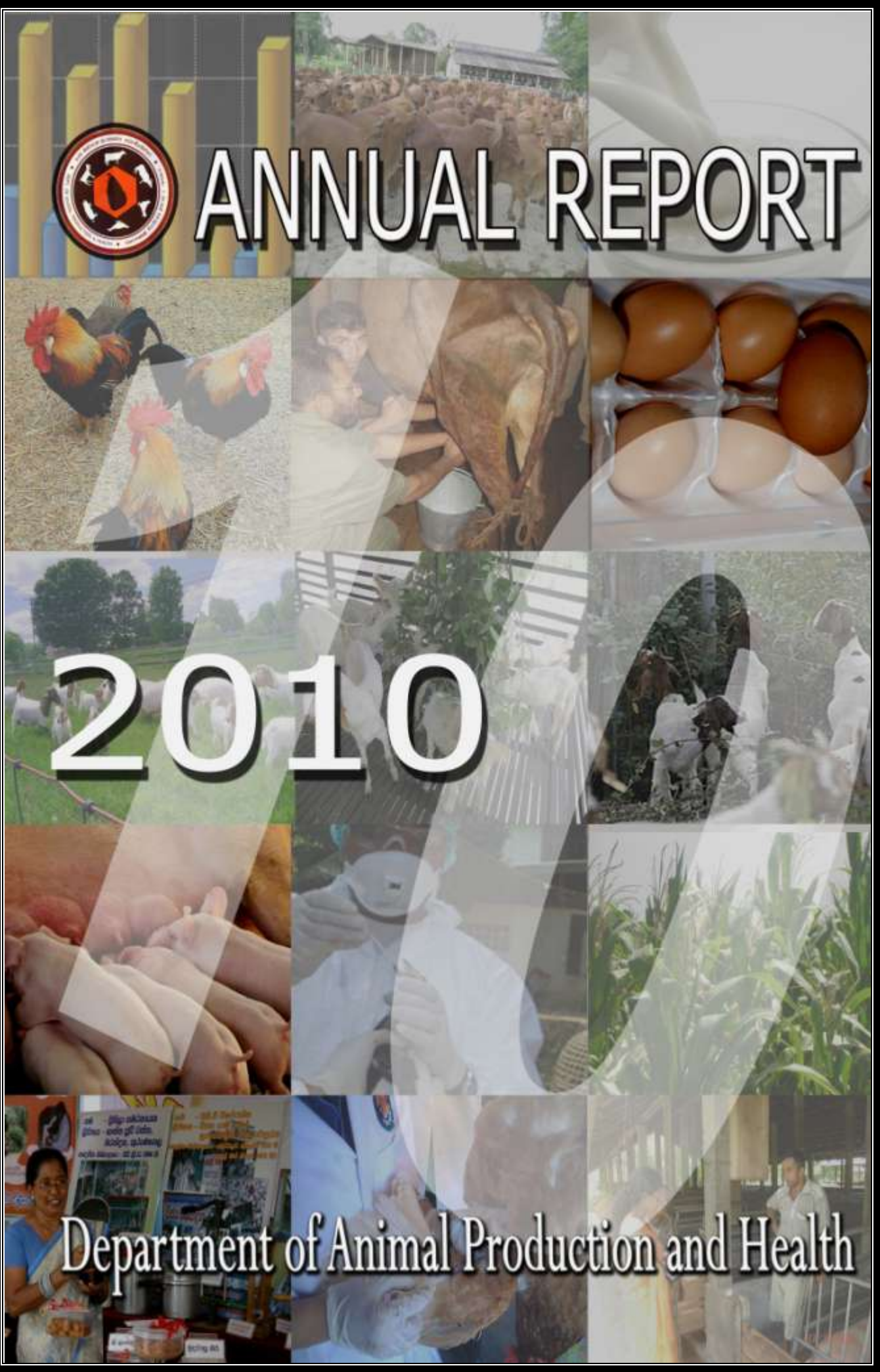




# ANNUAL REPORT

# 2010

Department of Animal Production and Health



# **ANNUAL REPORT 2010**

**Department of Animal Production and Health  
Peradeniya  
Sri Lanka  
Tel : 94 - 081 - 2388337 / 2388462  
Fax : 94 - 081 - 2388619  
Web Site: [www.daph.gov.lk](http://www.daph.gov.lk)**

# ANNUAL REPORT - 2009

## Contents

	Page No.
<b>PREFACE</b> -----	<b>V</b>
<b>VISION, MISSION</b> -----	<b>VI</b>
<b>1. Introduction</b> -----	<b>1</b>
<b>2. Livestock Sector Review</b> -----	<b>4</b>
2.1. Dairy Sector -----	4
2.2. Poultry Sector -----	5
2.3. Swine Sector -----	7
2.4. Goat Sector -----	8
2.5. Policy Decision Taken by the Government -----	9
<b>3. Animal Health</b> -----	<b>10</b>
3.1. Functions of the division -----	10
3.2. Main Activities -----	10
3.3. Animal Disease Situation -----	11
3.4. Disease Control and Vaccination Programmes -----	14
3.5. Veterinary Investigation Services -----	15
3.6. Special Animal Health Programs -----	16
3.7. Administration and Capacity Building -----	18
3.8. Financial Plan and Progress -----	18
<b>4. Animal Breeding</b> -----	<b>19</b>
4.1. Maintenance of Semen Production Centers -----	19
4.2. Artificial Insemination Service -----	22
4.3. Heifer Calf Rearing Program -----	23
4.4. Infertility Investigation -----	24
4.5. Oestrous Synchronization Programme -----	24
4.6. Issuance of Code Numbers -----	24
4.7. AI training -----	25
4.8. Bull Calf Rearing Programme -----	25
4.9. Pasture Development Programme -----	25
4.10. Goat Development Programme -----	26
4.11. Initiatives taken by the Division in 2010 -----	27
4.12. Financial Progress -----	27
<b>5. Veterinary Research Institute</b> -----	<b>28</b>
5.1. Products and Services -----	28
5.2. Clients Registered at VRI -----	30
5.3. Progress of Research Projects -----	31
5.4. Research Publications -----	38
5.5. Income and Expenditure -----	38

<b>6.</b>	<b>Human Resource Development -----</b>	<b>39</b>
6.1.	Staff and Units -----	39
6.2.	Training and Transfer of Technology -----	39
6.3.	Educational and Career Development -----	42
6.4.	Examinations -----	44
6.5.	Information and Publicity -----	44
6.6.	Entrepreneurship Development and Self- Employment support services -----	47
6.7.	The Department Library -----	48
6.8.	Finance and Expenditure -----	49
<b>7.</b>	<b>Livestock Planning and Economics Division-----</b>	<b>50</b>
7.1.	Identification and Designing of Livestock Development Programmes and projects -----	50
7.2.	Monitoring, Evaluation and Economic Analysis of Livestock Development Programmes and Projects of the Department-----	51
7.3.	Economic Studies, Surveys -----	51
7.4.	Review of Livestock Industries and Management of Livestock Database at National Level -----	52
7.5.	Coordination of Development Programmes with Provincial DAPH and special development projects -----	55
7.6.	Publications -----	56
7.7.	DAPH Website -----	56
7.8.	Capacity Building of Staff -----	57
7.9.	Other Activities-----	57
7.10.	Management of the Division -----	57
<b>8.</b>	<b>Laws and Regulations Implementation Unit -----</b>	<b>58</b>
8.1.	Animal Quarantine and Inspection Service -----	58
8.2.	Regulatory Activities - Poultry Industry -----	62
8.3.	Regulatory Activities - Other Livestock and Livestock Products -----	63
8.4.	Veterinary Drug Control Authority -----	64
8.5.	Implementation of Animal Feed Act -----	65
8.6.	Financial Progress -----	68
<b>9.</b>	<b>Administration Division -----</b>	<b>69</b>
9.1.	Present Cadre Positions of the Department -----	69
9.2.	Approval from the Management Service-----	69
9.3.	Appointments -----	69
9.4.	Promotions -----	70
9.5.	Transfers -----	70
9.6.	Retirements -----	70
9.7.	Resignations -----	70
9.8.	Vacation of Post -----	70
9.9.	Releases from the DAPH on permanent basis -----	71
9.10.	Loans -----	71
9.11.	Insurance Payments -----	71
9.12.	Other -----	71

<b>10.</b>	<b>Finance Division -----</b>	<b>72</b>
10.1.	Allocations -----	72
10.2.	Public Servants' Advance Account "B" -----	72
10.3.	General Deposit Account -----	73
10.4.	Departmental Income -----	73
<b>11.</b>	<b>Foreign Funded Projects -----</b>	<b>74</b>
11.1.	Avian Influenza Preparedness and Response Project	74
11.2.	Project on small Scale Farming Improvement through Genetic and Feeding Management Improvement in Sri Lanka -----	76
11.3.	Dairy Cattle and Buffalo Improvement Project -----	77
<b>12.</b>	<b>E Government Programme -----</b>	<b>79</b>
	<b>Annexures</b>	<b>I - XXI</b>

## PREFACE

Achieving self sufficiency in foods of animal origin is a major challenge ahead for the livestock sector in Sri Lanka. Due to growing economy in the country over the recent years the demand for livestock products has been increased.

Positive growth trends in dairy production have been observed during last few years due to various development interventions made by the government. However, annual import bill on dairy products in the country is still on the higher side and therefore a high priority is given by the government for development of the dairy sector. Creating an enabling environment for the commercial dairy farming and enhance production and productivity of existing farms through technical innovations are very much essential to achieve expected growth standards in the dairy sector. On the other hand, poultry sector has shown a remarkable growth over the past three decades or so and, is nearly self sufficient in chicken meat and eggs at current purchasing power levels. However, chicken meat and eggs are yet to be available at competitive prices, in order to fulfill consumer demands and further expansion in this industry. The growth in Swine and Goat sectors are more or less static.

Thus, the Ministry in- charge of the Livestock Sector, the Ministry of Livestock and Rural Community Development has a major role to play in fulfilling expectations of the livestock sector. Being the main technical arm of the Ministry, the Department of Animal Production and Health (DAPH) is geared to facilitate production and productivity improvements in the livestock sector. Technical expertise and services are provided to the sector and a range of statutes are implemented by the DAPH to safeguard the livestock industry in Sri Lanka. Furthermore, the DAPH has initiated re-structuring of its divisions/programmes and a Human Resources Development planning programme in order to provide a more efficient service for the livestock sector.

This Annual Report highlights status of livestock sub-sectors and progress of all programmes/projects implemented and activities carried out by the department during the year 2010. Most of livestock sector support services/programmes 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 programmes planned for the year 2010. Special word of appreciation goes to officers in respective divisions/units contributed in providing their annual progress reports and staff of the Livestock Planning and Economics Division for taking efforts in compiling and publishing this document within a short period of time.

**Dr. W.K. de Silva**  
Director General  
20 April 2010

## DEPARTMENT OF ANIMAL PRODUCTION OF 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 was (DAPH) established under the Ministry of Rural Industrial Development in September 1978. The department was created by the then Government that came into power in 1977 realizing the importance of the livestock sector in socio economic development in Sri Lanka. Prior to this, the DAPH functioned as a division under the Department of Agriculture. This division concentrated mainly on immunization of livestock, provision of preventive and curative services, issue of breeding stocks and provision of extension services to small farmers.

Newly created DAPH faced with new challenges within the context of open economic policies initiated by the then Government and, entrusted with implementing more development-oriented activities. Since 1989 the DAPH operated under several Ministries. A separate Ministry for the livestock sector, namely Ministry of Livestock Development was created in 2006, and subsequently from 2009, it functions under the Ministry of Livestock and Rural Community Development.

With the establishment of Provincial Councils in 1988 most of DAPH's field level functions were devolved to nine (09) Provincial Departments of Animal Production and Health (PDAPH) headed by Provincial Directors. By the end of 1991, DAPH transferred the responsibility of all livestock farms to the National Livestock Development Board (NLDB).

The National DAPH provides technical leadership, expertise and back-up services to provincial Department of Animal Production and Health (PDAPH). 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. 283 divisional veterinary offices scattered throughout the country, which are functioned under PDAPH handle delivery services. Divisional Veterinary Offices managed by veterinarians 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. 18 VIC's have been established at District level by end of 2010.

### Objectives:

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 seven (07) functional divisions; five (05) technical divisions and two (02) support service divisions. Sub-units, most located peripherally, are functioned under these divisions, except for two (02) units, which are coming directly under the Director General/ Additional Director General.

### **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 (VIC) located at:  
 Ampara, Anuradhapura, Badulla, Chilaw, Dambulla, Jaffna, Hambantota, Homagama, Kegalle, Matara, Nuwara-Eliya, Pannala, Peradeniya, Polonnaruwa, Ratnapura, Vavuniya, Trincomalee and Welisara.

### **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, 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  
 Animal Husbandry Training Centre - Seepukulama

### **Veterinary Research Institute**

*Main Responsibility:* Plan and execute research programs and to provide 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 appropriate agencies.

Dr. (Ms) P. Wijewantha, Director, Livestock Planning and Economics, Ms. S. Obeysekera, Director, Administration and, Mr.R.M.R.B. Rathnayaka, Director, Finance.

