Annual Report

2019







Department of Animal Production and Health

ANNUAL REPORT
2019

Department of Animal Production and Health

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ANNUAL REPORT – 2019

CONTENT

PREFACE

Demand for foods of animal origin is continued to grow with a similar trend as previous years in Sri Lanka in par with the global context. Being the main technical service providing organization in the Ministry of Agriculture, Livestock Development, Fisheries & Aquatic Resources and Irrigation, the Department of Animal Production and Health (DAPH) is responsible for ensuring availability of quality foods of animal origin according to the demand of the country. Therefore DAPH is carrying out provision of technical guidance and statutory functions related to livestock sector in the country. Accordingly, upgrading and maintaining a healthy animal population, providing required inputs, quality assurance of animal products, animal feed and veterinary pharmaceuticals 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 Livestock Master Plan particularly in the dairy sub sector while supporting poultry, goat and swine sub sectors. Food safety concerns on our involvements greater than ever. We have been partnering with Ministry of Health and other stakeholders for combatting antimicrobial resistance. Contribution for Animal welfare legislation has been enormous in the year. We are fully geared to take up the challenges of rabies eradication from Sri Lanka which is entrusted to us in this year.

Dairy sector showed around six percent annual growth in recent past. Introduction of modernized intensive dairy farms is new intervention to the sector. However the local milk production remains at 40% of total milk consumed in the country. The poultry sector in the country is in growing trend as last year and is demand-sufficient in chicken meat and eggs at current purchasing power levels. However, chicken meat and eggs are yet to be available at competitive prices for further expansion of this industry and to compete in the global market. The growth in Swine and Goat sectors are more or less static and needs more attention.

This 2018 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 2018. Most of 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 2018. 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. K.D. Ariyapala
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, Irrigation, Mahaweli and Rural Economic Development.

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. 25 VICs have been established at district level by end of 2018.

Objectives of the DAPH

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

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

Animal Health Division

Main Responsibility: Surveillance, prevention and control of 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, Getambe.
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.

Members of the Directorate

Members of the Directorate in 2019 were as follows:

Dr. K.D. Ariyapala/ Director General, Dr. (Mrs.) R. Hettiarachchi/ Additional Director General - Veterinary Research, Additional Director General– Animal Health (Vacant), Dr. (Mrs.) T.C. Ratnayake/ 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, Mrs. D.M.B.M. Dissanayake/ Director – Human Resource Development, Dr. (Mrs.) V.R.N. Munasinghe/ Director – Veterinary Regulatory Affairs (c.u.), Dr. Mrs. K.P.G.K. Badralatha/ Director – Veterinary Research, Mrs. V.P.K. Pilapitiya/ Director – Administration and Mr. K. Sarath/ Chief Accountant.

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

2. LIVESTOCK SECTOR REVIEW

2.1. Dairy Sector

The dairy sector has been identified as the priority sector for development among other livestock sub sectors in the country. Cattle and buffalo population in the country in 2019 has been recorded as 1.52 million and 0.47 million respectively *(Source: LPE Division, DAPH).* Domestic milk production recorded as 424,131,092 liters *(Source: LPE Division, DAPH).* It accounts to 14% drop compared to the previous year.

Number of milk chilling centers in the year totaled up to 315. The amount of milk collected by 14 main milk processors in the formal milk market in the year amounted to 242.83 million liters, around 30.5%, 20.3% and 19% of milk collected in the country was from the Central province, North-Western province and the North-Central province respectively.

Average farm-gate price per liter of milk in 2019 was around Rs.69.96. Average cost of production of one liter of milk in up country and mid country in 2019 was recorded as Rs. 51.11 under intensive management systems. *(Source: LPE Division, DAPH)*

Form of powdered milk out of milk and milk products imported was 86.43% which had more than 1.5 % of fat.

Import of dairy products amounted to 98,837.76 MT in 2019, a decrease of 6.09% over the corresponding figure of 104,861.87 MT in 2018 *(Source: Department of Customs).* Out of total dairy products imported into the country in 2019, full cream milk powder amounted to 85,434.94 MT which was a decrease of 2.09% when compared with 87,228.39 MT in the year 2018. Similarly, import of non-fat milk powder at 8,314.04 MT in 2019 showed a decrease of 29.53% from the 2018 import volume of 11,799.32 MT. Total import bill on dairy products reached Rs. 55.65 billion in 2019**.**

The average price including Cost, Insurance and Freight (CIF) prices (LKR) of imported dairy products in 2018 and 2019 were as follows:

	2018 (Rs./MT)	**2019 (Rs./MT)**
Whole milk powder	531,277.09	571,067.60
Skim milk powder	334,586.52	429,456.20

(Source: Department of Customs)

International market prices of whole milk powder showed an increase towards the end of the year. Comparison of prices in 2018 and 2019 are as follows:

International market prices of dairy products (2018 - 2019)

Product	Price USD/MT			
	2018 (Avg.)		2019 (Avg.)	
	Jan.	Dec.	Jan.	Dec.
Whole milk powder	3,038	3,088	3,132	3,406
Skim milk powder	1,656	1,925	2,051	2,788

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

Total availability of milk and milk products in the country had been 1,137 million liters of Liquid Milk Equivalent - LME (domestic production and imports) and the per-capita availability was recorded as 140.03 ml/day in year 2019 that accounted for 51.11 l/year.

2.2. Poultry Sector

Poultry industry is the fastest growing livestock industry in Sri Lanka. For the year 2019, poultry contributed to 0.45 GDP which is 64% of the total contribution of Sri Lankan livestock.

2.2.1. Broiler Industry

Three (3) grandparent farms operated in Sri Lanka in 2019. 37,116 grandparent chicks of Hubbard, Cobb, Indian River and Ross were imported during the year. The GP farms produced 80% of the local parent bird requirement (1,161,334) of the country.

Thirty four (34) parent farms were functioning during the year. Total procurement of parent chicks was 1,448,041 with the 286,707 imported parent chicks. The strains imported were Indian River (42%), Ross (41%) and Cobb (17%). 167.5 million broiler chicks were produced in the country during the year, recording a 7% increment compared to 157 million broiler chick productions in 2018. Estimated chicken meat production in 2019 at 224 '000MT recorded an increase of 4.6% over the 2018 volume of 214 '000MT.

Average price of a day-old broiler chick had been Rs. 69.29 in 2019 ranging from Rs. 55.79 in December and Rs. 87.57 in March. Average farm–gate price of live broiler recorded as Rs. 250.21/kg with the lowest price of Rs. 202.50/kg (May) to the maximum price of Rs. 280.00/kg (September).

2.2.2. Layer Industry

Layer industry remained more or less static during the year. The DAPH continued to regulate the parent stock import volume with the consensus of registered layer breeder farms and farmer organizations representing the commercial layers for the 2nd consecutive year. This regulation stabilized the market for producers but the market price of egg increased as a result. Few years of regulated input will create a balance in supply and demand with satisfactory price for consumer as well.

Ten (10) layer breeder farms were operated in the year 2019. Parent DOC supply is depend on importation as there is no layer grandparent farms in the country. Import of layer parent DOC was recorded as 94,811 in the year 2019. Bovans-White (26%), Lohmann Brown (22%), Dekalb white (18%), Lohmann LSL (15%), Hyline White (11%), Hyline Brown (5%) Bovans Brown (3%) was the main layer breeder strains imported by these farms. The majority (64%) of those were White layers. Main importing countries were Netherland (46%), Canada (38%), and USA (16%).

Pullet chick production was recorded as 8.07 million. The estimated total egg production of the country was 2,630.74 million eggs which included 5% of village chicken eggs.

Average pullet chick price was recorded as Rs. 136.92 and was ranging from Rs. 116.74 in May to 151.17 in September 2019. Farm gate price of table eggs ranged from Rs. 13.50 (May) to Rs. 17.75 (October). Average farm-gate price for the whole year recorded as Rs. 16.61 which is 23% increase from the previous year. Average retail price for brown and white eggs recorded as Rs. 18.35 and Rs. 18.12 respectively.

2.2.3. Poultry Feed Industry

Total animal feed production in the country estimated as 1,300,820.36 MT which is 2% decrement compared to previous year (1,328,219 MT) which is mainly due to reduction of poultry feed production. Ninety five (95%) of the animal feed produced in the country is used by poultry industry (1,236,602 MT) which included the commercial feed and self-mixed feed. Twenty four (24) registered poultry feed manufacturers were in operation during the year. The commercial poultry feed production in the country was 799,697 MT which is 4% increment compared to 771,773 MT in year 2018. However, estimated self-mixed poultry feed production has decreased by 10% compared to previous year amounting to 439,904 MT.

2.2.4. Poultry Processing Sector

Fifteen (15) processing establishments and elven (11) poultry further processing establishments registered under DAPH were in operation during the year 2019. Total value added meat products manufactured by further processing establishments amounted to 10,654 MT in the year, a decrease of 20% over the 2018 volume of 13,328 MT. Out of this production in 2019, a major portion (90%) consisted of chicken meat based value added products.

2.2.5. Exports

Export of chicken meat and meat products were recorded as 451 MT in the year 2019, an increase of 163% from the previous year volume of 171.75 MT. Chicken meat and chicken meat products were exported to Maldives and India. 9.3 million table eggs were exported to Maldives which is 65% increment compared to corresponding figure of 5.6 million in 2018. A total of 0.22 million day-old chicks were exported to Maldives, Bangladesh and Nepal during year 2019 recording 85% increment compared to 0.12 million in year 2018. A total of 283,680 hatching eggs were exported to Seychelles during the year 2019 compared 227,120 in year 2018 *(Source: AQ Station, Colombo).*

2.2.6. Imports

Though the country is demand-sufficient on chicken meat production specific meat products are yet imported for the use of meat further processing industry. Also few meat products are imported for the use of airline catering and for diplomatic missions. In 2019, 229 MT poultry meat and meat products were imported for this purpose. And 19.63 MT egg powder was imported mainly for bakery industry during 2019 which is a gradual reduction compared to 2018 *(Source: AQ Station, Colombo).* (Key data pertaining to the Industry in 2019 are given in *Annexure II.*

2.3. Swine Sector

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

Total pig population in Sri Lanka has been recorded as 163,567 in 2019 *(Source: LPE Division, DAPH)*

Estimated pork production in the country had been 8,998,603.624 MT during the year 2019 *(Source: LPE Division, DAPH)*. A total of 143.581 MT. of pork have been imported into the country in 2019 and 14.578 MT of pork and pork products have been exported *(Source: Department of Customs).*

Monthly average retail price of pork was recorded as Rs.760.99 per kg in the year 2019 ranging from Rs.720.67/kg in January to Rs. 779.67/kg in December *(Source:DCS).*

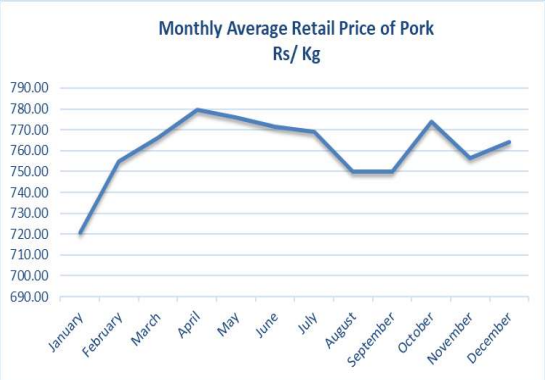


Figure 2.1: Monthly average retail price of pork- 2019 (Source: DCS)

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 2019 recorded as 549,397 *(Source: LPE Division, DAPH)* and number goat farms in the country recorded as 67,321 (Source: LPE Division, DAPH). Average cost of production of mutton was Rs. 869.42 in year 2019. Average retail price of mutton in the country reported as Rs. 1,838.22/kg in the year 2019 ranging from Rs.1,793.33/kg in January to 1,855 kg in December.

A total of 1,214,090 MT of mutton had been imported into the country during the year 2019. While 60kg 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 2019 (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 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, re-emerging 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.

HS was reported from Five (05) veterinary ranges during the year 2019 in Eastern and North Central provinces. Laboratory confirmation of disease was made by the Veterinary Research Institute. The cases numbered 260 with 115 deaths as summarized in table 3.1. Vaccination is practiced using locally produced alum precipitated and oil adjuvant vaccines. During the year 2019, 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 out routinely throughout the year.

Table 3.1: Spatial and temporal distribution of HS in 2019

No.	District	No. of affected VS ranges	No. of		Month(s) of occurrence
			Cases	Deaths	
1	Polonnaruwa	1	208	96	January
2	Ampara	2	17	07	February, July
3	Batticaloa	2	35	12	January February
	All island total	**5**	**260**	**115**	

b. Foot and Mouth Disease (FMD)

FMD was reported in one hundred & seven (107) veterinary ranges in eighteen (18) districts during the year 2019. The total cases numbered to 11,326 with 83 deaths as depicted in table 3.2.

The total number of cases recorded in the previous year (2018) was 5,240 with 205 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 early part of the year 2019 at Telippellai veterinary range of Jaffna district.

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.

Table 3.2: Spatial and temporal distribution of FMD in 2019

No.	District	No. of affected VS ranges	No. of		Month(s) of occurrence
			Cases	Deaths	
1	Kurunegala	13	8,182	27	January, October, November, December
2	Puttlam	14	1,079	0	November, December
3	Batticaloa	4	201	0	February, September, October, November,
4	Ampara	3	61	0	January, September
5	Trincomalee	2	82	0	October, November,
6	Anuradhapura	13	513	13	January, April, November, December
7	Polonnaruwa	2	63	0	May, December
8	Badulla	1	3	0	December
9	Moneragala	1	13	0	December
10	Kandy	4	31	1	January, November,
11	Matale	1	25	17	December
12	Mullative	2	199	04	July, October, December
13	Mannar	2	87	03	January
14	Jaffna	6	74	0	January, February, March, October
15	Killinochchi	4	226	08	August, September, November, December
16	Vavuniya	2	350	0	January, November
17	Kegalle	1	05	0	January
18	Gampaha	12	132	10	January, September, October, November, December
	All island total	**87**	**11,326**	**83**	

c. Black Quarter (BQ)

Fifteen (15) cases of Black Quarter and fifteen (15) deaths were recorded in the country during the period under review. The case fatality rate was found to be 100%. The cases were reported in Ampara district (Mahaoya) in Eastern province. Clinical cases were detected in this location during January 2019 and the year 2018 too.

