

# Department of Animal Production and Health





# ANNUAL REPORT 2020

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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 – 2020**

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# **PREFACE**

Department of Animal Production and Health (DAPH) coming under the purview of State Ministry of Livestock, Farm Promotion and Dairy and Egg Related Industries, Ministry of Agriculture is the main technical service providing organization in the country, responsible for ensuring food security of foods of animal origin, the major protein source of a healthy diet. Demand for animal products is continued to rise and it is quite challenging to achieve under current circumstances. 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 despite the difficulties created due to travel restrictions and pandemic. Upgrading and maintaining a healthy animal population, providing required inputs, quality assurance of animal products, inputs mainly animal feeds and veterinary pharmaceuticals, research and development are the main functions implemented by different divisions of DAPH with collaboration of provincial DAPHs and other livestock stakeholders. As such department facilitates for increased production and productivity improvements in the sector and thereby to achieve sector goals identified in the Government policy directives particularly. Food safety concerns and our involvements for that was continued to be demanding. We have been partnering with Ministry of Health and other stakeholders for combatting antimicrobial resistance and formulating food safety policy.

In general Livestock sector had a slight setback due to the indirect influence of the Covid19 pandemic. There was a slight drop in milk collection. The poultry sector in the country is continued to cater the local demand providing chicken meat and eggs. However, due to raw material shortages and due the implications of the pandemic expected growth was not seen in chicken meat and eggs and impact there was notable drop in production. Raw material shortage is continued to challenge the growth which needs addressing in year 2021. The growth in Swine and Goat sectors are more or less static and needs more attention in coming years.

This 2020 Annual Report of DAPH highlights status of livestock sub-sectors and progress of all programs/projects implemented and activities carried out by the department during the year 2020. Most of the livestock sector support services/programs are jointly implemented by the National 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.

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 2020. Special word of appreciation goes to Dr. S.S.P Silva – Director and the staff of Livestock Planning and Economics Division for taking efforts in compiling and publishing this document.

**Dr. R. Hettiarachchi** 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, State Ministry of Livestock, Farm Promotion and Dairy and Egg Related Industries.

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

The DAPH provides technical leadership, expertise and back-up services to Provincial Departments of Animal Production and Health (PDAPH) and other livestock industry stakeholders. 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 scattered throughout the country handle delivery services, managed by veterinarians, which are functioning under PDAPH and are the main functional units of the DAPH. In line with the policy decision taken by the government to expand veterinary network to strengthen service delivery system at grass root level, divisional veterinary offices are being established at every divisional secretariat level at present. 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.

Introduction 01

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 scheduled and emerging animal diseases of economic importance by implementing suitable control strategies and eradication programs.

### Sub Units:

Veterinary Investigation Centres (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 of livestock genetic and 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: Plan and execute research programs and to provide expertly technical products, and specialized services 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 and monitoring and evaluation of livestock development programs/ projects implemented by national/ provincial DAPH and other agencies.

# **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 resources and ensuring smooth functioning of the Department.

# **Finance Division**

*Main Responsibility*: Efficient management of finances allocated to the Department.

Introduction 02

# Members of the Directorate

Members of the Directorate in 2020 were as follows:

Dr. K.D. Ariyapala - Director General (up to 06.05.2020)

Dr. (Mrs.) R. Hettiarachchi - Director General

R. Hettiarachchi - Additional Director General/Veterinary Research, (up to 06.05.2020)

(Vacant) - Additional Director General/Veterinary Research

Dr. (Mrs) P.K. Bhadralatha - Additional Director General/Animal Health (up to 18.03.2020)

Dr. S. Hettiarachchi - Additional Director General/Animal Health (c.u.) (24.08.2020-15.01.2021)

Dr. (Mrs.) T. Rathnayake - Additional Director General/Livestock Development (up to 04.05.2020)

(Vacant) - Additional Director General/Livestock Development

Mrs. Geetha Indrani - Additional Director General / Administration

Dr. L.W.N. Samaranayaka - Director/Animal Breeding

Dr. S. Hettiarachchi - Director/Animal Health

Dr. S.S.P. Silva - Director/Livestock Planning and Economics

Dr. (Mrs.) V.R.N. Munasinghe - Director/ Veterinary Regulatory Affairs (c.u.)

Dr. (Mrs) P.K. Bhadralatha - Director/Veterinary Research (up to 18.02.2020)

Dr. L.W.N. Samaranayaka, Director/Veterinary Research (c.u.)

Mrs. B. Dissanayake - Director/ Human Resource Development (up to 22.06.2020)

A. Liyanagamage – Director/ Human Resource Development (c.u.)

Mrs. V.P.K. Pilapitiya - Director/Administration and

Mr. K. Sarath - Chief Accountant.

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

Introduction 03

# 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 2020 has been recorded as 1.62 million and 0.49 million respectively (Source: LPE Division, DAPH). Domestic milk production recorded as 414.83 million liters (Source: LPE Division, DAPH). It accounts to 2% drop compared to the previous year.

Number of milk chilling centers in the year totaled up to 283. The amount of milk collected by 14 main milk processors in the formal milk market in the year amounted to 237.9 million liters, around 33.6%, 20.9% and 18% 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 2020 was around Rs.74.62 and Rs.90.00 for buffalo

milk. Average cost of production of one liter of milk in up country and mid country in 2020 was recorded as Rs.49.28 under intensive management system. (*Source: LPE Division, DAPH*)

Form of powdered milk out of milk and milk products imported was 86.52% which had more than 1.5% of fat.

Import of dairy products amounted to 102,355.53 MT in 2020 an increase of 3.4 % over the corresponding figure of 98,837.76 MT in 2019 (Source: Department of Customs). Out of total dairy products imported into the country in 2020, full cream milk powder amounted to 88,558.22 MT which was an increase of 3.5% when compared with 85,434.94 MT in the year 2019. Similarly, import of non-fat milk powder at 8,705.06MT in 2020 showed an increase of 4.49% from the 2019 import volume of 8,314.04 MT. Total import bill on dairy products reached Rs. 61.93 billion in 2020.

The average price including Cost, Insurance and Freight (CIF) prices (LKR) of imported dairy products in 2019 and 2020 were as follows:

	2019	2020
	(Rs./MT)	(Rs./MT)
Whole milk powder	571,067.60	611,250.30
Skim milk powder	429,456.20	510,822.70

(Source: Department of Customs)

International market prices of whole milk powder and skim milk powder were decreased towards the end of the year. Comparison of prices in 2019 and 2020 are as follows:

International market prices of dairy products (2019 - 2020)

Product		Price U	SD/MT	
-	2019	(Avg.)	2020 (Avg.)	
	Jan.	Dec.	Jan.	Dec.
Whole milk powder	3,132	3,406	3,421	3,350
Skim milk powder	2,051	2,788	2,896	2,644

(Source: http://future.aae.wisc.edu)

Total availability of milk and milk products in the country had been 1,163.6 million liters of Liquid Milk Equivalent -LME (domestic production and imports) and the per-capita availability was recorded as 144.34 ml/day in year 2020 that accounted for 52.83 L/year.

# **2.2.** Poultry Sector

Poultry industry became one of badly affected industry during 2020 due to imposing of curfew and movement restrictions especially during the 1<sup>st</sup> wave of COVID 19. Restricted importation of live birds and feed raw materials, early culling of parent flocks and commercial layers and reduction of inputs at commercial level led to reductions in production of both chicken meat and eggs.

# 2.2.1. Broiler Industry

Procurement of broiler grandparents and parents were recorded as 30,792 and 1,396,703 respectively during the year 2020. Out of the total procurement of broiler parents, 1,244,146 Day Old Chicks (DOCs) were locally purchased. 159.78 million

broiler chicks were produced in the country during the year, recording a 4.8% decrement compared to 167.99 million broiler chick productions in 2019. Chicken meat production reduced to 216.16 ('000MT) in year 2020 with 3.5% reduction compared to 224.01 ('000MT) in 2019.

32 broiler breeder farms were in operation during the year. The broiler breeder strains imported by them were Ross (86%) Indian River (12%), and Arbor Acres (2%) and majority of parent DOC (89%) was purchased from local Grand Parent (GP) farms which are three (03) in number and the rest was imported from USA (94%) and Australia (6%).

Average price of a day-old broiler chick had been Rs. 73.97 in 2020 ranging from Rs. 52.79 in April and Rs. 90.21 in June. Average farm-gate price of live broiler recorded as Rs. 252.40/kg with the lowest price of Rs. 212.50/kg (March) to the maximum price of Rs. 360.00/kg (June).

# 2.2.2. Layer Industry

Parent stock importation had been restricted to a pre agreed quantity for the 3<sup>rd</sup> consecutive year with the consensus of registered layer breeder farms and farmer organizations representing the commercial layers. However, huge fluctuations of egg prices and increase of day old chick prices were observed during the year.

Imports of layer parents were recorded as 101,700 in the year 2020. Pullet chick production was recorded as 10.55 million. Average pullet chick price was recorded as Rs. 221.67 and was ranging from Rs. 200.00 in January to 257.91 in August 2020.

Twelve (12) layer breeder farms were in operation during the year and Bovans-White (35%), Dekalb white (21%), Lohmann LSL (14%), Hyline White (9%), Hyline Brown (8%), Lohmann Brown (7%), H&N Nick White (3%), H&N Nick Brown (3%) was the main layer breeder strains imported by these farms. The majority (82%) of those were White layers. Main importing countries were Netherland (42%), Canada (24%), USA (20%) and France (14%).

Farm gate price of table eggs ranged from Rs. 11.25 (April) to Rs. 19.88 (August). Average farm-gate price for the whole year recorded as Rs. 15.70 which is 5% decrease from the previous year. Average retail price for brown and white eggs recorded as Rs. 18.97 and Rs. 17.97 respectively. The egg production was decreased by 7.4% (2,435.96 Mn) in 2020 compared to 2019 (2,630.74 Mn).

# 2.2.3. Poultry Feed Industry

Poultry feed production remains static compared to previous year amounting to 1,224,371.75 MT in 2020. Ninety four percent (94%) of the total animal feed produced in the country is used for poultry industry which produced both by the commercial feed producers and farmers themselves. Forty five (45) registered poultry feed manufacturers were in

operation during the year. The commercial poultry feed production in the country was estimated as 933,314.85 MT which is 17% increment compared to 799,697.91 MT in year 2019. Total self-mixed poultry feed production has decreased by 33% compared to previous year amounting 291,056.90 MT. It may presume that the self-mixers were facing issues regarding obtaining animal feed raw materials thus tend to use proprietary feed during the difficult periods of 2020. Total animal feed production in the country estimated as 1,299,141.57 MT which is 1,678 MT less than the previous year's production (*Source: DAPH*).

# 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 2020. Total value added meat products manufactured by further processing establishments amounted to 11,220.40 MT in the year, an increase of 5% over the 2019 volume of 10,654.46 MT. Out of this production in 2020, a major portion (94%) consisted of chicken meat based value added products.

# **2.2.5.** Exports

Export of chicken meat and meat products were recorded as 769.31 MT in the year 2020, an increase of 317.60 MT from the previous year volume of 451.75 MT. Bulk of the chicken meat and chicken meat products were exported to Maldives and India. Export of table eggs reduced drastically by 72% by remaining at 2.5 million compared to corresponding figure of 9.3 million in 2019. A total of 0.06 million day-old chicks were exported during year 2020 recording 70% decrement compared to 0.22 million in year 2019. A total of 240,480 hatching eggs were exported during the year 2020 compared 283,680 in year 2019 (Source: AQ Station, Colombo).

# 2.2.6. Imports

157.28 MT poultry meat and meat products, 14.70 MT egg powder and 18 MT of liquid egg were imported to the country during 2020 (*Source: AQ Station, Colombo*).

Key data pertaining to the Industry in 2020 are given in *Annexure II*.

### 2.3. Swine Sector

Swine sector is one of the main livestock subsectors 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 163,684 in the country and the estimated National pork production was 9,005.04 MT. The cost of production of pork recorded as Rs 245.29kg for live weight and 353.94 kg to dressed weight (Source: LPE Division, DAPH). Monthly average retail price of pork was recorded as Rs.780.82 per kg in the year 2020 ranging from Rs.761.00 kg (Minimum) in March to Rs. 805.00 kg (Maximum) in October (Source: HARTI). However, local market price for curry pork was recorded as Rs. 680.00 kg. Total of 82.88 MT of pork and pork products have been imported into the country in 2020 and 6.69 MT of pork and pork products have been exported (Source: Department of Customs). Prices of piglings were recorded as Rs 9000.00 for naturally bred animals and Rs. 10,000.00 for piglings born by artificial insemination. (Source: NLDB)

Outbreak of Porcine Respiratory and Reproductive Syndrome (PRRS) which was started in latter part of the year 2019 was continued to mid-year 2020 and it caused pork production dropped. However Porcine Respiratory and Reproductive Syndrome (PRRS) vaccine was allowed to import under user permit to control the situation island wide. Total of 77,000 doses of PRRS vaccines were imported under user permit and affected farms and the farms at risk areas were vaccinated to control the situation.

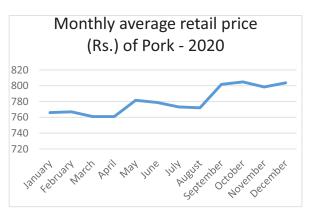


Figure 2.1: Monthly Average Retail Price of Pork- 2020 (Source: HARTI)

### 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 2020 recorded as 702,892 (Source: LPE Division, DAPH) and number goat farms in the country recorded as 67,937 (Source: LPE Division, DAPH). Average cost of production of mutton was Rs. 950.11 in year 2020. Average retail price of mutton in the country reported as Rs. 1,943.57/kg in the year 2020 ranging from Rs. 1,887.32/kg in February to Rs. 2,031.43/kg in December.

A total of 1,067,195 kg of mutton had been imported into the country during the year 2020. While 9 kg had been exported (*Source: Department of Customs*). Change of average retail prices of mutton is shown below. (Figure 2.2).

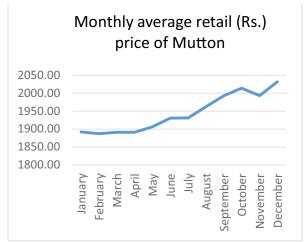


Figure 2.2: Monthly average retail price of Mutton 2020 (*Source: DCS*)

# 3. ANIMAL HEALTH DIVISION

# 3.1. Introduction

The animal health division which is one of the six technical divisions in the DAPH is responsible for disease surveillance and control for ensuring required animal health status to development of the livestock industry in the country. The division provided technical leadership and back-up services to prevent entry of exotic diseases and to control and eradicate existing economically important and zoonotic diseases while maintaining animal welfare and ensuring food safety of animal origin.

Animal health division has peripheral units namely Veterinary Investigation Centers (VICs) which are established at district level. Among the 25 administrative districts in Sri Lanka, twenty four of them have already established as functional VICs. Mannar district is still managed by the Vavuniya Veterinary Investigation Center located in the adjoining district. The national level vaccine bank is located at DAPH headquarters for issuing vaccine to field level.

Passive animal disease surveillance is carried out by 337 divisional government veterinary offices island wide. Number of listed diseases are monitored through clinical signs and monthly reported to Animal Health division by the field veterinary surgeons. Information are analyzed and feedback is sent to all provincial directors and respective field veterinary surgeons quarterly.

The Animal Diseases Act No.59 of 1992 stipulates the actions that have to be taken by different personnel in the event of occurrence of a 'notifiable disease' in the country. The owners are obliged to notify the presence of any suspected case of a 'notifiable disease' to the relevant government veterinary surgeon immediately who in turn will carry out a preliminary investigation. In such a situation, the disease reporting is more active and enhanced by following the stipulated procedure. Immediate reporting in a 'Preliminary Reporting format' followed by 'Weekly Returns' until a period of five weeks after the appearance of last fresh case. This is further supported by the district **VICs** by performing epidemiological investigation and providing laboratory back-up service for disease diagnosis and confirmation where necessary.

Country status of notifiable diseases is reported biannually to OIE by Animal health division. Disease information are published in World Animal Health Information System (WAHIS). Referred information are collated and managed by the animal health division at national level for decision making.

The Sri Lanka Veterinary Epidemiology Bulletin is prepared quarterly and circulated among the government and private veterinarians and other stakeholders of the livestock industry.

### Main Functions of the Division

- National level planning and implementing of animal disease control.
- Monitoring and evaluation of animal diseases status in the country and dissemination of

animal health related information locally and internationally.

- Maintenance of vaccine bank, island wide distribution of vaccines and monitoring of livestock vaccination programme.
- Strengthening of veterinary investigation network for improved disease surveillance and laboratory back-up for disease diagnosis.
- Implementation of special programmes for livestock health improvement.
- Planning and implementation of avian influenza surveillance programme and emergency preparedness against emerging, reemerging and exotic diseases.
- Formulation and implementation of veterinary public health policy in order to effectively control identified zoonotic diseases under 'One Health' concept.