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

## **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.

## **Laws and Regulations Implementing Unit**

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

### *Sub units:*

Animal Quarantine Station  
(Colombo and Katunayake)

## **Members of the Directorate**

Members of the Directorate in 2010 were as follows:

Dr.(Ms)H.M.S.P. Herath, Director General, (retired in March), Dr.A.D.N. Chandrasiri, Additional Director General (subsequently functioned as acting Director General), Dr.A. Chandrasoma, Director, Animal Health, Dr.K.M.T. Kendaragama, Director, Human Resource Development (simultaneously he functioned as acting Director Veterinary Research), Dr.D.R.T.G. Rathnayake, Director Animal Breeding,

## 2. LIVESTOCK SECTOR REVIEW

Contribution of the Agriculture sector to the national GDP had been 11.93 % in 2010 and the livestock sector contribution to the Agriculture component recorded as 7.1%. The total contribution of the livestock sector to the national GDP in 2010 was around 01 percent.

### 2.1. Dairy Sector

The Dairy Sector has been identified as the priority sector for development among other livestock sub sectors in the country. There had been much focus on dairy farming and production in 2010 due to several initiatives taken by the government in the recent past. Cattle and Buffalo population in the country in 2010 has been recorded as 1.169 million and 0.42 million respectively. Domestic milk production recorded a growth of 6% from the previous year's volume of 233.3 million liters to 247.5 million liters. (Source: Department of Census and Statistics).

Infrastructure facilities for milk marketing such as milk collecting centers, chilling centers and milk sales outlets were further increased in 2010. Number of milk collecting centres in the year totaled 2,895. Demand for milk and milk products was on the increasing trend and there were positive trends of investments in commercial dairy farming. Milk collection in the country has shown a significant progress in the year 2010. The amount of milk collected by 12 main milk processors in the formal milk market in the year amounted to 136.18 million liters which is an increase of 11% over the 2009 volume of 122.4 million liters. From this almost 73.83% was collected by two (02) leading milk collecting organizations. Around 35.93% and 17.63% of milk collected in

the country came from the Central Province and the North-Western Province respectively. Milk collection in the Eastern Province showed a good progress totaling 11.4 million liters and, contributing to 8.37 percent of the total milk collection in the country during the year. Increase in milk collection in the country is an indication of the progressive growth in the dairy industry over the recent years.

Average farm-gate price per liter of milk in 2010 was around Rs.33.68, average cost of production of one liter of milk in up country and mid country in 2010 was recorded as Rs. 27.11 under intensive management systems (Source: LPE Division, DAPH).

Out of milk and milk products available for consumption (domestic production and imports) in the year, 69 % have been imported into the country, mostly in the form of powdered milk.

Import of dairy products amounted to 75,482.6 MT in 2010, an increase of 18.17% over the corresponding figure of 63,873.5 MT in 2009 (Source: Department of Customs). Out of total dairy products imported into the country in 2010, full cream milk powder amounted to 66,554.9 MT which was an increase of 21.5 % when compared with 54,745.5 MT in the year 2009. However, import of non-fat milk powder at 5,329.7 MT in 2010 showed a drop of 15.7% from the 2009 import volume of 6,328.04 MT. Total import bill on dairy products reached Rs.29 billion in 2010. Increase in import of dairy products could have been due to increased demand for milk and milk products following post-war situation and recent economic growth in the country.

The average CIF prices (LKR) of imported dairy products in 2009 and 2010 were as follows:

	2009 (LKR/MT)	2010 (LKR/MT)
Whole milk powder	294,276.20	387,367.42
Skim milk powder	252,860.28	369,739.38

Source: Department of Customs

International market prices of whole milk powder showed an increase towards end of the year. Comparison of prices in 2009 and 2010 is as follows:

#### International market prices of dairy products (2009 - 2010)

Product	Price USD/MT			
	2009 (Av)		2010 (Av)	
	Jan	Dec	Jan	Dec
Whole milk powder	2665.20	3260.00	3281.94	3731.25
Skim milk powder	2158.75	3181.25	2900.00	2962.50

Total availability of milk and milk products in the country had been 794.6 million liters of Liquid Milk Equivalent - LME (domestic production and imports) in 2010. Thus, per-capita availability of the same was recorded as 105 ml per day.

## 2.2. Poultry Sector

### 2.2.1. General

There had been a large gap between demand and the supply of both broiler chicken and table eggs throughout the year 2010. The situation was very grave for the table eggs. Due to this scenario, the government had to intervene and a policy decision was taken during the later part of the year to allow import of chicken meat, table eggs, layer commercial chicks and layer hatching eggs for a short period of time. Import duties/taxes were withdrawn during the period. Import of chicken meat was allowed only to Lak Sathosa and commercial layer pullets were imported by State owned National Livestock Development Board (NLDB), to be distributed among poultry farmers.

Layer breeding farms were allowed to import Hatching eggs.

The situation improved towards December in the case chicken meat and adequate stocks of the same were available for the festive season in December 2010.

### Broiler Industry

Procurement of broiler parents recorded 919,145 during the year. Out of which, 528,402 (57.4%) were locally purchased and the balance 42.6% was imported. Procurement of broiler grand parents increased from 13,880 in 2009 to 15,254 in 2010. A total of 82.45 million broiler chicks were produced during the year, an increase of 6.8% from the corresponding number of 77.21 million in 2009.

Only 23 broiler farms were in operation during the year and main broiler breeder strains chosen by them were Cobb (40%), Hubbard (33%) and Indian River (25%). Broiler parents were imported from UK (28.6%), France (5.5%), Netherlands (5.1%)

and the USA (2.1%). The rest purchased from local GP farms.

Average price of a day-old broiler chick had been Rs.100.73 in 2010 ranging from Rs.73.75 in December to Rs.185.00 (August). Average farm-gate price of live broiler recorded as Rs.239.66/Kg with the lowest price of Rs.177.50/Kg (November) to the maximum price of Rs.287.40/kg (April).

### 2.2.3. Layer Industry

A sharp increase (45.4%) of import of layer parents was seen in 2010; from 55,107 imports in the previous year to 80,142 in the year 2010. Pullet chick production too increased during the year by 13.14% from 4.49 in 2009 to 5.08 in 2010. Six (06) layer breeder farms were in operation during the year and Bovans White (35.1%), Hyline (19.1%), Shaver 579 (18.7%), Shaver 288 (13.4%), Novogen (8.3%), and Bovans Brown (5.4%), were the main layer breeder strains imported by these farms. Majority of these imports were from France (62%), The Netherlands (19%), and UK (19%).

Farm gate price of table eggs (brown) remained at reasonably high levels in most parts of the year, ranging from Rs.9.50 (January) to Rs.13.70 (March). Average farm-gate price for the whole year recorded as Rs 11.76, an increase of 28% from the previous years average of Rs 9.21. Retail price of the same showed increasing trends towards the end of 2010.

### 2.2.4. Poultry Feed Industry

Fourteen (14) large, medium and small-scale registered poultry feed manufacturers were in operation during the year and the total feed production in the country estimated as 499.6 Metric Tons (Source: Registrar, Animal Feeds).

### 2.2.5. Poultry Processing Sector

Three (03) large scale and 10 medium scale poultry processing establishments and seven (07) further processing establishments were in operation during the year 2010. Estimated chicken meat production in 2010 at 104,160MT recorded an increase of 5% over the 2009 volume of 99,280 MT.

Total value added meat products manufactured by further processing establishments amounted to 8,083.45 MT in the year; an increase of 12% over the 2009 volume of 7,235.04 MT. Out of this production in 2010, a major portion ( 85%) consist of chicken meat based value added products.

### 2.2.6. Exports

Export of chicken meat and chicken meat products recorded as 661.87 MT in the year; a decrease of 56% from the previous year's volume of 1,513.85 MT. Bulk of these chicken meat and chicken meat products were exported to Maldives, UAE, Azerbaijan, Armenia, Iraq, Angola, Oman, Kuwait, Doha Qatar, Ghana and India. Export of table eggs at 0.76 million recorded a further increase by 58% from the corresponding figure of 0.48 million in 2009. A total of 0.024 million day-old commercial chicks and 0.022 million day-old parent chicks were exported to Maldives and Nepal during 2010.

### 2.2.7. Imports

Import of chicken meat and meat products recorded 1,235 MT, a remarkable increase of 23% from the corresponding 2009 figure of 1,004.18 MT. However, these quantities represented just 1% of the estimated domestic chicken meat production for the year. Moreover, bulk of these imports (81%) consisted of chicken meat products such as MDM, which is used for the preparation of value added products. Under the special duty concession granted



by the government, 92 MT of whole chicken was imported into the country in December 2010.

Under the same duty concession a total of 340,640 layer hatching eggs were imported by a layer breeder farm in 2010. Similarly, 102,362 day old commercial layer chicks were also imported in October.

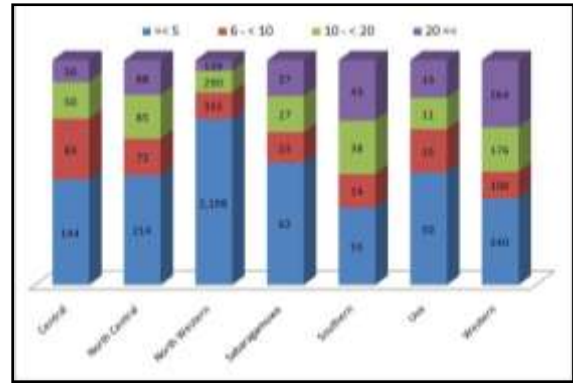
*(Key data pertaining to the Industry in 2010 are given in Annex II)*

### 2.3. Swine Sector

Swine sector is one of the major livestock sectors which place next to the poultry and dairy sectors in Sri Lanka. More than 6,000 Farmers are engaged in swine farming as their main income generating activity. Number of pig farms in the country in 2010 has been recorded as 10,259 (Source: Department of Census and Statistics)

Pig farming is mainly concentrated into four (04) districts in Sri Lanka. These districts include Colombo, Gampaha, Kalutara and Puttalam. Apart from these traditionally identified areas, to some extent, pig farming is also seen in other parts of the country as well, the Central part and the North Central part. Pig rearing is a profit gaining business which requires simple management techniques and feeding practices with low level of disease occurrence.

Total pig population in Sri Lanka has been recorded as 83,785 in 2010 (source: Department of Census and Statistics). Swine farms could be categorized as small-scale (60%) medium-scale (25%) and large-scale (15%). Distribution of swine farms by herd size as per the Livestock Farm Registration programme implemented in 2008 is shown in Figure 2.1.

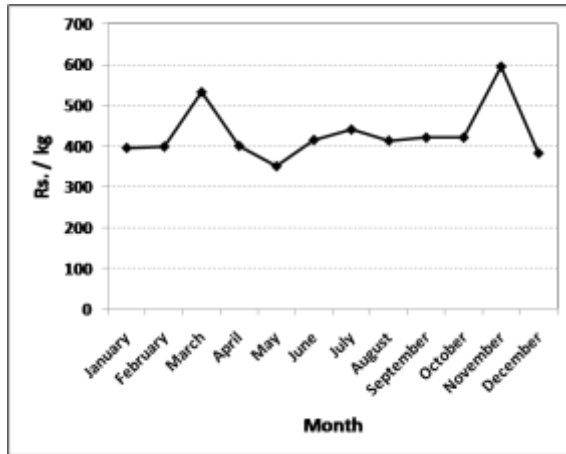


**Figure 2.1: Distribution of Swine Farms by Herd Size**

Unlike in other areas, most of the farms in the Western, North Western and Central Provinces have properly constructed pig houses. However, it should be noted that management and feeding practices presently adopted by pig farmers could be very much improved further, with introduction of cost-effective interventions. Marketing aspects and quality standards of pork products should also be improved for further expansion of this sector.

Estimated pork production in the country had been 13,431 MT during the year 2010. A total of 0.19 MT of pork have been imported into the country in 2010 with the value of Rs. 0.35 million. Average live weight prices of piglings sold for breeding purposes were Rs. 5,500/for Large White and Land Race females and Rs. 6,000/ for Duroc females. Fattener pigling (males) prices were Rs.5,000 and Rs. 5,500 for Large White/ Land Race and Duroc respectively (Source: NLDB).

Monthly average retail price of pork during the year ranged from Rs. 383.00 per Kg in December to Rs. 595.00 per Kg in November (Source: HARTI).



Source: HARTI

**Figure 2.2: Monthly Average Retail Price of Pork- 2010**

Upgrading of swine population through artificial breeding is carried out by the department using chilled semen produced at Kotadeniyawa Animal Husbandry Training Center. This program is successfully being implemented by the Provincial Department of Animal Production and Health (PDAPH), Western Province with the technical support of the DAPH.

Environmental related problems continued to be the main problem suppressing further development of the sector. This has led to closure of some pig farms as well. Therefore improvement of farm standards and educating farmers on waste management has become important issues that need serious attention. Initiatives were taken by the Department to assist livestock farmers to mitigate environmental problems faced by them and to facilitate regulatory provisions enforced by other state organizations. As per data collected from the Central Environmental Authority (CEA) on livestock farms faced with environmental related issues in 2008 and 2009, it was found out that majority of the environment issues (53%) were reported in swine farms.

In the year 2010, under the initiative taken by the Ministry, a *Master Plan* for the

swine sector was developed by a team appointed for the purpose. Officers who are engaged in activities related to the swine sector as well pig farmers contributed in preparing this master plan. While preparing this master plan all aspects of the sector had been considered and the final document had been handed over at the end of the year.

Vaccination against JE and FMD was done in relevant provinces to keep swine population healthy and to prevent transmission of zoonotic diseases (i.e. JE) to humans.

#### 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 and sheep population in 2010 recorded as 381,375 and number of goat farms in the country totaled 62,138 (Source: Department of Census and Statistics).