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. In Sri Lanka the disease is endemic in certain parts of Eastern and North-Central provinces.

A total of 468 abortions were recorded in the country due to brucellosis during the year under review. High incidence of disease was reported in Vavuniya District. In total 6,931 animals have been vaccinated by Veterinary Investigating Centers during the year 2019 using the S-19 Brucella vaccine.

e. Bovine Babesiosis

Four thousand seven hundred and seventy-one (4,771) cases of Bovine Babesiosis were recorded during the year under review and the cases were found in all the provinces with an overall case-fatality rate of 2.97%. Monthly distribution of cases varied from minimum of 298 to maximum of 486 with no obvious seasonal pattern.

f. Bovine Tuberculosis (TB)

In the year 2019, 1,645 animals were screened for TB by Veterinary Investigation Centers and 153 animals were reported as positive. 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 and a base line data establishment was initiated during the year 2013.

3.2.2. Swine Disease

Porcine Reproductive and Respiratory Syndrome (PRRS)

PRRS re-emerged in early April of 2019. First incidence was reported in Welisara veterinary range. Later the outbreak spread to other provinces including Western, North Western, Sabaragamuwa, North Central and Southern. Swine farms in Gampaha, Puttalam, Colombo and Kurunegala districts were worst affected.

Disease investigation were carried out in Welisara, Kosgama, Mahara, Dompe, Chilaw regions which revealed feeding of untreated swill, poor or no biosecurity practices in swine farms are the main sources of the virus. Division of Animal Health with the support of Provincial Department of Animal Production and Health, Western Province developed the bio security guideline for the swine farms. This document was communicated among all VIOs, PDs, Provincial staffs and NLDB
The movements of pigs and swine products from and into the infected areas have been banned. Actions have been taken to procure 41,000 doses of vaccine for immediate usage in order to arrest the spread and to protect the animals in high-risk.

3.2.3. Poultry Diseases

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 poultry farms, ensuring early warning system against Highly Pathogenic Avian Influenza (HPAI) and improving laboratory diagnostic capacities 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 2019 with 145,637 cases. Spatial distribution of the disease indicates its presence in all the districts of the country. Newcastle Disease (138,256 cases), Fowl Pox (77,387 cases), Infectious Bursal Diseases (61,976 cases) and Avian Salmonellosis (19,708 cases) were the other major diseases reported during the year 2019. However, there was a significant reduction in incidences of Coccidiosis, Salmonellosis and Infectious bursal disease when compared with previous year.

a. Newcastle Disease (ND)

Newcastle disease (ND) is an endemic disease among poultry population of Sri Lanka for several decades.

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 seldom 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 138,256 cases and 6,296 deaths were reported, whereas in the previous year there had been 62,624 cases with 6,284 deaths

Table 3.3: Distribution of Newcastle disease 2019

Province	Cases	Deaths
Central	295	26
Eastern	15,609	1,409
North Central	4,536	966
North Western	89,506	195
Northern	23,457	1,999
Sabaragamuwa	569	20
Southern	3,019	1,564
Uva	748	37
Western	517	80
Total	**138,256**	**6,296**

b. Infectious Bursal Disease (IBD)

61,976 cases of Infectious Bursal disease were recorded in the year 2019 in commercial poultry farms as depicted in table 3.4.

c. Salmonellosis Salmonellosis in poultry is caused by *Salmonella pullorum* and *Salmonella gallinarum.* 19,708 cases and 558 deaths were reported in the country during the year 2019 as summarized in table 3.6.

Table 3.4: Distribution of Infectious Bursal Disease – 2019

Province	Cases	Deaths
Central	307	51
Eastern	4,928	226
North Central	130	42
North western	31,405	402
Northern	9,446	653
Sabaragamuwa	2,739	85
Southern	1,305	50
Uva	373	60
Western	11,343	401
Total	**61,976**	**1,970**

Table 3.5: Distribution of Salmonellosis in Commercial Poultry Farms -2019

Province	Cases	Deaths
Central	122	10
Eastern	552	27
North Central	5,506	171
North western	2,196	27
Northern	1,103	28
Sabaragamuwa	950	1
Southern	574	84
Uva	776	38
Western	7,929	172
Total	**19,708**	**558**

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 (mono-valent, type 'O') partially produced and the balance was imported from India. In total 303,600 doses of HS vaccine, 221,843 doses of BQ vaccine and 970,160 doses of Foot and mouth disease vaccine (775,000 – imported) have been distributed during the period under review as shown in table 3.6.

Table 3.6: Issuing of vaccines to the field in 2019

Province	Number of Vaccine doses			
	FMD	BQ	HS (Oil)	HS (Alum)
North Western	130,550	60,390	-	-
Eastern	296,700	70,145	256,476	41,514
North Central	178,160	19,074	27,060	-
Northern	122,400	69,234	13,992	-
Southern	45,000	-	-	-
Uva	52,250	-	5,016	-
Western	75,600	-	-	-
Central	53,500	-	-	-
Sabaragamuwa	16,000	-	1,056	-
Total	**970,160**	**218,843**	**303,600**	**41,514**

Table 3.7: Province-wise vaccination targets and achievements in 2019

Province	FMD		BQ		HS	
	Target	Achievement	Target	Achievement	Target	Achievement
North Western	140,000	103,469	59,700	42,410		
Eastern	260,000	226,476	91,284	37,620	200,000	194,151
North Central	160,000	177,236	23,578	20,095	15,000	24,751
Northern	135,000	128,728	102,090	24,327	50,000	7,202
Southern	45,000	35,515	0	0		
Uva	50,000	41,729	2,000	1,000	2,000	526
Western	60,000	71,428	0	0		
Central	40,000	50,733	0	0		
Sabaragamuwa	10,000	17,321	0	0	4,000	531
Total	**900,000**	**852,635**	**278,652**	**124,452**	**271,000**	**227,161**

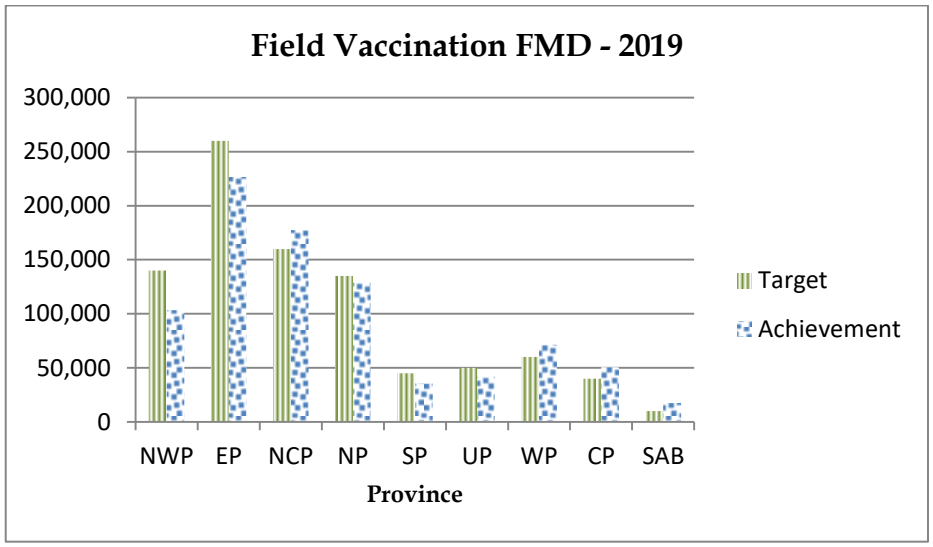


Figure 3.1: FMD Vaccination Progress

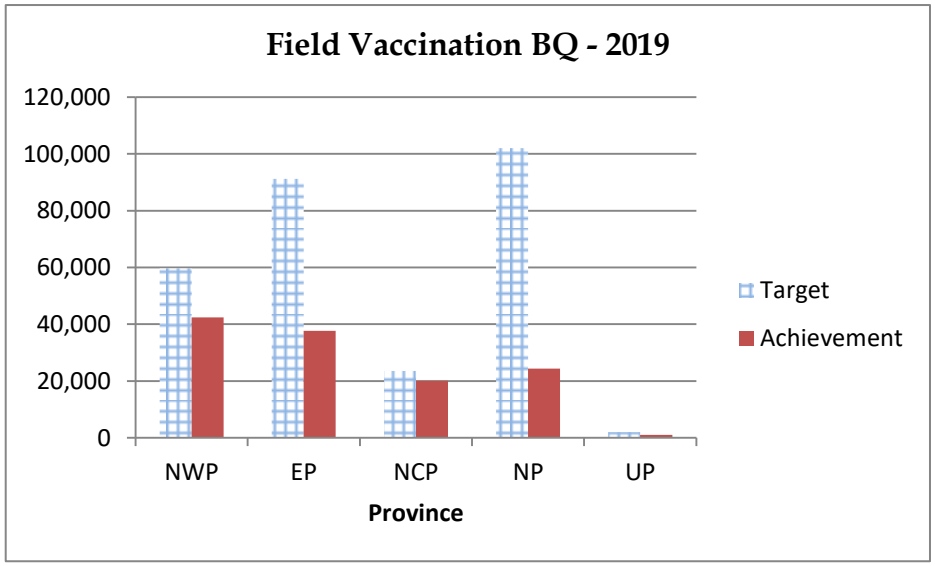


Figure 3.2: BQ Vaccination Progress

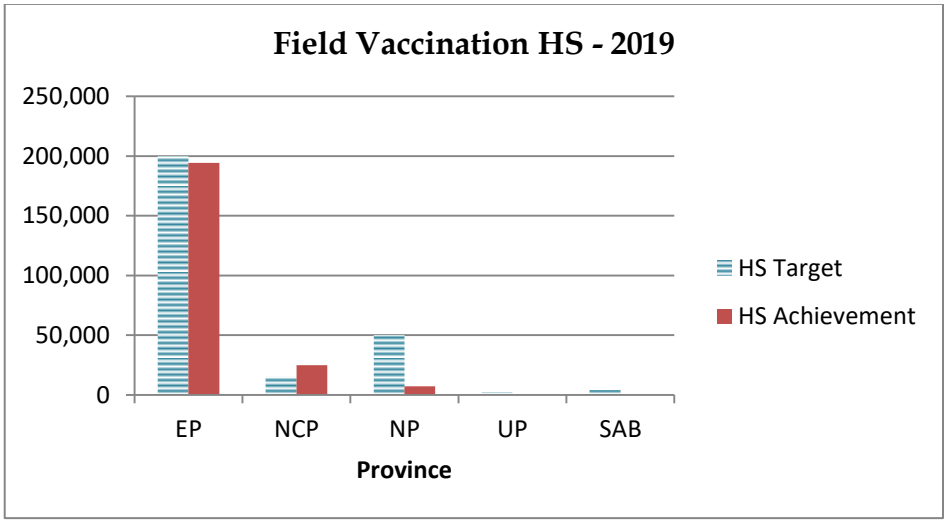


Figure 3.3: HS Vaccination Progress

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. Four million birds have been vaccinated as shown in Table 3.8

Table 3.8: Vaccination against Newcastle diseases using locally produced vaccine

Province	Vaccination
Western	219,764
Central	5,045
Southern	16,852
North Central	51,445
North Western	3,600
Northern	2,037,224
Eastern	1,661,567
Uva	13,468
Sabaragamuwa	43,804
Island Total	**4,052,769**

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 1,832 dairy farms have visited by the veterinary investigation officers during the year 2019. Subsequently, 15,383 milking cows have been subjected to California Mastitis Test (CMT) for early detection of sub clinical mastitis. Moreover, 5,884 liters of teat dip solution and 579 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.

903 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 20,276 vials of udder base was issued by the VICs in 2019 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

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 2019 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. 346 sampling sites were identified in the country for the year 2019 and 15 samples were collected per site for testing.

Epidemiological surveillance was undertaken to monitor the risk of introduction of HPAI through migratory birds. 35 hot spots were identified along 11 coastal districts in the country as high risk areas. Fresh feacal samples (4, 283) and cloacal swabs of migratory birds, cloacal swabs (5,043) and (1,135) serum samples of backyard poultry and ducks, cloacal swabs of poultry in live bird market (1,272) and poultry processing plants (2,330) 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 seven hundred twenty-two (4,722) serum samples were collected from commercial layer and broiler birds during the year under review and samples were tested using Enzyme Linked Immuno-Sorbant Assay (ELISA). There have been sero-reactors to evidence the presence of Avian Influenza type 'A' virus antibody and the reactor rates at district level varied. The sero-reactors have been further tested to ascertain the presence or absence of H5, H7 and H9 subtypes. The testing programme will be continued in 2020.

3.4.3. Salmonella Control Programme

All the poultry breeder farms having either parent birds or grandparent birds have to be maintained in salmonella-free status in order to ensure the production and supply of salmonella-free chicks. All the breeder farms have been instructed to carry out regular screening programs which are followed by official

verification by the relevant Veterinary Investigation Centers and the Veterinary Research Institute.

There were 43 poultry parent farms (Broiler-33, Layer -10) and 03 grandparent farms registered with the Department for the year 2019. *Salmonella* organism was isolated from some of the hatcheries. Therefore, killed salmonella vaccine was allowed to be used 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 2019. Required high tech laboratory equipment, chemicals, reagents, glassware and other consumables were procured during 2019.

