12,841,118	12,429,519
	Moneragala	5,480,940	6,224,045
	Total	**18,322,058**	**18,653,564**
Sabaragamuwa	Kegalle	159,552	957,195
	Rathnapura	1,205,017	316,108
	Total	**1,364,569**	**1,273,303**
Island Total		**231,039,501**	**243,445,753**

Collection details received from;

* Milco (Pvt) Ltd.
* Cargills Quality Dairies (Pvt) Ltd.
* Nestle Lanka Ltd.
* Ulankulama Dairy pvt Ltd.
* Chello Dairies (Pvt.) Ltd
* Richlife Dairies Ltd.
* Ambewela Products (pvt) Ltd.
* Polonnaruwa District Milk Cooperative Society
* Pattipola Livestock Co. Ltd.
* Lanka Dairies (pvt) Ltd
* CIC Dairies (Pvt.) Ltd
* Ceylon Cold Stores PLC
* Pelwatte Dairy Industries Ltd.
* Fonterra Brands Lanka (Pvt) Ltd.
* NLDB

Annexure IX

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2023

Type of animal /Animal- product			No. of consignments arrived		Quantity arrived (No. / MT)		No. of consignments inspected	
			2022	**2023**	**2022**	**2023**	**2022**	**2023**
1.	DOC	- Grand parents	09	10	57723	71952	09	10
		- Layer parents	07	20	49731	128058	07	20
		- Broiler parents	12	27	90513	288435	12	27
2.	Meat	- Poultry	13	16	171.154	236.848	13	16
		- Beef	25	20	98.311	57.099	25	20
		- Mutton	17	12	200.14	210.437	17	12
		- Lamb	17	11	116.867	112.864	17	11
		- Pork	12	6	236.320	56.010	12	6
		- Duck	04	5	6.560	10.969	04	5
		- Turkey	01	3	9.648	21.266	01	3
		- Casings	02	2	2.1	2.53	02	2
		-Goat meat pro.	02	1	48.023	17.875	02	1
			Total No of import con: 53	**Total No of import con: 44**				
3.	Meat and bone meal		189	214	24678.529	28374.4860	189	214
4.	Ornamental fish (marine + fresh water)		175	210	771468 nos/ 7 bags	149810- nos	175	210

Annexure IX cont…

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2023

Type of Animal/Animal- product		No. of consignments arrived		Quantity arrived (No./MT)		No. of consignments inspected	
		2022	2023	2022	2023	2022	2023
5.	Cattle	-	--	--	--	--	--
	Zoo animals	--	06	--	19	--	06
	Horses	02	4	22	22 nos	02	4
	Pet birds	05	8	423	198-nos	05	8
	Live shrimps	23	24	3708	5764-nos	23	24
	Live corals	--	--	--	--	--	--
	Goat	--	--	--	--	--	--
	Crabs	--	1	--	30 nos/0.03 mt	--	1
	Pigeon	02	1	188	130 nos	02	1
	Rabbit	01	1	01	50-nos	01	1
	Guinea Pig	01	--	01	--	01	--
6.	Dogs/Cats	325	359	441	478	325	359
7.	Fish meal	43	59	1785.605	1839.485	43	59
8.	Prawn feed	349	510	19153.911	17729.969	349	510
9.	Tallow	--	--	--	--	--	--
10.	Gelatin	54	102	450.460	698.417	54	102
11.	Egg powder	01	1	18	18.48	01	1
12.	Egg albumin	--	4	--	2.39	--	4
	whole liquid egg	02	3	36.016	39	02	3

Annexure IX cont….