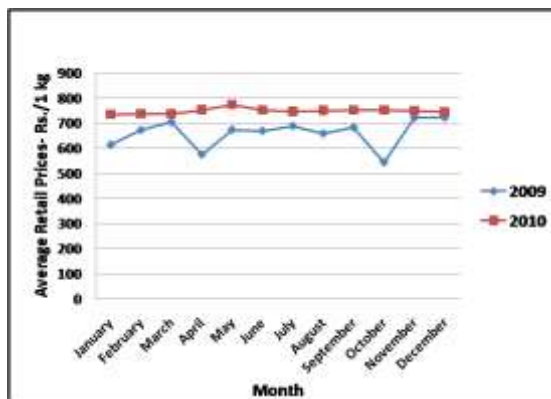
Extensive management system is practiced in the dry zone and semi intensive and intensive systems are practiced in coconut triangle, hill country and in urban areas of the country. Goat farming is mostly linked to socio-cultural patterns and the availability of land and fodder.

*Saanan, Jamnapari, Kottukachchiya, Sri Lankan Boer* are the commonly available goat breeds in Sri Lanka. Indigenous and cross breeds are also distributed all over the country. Two (02) goat breeding farms located at Thelahera and Imbulandanda, operated under the DAPH, contribute in upgrading of goats by distributing breedable animals.

Artificial inseminations (AI) are being done using deep frozen semen produced at Central Artificial Insemination Centre, Kundasale and imported deep frozen semen. Artificial insemination services for

goats performed mainly by six provinces namely Northern, Western, North Central, Southern, Eastern, and Sabaragamuwa. Northern Province, where a large number of goat population is found has performed nearly 43% of AI's done in goats in 2010.

Average retail price of mutton in the country reported as Rs.718.82/Kg in the year 2010 ranging from Rs.735.00/Kg in January to Rs.774.00/Kg in December (Source: HARTI). A total of 284.92MT of mutton had been imported into the country during the year 2010 (Source: Department of Customs). Average retail prices of mutton have not shown significant fluctuations throughout the year when compared with the previous year. (Figure 2.3)



Source: HARTI

**Figure 2.3: Retail price changes of Mutton 2009-2010**

Northern Province had been one of the main regions in the country during the past, where goat production was done very successfully. As per goat population statistics in the last Agriculture census carried out in 2002, Northern Province/Jaffna District accounted for 16.3% (65,519) of the total goat population in the country. However, due to war situation prevailed in the area, goat production as well as access to Colombo markets was badly affected. Therefore, a baseline survey was initiated by the department in collaboration with the PDAPH in the latter part of the year to

assess present situation of goat farming in the Northern region in order to identify prevailing issues and initiate development interventions.

**2.5. Policy decisions taken by the government**

Following policy were taken by the government in 2010 to facilitate further growth in the livestock sector as well as to address consumer needs:

- a. To allow importation of Chicken meat, Table eggs, Commercial layer pullets and Hatching eggs for a short period to rectify market shortfalls (implemented during the last quarter of the year);
- b. Revision of tax structure for poultry, and poultry products for a short period to facilitate above imports;
- c. To increase farm gate price of liquid milk to Rs. 50. per litre (*Budget Proposal 2011*); and
- d. To extend special credit facilities at eight (08) percent interest to promote small-scale livestock production (*Budget Proposal 2011*).



### 3. ANIMAL HEALTH DIVISION

The Animal Health Division of the Department of Animal Production and Health (DAPH) is the main implementing organization in Sri Lanka responsible for ensuring required animal health status for development of the livestock industry in the country. Animal Health division has the national unit located at Head Quarters of DAPH with its component namely Vaccine Bank and Veterinary Store located at Getambe. Its peripheral units namely Veterinary Investigation Centres (VIC's) are established at district or provincial level.

#### 3.1.Functions of the Division

The mission of Animal Health Division has been identified as provision of 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 safety of foods of animal origin.

In order to accomplish the said mission the following major tasks were earmarked to be carried out during the year 2010.

- Strengthening GIS based disease surveillance and animal disease database.
- Design, support, monitor and evaluate mass-scale preventive vaccination programme.
- Maintenance of Vaccine Bank and Veterinary-Store.
- Provision of laboratory back-up service for disease diagnosis.

- Establishment and maintenance of district based Veterinary Investigation network.
- Formulation and implementation of special programs against identified exotic, emerging and re-emerging animal diseases.
- Compilation and dissemination of animal health related information locally and internationally.
- Functioning as the focal point to World Animal Health Organization; OIE.
- Accomplishing the OIE requirements to obtain "Rinderpest Free Status" in Sri Lanka.

#### 3.2.Main Activities

The major activities performed during the year under review could be listed as follows:

- 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.

- Development and Implementation of Rinderpest Sero-surveillance and declaration of freedom from Rinderpest.

### 3.3. Animal Disease Situation

#### a. Bovine Diseases

##### *Foot and Mouth Disease*

Foot and mouth disease (FMD) broke out in seven (07) Veterinary ranges namely Kebithigollewa, Thambuttegama, Rambewa, Kahatagasdigiliya, Horowapothana, Nuwaragampalatha-Central and Ipalogama at Anuradhapura district in the NorthCentral Province during the period under review. The first wave of outbreaks involving the first five Veterinary ranges (Kebithigollewa, Thambuttegama, Rambewa, Kahatagasdigiliya, Horowapothana) was noticed during the months of May and June recording 681 cases in cattle and 21 cases in buffalo population. 33 calves which include two buffalo calves succumbed to death due to disease. Most of the deaths were observed at Kebithigollewa Veterinary range where the index cases at Anuradhapura district were detected in early May, perhaps as the leakage of infection prevailed at Vavuniya district during the previous month.

In the Polonnaruwa District, the first outbreak during the year was observed at Minneriya Veterinary range infecting an extensively managed cattle herd during the month of January. It was promptly controlled by isolation and quarantine supported by "ring vaccination" around the infected focus. The second outbreak at Polonnaruwa

District was noticed at Polonnaruwa Veterinary range infecting 50 buffaloes during the month of November.



**Figure 3.1: Field investigation on FMD outbreak**

FMD was also detected at Northern and Eastern Provinces during the month of March. In Northern Province, the disease was found at Vavuniya Veterinary range, and in the Eastern Province it was found at Mahaoya Veterinary range. Furthermore, the disease was detected at Punanai Veterinary range at Batticaloa District during the month of July. FMD was also noticed at Welisara Veterinary range in Western Province during the month of February recording 30 bovine cases mainly closer to the slaughter house or having association with animals brought for slaughter.

The striking feature in the epidemiology of FMD was noticed as the unusual occurrence of clinical cases in the Central Province during the period under review. Outbreaks were initially observed at Kundasale and Meda-Dumbara Veterinary ranges during the months of March and April respectively. Disease surveillance and reporting were inadequate and the control measures failed to arrest the spread of infection at the required level and it allowed the

disease to extensively spread and linger on for a longer period. The infected areas were proclaimed under the provisions of Animal Diseases Act No. 59 of 1992 and gazette notification was made. Later on the disease was also detected at Nuwara-Eliya District; Rikillagaskada Veterinary range in May and Ragala Veterinary range in July. Subsequently, FMD vaccination was introduced to Nuwara-Eliya District which generally remains as free of vaccination and free of infection.

In overall, FMD was observed in the country in most of the period, except for August-October; infecting cattle and buffalo population in Northern, Eastern, North-Central, Central and Western Provinces. The total number of recorded cases during the year 2010 was 930 and 39 animals died of this disease.

### *Haemorrhagic Septicaemia*

Clinical cases of Haemorrhagic Septicaemia (HS) have not been detected in the country during the year 2010. As such, the country remains free of clinical cases of HS for sixth (06<sup>th</sup>) consecutive year, since the last outbreak was found at Kalutara District in October 2004.

### *Black Quarter*

Seventy nine cases of Black Quarter (BQ) and sixty two deaths were recorded in the country during the period under review. The overall case-fatality rate was found to be 79%. The cases were confined mainly to North-Central Province and also found in Northern Province (Vavuniya), Eastern Province (Padiyatalawa and Uhana), North Western Province (Karuwalagaswewa) and Southern (Ambalantota) Provinces. The distribution of cases at different Veterinary range level is shown in *Table 3.1*.

**Table 3.1: Spatial and Temporal Distribution of BQ in 2010**

District	Veterinary Range	No. of		Month(s) of Occurrence
		Cases	Deaths	
Anuradhapura	Thirappane	14	14	June
	Palagala	07	04	August and October
	Kekirawa	01	01	September
	Padawiya	02	02	October
Puttalam	Karuwalagaswewa	16	14	June
Ampara	Padiyatalawa	09	08	January
	Uhana	20	15	November
Vavuniya	Vavuniya	04	04	October and November
Hambantota	Ambalantota	06	01	October
<b>All Island</b>		<b>79</b>	<b>63</b>	

### *Brucellosis*

Two (02) major abortion storms due to brucellosis were detected at Tissamaharama (Hambantota district) and Minneriya (Polonnaruwa district) during the period under review. Thirty

cows aborted at the first location and eighteen abortions were recorded in the second location. Furthermore brucellosis was found to be causing abortion at three locations in Anuradhapura district in North-Central Province affecting the Veterinary ranges namely Kekirawa,

Mihintale and Nuwaragampalatha Central where fifteen cases were recorded during the year. Brucellosis was also suspected at Nintavur and Uhana in Ampara district, Cheddikulam in Vavuniya district and Wellawaya in Moneragala district. In overall 69 abortions due to brucellosis were recorded in the country during the year under review. Vaccination against brucellosis is practiced only at livestock farms managed by National Livestock Development Board (NLDB) and in selected areas especially in Anuradhapura District where high incidence of brucellosis has been established and the farmers have obliged to make an agreement with the Department of Animal Production and Health. Since the vaccination requires special attention, it is carried out only by the Veterinary Investigation Officers and 1,117 vaccinations using the locally manufactured S-19 brucella vaccine were carried out during the year 2010.

#### ***Bovine Babesiosis***

One thousand four hundred and seventy six cases of bovine babesiosis were reported during the year and the cases were found in all provinces with an overall case-fatality rate of 3.38%. There has been a static trend in the annual incidence of this disease for the past several years in the country. However, the pre-immunisation is neither popular nor requested by the field Veterinary Surgeons. Monthly distribution of cases varied from 32 to 195 with no obvious seasonal pattern.

#### ***Leptospirosis***

Seventy six cases of leptospirosis were recorded during the period under review. Majority of the cases were reported from Karaveddy (Jaffna

district), Arachchikattuwa (Puttalam district) and Ambalantota (Hambantota district) Veterinary ranges. However, the disease was also noticed in small numbers at many more districts namely Kurunegala, Anuradhapura, Polonnaruwa, Mannar, Trincomalee, Matara, Badulla and Matale.

#### **b. Poultry Diseases**

Main poultry diseases reported by divisional veterinary surgeons in this year are Coccidiosis (90,120 cases), Newcastle Disease (47,309 cases), E coli infection (43,576 cases), Infectious Bursal Disease (32,839 cases), Fowl pox (7,054 cases), Avian Salmonellosis (5,435 cases), Fowl cholera (2,190 cases).

#### ***Newcastle Disease***

Newcastle disease (ND) is an endemic disease among poultry population of Sri Lanka for several decades. However, an unusually high occurrence pattern of this disease was noticed in year 2010 affecting backyard and commercial birds in the country. This unusual event which began in June turned into an epidemic form in September leading to a peak in October. Though vaccination against ND is a commonly anticipated programme in the country, 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. In addition to these characteristics, non-availability of adequate stocks of vaccine and uncontrolled movement of infected birds contributed to the development of an epidemic in the country which demanded re-commencement of vaccine

production locally. In overall 47,309 cases of Newcastle disease was reported in the country with the case-fatality rate of 78%.

**Infectious Bursal Disease**

Infectious Bursal Disease (Gumboro disease) remained as a highly prevalent poultry disease affecting the avian population in the country. Spatial distribution of the disease indicates its presence in all the districts in the country. In overall 32,839 cases were recorded during the year with 29.8% case-fatality rate.

**c. Diseases of small ruminants**

**Contagious Pustular Dermatitis**

A total of one thousand two hundred and twenty four (1,224) cases of Contagious Pustular Dermatitis (CPD) were detected among goats and sheep in the country during the year 2010. The disease was detected in all the Provinces. Sheep population in the Eastern, Northern, North-Western, North-Central and Southern Provinces were also infected. The total number of cases in ovine population was 197. Auto vaccine was prepared at VIC's on many occasions and thus contributed to the control of spread of infection effectively.

**3.4. Disease Control and Vaccination Programmes**

Preventive vaccination programmes have been carried out against economically important major livestock diseases such as Foot and Mouth Disease (FMD) and Black Quarter (BQ) in ear marked locations in the country. Mass-scale vaccination against Haemorrhagic septicaemia (HS) could not be carried out since the required vaccine could not be produced at the

Vaccine Production Centre due to unavailability of some ingredients in the production chain. As such, only a small quantity of HS vaccine was made available during the year 2010 and therefore HS vaccination was confined only to Northern and Eastern Provinces mainly covering the animals which were collected under the "Rounding up Programme for Cattle in displaced areas". BQ vaccine was produced locally in adequate amount to meet the demand for preventive as well as control vaccination programs. Foot and mouth vaccine (mono-valent, type 'O') was imported from India.

All the vaccines were maintained at the Vaccine Bank and supplied to the Provinces as per the vaccination schedule. 37,840 doses of HS vaccine, 506,550 doses of Foot and mouth vaccine and 159,390 doses of BQ vaccine have been supplied during the period under review as shown in *Table 3.2*.

Annual vaccination achievement has been found to be 453,305 vaccinations against FMD, 119,005 vaccinations against BQ and 37,500 vaccinations against HS.