# 3.2. Animal Disease Situation

### 3.2.1. 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 1955 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.

Three (03) outbreaks of HS occurred in three veterinary ranges during the year 2020 in Eastern and North Central provinces. Laboratory confirmation of disease was made by the Veterinary Research Institute. The cases numbered 87 with 40 deaths as summarized in table 3.1. Vaccination is practiced using locally produced alum precipitated and oil adjuvant vaccines. During the year 2020, all the animals in outbreak areas had been vaccinated against HS by divisional veterinary officers.

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 vaccine.

Prophylactic vaccination which considered as the major tool in controlling the disease was carried outroutinely throughout the year.

No.	No. of affected		No.	of	Month(s) of
NO.	District	VS ranges	Cases	Deaths	occurrence
1	Polonnaruwa	1	53	38	October
2	Ampara	2	44	02	May, October
	All island total	3	97	40	

Table 3.1: Spatial and temporal distribution of HS in 2020

# b. Foot and Mouth Disease (FMD)

Foot and mouth disease which has been officially recorded in Sri Lanka since 1902 has been identified as the major contagious disease among cattle and buffaloes with clinical cases in caprine and swine species too. The serotype of the virus that has been determined since 1962 reveals the serotype of 'O' as the causative agent for majority of the outbreaks, while serotype 'C' was introduced in 1970 through cattle imported from India. However, serotype C has not been isolated since 1984.

Records of outbreaks since 1962 indicate that the disease assumes epidemic proportions in 4-6 years; and 12,000 to 40,000 cases have been recorded in the peak years of these epidemics. However, there had been two exemptions with a massive epidemic in 1987 recording 86,000 cases and a lull period of two years in 1995 and 1996. The last peak was observed in 2014 recording 68,997 cases with 1997 deaths.

FMD was reported in Forty four (44) veterinary ranges in fifteen (15) districts during the year 2020. The total cases numbered to 1,578 with 18 deaths. as depicted in Table 3.2.

The total number of cases recorded in the previous year (2019) was 11,326 with 132 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.

The index case of foot and mouth disease (FMD) was encountered during latter part of the year 2019 at Oddusudan veterinary range of Mulathivu district. Mulathivu had been identified as one of the major foci of foot and mouth disease in the country

In Sri Lanka uncontrolled movement of cattle by traders, herdsmen and distribution of salvage animals among farmers through charity organizations without the knowledge of the veterinary authority has been recognized as the main contributory factor in the spread of FMD.

Hence, implementation of legislative measures pertaining to animal movement has to play a key role in controlling disease spread.



Figure 3.1.Clinical Signs of FMD (ulcers at the upper palate of the mouth)



Figure 3.2.Clinical Signs of FMD (blisters and erythema at the teats)

Table 3.2: Spatial and temporal distribution of FMD in 2020

		No. of	No	o. of	Month(s) of
No.	District	affected VS ranges	Cases	Deaths	occurrence
1	Anuradhapura	09	349	0	January, July, October, November, December
2	Polonnaruwa	03	57	5	January, February
3	Kurunegala	05	19	0	January, February , August
4	Puttalam	02	103	1	November, December
5	Gampaha	01	6	0	January
6	Kalutara	01	12	0	January, August
7	Kandy	05	34	1	October, November
8	Mathale	01	113	0	January
9	Nuwara Eliya	04	127	3	January, February, November, December
10	Ampara	02	108	2	January, June
11	Trincomalee	01	80	0	March
12	Kegalle	01	37	0	October
13	Badulla	01	81	3	January
14	Monaragala	06	207	3	January, February, October, November
15	Hambantota	02	245	0	January
	All island total	44	1,578	18	

# 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. The disease is mainly vector born disease transmitted by blood suckling mosquitoes, ticks and flies and rarely by direct contact with infected cows, semen of infected bull, calf through the mother's uterus and milk.

A disease suspected to be Lumpy Skin Disease (LSD) was reported by the Veterinary Investigation Officer of Jaffna during September 2020. The first reported cases have been in Kopayi and the disease have rapidly spread to neighboring farms and even to the other areas and spread to many parts of the country. Susceptibility much higher in cattle than buffaloes. Other species of livestock have not been affected by this viral disease.

Samples of affected animals were tested by the Pathology division of VRI and diagnosed as the

viral disease. The disease has been confirmed as Lumpy Skin Disease (LSD) by foreign laboratory (World Reference Laboratory, Pirbright, in UK). Isolated cases were found in all three districts in almost all the veterinary ranges.

LSD was reported in forty nine (49) veterinary ranges in thirteen (13) districts during the year 2020. The total cases numbered to 6,680 with no deaths as depicted in Table 3.3.

Necessary awareness and advices were given by facility of provincial department of Animal Production and health- all provinces. At present severity of the disease is remarkably reduced.



Figure 3.3 LSD Outbreak at Manthai West in Mannar

Table 3.3: Spatial and temporal distribution of LSD in 2020

	District	No. of			Month(s) of
No.		affected VS ranges	Cases	Deaths	occurrence
1	Anuradhapura	05	228	0	October, November, December
2	Polonnaruwa	01	108	0	December
3	Jaffna	16	3,109	0	September, October, November, December
4	Mulathivu	03	412	0	November, December
5	Mannar	01	56	0	September
6	Vavuniya	03	1,180	0	October, November, December
7	Killinochchi	04	778	0	October, November, December
8	Ampara	08	360	0	October, November, December
9	Batticaloa	01	304	0	December
10	Trincomalee	01	88	0	December
11	Ratnapura	02	34	0	December
12	Badulla	03	15	0	December
13	Monaragala	01	08	0	December
	All Island Total	49	6,680	0	

# 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. It prevalence varies considerably between herds, areas and counties. The disease is endemic in certain parts of Eastern, Northern and North-Central provinces.

A total of 682 cases with 02 abortions were recorded in the country due to brucellosis during the year under review. High incidence of disease was reported in Vavuniya District (565 cases with no death).

In total 8,019 animals have been vaccinated by Veterinary Investigating centers during the year 2020 using the S-19 Brucella vaccine.

### e. Bovine Babesiosis

Five thousand and one hundred one (5,101) cases of Bovine Babesiosis were recorded during the year under review. Majority of cases were found in Uva and Northern provinces with an overall casefatality rate of 2.45%. Monthly distribution of cases varied from minimum of 246 to maximum of 525 with no obvious seasonal pattern.

# f. Bovine Tuberculosis (TB)

A total of 50 cases with 01 death were recorded in the country due to Bovine Tuberculosis during the year under review. High incidence of disease was reported in Sabaragamuwa Province.

In the year 2020, 908 animals were screened for TB by Veterinary Investigation Centers. Comparative Tuberculin Purified Protein Derivative (PPD) 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 on Bovine Tuberculosis has been implemented at national level.

# 3.2.2. Swine Disease

# Porcine Reproductive and Respiratory Syndrom (PRRS)

A total of 626 cases with 211 death were recorded in the country due to PRRS disease during the year under review. Majority of cases were found in Central and North Central provinces

Disease investigation were carried out in Thalathuoya, Welioya, Dimbulagala, Karuwalagaswewa, Chavakachcheri, Kalpitiya, Dankotuwa, and Divulapitiya Veterinary ranges which revealed feeding of untreated swill, poor or no biosecurity practices in swine farms are the main sources of the virus.

The movements of pigs and swine products from and into the infected areas have been banned. Actions have been taken to issued vaccines under user permit for immediate usage in order to arrest the spread and to protect the animals in high-risk.

# 3.2.3. Poultry Diseases

Poultry industry in Sri Lanka has shown a remarkable expansion during recent years and reaches self – sufficiency in poultry products.

Incidence of poultry diseases has increased and new poultry diseases have been introduced in to the country as a result of rapid expansion and intensification.

Poultry health improvement is essential to maintain the quality standards of poultry products. Four activities including control of salmonellosis in poultry breeder farms, control of Newcastle disease in small scale back yard poultry farms, ensuring early warning system against Highly Pathogenic Avian Influenza (HPAI) and improving laboratory diagnostic facilities in

Western and Northwestern provinces are being conducting under the "Export facilitation of poultry meat and eggs through the health Improvement" project.

Coccidiosis was the main poultry disease reported by divisional veterinary surgeons in this year 2020 with 190,982 cases with 7,382 deaths. Spatial distribution of the disease indicates its presence in all the districts of the country and majority of cases were found in Northwestern, Northern and Eastern Provinces. Newcastle Disease (83,700 cases with 8,607 death), Fowl Pox (74,271 cases with 2,749 death), Infectious Bursal Diseases (40,504 cases with 2,479 deaths) and Avian Salmonellosis (50,642 cases with 900 deaths) were the other major diseases reported during the year 2020.

However, there was a significant reduction in incidences of Infectious Bursal Disease when compared with previous year.

# a. Newcastle Disease (ND)

Table 3.4: Distribution of Newcastle disease 2020

among poultry population of Sri Lanka for severa	1
decades.	

Newcastle disease (ND) is an endemic disease

Vaccination against Newcastle disease is a commonly anticipated program in the country. However, its application in the field especially among backyard population appears to be rarely practiced. Furthermore, most of the commercial operations usually do not strictly adhere to the recommended vaccination schedule to ensure protection of birds throughout their lifespan.

Outbreaks of Newcastle disease were observed in all the provinces during the year under review. Major outbreaks were encountered in North Western and Northern provinces. A total of 83,700 cases and 8,607 deaths were reported, whereas in the previous year there had been 138,256 cases with 6,296 deaths.

Province	Cases	Deaths
Central	701	271
Eastern	29,547	3,793
North Central	3,884	912
North Western	20,390	367
Northern	23,610	2,915
Sabaragamuwa	2,193	65
Southern	2,242	119
Uva	254	23
Western	879	142
Total	83,700	8,607

# b. Infectious Bursal Disease (IBD)

Total 40,504 cases of Infectious Bursal disease with 2,479 deaths were recorded in the year 2020 in commercial poultry farms as depicted in Table 3.5.

# c. Salmonellosis

Salmonellosis in poultry is caused by *Salmonella pullorum* and *Salmonella gallinarum*. 50,642 cases and 900 deaths were reported in the country during the year 2020 as summarized in Table 3.6.

Table 35.	Distribution	of Infectious	<b>Bursal Disease</b>	- 2020
Table 3.3.	171811117411011	or infectious	Duisai Disease	- 2020

Province	Cases	Deaths
Central	154	9
Eastern	7,015	640
North Central	33	7
North western	21,803	920
Northern	7,691	713
Sabaragamuwa	1,454	77
Southern	754	24
Uva	305	30
Western	1,295	59
Total	40,504	2,479

Table 3.6: Distribution of Poultry Salmonellosis in Commercial Poultry Farms 2020

Province	Cases	Deaths
Central	736	23
Eastern	959	45
North Central	3,412	381
North western	31,271	114
Northern	3,383	33
Sabaragamuwa	1,996	4
Southern	600	3
Uva	1,522	47
Western	6,763	250
Total	50,642	900

# 3.3. Disease control and vaccination programs

# 3.3.1. Vaccination of Livestock

Preventive vaccination programs have been carried out against economically important major livestock diseases such as Foot and Mouth Disease (FMD), Haemorrhagic Septicaemia (HS) and Black Quarter (BQ) in earmarked locations in the country.

BQ vaccine was produced locally to meet the demand for preventive as well as control vaccination in case of outbreaks. HS oil adjuvant vaccine was produced for mass-scale preventive vaccination and the Alum precipitated vaccine was produced as an emergency pre requisite to be used in outbreaks. Foot and mouth vaccine (monovalent, type 'O') was imported from India.

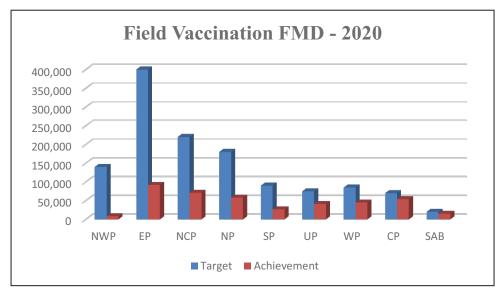
In total 351,010 doses of HS vaccine, 146,619 doses of BQ vaccine and 226,600 doses of Foot and mouth disease vaccine (410,459 – imported) have been distributed during the period under review as shown in Table 3.7.

Table 3.7 Issuing of vaccines to the field in 2020

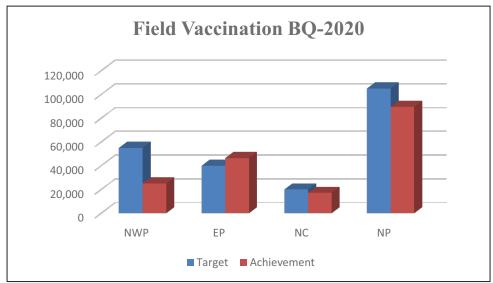
Province	Numbe			
riovince	FMD	BQ	HS (Oil)	HS (Alum)
North Western	10,000	38,874	-	-
Eastern	20,000	19,701	243,870	28,908
North Central	60,000	19,998	37,510	12,672
Northern	20,000	68,046	16,764	6,006
Southern	15,000	1	-	-
Uva	35,000	-	2,640	-
Western	5,000	1	-	-
Central	51,600	1	-	-
Sabaragamuwa	10,000	-	2,640	-
Total	226,600	146,619	303,424	47,586

Table 3.8: Province-wise vaccination targets and achievements in 2020

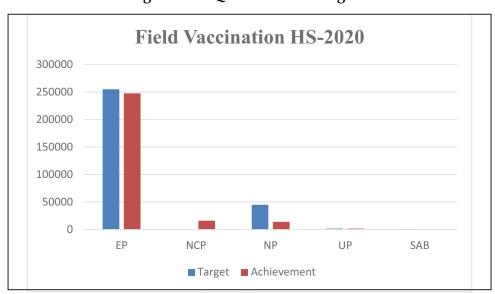
Province	F	FMD	BQ		HS	
Province	Target	Achievement	Target	Achievement	Target	Achievement
North Western	140,000	8,530	55,000	25,048		
Eastern	400,000	91,764	40,000	46,472	255,000	247,771
North Central	220,000	70,813	20,000	17,154		16,045
Northern	180,000	57,955	105,000	89,569	45,000	14,098
Southern	90,000	26,707				
Uva	75,000	41,034			1,500	1,493
Western	85,000	45,119				
Central	70,000	53,617				
Sabaragamuwa	20,000	14,920			500	
Total	1,280,000	410,459	220,000	178,243	302,000	279,407



**Figure 3.4: FMD Vaccination Progress** 



**Figure 3.5: BQ Vaccination Progress** 



**Figure 3.6: HS Vaccination Progress** 

# 3.3.2. Vaccination of Poultry

Locally produced Newcastle disease vaccine distributed through the government veterinary surgeons for free issuing to immunize the disease in backyard poultry and small-scale poultry farms.

5.39 million doses of vaccines have been distributed to the field veterinary officers. 5.9 million birds have been vaccinated as shown in Table 3.9.

Table 3.9: Vaccination against Newcastle diseases using locally produced vaccine

Province	Vaccination
Western	512,000
Central	25,000
Southern	30,000
North Central	214,200
North Western	508,000
Northern	2,454,400
Eastern	2,024,200
Uva	83,600
Sabaragamuwa	60,000
Island Total	5,911,400

# 3.4. Special animal health programmes

# 3.4.1. Livestock Health Improvement Project

A special project had been initiated in year 2007 in selected dairy farms. Disease status is closely monitored and assistance to improve the animal health was provided through VIOs regularly. The selected farms were identified with geo-reference; a database was developed with all relevant information.

Under this project 1,751 dairy farms have visited by the veterinary investigation officers during the year 2020. Subsequently, 14,115 milking cows have been subjected to California Mastitis Test (CMT) for early detection of sub clinical mastitis. Moreover, 3,140 liters of teat dip solution and 701 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. Bacterial cultures indicated the presence of *Staphylococci, Streptococci,* and *E. coli* species.

Total 1,049 samples were subjected to Antibiotic Sensitivity Tests (ABST) to identify the most suitable antibiotics for treatments. It was recommended to use these antibiotics for preparation of economically beneficial udder infusions for mastitis treatment using the udder base prepared at VICs. A total of 11,602 vials of udder base was issued by the VICs in 2020 for this purpose. Furthermore, intra mammary preparations comprising the most appropriate antibiotics were prepared at some VICs and supplied for treating of mastitis cases.

# 3.4.2. Avian Influenza Surveillance Programme

Sri Lanka exports chicken meat, eggs, hatching eggs, day old chicks and value added poultry products which should be further facilitated and expanded. Declaration of disease free status and strong disease control programs are important in order to facilitate the exportation of poultry products to the international market.

Sri Lanka is free from HPAI, due to its geographical location and it is immensely important in importation of poultry products. But there is a high risk of entering of the disease in to the country by the way of migratory birds, smuggling of live poultry, poultry products, poultry meat and pet birds, infections carried by international passengers and fomites, importation of live poultry and poultry products and importation of pet birds. There for the program is conducted in order to detect the presence of notifiable (H5 and H7) Avian Influenza in the country.