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

Humans and Livestock share the same habitats with numerous species of wild animals in most parts of the world. This is true even in Sri Lanka where wildlife is not confined to the National Parks and nature reserves. Wildlife and livestock share same resources in some parts of the country especially during dry seasons when the food and water is scarce.

Three fourths of all emerging infectious diseases of humans are zoonotic; most originate in wildlife, and their incidence since 1940 has increased. Wildlife can also serve as vectors for non-zoonotic diseases of livestock, hence affecting food security due to loss of animal originated proteins.

Cost-effective prevention and control of these diseases require an interdisciplinary and holistic approach and international cooperation, surveillance, improvement of laboratory capacities, capacity building, research and communication are identified as the key elements of such control strategies.

The OIE gap analysis on the Performance of Veterinary Services (PVS) for Sri Lanka (2012) identifies surveillance for diseases in wild animals as one of the key component of performance for a national veterinary service.

Department of Animal Production and Health has responded to this national requirement and the international

obligation by initiating the project "Mitigation of disease risks to livestock and humans through targeted wildlife disease surveillance" in 2018, with the collaboration of the Department of Wildlife Conservation, Faculty of Veterinary Medicine and Animal Science, University of Peradeniya and the Ministry of Health.

The main objective is to minimize disease transmission from wildlife to humans (zoonotic diseases) and to livestock (economically important diseases).

Two central laboratories at the Veterinary Research Institute (VRI) and 09 regional laboratories including Anuradhapura, Polonnaruwa, Ampara, Ratnapura, Mankulam, Hambanthota, Dambulla, Kundasale and Homagama Veterinary Investigation Centers were identified to develop for wildlife disease surveillance.

The selected laboratories were equipped with items including lab equipment/ instruments, consumables, chemicals/ reagents, Personal Protective Equipment (PPE), lab furniture, communication/ IT equipment and generators required for wildlife disease surveillance programme.

Following capacity development programs were conducted under the project for DAPH and wildlife officers those who are engaged with wild life disease surveillance.

a. Five workshops (80 participants) on wildlife necropsy procedures, sample collection, preservation and transport was conducted for VSs, VIOs, RAs and LDIs of DAPH, wildlife guards and field assistants of DWC and RAs and Vet undergraduates of FVMS, University of Peradeniya.

b. A seminar on fish disease diagnosis, treatment and management was conducted for the VIOs and VSs (29 participants).

c. An awareness program was carried out for all DAPH staff (227 participants) including PD, DPD, SMS, VSs, LDIs, DOs, DLs, Drivers etc. of North Central Province. Main objective was to improve disease reporting and sample submission for the surveillance project.

Laboratory investigations were carried out on convenient samples (mainly from 62 carcasses including mammals, birds and reptiles) Fresh feacal samples were collected from wild birds in Chundikulum Nature Reserve and Kumana National Park for HAPI and ND surveillance.

A surveillance program was started with the Faculty of Medicine, University of Peradeniya for the surveillance of pathogenic Leptospires in wild animals.

Standard Operation Procedure (SOP) Guidelines were prepared for sample necropsy procedures, sample collection for rabies, Leptospirosis and HS surveillance. As an initiative for the research, an awareness program was conducted for four identified priority diseases (Rabies, TB, FMD, and HS) that have zoonotic or economic importance.

3.5. Veterinary investigation services

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. To strengthen the infrastructure facilities at VIC Kandy, a new building was constructed 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 2019. 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 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 2019 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 seeds and planting materials of pasture and fodder varieties. Establishment of irrigation system and strengthening of electric fence at AI Centre Polonnaruwa were done during the year 2019.

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.

Main functions of the division

- 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.
- Conservation and sustainable utilization of livestock genetic resources.

4.2. Special livestock development projects implemented during the year 2019

4.2.1. Livestock Breeding Project (LBP)

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

a. Production of semen

Table 4.1: No. of semen doses produced in 2019

Species/Breed	AI Center	
	Kundasale	**Polonnaruwa**
Jersey	210,341	-
Friesian	11,149	-
AFS cross	10,670	-
Girolando cross	38,341	39,660
Murrah	-	6,520
Local neat cattle	-	13,318
Jamnapari cross	7,835	-
Total	**278,336**	**59,498**

b. Import of semen

A total of 5,931 doses of semen were imported during the year 2019 to maintain the diversity in local population,

Jersey (conventional) semen 2,453 doses
Friesian (sexed) semen 998 doses
Friesian (conventional) semen 2,480doses

c. Distribution of semen

Table 4.2: Breed-wise distribution of semen – 2019

Species	Breed	Locally produced	Imported	Total
Cattle	Jersey	125,139	1,397	126,536
	Jersey (Sexed)	-	230	230
	Friesian (sexed)		37	37
	Friesian	36,929	337	37,266
	Sahiwal	4,026	1,694	5,720
	Cross	75,619	-	75,619
	Girolando	-	1,750	1,750
Buffalo	Murrah	1,443	3,350	4,793
	Niliravi	2,030	125	2,155
Goat	Jamunapari	3,865	1,050	4,915
	Saanen	163	166	329
	Boer	16	-	16
Total		**249,230**	**10,136**	**259,366**

d. Artificial insemination service

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

Table 4.3: Targets, performance and achievement of AI – 2019 (Cattle and Buffaloes)

Province	Target	Performance	Achievement (%)
Central	56,402	53,125	94%
Uva	24,881	21,062	85%
North Central	22,825	17,503	77%
North Western	70,000	49,173	70%
Sabaragamuwa	7,598	6,261	82%
Eastern	13,477	8,095	60%
Northern	35,013	28,224	81%
Southern	15,930	10,387	65%
Western	21,395	17,526	82%
Island Total	**267,521**	**211,356**	**79%**

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 2019 was 72,447 (62%).

Table 4.4: Province-wise target, performance and achievement of PD- 2019

Province	Target	Performance	Achievement (%)
Central	19,683	13,011	66%
Uva	12,478	10,278	82%
North Central	7,385	3,547	48%
North Western	35,000	18,553	53%
Sabaragamuwa	4,952	3,266	66%
Eastern	7,415	4,563	62%
Northern	9,490	6,234	66%
Southern	9,570	6,561	69%
Western	10,147	6,434	63%
Total	**116,120**	**72,447**	**62%**

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 66,157 (70%).

Table 4.5: Province wise target, performance and achievement of calving – 2019

Province	Target	Performance	Achievement (%)
Central	19,757	14,350	73%
Uva	8,478	6,864	81%
North Central	4,775	4,500	94%
North Western	32,050	19,674	61%
Sabaragamuwa	3,104	4,115	133%
Eastern	5,165	2,751	53%
Northern	9,490	5,212	55%
Southern	4,300	4,103	95%
Western	7,583	4,588	61%
Total	94,702	66,157	70%

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 - 2019

Technician Category	No. Trained
Government Technicians (Fresh)	30
Private Technicians (Fresh)	16
Total	**46**

e. Infertility investigations

Treatment of infertility cases in cattle/buffaloes reported by the range VSs are usually facilitated by this division by providing required reproductive hormones and total of 1,712 such cases were attended by field Veterinary Surgeons during the year 2019.

f. Pedigree and Performance Recording Scheme (PPRS)

This project is currently implemented as a pilot breeding project in Kurunegala, Anuradhapura, Polonnaruwa, NuwaraEliya and Badulla districts. The main objective is to identify locally adapted dairy cows with superior genetic merits for lactation yield through testing day milk recording program. 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 sons of selected cows are again selected and screened as future semen donors for Artificial Insemination Centers and semen is expected to be utilized in national AI programs.

Four (04) number of certified bull calves have been screened and procured

during 2019. Capacity building among farmers on the project was implemented and 590 farmers participated in this programme.

In addition, 43 Veterinary Surgeons, 54 Livestock Development Instructors (LDIs), and 38 Recorders were exposed to knowledge update program.

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 stock for breeding purpose. 98 Jamunapari goats (74 stud goats and 24 female goats) have been issued to the breeder farmers in 2019.

100 Boer goats (10 stud goats and 90 female goats) were imported from Australia in April 2019 and currently reared in Imbulandanda Goat Breeding Center. The progeny of imported herd will be issued to farmers in coming years.

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 good milkers 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 – 2019

Payment of incentives		**Unit**	**Target**	**Achievement**
Farmer incentives	No. registered	No of calves	15,660	16,042
	2nd Installment	No of payments	2,000	1,905
	3rd installment		1,500	805
	4th installment		700	771
Monitoring of registered calves			554 calves to be monitored in twice per year	494 calves monitored in twice per year completed

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 socio economic 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 2019 are as follows.

5.2.1 Products issued

Table 5.1: Vaccines

Vaccine	Production (Doses)	Issues (Doses)
Hemorrhagic Septicemia (HS) (OA)	312,246	312,246
Hemorrhagic Septicemia (HS) (APV)	76,626	76,626
Black Quarter (BQ)	263,505	263,505
Foot and Mouth Disease (FMD)	113,160	112,560
Tick fever (*Bivalent B. bovis & B. bigemina*)	Nil	4,520
Brucella S 19	18,000	11,300
Newcastle Disease (ND Primary)	2,039,800	2,039,800
Newcastle Disease (ND Secondary)	2,064,600	2,064,600
Fowl cholera	175,560	175,560
Swine pasturellosis	3,000	3,000
Wart	7	7

Table 5.2: Diagnostic reagents

Reagent	Quantity Issued
FMD transport medium (ml)	7,500
Avian Influenca transport medium (ml)	10,000
CMT reagent (L)	2
Pullorum antigen (doses)	121,485
RBPT antigen (ml)	180
MRT reagent (ml)	235

Table 5.3: Therapeutic reagents

Reagent	Quantity Issued
Teat dip solution (L)	44
Udder infusion (Vials)	52,992

Table 5.4: Starter cultures

Starter culture	Quantity Issued
Yoghurt culture (vials)	95
Curd culture (vials)	172

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

Chick type	Number Issued
Embryonated eggs	6,100
Day old chicks (Backyard poultry)	127,909

5.2.2 Services

Table 5.6: Examination of specimens

Specimen Type	No. of Samples
Blood smears for parasites	1,407
Fecal samples for parasites	1,036
Skin/litter/ticks/intestinal samples for parasites	19
Litter/ bedding samples	56
Skin scrapings	304
Blood samples for disease diagnosis	307
Plasma/blood/serum for brucellosis, leptospirosis and pasturella	730
Tissue samples for histopathology	296
Tissue samples for microbiology	1,964
Milk samples for CMT	160
Milk & poultry samples for ABST	118

Specimen Type	No. of Samples
Serum samples for viral disease diagnosis	8,792
Tissue samples for viral disease diagnosis	2,266
Cloacal/fecal swabs, egg parts, chicken powder for viral disease diagnosis	14,567
Urine samples	12
Tissue samples	13
Stomach content	5
Impression smears	23
Intestinal samples	82
Feed samples for microbiological quality	1,117
Day old chick samples	101
Fish samples for microbiology, parasites and PCR	2,508
Water samples for microbiology	218

Table 5.7: Testing of Samples

Name of the Test/ Activity	No of Tests/ Batches
PCR done for ruminant, poultry & other monogastric animals	1,855
Microbiological culture tests carried out	8,096
Total bacterial counts performed	543
Seed preparation of bacterial vaccines (no. of batches)	15
Quality testing bacterial vaccine harvests (no. of batches)	13
Quality testing bacterial vaccine final product (no. of batches)	9
Seed preparation of viral vaccines (no. of batches)	2
Quality testing of viral vaccines (no. of batches)	21

Table 5.8: Analysis, identification and quality testing of samples

Sample Type	No. of samples
Feed samples for proximate components and minerals	1,222
Mineral mixtures and blood samples for mineral analysis	51
Milk and milk products samples for microbiological quality	527
Milk and milk products samples for compositional quality	629
Species identification using meat, skin and blood samples	111
Soil samples for chemical properties	13
Water samples for chemical properties	15
Plant samples for nitrate, oxalate and soluble carbohydrates	10
Seed samples for purity, germination and viability	11
Silage samples for quality testing	74

Table 5.9: Field and laboratory investigations

Investigation Type	No. of investigations
Field disease investigations	112
Postmortems	3,180
No. of lab disease investigations	731
Field investigation into nutritional problems	12
Field investigation into milk quality control problem	5
Ration formulation evaluations	16
Confirmation of contagious / notifiable diseases	67

Table 5.10: Sample analysis for statutory purposes, quarantine, export certification etc.