**Table 3.2: Issue of Livestock Vaccines to the Field in 2010**

Province	Type of Vaccine in doses		
	HS	FMD	BQ
NWP	-	146,700	78,210
EP	13,090	65,000	15,312
NCP	-	85,000	30,591
NP	24,750	41,000	20,592
Southern	-	17,600	-
Uva	-	62,000	13,662
Western	-	46,350	-
Central	-	29,350	-
Sabaragamuwa	-	13,550	1,023
<b>Total</b>	<b>37,840</b>	<b>506,550</b>	<b>159,390</b>



The vaccination achievement against set targets respectively illustrated in Figure 3.2. Provincial distribution of vaccination performance against FMD and BQ compared with the set targets has shown in Figures 3.3 and 3.4.

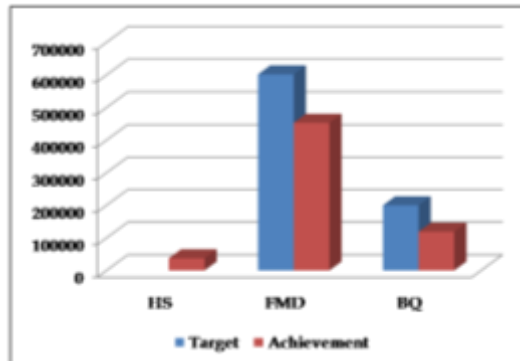


Figure 3.2: Performance in Vaccination against major livestock diseases in 2010



Figure 3.3: Province-wise Vaccination Performance against FMD- 2010

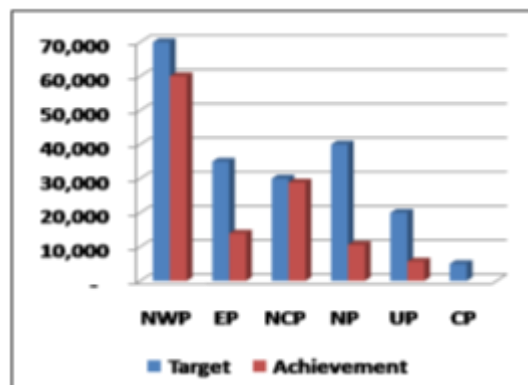


Figure 3.4: Province-wise Vaccination Performance against BQ - 2010

The implementation cost for the field vaccination programme varied under different situations depending on the livestock system, management practice and the availability of resources for vaccination programme. During the year 2010, the average cost per vaccination in the island was found to be Rs.5.62 with the range of Rs.2.47 to Rs.17.32 as the Provincial averages as per shown in Figure 3.5.

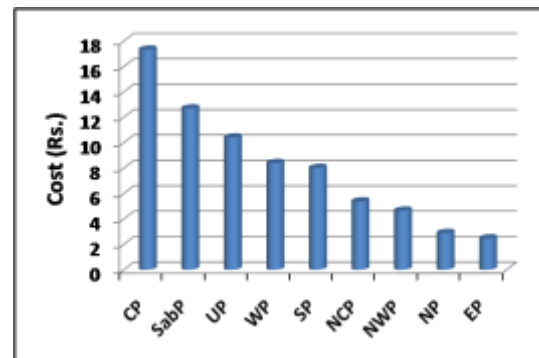


Figure 3.5: Implementation Cost for Field Vaccinations in 2010 (Rs. per vaccination)

### 3.5. Veterinary Investigation Services

The concept of strengthening the laboratory back up for Veterinary services by providing Veterinary Investigation facilities at District level through District Veterinary Investigation Centres (VICC) was recognised in Year 2006. Since then continuous effort has been taken to ensure that these facilities are set up at each and every district. Three (03) Veterinary Investigation Centres, for which the building construction had been initiated in 2009, were completed in 2010. They are located at Trincomalee (Thambalagamuwa), Colombo (Homagama) and Ampara (Ampara) districts. Accordingly, fifteen functional VIC's under the Central government and one VIC at Vavuniya under the

Provincial government were technically supported during the period under review. Actions were also taken to build up new buildings at Wariyapola and Jaffna for District Veterinary Investigation Centres with the financial support of World Bank under the Avian Influenza Preparedness and Response Project.

Veterinary Investigation Centres focused mostly on animal disease investigation in order to support the disease surveillance system in the country. There were 416 field level investigations carried out during the year 2010. Foot and Mouth Disease, Black Quarter, Brucellosis, Babesiosis, Theilariasis, Mastitis and Infectious Kerato-conjunctivitis are some of the specific disease conditions confirmed at District Veterinary Investigation Centres during this period. Unusual event of occurrence of Black Quarter in Hambantota District during the period under review was promptly controlled by vaccination. Calf diarrhea in Dambulla was investigated in detail and the cause was established as Ruminal acidosis and subsequently treatment was recommended with successful results. Development of resistance to mostly used antibiotics in the field among poultry population was confirmed in many occasions by antibiotic sensitivity test and the remedial measures were recommended to overcome this issue.

Detail information on activities performed at Veterinary Investigation Centres during the year 2010 is shown in *Annex III*.

### 3.6. Special Animal Health Programmes

#### *a. Livestock Health Improvement Project*

A special project had been initiated in year 2007 in selected dairy farms at districts where functional VIC's are located in order to monitor the disease status closely and to assist to improve the health and production in these farms. The field level implementation was carried out through the respective VICC in these districts. The Project envisaged at fulfilling the long term need of establishing active focal points for disease monitoring and surveillance at district level. The selected farms were identified with geo-reference, a database was developed with all relevant information and the farms were visited by the respective VIOO on a regular basis.

Four thousand six hundred and seventy one (4,671) milking cows have been subjected to California Mastitis Test (CMT) for early detection of sub clinical mastitis. Moreover, 1,039 litres of teat dip solution prepared at VICC have been distributed among these farmers in order to improve the hygienic practices in these farms. Samples which have shown high positive reactions to CMT have been further subjected to laboratory investigation. Bacterial cultures indicated the presence of *Staphylococci*, *Streptococci*, and *E.coli* species.

Antibiotic sensitivity tests (ABST) identified the antibiotics namely Neomycin, Enrofloxacin, Doxycycline and Cephalexin as the drugs of choice at different instances. Hence, it was recommended to use these drugs using the locally produced udder base as the vehicle for incorporating these

antibiotics for preparation of more appropriate and economically beneficial udder infusions to be used at farm level. Furthermore, the calves in these selected farms have been tested for helminthiasis by laboratory testing.

***b. Avian Influenza Surveillance Programme***

The national surveillance programme against Avian Influenza initiated in 2007 continued in year 2010 too. Field level implementation was carried out mainly by the VIOO. The sero-surveillance programme for the entire country was prepared, coordinated and monitored for its efficiency and effectiveness. A total of 4,140 serum samples were collected until the month of July 2010. Since then serum samples were not collected due to unavailability of the facilities to test the same. In total, 2,203 samples were tested by the Virology Division of the Veterinary Research Institute (VRI) using Enzyme Linked Immuno-Sorbant Assay (ELISA) during the year 2010. There have been sero-reactors to evidence the presence of Avian Influenza type 'A' virus antibody at Colombo, Gampaha, Kandy, Matara, Puttalam, Anuradhapura, Badulla and Rathnapura districts. Reactor rates at district level varied from 1% at Colombo to 13.3% at Badulla with the overall Reactor rate of 1.49%. The sero-reactors have been further tested to establish the presence or absence of H5, H7 and H9 subtypes. The testing programme continues to the following year too.

In addition to the sero-surveillance programme, the risk-focused Targeted surveillance programmes were carried out during the year 2010 too. Two thousand one hundred and seventy (2,170) pooled cloacal swabs were collected from Wild / migratory birds

and Back-yard poultry in the vicinity of "Hot spots" and subjected to virus isolation and found to be negative for Avian Influenza Virus Isolation. Detail on the surveillance activities is shown in *Annex IV*.

***c. Salmonella Control Programme***

All the Poultry Breeder farms having either parent birds or grandparent birds have to be in salmonella-free status in order to ensure the production and supply of salmonella-free chicks from their farms. Accordingly these farms have been instructed to carry out regular screening programmes to be followed by official verification by the relevant VICC and the VRI.

Thirty nine Poultry Breeder Farms were in operation during the year 2010. However, some of these registered farms had more than one operating units / locations in areas far apart. *Salmonella* organism was isolated at seven hatcheries; *E.coli* was isolated at three hatcheries and *Klebsiella* was isolated at one hatchery. Breeder birds were subjected to salmonella testing (whole blood) as a screening programme and positive reactors were detected at sixteen farms.

***d. Rinderpest free Declaration***

Sri Lanka recorded the last clinical case of Rinderpest in 1994 and subsequently the provisional declaration of freedom from Rinderpest was announced in November 1999. However, thereafter the required activities did not follow successfully to obtain the 'Rinderpest free status' by fulfilling the requirements laid down in the 'OIE pathway'. Since the global declaration of freedom from Rinderpest was aimed to be achieved in 2010, a FAO funded



international project namely "Surveillance for accreditation of freedom from Rinderpest" (TCP/INT/3204) was introduced into Sri Lanka during the year 2010.

Under the above project, workshops and awareness programmes were carried out at provincial and district level in order to educate and create awareness among the Veterinarians in the country. Furthermore, a sero surveillance strategy was developed and 4,500 serum samples were collected from cattle and buffaloes and tested for the presence of Rinderpest antibody in order to prove the absence of circulating virus among the national livestock population. Detail information on the sample collection and testing has been shown in *Annex V*.

Moreover, the Dossier for the submission to the OIE in order to support the national application for recognition as a country free from Rinderpest was compiled during the year 2010 and it was accepted by the OIE Scientific Commission. As such the OIE declared Sri Lanka as "Rinderpest free country" in December 2010.



**Figure 3.6: Collection of blood samples in Hambantota for Rinderpest Surveillance programme**

### 3.7. Administration and Capacity Building

Many significant developments have taken place in strengthening the human resource with capacity development in the division since year 2007. Technical and management capacity of the officers have been improved by providing them the opportunity to participate in training programmes and workshops locally as well as abroad.

The most significant programme in 2010 was the post-graduate degree (Master level) programme offered to four Veterinarians (two veterinary surgeons and two Veterinary Investigation Officers) in this division to qualify them in 'Preventive Veterinary Medicine'. This on-line programme conducted by the Massey University, New Zealand provided these candidates opportunities to share their experiences with Veterinary and Medical professionals at international forums too.

The VICC were supported by the Technical supportive staff during this year. Research Assistants were recruited and posted to three identified VICC at Hambantota, Thambalagamuwa and Polonnaruwa during this year.

### 3.8. Financial Plan and Progress

The financial allocation for capital expenditure for the year 2010 was 82.8 million rupees and 74% of the allocation was spent during the year. The total allocation under the recurrent budget was 11.137 million rupees and 88.4% was utilized in 2010.

## 4. ANIMAL BREEDING DIVISION

Animal Breeding division is mainly responsible for the production of high quality animals through improved technologies to meet the country's demand. Genetic materials are produced at Kundasale and Polonnaruwa semen production stations to breed cattle, buffalo and goats artificially. Both stations are equipped to produce Deep Frozen (DF) semen. Semen thus produced at processing centers is distributed island-wide to artificial insemination units at more than 283 Divisional Veterinary offices through a distribution network.

Two (02) Goat Breeding Farms located at Thelahera and Imbulandanda maintain 226 Jamnapari Does and their followers as nucleus herds and provide genetic material for natural breeding of goats.

### Main Functions / Responsibilities of the Division:

1. Preservation and sustainable utilization of Livestock Genetic resources;
2. Improving the genetic base through the use of Animal Reproductive Technologies;
3. Enhancing the available feed base through the introduction of fodder resources;
4. Development of human resources in order to strengthen the animal breeding services; and
5. Human Resource Management, Financial Management and General Administration and Maintenance of the resources.

In addition to routine functions performed, five (05) major projects were implemented during the year 2010 by the Animal Breeding Division. Three

(03) projects were funded through the National Budget, while two (02) projects were foreign funded namely GFMI Project (JICA) and DCBD Project (FAO). The following projects were funded through GOSL funds.

1. Livestock Breeding Project (LBP)
2. Goat Development Project (GDP)
3. Heifer Calf Rearing Project (HCRP)

### 4.1. Maintenance of Semen Production Centers

Animal Breeding Division manage two (02) Artificial Insemination (AI) centers at Kundasale and Polonnaruwa that are involved in the collection, processing, storage and distribution of genetic material (Deep frozen semen) throughout the island.

#### 4.1.1. Local Deep Frozen (DF) Semen Production

##### a. Central Artificial Insemination Station (CAIS), Kundasale

Semen processing was done in the CAIS twice a week; on Monday and Thursday. During the year 136,920 doses of DF Semen were produced from Friesian, Jersey, Jy x Sw and AFS bulls.

Cost of Production of a dose of DF semen had increased by 12.4% from the previous year's cost of Rs.53.80 to Rs.60.45 in 2010.

Five hundred (500) doses of *Canadian Jersey type I semen* and 6,160 doses of *USA Jersey type II semen* were received during the year through GFMI project funded by JICA. These semen stocks will be used in targeted farms from selected ranges for easy follow up.

The distribution target for the year 2010 was 150,000 and a total of 204,173 doses of DF semen were issued to the field during the year (Table 4.1). This includes locally produced Cattle, Buffalo and

Goat semen and imported Cattle, Buffalo and Goat semen. Bull Wise semen issues in 2010 are given in Annex VI.