Avian influenza surveillance is a key component in emergency preparedness against the disease in non-infected countries. It plays a major role in early warning system against the introduction of this exotic disease. The national surveillance programme against Avian Influenza was initiated in 2007 and it was continued in the year 2020 too. The surveillance programme for the country was prepared, coordinated and monitored by Animal Health division. The field level implementation is carried out by the veterinary investigation officers.

There are three major components in the Highly Pathogenic Avian Influenza (HPAI) surveillance program, clinical disease surveillance, sero surveillance and targeted epidemiological surveillance at identified locations. Clinical disease surveillance is carried out by field veterinary surgeons and district veterinary investigation officers. Sero-surveillance is designed to detect antibody against HPAI in commercial layer and broiler operations. The sampling sites are identified by veterinary surgeons in accordance with the distribution of poultry population. The program is repeated annually. 340 sampling sites were identified in the country for the year 2020 and 15 samples were collected per site for testing.

Epidemiological surveillance was undertaken to monitor the risk of introduction of HPAI through migratory birds. 36 hot spots were identified along 11 coastal districts in the country as high risk areas. Fresh feacal samples (5, 171) of migratory birds, cloacal swabs (5,939) of backyard poultry, cloacal swabs (855) and serum samples (783) of ducks, cloacal swabs of poultry in live bird market (1,095) and poultry processing plants (3,255) were collected by district veterinary investigation officers. All samples were tested at animal virus laboratory of Veterinary Research Institute. Fecal samples and cloacal swabs subjected to virus isolation by inoculating chicken embryonated eggs. The results were found to be negative for the presence of avian influenza viruses.

A total of four thousand four hundred five (4,405) serum samples were collected from commercial layer during the year under review and samples were tested using Enzyme Linked Immuno-Sorbant Assay (ELISA). There have been zero-reactors to evidence the presence of Avian Influenza type 'A' virus antibody and the reactor rates at district level varied. The zero-reactors have been further tested to ascertain the presence or absence of H5, H7 and H9 subtypes. The testing programme will be continued in 2021.

# 3.4.3. Salmonella Control Programme

Salmonellosis is an economically important disease in poultry due to its zoonotic potential, risk of vertical transmission and production losses. All the poultry breeder farms having either parent birds or grandparent birds have to be maintained in salmonella-free status.

There were 46 poultry parent farms (Broiler-33, Layer -10) and 03 grandparent farms registered with the Department for the year 2020.

Total of 111 breeder farm visits and 119 hatchery visits were done by Veterinary Investigation Officers during the year and one hatchery was confirmed to be positive for motile Salmonella from Veterinary Research Institute. Therefore, killed salmonella vaccine was allowed to use in selected breeder farms to control the infection and some breeder farms maintained salmonella free status using testing and culling of infected birds.

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

Poultry, shrimp and ornamental fish industries in Sri Lanka have shown a phenomenal growth over the recent past. Therefore, Wariyapola, Chilaw and Welisara VICs were selected to be further developed to cater the demand of these industries. Laboratory facilities will be developed to facilitate

rapid disease diagnosis, regular screening and surveillance of poultry and fish diseases and quality certification of poultry and fish products.

Upgrading of 3 VICs with the PCR and ELISA diagnostic facilities have completed during 2020. Required high tech laboratory equipment, chemicals, reagents, glassware and other consumables were procured during 2019 and 2020.

The three Veterinary Investigation Officers were trained on PCR and ELISA diagnostic techniques. The molecular diagnostic activities of the Shrimp in Chilaw and poultry in Wariyapola VIC has initiated in 2020 and that of Welisara VIC for the ornamental fish has to be started in 2021.

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

Globalization, climate change and ecosystem alterations bring livestock, people and wildlife into closer contact leading pathogen transmission between wildlife to humans and livestock and vice versa. This multidisciplinary project initiated as a measure to minimize such disease risks and for the early detection and manage adverse impacts of these diseases on human and livestock health

# Coordinating Unit and network among partner institutes

The coordinating unit established in the Animal Health Division coordinated the activities with the contact persons nominated by the Heads (Director General/Dean) of each institute for this project.

Regional coordinating units were established to facilitate field wildlife disease surveillance activities and communication between regional representatives (Veterinary Investigation Officers, Regional Epidemiologists)

# Capacity Building for wildlife disease surveillance

Five necropsy training workshops and field visits were conducted at Randenigala, Elephant Transit Home, Ampara, Udawalawa National Park and Kumana National Park. Participants include VIOs, VSs of DAPH and DWC, Veterinary Assistants/DWC, RAs/DAPH and Veterinary Interns.

# Implementation of wildlife diseases surveillance and research

Surveillance program for pathogenic Leptospires was continued with the collaboration of the Faculty of Medicine, University of Peradeniya.

Laboratory investigations were carried out on convenient samples (mainly from necropsy samples of 125 carcasses including mammals, birds, reptiles and fish) at the VRI, VICs, Genetech and the Faculty of Veterinary Medicine and Animal Science.

# Investigations on mass mortalities of wild animals were carried out.

Deaths of crows in Welisara and Batticaloa VIC ranges – necropsy samples submitted to laboratories revealed that the samples were negative for Newcastle Disease and Avian Influenza viruses. Cause of these deaths were suspected as poisoning/toxeamia.

Black headed ibis deaths at Ulhitiya - 200-300 ibises have died in an island in the Ulhitiya tank, Maduru Oya National Park. *Salmonella typhymurium* was isolated from the submitted samples.

Olive ridley sea turtle stranding at Colombo – suspected due to the oil spill (Pending lab test results). Finless porpoise stranding at Arugambe – suspected due to the oil spill (Pending lab test results). Hard shelled terrapin deaths in Aththidiya suspected due to an environmental pollutant (Pending lab test results). Deaths of Sooty turns in Aththidiya – suspected as a mild form of Newcastle Disease. Lab results revealed samples were (-) ve for Newcastle Disease.

Short finned pilot whales – Approx. 125 whales stranded and 06 died and others were rescued. This live stranding is probably due to geomagnetic

anomaly or disturbance due to Sonar (Eg. military sonar). Necropsy samples were submitted for laboratory investigations.

Ashy-crowned larks in Wanathawilluwa – Approx. more than 300 birds have died. Some birds that have been debilitated with nervous signs had been rescued and recovered. Suspected due to intentional poisoning (Lab reports pending).

Spinner dolphins – two dolphin carcasses had been stranded in Katukurunda and Mount Lavinia.

Squirrels – Approx. 06 squirrels have died in the Boralugoda Estate, Kosgama. Cause of death was suspected as acidosis (Lab reports pending).

Fresh fecal samples were collected from wild birds in Chundikulum Nature Reserve, Kumana National Park, Karuwalagaswewa, Thabbowa tank, Anawilundawa, Vangalai, Thalladi, Yala National Park, Bundala National Park and Wasgamuwa National Park for HAPI and ND surveillance.

# 3.5. Veterinary investigation services

The first Veterinary Investigation Center in Sri Lanka was set up in Polonnaruwa in 1960s with main objective of providing laboratory back up services to Thamankaduwa farm which was the main Livestock project in the country. The Veterinary Investigation Cadre was introduced in 1974. The main duties of the officer in charge of VIC were carrying out post mortems of animals and diagnosis of disease in livestock in relation to parasitology, mastitis control work and testing for Brucellosis disease by Roes Bengal test. The disease diagnostic work was decentralized and regional Veterinary Investigation Centers were set up Matara, Welisara, Polonnaruwa and Jaffna. Later two more VICs were set up at Pannala in 1989 and in Vavuniya in 1992 in replacement of the defunct VIC in Jaffna. In 1994 for no apparent functional advantage Director AP&H took over all the regional VICs and placed them in the Animal Health Division which has from the inception

depended on the VRI and VICs for laboratory diagnoses.

The concept of strengthening the laboratory back up for veterinary services by providing veterinary investigation facilities at district level by District Veterinary Investigation Centres (DVICs) was recognised in year 2006. Since then continuous effort has been taken to set up one VIC for each district. With the establishment of new Veterinary Investigation Centre at Kandy district, the total number of functioning VICs became twenty five during the year under review.

Veterinary Investigation Centres focused mostly on animal disease investigation in order to support the disease surveillance system in the country. 474 field level investigations carried out during the year 2020. Foot and Mouth Disease, Bovine Black Quarter, Brucellosis, Babesiosis, Theilariasis and Mastitis in cattle and buffaloes; Newcastle Disease, Salmonellosis, Infectious Bursal Disease Marek's Disease and Coccidiosis in poultry and PRRS outbreaks in Swine are some of the specific disease conditions diagnosed or/and confirmed at District Veterinary Investigation Centers during this period.

Veterinary Investigation Centers played the leading role in immunization of cattle against bovine brucellosis, bovine babesiosis, contagious pustular dermatitis vaccination in goats, mastitis control programme in cattle, salmonella control programme in poultry breeder farms and avian influenza surveillance programme at national level. Detail information on activities performed at Veterinary Investigation Centers during the year 2020 has been shown in *Annexure III*.

# 4. ANIMAL BREEDING DIVISION

# 4.1. Introduction

Animal breeding division is responsible for national level livestock genetic improvement through facilitation of appropriate breeding techniques and logistic support.

Deep frozen semen is produced at Kundasale and Polonnaruwa Artificial Insemination Centers for artificial insemination (AI) of cattle, buffalo and goat. In addition, field AI programs are facilitated by supplying semen of specific genetic merits imported from other sources. Sexed semen is also supplied to the provinces on demand. The national AI program is monitored and centrally assessed 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 nucleous herds of Jamunapari and Boer goats respectively and generally issue stud goats for breeding purposes.

### a. Production of semen

Table 4.1: No. of semen doses produced in 2020

Species / Breed	AI Center		
	Kundasale	Polonnaruwa	
Jersey	144,079	-	
Friesian	16,325	-	
Sahiwal cross	-	3,434	
Murrah	-	3,350	
Girolanda cross	25,465	8,872	
Boer	2,550	-	
Jamnapari	11,836	-	
Local Neat Cattle	-	2,924	
Total	200,255	18,580	

# 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 2020

# 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.

# b. Distribution of semen

Table 4.2: Breed-wise distribution of semen - 2020

Species	Breed	Locally	Imported	Total
		produced		
Cattle	Jersey	124,743	678	125,421
	Jersey (sexed)	-	267	267
	Friesian	34,701	337	35,038
	Friesian (sexed)	-	76	76
	Sahiwal	-	897	897
	Cross	82,067	-	82,067
	Girolando	-	900	900
Buffalo	Murrah	1,505	568	2,073
	Niliravi	1,800	-	1,800
Goat	Jamunapari	5,057	22	5,079
	Saanen	79	10	89
	Boer	1,987	-	1,987
	Total	251,939	3,755	255,694

# c. 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 4.3: Targets, performance and achievement of AI – 2020 (Cattle and Buffaloes)

Province	Target	Performance	Achievement (%)
Central	58,445	49,036	84%
Uva	25,247	23,023	91%
North Central	19,550	19,115	98%
North Western	72,214	43,940	61%
Sabaragamuwa	7,594	6,128	81%
Eastern	12,168	8,431	69%
Northern	35,866	28,035	78%
Southern	15,930	10,403	65%
Western	20,646	14,405	70%
Island Total	267,660	202,516	76%

# **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 2020 was 59, 877 (48%).

Table 4.4: Province-wise target, performance and achievement of PD-2020

Province	Target	Performance	Achievement (%)
Central	29,223	11,271	39%
Uva	11,829	7,929	67%
North Central	4,760	3,371	71%
North Western	35,903	13,742	38%
Sabaragamuwa	4,774	2,566	54%
Eastern	7,686	4,239	55%
Northern	11,897	5,441	46%
Southern	9,570	6,236	65%
Western	10,192	5,082	50%
Total	125,834	59,877	48%

# 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 57,051 (57%).

Table 4.5: Province wise target, performance and achievement of calving – 2020

Province	Target	Performance	Achievement (%)
Central	19,482	12,428	64%
Uva	8,272	7,521	91%
North Central	6,090	3,603	59%
North Western	35,810	15,912	44%
Sabaragamuwa	3,227	2,311	72%
Eastern	5,101	2,432	48%
Northern	10,134	4,531	45%
Southern	4,405	3,836	87%
Western	8,352	4,477	54%
Total	100,873	57,051	57%

# **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 4.6: Training on AI for field staff and students 2020

Technician Category	No. Trained
LDO (Fresh)	71
Private Tech (Fresh)	18
Total	89

# d. Infertility investigations

Infertility cases are attended on request basis and required reproductive hormones are supplied to the provinces. Following reproductive hormones were supplied in the year 2020.

GnRH - 835 Doses PGF<sub>2</sub> -2,180 Doses

A total of 590 infertility cases were attended by field Veterinary Surgeons in the year 2020.

# e. Pedigree and Performance Recording Scheme (PPRS)

This project is currently implemented in Kurunegala, Anuradhapura, Polonnaruwa, NuwaraEliya and Badulla districts. The main target is to identify locally adapted dairy cows with superior genetic merits for lactation yield through test day milk recordings. Such cows are impregnated with imported proven sire semen. The bull calves, born to those cows, would possess Quantitative Trait Loci (QTL) responsible for both adaptability and additive effect of superior lactation yield. The bull calves of selected cows are further examined and screened as future semen donors for Artificial Insemination Centers and their semen is expected to utilize in local AI programs. For that, 12,000 cattle and buffalo in 650

farms have been monitored for their pedigree and performance recording. Those data were analyzed and EBV for 2.000 cows were calculated.

Six (06) number of certified bull calves have been screened and procured during 2020. Capacity building among farmers on the project was implemented and 50 farmers were participated. In addition, 89 Veterinary Surgeons and Livestock Development Instructors (LDIs), and 32 Recorders were exposed to knowledge update program. Further, 32 number of bulls were selected as stud for the natural breeding program to improve the production potential of extensively managed herd.

# f. Pasture development

Establish sprinkler irrigation system for 1.5 Acres of Brachiaria cultivation at AIC Kundasale.

Seven (7) Acres of pasture Land rehabilitation was done at GBC Thelahera to upgrading the cultivation.

# g. Goat development

Division of Animal Breeding maintains two nuclear level goat farms with high genetic merits of *Jamunapari* and *Boer* goat breeds. Main objective of the two nuclear goat farms, being the issue of animals for breeding purpose. Eventy eight (78) goats (59 stud goats and 19 female goats) have been issued to the breeder farmers in 2020.

# 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 animals 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 to motivate them for appropriate feeding of the heifers.

Table 4.7: Physical achievements of Heifer Calf Rearing project - 2020

Payment of incentive	es	Unit	Target	Achievement*
Farmer incentives	No. registered	No of Calves	15,500	12,389
	2 <sup>nd</sup> Installment	No. of	3,000	1,881
	3 <sup>rd</sup> installment	payments	2,000	745
	4 <sup>th</sup> installment		1,000	747
Monitoring of registered calves			494 calves to be monitored in twice per year	completed

<sup>\*</sup>Gap between target and achievement is due to covid-19 pandemic situations prevailing in the country.

# 5. VETERINARY RESEARCH INSTITUTE

# 5.1. Introduction

Veterinary Research Institute (VRI) is the only national level Research Institute, involved in veterinary research, diagnostic, consultancy, 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 livestock products have been developed and produced by the VRI to the farming community and other stakeholders of the industry. On the other hand, diagnostic 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 2020 are as follows.