Investigation Type	No. of investigations
No. of samples done for statutory purposes	9,111
No. of food products for microbiological examination	49
No. of court directed Investigations	6
No. of samples for quarantine/ import, export purposes	3,786

Table 5.11: Sample confirmed for notifiable diseases

Investigation Type	No. of investigations
No. of samples confirmed for notifiable ruminant animal disease	102
No. of samples confirmed for notifiable swine diseases	13
No. of samples confirmed for notifiable fish diseases	48

5.3. Clients registered at VRI

Table 5.12: Clients registered at VRI

Place of registration	No. of clients
Coordinating unit	3,724
Central Poultry Research Station (CPRC)	652
Animal Virus Laboratory	780

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
Duration: 3 Years
Status of the project: Continued to 2020

02. Title: Immunohistopathological study on Porcine Reproductive and Respiratory Syndrome (PRRS) and Porcine Parvo Virus (PPV) infection
Principal Investigator: Dr. S. M. T. S. Manchanayaka
Collaborating Scientists: Dr. S. Puvanendiran, Dr. G. I. S. Perera, Dr. P. Bandara, Dr. K. G. I. S. Disnaka
Duration: 3 Years
Status of the project: Completed

03. Title: PCR based detection of cow milk adulteration in fresh goat milk in Kandy district
Principal Investigator: Dr. A. P. D. G. Pathirana
Collaborating Scientists: Dr. U. L. P. Mangalika
Duration: 2 Years
Status of the project: Completed

04. 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. N. Priyankarage
Duration: 3 Years
Status of the project: Continued to 2020

05. Title: Layer performances and egg quality characteristics affecting the hatchability, in village chicken at CPRS, Karandagolla
Principal Investigator: Dr. M. W. C. D. Palliyeguru
Collaborating Scientists: Dr. N. Priyankarage
Duration: 3 Years
Status of the project: Completed

06. Title: Identification of two 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
Duration: 3 Years
Status of the project: Continued to 2020

07. Title: Establishment of fatty acid profiles of animal feeds and products
Principal Investigator: Dr. W. M. P. B. Weerasinghe
Collaborating Scientists: Dr. N. Priyankarage
Duration: 2 Years
Status of the project: Continued to 2020

08. 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, Dr. M. W. C. D. Palliyeguru
Duration: 3 Years
Status of the project: Continued to 2020

09. 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: 3 Years
Status of the project: Continued to 2020

10. Title: Introduction of oil adjuvant vaccine to control Newcastle Disease in Sri Lanka
Principal Investigator: Dr. H. Kothalawala
Collaborating Scientists: Dr. S. Puvanendiran
Duration: 2 Years
Status of the project: Completed

11. Title: Detection and characterization of MRSA, ESBL and carbapenem resistant E. coil among isolates in bovine mastitis
Principal Investigator: Dr. M. A. R. Priyantha
Collaborating Scientists: Dr. P. S. Fernando, Dr. K. M. S. G. Weerasooriya
Duration: 2 Years
Status of the project: Completed

12. **Title:** Characterization of ESBL producing E.coil and fluoroquinolone resistant Salmonella species in commercial broilers
    Principal Investigator: Dr. M. A. R. Priyantha
    Collaborating Scientists: Dr. P. S. Fernando, Dr. K. M. S. G. Weerasooriya
    Duration: 2 Years
    Status of the project: Completed

13. **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
    Duration: 3 Years
    Status of the project: Continued to 2020

14. **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
    Duration: 3 Years
    Status of the project: Continued to 2020

15. **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: Continued to 2020

16. **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
    Duration: 2 Years
    Status of the project: Continued to 2020

17. **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: 3 Years
    Status of the project: Continued to 2020

18. **Title:** Examine the nutritional quality of some selected non – conventional feed stuff which can be used in animal feed rations.
    Principal Investigator: Dr. S. S. K. Daluwattha
    Collaborating Scientists: Dr. M. W. C. D. Palliyeguru
    Duration: 1 Year
    Status of the project: Completed

19. **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: 1 Year
    Status of the project: Continued to 2020

20. **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: Continued to 2020

21. **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: Continued to 2020

22. **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
    Duration: 2 Years
    Status of the project: Continued to 2020

23. **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: Continued to 2020

24. **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: Continued to 2020

25. **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 2020

26. **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: 2 Years
    Status of the project: Continued to 2020

27. **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
    Duration: 2 Years
    Status of the project: Continued to 2020

5.5. Research Publications in 2019

Details of research publications are in *Annexure IV*.

5.6: Special Achievements

The research symposium of Veterinary Research Institute was held on 5th December 2019 at Plant Genetic Resource Centre Auditorium. The key note speech was delivered by Dr. Samuel Thevasagayam from Bill & Melinda Gate Foundation. The directors of department, officers from SL CARP, provincial directors and representatives, veterinary investigation officers, academics of the universities and staff of the VRI attended for this event. The abstracts of the symposium indicate the diversity of research interests of the Veterinary Research Institute. This Research event provided an ideal platform for researchers to present their latest research findings**.**

Central Veterinary Investigation Centre (CVIC) of VRI was appointed by CSIRO, Australia as the coordinating laboratory in Sri Lanka for regional proficiency testing program on fish, crustacean, avian and swine diseases.

Real time Polymerase Chain Reaction (PCR) technique was standardized in CVIC to diagnose Porcine Reproductive and Respiratory Syndrome (PRRS) and the virus was detected in pigs. Nested PCR was standardized in CVIC to diagnose Tilapia lake virus which is emerging threat for Tilapia industry worldwide.

Figure 5.1: Research symposium 2019

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. / Hotline.
- Livestock Knowledge Center, Getambe.
- Livestock Technology Park.

Main functions of the division

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

6.2.Training and transfer of technology

6.2.1.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.

Achievement of training conducted during 2019 at ICEAPH is given in Table 6.1 and Table 6.2.

Table 6.1: Details of training conducted at ICEAPH

Category	No. of programs planned	No. of programs conducted
AP&H service officers	27	26
Research Assistance, Livestock Development Officers/ Instructors	12	12
Development officers	06	05
Supportive staff	04	05
Others	02	05
Total	**51**	**53**

Table 6.2: Progress of training conducted at ICEAPH

Item	Target	Achievement
Number of trainees/ participants	1,520	2,307
Number of training man days	2,652	6,958

6.2.2. Special training conducted during the year

Table 6.3: The special training conducted during the year 2019

Name of the program	No. of program conducted	Number of participants	Man days
Induction training program for newly recruited veterinary surgeons	01	37	777
Language training program for AP&H officers	1	89	1,602
Residential training/ Learning & development program on management for class 1 AP&H officers	5	126	2,379
Total	**07**	**252**	**4,758**

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

Nineteen (19) training programs were conducted and 1,523 trainees were participated throughout the year 2019.

Table 6.4 Details of training conducted by SLSAH, Seeppukulama

Category of participants	No. of programs	No. of participants
Government officers	01	35
Farmers	09	358
Students	07	860
Nurses	02	270
Total	**19**	**1,523**

6.3. Educational and career development

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

New batch for the academic year 2019 - 2021 was enrolled on 24.11.2019. Number of students for this program was 67. The batch was continued first academic year with practical training.

Seventy four diploma holders (2017 – 2019 batch) passed out after completing their final exam (2nd year) during the year 2019.

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

The SLSAH, Seeppukulama has been conducting two (02) year Diploma Programme in Animal Husbandry.

Fourty three diploma holders (2017 – 2019 batch) passed out after completing their final exam (2nd year) during the year 2019.

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 2019. Details of this program is given below.

Batch Number	No. of Internees
Batch – DAPH/HRD/ICE/ITN /2019 /i	78 (2019.4.01 - 2019.10.01)

6.3.4. Foreign training

Details of overseas training awarded to DAPH officers in 2019 are given in *Annexure V.*

6.3.5. Support for Post Graduate Training

During the year 2019, HRD Division supported in post graduate fellowships programs are given in *Annexure VI.*

6.4. Examinations

The HRD division is responsible for conducting examinations for Department officers. Details of examinations conducted by DAPH in 2019 are given in *Annexure VII.*

6.5. Information and publicity

6.5.1. Publications in 2019

a. New prints

Booklet	02
Leaflets	01

b. Reprints in 2019

Leaflets	04
Booklets	12

6.5.2. Sale of publications in 2019

No. of booklets/leaflets	26,691
No. of photographs (10"x12")	80
No. of CD's	264

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 6.5.**

Table 6.5: Mass media activities in 2018

Type of media	No. of programs (planned)	TV/ Radio channel/ News paper	No .of Telecasts/Broadcasts/Releases
TV	Sinhala - 09	ITN /SLRC	09
Radio	Sinhala-72	SLBC – Colombo – Sathwa Rawaya	48
		SLBC – Kadurata FM – Sathwa Govipola	12
		Krushi FM WEB Radio	24
Paper articles		News paper	03
News releases	12	All media	24
Press conference		All media	01

6.5.4. Exhibitions

Table 6.6: Exhibitions conducted / participated in 2019

	Category	Venue	Period
01	Younpuraya	Weeravila	27.03.2019 – 31.03.2019
02	Vet Expo" Exhibition 2019	BMICH, Colombo	05.04.2019 – 07.04.2019
03	"Shilpa Sena " Technical Exhibition	BMICH, Colombo	18.04.2019 – 21.07.2019
04	V2025 Enterprise Sri Lanka	Harishchandra Sport Ground, Anuradhapura	24.07.2019 – 27.07.2019
05	"Krushi Mela 2019" Agricultural Exhibition	University of Rajarata, Mihinthale	22.08.2019
06	V2025 Enterprise Sri Lanka	Jaffna	07.09.2019 – 10.09.2019
07	"Shilpa Sena " Technical Exhibition	National Sports Complex, Polonnaruwa	25.09.2019 – 29.09.2019

6.6. Entrepreneurship development and self – employment support services

Table 6.7: Details of entrepreneurship development and self - employment support trainings 2019

Topic	Venue	No. of Programs	No. of Participants
Small scale milk processing	Kotagala	01	30
	Livestock Technology Park- Gannoruwa	02	44
	Ginigathhena	01	36
	Gampola	01	23
	Kotadeniyawa	01	21
	Seeppukulama	02	45
	Kurunegala	01	25
	Badulla	02	49
	Elpitiya	01	16
Total		**12**	**289**

Table 6.8: Follow up technical training programs 2019

Topic	Venue	No. of Programs	No. of Participants
Milk processing	Kaduwela	01	27
	Kotadeniyawa	01	23
	Galewela	01	22
Total		**03**	**72**

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: 19
- 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 6.9: Activities done by hotline service in 2019

	Activity	Target	Cumulative Progress
01	Registration of clients (on request)	1,400	1,868
02	Provision of technical guidance	1,200	1,798
03	Direction clients for training	100	95
04	Coordination with other institution	160	324
05	Direct advisory	200	224
06	Written technical advisory service for postal requests & e- mails	On Req.	10
07	Handling of public requests / complaints	60	56
08	Follow up service to evaluate customer satisfaction	140	154
09	Collection of newspaper articles related on livestock	440	635
10	Directing articles on livestock issues to DG, Directorate & PDs	60	301
11	Distribution of leaflets – free of charge for exhibition/ seminar	480	823
12	Data analysis, presentation	2,880	2,900

6.9. Livestock Technology Park

Table 6.10: Livestock Technology Park - details of performance in 2019

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	29,261
	Conduct demonstration sessions	Conduct pasture & milk processing demonstration sessions for students	30

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, researchers, 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 e-government policy in the department.

7.2. Identification and designing of livestock development programs and projects

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

7.2.1. Projects for the National Budget - 2020

Eight (08) new project proposals for 2020 were formulated in collaboration with respective divisions in 2019. These project proposals were forwarded to relevant authorities.

Furthermore, 16 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 (2019) of DAPH was implemented successfully. The physical and financial progress was monitored and reported monthly on the basis of thrust area. At the end of 2019, action plan for physical and financial progress review of the DAPH was prepared only for the first quarter of the year 2020 due to the non-availability of budget and allocation for the whole year.

Capital expenditure utilization of the DAPH was 89.35% in 2019 which was higher than the previous year (45.95%) The progress of recurrent fund utilization was 98.97% in 2019, which was higher than the corresponding figure of 97.33% in the year 2018. 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 2019. Total milk collection by 14 key organizations was 242.82 million liters. Central Province, North Western Province and the North Central Province contributed for this total as 30.7%, 19.7%and 19.1% respectively. District–wise milk collection data for the year 2019 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 2019 was obtained from Sri Lanka Customs and analyzed. Quantities of dairy products, meat and meat products imported into the country in 2019 is totaled 98,837.76 MT and 1,674.14 MT with the value of Rs.55.65 billion and Rs.864.25 million respectively. Imported quantity of dairy products has been decreased, imported quantity of meat products increased during the year 2019 when compared with the year 2018.

Total of 1,366.71 MT of milk and milk products and 3,758.41 MT of meat and meat products have been exported to other countries during year 2019.

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 as Poultry Forecast 2019, Livestock Information Bulletin, Livestock Statistical Bulletin, Dairy Bulletin and Livestock Outlook for the year 2018. It was disseminated to all the relevant organizations and other stakeholders in 2019.

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 2019.

Main committee meeting was supplemented by seven (7) sector meetings with different categories of stakeholders and fourteen (14) internal technical meetings. Important issues

were discussed and necessary attempt were taken to solve address the issues faced by the industry.

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 directors' meetings

LPE division organizes and coordinates Provincial Directors' meetings to review on-going livestock development programs and to discuss on administrative and financial matters. Three (03) such meetings were held during the year 2019.

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 seven (07) veterinary offices were continued from 2018 in Southern Province (Lunugamwehera, Pasgoda) and Eastern Province (Trincomalee and Kaluwanchikudy), North Central Province (Aralaganvila), Sabaragamuwa Province (Ayagama) and Central Province (Pundaluoya). Construction work of these seven (07) veterinary offices were completed in the year 2019. Construction of one (01) veterinary office started in 2019, in Uva Province (Haliela).

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 2019 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 the year 2019.

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, along 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. Six such field visits and inspections were done in different parts of the island to mitigate the issues prevailed in those farms.

A special training programme on Swine Waste Management was organized and conducted to swine farmers of Western Province including biosecurity and best management practices in swine farms to control disease incidences.

Collaboration with the Livestock Ministry, preparation of Code of Practice for swine farming was initiated in year 2019.

A handbook was printed and published through HRD Division on Livestock Waste Management by LPE Division.

A radio programme on Livestock Waste Management was done to aware the livestock farmers in Sri Lanka via SLBC.

7.6. Publications

The division compiled following publications/reports during the year 2019.

- Action Plan DAPH -2019
- Action Plan 2019- LPE Division
- Annual Report -2018
- Livestock Development Projects for 2020
- Livestock Statistical Bulletin 2018
- Poultry Sector Forecast 2019
- Dairy Bulletin 2018
- Livestock Outlook 2018
- Livestock Information Bulletin 2018
- Physical and Financial Progress reports 2019 for livestock development projects.