**Table 4.1: Breed-wise semen issues 2010**

Species	Breed	Local	Imported
Neat Cattle	Jersey	104,226	120
	Friesian	37,170	28
	Sahiwal	17,201	310
	Cross-Bred	35,117	25
Buffaloe	Murrah	6,628	35
	Nili Ravi	0	100
Goat	Sannan	0	7
	Jamunapari	3,152	54
<b>Total</b>		<b>203,494</b>	<b>679</b>

**Liquid Nitrogen (LN<sub>2</sub>) Distribution**

The amount of LN<sub>2</sub> procured during the year was 204,532 liters and out of this 172,745 liters (84.42%) had been utilized. The evaporation rate was 15.58% (31,871 liters). The total cost of the purchased LN<sub>2</sub> was Rs. 20.88 million.

During the previous year, supply of LN<sub>2</sub> and DF semen were limited to Kanthale VS Office and Provincial DAPH had to redistribute from Kanthale. In 2010 the distribution of semen was expanded in the Province reaching most of the VS

Offices in the Eastern Province. Though there were requests from the Provincial DAPH for LN<sub>2</sub> and DF semen to be used in new Veterinary Offices, the requests could not be entertained due to lack of transport facilities as well as shortage of skilled staff.

Cost incurred for the production, storage and distribution of semen up to the VS office was calculated and following table shows these values in relation to year 2009.

**Table 4.2: Cost per dose of Semen (2009 - 2010)**

Province	Cost per Dose (Rs)	
	2009	2010
North Western Province	145.36	132.91
Central Province	148.34	131.75
Western Province	182.28	172.62
Uva Province	193.74	171.07
North Central Province	264.68	162.59
Eastern Province	262.35	341.68
Southern Province	256.40	233.10
Sabaragamuwa Province	311.20	298.53
Northern Province	146.42	227.30

Bogawantalawa Veterinary office had recorded lowest usage of LN<sub>2</sub> (0.24 liters per dose) while Sooriyakanda Veterinary office had recorded highest usage of LN<sub>2</sub> (10.3 liters per dose).

**Supply of Inputs**

Field requirements of AI equipment and AI consumables were fulfilled during the year.

**Improvements to the CAIS Laboratory**

In order to strengthen the capabilities and standards at CAIS, Hot air (oven) sterilizer, Incubator for Artificial Vagina and UV sterilizer were obtained from JICA funded GFMI Project.

**Pasture and fodder**

About three (03) Acres were replanted with CO-3 in 2010. Non availability of tractor operator was badly affected to the fodder development work during the year. About 1,458.0 MT of green fodder was harvested and 2.0 MT of

Hay was produced and fed to animals during the year. Other than that about 1.0 MT of CO-3 planting materials were issued to fulfill provincial requests from our fodder lands.

**Bulls and bull calves management**

All bulls and bull calves were tested for sexually transmitting diseases with the assistance of the Veterinary Research Institute. All animals were vaccinated against FMD and HS last year. All semen donor bulls were exercised every other day using bull exerciser and bull calves were sent to pasture lands every morning for grazing and exercising.

**b. AI Center (AIC) Polonnaruwa**

This center consists of two sections such as Semen Production Section and Artificial Insemination Training Center (AIC). The following performances were achieved in 2010.

**Table 4.3: Semen Production at Polonnaruwa AI Center**

Breed	Semen Code	Bull number	No of doses produced
Sahiwal	847	SB-12	1,693
Murrah	1115	1433	818
	1116	1430	245
	1113	3270	440
	1117	3246	590
<b>Total</b>			<b>3,786</b>

**Table 4.4: Performance of the AI Training Program at AIC**

Activity	Type of participants	No. of programs targeted	No. of programs achieved	No. of participants expected	No. participated
1. Fresh	P AI Tech.	4	2	30	24
2. Fresh	LDOO	2	5	73	65
3. Refresh	LDOO	2	3	52	36
4. Refresh	P AI Tech.	2	1	14	12
5. Fresh	NLDB Staff	1	1	12	09
6. Refresh	NLDB Staff	1	1	17	17
<b>Total</b>		<b>12</b>	<b>13</b>	<b>198</b>	<b>163</b>

## 4.2. Artificial Insemination Service

and achievement of the country for the year 2010 are given in *Table 4.5*.

### 4.2.1. Artificial Inseminations

The achievement of AI for the year 2010 was 177,000 (cattle, buffalo and goat) which is 2.72% increase over the year 2009. The highest number of AI has been performed in the Central Province. Province-wise AI targets, performance

A total of 2,825 inseminations in goats and 712 inseminations in swine have also been reported during the same year. Demand for goat AI was mainly from Northern Province. Swine AI was carried out in the Western Province.

**Table 4.5: Province- wise AI targets, performance and achievement- 2010**

Province	Target	Performance	Achievement %
Central	42,941	45,952	107
North Western	47,712	45,227	95
Western	23,091	23,052	100
Uva	14,569	14,379	99
North Central	16,141	12,234	76
Southern	12,456	9,409	76
Northern	10,954	9,812	90
Eastern	6,887	5,891	86
Sabaragamuwa	7,302	6,363	87
<b>Total</b>	<b>182,053</b>	<b>172,319</b>	<b>95</b>

### 4.2.2. Pregnancy Diagnoses (PD)

Veterinarians. The Province-wise target, performance and achievement details are as follows.

Number of Pregnancy Diagnosis performed was 48,572 by field

**Table 4.6: Province-wise target, performance and achievement of PD's- 2010**

Province	Target	Performance	Achievement %
Central	10,260	7,226	70
NWP	25,000	13,489	54
Western	9,329	7,303	78
Uva	5,190	4,776	92
NCP	8,058	4,078	51
Southern	5,392	3,625	67
Northern	3,693	2,098	57
Eastern	3,170	3,218	102
Sabaragamuwa	4,926	2,799	57
<b>Total</b>	<b>75,018</b>	<b>48,612</b>	<b>64.8</b>

### 4.2.3. Calving

the year. The province-wise target, performance and achievement details are given in *Table 4.7*.

A Total of 57,334 calving have been reported by field veterinarians during

**Table 4.7: Province wise target, performance and achievement of calving -2010**

Province	Annual Target	Performance	% Achieved
Central	13,455	11,407	85
NWP	20,200	16,673	83
Western	8,513	6,568	77
Uva	4,136	4,314	104
NCP	5,355	3,049	57
Southern	4,465	3,169	71
Northern	2,872	2,498	87
Eastern	1,474	1,977	134
Sabaragamuwa	3,015	1,926	64
<b>Total</b>	<b>63,485</b>	<b>51,581</b>	<b>81</b>

### 4.3. Heifer Calf Rearing Program

The aim of the project is to improve and increase the availability of breedable heifer calves in the country. The major activities were registration of heifer calves, distribution of calf feeds, distribution of de-worming medicines, external parasiticides, conducting training programs related to calf rearing and operating heifer calf insurance scheme.

This project is a special project approved by the Cabinet with an allocation of Rs. 1,430 Million for a period of eight (08)

years from 2008 to 2015. The project commenced in 2008. The project was not implemented during 2009 due to financial constraints. Even though it was managed to resume the project in June, 2010. Remarkable progress has shown during 2010 and it shows that a continuous financial support without any interruption is necessary for the projects successfulness.

The physical achievements are given below for the period of July - December, 2010. The financial achievement was Rs.25 Mn out of annual allocation of Rs.42 Mn.

**Table 4.8: Physical Achievements of Heifer Calf Rearing Project**

Major activities	Unit	Physical Target	Physical Achievement
Registration of heifer calves	Calves	6,000	4,242
Distribution of cattle feeds	MT	1,000	700
Distribution of de-worming medicines	Doses	30,000	25,000
Distribution of de- ticking medicines	Doses	60,000	37,000
Conducting training programs	Trainings	1,000	470
Operating Heifer Calf Insurance scheme	Animals	6,000	4,242



Provincial level animal enrolment for 2010 is as follows.

**Table 4.9: Heifer Calf Insurance Program - Progress 2010**

Province	Aug	Sept	Oct	Nov	Dec	Total
Central	79	111	343	254	382	1169
Uva	5	16	46	154	100	321
Sabaragamuwa	27	15	63	33	58	196
NWP		123	209	266	339	937
Western			126	163	238	527
Southern	46	2	62	137	118	365
Eastern	11			101	25	137
Northern				149	160	309
NCP	74	19	77	44	67	281
Total	242	286	926	1,301	1,487	4,242

#### 4.4. Infertility Investigations

Thirteen programmes were conducted in twelve veterinary ranges namely Rikillagaskada, Welikanda, Naula, Medirigiriya, Dambulla, Katana, Hatharaliyadda, Mawanella, Attanagalla, Ududumbara, Gangawata Korale and Udunuwara. Number of cases attended during the year totalled 145.

#### 4.5. Oestrous Synchronization Program

##### 4.5.1. Goat Ultrasound Scanning and synchronization

Total of 127 does were examined in both Thelahera and Imbulandanda goat nuclear farms for pregnancy diagnosis using ultrasound scanner and 70 pregnant does have been separated. 57 does were treated with progesterone releasing intra-vaginal sponges for heat induction. Summary of the program is as follows:

Farm	Thelahera	Imbulandanda
No. of does examined	83	44
No. Pregnant	53	17
Heat Induced	30	27

#### 4.6. Issuance of Code Numbers

Code numbers were issued to Veterinary Surgeons (VSS), Artificial

Insemination Technicians (Private: PAIT and Government: GAIT), Veterinary Ranges and Semen donor bulls. The details are as follows.

**Table 4.10: Code numbers issued for VSS, PAIT and GAIT**

Number	Category	Number
1	Veterinary Surgeon	20
2	Government AI Technicians	22
3	Private AI Technicians	11

**Table 4.11: Code number issues for new Veterinary Ranges**

Province	Veterinary Range	Code Number Issued
Eastern province	Padavi Sripura	739
	Gomarankadawala	740
	Kinniya	741
	Araiampathy	742
	Irakkamam	743
	Morawewa	744

#### 4.7. AI Training

Livestock Development Officers and Private AI technicians are trained on AI in order to strengthen the field AI program. Applications received through field veterinary surgeons with the recommendation of respective provincial directors are forwarded for Artificial insemination training following approval from the Director, Animal Breeding. A total of 154 government technicians and 44 private technicians had been applied through the said channel in 2010. 163 personnel were participated for the training programs conducted at the Artificial Insemination training centre, Polonnaruwa (Table 4.12).

**Table 4.12: Training of AI Technicians**

Technician Category	No. trained
LDOs (Fresh)	65
LDOs (Refresh)	36
Private (Fresh)	24
Private (Refresh)	12
NLDB Staff (Fresh)	09
NLDB Staff (Refresh)	17
<b>Total</b>	<b>163</b>

#### 4.8. Bull Calf Rearing Programme (Natural Service Programme)

The objective of Bull Calf Rearing Programme is to supply suitable bull calves (pure or cross bred) for needy farmers who are practicing natural

breeding, in order to enhance the Natural Breeding Programme.

The bull calves are purchased from NLDB farms as well as from dairy farmers in the field after examining their suitability for natural breeding. The age of bull calves should be 3-5 months at the time of purchase and Rs.130 /Kg live weight is paid for calves. These bull calves are reared at Polonnaruwa farm till they become one years of age.

At 09 months to 01 year period, the bulls are issued to the required farmers (with 50% subsidy) through range veterinary surgeons, under the conditions stipulated by the department.

#### Achievements 2010:

- Total number of bull calves selected - 85 (cattle 47, buffalo 38)
- Total Number of bull calves issued - 65 (cattle 35, buffalo 13)

(\*There is a balance of 20 bulls, 13 cattle and 07 buffaloes for the issue in 2011).

#### 4.9. Pasture Development Programme

The pasture development programme is operated in the Department farms as well as with the farmers who need support for pasture and fodder development in the country.

The main objective is to maintain pasture and fodder nurseries with improved varieties, issue pasture cuttings to needy farmers and



conducting training programs for farmers as well as officers. The details of progress are given in Table 4.13.

**Table 4.13: Pasture Development Programme - 2010**

Activity	Target	Achievement
1. Pasture and legume seed production at AIC	10 Ac	10Ac
2. Farmer Training on Utilization of pasture and fodder	1,500 farmers	1,029 farmers
3. Establishment of Fodder at AI Centers	20 Ac	21 Ac
4. Establishment of tree Fodder at Goat Breeding stations	5 Ac	5 Ac
5. Fodder nursery development	5 nurseries	4 nurseries
6. Establishment of fodder plots in VS ranges (plots)	500 plots	540 plots
7. Fodder Conservation (Hay making)	50 MT	64 MT

#### 4.10. Goat Development Program

Two Goat Breeding Stations are maintained by the Division at Thelahera and Imbulandanda. Progeny of Jamnapari goats imported from India are available in these two farms. The main objective of running these two breeding stations is to maintain nucleus herds to produce breeding goats that are needed to be issued to the field.

In the year 2010 a sum of Rs. 8.0 million was allocated for the maintenance of these two Goat Breeding Farms. Total expenditure incurred during the year was Rs. 7.4 million and income of both these breeding farms was Rs. 1.7million. The sole purpose of maintaining these breeding farms is to provide a service to goat farmers and 29.6% of the income was earned against expenditure from farm produce in 2010.

**Table 4.14: Performance of two goat breeding stations (2008-2010)**

Year	Breedable females	Births	Total Deaths	Deaths <4M	Deaths 4M-1Y	Mortality (%)	Kidding (%)
2008	272	248	72	32	40	29	91
2009	284	361	45	29	16	12	127
2010	226	337	29	26	3	9	149

Total of 106 unproductive females were culled during the year 2010. Mortality of new born has decreased and kidding percentage has increased gradually.