Details of Consignments (Imports) subjected to Quarantine Surveillance in 2023

Type of Animal /Animal- product		No. of consignments Arrived		Quantity arrived (No. / MT)		No. of consignments inspected	
		2022	2023	2022	2023	2022	2023
13.	Feather/Skin/Bristle - Other PRODUCTS	38	36	Bristle-70.6 Feather-0.910 Skins-0.40	Bristle-18.637 Feather-0.9340 Skins-0.569	38	36
14.	Frozen fish	215	285	8037.82	10382.384	215	285
15.	Fish food	102	94	3524.46	3736.32	102	94
16.	Leather	253	288	170.339	658.834	253	288
17.	Feed ingredients (Soya bean meal, Corn meal, Wheat, Maize, Rape seed, Guar meal, Cotton seed meal, Bakery meal, Millet)	1789	2011	441877.568	649557.027	1789	2011
18.	Chicken products (chicken powder, chicken essence, chicken extract, chicken soup)	09	07	24.05	3.429	09	07
19.	Pet food	90	132	1240.133	2094.17	90	132

Annex IX cont….

Details of Consignments (Imports) subjected to Quarantine Surveillance in 2023

Type of Animal/Animal- product		No. of consignments Arrived		Quantity arrived (No./MT)		No. of consignments Inspected	
		2022	2023	2022	2023	2022	2023
20.	Vaccines	170	202	5390504090 doses/ 3 L/4000 packs/ 8700 pcs/100700 vials/ 1506 bottles	322260- vials/ 18925155685 doses/2867.18 L/0.002mt/2560 pcs/200 tab	170	202
21.	Veterinary drugs	132	193	177.5976 mt/ 94200 tablets/ 100 units/1 bottles/ 650 pcs	475.3099 mt/677 L/1188 bottles/800 packs/3255 tab/93520 pcs	132	193
22.	Semen	03	13	8000	39521 doses/1500 vials/ 6000 straws	03	13
23.	Yoghurt culture	02	2	0.1	0.11 mt/ 1700 nos	02	2
24.	Test kit	11	11	1150 nos/ 620 packs	755 –nos	11	11
25.	Veterinary products	23	19	22.664 mt/ 172.5 L/94201 nos	1.004 mt/14316 nos/ 6705 tab/200 boxes/179.01 L/600 pkts	23	19
26.	Turkey Eggs	--	--	--	--	--	--
27.	Artemia	09	08	3.1835 mt/ 850 cans	1.128 mt/1450 cans	09	08

Type of Animal /Animal- product		No. of consignments Arrived		Quantity arrived (No. / MT)		No. of consignments Inspected	
		2022	**2023**	**2022**	**2023**	**2022**	**2023**
28.	Veterinary Equipments-Nos	02	01	2 nos	20	02	01
29.	Feed Additives	02	8	0.105	0.722	02	8
30.	Yeast Powder	01	--	0.2	--	01	--
31.	Collagen	02	--	0.27	--	02	--
32.	Table Egg (nos)	--	97	--	168527271		97
33.	Hatching Egg (Nos)	--	35	--	1507800		35
34.	Duck Egg (mt)	--	01	--	1.757		01
35.	Frozen Pigeon meat(mt)	--	01	--	0.2	--	01
36.	Whey Protein (mt)	--	01	--	0.4	--	01

Annex X

Details of Consignments Detained / Destroyed in 2023

No	Type of consignment	Country of origin	Reason for destruction/ detention	Quantity Kg / No.	Action taken
1	Preserved Dried Ham/seasoned Egg Ready to eat meat roll	China	Imported without DAPH approval	2990 kg 373 kg	Sample tested. Negative Released to the owner.
2	Salted Egg	China	Imported without DAPH approval	92 kg	Sample tested. Negative Released to the owner.
3	Bajiri (Yellow Millet)	Not mentioned	Imported without DAPH approval	10000 kg 1950 kg	Not granted to release by the letter of feed registrar (DAPH/VRA/10/2/1-2023 dated 14.08.2023)
4	Frozen Mackerel	China	Imported without DAPH approval	27000 kg	Released. Decision given by DVRA
5	Rice	Not mentioned	Unfit for Human consumption	90000 kg	Based on the lab reports released for animal feed.
6	White Raw Rice Parboiled Rice	Not mentioned	Detained by food and drug inspector (custom)	15 container 19 container	Informed DVRA & VRI 20.09.23/02.10.23
7	Fresh Frozen duck Frozen chicken Taiwan grill sausages Duck Head Pork Skin Chicken wings & Sweet corn roll sausages	China	Imported without DAPH approval	2560 kg 171 kg 56 kg 132 kg 12 kg 20 kg	Destroyed.