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

8. VETERINARY REGULATORY AFFAIRS DIVISION

8.1. Introduction

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

Main functions of the division

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

8.2. Animal quarantine and inspection service

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

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

a. Quarantine holdings

Large animals, zoo animals, pet birds, pet animals and ornamental fish were subjected to quarantine at Animal Quarantine Stations (AQS) (Colombo, Katunayake) and at own farms during the year 2019.

b. Import and quarantine surveillance

Details of consignments that were subjected to quarantine surveillance in 2019 are given in *Annexure X.*

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 were 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 was done during the surveillance period. (Table 8.1)

Table 8.1: HPAI Surveillance program and laboratory test results - 2019

No of farm visits	No. of samples dispatch to laboratory	Test results
Animal Quarantine Station-Colombo		
Day Old Chicks -56	Cloacal swabs-3,400	Negative
	Serum samples-1,387	Negative
Pet birds-14	Fecal Samples-230	Negative
Animal Quarantine Station Katunayake		
Pet birds-254	Fecal samples- 254	Negative
Animal Quarantine Station-Mattala		
Pet birds- 42	415 swabs	Negative

d. Consignment detained/ destroyed/ re-exported in the year 2019

Details of consignments of animals and animal products that were not allowed to enter into the country in 2019 due to non-conformity with our import health requirements are given in *Annexure XI.*

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 2019 are given in Table 8.2.

Table 8.2: Health certificates issued for exports (2018-2019)

Item	No. of health certificates issued	
	2018	2019
Ornamental fish	3,121	4,180
Dogs	176	247
Cats	66	103
Poultry -DOC	39	67
Hatching eggs	18	21
Pet birds	03	04
Zoo animals	01	02
Elephant	-	-
Rabbit/Rat/Hamsters/G. Pig	-	03
Animal products (meat & meat products)	3,250	3,606
Table eggs	1,550	1,861
Animal by-products	73	71
Leather	09	20

b. Exports

Details on consignments of animals and animal products that were subjected to animal quarantine inspections and approved for export in 2019 are given in *Annexure XII.*

8.3. Regulatory activities– livestock industry

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

a. Poultry

The regulatory activities carried out in 2019 in related to poultry industry are given in Table 8.3. There has been no new registration of Breeder farms, Hatcheries or Processing centre in year 2019.

Table 8.3: Regulatory activities carried out in 2019

Activity	Description	Number
Renewal of registration	Renewal of breeder farms	81
	Renewals of hatcheries	53
	Renewal of grandparent farms	03
	Renewal of processing centers	15
	Renewal of further processing centers	11
Facilitation of imports	Issuing pre clearance approvals (No. of consignments)	201
	Revision/ preparation of import health requirements	2

b. Other animals, animal products and animal by products

Regulatory activities carried out during the year 2019 in respect to livestock and livestock products are given below.

Table 8.4: Issue pre-clearance approvals

Activity	No. of Applications received	Number Approved	Number of animals/ Quantity
1. Live animals			
Pets-dog & Cats	405	385	572 Animals
Horses	03	01	06
Rabbits	05	03	07
Zoo Animals	10	05	14
Live Fish	55	55	55 (consignments)
2. Genetic Material (Semen)			
Cattle Semen	04	04	5,900 Doses
Dog Semen	01	01	05 doses
Day Old Chicks	57	57	57 consignments
3. Animal Products			
Meat and Meat Items			
Beef	161	28	222.736 MT
Mutton		71	1,436.118 MT
Pork		16	219.916 MT
Lamb		26	227.502 MT
Edible Fat/Tallow/Casing		13	13 Consignments
Poultry Meat	63	63	63 consignments.
Frozen Fish – Bait	145	145	5,614.555 MT

Activity	No. of Applications received	Number Approved	Number of animals/ Quantity
4. Animal By products			
Fur/ Wool/ Hair/ Bristles	66	66	50.714 MT
Lether	123	123	123 Permits
Gelatine	88	86	868.058 MT
Feathers	22	22	22 consignments.
5. BSE (Hide Glue, Yoghurt Cultures, Veterinary Equipments)	145	142	142 Consignments

8.4. Veterinary Drug Control Authority

Veterinary Drug Control Authority (VDCA) was promulgated under the provision of the Animal Disease Act No. 59 of 1992 and related regulation. VDCA is responsible for regulating manufacture, import, re-packing, export, marketing and use of veterinary pharmaceutical and biological products to safeguard animal health and thereby some human health aspects as well. VDCA committee members for the year 2019 and their fields of expertise as stated below.

01. Dr. W.A. Wedasinghe - Chairman (January-April 2019)
02. Dr. K.D. Ariyapala – Chairman (May- December 2019)
03. Prof. S.P. Gooneratne – Nutrition (January-June 2019)
04. Dr.(Mrs) Chamari Palliyaguru – Nutrition (July- December 2019)
05. Dr. D.D.N.De Silva – Pharmacology
06. Dr. A. Arulkanthan – Parasitology
07. Dr. Anil Pushpakumara – Reproduction
08. Dr. S. Samarakoon – Clinical Practice
09. Dr. H. Kothalawela – Microbiology
10. Dr. W. Samarasinghe – Special member representing Local manufactures
11. Dr. M.D.N. Jayaweera – Registrar

Nine committee meetings of VDCA and thirteen 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 registered veterinary pharmaceutical products up to September 2019 was updated in the DAPH website.

a. New products registered in VDCA

New pharmaceuticals and biological products registered in 2019 are as follows.

Table 8.5: Imports for free sales

Pharmacological type	Dosage Form	Number registered
Antibiotics	Injectable	08
	Oral preparations	04
Antiparasitic- Ectoparasitics	Injectable	01
	Oral	01
	Dog Collar	01
Anticoccidial	Oral	02
Anelgesics (Anti-allergy)	Injectable	01
Antihistamin	Injectable	01
	Oral	01
Anthelminthic	Oral	03
Glucocorticoid	Ear drop	01
Vaccines- Poultry	Oral	03
	Parenteral	06
Supplements		
➢ Vitamins and minerals	Injectable	01
➢ Energy and electrolyte	Injectable	01
➢ Minerals and energy	Injectable	01
Hormones	Injectable	02
NSAID	Injectable	02
Disinfectant (farm use)		05
Herbal wound topical application	Topical application	01
Total		**46**

Table 8.6: Local manufacture for free sales

Pharmacological type	Dosage Form	Number registered
Anthelminthics	Oral	05
Antibiotics	Powder	01
Antibiotic ear drop	Ear drop	01
Herbal wound spray	Topical application	02
Keratolytic	Topical application	01
Herbal insect repellent	Topical application	01
Total		**11**

a. Invoice approvals

During the year 626 invoices were approved by VDCA, to import veterinary pharmaceuticals and biological products for the worth of 2,716 Million Sri Lankan rupees.

b. User permit approvals

Table 8.7: User permit approvals

Species	Pharmacological type	Issued
Poultry	Vaccine	38
Equine	Fly Repellent	01
	Soothing embrocation	02
	Anthelminthic	01
	Topical application	04
Bovine	Vaccine	12
	Hormone	09
	Hormonal devices	06
Wild animal	Sedatives	02
Zoo animal	Sedatives	03
Swine	Vaccine	04
Pigeon	Anthelminthic	01
Canine	Sedatives	02
	Topical application	04
	NSAID	02
	Anthelminthic	01
	Repellent	01
	Urinary incontinence agent	01
	Supplement & probiotics	03
	Ear drop	02
	Sedatives and analgesic	02
Feline	Vaccine	03
Fish	Vaccine	01
Total		**105**

8.5. Implementation of Animal Feed Act

Under the provisions of Animal Feed Act No 15 of 1986 and its regulations and its subsequent amendment No. 15 of 2016 activities have been carried out to regulate the manufacture, import, export, sale and use of animal feeds in order to ensure the quality at local market.

Appointed Animal Feed Advisory Committee and Feed Registrar during the year 2018 are conducted their activities in 2019 also.

Table 8.8: Members functioned as the members of AFAC in 2019

Name	Position of the committee	Designation
1. Dr. Nihal Wedasinghe (Jan- April) 2. Dr K. D. Ariyapala (May- Dec)	Chairman	Director General, Department of Animal Production & Health
3. Professor S.S.E. Ranawana	Member	Animal Nutritionists, former Professor, Wayamba University of Sri Lanka
4. Professor K. Samarasinghe	Member	Animal Nutritionists, professor in Animal Science, University of Peradeniya
5. Professor J.M.P. K. Jayasinghe	Member	Aquatic Specialists, former Professor, Wayamba University of Sri Lanka
6. Dr. W.M.P.B. Weerasinghe	Member	Animal Nutritionist, Veterinary Research Officer, Veterinary Research Institute
7. Dr (Mrs) W.I.P.Peiris	Member	Veterinary Surgeon, Ministry of Livestock Development
8. Dr. W. Samarasinghe	Member	General Manager, Super Feed Pvt. Ltd
9. Dr. N. Priyankarage	Registrar	Registrar, Animal Feed

a. Table 8.9: Renewals/ new licenses for animal feed

Activity	Number of products
Renewal of animal feeds	1,936
New licenses issued; ➢ for animal feed manufacture ➢ for animal feed imports	 190 533

b. Collection of Turn over Returns

Table 8.10: Compound animal feed production by type: 2018 – 2019

Type of feed	Quantity 2018 (MT)	Quantity 2019 (MT)
Poultry feed	771,773.76	799,697.91
Cattle feed	40,737.38	59,576.78
Calf feed	22,460.14	1,294.08
Pig feed	1,311.42	1,748.94
Shrimp/Fish feed	1,020.17	406.38
Horse feed	290.00	225.05
Goat feed	95.00	125.49
Other feed	654.97	841.66
Total feed production	**838,342.84**	**863,916.29**
Self-mixed	489, 876.92	436,904.10
Total	**1,328,219.76**	**1,300,820.39**

** Source: TOR -2019 (by Registered Animal feed manufacturers)*

There was a 2% reduction in both total poultry feed and total feed production in 2019.

Animal feed premixes manufactured in 2018 was 18.27 MT where as in 2019 it was increased to 65.78 MT.

c. Usage of raw materials

Details of the raw materials used by the registered feed manufacturers are given in *Annexure XIII.*

Table 8.11: Poultry feed production by category (2018 - 2019)

Type of poultry Feed	Quantity 2018 (MT)	Quantity 2019 (MT)
Chick starter	10,138.95	11,902.94
Layer grower	26,911.38	29,926.37
Layer	119,217.86	113,230.51
Total layer feed	**156,268.19**	**155,059.82**
Broiler booster & starter	187,138.41	197,737.52
Broiler grower, finisher & withdrawer	334,613.01	377,772.67
Total broiler feed	**521,751.42**	**575,510.19**
Broiler breeder	58,137.05	46,642.00
Layer breeder	35,617.1	22,485.90
Total breeder feed	**93,754.15**	**69,127.90**
Total poultry feed	**771,773.76**	**799,697.91**

** Source: TOR - 2018 (by Registered Animal feed manufacturers)*

d. Implementation of BSE regulations on animal feed imports

Screening verified and approval was given to import 31,651.74 MT of meat and bone meal from the countries which were declared as Bovine Spongiform Encephalopathy disease risk is negligible.

e. Export of animal feed

Vitamin and mineral premixes and vitamin E were exported to the South Asian countries (India and Bangladesh) by two large scale premixing manufacturers and two small scale manufacturers. Total number of veterinary export certificate issued 777 Total quantity exported 31,415.579 MT as powder form and 238,365 Liters as liquid form.

8.6. Animal identification and traceability programmed

Necessary inputs (105,900 ear tags, 42,500 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 131,007 cattle were ear tagged during the year 2019.

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 951 and actual cadre position was 766 *(Project I: 206 Project II:320 and Project III: 240*) Details of cadre positions are given in the *Annex XIV*.

9.3. Approval from the management service

A Post of Laboratory Scientist has been approved by the Management Services Department on 10/08/2019.

9.4. Appointments

Following new appointments were made during the year 2019.

Director General
Additional Director General (Administration)
Technical Officer - 03

9.5. Recruitments

Mechanic – 01
Field Assistant - 13

9.6. Promotions

Promotions given during the year are as follows;
Livestock Officer -01
Livestock Development Officer - Tech-01
Development Officer - 12
Drivers-1
Field Assistant – 13

9.7.Transfers

Details of veterinary surgeon transfers are stated below;

Transfer to national DAPH- 14
Transfer from national DAPH – 02

9.8. Retirements

Details of staff members who have retired from the service in 2019 are as follows;

Director General	01
Director General (Administration)	01
Chief Animal Quarantine Officer	01
Livestock Officer	01
Research Assistant (special)	01
Research Assistant I	01
Public Management Assistant	02
Laboratory Assistant	02
Office Employee Service	01
Drivers	05
Field Assistant	05

9.9. Resignations

Livestock Development Officer - Tech-02
Veterinary Surgeon – 01

9.10. Vacation of Post

Veterinary Surgeon – 01

Veterinary Research Officers - 03
Public Management Assistant – 01
Livestock Assistant – 01
Office Employee Service – 01
Field Assistant - 01

9.11 Releases from the DAPH on permanent basis

Livestock Development Officer - Tech-04
Development Officer – 01
Laboratory Assistant - 01

9.12 Loans Approved

Type of loan	No.	Amount (Rs.)
Distress Loan	226	20,185,130.00
Property Loan	09	21,512,552.00

9.13 Insurance Payments

During the year 2019, **226** applications were approved for "Agrahara" insurance scheme.

10. FINANCE DIVISION

10.1. Introduction

The Departmental Head pertaining to the financial activities for the year 2019 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 2019 are as in *Annex XV*.