Total of 599 Goats were available in two farms at the end of year 2010 and details are as follows.

**Table 4.15: Closing Stock Position by 31 December 2010**

Farm	Adults (>12mths)		Young stock (4-12mths)		Kids (0-4mths)		Total
	Male	Female	Male	Female	Male	Female	
Thelahera	03	206	16	61	35	63	384
Imbulandanda	05	94	04	40	32	40	215
<b>Total</b>	<b>08</b>	<b>300</b>	<b>20</b>	<b>101</b>	<b>67</b>	<b>103</b>	<b>599</b>

#### **4.11. Initiatives taken by the Division in 2010**

The Animal Breeding division published *The Guidelines for AI Technicians* in collaboration with GFMI project under the JICA assistance.

#### **4.12. Financial progress**

The total financial allocation for the Animal Breeding Division for the year 2010 was Rs. 148.4 million and overall utilization of funds was 94.8%.

## 5. VETERINARY REASERCH INSTITUTE

Research programmes pertaining to Livestock Sector are conducted by the Veterinary Research Institute (VRI) of the Department. The VRI, which is the National Institute to carry out livestock research, provides a range of services and produces vaccines, reagents as well to support further growth of the livestock sector.

The vision of the VRI is 'To be a centre of excellence in research and development of the Livestock Industry'.

The VRI, headed by a Director and supported by three (03) Deputy Directors (*Animal Production Research, Animal Health Research and Technical Services*) has eight (08) research divisions

namely, Pathology, Parasitology, Bacteriology, Virology, Animal Breeding, Animal Nutrition, Pasture and Fodder, Farming System Economics and Marketing. The Central Poultry Research Station (CPRS), Karandagolla, Central Veterinary Investigation Centre, Poultry Service Unit, Animal Virus Laboratory, Polgolla, Veterinary Vaccine Production Centre and Animal Experimental Farm, Gannoruwa are operated under the respective division/Deputy Director of the VRI.

Approved cadre and actual cadre positions of the VRI totaled 201 and 140 respectively for the year 2010.

### 5.1. Products and Services

The details of manufacture and issue of veterinary products by the VRI in 2010 is as follows:

#### 5.1.1. Products issued

a. Local Vaccines	Annual Target	Production	Issues
HS( Oil/ Alum ) vaccine	1,203,300	41,460	42,680
BQ vaccine	200,000	203,874	128,370
Ranikhet vaccine		20,200,000	20,200,000
Tick Fever vaccine	800	129	161
Wart vaccine	75	20	20
Fowl Cholera		244,200	244,200
<b>b. Diagnostic Reagents</b>			<b>Issues</b>
CMT Reagent (L)			11.5
Pullorum Antigen (Doses)			267,650
<b>c. Therapeutic Reagents</b>			<b>Issues</b>
Teat dip solution (L)			17.5
Udder infusion base ( vials)			356
<b>d. Dairy Products</b>			<b>Issues</b>
Yoghurt Culture (2ml & 6ml vial)			170

<b>e. Other Products</b>	<b>Issues</b>
Day Old Chicks (Nos)	6,072
Eggs (Nos)	10,227
Poultry meat (Kg)	2,681
Poultry litter (g)	2,080
Laboratory animals	85
Forage Specimens	
Education (Nos)	20
Establishment (Nos)	161
Seeds (g)	10

### 5.1.2. Services

#### *Examination of Specimens*

<b>Sample</b>	<b>Number</b>
Blood smears	323
Dung / faecal samples	64
Litter samples	50
Milk samples	105
Meat Identification	37
Intestinal samples	4
Tissue samples for histopathology	148
Serum /Plasma samples for Brucellosis & Leptospirosis	968
Serum /Plasma samples for AI	1162
ABST	44
Other samples	465

#### *Analysis, identification and quality testing of samples*

<b>Specimen</b>	<b>Number</b>
Feed	1117
Milk & dairy products	543
Soil	16
Water	51
Yoghurt	16
Curd	22

#### *Field investigations*

<b>Activity</b>	<b>No. of Visits</b>
Field investigations on poultry	150
Field investigations on Bovine , Caprine and other	14
Field investigations in to nutritional problems	31

## 5.2. Clients Registered at VRI

### *Clients Registered at different Units*

Place of Registration	No. of Clients
Coordinating Unit (Room 21 CU)	1,750
Central Poultry Research Station (CPRS)	2,209
Information Technology Centre (ITC)	1,074

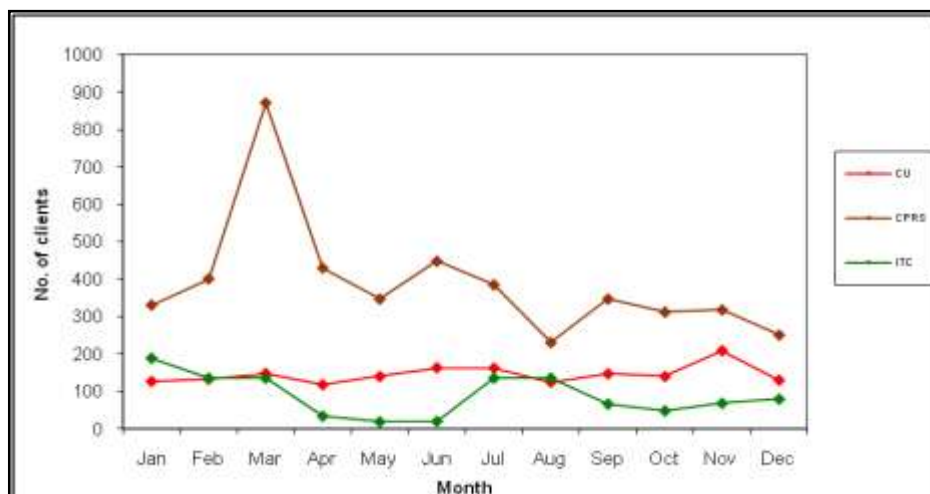


Figure 5.1: Clients Registered at Different Units

### *Sector based Client Registration at the Coordinating Unit*

Sector	No. of Clients
Cattle and Buffalo	150
Goat and Sheep	23
Poultry	384
Pasture	51
Laboratory Animals	22
Canine	214
Flesh	71
Feed	341
Dairy Products	113
Milk	47
Other	189
<b>Total</b>	<b>1,605</b>

*Service vice categorization*

Service type	No. of Clients
Disease Diagnosis	690
Feed formulation	351
Feed analysis	390
Blood smear examine	243
Quality testing	80
Meat identification	22
Advisory	
Disease control	21
Dairy technology	12
Livestock Management	16
<b>Total</b>	<b>1,825</b>

*Discipline-wise Client Registration*

Animal Nutrition (AN)	359
Bacteriology (Bac)	280
Farming Systems and Livestock	07
Economics (FS)	
Parasitology (Para)	256
Pasture (Pas)	55
Pathology (Pat)	35
Poultry Service Unit (PSU)	471
Veterinary Investigation Centre	222
Animal Breeding (AB)	49
<b>Total</b>	<b>1,734</b>

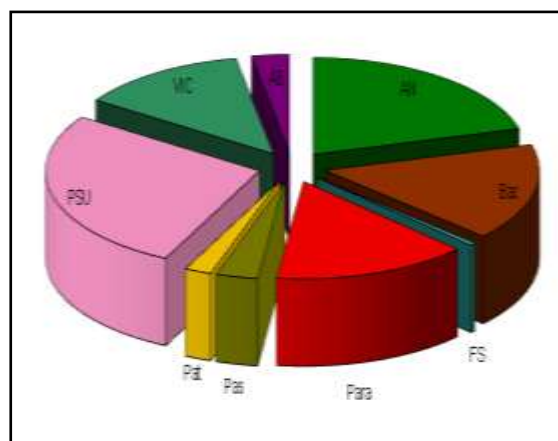


Figure 5.2: Discipline-wise client registration

**5.3. Progress of Research Projects**

**a.) Detection of HS latent carrier in endemic herds in Sri Lanka**

*Chief Investigator:* M.A.R.Priyantha

*Collaborating workers:* P.S.Fernando, A.A.Vipulasiri, S.A.Thalagoda,

*Duration:* 2 years (2010 – 2011)

*Objectives and Progress:* Haemorrhagic Septicaemia (HS) was the number killer disease in cattle and buffaloes in Sri Lanka. Sri Lanka has not experienced HS related deaths or any clinical cases for the past 7 years. This study is designed to assess the present status of HS in the country in the context of a country which has completely eradicated the dreaded disease.

**Status of the Project:** The study being carried out in slaughter houses in different districts of country, by using bacteriological and serological examinations has not so far yielded evidence of the pathogenic bacterial organism in any of samples. Study continuing in 2011

**b.) Isolation and identification of Salmonella serovars in Poultry Hatcheries**

**Chief Investigator:** N.Liyanagunawardena

**Collaborating workers:** P.S.Fernando, G. Wijewardena, A.Vipulasiri.

**Duration:** Two year: 2 years (2010 - 2011)

**Objectives and Progress:** The present study would identify the different Salmonella species that are suspected to be present in poultry breeder farms in the country and, hopefully pave the way to establish a stock of potential vaccine organisms.

**Status of the project:** Continuing in 2011

**c.) Identification of biovars of Brucella abortus and Brucella melitensis in aborted cattle herd in Sri Lanka.**

**Chief Investigator:** M.A.R.Priyantha

**Collaborating workers:** P.S.Fernando, M.Wijemuni, S.A.T.C. Samarakoon

**Duration:** 1 year

**Objectives and Progress:** Brucellosis is endemic in Sri Lanka. The present study was undertaken with a view to identifying the Brucella serovars currently present in the country in the affected herds. Brucella abortus serovar 3 was isolated and confirmed by biochemical and serological examinations.

**Status of the project:** Completed.

**d.) In vivo evaluation of the efficacy of selected probiotic organisms to combat S. Pullorum and S. Enteritidis in chickens**

**Chief Investigator:** P. S. Fernando

**Collaborating workers:** S.S.P. Silva, P. S. de Alwis, S. A. Thalagoda

**Duration:** 2 years. 2010 - 2011

**Objectives and Progress:** Salmonella pullorum and Salmonella enteritidis are important pathogens in poultry in Sri Lanka. Use of Probiotics is a novel method in controlling the infections caused by these organisms, especially beneficial in the face of the ban on use of antibiotics in poultry feeds. 20 Lactobacilli and 10 Streptococci strains had been isolated, selected and tested for in vitro antagonistic activity against S. pullorum. Of these five lactobacilli and two streptococci strains have been selected for a in vivo study to be continued in 2011.

**Status of the project:** To be continued in 2011

**e.) Dairy cattle growth monitoring in view of enhancing milk production.**

*Chief Investigator:* S. Weerasingha

*Duration:* 1 year

*Objectives and Progress:* A growth prediction formula to be formulated using different body parameters in cattle in Sri Lanka. A correction factor was developed to calculate the correct reading of the weigh band as given below:

$$\text{Weigh band reading} = 14.655 + 0.95 * \text{Actual reading}$$

*Status of the project:* Completed.

**f.) Quality evaluation of deep frozen bull semen.**

*Chief Investigator:* S. Weerasingha

*Duration:* 1 year

*Objectives and Progress:* A new quality control system was formulated and established to ensure the quality of deep frozen semen, in-order to increase the insemination rate in the field.

*Status of the project:* Completed

**g.) Milk urea nitrogen : as a tool for the determination of nutritional status of dairy cows**

*Chief Investigator:* U.L.P. Mangalika

*Duration:* 2 years (2010 - 2011)

*Objectives and Progress:* Laboratory expertise was developed to determine the MUN values.

*Status of the project:* To be continued in 2011

**h.) Milk composition parameters affecting the ethanol stability of cow milk**

*Chief Investigator:* U.L.P. Mangalika

*Duration:* 2 years (2010 - 2011)

*Objectives and Progress:* 225 milk samples from different locations have been collected and tested by the Ethanol test. And 81 were found to be positive. This indicates that by the Ethanol test significant number of milk producers face rejection at Milk Collecting Centres for failing the test. Hence the identification of compositional parameters that affect milk ethanol stability would be determined in 2011.

*Status of the project:* To be continued in 2011.



**i.) Determination of nutrient and amino acid composition and the development of database of the available raw materials that are used for animal feed production in Sri Lanka**

*Chief Investigator:* N. Priyankarage

*Duration:* 2 years (2010 – 2011)

*Objectives and Progress:* Determination of nutrient and amino acid composition and development of data base, establish the HPLC method for determination of amino acids in VRI and establish the determination of proximate composition of raw materials using NIRA system in VRI.

60 different types of rice polish samples (Red, white and parboiled forms of these two varieties) were collected from Kekirawa and Anurdhapura ranges and these samples were analyzed for their nutritional qualities.

One feeding trial and one digestibility trial was conducted during the year 2010 to investigate effect of red and white rice polish on the performance and digestibility of broiler chickens. Laboratory analysis of all experimental samples has been completed.

*Status of the project:* Continued in 2011.

**j.) Assessment of performance of UMMB supplementation under field conditions**

*Chief Investigator:* W. Weerasingha

*Duration:* 2 years. Continuation from 2009

*Objectives and Progress:* The project continued from 2009 to further evaluate the effects of UMMB supplementation on performance of dairy cows under field conditions. During the year 2009, the experiment conducted was to assess the animal performance with UMMB supplementation fed with basal diet consisting of good quality improved roughages, which resulted in some positive responses. During the year 2010 one experiment was conducted to see whether the same feeding practice would be enhanced by replacing of some part of improved roughages with rice straw as night feeding.