No	Type of consignment	Country of origin	Reason for destruction/ detention	Quantity Kg / No.	Action taken
8	Yellow corn Grain	D/SL customs RCT/misc/038/ 2023		2 containers	Destroyed DAPH/VRA/10/2/1-2(20.10.2023)
9	Red Millet		Imported without DAPH approval	19500 kg	Permission gave to use as Animal feed
10	Maize	India	Imported Maize with undeclared goods	139.5 mt	Destroyed recommended by DVRA DVRA/VRA/10/2/1-2(29.11.23)
11	Fish Food	Not mentioned	Imported without DAPH approval	8 containers	Pending
12	Soya Bean Meal	Not mentioned	Imported without DAPH approval	06 containers	Physical inspection done. Sample dispatched.
13	Fish Feed	China	Imported without DAPH approval	600 kg	Instructed Re export or destroy , by the letter of DAPH/VRA/10/2/1-2023 13/12.2023
14	Leather	Taiwan	Imported without DAPH approval.	644.20 kg	Destroyed
15	Palm olein	Imported without DAPH/informed by SL customs		105 mt	Released for Animal feed.
16	Black eye bean	Imported without DAPH/informed by SL customs		50000 kg	Recommended to release for animal feed. DAPH/VRA/10/2-1(2022(1)

Annexure XI

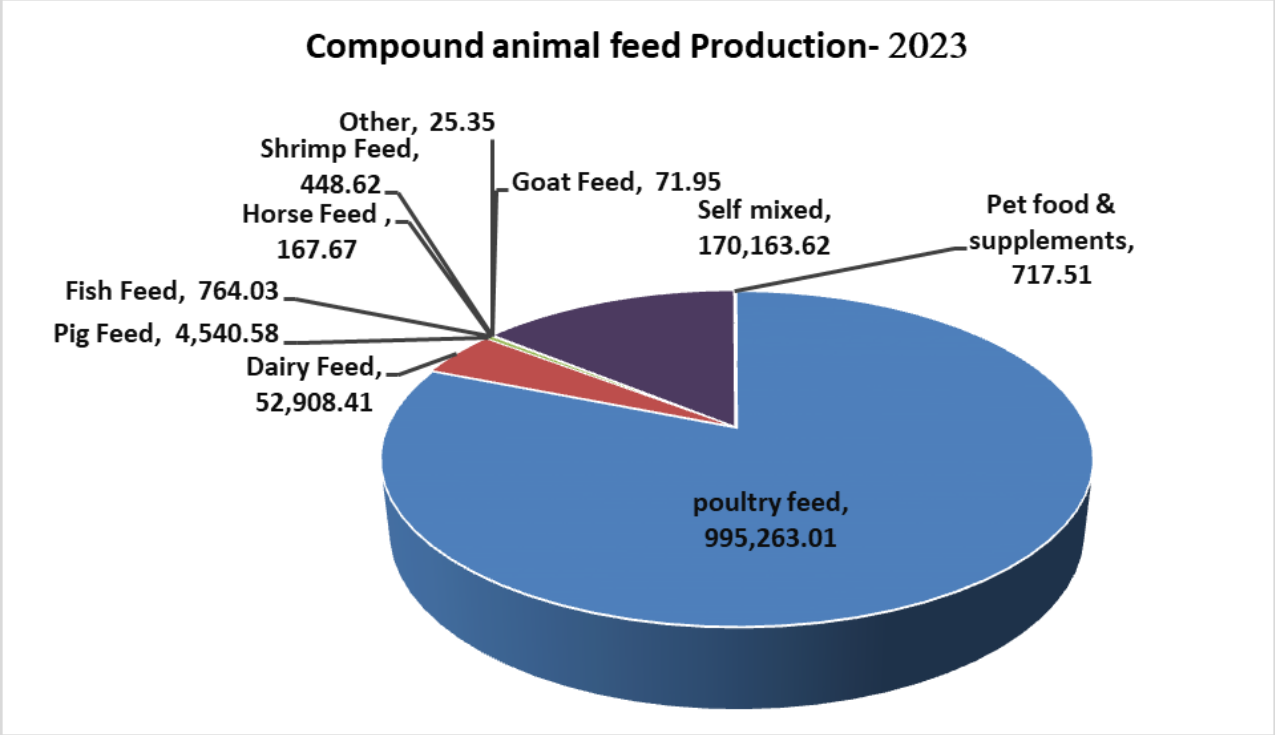
Export of Animals and Animal Products – 2023