A sum of Rs. 586.76 million for the recurrent expenditure and Rs. 888.00 million for the capital expenditure was received by the Department for the year 2019, totaling Rs. 1,474.76 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.)	574,000,000	12,766,000	586,766,000	580,708,017	98.97%
Capital (Rs.)	724,000,000	164,000,000	888,000,000	793,458,071	89.35%
Total (Rs.)	1,298,000,000	176,766,000	1,474,766,000	1,374,166,088	93.17%

Allocations received from other Ministries and Departments

Vote	Allocation (Rs.)	Expenditure (Rs.)	Percentage of the expenditure
104-01-02-00-1003	1,020,000	890,170	87%

10.3. Public Servants' Advance Account "B"

	Limits of the Annual Estimates (Rs.)	Actual Value (Rs.)
Balance carried forward		**92,527,557.13**
Maximum debit limit	40,000,000.00	42,225,574.68
Minimum credit limit	23,000,000.00	31,253,172.44
Maximum limit of the debit balance	120,000,000.00	92,527,557.13
Credits not affecting the limits		3,474,805.00
	Balance brought down	**103,499,959.49**

10.4. General Deposit Account

The balance of the General deposit account of the Department as at 31.12.2019 was Rs.25, 105,774.36

It was prepared as follows:
6000-0-0-1-0-110 **940,937.65**
6000-0-0-13-0-106 **5,581,763.89**
6000-0-0-16-0-98 **17,445,284.82**
6000-0-0-2-0-153 **1,137,788.00**

10.5. Departmental Income

The income received by the Department for the year 2019 is given in *Table 10.1*.

Table 10.1: Departmental income – 2019

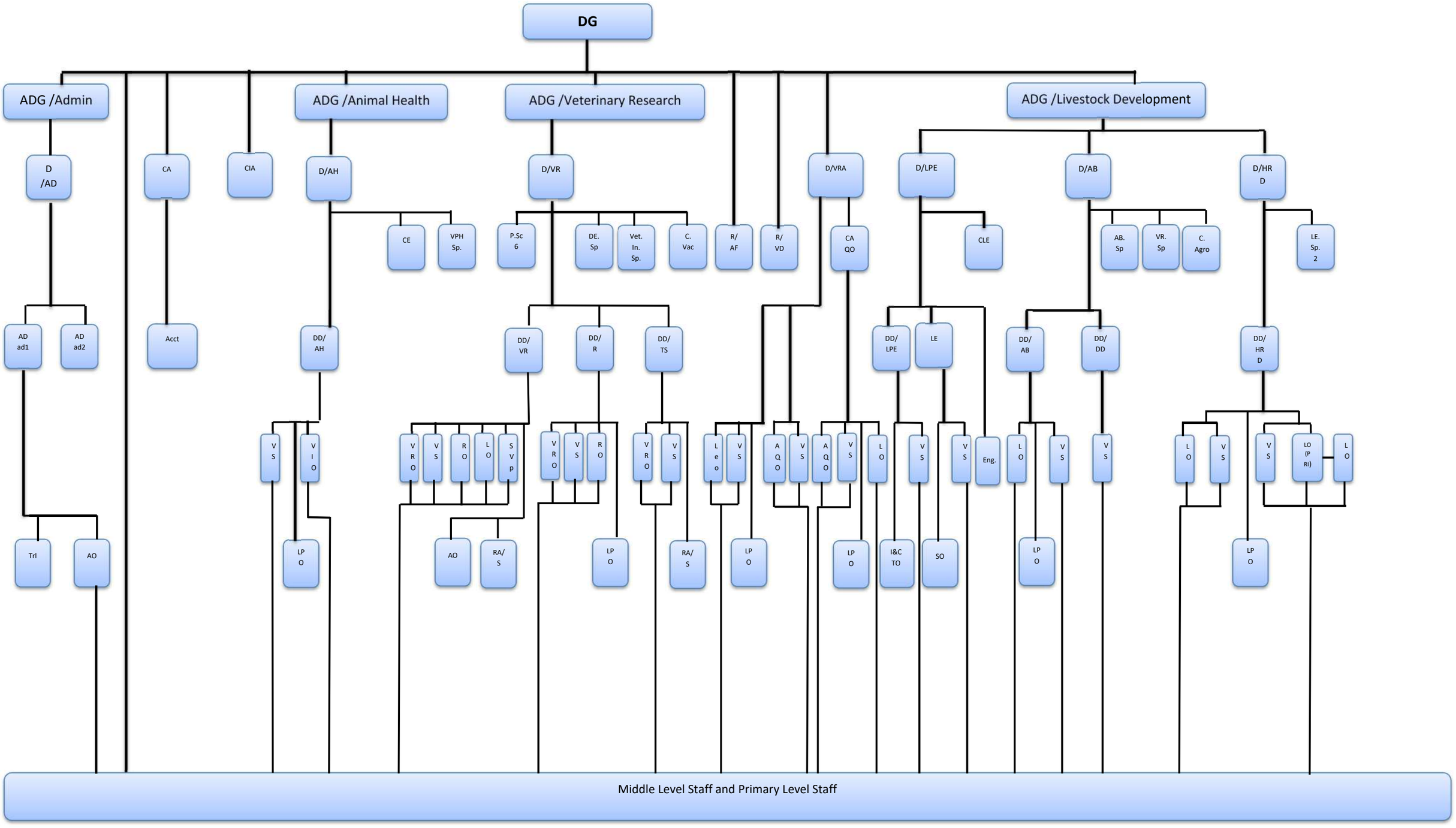
Income Subject No.	Particulars of the income	Total income received * (Rs.)
2002-01-00	Home rent	8,918,660.00
2002-02-99	Loan interest	3,633,916.00
2003-01-00	Departmental sales	14,648,661.00
2003-02-99	Other receipts	3,557,462.00
2003-04-00	Public officer's motorcycle premium	10,000.00
2003-99-00	Other receipts	34,562,257.00
2004-01-00	Social security contributions	19,643,035.00
	Total	**84,973,991.00**

*Revised

Rs.1, 303.570 million was obtained from the Treasury for the activities of the department and Rs.84.97 million received as income, miscellaneous revenue and there was no balance.

Annexures

Organizational Structure



Other Staff : BA , DO, DA, Le.Ass, Pro.Ass., Pro.Ass.Com, TO, Drftm, RA, PMA, LIB, LDO

Dri, Tra.Ope., LA, Mech, BO, GL, SL, Watc, Ban.Kee., O.E.S, Car, Elec, BBC, MM, GC, AG, LM, ACA, FA

Annexure I

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

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

Other Staff

BA	-Budget Assistant
DO	-Development Officer
DA	-Development Assistant
Le.Ass	-Legal assistant
Pro.Ass.	-Programming Assistant
Pro.Ass.Com	-Programming Assistant (Communication)
TO	-Technical Officer
Drftm	-Draftman
RA	-Research Assistant
LIB	-Librarian
PMA	-Public Management Assistant
LDO	-Livestock Development Officer
Dri	-Driver
Tra.Ope.	-Tractor Operator
LA	-Laboratory Aide
Mech	-Mechanic
BO	-Boiler Operator
Car	-Carpenter
Elec	-Electrician
Ban.Kee.	-Bungalow Keeper
O.E.S.	-Office Employment Service
GL	-Gardening Laborer
SL	-Sanitary Laborer
Watc	-Watcher

BBC	-Bast Bullock Care – taker
MM	-Milk Man
GC	-Goat Care – taker
AG	-Animal Guardian
LM	-Lawn Mower
ACA	-Animal Control Aide
FA	-Field Assistant

Annexure II

Key Data on the Poultry Industry (2018-2019)

Activity	2018	2019	Growth (%)
1. Procurement of Grand Parent and Parent stock			
Grand Parent Stock (Broiler)	28,986	37,116	28.05
Parent Stock ('000)			
Broiler	1,442.92	1,448.04	0.35
Layer	68.51	94.81	38.39
2. Production of Day - Old Chicks (Mn)			
Broiler	156.99	167.99	7.00
Layer	7.59	7.73	1.84
3. Production of Poultry Feed (1000 MT)	1,326.25	1,258.04	-5.24
4. Export of Poultry Products			
Day- Old Chicks	121,890	219,299	79.91
Chicken and Chicken Products (MT)	171.75	451.71	163.00
Table Eggs	5,632,780	9,333,416	65.70
Hatching Eggs	227,120	283,680	24.90
5. Import of Poultry Products			
Chicken and Chicken products (MT)	237.02	229.55	-3.15
Egg Products (MT)- Egg Powder/Egg Albumin	13.24	19.63	48.26
- Liquid Egg	17.92	0.00	-100.00

Detail Information on Activites Performed at Veterinary Investigation Centers - 2019

Annexure III

Programme	Activity	Annual Target	Achievement	Percentage %
1. Disease investigation	1.1 Field investigation	620	474	76
	1.2 Sample collection for testing	3,100	3,647	100
	1.3 Investigation reports	620	466	75
	1.4 Follow-up / further investigation	290	228	79
2. Laboratory service for disease diagnosis	2.1 Post-mortem examinations			
	- Poultry (No. of birds)	5,115	4,131	81
	- Other species	430	390	91
	2.2 Testing of samples			
	- Bacteriological (culture)	5,660	3,995	71
	- ABST	2,450	2,188	89
	- Parasitological - Blood	6,350	6,127	96
	- Fecal sample	3,395	2,826	83
	- Skin	170	108	64
	2.3 Milk analysis (including PPRS)	17,135	16,332	95
	- CMT on request	6,220	6,846	100
	2.4 Samples dispatch for further testing	1,405	2,338	100
3. Vaccine Production & Va	3.1 CPD vaccine (No. of farms)	275	188	68
	3.2 Wart vaccine (No. of Animals)	805	558	69
	3.3 Babesiosis vaccine (No. of Animals)	3,560	1,251	35
4. Supply of lab. Inputs to veterinary offices	4.1 CMT reagent (Litre)	580	579	100
5. Dairy farm health improvement project	5.1 New farm registration	90	88	98
	5.2 No. of total registered farm	2,410	2,380	
	5.3 Farm visited	2,475	1,832	74
	5.4 Mastitis screening (CMT)	19,000	15,383	81
	5.5 Milk sample testing (ABST)	2,075	903	44
	5.6 No. of sample tested for Helmenthiosis	9,500	6,451	68
	5.7 Teat dip solution issued (L)	4,770	5,884	100
	5.8. Issuing of udder infusion vials (free issue)			
	Lactating cow	27,898	17,389	62
	Dry cow	6,800	2,887	42
6. Brucellosis control programme	6.1 Screening dairy herds (MRT)	2,860	2,657	93
	6.2 Animal screening in suspected herds (RBPT)	2,355	1,582	67
	6.3 No. of samples submited for CFT	670	570	85
	6.4 Vaccination of animals S19	7,500	6,931	92
7. Salmonella Control programme	7.1 No of Breeder farm to be monitered	69	69	100
	7.2 No of Breeder farm visits	138	104	75
	7.4 No of hacheries to be visited	46	46	100
	7.5 No of Hatchey visits	184	134	73
	7.6 No of Hatchey samples tested	13,800	10,346	75
8. Avian Influenza surveillance programme	8.1 No of serum samples	5,190	4,722	91
	8.2 No of dropping samples at hotspots	5,550	4,283	77
	8.3 No of cloacal swabs (Backyard)	5,575	5,048	91
	8.4 No. of sample (live bird market)	1,500	1,272	85
	8.5 No. of Samples (Poultry processing estalishm	2,600	2,330	90
	8.6 Duck serum sample	1,070	1,135	100
	8.7 No of cloacal swabs (Duck)	1,070	1,083	100
9. No. of Animals Tested for TB	9.1 No. of PPD tests	3,415	1,645	48
10. Aquaculture	10.1 No. of sample tested	92	418	100

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1. Ranaweera, K.K.T.N., KumaraMahipala, M.B.P. and **Weerasinghe, W.M.P.B.** (2019) Influence of bypass fat supplementation during early lactation in tropical cross bred dairy cattle, Tropical Animal Health and Production. https://doi.org/10.1007/s11250-019-02140-5.
2. Sumanasekara, G.S. and **Weerasinghe, W.M.P.B.** (2019) Relationship between feeding type and the occurrence of aflatoxin M1 in milk of high yielding dairy cows, International Journal of Advances in Science Engineering and Technology, 07 (02), pp25-28.
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4. **Ubeyratne, J.K.H**., Srikitjakarn, L., Pfeiffer, D.U., Kohnle, L., Sunil-Chandra, N.P., Chaisowwong, W., & Hemwan, P. (2019) Qualitative study of stakeholder perceptions related to requirements for elimination of dog rabies in Sri Lanka by 2025, Open Science Journal, 4(1), pp1-16.

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2. **Perera, G.I.S.**, Philibert, H., Leighton, F.A., **Fernando, P.S**., Nanayakkara, S., Muthugala, R., Rajapakse, R.P.V.J. and Gunawardena, G.S.P. de S. (2019) Histological identification of neurological conditions and diseases in the brain of non-rabid dogs and cats, 71st Annual Scientific Sessions of the Sri Lanka Veterinary Association, 28th June, Oak Ray Regency, Kandy, Sri Lanka, p54.

3. **Perera, G.I.S.,** Jayawardena, B.A.D.S., Perera, B.V.P., de Silva, D., Jayasinghe, C.A., Philibert, H., Leighton, F.A., **Fernando, P.S**., Nanayakkara, S., Muthugala, R., Rajapakse, R.P.V.J. and Gunawardena, G.S.P. de S. (2019) Detection of canine distemper virus in wild animals in Sri Lanka, 71st Annual Scientific Sessions of the Sri Lanka Veterinary Association, 28th June, Oak Ray Regency, Kandy, Sri Lanka, p16.