*Status of the project:* Completed

**k.) Evaluation of Periodical Changes in Market Margin in Different Livestock Products.**

*Chief Investigator:* R.M. Chandrasena

*Duration:* 2 years (2010 – 2011)

*Objectives and Progress:* Initial investigations have enabled the determination of cost of production of different livestock products, marketing channels for different livestock products, distribution of market margin between producers to consumer.

*Status of the project:* Continuing in 2011.

**l.) Characterization and Economic Evaluation of Cattle and Buffalo farming systems in the Uva Province, with a view to obtaining optimum potential from milk production.**

*Chief Investigator:* R.M. Chandrasena  
*Collaborating workers:* R.M. Ariyadasa  
*Duration:* 1 year

**Objectives and Progress:** The farming system known as Helmalu is practiced in Upper-Uva, Kandaketiya, Meegahakiula Ridimaliyadda where males are kept for draught purposes. During the paddy cultivation period cattle and buffaloes are driven to Nilgala forest reservoir for a period of three to four month. Therefore the supply of milk to the milk channels is discontinued.

A low-input management system was introduced whereby increases in the average number of milking animals in the herd by 12%, lactation length by additional four week, average per animal milk production by 400ml/day and the Fat and SNF content in the milk by additional 1% and 0.5% respectively were obtained.

**m.) Development of a PCR method to identify Paramphistomum genus in cattle**

*Chief Investigator:* S.S. Iddamaldeniya  
*Co-Scientists:* M.B. Navarathne, N.D. Senasinghe Dissanayake

**Objectives and Progress:**

- To Develop a PCR method to identify Paramphistomum genus in cattle
- To develop a PCR method to diagnose immature paramphistomiasis in situations where definitive diagnosis is difficult but necessary.

A PCR method was developed to diagnose immature paramphistomiasis in situations where definitive diagnosis is difficult but necessary and would be of great benefit to the field Veterinarian. A circular had been circulated among field veterinarians through the Provincial Directors.

*Status of the project:* Completed.

**n.) Detection of the efficacy and safety of newly developed *B. bigemina* vaccine strain under experimental conditions.**

*Chief Investigator:* M.B.Navaratne  
*Co- Scientists:* N.D. Senasinghe Dissanayake, S.S.Iddamaldeniya

**Objectives and Progress:** Determination of effectiveness and safety of newly developed local strain of *B. bigemina* before issuing to the field as a vaccine in order to control *B. bigemina* infection.

It is also notable the use of lower dosage showed infectivity.

During the challenge experiment all vaccinated groups were protected against *B.bigemina* infection whilst the control group showed high temperature and clinical signs. Statistical analysis of the results and the final report writing is in progress.

A local strain of *Babesia bigemina* was isolated and tested for efficacy and safety in order to incorporate into the vaccine used for the control of babesiosis in Sri Lanka.

*Status of the project:* Completed.

**o.) Detection of anthelmintic resistance in bovine nematodes in Sri Lanka.**

*Chief Investigator:* N.D. Senasinghe Dissanayake  
*Co-scientists:* M. B. Navaratne, S. S. Iddamaldeniya

*Objectives and Progress:* In order to determine whether anthelmintic resistance is present in Sri Lanka a study was conducted at NLDB farms in the dry, wet and intermediate zones using popular anthelmintics: Albendazole and Fenbendazole. Anthelmintic resistance is not present in the farms that were tested. Lack of effectiveness of anthelmintics were due to management problems.

**p.) Present status of Rinderpest of Northern and Eastern Province of Sri Lanka**

*Chief Investigator:* B. D. R. Wijewardena

*Objectives and Progress:* Four hundred and ninety five samples were collected from Jaffna, Vavuniya, Mannar, Trincomalee, Batticaloa, Ampara and Mullathivu, districts. Excess ELISA Test Kit reagents received For OIE/FAO eradication programme were used for testing and all samples were negative for Rinderpest antibodies. Since these provinces were affected by the outbreak and some parts were inaccessible compared to other areas. These results may act as a confirmatory to the results of OIE/FAO Project.

**q.) Isolation and identification of respiratory disease causing viruses of poultry with emphasis of Avian Influenza and Newcastle Disease**

*Chief Investigator:* H. Kothalawala

*Objectives and Progress:* The lentogenic type of Newcastle disease viruses which isolated from the field attempt to use for the local vaccine production. Eventually using B1 type of virus strain able to regain the Newcastle Disease vaccine production at VRI. This vaccine was successfully used as a combat vaccine for the island wide outbreak of Newcastle disease in year 2010.

A vaccine against New castle infection in poultry was produced incorporating locally isolated NCD virus strains. This was used very successfully in a massive outbreak in 2010.

*Status of the project:* Continuing in 2011

**r.) Detection of Avian Influenza Subtypes circulating in Commercial Poultry in Sri Lanka**

*Chief Investigator:* S. Ralapanawe

*Objectives and Progress:* Four hundred serum samples were collected from Known traced back Avian Influenza antibody positive farms of North Western, Western, Central and Uva provinces. These samples were checked with commercial Enzyme Linked Immuno Sorbant Assay (ELISA) kits for avian Influenza Type A. One hundred and nine samples were found to be positive and the positive samples were further analyzed by Haem Agglutination Inhibition Test for H5, H7 and H9 subtypes which can be pathogenic to poultry and found to be negative.

*Status of the project:* Completed.

**s.) Sero- surveillance of Swine Influenza type A in pigs in Sri Lanka**

*Chief Investigator:* S.A.E. Abeyratne

*Objectives and Progress:* Four hundred and sixty serum samples and forty tracheal swabs were collected from commercial pig farms. The tracheal swabs were found to be negative. The serum samples could not be tested for antibodies for Swine Influenza since the ELISA kits were not procured (tender has been awarded and waiting for supply of kits).

Three hundred sixty eight (368) of the serum samples were tested for Classical Swine Fever and fifty eight samples were found to be serologically positive.

*Status of the project:* Continuing in 2011.

**t.) Forage seed production; Evaluation of agronomy and economical feasibility of the operation**

*Chief Investigator:* G.G.C.Premalal

*Objectives and Progress:*

- To investigate the agronomic aspects of fodder seed production under Sri Lankan conditions
- Evaluation of economical feasibility of the operation
- To find out the technologies for fodder seed production under local conditions
- Transferring technologies to private seed producers for their commercial operations

The study was carried at 4 locations namely Ambewella, Nikaweratiya, Imbulandanda and Gannoruwa with forage varieties Rye grass (Ambewella only), Signal grass (Nikaweratiya and Imbulandanda), Guinea TD-58, Hamil and 435 (Gannoruwa). Matured seed crops were harvested and analyzed for germination and viability from harvesting up to 6 month storage period in 2 months intervals. Viable seeds at 20-25%

germination rate could be produced using the above varieties. Seed germination rate was increased from 10-12% to 28-30% during storage up to 6 months

#### **5.4. Research Publications - 2010**

Details of research publications are stated in *Annex VII*.

#### **5.5. Income and Expenditure**

##### **Income**

The VRI generated funds through provision of its services. Accordingly, the annual income of the Institute totaled Rs. 2.965 million. Details are given under *Annex VIII*.

##### **Expenditure**

Total recurrent and capital budget for the VRI for the year had been Rs. 37.98 million and Rs. 48.00 and the expenditure percentages been 45.78% and 30.4 % respectively.

## 6. HUMAN RESOURCES DEVELOPMENT DIVISION

The Human Resource Development Division (HRDD) is one of the major divisions of the Department of Animal Production and Health (DAPH). The main responsibility of this Division is to develop human resources in order to meet the present and future needs arising in the Livestock sector. The technical activities of the HRD division could be broadly classified into four (04) programmes as follows.

- Training and technology transfer
- Education and career development
- Information and publicity
- Entrepreneurship development and self employment support services

### 6.1. Staff and units

The HRDD consisted of 90 staff during the year 2010. Apart from the Head Quarters at Peradeniya, the HRD Division administers following four (04) units.

- Institute of Continuing Education for Animal Production and Health (ICEAPH), Gannoruwa.
- Sri Lanka School of Animal Husbandry (SLSAH), Karandagolla.
- Animal Husbandry Training Center (AHTC), Seppukulama.
- The Department Library, Gannoruwa.

### 6.2. Training and Transfer of Technology

Training programs have been used as the main tool in transfer of technology. Most of the officer training programmes were conducted at the ICEAPH, whereas farmer trainings were conducted at the

AHTC, Seppukulama. During the year under review, a total of 2,436 personnel have been trained.

#### a. Key Training Areas

In the case of Department officers, training programs were planned in consultation with the relevant target groups and their supervising officials in both Central and Provincial Departments of Animal Production and Health. Following subjects have been emphasized mainly, through these training courses.

- Update on the Livestock Industry and Animal Husbandry
- Development of Managerial Capabilities of officers
- Motivation training for clerical and minor staff
- Training of Trainers
- Computer application
- HPAI Preparedness

The farmer training conducted was mostly need based and on demand.

#### 6.2.1. Training Conducted at ICEAPH

The Institute of Continuing Education 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 sector activities.

#### a. Target groups

- Officers of the Animal Production and Health Service
  - Veterinary Surgeons- DAPH/PDAPH
  - Livestock Officers
  - Veterinary Research Officers/Research Officers
  - Veterinary Investigation Officers



- Officers of the Organizations involved in Livestock Development.
- Small Scale Processors
- Others - All employees of Central DAPH

**b. Training Programs**

Discipline-wise physical targets and achievement of the training programs conducted at the ICEAPH during the year 2010 are given below with number of programs conducted under each.

Items	Target	Achievement
Number of Training Programs	75	70
Number of Trainees/ participants	1,460	1,977
Number of training man days	1,900	2,895

**c. Trainee Composition**

Number of training programs conducted in 2010 based on the composition of trainees is shown below:

Category	Planned	Achievement
AP&H Officers	30	28
Middle level officers	06	03
Supportive Staff	20	17
Other stake holders (i.e., processors, feed millers)	08	07
Training of provincial extension staff	09	04
Agriculture teachers/ Asst. Directors	02	02
Farmer Programs	-	05
Other Programs	-	04
<b>Total</b>	<b>75</b>	<b>70</b>

**d. Special training conducted during the year**

**IT and Computer Applications**

Training programs on open source applications were carried out for selected officers from each province. Special certificate course on computer studies was conducted for AP&H officers in the Sabaragamuwa province.

**Special Program with Korean Internet Volunteers (KIV)**

Four (04) programs were conducted and 85 officers were trained. Training programs could be categorized as video editing with Adobe Premiere, Database management with PHP and MySQL and image editing with Adobe Photoshop.



Figure 6.1: KIV's training programme - 2010

**Induction Training Programs**

- Induction program was carried out for 28 newly recruited AP&H officers. (392 man days)
- Theme of the program was Administration and Financial Discipline, public relation and motivation in public service.



Figure 6.2: Induction Training Programme - 2010

**Special Dairy Development propaganda programs at Sabaragamuwa Province**

Under this category, four (04) training programmes on Production of Cheese and Butter were conducted in Deraniyagala.



Figure 6.3: Special Dairy Development propaganda programs - 2010

**Programs for the Small Scale Processors**

Two (02) Programs were designed and conducted to strengthen the capacity of the Small Scale Processors. 27 small scale processors were trained.

**Tamil Language Proficiency Program**

According to decision made by the Government to improve communication ability among different ethnic groups arrangements were made to commence Tamil Language Proficiency program. Group of 90 officers of the DAPH (Central Government) selected for this and the program was conducted under the guidance of the Language Department. Classes were held at the ICEAPH from 2.30 to 4.30 p.m. on every Tuesdays, Thursdays and Fridays.

**Farmer Information Hot Line - Govi Sarana Sevaya - 1920**

Farmer information hot line, *Govi Sarana Sevaya* (1920 extension) which started from mid October 2008 to respond to technical problems of livestock farmers continued during the year 2010 as well.

**6.2.2. Training at Other institutions**

**a. Animal Husbandry Training Centre, Seepukulama**

Facilities at AHTC Seepukulama, has also been used for training particularly for training of farmers and other categories, such as undergraduates, department officers, diploma students, school students etc.. At AHTC, Seepukulama, 17 training programs have been conducted during the year and 449 trainees have participated in these courses. The details are as follows.

Category of participants	No of programs	Number of participants
Government officers	07	164
Farmers	06	129
School children	02	82
Diploma students	01	47
Others	01	27
<b>Total</b>	<b>17</b>	<b>449</b>

**b. Training Farm, Seepukulama**

The training farm at Seepukulama continued functioning during the year. The farm produced milk, eggs, breeding animals etc.

**Grass cultivation**

During the year CO<sub>3</sub> grass cultivated on 2 and 1/2 ac.

**6.3. Educational and Career Development**

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

Sri Lanka School of Animal Husbandry, Karandagolla continued conducting two (02) year Diploma programme in Animal Husbandry.

**a. Academic Activities**

Seventy eight students were passed out from 2007 / 2009 academic year. New batch for the academic year 2010/2012 was started on 20 July 2010. Number of

students enrolled for this programme was 68. The batch continued in the first academic year with the practical training programme.

**b. Teaching Facilities**

During the year new books for the library were purchased. Total expenditure for that was Rs.20, 200.00.

**c. Infrastructure Development**

During the year 2010, construction of the new administration block was

completed and new furniture for the administrative block purchased.