Category		Number/ Quantity (MT) in 2022	Number/ Quantity (MT) in 2023
	Item		
01	Ornamental fish	35,379,666 (nos)	35,298,437 (nos)
02	Dogs (Travelled with owners)	355- nos	206-nos
03	Cats (Travelled with owners)	156-nos	115-nos
04	Poultry –DOC	92,477-nos	78,453-nos
05	Pet birds	10,714-nos	16,351-nos
06	Zoo animals	01-nos(Guinea Pig)	**51-nos** (Giant Squirrel-6 Guinea Pig-1 Star Tortoise-3 Ceylon viper-2 Russell's viper-4 Jungle fowl-2 Spoonbill-4 Elephant-1 Fishing cat-2 Black palm Civet-2 Toque monkey-4 Purple faced Langur-4 Pygmy Hippopotamus-2 Water Monitor-2 Common krait-2 Hump nosed Lizard-2 Green pit Viper-4 Hard Shelled Terrapin-4)
07	Animal products-meat and meat products	2,091.8729-mt	1,679.71-mt
08	Table eggs	17,916,455-nos	15,762,980-nos
09	Hatching eggs	27,960-nos	21,840-nos
Category		**Number/**	**Number/ Quantity**

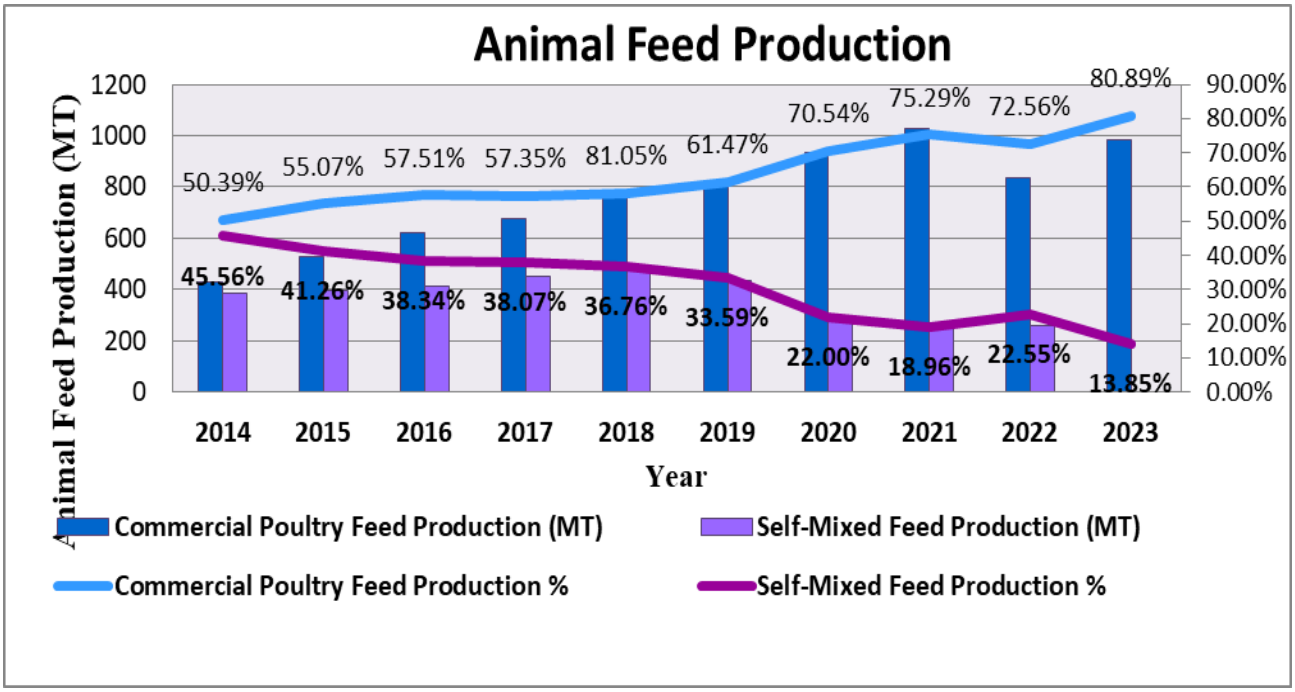
	Item	**Quantity (MT) in 2022**	**(MT) in 2023**
10	Animal byproducts- Artistic brushes/dog chews/elephant dung papers/hat/hat parts/chank Drums Bone grits/cattle bone and crushed/dry crab shells/enzymes/cattle feed/gelatin capsules/dried milk sludge/seasoning cubes/Nakla/Cuttle fish bone & crushed/Animal Hair	2,236,263-Pieces 72.956-mt	891,040-Pieces 102.601- mt
11	Leather	--	--