# 5.2.1 Products issued Table 5.1: Vaccines

Vaccine	Production (doses)	Issues (doses)
Hemorrhagic Septicemia (HS) (OA)	306,570	306,570
Hemorrhagic Septicemia (HS) (APV)	62,040	62,040
Black Quarter (BQ)	125,334	125,334
Tick fever (Bivalent B. bovis & B. bigemina)	Nil	4,860
Brucella S 19	14,000	9,500
Newcastle Disease (ND Primary)	3,115,400	3,115,400
Newcastle Disease (ND Secondary)	2,801,000	2,801,000
Fowl cholera	116,000	116,000
Wart	8	8

**Table 5.2: Diagnostic reagents** 

Reagent	Quantity issued
FMD transport medium (ml)	7,600
AI transport medium (ml)	7,400
CMT reagent (L)	22.5
Pullorum antigen (doses)	240,856
RBPT antigen (ml)	135
MRT (ml)	140

**Table 5.3: Therapeutic reagents** 

Reagent	Quantity issued
Teat dip solution (L)	700
Udder infusion (Vials)	571

**Table 5.4: Starter cultures** 

Starter culture	Quantity issued
Yoghurt culture (vials)	29
Curd culture (vials)	156

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

Chick type	Number issued
Embryonated eggs	111,764
Day old chicks (Backyard poultry)	102,263

# 5.2.2 Services

**Table 5.6: Examination of specimens** 

Specimen type	No. of samples
Blood smears for parasites	345
Fecal samples for parasites	617
Skin/litter/ticks/intestinal samples for	255
parasites	
Litter/ bedding samples	42
Skin scrapings	209
Blood samples for disease diagnosis	116
Plasma/blood/serum for Brucellosis,	Brucellosis - 497
Leptospirosis	Leptospirosis - 214
Tissue samples for histopathology	3,479
Tissue samples for microbiology	1,783
Milk samples for CMT	95
Milk & poultry samples for ABST	55
Serum samples for viral disease diagnosis	6,406
Tissue samples for viral disease diagnosis	1,350
Cloacal/fecal swabs, egg parts, chicken powder	16,679
for viral disease diagnosis	·
Urine samples for microbiology	52
Tissue samples for microbiology	2,238
Stomach content for microbiology	47
Impression smears for parasitology	12
Intestinal samples for microbiology/	14
parasitology	
Feed samples for microbiological quality	1,318
Day old chick samples	84
Fish samples for microbiology, parasites and	1,547
PCR	,
Water samples for microbiology	113
Number of PCR done for ruminant, poultry &	921
other monogastric animals	
Microbiological culture tests carried out	7,434
Total bacterial counts performed	421
Other Bacterial Counts (E coli, Salmonella,	257
Coliforms)	
Seed preparation of bacterial vaccines (no. of	14
batches)  Quality testing bacterial vaccine harvests (no. of	12
batches)	12
Quality testing bacterial vaccine final product	1
(no. of batches)	
Seed preparation of viral vaccines (no. of	1
batches)	
Quality testing of viral vaccines (no. of batches)	12

Table 5.7: Analysis, identification and quality testing of samples

Sample type	No. of samples
Feed samples for proximate components and minerals	933
Mineral mixtures and blood samples for mineral analysis	33
Milk and milk products samples for microbiological quality	130
Milk and milk products samples for compositional quality	201
Species identification using meat, skin and blood samples	102
Soil samples for chemical properties	45
Water samples for chemical properties	12
Plant samples for nitrate, oxalate and soluble carbohydrates	1,026
	In vitro - 976
Seed samples for purity, germination and viability	2
Silage samples for quality testing	58

Table 5.8: Field and laboratory investigations

Investigation type	No. of
	investigations
Field disease investigations	23
Postmortems	2,428
No. of lab disease investigations	586
Field investigation into nutritional problems	19
Field investigation into milk quality control problem	1
Ration formulation evaluations	32
Confirmation of contagious / notifiable diseases	17

Table 5.9: Sample analysis for statutory purposes, quarantine, export certification etc.

Investigation type	No. of
	investigations
No. of samples handed for statutory purposes	4,097
No. of food products for microbiological examination	49
No. of court directed Investigations	99
No. of samples for quarantine/ import, export purposes	3,548

Table 5.10: Sample analyzed for notifiable diseases

Investigation type	No. of investigations
No. of samples confirmed for notifiable ruminant animal	HS - 8
disease	FMD - 24
No. of samples confirmed for notifiable swine diseases	PRRS - 8

### 5.3. Clients registered at VRI

Table 5.11: Clients registered at VRI

Place of registration	No. of clients
Coordinating unit	2,456
Central Poultry Research Station (CPRS)	330
Animal Virus Laboratory	512

### 5.4. Research projects

Research projects conducted during the year are as follows:

**01. Title:** Study on use of histopathological and immune histochemical techniques for detection of bovine tuberculosis

Principal Investigator: Dr. G. I. S. Perera

Collaborating Scientists: Dr. S. M. T. S. Manchanayaka, Dr. P. S. Fernando,

Dr. H. R. N. Jinadasa, Dr. H. P. V. D. S. Bandara

**Duration**: 4 Years

Status of the project: Completed

**O2. Title:** Examine the efficacy of selected probiotics and phytobiotics to replace antibiotics in poultry feed

Principal Investigator: Dr. M. W. C. D. Palliyeguru

Collaborating Scientists: Dr. K. H. D. T. D. Kasagala, Dr. S. K. Daluwatta

**Duration**: 5 Years

Status of the project: Continued to 2021

**Title:** Identification of native wild life species in extinction as a technical assistance to prevent illegal slaughtering

Principal Investigator: Dr. M. W. C. D. Palliyeguru

Collaborating Scientists: Dr. K. H. D. T. Kasagala, Dr. G. A. Gunawardane

**Duration**: 3 Years

Status of the project: Completed

04. Title: Establishment of fatty acid profiles of animal feeds and products

**Principal Investigator**: Dr. W. M. P. B. Weerasinghe **Collaborating Scientists**: Dr. M.W.D.C. Weerathunga

**Duration**: 2 Years

Status of the project: Completed

**05. Title:** Occurrence of ethanol unstable milk and its relation with physico-chemical characteristics of milk

**Principal Investigator**: Dr. U. L. P. Mangalika **Collaborating Scientists**: Dr. A. P. D. G. Pathirana

**Duration**: 4 Years

Status of the project: Continued to 2021

06. **Title:** Development of strip based methods for detection of common adulterants in milk

Principal Investigator: Dr. U. L. P. Mangalika Collaborating Scientists: Dr. A. P. D. G. Pathirana

**Duration**: 2 Years

Status of the project: Completed

07. **Title:** Molecular detection methods and diversity of M. bovis for effective control strategies.

Principal Investigator: Dr. G. A. Gunawardana

Collaborating Scientists: Dr. G. A. Deepal Chandana, Dr. P. P. Jayasekara, Dr. Tariq Javed

**Duration**: 3 Years

Status of the project: Completed

08. Title: Molecular tools and geographical information system to develop specific control strategies for bovine mastitis.

Principal Investigator: Dr. G. A. Gunawardana

Collaborating Scientists: Dr. G. A. Deepal Chandana, Dr. P. P. Jayasekara, Mr. S. A. Gunarathne

**Duration**: 3 Years

Status of the project: Completed

09. Title: Genetic polymorphism and climate change impact among farm animals

Principal Investigator: Dr. G. A. Gunawardana

Collaborating Scientists: Dr. G. A. Deepal Chandana, Dr. P. P. Jayasekara

**Duration**: 3 Years

Status of the project: Completed

10. Title: Establishment of metabolizable energy (ME) and organic matter digestibility (OMD) values of

locally available ruminant feed stuffs in Central and Wayamba provinces

Principal Investigator: Dr. W. M. P. B. Weerasinghe

Collaborating Scientists: Dr. M. B. P. Kumara Mahipala, Dr. M.W.D.C. Weerathunga

**Duration**: 2 Years

Status of the project: Completed

11. **Title:** Evaluation of veterinary drug residues in animal products

> Principal Investigator: Dr. M. W. C. D. Palliyeguru Collaborating Scientists: Dr. S. S. K. Daluwattha

**Duration**: 2 Years

Status of the project: Completed

12. **Title:** Development of field screening test for antibiotic residues in milk

Principal Investigator: Dr. P. S. Fernando

Collaborating Scientists: Dr. M. A. R. Priyantha, Dr. K. M. S. G. Weerasooriya

**Duration**: 3 Years

Status of the project: Continued to 2021

**13. Title:** Preparation of poultry foundation stock 1 to Central Poultry Research Station (CPRS), Karandagolla

Principal Investigator: Dr. U. G. V. S. S. Kumara

Collaborating Scientists: Dr. M. B. D. Lakmali, Mr. Sunil Gamage

**Duration**: 2 Years

Status of the project: Completed

14. Title: Screening of imported dairy cattle for acute Fasciolosis by detecting rising titers of anti-

Fasciola hepatica (Ab) using ELISA and confirmation of the clinical disease if present.

Principal Investigator: Dr. P. D. I. G. Amarasiri

Collaborating Scientists: Dr. N. D. S. Dissanayake, Dr. S. S. Iddamaldeniya

**Duration**: 2 Years

Status of the project: Completed

**15. Title:** Introduction of serological vaccine matching technique to assess ability of cross protection of locally produced FMD vaccine against field isolates.

Principal Investigator: Dr. H. Kothalawala

Collaborating Scientists: Dr. S. Puvanindiran, Dr. W. M. A. D. Wanninayaka, Mr. R. Karunarathne

**Duration**: 3 Years

Status of the project: Continued to 2021

16. Title: Improving locally produced FMD vaccine by 146S quantification and shelf life extension

Principal Investigator: Dr. S. Puvanendiran

Collaborating Scientists: Dr. H. Kothalawala, Dr. W. M. A. D. Wanninayaka,

Dr. Mayurathy Deivendran

**Duration**: 2 Years

Status of the project: Completed

17. Title: Detection of infectious bronchitis using enzyme including hemagglutination assay.

Principal Investigator: Dr. W. M. A. D. Wanninayaka

Collaborating Scientists: Dr. H. Kothalawala, Dr. S. Puvanendiran, Dr. G. M. C. R. Karurnarathne

**Duration**: 2 Years

Status of the project: Completed

**18. Title:** Relationship among bacterial counts and somatic cell counts and factors influencing their variation in cow, buffalo and goat milk in four provinces

**Principal Investigator**: Dr. A. P. D. G. Pathirana

Collaborating Scientists: Dr. U. L. P. Mangalika

**Duration**: 3 Years

Status of the project: Continued to 2021

19. Title: Microbial molecular profiling to determine origin and transmission of bovine mastitis.

**Principal Investigator**: Dr. P. P. Jayasekara

Collaborating Scientists: Dr. G. A. Gunawardana, Dr. S. K. Weerasundara

**Duration**: 3 Years

Status of the project: Continued to 2021

**20. Title:** Study of the underutilized poultry production systems including duck, turkey, guinea fowl, Japanese quail and indigenous chicken in Sri Lanka

Principal Investigator: Mrs. I. K Leuke Bandara

Collaborating Scientists: Dr. N. Priyankarage, Dr. Devika Lakmalie

**Duration**: 2 Years

Status of the project: Completed

**21. Title:** Evaluation of agronomic characters and nutritive values of Napier Hybrid fodder varieties of CO5 and Sampoorna in different harvesting intervals in Yala and Maha seasons

**Principal Investigator**: Dr. M. W. D. C. Weerathunga

Collaborating Scientists: Dr. M.P.B.K. Mheepala, Dr. W.M.P.B. Weerasinghe, Mr. N. Perera

**Duration**: 2 Years

Status of the project: Continued to 2021

**22. Title:** Determination of quinolone resistance in E. coli isolated in Commercial broilers.

Principal Investigator: Dr. M. A. Roshan Priyantha

Collaborating Scientists: Dr. PS Fernando

**Duration**: 2 Years

Status of the project: Continued to 2021

23. Title: Detection of carcinogenic and mutagenic nitrofuran metabolites in animal products

Principal Investigator: Dr. S. S. K. Daluwattta

Collaborating Scientists: Dr. M. W. C. D. Palliyeguru

**Duration**: 2 Years

Status of the project: Continued to 2021

### 5.5. Research Publications in 2020

Details of research publications are in *Annex IV*.

### 5.6: Special Achievements

1. Following Research Article was selected for the Presidential Awards 2020.

Yapa, P.R; **Kothalawala, H.**; Vimalakumar, S.C; **Silva, S.S.P.**; Kanagarathnam, R; Weerasinghe, A.S.; Sivakumar, T.; Abeysekara, T.S, Genetic analysis of babesia isolates from cattle with clinical babesiosis. Journal of Clinical Microbiology Voloume 56 Issue

- 2. Improved the facilities at Veterinary Vaccine Production Centre, Gannoruwa.
- 3. Improved the facilities at the newly establishing Molecular Biology Division.
- 4. Established specific PCR to identify A2 and A1 milk beta casein producing animals.

### 6. HUMAN RESOURCE DEVELOPMENT DIVISION

#### 6.1. Introduction

The main responsibility of Human Resource Development (HRD) Division is to develop human resources in order to meet the present and future needs of the livestock sector.

HRD division administers following seven (07) units.

- Institute of Continuing Education for Animal Production and Health (ICEAPH), Gannoruwa, Peradeniya.
- Sri Lanka School of Animal Husbandry (SLSAH), Karandagolla, Kundasale.
- Sri Lanka School of Animal Husbandry (SLSAH), Seeppukulama, Anuradhapura.
- The Department library, Gannoruwa, Peradeniya.
- Information communicating unit.
- Livestock Knowledge Center, Getambe/ Hotline.
- Livestock Technology Park.

### Main functions of the division

- Training and technology transfer
- Education and career development
- Livestock promotion
- Entrepreneurship development and selfemployment support services
- Testing and evaluation

### 6.2. Training and transfer of technology6.2.1. Training conducted at ICEAPH

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

Details and progress of trainings conducted during 2020 at ICEAPH are shown in Table 6.1 and 6.2 respectively.

Table 6.1: Details of training conducted at ICEAPH

Category	No. of programs planned	No. of programs conducted
AP&H service officers	27	18
Research Assistant, Livestock Development Officers/	23	06
Instructors		
Development officers	11	04
Supportive staff	07	02
Others	08	02
Total	76	32

Table 6.2: Progress of training conducted at ICEAPH

Item	Target	Achievement
Number of trainees/ participants	2,072	1,072
Number of training man days	6,015	2,287

### 6.2.2. Special training conducted during the year

Table 6.3: Details of the special trainings conducted during the year 2020

Name of the	Number	Number	Man
program	of	of	days
	program	participants	
	s		
Food Safety	01	20	40
General	01	25	75
Administration			
& Finance			
Prevention &	01	25	25
Control of Anti-			
Microbial			
Resistance			
Management	01	18	36
General	01	25	50
Behavior &			
Discipline of			
Government			
Servant			
Total	05	113	226

### 6.2.3. Training at Sri Lanka School of Animal Husbandry (SLSAH), Seeppukulama

One farmer training program was conducted and 25 farmers participated during the year 2020.

### 6.3. Educational and career development

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

New batch for the Diploma in Animal Husbandry course (2019 -2021) was enrolled on 24.11.2019. Number of students enrolled for this program was sixty seven. This course is scheduled to be completed in 2022.

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

In the year 2020, facilities were provided for farmer training courses. In parallel, about 1.5 acres of maize, sorghum and CO3 cultivation required for animals was established.

Another 4 acres of land was prepared for pasture cultivation. In addition, hostels were renovated to commence the NVQ level 4 "Dairy Farming Assistant Course" from 2021.



Figure 6.1: Diploma students engaged in practical training

### 6.3.3. Internship training for veterinary graduates

One (01) internship program was conducted and completed in the year 2020. Details of this program is given below.

Batch Number. DAPH/HRD/ICE/ITN / 2020 No. of Internees: 178

### 6.3.4. Foreign training

Details of overseas training awarded to DAPH officers in 2020 are given in *Annexure V*.

### 6.3.5. Support for Post Graduate Training

During the year 2020, Post graduate fellowship programs supported by HRD Division are given in *Annexure VI*.

### 6.4. Examinations

HRD division is responsible for conducting examinations for Department officers. Details of examinations conducted by DAPH in 2020 are given in *Annexure VII*.

### 6.5. Information and communication

No. of booklets/leaflets 13,848 No. of photographs (10"x12") 06 No. of CD's 10

#### 6.5.1. Publications in 2020

a. New prints

Booklet 05 Leaflets 01

b. Reprints in 2020

Leaflets 04 Booklets 01

6.5.2. Sale of publications in 2020

### 6.5.3. Mass media activities

The division continued broadcasting/telecasting / publishing programs and articles in various TV channels/radio stations and newspapers. Details are given in Table 6.4.

### Table 6.4: Mass media activities in 2020

Type of media	No. of	TV/ Radio channel/ News	No .of
	programs	paper	Telecasts/Broadcasts/Releases
	(planned)		
TV	Sinhala - 04	ITN /SLRC	04
Radio	Sinhala- 28	SLBC - Colombo - Sathwa	12
		Rawaya	
		SLBC - Kadurata FM - Sathwa	06
		Govipola	
		Krushi FM WEB Radio	10
	Tamil- 04	Niraivalam	04
Paper articles		News paper	03
News releases	12	All media	08

### 6.5.4. Exhibitions

Table 6.5: Exhibitions conducted / participated in 2020

	Category	Venue	Period
01	Wings of future 2020	Nugawela Central College-	09.01.2020- 10.01.2020
		Katugastota	

### 6.6. Entrepreneurship development and self – employment support services

Table 6.6: Details of entrepreneurship development and self - employment support trainings 2020

Topic	Venue	No. of Programs	No. of Participants
Milk processing	Walapane	02	31
	Pathadumbara	01	26
	Kotadeniyawa	01	25
	Seeppukulama	01	24
	ICE- Gannoruwa	01	40
	Livestock Technology	01	23
	Park- Gannoruwa		
Total		07	169

### Follow up technical training programs 2020

One training program on milk processing was conducted at Kotadeniyawa training center for 23 participants.

### 6.7. The department library

The Department library continued serving as the national level library for livestock industry related fields and veterinary science.