4. **Perera, G.I.S.**, Manchanayake, S.M.T.S., Fernando, P.S., Jinadasa, H.R.N., **Bandara, H.P.V.D**., Wijekoon, W.M.S.K. and **Dulakshi, H.M.T.** (2019) Immunohistochemical detection of *Mycobacterium bovis* in formalin-fixed, paraffin embedded tissue sections. Proceedings of the Veterinary Research Institute Research Symposium, 5th December, Plant Genetic Resource Centre, Gannoruwa, Peradeniya, Sri Lanka, p11.

5. **Manchanayake, T.,** Jagoda, S., Wijesundara, K., **Perera, S**. and **Munasinghe, M**. (2019) Histopathological changes of gills observed in freshwater food fish obtained from Kandy city limits – a preliminary study, 71st Annual Scientific Sessions of the Sri Lanka Veterinary Association, 28th June, Oak Ray Regency, Kandy, Sri Lanka, p12.

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Annexure V

Names of Officers Attended Overseas Training/ Meetings/ Workshops/ Visits – 2019

Name of the officer	Designation	Course/ Program	Country and duration
Dr. N. Priyankarage	Registrar/Animal Feed	Regional workshop on animal feed safety	14th to 17th Jan. 2019 Japan
Dr. H.P.V.D.S. Bandara	Head/Central Veterinary Investigation Centre	Invitation for the 3rd regional workshop of GHSA Detect-1 (National Laboratory System)	16th to 18th Jan 2019 Thailand
Dr. L.W.N. Samaranayake Dr. S. Hettiarachchi Dr. M.D.N. Jayaweera	Director /Animal Breeding Director /Animal Health Registrar/Veterinary Drug	PVS pathway orientation training workshop for South Asia	12th to 15th Feb 2019 Bhutan
Dr. SiriyalathaMenike	Chief Animal Quarantine Officer	Sri Lanka Netherland food safety cooperation study	2nd to 9th of Feb 2019 Malaysia
Dr. P.G. Seneviratne	Deputy Director/ Animal Breeding	Workshop on underutilized animal genetic resources and their amelioration	4th to 6th March 2019 Malaysia
Dr. R. Hettiarachchi	Additional Director General /Veterinary Research	8th Asia- Pacific workshop on multi-sectorial collaboration of the animal - human ecosystems interface	9th to 11th April 2019 Bangkok, Thailand
Dr. L.W.N. Samaranayake Dr. A.M.D.N. Abeykoon	Director / Animal Breeding Veterinary Surgeon/Animal Breeding	Importation of Boar goats nominees for animal selection in Australia	4th to 12th March 2019 Australia
Dr. K.H.D.T. Kasagala	Veterinary Surgeon/ Central Veterinary Investigation Centre	Laboratory proficiency testing workshop	12th to 15th March 2019 Thailand

Dr. K.D. Ariyapala Dr. S. Hettiarachchi	Additional Director General /Animal Health Director /Animal Health	BTSF Regional workshop on animal disease preparedness	18th to 21st March 2019 Kuala Lumpur, Malaysia
Dr. K.H.D.T. Kasagala	Veterinary Surgeon/ Central Veterinary Investigation Centre	OIE Global conference on aquatic animal health	2nd to 4th April 2019 Santiago, Chile
Dr. RanganiMunasingha	Director /Veterinary Regulatory Affairs	Seminar on safety governance of agricultural livestock & fishery products for Asian countries	26th May to 1st June 2019 Korea
Dr. G.A. Gunawardana	Veterinary Research Officer/Veterinary Research Institute	SAARC Regional training on "molecular diagnosis and laboratory surveillance of PPR"	21st to 26th July 2019 Dhaka, Bangladesh
Dr. P.S. Fernando Dr. G.M.C.R. Karunarathne	Veterinary Surgeon/Head, Bacteriology Division Veterinary Investigation Officer, Wariyapola	Hands on training on standardized and harmonized surveillance methods for antimicrobial resistance in food in South Asia	28th to 31st May 2019 Bangkok, Thailand
Dr. K.D. Ariyapala	Director General	87th General session of the world assembly of national delegate of the OIE	26th to 31st May 2019 Paris, France
Dr. K.P.G.K. Badralatha	Director /Veterinary Research	Regional seminar for OIE national focal point for veterinary laboratories	16th to 23rd June 2019 Thailand
Dr. S.A.A.P. Samarasundara	Veterinary Surgeon/ Livestock Planning &Economics	Rural development through creating agricultural value chain	11th June to 8th August 2019 Japan
Dr. E.R.R Wimalasinghe	Veterinary Investigation Officer/Pannala	The first SAARC regional animal health laboratory technical advisory group (Lab- TAG) meting	17th to 18th June 2019 Chiang Mai, Thailand

Dr. G.S.P.D.S. Gunawardena Dr. B.C.S. Perera Dr. P.L. Kumarawadu	Senior Lecturer, University of Peradeniya Additional Provincial Director (NWP) Veterinary Surgeon/ Animal Health	In-country stepwise approach towards rabies elimination (SARE) workshop.	26th to 28th June 2019 Nepal
Dr. R. Hettiarachchi Dr. G.G.I.A. Jayawickrama	Additional Director General /Veterinary Research Veterinary Surgeon/ Animal Health	The seventh meeting of the SAARC chief veterinary officers' (CVOs) forum	23rd to 24th July 2019 Pakistan
Dr. K.D. Ariyapala	Director General	Poultry industry field visit and 2019 emergency poultry disease response (EPDR) course	22nd June to 05th July 2019 USA
Dr. P.S. Fernando Dr. N. Priyankarage	Veterinary Surgeon, Head, Bacteriology Division Registrar/ Animal Feed	The 1st meeting of the AMR technical advisory group(TAG) of South Asia	19th to 21st August 2019 Thailand
Dr. R. Hettiarachchi	Additional Director General /Veterinary Research	Technical assistance to the modernization of agriculture program stakeholder tour	10th to 18thAugust 2019 Vietnam
Dr. SarathPriyantha	Veterinary Surgeon/ Livestock Planning &Economics	Regional training of trainers on management of agriculture, livestock and forest based water pollution	28th to 31st May 2019 Nepal
Dr. K.D. Ariyapala	Director General	31st Conference of the regional commission for Asia, the Far East and Oceania	2nd to 6th Sep 2019 Japan
Dr. (Mrs.) Mayurathi Theivendran	Veterinary Investigation Officer/Trincomalee	System & species diversification	14th to 22nd Sep 2019 Vietnam
Dr. S.S.P. Silva	Director /Livestock Planning and Economics	Establishment of international collaborating center for tick - borne protozoan diseases	22nd to 27th Sep 2019 Japan
Dr. L.W.B. Epakanda	Deputy Director/Animal Health	South Asia one health disease surveillance network workshop	19th 20th Sep 2019 Bhutan

Dr. Sumathy Puvanendiran	Veterinary Research Officer/ Polgolla	OIE Regional expert group meeting for diseases of poultry in Asia and the Pacific region	3rd to 4th Oct 2019 Japan
Dr. W.A.S.D. Weerasooriya	Deputy Director/ Kurunegala	Feed milling technology forum	11th to 12th Sep 2019 India
Mr. C.I. Sakalasooriya	Assistant Director /Administration	Public policy development and public engagement program	26th to 30th Aug 2019 Singapore
Dr. A.P. Wickramasingha	Veterinary Surgeon/ Veterinary Research Institute	Factory acceptance test	07th to 10th Oct 2019 USA
Dr. K.D. Ariyapala Dr. A.G. Liyanagamage	Director General Veterinary Surgeon, Deputy Director / Institute of Continuing Education	Regional training workshop for public private partnerships in the veterinary domain	17th to 18th Oct 2019 Nepal
Dr. Hemal Kothalawala Dr. G.G.I.A. Jayawickrama	Veterinary Research Officer/ Polgolla Veterinary Surgeon/ Animal Health	FMD vaccine - pre shipment inspection and proceedings	3rd to 6th Dec 2019 India
Dr. K.D. Ariyapala	Director General	the 79th executive committee of APHCA and the 42nd APHCA session	4th to 7th Nov 2019 Malaysia
Dr. M.A.R. Priyantha	Veterinary Research Officer/ Veterinary Research Institute	BTSF training on sampling & analysis: course residues of VMP - TS03	11th to 22nd Nov 2019 Porto, Portugal
Dr. P.L. Kumarawadu	Veterinary Surgeon/ Animal Health	OIE Regional workshop for OIE focal points for animal welfare in the region of Asia and the Pacific	11th to 14th Nov 2019 Bali, Indonesia
Dr. T.C. Rathnayake Dr. S.S.P. Silva	Additional Director General/Livestock Development Director /Livestock Planning &Economics	Regional workshop for supporting analytical capacity in the livestock sector in Asian countries using LSIPT and GLEAM -1	26th to 29th Nov 2019 Thailand

Annexure VI

Payments for Local Trainings - 2019

Name of the officer		Course/ Programme	Finance/Leave
01	Dr.(Mrs) A.P.Wickramasinghe	Administrative Law	Both
02	Dr.(Mrs) V.R.N. Munasinghe	Administrative Law	Both
03	Dr.(Mrs) V.G.V.S.S. Kumara	Certificate Course of Data Analysis	Finance only
04	Dr.(Mrs) V.G.V.S.S. Kumara	Certificate Course of Research Methodology	Finance only
05	W.M.W.S.L. Wickramasinghe	MSC in Agriculture Economic	Both
07	J.K. Amarasinghe	Certificate Course of Machinery	Finance only
08	W.M.R.B. Weerakoon	Certificate Course of Diesel generator maintenance	Both

Annexure VII

Details of Examinations Conducted in 2019

No	Name of the exam	Number of applicant	Number of exams
01	Second year final exam for 2017/2019 Animal Husbandry Diploma batch in SLSAH- Karandagolla & Seeppukulama	120	01
02	Department exams of veterinary surgeon employed at NLDB (on request)	04	01
03	English oral exams for Livestock Development Officers/Research Assistants/Development Officers/Management Assistants/Laboratory Assistants.	38	04
04	Recruitment exam for technical officers for DAPH	63	01
05	Department exams 1 & 11 for livestock development officers in Sabaragamuwa province (Coordination with provincial public service commission & other authorities)	15	01
06	Department exams 1 & 11 for livestock development officers in North Central province, Central province and Uva Province (Coordination with provincial public service commission & other authorities)	65	02
07	First year repeat exam for 2017/2019 Animal Husbandry Diploma batch in SLSAH- Karandagolla	12	01
08	Second year repeat exam for 2017/2019 Animal Husbandry Diploma batch in SLSAH- Karandagolla	15	01
09	Second year (Oral Project) exam for 2017/2019 Animal Husbandry Diploma batch in SLSAH- Seeppukulama / Karandagolla	117	01
10	Second year repeat (Oral Project) exam for 2017/2019 Animal Husbandry Diploma batch in SLSAH- Karandagolla	06	01
11	Recruitment exam for students for SLSAH- Karandagolla	105	01
12	Third Efficiency Bar Examination of AP&H Service - Class I officers	333	01

Provincial Activities

Annexure VIII

Progress of Services / Activities of Provincial DAPH -2019

Dispensary Cases	WP	CP	SP	NP	EP	NWP	NCP	UP	SP	Total
Cattle /Buffalo	4,509	3,442	6,404	26,887	12,092	27,504	8,543	3,842	2,901	**96,124**
Goat / Sheep	3,360	2,275	1,549	36,410	11,185	10,632	2,229	700	1,550	**69,890**
Pig	1,023	1,458	293	162	191	2,476	681	79	120	**6,483**
Poultry	60,712	38,045	29,307	408,913	122,714	762,335	29,277	26,093	29,834	**1,507,230**
Pet Animal	39,188	12,708	16,973	33,327	2,714	18,630	3,957	3,277	4,984	**135,758**
Other	912	1,970	292	4,268	579	615	160	65	198	**9,059**
Total	**109,704**	**59,898**	**54,818**	**509,967**	**149,475**	**822,192**	**44,847**	**34,056**	**39,587**	**1,824,544**

Field Cases	WP	CP	SP	NP	EP	NWP	NCP	UP	SP	Total
Cattle /Buffalo	9,973	12,017	9,884	19,917	16,900	31,820	12,846	9,495	6,884	**129,737**
Goat / Sheep	5,151	3,139	2,782	8,576	9,462	7,219	5,007	763	2,751	**44,850**
Pig	5,662	5,680	674	283	216	3,084	1,052	580	594	**17,825**
Poultry	22,292	10,587	17,968	55,665	99,932	27,912	22,327	27,038	34,203	**317,924**
Pet Animal	448	26	269	354	337	19	14	319	66	**1,852**
Other	1,055	19	15	13	204	78	-	1	907	**2,292**
Total	**44,581**	**31,468**	**31,592**	**84,808**	**127,051**	**70,132**	**41,246**	**38,196**	**45,405**	**514,480**

Issue of Health Certificates	WP	CP	SP	NP	EP	NWP	NCP	UP	SP	Total
Cattle /Buffalo	864	1,493	713	2,278	6,331	706	1,314	1,534	320	**15,553**
Goat	336	561	229	975	1,482	346	492	141	257	**4,819**
Pig	242	108	173	85	42	131	27	9	56	**873**
Other	7	3	15	24	-	53	3	1	10	**116**
Total	**1,449**	**2,165**	**1,130**	**3,362**	**7,855**	**1,236**	**1,836**	**1,685**	**643**	**21,361**