Annexure XII

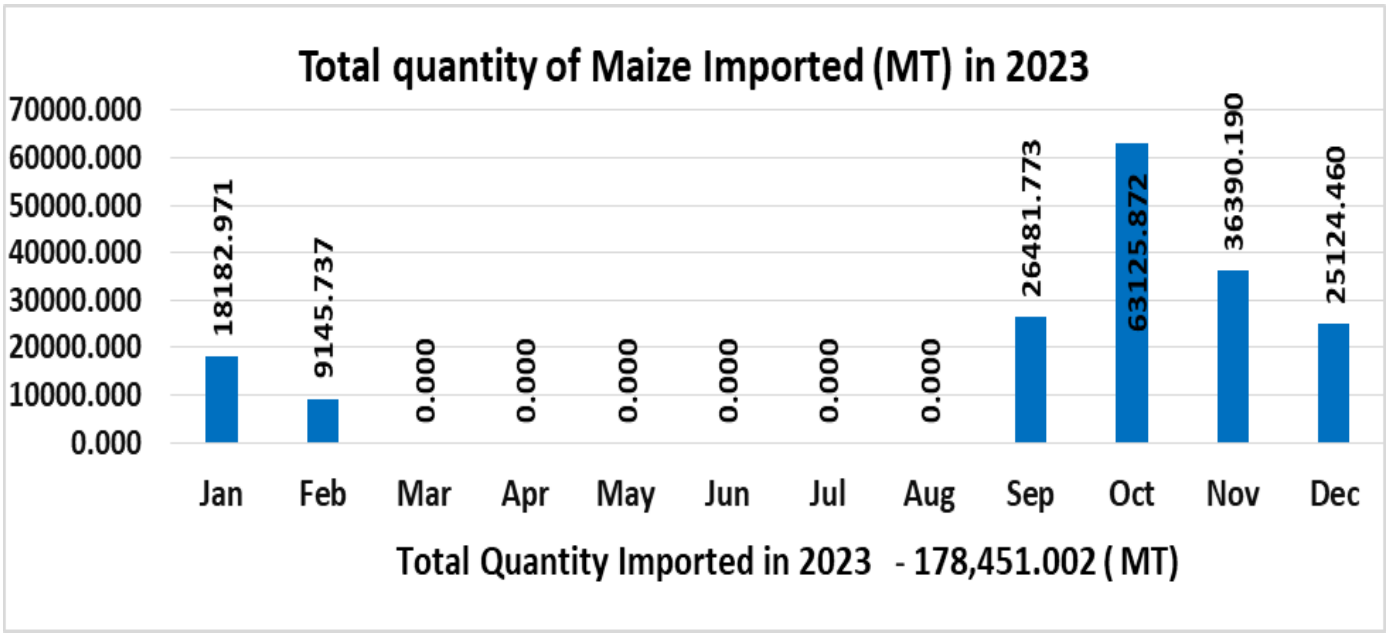
Compound animal feed production- 2023