- Purchase of local and foreign library books and journals: 46
- Acquisition of print and non-print library materials related to the livestock and other allied subject areas: 100%

### 6.8. The Departmental hotline service

The DAPH maintains a hotline service (Tel: 081-2388463) to facilitate stakeholder needs

Table 6.7: Activities done by hotline service in 2020

	Activity	Target	Cumulative
			Progress
01	Registration of clients (on request)		1,110
02	Provision of technical guidance		1,087
03	Non-technical guidance		23
04	Coordination with other institution		758
05	Direct advisory	On	118
06	Telephone advisory		992
07	No. of questions answered	request	10,638
08	Follow up service to evaluate customer satisfaction		105
09	Collection of newspaper articles related on livestock		255
10	No. of clients visited to booklets and direct advisory		332
11	Leaflets issued free of charge		332

### 6.9. Livestock Technology Park

Table 6.8: Livestock Technology Park - details of performance in 2020

Project / Program	Activity	Expanded activities	Progress at the end of year
Establishment of livestock technology park	Demonstrate model livestock units to the public	Facilitation of visitors	6,559
	Conduct demonstration sessions	Milk processing demonstration sessions for farmers	01
	Development and maintenance of different units of the	Purchase of farm equipment	100%
	Livestock Technology Park	Purchase of Animal Feed	100%

### 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 data base at National level.
- Coordinate livestock development programs with provincial DAPH and other state institutions and organizations.
- Coordinate implementation of egovernment 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 - 2020

Eight (08) new project proposals for 2021 were formulated in collaboration with respective divisions in 2020. These project proposals were forwarded to relevant authorities.

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 2020 of DAPH was implemented successfully even in COVID – 19 outbreak. The physical and financial progress was monitored and reported monthly on the basis of thrust area. At the end of 2020, action plan for physical and financial progress review of the DAPH was prepared for the year 2021 considering the budget allocation.

Capital expenditure utilization of the DAPH was 79.47% in 2020 which was lower than the previous year (89.35%) The progress of recurrent fund utilization was 95.19% in 2020, which was lower than the corresponding figure of 98.97% in the year 2019. 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 VIII*. 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 2020. Total milk collection by 14 key organizations was 237.94 million liters. Central Province, North Central Province and the North Western Province contributed for this total as 34%, 21% and 18% respectively. District—wise milk collection data for the year 2020 is given in *Annexure IX*.

### 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 2020 was obtained from Sri Lanka Customs and analyzed. Quantities of dairy products, meat and meat products imported into the country in 2020 is totaled 102,355.53 MT and 1,360.92 MT with the value of Rs.61.93 billion and Rs.673.38 million respectively. Imported quantity of dairy products has been increased, imported quantity of meat products decreased during the year 2020 when compared with the year 2019.

Total of 1,507.08 MT of milk and milk products and 1,632.78 MT of meat and meat products have been exported to other countries during year 2020.

### 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 2020, Livestock Information Bulletin, Livestock Statistical Bulletin, Dairy bulletin and Livestock outlook for the year 2019. It was disseminated to all the relevant organizations and other stakeholders in 2020.

### 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. One committee meeting was conducted during the year 2020. Main committee meeting was supplemented by eight (8) stakeholder meetings. As it was not possible to hold meetings due to health regulations most of the industry coordination activities were done by using informal methods using electronic media specially during the period of 1st wave of COVID 19.

# 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. One (01) such meetings were held during the year 2020.

## 7.5.2. Special livestock development projects

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

A project to improve services of provincial veterinary offices was commenced in year 2008 aiming at improving infrastructure facilities of veterinary offices.

Construction work of Veterinary Surgeon office, Haliela in Uva province was completed in the year 2020.

## 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 2020 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 2020.

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. However the filed visits to such farms were hampered due to the Covid -19 pandemic in the country.

A radio programme on Environmental friendly livestock farming was done to aware the livestock farmers in Sri Lanka via "Krushi FM" online radio

### 7.6. Publications

The division compiled following publications / reports during the year 2020.

- Action Plan DAPH -2020
- Action Plan 2020- LPE Division
- Annual Report -2019
- Annual Performance report 2019
- Livestock Statistical bulletin 2019
- Poultry Bulletin 2019
- Poultry Sector Forecast 2020
- Dairy Bulletin 2019
- Livestock Outlook 2019
- Livestock Information Bulletin 2019

#### 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. S.S.P. Silva of the LPE division serves as a Chief Innovative Officer (CIO) for ICTA.

The LPE division holds the responsibility of managing and updating the department website <a href="https://www.daph.gov.lk">www.daph.gov.lk</a>. 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 byproducts.

### a. Quarantine holdings

Large animals, zoo animals, pet birds, pet animals and ornamental fish were subjected to quarantine at Animal Quarantine Station (AQS) (Colombo, Katunayake) and at own farms during the year 2020. Details are given in *Annexure X*.

### b. Import and quarantine surveillance

Details of consignments those were subjected to quarantine surveillance in 2020 are given in *Annexure XI*.

## 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 period.

Table 8.1: HPAI Surveillance program and laboratory test results - 2020

No of farm visits	No. of samples dispatch to laboratory	Test results
Animal Quarantine Station - Colombo Fish Farm - 41	Packing Water samples - 31 Fish Samples - 36	Negative Negative
Animal Quarantine Station - Katunayake DOC - 30  Pet birds (Holding) - 07  Pigeon - 02  On farm pet bird - 01	Cloacal Swabs - 2,530 Serum Samples - 800  HPAI - 74 Salmonella - 04  HPAI - 40 Salmonella - 02  HPAI - 04 Salmonella - 05	Negative
Animal Quarantine Station-Mattala Pet birds - 36 (8 batches)  Fish Farm - 03  Camel - 02	460 swabs Pooled fresh dropping Sample -92 Fish Samples - 09 Water Samples - 11  Dung Sample - 02	Negative
Cheetah – 02 (03 Farm Visit)	Blood Smears - 05 slides	

### d. Consignment detained / destroyed / reexported in the year 2020

No consignments of animals and animal products were detained/ destroyed/ re-exported in the year 2020.

### 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 2020 are given in Table 8.2.

Table 8.2: Health certificates issued for exports (2019-2020)

Item	No. of health cert	ificates issued
	2019	2020
Ornamental fish	4,180	3,880
Dogs	247	153
Cats	103	68
Poultry -DOC	67	20
Hatching eggs	21	08
Pet birds	04	27
Zoo animals	02	-
Elephant	-	-
Rabbit/Rat/Hamsters/G. Pig	03	=
Animal products (meat & meat products)	3,606	1,424
Table eggs	1,861	826
Animal by-products	71	97
Leather	20	14

### b. Exports

Details on consignments of animals and animal products that were subjected to animal quarantine inspections and approved for export in 2020 are given in *Annexure XII*.

### 8.3. Regulatory activities – livestock industry

### a. Poultry

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

The regulatory activities carried out in 2020 in related to poultry industry are given in Table 8.3.

Table 8.3: Regulatory activities carried out in 2020

Activity	Description	Number
New Registration	Registration of new processing centers	02
Renewal of	Renewal of breeder farms	76
Registration	Renewal of hatcheries	50
	Renewal of grandparent farms	03
	Renewal of processing centers	12
	Renewal of further processing centers	09
Facilitation of imports	Issuing pre clearance approvals (No. of consignments)	121
	Revision/ preparation of import health requirements	1

### b. Other animals, animal products and animal by products

Regulatory activities carried out during the year 2020 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	received	прричен	Quantity
1.	Pets - Dogs & Cats	150	143	221 Animals
	Live Fish	28	28	28 consignments
2.	Genetic Material ( Semen)			8
	Cattle	06	05	15,962 Doses
	Day Old Chicks	44	44	44 consignments
3.	Animal Products			
	Meat and Meat Items			
	Beef	٢	23	114.369 MT
	Mutton		63	1,131.7 MT
	Pork	127	05	52.650 MT
	Lamb		15	127.981 MT
	Edible Fat/Tallow/Casing		11	11 Consignments
	Poultry Meat	48	48	48 consignments.
	Frozen Fish - Bait	87	87	3,816.29 MT
4.	Animal by products			
	Fur/ Wool/ Hair/ Bristles	60	54	50.715 MT
	Leather	108	105	105 Permits
	Gelatin	107	105	1040.7 MT
	Feathers	22	22	22 consignments.
5.	BSE			-
	( Hide Glue, Yoghurt			
	Cultures, Veterinary	145	142	142 Consignments
	Equipment)			-

### 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, inspection of manufacturers (GMP), and antimicrobial resistance (AMR) project lead for animal health sector.

VDCA committee members for the year 2020 and their fields of expertise are as stated below.

- 01. Dr. K. D. Ariyapala Chairman (Jan March 2020)
- 02. Dr. (Mrs) R. Hettiarachchi- Chairman (April December 2020)
- 03. Dr. (Mrs) D. D. N. De Silva Vet. Pharmacology
- 04. Dr. A. Arulkanthan Vet. Parasitology
- 05. Dr. Anil Pushpakumara Vet. Reproduction
- 06. Dr. S. Samarakoon Vet. Clinical Practice
- 07. Dr. H. Kothalawela Vet. Microbiology
- 08. Dr.(Mrs) Chamari Palliyaguru- Animal Nutrition
- 09. Dr. W. Samarasinghe Special member representing Local manufactures
- 10. Dr. M.D.N. Jayaweera Registrar

Six committee meetings of VDCA and Nine user permit panels were conducted during this year. During the year, nominations of seventy five (75) field level authorized officers were completed for pharmaco-vigilance activities. List of imported and locally manufactured/repacked, registered veterinary pharmaceutical products up to 31st December 2020 was updated in the DAPH website.

OIE - AMR awareness leaflets for different stakeholders (Farm owners, Policy makers, Animal feed manufacturers, Veterinary pharmaceutical manufacturers and Distributors) and AMR mitigation key messages were translated to Sinhala and Tamil languages and uploaded to OIE website (<a href="https://rrasia.oie.int/en/projects/antimicrobial-resistance/communication-materials/">https://rrasia.oie.int/en/projects/antimicrobial-resistance/communication-materials/</a>)

### a. New products registered in VDCA

New veterinary pharmaceutical and biological products registered in 2020 as follows.

Table 8.5: Imports for free sales

Pharmacological type	Dosage Form	Number registered
	Injectable	9
Antimicrobial	Topical application	1
	Oral preparations	6
	Injectable	3
Antiparasitic - (Ecto & Endoparasiticides)	Oral	3
	Spot on solution	1
Corticosteroid	Injectable	2
Antiprotozoal	Oral	1
Antihistamine	Injectable	3
Anthelmintic	Oral preparations	5
Glucocorticoid	Injectable	4
Vaccine markers	Injectable	1
	Injectable	10
	Oral	3
Biological (Poultry Vaccines)	Spray/Eye drop	2
	Intra nasal/Intra ocular	1
	Intra nasal/Intra	
	ocular/Oral	2
Biological (Canine / Feline vaccines)	Injectable	3
Biological (Livestock - Bovine, Ovine, Caprine and Swine Vaccines)	Injectable	2
Supplements (Vitamins and minerals)	Injectable	10
Supplements (Vitamins and Energy)	Injectable	3
Supplements (Herbal)	Oral	1
Hormones	Injectable	4
Shampoo	Topical application	2
Herbal wound cream	Topical application	1
Herbal wound spray	Topical application	3
Herbal-Anti-inflammatory ointment/cream	Topical application	2
NSAID	Injectable	1
Disinfectants (Animal farm use)	Spray	1
Anti-bloat	Oral	1
Total		91

Table 8.6: Local manufacture for free sales

Pharmacological type	Dosage form	Number registered
Anthelmintic	Oral	05
Antibiotics	Powder	03
Shampoo	Topical application	04
Herbal insect repellent	Topical application	02
Total		14

### b. Invoice approvals

During the year, 601 invoices were approved by VDCA, to import veterinary pharmaceuticals and biological products for the worth of approximately 2,300 Million Sri Lankan rupees.

### c. User permit approvals

Table 8.7: User permit approvals

Species	Pharmacological type	Issued
Poultry	Vaccine	31
Equine	Diuretic	01
	Supplement	01
	Sedatives and analgesic	01
	Antispasmodic	01
Bovine	Vaccine	02
	Reproductive hormone	03
	Antiprotozoal	01
Wild animal	Sedatives	02
Swine	Vaccine	03
Pet Bird	Hormone	01
Canine	Vasodilator	01
	Metabolic supplement	01
	NSAID	01
Fish	Vaccine	02
	Antibiotic	02
	Total	54

### 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 Feed 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 and one feed industry representative. Director General of the Department of Animal Production and Health and Registrar (Animal Feed) of the department whose served as Chairmen and Secretary of the committee.

Appointed Animal Feed Advisory Committee in 2018 is continued their activities in 2020 also.

### 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 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 8.8: Number of registrations of feed manufacturers and importers - 2020

Category	Total Number	Number registered 2020	Number of Products
Number of manufacturers	45	16	248
Number of importers	140	35	574
Total			822

Table 8.9: Number of renewals of feed manufacturers and importers - 2020

Category	Number of Manufacturers / Importers	Number of Products
Number of manufacturers / exporters / importers	61	608
Number of importers	139	1,669
Total		2,277

### 8.5.3 Animal feed production - 2019 & 2020

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

Table 8.10. Compound animal feed production by type - (2019 - 2020)

Type of feed	Quantity 2019 (MT)	Quantity 2020 (MT)
Poultry feed	799,697.91	933,314.85
Cattle feed	59,576.78	68,303.56
Calf feed	1,294.08	236.28
Pig feed	1748.94	2,321.50
Shrimp/Fish feed	406.38	1,525.35
Horse feed	225.05	409.64
Goat feed	125.49	37.60
Other feed	841.66	1,935.89
Feed production from registered manufacturers	863,916.29	1,008,084.67
Self-mixed	436,904.10	291,056.90
Total feed production	1,300,820.39	1,299,141.57

<sup>\*</sup> Source: TOR -2020 (by Registered Animal feed)

Although the Total feed production has reduced during the year 2020, the total poultry feed production by registered feed manufacturers has increased. The quantity of feed produced by self-mixers (especially

poultry feed producers) has been reduced and this indicated that there may be a shortage of raw materials for self-mixers and they tend to purchase their required quantity from feed manufacturers.

Table 8.11: Poultry feed production by category 2019 - 2020

Type of poultry feed	Quantity 2019 (MT)	Quantity 2020 (MT)
Chick Starter	11,902.94	32,485.65
Layer Grower	29.926.37	58,899.25
Layer	113,230.51	209,979.30
Total Layer feed	155,059.82	301,364.20
Broiler Booster & Starter	197,737.52	231,936.10
Broiler Finisher & Grower &	377,772.67	328580.61
Withdrawer	011,112.01	020000.01
Total Broiler feed	575,510.19	560,516.71
Broiler Breeder	46,642.00	52,199.04
Layer Breeder	22,485.90	19,234.90
Total Breeder feed	69,127.90	71,433.94
_	·	
Total Poultry feed	799,697.91	933,314.85

<sup>\*</sup> Source: TOR -2020 (by Registered Animal feed manufacturers)

### 8.5.4. Vitamin mineral premix production -2020

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

Table 8.12: Vitamin and mineral premix production - 2020

Type	Quantity
Vitamin/mineral premix for local use (powder) MT	5,462.54
Vitamin/mineral premix for export (powder) MT	18,484.60
Vitamin/mineral premix for export (liquid) m <sup>3</sup>	61.8

### 8.5.5. Usage of raw materials - 2020

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* 

## a. Use of meat and bone meal for animal feed production

With the view of implementing BSE regulations on animal feed production, approval was given to import 39,578 MT 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 are imported to cater the customer requirement.

Table 8.13: Import of animal feed - 2020

Type	Quantity (MT)
Prawn/Shrimp Feed	9,833.36
Fish Feed	2,171.24
Pet Food (Dog & Cat)	1,838.37

### 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 (9) registered premixing manufacturers.

Table 8.14: Issuance of veterinary export certificates - 2020

Number of veterinary export certificates is sued	Quantity of vitamin/mineral and other products exported (MT) as powder	
790	18,484.60	61.8

### 8.6. Animal identification and traceability program

Necessary inputs (81,025 ear tags, 46,750 Cattle Vouchers and fuel to implement the program at field level) were provided to the provinces to facilitate implementation of this program. A total of 111,289 cattle were ear tagged during the year 2020.

### 09. ADMINISTRATION DIVISION

### 9.1. Introduction

The main responsibility of this division is managing staff cadre and supporting employee services to achieve objectives of the Department.

### 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 952 and actual cadre position was 742 (*Project I: 198, Project II: 319 and Project III: 225*) Details of cadre positions are given in the *Annex XIV*.

### 9.3. Approval from the management service

Post		DMS number and
		Date
Additional	Director	DMS/1145/VOL-IV
General	(Program	2020.10.26
Development	&	
International A	Affairs)- 01	
Warden- 02		DMS/1145/VOL-IV
		2020.12.22

### 9.4. Appointments

Following new appointments were made during the year 2020.