Annexure IX

Milk Collection by Main Milk Collecting Organizations 2018 - 2019

Province	District	Milk Collection Lts.	
		2018	2019
Western	Colombo	1,340,386	1,382,609
	Gampaha	5,069,780	4,767,725
	Kalutara	1,668,373	1,461,951
	Total	**8,078,539**	**7,612,285**
Central	Kandy	12,027,309	11,669,940
	Matale	12,180,638	10,424,347
	Nuwara-Eliya	49,968,776	51,903,237
	Total	**74,176,723**	**73,997,524**
Southern	Galle	919,237	871,251
	Hambantota	15,755,909	12,388,580
	Matara	945,469	734,844
	Total	**17,620,615**	**13,994,675**
North Central	Anuradhapura	34,607,875	34,550,668
	Polonnaruwa	11,169,159	12,125,016
	Total	**45,777,034**	**46,675,684**
North Western	Kurunegala	43,024,495	40,533,867
	Puttlam	10,505,857	8,804,138
	Total	**53,530,352**	**49,338,005**
Northern	Jaffna	7,582,851	7,418,509
	Kilinochchi	3,485,072	2,385,177
	Mannar	2,064,254	891,309
	Mullativu	5,431,239	2,468,986
	Vauniya	5,243,540	4,195,795
	Total	**23,806,956**	**17,359,776**
Eastern	Ampara	7,730,803	6,988,357
	Batticaloa	8,819,330	3,590,780
	Trincomalee	5,846,759	1,722,903
	Total	**22,396,892**	**12,302,040**
Uva	Badulla	16,999,569	15,431,932
	Moneragala	4,688,634	4,658,227
	Total	**21,688,203**	**20,090,159**
Sabaragamuwa	Kegalle	336,501	326,431
	Rathnapura	1,849,107	1,707,960
	Total	**2,185,608**	**2,034,391**
			-
Island Total		**269,260,920**	**243,404,539**

*** Collection details recived from ;**

* Milco (Pvt)LTD
* Nestle Lanka Ltd.
* Kotmale Dairi Product (Pvt) Ltd
* Ambewela Products
* CIC Dairies Pvt. Ltd
* Pelwatte Dairy Industries Ltd.
* Polonnaruwa Milk Co-op Society
* Cargills Quality Dairies
* Fontera Brands Lanka Pvt. Ltd
* Lanka Dairies (Pvt) Ltd
* Richlife Dairies Ltd.
* Chello milk products.
* Pattipola Livestock
* NLDB

Annexure X

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2019

Type of Animal /Animal- product			No. of consignments inspected		Quantity arrived (No. / MT)	
			2018	**2019**	**2018**	**2019**
1.	DOC	- Grand parents	07	07	139,891	59,439
		- Layer parents	14	24	120,770	112,908
		- Broiler parents	36	27	442,350	341,287
2.	Meat	- Poultry	26	16	239.69	229.66
		- Beef	44	37	193.52	170.63
		- Mutton	29	43	374.29	672.80
		- Lamb	36	35	185.47	209.93
		- Pork	07	11	123.76	162.01
		- Duck	14	13	23.39	37.21
		- Turkey	07	03	50.25	15.09
		- Casings	03	02	3.5	2.24
		-Goat meat pro.	12	10	206.34	278.15
3.	Meat and bone meal		216	210	29,455.28	27,914.180
4.	Ornamental fish (marine+–fresh water)		373	329	3,467,960 47 boxes	12,352,578 25 cartons

Annexure X cont….

Details of Consignments (Imports) Subjected to Quarantine Surveillance in 2019

Type of Animal /Animal- product		No. of consignments inspected		Quantity arrived (No. / MT)	
		2018	**2019**	**2018**	**2019**
5.	Cattle	01	--	246	--
	Zoo animals	02	8	05 (1-Parrot/4-Kangaroo)	45 (4-Blue Bull/1-Jaguar/9-Kangaroo/4-Blach Buck/21-Snakes/2-Cheetah/4-Rabbits
	Horses	04	02	36	10
	Pet birds	13	22	603	1,132
	Live shrimps	03	09	446	1,296
	Live corals	--	01	--	200
	Goat	--	03	--	100
6.	Dogs/Cats	307	321	481	463
7.	Fish meal	127	139	5,175	6017.61
8.	Prawn feed	253	244	12,581.62	8980.3
9.	Tallow	32	12	4,616.05	476.56
10.	Gelatin	65	56	630.58	625.98
11.	Egg powder	07	05	11.04	19.63
12	Egg albumin	02	--	1.3	--
	whole liquid egg	01	--	17.92	--

Annexure X cont….

Details of Consignments (Imports) subjected to Quarantine Surveillance in 2019

Type of Animal /Animal- product		No. of consignments inspected		Quantity arrived (No. / MT)	
		2018	**2019**	**2018**	**2019**
20.	Vaccines	127	135	3,810,607,700 doses/ 38.66 MT/ 603,000 ml/16,747,550 vials	9,597,662,506 doses/ 9.7 MT/ 688 ml/3,046 pkts/77,756 vials/ 6,500 tablets/ 15 cartons
21.	Veterinary drugs	139	161	293.52	394.4
22.	Semen	07	03	11,100 doses	8,100 doses
23.	Yoghurt culture	06	07	0.71	0.17
24.	Test kit	09	12	104	197
25.	Veterinary products	05	22	0.22	2.96 MT/ 4,736 890 doses/ 3,445 pkts

Annexure XI

Details of Consignments Detained / Destroyed due to absence of Import Permit in 2019

No	Type of consignment	Country of origin	Quantity due to absence of Import Permit Kg / No.	Action taken
1	Live fish	Thailand	1,012 Fish	Destroyed
2	Live fish	Thailand	39 No's	Destroyed
3	Prawn feed	Thailand	84 Tins	Destroyed
4	Frozen chicken leg	Thailand	10,970 Kg	Re-export
5	Live fish	Singapore	160 Fish	Destroyed
6	Live birds	Thailand	-	Re-export
7	Frozen blood worms & bird feed	Singapore	30 Kg 15 Kg	Destroyed

Annexure XII

Export of Animals and Animal Products 2019

Category		Number/ Quantity (MT) in 2018	Number/ Quantity (MT) in 2019
	Item		
01	Ornamental fish	28,163,682 (tails)	32,567,855 (tails)
02	Dogs (Travelled with owners)	176- nos	211- nos
03	Cats (Travelled with owners)	66 -nos	90-nos
04	Poultry –DOC	155,428	210,868 -nos
05	Pet birds	655- nos	1,715 no. (1,615- Pet birds/50 Ducks/ 50 Turkeys
06	Zoo animals	12 –nos (2- Anaconda/ 10 – Goats)	147 no. (15- Guinea pigs/20-Black swans/110- Rabbits/ 2 Jungle cats
07	Animal products-meat and meat products	3,910.81	4,635.11
08	Table eggs	5,632,780	9,333,416- nos
09	Hatching eggs	286,520	363,600 -nos
10	Animal byproducts- Artistic brushes/dog chews/elephant dung papers/hat/hat parts/chank Drums Bone grits/cattle bone and crushed/dry crab shells/enzymes/cattle feed/gelatin	1,589,338 pieces 19 44.47	1,656,032 pieces 9 88.32
11	Leather	2.85	5.54

Annexure XIII

Raw Material Usage in Animal Feed Production – 2019

Raw Material	Local Purchased Quantity (MT)	Imported Quantity (MT)
A. Cereal		
1. Maize	202,784.27	102,895.29
2. Other	52,967.70	3,237.00
B. Cereal By-Product		
1. Rice Polish/Rice Bran	70,699.40	
2. Broken Rice	22,396.40	
3. Wheat Bran	50,385.30	1,738.00
4. DDGS	92.00	896.00
5. De-Oiled Rice Bran	620.00	
6. Wheat Flour	6,976.00	
7. Other	23,721.70	37,123.00
C. Plant Protein Supplement		
1. Soya Bean meal	31,980.17	153,817.24
2. Coconut Meal	5,622.10	
3. Palm Kernel meal	835.00	
4. Sun Flower Meal		184.00
5. Other	1,686.00	
D. Animal protein supplement		
1. Fish meal	2,486.80	846.00
2. Meat & Bone Meal	6,334.85	25,530.51
3. Poultry Offal	1,983.00	
4. Other	3,250.33	15.00
E. Urea	190.19	
F. Feed Grade Oil		
1. Palm Oil	1,858.40	137,563.00
2. Vegetable oil	60.00	10,929.80
3. Other Plant Based oil	212.84	
4. Other Animal Based Oil		561.00
G. Vitamin/ Mineral Supplements		
1. Shell Grit	166,824.44	
2. Calcium Carbonate	2,043.68	
3. Di Calcium Phosphate	1,041.08	4,196.00
4. Salt	1,260.97	180.00
5. Bio Minerals		39.00
6. Trace Elements	100.08	55.79

7. Biotin		0.70
8. Choline Cloride		124.00
9. Folic Acid		0.10
10. Vitamin Premixers	371.19	794.13
11. Vitamin Mineral Premixers	454.37	490.80
12. Other	2,422.30	255.00
H. Amino Acids		
1. Lysine/ Lysine Analogue	597.46	1,982.16
2. Methionine/ methionine analogue	543.41	1,426.46
3. Threonine		509.26
I. Additives		
1. Probiotics	46.29	62.60
2. Prebiotics	31.94	51.10
3. Exogenous Enzymes	178.51	297.24
4. Toxin Binders/Mould Inhibitors	426.05	416.69
5. Growth Promoters	32.53	405.11
6. Anticoccidials	46.89	155.06
7. Antioxidents		14.00
8. Other (Flavors/Pigments etc.)	158.67	1,539.76

Annexure XIV

Present Cadre Positions of the Department and Staff Strength as at, (2019.12.31)

S. No.	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
1	Director General	**1**	**1**	**0**	**0**	**0**
2	Additional Director General	**3**	**2**	**0**	**0**	**1**
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**	**2**	**2**	**1**
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 Directors	**8**	**0**	**1**	**0**	**7**
25	Vaccine Superintendent / AD Vaccine	**1**	**0**	**0**	**0**	**1**
26	Animal Quarantine Officers	**10**	**3**	**0**	**0**	**7**
27	Veterinary Research Officer	**24**	**0**	**20**	**0**	**4**
28	Veterinary Investigation officer	**26**	**0**	**14**	**0**	**12**

Present Cadre Positions of the Department and Staff Strength as at, (2019.12.31)

S. No.	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
29	Research Officer	**5**	**0**	**3**	**0**	**2**
30	Agriculture Economist	**1**	**1**	**0**	**0**	**0**
31	Livestock Officer	**16**	**1**	**0**	**11**	**4**
32	Livestock Economist	**1**	**0**	**0**	**0**	**1**
33	Veterinary Surgeon	**61**	**20**	**30**	**20**	**-9**
34	Civil Engineer	**1**	**1**	**0**	**0**	**0**
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**	**6**	**0**	**0**	**0**
41	Draftsman	**1**	**1**	**0**	**0**	**0**
42	Information Communication Officer	**1**	**2**	**0**	**0**	**0**
43	Livestock Development Officer- Special	**8**	**0**	**2**	**5**	**1**
44	Livestock Development Officer- Tech Service	**62**	**19**	**11**	**26**	**6**
45	Livestock Development Officer	**3**	**1**	**0**	**2**	**0**
46	Librarian	**3**	**0**	**0**	**1**	**2**
47	Development Officer	**115**	**40**	**32**	**28**	**15**
48	Development Assistant	**3**	**0**	**2**	**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**	**10**	**10**
53	Research Assistant (Special)	**7**	**0**	**2**	**0**	**5**
54	Research Assistant	**70**	**4**	**60**	**5**	**1**
55	Driver	**76**	**15**	**35**	**15**	**11**
56	Tractor Operator	**3**	**0**	**1**	**0**	**2**

Annexure XIV Cont…..

Present Cadre Positions of the Department and Staff Strength as at, (2019.12.31)

S. No.	Designation	Approved Cadre	Current			Vacancies
			Project I	Project II	Project III	
57	Laboratory Assistant	**47**	**1**	**23**	**2**	**21**
58	Mechanic	**2**	**2**	**0**	**0**	**0**
59	Boiler man	**1**	**0**	**0**	**0**	**1**
60	Carpenter	**3**	**0**	**0**	**0**	**3**
61	Electrician	**1**	**0**	**1**	**0**	**0**
62	Bungalow Keeper	**1**	**0**	**0**	**0**	**1**
63	Watcher	**3**	**0**	**0**	**3**	**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**	**3**	**11**	**4**
70	Livestock Assistant	**23**	**3**	**6**	**12**	**2**
71	Garden Laborer	**1**	**0**	**0**	**0**	**1**
72	Sanitary Laborer	**1**	**0**	**1**	**0**	**0**
73	Field Assistant	**161**	**12**	**56**	**84**	**9**
Total		**951**	**206**	**320**	**240**	**185**

Source: Administration Division

New Post Approved by the Management Services Department during the Year -2019. (10/08/2019)

Annexure XV

Financial Allocations and the Expenditure Summary - 2019

	Allocation (Rs. Mn.)	Expenditure (Rs. Mn.)	Balance at 31.12.2019 (Rs. Mn.)	Expenditure as a % of Allocation
Project 1				
Capital Expenditure	129,000,000	95,112,289	33,887,711	73.73%
Recurrent expenditure				
Personal Emoluments	466,000,000	463,208,230	2,791,770	99.40%
Other	120,766,000	117,499,787	3,266,213	97.30%
Total	**586,766,000**	**580,708,017**	**6,057,983**	**98.97%**
Project 11				
Capital Expenditure	375,000,000	331,157,025	43,842,975	88.31%
Total	375,000,000	331,157,025	43,842,975	88.31%
Project 111				
Capital Expenditure	384,000,000	367,188,757	16,811,243	95.62%
Total	384,000,000	367,188,757	16,811,243	95.62%
Total Capital Expenditure	**888,000,000**	**793,458,071**	**94,541,929**	**89.35%**
Total Recurrent Expenditure	**586,766,000**	**580,708,017**	**6,057,983**	**98.96%**
Total Capital & Recurrent Expenditure	**1,474,766,000**	**1,374,166,088**	**100,599,912**	**93.17%**

Livestock Planning and Economics Division

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LPE/2019/02