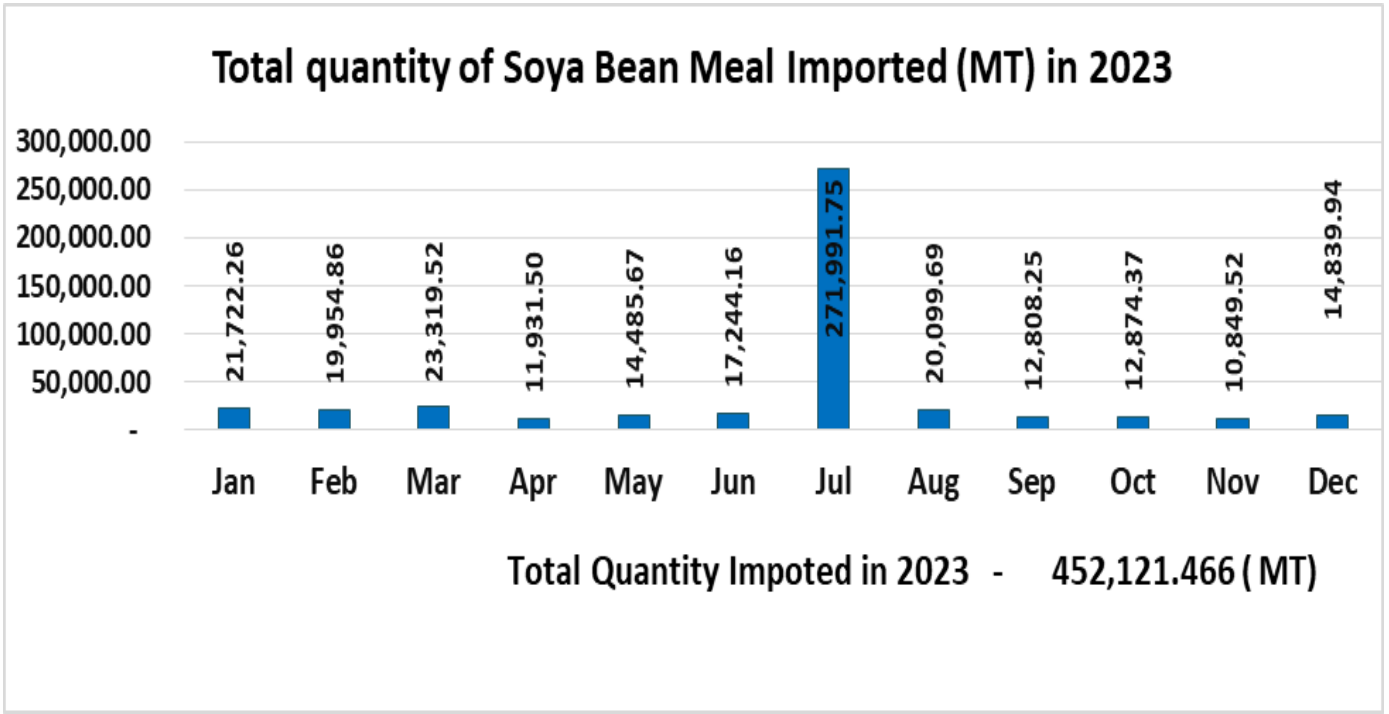
Commercial poultry feed production & self- mixed feed production in last 5 years