**Director General** 

Additional Director General (Animal Health) - 01

### 9.5. Recruitments

No recruitments

#### 9.6. Promotions

Promotions given during the year are as follows;

Accountant- 01 Development Officer - 07 Field Assistant - 01

#### 9.7. Transfers

Details of transfers made to and from the DAPH-26

### 9.8. Retirements

Details of staff members who have retired from the service in 2020 are as follows;

Director General	01				
Director General (Animal Health/	02				
Livestock Development)					
Director	01				
Internal Auditor	01				
Veterinary Surgeon	01				
Livestock Officer	02				
Livestock Promotion Officer	02				
Livestock Development Assistant	01				
Research Assistant	01				
Laboratory Assistant	01				
Management Service Officer	01				
Livestock Assistant	02				
Office Employee Service	02				
Drivers	02				
Field Assistant	05				

### 9.9. Resignations

Veterinary Surgeon – 01 Livestock Development Officer - 02 Technical Officer – 02 Field Assistant-01

### 9.10. Vacation of Post

Veterinary Surgeon - 01

### 9.11. Releases from the DAPH on permanent basis

Technical Officer - 01 Statistical Officer - 01 Management Service Officer - 06 Driver - 01 Garden Labor - 01

### 9.12. Loans Approved

Type of loan	No.	Amount (Rs.)
Distress Loan	157	16,454,756.00
Property Loan	06	15,556,480.00

### 9.13. Insurance Payments

During the year 2020, 163 applications were approved for "Agrahara" insurance scheme.

### 10. FINANCE DIVISION

### 10.1. Introduction

The Departmental Head pertaining to the financial activities for the year 2020 was 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 2020 are as in *Annex XV*.

A sum of Rs. 616.20 million for the recurrent expenditure and Rs. 481.40 million for the capital expenditure was received by the Department for the year 2020, totaling Rs. 1,097.60 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.)	647,300,000	-	647,300,000	616,170,667	95.19%
Capital (Rs.)	605,700,000	-	605,700,000	481,357,838	79.47%
Total (Rs.)	1,253,000,000	-	1,253,000,000	1,097,528,505	87.59%

### Allocations received from other Ministries and Departments

Vote	Allocation (Rs.)	Expenditure (Rs.)	Percentage of the expenditure
104-01-02-00-1003	No		

### 10.3. Public Servants' Advance Account "B"

	Limits of the Annual Estimates (Rs.)	Actual Value (Rs.)
Balance carried forward		103,499,959.00
Maximum debit limit	40,000,000.00	28,241,705.00
Minimum credit limit	23,000,000.00	27,359,956.00
Maximum limit of the debit balance	120,000,000.00	103,499,959.00
Credits not affecting the limits		(2,404,000.00)
	Balance brought down	104,381,710.00

Finance Division 54

### 10.4. General Deposit Account

The balance of the General deposit account of the Department as at 31.12.2020 was Rs. 15,558,374.00

### It was prepared as follows:

6000-0-0-1-0-110 661,554.00 6000-0-0-13-0-106 3,338,367.00 6000-0-0-16-0-98 11,166,683.00 6000-0-0-2-0-153 391,780.00

### 10.5. Departmental Income

The income received by the Department for the year 2020 is given in Table 10.1.

Table 10.1: Departmental income – 2020

Income Subject No.	Particulars of the income	Total income received *
		(Rs.)
2002-01-01	Building rent	7,684,318.00
2002-02-99	Loan interest to Public	2,910,554.00
	Servants	
2003-01-00	Departmental sales	1,753,414.00
2003-02-99	Sundries	1,323,861.00
2003-99-00	Other receipts	44,792,146.00
	Total	58,464,293.00

\*Revised

Rs. 1,030.373 million was obtained from the Treasury for the activities of the department and Rs. 58.46 million received as income, miscellaneous revenue and there was no balance.

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### **Annexures**

Annexure I Organizational structure of the DAPH

Annexure II Key data on the poultry industry (2019–2020)

Annexure III Activities performed at veterinary investigation centers - 2020

Annexure IV Research publications in 2020

Annexure V Names of officers attended overseas training/ meetings/ workshops/ visits - 2020

Annexure VI Support for Post Graduate Training 2020

Annexure VII Details of examinations conducted in 2020

Annexure VIII Provincial activities 2020

Annexure IX Milk collection by main milk collecting organizations – (2019 - 2020)

Annexure X Quarantine Holdings 2020

Annexure XI Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2020

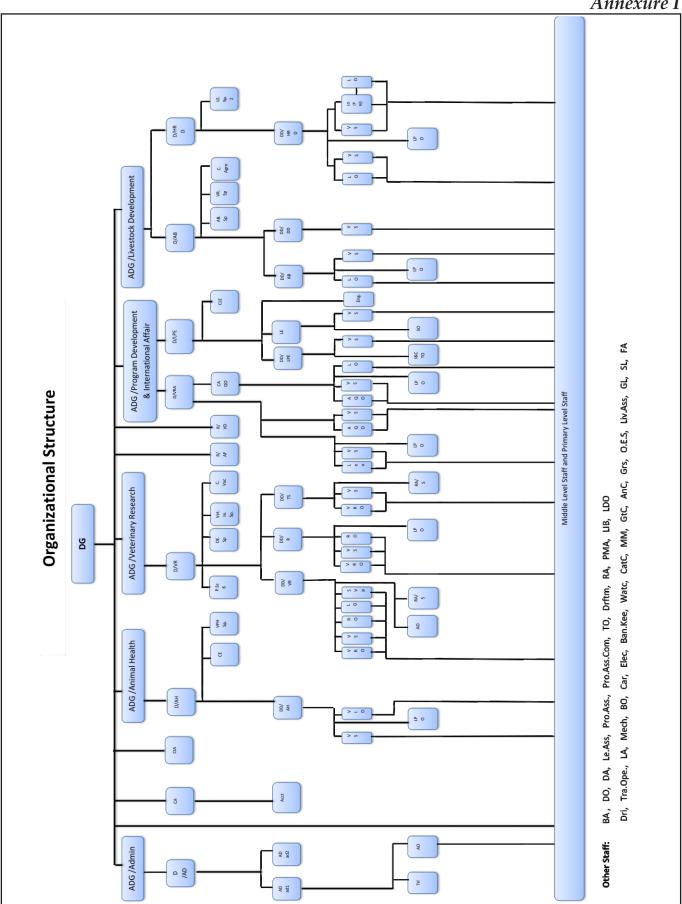
Annexure XII Export of animals and animal products – 2020

Annexure XIII Usage of raw materials by registered animal feed manufactures - 2020

Annexure XIV Present cadre positions of the Department and staff strength (2020.12.31)

Annexure XV Financial allocations and the expenditure summary – 2020





-Director General – Dept. of Animal Production	/QQ	рр/Ан	-Deputy Director, Animal Health
& Health	DD/VR	ΛR	-Deputy Director, Veterinary Research
-Additional Director General	DD/R	Ä	- Deputy Director, Research
-Director, Administration	DD/TS	/TS	-Deputy Director, Technical Service
-Director, Veterinary Regulatory Affairs	/QQ	DD/LPE	-Deputy Director, Livestock Planning and Economics
-Director, Livestock Planning and Economics	DD/	DD/HRD	-Deputy Director, Human resource Development
-Director, Human Resource Development	/QQ	DD/AB	-Deputy Director, Animal Breeding
-Director, Animal Breeding	/QQ	aa/aa	-Deputy Director, Dairy Development
-Director, Veterinary Research	빌		-Livestock Economist
-Director, Animal Health	AD. Ad	Ad	-Assistant Director/ Administration
-Chief Accountant	SVP		-Superintendent of Vaccine Production
-Chief Livestock Economist	AQO	0	-Animal Quarantine Officer
-Chief Epidemiologist	VRO	0	-Veterinary Research Officer
-Veterinary Public Health Specialist	VIO		-Veterinary Investigation Officer
-Principal Scientist	VS		-Veterinary Surgeon
-Dairy Engineering Specialist	9		-Livestock Officer
-Veterinary Investigation Specialist	RO		-Research Officer
-Chief Vaccinologist	Leo		-Legal Officer
-Registrar/ Animal Feeds	Eng.		-Engineer
-Registrar/ Veterinary Drugs	AO		-Administrative Officer
-Chief Animal Quarantine Officer	RA/S	S	-Research Assistant/Special
-Animal Breeding Specialist	LPO		-Livestock Promotion Officer
-Veterinary Reproduction Specialist	귿		-Translator
-Chief Agronomist	<u>~</u>	I & CTO	-Information & Communication Technical Officer
-Chief Internal Audit -Accountant	80		-Statistical Officer

ADG
D/AD
D/NRA
D/LPE
D/HRD
D/AB
D/AB
D/AH
CA
CLE
CE
CE
CE
CE
CR
CKA
CYPH.Sp.
P.Sc
DE.Sp.
VPH.Sp.
CAQC
AR.Sp.
CAQC
AB.Sp.
VR.Sp.

-Grass Cutter	-Office Employment Service	- Livestock Assistant	-Garden Laborer	-Sanitary Laborer	-Field Assistant							
serej-	s.	Liv.Ass - Live	GL -Gard	SL -Sanit								

Other Staff	
ВА	-Budget Assistant
DO	-Development Officer
DA	-Development Assistant
Le.Ass	-Legal assistant
Pro.Ass.	-Programming Assistant
Pro.Ass.Com	-Programming Assistant (Communication)
10	-Technical Officer
Drftm	-Draftman
RA	-Research Assistant
PMA	-Public Management Assistant
LIB	-Librarian
ГРО	-Livestock Development Officer
Dri	-Driver
Tra.Ope.	-Tractor Operator
4	-Laboratory Assistant
Mech	-Mechanic
ВО	-Boiler Operator
Car	-Carpenter
Elec	-Electrician
Ban.Kee.	-Bungalow Keeper
Watc	-Watcher
CatC	-Cattle Caretaker
MM	-Milk Man
GtC	-Goat Caretaker
AnC	-Animal Caretaker

Annexure II

### Key Data on the Poultry Industry (2019-2020)

Activity	2019	2020	Growth (%)					
1. Procurement of Grand Parent and Parent stock								
Grand Parent Stock (Broiler)	37,116	30,792	-17.04					
Parent Stock ('000)								
Broiler	1,448.04	1,396.70	-3.55					
Layer	94.81	101.70	7.27					
2. Production of Day - Old Chicks (Mn)	<u> </u>							
Broiler	167.99	159.78	-4.89					
Layer	7.73	10.55	36.48					
3. Production of Poultry Feed (1000 MT)	1,300.84	1299.14	-0.001					
4. Export of Poultry Products								
Day- Old Chicks	219,299	66,747	-69.56					
Chicken and Chicken Products (MT)	451.71	769.31	70.31					
Table Eggs	9,333,416	2,586,547	-72.29					
Hatching Eggs	283,680	240,480	-15.23					
5. Import of Poultry Products								
Chicken and Chicken products (MT)	229.55	157.28	-31.48					
Egg Products (MT) - Egg Powder/Egg Albumin	19.63	14.70	-25.11					
- Liquid Egg	0.00	18.00	100					

### Annexure III

### Activites Performed at Veterinary Investigation Centers - 2020

Programme	Activity	2020 Annual Target	Achievement	0/0
1. Disease Investigation	1.1 Field Investigation	491	469	96
in the field	1.2 Sample collection for testing	2,402	3,031	100
	1.3 Investigation reports	491	429	87
	1.4 Follow-up / further investigation	280	228	81
2. Laboratory service for	2.1 Post-mortem examinations		_	
disease diagnosis	- Poultry (No. of birds)	3,605	4,121	100
	- Other species	409	382	93
	2.2 Testing of samples			
	- Bacteriological (Culture)	3,853	3,683	96
	- ABST	1,862	2,277	100
	- Parasitological - Blood	4,745	5,804	100
	- Fecal sample	2,675	3,216	100
	- Skin	181	180	99
	2.3 Milk analysis (including PPRS)	12,277	12,164	99
	- CMT on request	4,811	6,911	100
	2.4 Samples dispatch for further testing	1,047	2,097	100
3. Vaccine production	3.1 CPD vaccine (No. of farms)	200	205	100
& vaccination	3.2 Wart vaccine (No. of animals)	520	627	100
	3.3 Babesiosis vaccine ( No. of animals)	2,123	1,839	87
	3.4 FMD	750	198	26
4. Supply of lab. Inputs to	4.1 CMT reagent (Litre)	413	701	100
Veterinary Offices	0 ( )			
5. Dairy farm health	5.1 New farm registration	95	92	97
improvement project	5.2 No. of total registered farms	1,748	2,073	100
Tarabas Taraba	5.3 Farm visited	1,808	1,751	97
	5.4 Mastitis screening (CMT)	13,032	14,115	100
	5.5 Milk sample testing (ABST)	1,636	1,049	64
	5.6 No. of sample tested for Helmenthiosis	6,437	6,042	94
	5.7 Teat dip solution issued (L)	3,600	3,140	87
	5.8.Issuing of udder infusion vials (free issue)	,,,,,	-,	
	Lactating cow		8,652	
	Dry cow		2,950	
6. Brucellosis control	6.1 Screening dairy herds (MRT)	2,407	2,941	100
Programme	6.2 Animal screening in suspected herds (RBPT)	1,762	2,272	100
8	6.3 No. of samples submited for CFT	511	605	100
	6.4 Vaccination of animals S19	5,138	8,019	100
7. Salmonella control	7.1 No of breeder farm to be monitered	68	74	100
programme	7.2 No of breeder farm visits	136	109	80
10	7.3 No of hacheries to be visited	48	52	100
	7.4 No of hatchey visits	144	130	90
	7.5 No of hatchey samples tested	10,800	8,850	82
8. Avian Influenza	8.1 No of serum samples	5,090	4,717	93
surveillance programme	8.2 No of dropping samples at hotspots	7,425	7,285	98
r 0	8.3 No of cloacal swabs (backyard)	7,525	7,973	100
	8.4 No. of sample (live bird market)	1,560	1,183	76
	8.5 No. of samples (Poultry Processing Estalishment)	3,900	3,435	88
	8.6 Duck serum sample	915	968	100
	8.7 No of cloacal swabs ( Duck)	915	987	100
9. No. of animals tested for TB	9.1 No. of PPD Tests	1,873	908	48

### Research publications in 2020

Annexure IV

### PUBLICATIONS IN PEER-REVIEWIED JOURNALS

Seresinhe, T.R., <u>Weerasinghe, P.B.</u>, Sanjeewa, J., Harindrika, H., Manawadu, A., Mahipala, K., Ranaweera, K.K.T.N., Kumara Mahipala, M.B.P., and Iben, C. 2020. Evaluation of silages of hybrids of Napier grass and sorghum in the low country wet zone of Sri Lanka. Journal of Land Management, Food and Environment. 71 (01): 1-18.

Ranaweera, K.K.T.N., Mahipala, M.B.P., and <u>Weerasinghe, W.M.P.B.</u> 2020. Evaluation of energy balance in Tropical and Temperate crossbred dairy cows at post-partum transition stage: a case study. Tropical Agricultural Research 31(2): 12-20.

### **PUBLICATIONS IN CONFERENCE PROCEEDINGS**

De Silva, S.M.H.H., Abeyrathne, E.D.N.S., <u>Weerasinghe, W.M.P.B.</u>, Maheepala, M.B.P.K. and Ranaweera, K.K.T.N. 2020. Rumen protected fat preparation using by-products generated in coconut processing industry. Proceedings of the International Research Conference of Uva Wellassa University, July 29-30, 2020, p 15.

**Weerathunga, M.W.D.C.**, Wimalarathne, W.C.P., <u>Weerasinghe, W.MP.B.</u>, <u>Udagama, U.M.G.D.N.</u>, Perera, N.O. and Maheepala, M.B.P.K. 2020. Effect of stage of maturity on agronomic characters and dry matter content of Hybrid Napier varieties, Sampoorna (DHN-6) and CO-5. 72<sup>nd</sup> Annual scientific sessions of the Sri Lanka Veterinary Association, p 34.

Wimalarathne, W.C.P., <u>Weerasinghe, W.MP.B.</u>, Weerathunga, M.W.D.C., Udagama, U.M.G.D.N. and Somasiri, S.C. (2020). Agronomy and digestibility characteristics of new Napier Hybrids harvested at different harvesting intervals. Proceedings of the 12<sup>th</sup> Annual Research Symposium, Rajarata University of Sri Lanka, p 71.

Wasana, M.L.D., de Silva, A., Gunawardana, N., Illeperuma, D.C.K., <u>Weerasinghe, W.M.P.B.</u>, Weerathunga, M.W.D.C., Ekanayake S. and Madhujith, T. (2020). Study on trans-fat content of selected foods commercially available in Colombo district of Sri Lanka. Proceedings of the 32<sup>nd</sup> Annual Congress of Post Graduate Institute of Agriculture, University of Peradeniya, p 04.

Weerathunga, M.W.D.C., Bodihewa, A.P., Udagama, U.M.G.D.N and Weerasinghe, W.MP.B, (2020). Fermentation quality, chemical composition and *in-vitro* digestibility of silages prepared by using different ratios of pumpkin and rice straw. 72<sup>nd</sup> Annual scientific sessions of the Sri Lanka Veterinary Association, p 41.

Jothirathna, M.W.H.H., <u>Weerasinghe, W.M.P.B.</u>, Seresinhe, T., Maheepala, M.B.P.K., Manawadu, A., Jashanthy, A. and **Udagama**, **U.W.G.D**. (2020). *In-vitro* fermentation, digestibility and methane production of three improved forage varieties harvested at different cutting intervals during the Yala season in Sri Lanka. Proceedings of the International Symposium on Agriculture and Environment, University of Ruhuna, Sri Lanka, p 193.

Jothirathna, M.W.H.H., Manawadu, A., Seresinhe, T., <u>Weerasinghe, W.M.P.B.</u> and Maheepala, M.B.P.K. (2020). Yield and nutritive value of three improved fodder varieties under different harvesting intervals during the Yala Season in Sri Lanka. Proceedings of the International Symposium on Agriculture and Environment, University of Ruhuna, Sri Lanka, p 192.

Waduge, P.R and <u>Weerasinghe, W.M.P.B.</u> (2020). Effects of supplementation of a combination of organic Magnesium, Zinc, Copper and Selenium Glycinates on production performance of high producing dairy cows in early lactation. Proceedings of the International Symposium on Agriculture and Environment, University of Ruhuna, Sri Lanka, p 188.

Lasadi L.S., **Priyantha M.A.R.**, Kumari M.A.A.P. (2020). Determination of quinolone resistance in *E. coli* isolated from selected commercial broiler, *In 12th Annual Research Symposium Proceedings of Faculty of Agriculture*, Rajarata University of Sri Lanka, p 64.

Rathnassoriya D.D.T.M., **Priyantha M.A.R.**, **Alwis P.S.D.**, **Dissanayake N.**, **Fernanado P.S.**, Somasiri S.C. (2020). Identification of the movable colistin-resistant gene (*mcr*) in *E. coli* isolated from commercial broilers, *In 12th Annual Research Symposium Proceedings of Faculty of Agriculture*, Rajarata University of Sri Lanka, p 67.

Athukorala, A.D.T.N., Weerasinghe, W.V.V.R., and **Pathirana**, **A.P.D.G**. (2020). Milk ionized calcium in relation to variation of ethanol stability in different agro-ecological zones in Kandy district during dry season. *In 12th Annual Research Symposium Proceedings of Faculty of Agriculture*, Rajarata University of Sri Lanka, p 62.

Hasangika, P.A.S., **Palliyaguru, M.W.C.D.**, **Gunawardana, G.A.**, **Jayasekara, P.P.**, and Kumari, M.A.A.P., (2020). Designing of specific primers for identification of endangered species: Thick-tailed pangolin (*Manis crassicaudata*) and Purple- faced langur (*Trachypithecus vetulus*). Proceedings of 12<sup>th</sup> annual research symposium of Faculty of Agriculture, Rajarata University, Sri Lanka. 30<sup>th</sup> July, p 63.

Palliyeguru, M.W.C.D., Kaushalya, K.T.G.M., Peranantham, S., Amunugama, A.B., Jayasingha, C.P., Malkanthi, R.M.S., Sujani, P.H., Nishopa, B., Kumara, U.G.V.S.S., Daluwatta, S.S.K., Jayasekara, P.P. and Gunawardana, G.A. (2020). Development of a novel dual- purpose poultry line that thrives well in extensive backyard poultry rearing system of Sri Lanka. Proceedings of 72<sup>nd</sup> annual scientific sessions of Sri Lanka Veterinary Association, p 37.

Premachandra, H.G.B.S., Vidanarachchi, J.K., **Mangalika**, **U.L.P.**, Senarathna, P, Kumara Maheepala, M.B.P. and Kodithuwakku, S.P. (2020) Dietary protein intake and days in milk influence on the Milk Urea Nitrogen, Non esterified Fatty acids and ß Hydroxybutyric acid content in the different categories of Milking Cows in a Hill Country Farm, Sri Lanka. In: Proceedings of Faculty of Agriculture, undergraduate research symposium, University of Peradeniya, p 126.

### **PUBLICATIONS IN WEBSITES**

**Kamalika Ubeyratne**, Lertrak Srikitjakarn, Dirk Pfeiffer, Fiona Kong, Narapity Sunil-Chandra, Warangkhana Chaisowwong, Phonpat Hemwan (2020). *A Knowledge, Attitudes, and Practices survey on canine rabies prevention and control in four rural areas of Sri Lanka. Transboundary and Emerging Diseases. <a href="https://doi.org/10.1111/tbed.13940">https://doi.org/10.1111/tbed.13940</a>* 

Annexure V

### Names of Officers Attended Overseas Training/ Meetings/ Workshops/ Visits - 2020

Name of the officer	Designation	Course/ Program	Country and
			duration
Dr. M.D.N. Jayaweera	Registrar/Veterinary Drug	Regional training seminar for OIE national focal points for veterinary products (Asia and the Pacific)	Malaysia 14 <sup>th</sup> to 16 <sup>th</sup> Jan. 2020
Dr. S. Chandrasekara	VIO- Nuwara Eliya	Better Training for Safer Food (BTSF) regional training workshop on anti-microbial resistance	New Delhi -India 18 <sup>th</sup> to 21 <sup>st</sup> Feb 2020
Dr. P.S. Fernando	Head/ Bacteriology	UKRI GCRF one Health Poultry Hub project meeting	India 08 <sup>th</sup> to 15 <sup>th</sup> Feb 2020

### Annexure VI

### **Support for Post Graduate Training-2020**

Name of the officer		Course/ Programme
01	Dr. (Mrs) G.G. Thilakarathna	Animal Reproduction
02	Dr. A.M.D.N. Abeykoon	Animal Reproduction
03	Mr. E.V.J. Edirisinghe	Animal Reproduction
04	Dr.(Mrs) U.D. Ramanayake	PhD. in Animal Science
05	Dr. (Mrs) S.A.U.M. Sinhalagoda	MSc. in Animal Science

#### Annexure VII

### **Details of Examinations Conducted in 2020**

No	Name of the exam	Number of	Number
		applicant	of exams
01	English oral exams for Livestock Development	13	02
	Officers/Research Assistants/Development		
	Officers/Management Service Officers/Laboratory		
	Assistants.		
02	First (1st) Efficiency Bar Examination of AP&H Service	94	01
03	Second (2nd) Efficiency Bar Examination of AP&H Service	116	01
04	First (1st) Efficiency Bar Examination of Engineering	01	01
	Service		
05	Second (2 <sup>nd</sup> ) Efficiency Bar Examination of Field Assistant	25	01
06	Model paper for 2019/2021 Animal Husbandry Diploma	53	01
	batch in SLSAH- Karandagolla		
07	First (1st) semester examination for 2019/2021 Animal	53	01
	Husbandry Diploma batch in SLSAH- Karandagolla		
08	Research Assistant Promotion Examination	10	01
09	Third Efficiency Bar Examination of AP&H Service	30	01

Annexure VIII

Provincial Activities Progress of Services / Activities of Provincial DAPH - 2020

Dispensary Cases	WP	CP	SP	N	EP	NWP	NCP	UP	SP	Total
Cattle/ Buffalo	3,907	2,800	5,171	30,383	12,297	20,928	8,394	2,843	2,697	89,420
Goat/ Sheep	3,418	1,618	1,577	41,466	13,449	6,930	2,961	575	1,627	73,621
	1,086	569	304	450	238	2,306	326	177	152	5,308
Poultry	39,733	37,103	42,021	486,558	139,760	714,402	32,825	34,180	31,456	1,558,038
Pet Aminal	29,779	17,014	28,379	41,371	2,946	15,917	5,640	2,991	7,669	151,706
	785	378	1,071	3,147	1,041	395	162	41	276	7,296
	78,708	59,182	78,523	603,375	169,731	760,878	50,308	40,807	43,877	1,885,389
Field Cases	WP	CP	SP	NP	EP	NWP	NCP	UP	SP	Total
Cattle/ Buffalo	9,027	12,046	11,707	27,749	13,968	26,849	12,702	7,984	5,636	127,668
Goat/ Sheep	5,785	5,977	3,935	13,370	10,940	6,172	6,134	614	2,354	55,281
	2,932	1,405	1,069	1,060	425	2,584	880	293	399	11,047
Poultry	8,860	8,448	14,547	35,609	72,679	5,307	28,548	48,908	24,873	247,779
Pet Aminal	131	263	441	62	185	28	22	6	99	1,206
	12	39	622	146	251	66	1	18	10	1,198
	26.747	28.178	32.321	966.77	98.448	41,039	48.287	57.826	33,337	444,179

Annexure IX

### Milk Collection by Main Milk Collecting Organizations 2019 - 2020

Duovinas	District	Milk Collection	Lts.
Province	District	2019	2020
Western	Colombo	1,382,609	1,339,679
	Gampaha	4,767,725	3,419,206
	Kalutara	1,461,951	1,246,130
	Total	7,612,285	6,005,015
Central	Kandy	11,669,940	10,698,180
	Matale	10,424,347	11,910,891
	Nuwara-Eliya	51,903,237	57,293,413
	Total	73,997,524	79,902,484
Southern	Galle	871,251	828,950
	Hambantota	12,388,580	10,587,726
	Matara	734,844	832,004
	Total	13,994,675	12,248,680
North Central	Anuradhapura	34,550,668	40,648,182
	Polonnaruwa	12,125,016	9,162,711
	Total	46,675,684	49,810,893
North Western	Kurunegala	40,533,867	35,352,326
	Puttlam	8,804,138	7,373,782
	Total	49,338,005	42,726,108
Northern	Jaffna	7,418,509	5,276,252
	Kilinochchi	2,385,177	1,978,661
	Mannar	891,309	1,103,662
	Mullativu	2,468,986	2,388,470
	Vauniya	4,195,795	3,447,621
	Total	17,359,776	14,194,666
Eastern	Ampara	6,988,357	7,273,432
	Batticaloa	3,590,780	4,482,183
	Trincomalee	1,722,903	2,573,234
	Total	12,302,040	14,328,849
Uva	Badulla	15,431,932	11,378,305
	Moneragala	4,658,227	5,390,225
	Total	20,090,159	16,768,530
Sabaragamuwa	Kegalle	326,431	249,138
	Rathnapura	1,707,960	1,704,021
	Total	2,034,391	1,953,159
			-
<b>Island Total</b>		243,404,539	237,938,384

<sup>\*</sup> Collection details recived from ;

\* Milco (Pvt)LTD

\* Cargills Quality Dairies

\* Nestle Lanka Ltd.

\* Fontera Brands Lanka Pvt. Ltd

\* Kotmale Dairi Product (Pvt) Ltd

\* Lanka Dairies (Pvt) Ltd

\* Ambewela Products

\* Richlife Dairies Ltd.

\* CIC Dairies Pvt. Ltd

\* Chello milk products.

\* Pelwatte Dairy Industries Ltd.

\* Pattipola Livestock

\* Polonnaruwa Milk Co-op Society

\* NLDB

### Annexure X

### **Quarantine Holdings - 2020**

No	Species/Type of Animals	Strain/ Breed	No of	Country of	1st Date of	Period of
	or Animais		Animals	Origin	Quarantine	Quarantine
1	Canine	Mixed	1	UAE	3/1/2020	1day
2	Feline	Arabian Mau	1	UAE	3/1/2020	1day
3	Feline	Orange Tabby, Chinchilla	2	Turkey	5/1/2020	1day
4	Pigeon	African Grey parrot	1	South Africa	4/1/2020	30 days
5	Canine	Mixed	1	Qatar	6/1/2020	1day
6	Canine	Cocker Spaniel	1	Nepal	6/1/2020	1day
7	Canine	Dachshund	2	India	7/1/2020	1day
8	Canine	Beagle	2	India	7/1/2020	1day
9	Canine	Mixed	1	Oman	8/1/2020	1day
10	Feline	Persian, DSH	2	Kuwait	9/1/2020	1day
11	Canine	Maltese	1	Doha Qatar	13/01/2020	1day
12	Feline	DSH	1	Qatar	12/1/2020	1day
13	Feline	DLH	1	UAE	10/1/2020	1day
14	Canine	French Bulldog	1	China	14/01/2020	1day
15	Canine	Mixed	1	Kuwait	17/01/2020	1day
16	Canine	Mixed	1	Germany	17/01/2020	1day
17	Feline	Persian	1	Russia	17/01/2020	1day
18	Parrot	Blue fronted parrot	2	South Africa	17/01/2020	30 days
19	Canine	Rottweiler, German Shepherd,	5	Hungary	19/01/2020	1day
		Akita, Labrador				
20	Canine	Mix Labrador	1	Kuwait	19/1/2020	1day
21	Feline	Turkish Angora	3	Oman	20/1/2020	1day
22	Canine	Salukt	1	Qatar	20/1/2020	1day
23	Canine	Shihtzu	1	Canada	20/1/2020	1day
24	Feline	DMH	2	UAE	22/1/2020	1day
25	Canine	Maltese	1	Italy	22/1/2020	1day
26	Canine	Beagle	1	UAE	24/1/2020	1day
27	Canine	Retriever Labrador Mixed	1	USA	24/1/2020	1day
28	Canine	Pug	1	Bangladesh	24/1/2020	1day
29	Feline	3DSH, Arabian Mau	3	UAE	27/1/2020	1day
30	Canine	Chihuahua	1	UAE	28/1/2020	1day
31	Feline	Mixed	1	Russia	28/1/2020	1day
32	Feline	DSH	2	Uganda	28/01/2020	1day
33	Feline	Persian	1	Kuwait	30/1/2020	1day
34	Feline	DSH	1	Qatar	30/1/2020	1day
35	Feline	DSH	1	Oman	31/1/2020	1day
36	Feline	DLH	1	UAE	31/1/2020	1day

No	Spp/Type of	Strain/Breed	No of	Country of	1st Date of	Period of
	Animals		Animals	Origin	Quarantine	Quarantine
37	Canine	Jack Russell Terrier	1	Russia	4/2/2020	1day
38	Feline	DSH, Bengal	1	Thailand	6/2/2020	1day
39	Canine	Toy Poodle	1	Malaysia	6/2/2020	1day
40	Canine	Labrador Retriever	1	Russia	9/2/2020	1day
41	Canine	Dachshund	1	Ukraine	10/2/2020	1day
42	Canine	Pit Bull	1	USA	11/2/2020	1day
43	Canine	Dogo Argentino	1	Italy	11/2/2020	1day
44	Canine	Maltese	1	Italy	12/2/2020	1 day
45	Feline	DLH	3	Qatar	13/02/2020	1 day
46	Pigeon	Columba livia	30	Doha Qatar	16/2/2020	30 days
47	Canine	pomichi	1	Qatar	17/2/2020	1day
48	Feline	Mixed	2	Maldives	17/2/2020	1 day
49	Canine	Chihuahua	1	Thailand	18/2/2020	1day
50	Canine	Beagle	1	Hungary	18/2/2020	1 day
51	Feline	DLH,DSH	3	UAE	19/2/2020	1day
52	Feline	Persian	2	Saudi Arabia	20/2/2020	1 day
53	Canine	Maltese Mixed	1	Qatar	20/2/2020	1day
54	Canine	Labrador Retriever, German	20	Netherland	20/2/2020	1 day
		Shepherd, Belgium Malinois,				
		English Springer Spaniel				
55	Feline	DSH	1	UK	22/2/2020	1day
56	Canine	Pug	1	Kuwait	24/2/2020	1 day
57	Canine	Mixed	1	Malaysia	25/2/2020	1 day
58	Canine	Rottweiler, German Shepherd,	5	Hungary	28/2/2020	1 day
		Dogo Argentino				
59	Canine	American Bully, German	2	Serbia	29/02/2020	1 day
		Shepherd		0.1:	20 /2 /2020	4.1
60	Canine	Rottweiler	2	Serbia	29/2/2020	1 day
61	Canine	German Shepherd	1	Serbia	29/2/2020	1 day
62	Canine	Mixed	1	Bahrain	2/3/2020	1 day
63	Canine	Mongrel	1	Japan	3/3/2020	1 day
64	Feline	Scottish Fold	1	UAE	4/3/2020	1 day
65	Canine	German Shepherd	2	Thailand	5/3/2020	1 day
66	Canine	Golden Retriever Mixed	3	UAE	5/3/2020	1 day
67	Canine	Pinscher	1	France	6/3/2020	1 day
68	Feline	DLH	1	Qatar	10/3/2020	1 day
69	Canine	Labrador	1	India	10/3/2020	1 day
70	Feline	DSH P:	1	UK	18/3/2020	1 day
71	Birds	Fancy Pigeon	190	Belgium	3/7/2020	30 days
72	Pigeon	Fancy Pigeon	76	Belgium	1/8/2020	30 days
73	Canine		1	Dubai	3/9/2020	1 day
74	Feline	Turkish Angora	1	UAE	10/9/202	1 day
75	Feline		2	UAE	12/9/2020	1 day