Imported quantity of Maize in 2023



Imported quantity of Soya Bean Meal in 2023



Annexure XIII

Raw Material Usage -2023

	Raw Material	Locally Purchased Quantity (MT)	Imported Quantity (MT)
A	**Cereals**		
	Maize	230,302.8	191,965.94
	Broken Rice	59,636.47	-
	Wheat	3,733.9	1195.3
	Others	3,268.09	-
	Total Cereals	**296,941.26**	**193,161.24**
B	**Cereal by Products**		
	Rice Polish/Rice Bran	101,295.49	-
	Wheat Bran	12,618.07	-
	Wheat Feed Flour	-	-
	DDGS	1,883.15	4,876.34
	De-Oiled Rice bran	11,660.92	
	Other	3,728.74	303.52
	Total Cereal by Products	**131,186.37**	**5,179.86**
C	**Plant Protein Supplement**		
	Coconut Meal	13,039.16	-
	Soya Bean Meal	-	175,670
	Corn Gluten Meal	-	2,995.83
	Bakery Meal	-	6,374.97
	Palm Kernel Meal	7,412.38	-
	Other	1,391	734.4
	Total Plant Protein Supplement	**21,842.54**	**185,775.2**
D	**Animal by Products**		
	Fish Meal	5,339.67	1,939.61
	Meat & Bone Meal	-	21,638.38
	Poultry Offal	4,056.76	-
	Other	275.43	332
	Total Animal by Products	**9,671.86**	**23,909.99**
E	**Feed Grade Oil**		
	Vegetable Oil	3,861.9	2,313.52
	Palm Oil	2,108.08	251
	Gro fat	-	1,646
	Other	3,702.05	1,396.18
	Total Feed Grade Oil	**9,672.03**	**5,606.70**
F	**Vitamin/Mineral Supplements**		
	Di Calcium Phosphate	1,770.13	3,579.36
	Calcium Carbonate	10,899	-
	Salt	3,545.54	3.03
	Shell grit	9,515.9	-
	Others	3,485.81	-
	Vitamins & Minerals	10,610.37	9,512.91
	Total Vitamins & Minerals Supplement	**39,826.75**	**13,095.3**

	Raw Material	Locally Purchased Quantity (MT)	Imported Quantity (MT)
G	**Urea**	17	-
	Urea	**17**	**-**
H	**Amino Acids**		
	DL- Methionine	1,294.42	9,256.27
	L-Lysine	4,509.29	7,950.06
	L- Threonine	4,072.23	2,726.56
	Total Amino Acids	**9,875.94**	**19,932.89**
I	**Additives**		
	Probiotic	496.3	7,608.62
	Prebiotic	93.1	10.5
	Acidifiers	1,045.67	15,395.74
	Toxin Binders	1,464.7	6,548.70
	Mold Inhibitors	-	138.43
	Growth Promoters	54.68	156.3
	Anticoccidial agents	140.23	53.6
	Exogenous Enzymes	604.97	194.7
	Antioxidant	20.21	71.05
	Emulsifier	479.6	35.6
	Preservatives	-	-
	Others	1,763.71	10,022.1
	Total Additives	**6,163.17**	**40,235.34**

Annexure XIV

Present Cadre Position of the Department & Staff Strength as at 2023.12.31

S. No	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
1	Director General	1	1	0	0	0
2	Addl. Director General	4	3	0	0	1
3	Addl. Director General (Admin)	1	1	0	0	0
4	Director (Admin)	1	1	0	0	0
5	Chief Accountant	1	0	0	0	1
6	Director	6	2	2	0	2
7	Registrar (Animal Feed)	1	1	0	0	0
8	Registrar (Veterinary Drugs)	1	0	0	0	1
9	Chief Animal Quarantine Officer	1	0	0	0	1
10	Chief Livestock Economics Specialist	1	1	0	0	0
11	Chief Epidemiologist	1	0	1	0	0
12	Principal Scientist	6	0	6	0	0
13	Veterinary Investigation Specialist	1	0	1	0	0
14	Chief Vaccinologist	1	0	1	0	0
15	Livestock Extension Specialist	1	0	1	0	0
16	Vet. Reproductive Specialist	1	0	1	0	0
17	Animal Breeding Specialist	1	0	0	1	0
18	Chief Agronomist	1	0	0	1	0
19	Veterinary Public Health Specialist	1	0	0	0	1
20	Dairy Engineering Specialist	1	0	1	0	0
21	Chief Internal Auditor	1	0	0	0	1
22	Accountant	3	2	0	0	1
23	Deputy/Assistant Director (Admin)	2	2	0	0	0
24	Deputy Directors	8	0	0	0	8
25	Vaccine Production Superintendent	1	0	0	0	1
26	Animal Quarantine Officer	10	10	0	0	0
27	Veterinary Research Officer	24	0	8	0	16
28	Veterinary Investigating officer	26	0	19	0	7
29	Research Officer	5	0	2	0	3
30	Livestock Economist	1	0	0	0	1
31	Livestock Officer	16	1	1	6	8
32	Veterinary Surgeon	61	19	18	15	9