No	Spp/Type of	Strain/Breed	No of	Country of	1St Date of	Period of
	Animals		Animals	Origin	Quarantine	Quarantine
76	Canine	Havanese	1	Hungary	17/9/2020	1 day
77	Feline	DMH,DSH	2	UAE	17/9/2020	1 day
78	Feline, Canine	DLH, Retriever Mixed	4	Kuwait	19/9/2020	1 day
79	Canine		1	Kuwait	14/9/2020	1 day
80	Canine	Maltese	1	Dubai	20/9/2020	1 day
81	Canine	Beagle Mix	1	Nepal	25/9/2020	1 day
82	Feline	Arabian Mau	2	UAE	27/9/2020	1 day
83	Feline	DSH	2	UAE	28/9/2020	1 day
84	Canine	Spitz	1	Kuwait	29/9/2020	1 day
85	Canine	Rhodesian Ridgeback	1	Lusaka Zambia	1/10/2020	1 day
86	Canine	Siberian Husky Husky	2	USA	4/10/2020	1 day
87	Green parrot		3	UAE	4/10/2020	30 days
88	Feline	DLH	1	UAE	8/10/2020	1 day
89	Feline		1	Oman	8/10/2020	1 day
90	Canine	German Shepherd	1	UAE	8/10/2020	1 day
91	Canine	Beagle	1	USA	10/10/2020	1 day
92	Canine	Yorkshire Terrier	1	UAE	11/10/2020	1 day
93	Feline	DSH, Turkish Angora	3	UAE	15/10/2020	1 day
94	Canine	Shih-Tzu	1	UAE	23/10/2020	1 day
95	Feline		1	Singapore	23/10/2020	1 day
96	Canine	Toy Poodle	2	UAE	29/10/2020	1 day
97	Canine		1	India	7/11/2020	1 day
98	Canine	Golden Retriever	1	UAE	5/11/2020	1 day
99	Canine, Feline		2	USA	8/11/2020	1 day
100	Canine	Mixed	1	Kenya	9/11/2020	1 day
101	Canine	Siberian Husky	1	Dubai	12/2/2020	1 day
102	Canine	German Shepherd, Cane Corso	5	Serbia	15/11/2020	1 day
103	Canine	Mixed	1	Netherland	20/11/2020	1 day
104	Canine	Husky Mixed	1	Jordan	17/11/2020	1 day
105	Canine	Poodle Shih Tzu	3	Bahrain	20/11/2020	1 day
106	Canine	Toy Poodle	1	Malaysia	27/11/2020	1 day
107	Canine	American Bully, Staffordshire	1	Australia	13/12/2020	1 day
108	Canine	Airedale Terrier	1	Australia	13/12/2020	1 day
109	Canine	Pembroke Corgi	1	China	17/12/2020	1 day
110	Canine	Cane Corso	2	Russia	17/12/2020	1 day
111	Feline	Arabian Mau, Scottish Longhair	2	UAE	18/12/2020	1 day
112	Canine	German Shepherd	3	Serbia	17/12/2020	1 day
113	Canine	Pug	2	Serbia	17/12/2020	1 day
114	Feline	DSH	1	UAE	25/12/2020	1 day
115	Feline	DMH	1	USA	24/12/2020	1 day
116	Canine		1	Germany	31/12/2020	1 day

Annexure XI

No. of consignments 2020 13 26 30 11 11 06 02 02 01 19 08 23 15 252 150 inspected 210 329 2019 07 24 27 16 37 43 35 11 11 13 03 02 52,266 111,190 108.66 555.77 85.08 79.25 20.40 0.67 1.35 186,739 157.024 34,463.776 (nos) 113,894 2020 Quantity arrived (No./MT) 59,439 112,908 341,287 229.66 170.63 672.80 209.93 15.09 27,914.180 12,352,578 25 cartons 162.01 37.21 2019No. of consignments 2020 13 26 30 11 11 06 02 02 01 01 252 150 08 23 15 arrived 2019 210 116 337 43 343 111 113 03 02 10 329 07 24 27 Ornamental fish (marine + fresh water) Type of animal/Animal-product -Grand parents - Broiler parents - Layer parents Goat meat pro. Meat and bone meal - Casings - Duck - Turkey - Mutton - Poultry - Lamb - Pork - Beef Meat DOC <del>ا</del>  $^{\prime i}$ ω. 4

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2020

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2020

Typ	Type of Animal/Animal-product	No. of	jo ,	Quantity arrived	arrived	ž	No. of
		consignments	ıments	(No./MT)	MT)	consig	consignments
		arrived	ved			insp	inspected
		2019	2020	5019	2020	2019	2020
.c	Cattle	1	1	1	1	1	
	Zoo animals	∞	1	45 (4-Blue Bull/1-	1	8	1
				Jaguar/9-Kangaroo/4- Blach Buck/21- Snakes/2-Cheetah/4-			
				Rabbits/			
	Horses	02	1	10	ŀ	02	1
	Pet birds	22	60	1,132	351	22	60
	Live shrimps	60	13	1,296	3,055	60	13
	Live corals	01	1	200	ł	01	1
	Goat	03	1	100	ŀ	03	ŀ
	Crabs	-	01	-	5,649		01
6.	Dogs/Cats	321	119	463	200	321	119
7.	Fish meal	139	136	6,017.61	4384.24	139	136
<u>«</u>	Prawn feed	244	285	8,980.3	11,058.51	244	285
9.	Tallow	12	1	476.56	1	12	1
10.	Gelatin	56	81	625.98	930.931	56	81
11.	Egg powder	05	05	19.63	10.60	05	05
12.	Egg albumin	1	02	1	4.1	1	02
	whole liquid egg	1	01	I	18	1	01

Details of Consignments (Imports) subjected to Quarantine Surveillance in 2020

Tyl	Type of Animal /Animal- product	No. of con	No. of consignments	Quantity arrived	arrived	No	No. of
		arri	arrived	(No./MT)	MT)	consig	consignments
						insp	inspected
		2019	2020	2019	2020	2019	2020
13.	Feather/Skin/Bristle - Other	59	54	Bristle-40.94	Bristle-49.25	59	54
	PRODUCTS			Feather-4.04	Feather-1.15		
				Skin-0.36	Skins-0.11		
14.	Frozen fish	863	542	25,639.89	17,482.63	863	542
15.	Fish food	85	137	1,402.95	2,724.315	85	137
16.	Leather	212	127	746.59	212.548	212	127
17.	Feed ingredients (Soya bean						
	meal, Corn meal, Wheat,						
	Maize, Rape seed, Guar meal,	1,132	1,057	311,556.97	954,570.99	1,132	1,057
	Cotton seed meal, Bakery						
	meal, Millet)						
18.	Chicken products (chicken						
	powder, chicken essence,	12	07	24.35	22.82	12	07
	chicken extract, chicken soup)						
19.	Pet food	117	132	3,897.51	1,718.951	117	132

Details of Consignments (Imports) subjected to Quarantine Surveillance in 2020

Tyl	Type of Animal /Animal- product	,		Quantity arrived	arrived	No	No. of
		No. or con arri	No. or consignments arrived	(No./MT)	MT)	consign	consignments Inspected
		2019	2020	2019	2020	2019	2020
20.	Vaccines	135	149	9,597,662,506	7,897,439,325	135	149
				doses/ 9.7 MT/ 688	doses/54,063 L/		
				ml/3,046	213 Mt / 15,410		
				pkts/77,756 vials/	tablets/500 packs		
				6,500 tablets/ 15			
				cartons			
21.	Veterinary drugs	161	157	394.4	340.51 Mt/ 12,144	161	157
					bottles/ 10,100		
					vials/ 99,482 doses		
22.	Semen	03	70	8,100 doses	2,000 doses/ 2292	03	0.4
		S	<b>.</b>		nos/8,000 units	S	<b>#</b>
23.	Yoghurt culture	07	03	0.17	0.1	07	03
24.	Test kit	12	20	197	15 boxes/33 kg/	12	20
					203 nos		
25.	Veterinary products	22	<u>ل</u> ت	2.96 MT/ 4,736,890	2.59 Mt/ 48 L/ 610	22	7,5
		7	Q.	doses/3,445 pkts	pcs	1	10

Annexure XII

## **Export of Animals and Animal Products - 2020**

	Category	Number/ Quantity	Number/ Quantity
	Item	(MT) in 2019	(MT) in 2020
01	Ornamental fish	32,567,855 (tails)	31,267,684
			(tails)
02	Dogs (Travelled with owners)	211- nos	76- nos
03	Cats (Travelled with owners)	90-nos	27- nos
04	Poultry -DOC	210,868-nos	83,607- nos
05	Pet birds	1,715 no. (1,615- Pet birds/50 Ducks/ 50 Turkeys)	9,570- nos
06	Zoo animals	147 nos (15- Guinea pigs/20- Black swans/110- Rabbits/ 2 Jungle cats)	
07	Animal products-meat and meat products	4,635.11 Mt	2010.453 Mt
08	Table eggs	9,333,416- nos	2,586,547- nos
09	Hatching eggs	363,600 -nos	240480- nos
10	Animal byproducts- Artistic brushes/dog chews/elephant dung papers/hat/hat parts/chank	1,656,032 pieces	1,082,408 pieces
	Drums	9 pcs	30 pcs
	Bone grits/cattle bone and crushed/dry crab shells/enzymes/cattle feed/gelatin/dried milk sludge/seasoning cubes/Nakla	88.32 Mt	85.734 Mt
11	Leather	5.54 Mt	1.72 Mt

#### Annexure XIII

# Raw Material Usage - 2020

	Raw Material	Locally Purchased Quantity (MT)	Imported Quantity (MT)
A	Cereals		
	Maize	198,393.40	21,335.80
	Broken Rice	51,814.89	0
	Wheat	13,629.69	119,766.10
	Others	8,068.67	3,910.00
	<b>Total Cereals</b>	271,906.66	145,011.90
В	Cereal by Products		
	Rice Polish/ Rice Bran	83,167.15	0
	Wheat Bran	84,212.20	0
	Wheat Feed Flour	23,758.67	0
	Soya	376.28	0
	DDGS	2,104.379	18,603.60
	CGM	0	2,592.00
	Other	8,455.05	16,333.69
	<b>Total Cereal by Products</b>	202,073.729	37,529.29
С	Plant protein Supplement		
	Coconut Meal	6,710.43	0
	Soya Bean Meal	33,526.300	135,031.59
	Other	1,703.9	11,260.54
	<b>Total Plant protein Supplement</b>	41,940.63	146,292.13
D	Animal by Products		
	Fish Meal	2,430.28	844.00
	Meat & Bone Meal	10,640.43	24,456.80
	Poultry offal Meal	4,049.50	0
	Poultry Fat	454.00	0
	Other	244.25	14.00
	Total Animal by Products	17,818.46	25,314.8
E	Feed Grade Oil		
	Vegetable Oil	783.53	9,367.75
	Palm Oil	3,416.06	5,543.86
	Total Feed Grade Oil	4,199.59	14,911.61
F	Vitamin/ Mineral Supplements		
	Di Calcium Phosphate	15,691.34	2,890.00
	Calcium Carbonate	4,963.20	0
	Limestone Powder	35,242.14	0
	Salt	1,480.09	0

	Shell grit	5,903.54	0
	Others	2,113.09	50.00
	Nicotanamide/Niacin	0	2.94
	Folic Acid	0	0.06
	Vitamins & Minerals	3,090.03	3,315.41
	Total Vitamin & Mineral	68,483.43	6,258.41
G	Urea	183.00	0
	Urea	183.00	0
Н	Amino Acids		
	DL-Methionine	759.24	4,812.65
	L-Lysine	473.78	2,577.69
	L-Threonine	186.92	953.63
	Total Amino Acids	1,419.94	8,343.97
I	Additives		
	Probiotic	139.80	206.99
	Prebiotic	18,781.66	65.10
	Acidifiers	53.48	88.99
	Toxin Binders	354.92	324.96
	Mold Inhibitors	14.00	201.76
	Growth Promoters	8.56	219.06
	Anticoccidial agents	84.27	117.04
	Exogenous Enzymes	201.45	841.47
	Antioxidant	11.62	29.20
	Emulsifier	55.63	26.83
	Choline Chloride	278.57	221.00
	Others	1,464.63	380.12
	Total Additives	21,448.59	2,722.52
J	Others (Specify)		
	Sodium bi carbonate	324.90	91
	Other	9,656.15	5,537.32
	Total Others	9,981.05	5,628.32

Annexure XIV Present Cadre Positions of the Department and Staff Strength (2020.12.31)

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

## Present Cadre Positions of the Department and Staff Strength (2020.12.31)

S.	Designation	Approved	Current			Vacancies
No.		Cadre	Project I	Project II	Project III	
33	Veterinary Surgeon	61	22	30	18	-9
34	Civil Engineer	1	0	0	0	1
35	Legal Officer	1	0	0	0	1
36	Laboratory Scientist	1	0	0	0	1
37	Administrative Officer	3	2	1	0	0
38	Statistical Officer	1	1	0	0	0
39	Translator	2	2	0	0	0
40	Technical Officer	6	3	0	0	3
41	Draftsman	1	1	0	0	0
42	Information Communication and Technology Officer	1	1	1	0	-1
43	Livestock Promotion Officer	8	0	2	4	2
44	Livestock Development Officer- Technical service	62	16	9	24	13
45	Livestock Development Officer	3	1	0	2	0
46	Librarian	3	0	0	1	2
47	Development Officer	116	40	35	27	14
48	Development Assistant	2	0	1	1	0
49	Legal Assistant	2	1	0	0	1
50	Programme Assistant	2	1	0	1	0
51	Programme Assistant (Communication)	1	0	0	1	0
52	Public Management Assistant	72	38	14	11	9
53	Research Assistant (Special)	7	0	2	0	5
54	Research Assistant	70	3	60	5	2
55	Driver	76	16	33	17	10
56	Tractor Operator	3	0	1	0	2
57	Laboratory Assistant	47	1	22	2	22
58	Mechanic	2	1	1	0	0
59	Boiler man	1	0	0	0	1
60	Carpenter	3	0	0	0	3
61	Electrician	1	0	1	0	0

### Present Cadre Positions of the Department and Staff Strength (2020.12.31)

S.	Designation	Approved	Current			Vacancies
No.		Cadre	Project I	Project II	Project III	
62	Bungalow Keeper	1	0	0	1	0
63	Watcher	3	1	0	2	0
64	Cattle Caretaker	5	0	0	0	5
65	Milkman	4	0	0	0	4
66	Goat Caretaker	4	0	0	0	4
67	Animal Caretaker	12	0	0	0	12
68	Grass Cutter	15	0	0	0	15
69	Office Employee Service	32	14	5	10	3
70	Livestock Assistant	23	2	6	11	4
71	Garden Labourer	1	0	0	0	1
72	Sanitary Labourer	1	0	1	0	0
73	Field Assistant	161	11	54	79	17
	Total	952	198	319	225	210

Source: Administration Division

Annexure XV

# Financial Allocations and the Expenditure Summary - 2020

	Allocation (Rs. Mn.)	Expenditure (Rs. Mn.)	Balance at 31.12.2020 (Rs. Mn.)	Expenditure as a % of Allocation
Project 1				
Capital Expenditure	57,500,000	51,449,319	6,050,681	89.48%
Recurrent expenditure				
Personal Emoluments	531,200,000	509,619,694	21,580,306	95.94%
Other	116,100,000	106,550,973	9,549,027	91.78%
Total	647,300,000	616,170,667	31,129,333	95.19%
Project 11				
Capital Expenditure	322,000,000	244,384,753	77,615,247	75.89%
Total	322,000,000	244,384,753	77,615,247	75.89%
Project 111				
Capital Expenditure	226,200,000	185,523,766	40,676,234	82.01%
Total	226,200,000	185,523,766	40,676,234	82.01%
Total Capital Expenditure	605,700,000	481,357,838	124,342,162	79.47%
Total Recurrent Expenditure	647,300,000	616,170,667	31,129,333	95.19%
Total Capital & Recurrent Expenditure	1,253,000,000	1,097,528,505	155,471,495	87.59%

#### **Editorial Team**

**Editor:** 

Dr. (Mrs.) A.S. Lenagala - Veterinary Surgeon, LPE Division

Compilation:

Mrs. H.W.S. Poornima- Livestock Development Officer, LPE Division

**Livestock Planning and Economics Division** 

**Department of Animal Production and Health** 

Peradeniya

Sri Lanka

Tel:+94-81-2388450

Fax: +94-81-2388186

Email: daphleconomics@gmail.com

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