Present Cadre Position of the Department & Staff Strength as at 2023.12.31

S. No	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
33	Civil Engineer	1	1	0	0	0
34	Legal Officer	1	1	0	0	0
35	Laboratory Scientist	1	0	0	0	1
36	Administrative Officer	3	2	1	0	0
37	Research Assistant/Special Grade	7	0	2	0	5
38	Livestock Promotion Officer	8	0	1	3	4
39	Translator	2	2	0	0	0
40	ICT Officer	1	1	1	0	-1
41	Statistical Officer	1	1	0	0	0
42	Development Officer	132	44	49	38	1
43	Development Assistant	1	1	0	1	-1
44	Legal Assistant	1	1	0	0	0
45	Programming Assistant	1	0	0	1	0
46	Technical Officer	6	3	0	0	3
47	Draftsman	1	1	0	0	0
48	Research Assistant	70	3	55	4	8
49	Librarian	3	0	0	0	0
50	Livestock Development Officer	62	15	9	14	24
51	Management Service Officer	72	39	16	14	8
52	Livestock Development Officer	3	1	0	2	0
53	Warden -female	1	0	0	0	1
54	Warden- male	1	0	0	0	1
55	Driver	76	15	33	16	12
56	Tractor Operator	3	0	1	0	2
57	Laboratory Aide	47	1	27	3	16
58	Mechanic	2	1	1	0	0
59	Boiler Operator	1	0	0	0	1
60	Carpenter	3	0	0	0	3
61	Electrician	1	0	1	0	0
62	Bungalow Keeper	1	0	0	1	0
63	KKS	32	13	6	9	4
64	Garden Laborer	1	0	0	0	1

Present Cadre Position of the Department & Staff Strength as at 2023.12.31

S. No	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
65	Sanitary Laborer	1	0	1	0	0
66	Watcher	3	1	0	2	0
67	Bast Bullock Care-taker	5	0	0	0	5
68	Milk Man	4	0	0	0	4
69	Goat Care-taker	4	0	0	0	4
70	Animal Guardian	12	0	0	0	12
71	Lawn Mower	15	0	0	0	15
72	Animal Control Aide	23	2	6	11	4
73	Field Assistant	161	11	45	70	35
	Multitasking Development Assistant			23	12	-
	Total	**965**	**204**	**337**	**214**	**210**

Annexure XV

Financial Allocations and the Expenditure Summary – 2023

	Allocation (Rs. Mn.)	Expenditure (Rs. Mn.)	Balance at 31.12.2023 (Rs. Mn.)	Expenditure as a % of Allocation
Project 1				
Capital Expenditure	91,000,000	48,179,165	42,820,835	52.94%
Recurrent expenditure				
Personal Emoluments	590,000,000	525,093,369	64,906,631	89%
Other	212,100,000	194,649,515	17,450,485	91.77%
Total	**802,100,000**	**719,742,884**	**82,357,116**	**89.73%**
Project 11				
Capital Expenditure	344,000,000	188,963,723	155,036,277	54.93%
Total	**344,000,000**	**188,963,723**	**155,036,277**	**54.93%**
Project 111				
Capital Expenditure	432,000,000	272,680,845	159,319,155	63.12%
Total	**432,000,000**	**272,680,845**	**159,319,155**	**63.12%**
Total Capital Expenditure	**867,000,000**	**509,823,733**	**357,176,267**	**58.80%**
Total Recurrent Expenditure	**802,100,000**	**719,742,884**	**82,357,116**	**89.73%**
Total Capital & Recurrent Expenditure	**1,669,100,000**	**1,229,566,617**	**439,533,383**	**73.66%**

Livestock Planning and Economics Division

Department of Animal Production and Health

Peradeniya

Sri Lanka

Tel:+94-81-2388850
Fax: +94-81-2388186
Email: daphleconomics@gmail.com