**d. Training Farm**

The Training Farm at Karandagolla continued functioning with different units namely, Dairy, Buffalo, Goat, Rabbit, Quail, Poultry, Horticulture and Export Agricultural Crop. Source of income and revenue of the above units during the year 2010 were as follows;

Source of income	Revenue (Rs.)
Selling Milk	175,352.70
Seasonal crop production	14,630.00
Sale of Pasture cutting	2000.00
Sale of Animals	-
<b>Total farm income</b>	<b>191,982.70</b>

**6.3.2. Veterinary Internship Training**

This Division is responsible for implementation of the Internship Training for Veterinary Graduates. Two (02) internship programs started during the year 2010 and one programme continued from the year 2009. The details of these three programs are given below.

- The programme commenced on 01<sup>st</sup> September 2009 with 43 Veterinary graduates continued up to 28<sup>th</sup> February 2010.
- The first internship programme was started on 15<sup>th</sup> July 2010 with 34 veterinary graduates and completed by 15<sup>th</sup> December 2010.
- The second program commenced on 01<sup>st</sup> September 2010 with 21 Veterinary graduates and this internship programme was completed in the 28<sup>th</sup> February 2010.

**6.3.3. Foreign Training**

Division continued procuring foreign fellowships. During the year 43 officers have undergone foreign training on various disciplines and detail information on these fellowships is given in *Annex IX*.

**6.3.4. Support for Post Graduate Training**

Division continued to support post graduate fellowships in local universities. During the year under review, six (06) AP&H Officers have undergone MVSc training and three (03) officers have undergone MSc training on various disciplines.

Further to this one officer of the Department has been supported to follow short term training programme in a local higher education institute. Details on these fellowships and trainings are given in *Annex X*.

#### 6.4. Examinations

The HRD division is responsible for conducting examination on behalf of the Department. It was planned to conduct 11 examinations and 12 have been successfully conducted. One examination was conducted on the request of the Ministry in addition to the planned programme. Details of examinations conducted in 2010 are given in Annex XI. Results of Departmental exams which have been released in the year 2010 also given in Annex XII.

#### 6.5. Information and Publicity

Information unit of the division carried out Information, Publicity, Propaganda and Mass Media activities. This unit gave priority for promotion of income generating activities with the intention

of assisting farmers and potential farmers engaged in small-scale animal husbandry and related activities. Print Media and Mass Media were used mainly for above purposes.

##### 6.5.1. Print Media Activities

Printed materials were mainly used to transfer technological information to users. There was a continued demand for leaflets and booklets published by the Department.

##### 6.5.2. Publications

According to the users need, the division continued printing following materials for dissemination of new technological information. The achievements for new prints were two (02) and revised prints were 26 in the year.

#### New Prints in 2010

	Subject	Type	Medium	No. of copies
1	Dairy farming	Booklet	Sinhala	3,000
2	Quarantine Management	Booklet	English	1,000

New Booklets on following titles were handed over to the press for printing during the year.

1. Planning of a milk processing plant
2. Poultry Diseases

#### Revised Printings in 2010

	Subject	Type	Medium	No. of copies
1	Environmental effects on egg production	Booklet	Tamil	1000
2	Cattle Sheds	Booklet	Sinhala	3000
3	Integrated farming on crops -Livestock	Booklet	Tamil	2000
4	Bio Gas production	Booklet	Tamil	2000
5	Identification of heat signs of adult cattle	Booklet	Tamil	1000
6	Keeping of calves	Booklet	Tamil	1000
7	Keeping of calves	Booklet	Sinhala	1000
8	Environment and milk production	Booklet	Sinhala	2600
9	One calf for a year	Booklet	Sinhala	3000
10	One calf for a year	Booklet	Tamil	1000

**Revised Printings in 2010 - contd**

	<b>Subject</b>	<b>Type</b>	<b>Medium</b>	<b>No. of copies</b>
11	Identification of heat signs of adult cattle	Booklet	Sinhala	3000
12	Treatment of straw	Booklet	Tamil	2000
13	Preparation of dried fodder	Booklet	Tamil	2000
14	Control of litter	Booklet	Tamil	2000
15	Poultry diseases	Booklet	Tamil	2000
16	Ornamental fish diseases	Booklet	Tamil	1000
17	Birth of calves	Booklet	Sinhala	3000
18	Birth of calves	Booklet	Tamil	1000
19	Environment and milk production	Booklet	Tamil	1000
20	Clean milk	Booklet	Tamil	2000
21	Dairy farming	Sticker		3000
22	Culling of layers	Booklet	Tamil	2000
23	Reducing of mortality of chickens	Booklet	Tamil	2000
24	Poultry diseases	Booklet	Sinhala	3000
25	Compost production from Broiler Litter	Booklet	Sinhala	3000
26	Recycling for a portable poultry industry	Booklet	Tamil	2000

**6.5.3. Printing of Other Documents**

Information unit undertook printing of urgently needed documents such as reports, printed forms of various divisions of the Department. Details are as follows.

**New Publications in 2010**

	<b>Title</b>	<b>Type</b>	<b>Medium</b>	<b>Total No. of copies</b>
1	Suitable pasture, fodder and legumes for cattle	Leaflet	Tamil	2000
2	Services being rendered by the department	Leaflet	Sinhala	2000
3	Fundamental reports used in the epidemic conditions	Leaflets	Sinhala	1000
4	New Year greeting Cards for 2011	Greeting card	Sinhala	250
5	Invitation cards (Opening of Homagama VIC Office)	Invitation cards	Sinhala/ Tamil/ English	300
6	Letters of Labour recruitment	Letter	Sinhala	1000
7	"Pashu Kirana" Newsletter	Newsletter	Sinhala	1000
	<b>Reprints</b>			
1	Application form of self employment training	Leaflet	Sinhala	1000
2	Broacher of self employment training	Leaflet	Sinhala	1000
3	Broacher of self employment training	Leaflet	Tamil	2000
4	Application form of self employment training	Leaflet	Sinhala Tamil	2000 2000



**6.5.4. Sale of Publications**

Sales Centre of the Department has sold 40,537 booklets / leaflets, 132 Photographs (10x12 size), 483 post card size photographs and 58 CD's during the year and has reported a revenue of Rs.814, 677.00.

**6.5.5. Electronic Media Activities**

The two (02) major programs carried out under the Electronic Media Activities

were Radio Broadcasting and TV telecasting.

**6.5.6. Radio Broadcasting Programmes**

The Division continued broadcasting number of programs in various channels. During the year, 84 radio programmes were broadcasted in various radio stations as follows. This was against the 96 programmes targeted in the year.

Programme	Radio Stations	Number of broadcasts
" Sathwarawaya"	National Service (SLBC)	78
Others/ (Kandurata Sewaya, Lakhandanda Radio)	Regional Services	06

**6.5.7. TV Programmes**

As TV plays a dominant role in mass media nowadays, the Division continued telecasting TV programmes. During the year, 30 TV programmes

were telecasted in channels of Independent Television Network (ITN) and National Rupavahini as follows. This was against the 08 programmes targeted.

Programme	Channel	Number
Arunella and Pahandora	ITN	24
Nugasewana and other programmes	Rupavahini	06

**6.5.8. News Releases**

Altogether 36 news items written on Animal Husbandry related subjects have been broadcasted / telecasted and two (02) web news and five (05) technical articles were published.

The Division maintained collection of paper articles published on newspapers during the year for future references.

**Audio Visual unit**

An Audio Visual centre for the department has been a long felt need and a decision was taken to setup an Audio Visual Centre for the department with the assistance of the World Bank funded Avian Influenza Project. Accordingly, an Audio Visual centre was established in the top floor of the department building. During the year, 11 officers from the HRD were trained for one (01) month by the Sri Lanka Rupavahini Corporation.

**6.5.9. Production of Audio Visual Material**

This unit provided video productions and duplication services on request.

**6.5.10. Exhibitions**

The HRD Division participated in exhibitions at National and Regional level. Information about exhibitions

participated during the year 2010 are given below. The target for the year 2010

had been six (06) exhibitions.

**Table 6.1: Exhibitions conducted in 2010**

Category	Venue	No. of programs	No of Days
National Level	Deyata Kirula, Pallekele	01	07
	Govi Sathiya, Bataatha	01	05
	Agri Educational and teaching Exhibition, Pannala	01	04
	Agriculture, Livestock and Fishries exhibition (SMEDEX), BMICH, Colombo	01	02
	Janapathi Jangama Sevaya, Kilinochchi	01	01
	Dairy farmers meeting and exhibition, Kotagala	01	01
<b>Total</b>		<b>06</b>	<b>20</b>

**6.6. Entrepreneurship Development and Self- Employment support services**

The Entrepreneurship development and Self Employment Support Training Scheme is an important and highly promising programme carried out by the Division. Farmers and unemployed youth, who wish to be engaged in Animal Husbandry and related

activities on self-employment basis, directly benefits through this programmes. For unemployed youth 12 new self-employment programs and for he Entrepreneurs eight (08) follow-up programs were targeted for the year 2010. There were 450 trainees targeted for the year under this. Details of the training conducted during the year are given below.

**6.6.1. Basic Training for Self Employment**

Topic	Venue	No. of Programmes	No. of Participants
Milk Processing	Nuwaraeliya	01	45
Milk Processing	Seppukulama	03	84
Milk processing	Uppuweli	01	31
Dairy Management	Seppukulama	01	18
Poultry Management	Seppukulama	01	30
<b>Total</b>		<b>07</b>	<b>208</b>

**6.6.2. Follow up Technical Training Programmes**

Topic	Venue	No. of Programme	No. of Participants
Positive Thinking	ICEAPH/Gannoruwa	01	92
Milk processing	Padiyathalawa	01	27
Milk Processing	Seppukulama	01	21
Diary Management	ICEAPH/Gannoruwa	01	40
Business Management	ICEAPH/Gannoruwa	02	86
Milk Processing	Dehiovita	01	75
<b>Total</b>		<b>07</b>	<b>341</b>

Under the Self- Employment support and Entrepreneurship Development, 38 farms and processing centers have been visited by the staff during the year to improve their capabilities as entrepreneurs. 13 business promotion programmes have also been undertaken to motivate the young entrepreneurs to enter into the business ventures of animal husbandry and related fields.



**Figure 6.5:** *Business management Programme conducted at ICEAPH*

The records at the division reveal that around 1,500 individuals have contacted the division through telephone or by post for technical advice and information.

## 6.7. The Department Library

The Department Library continued serving as the National level Library for Livestock Development and Veterinary Science, who search for information.

### 6.7.1. Membership

The Library issues membership only to the DAPH officers and there were 237 members as at the end of the year 2010.

### 6.7.2. Accession

Total grants allocated for purchasing journals for the library was Rs. 300,000.00.

The following foreign journal titles were purchased through their agent SWETS.

- Animal science
- Asian Australian journal of Animal Science
- Veterinary Record and In Practice
- Research in Veterinary Science
- Tropical Animal Health and Production
- Buffalo Journal
- Indian Journal of Poultry Science

### 6.7.3. Reports

Central Bank Report -2010 was purchased during the year 2010

### 6.7.4. Literature searches

Computer based Literature searches were carried out by the library on user request using Vet CD and beast CDs and drug CDs related to the Animal Science. During the year number of literature searches had done at user request through Internet too.

The Chief librarian was appointed again as a member of AGRINET advisory committee in 2010. During the year chief librarian participated in several AGRINET meetings, user seminars which were conducted by the CARP and the National Science Foundation. Also the library organized several awareness programmes to educate farmers on the way of collecting information from institutional libraries. During the year 30 content pages of journal titles and 150 articles were received by the library through AGRINET member libraries. Library requested reprints from the books and journals as well from the universities and institutional libraries.

### 6.7.5. Databases

By end of the year two (02) bibliographical databases for organizing information related to the veterinary

science created and the data feeding was commenced.

### 6.8. Finance and Expenditure

The Division functions on the funds provided from the consolidated fund, through vote 292 - 02 - 03. The total

allocation for the year was Rs 32,915,000.00 out of which Rs 10,815,000.00 was for recurrent expenses and the balance Rs 22,100,000.00 was for development works under capital expenditure.

	Allocation (Rs. Mn)	Expenditure (Rs. Mn)	Expenditure %
Recurrent	10.815	10.766	99.54
Capital	22.100	27.590*	124.84

\* Though the total allocated amount of capital budget was Rs. 22.10 Mn, the actual expenditure was Rs. 27.59 Mn. This was because the number of internees enrolled for the internship

program in year 2010, has exceeded the expected number. The excess amounts were received as additional allocations from other votes.

## 7. LIVESTOCK PLANNING AND ECONOMICS DIVISION

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 maintains the National level *Databank* to collect and compile livestock statistics and Data which is accessible to the public and to policy makers, researches, university students. The *Data Processing Unit* is responsible for data entry, analysis and preparation of reports/documents to the data bank and to the ministry and other relevant organizations.

Main responsibilities of the division are as follows:

- Identification and formulation of livestock development programmes and projects;
- Monitoring , evaluation and economic analysis of livestock development programmes and projects of the department ;
- Conduct economics studies to assess feasibility and viability of livestock development programmes 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;
- Co-ordinate livestock development programmes with provincial DAPH and other state institutions and organizations;
- Human resource development of the division; and
- Staff management, financial management and general maintenance of the division.

### 7.1. Identification and Designing of Livestock Development Programmes 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.

#### 7.1.1. Projects for the National Budget- 2011

Under this, Four (04) new projects proposals were formulated and cabinet papers prepared in collaboration with respective divisions/officers. These project proposals were forwarded to the Department of National Planning for consideration, and forward to the Treasury. Out of this, three (03) project proposals have been accepted for implementation from the year 2011.

Details of those projects are as follows:

- Establishment of an Animal Identification and Traceability system and a Central Livestock Farm Database
- Establishment of a Dairy Technology Laboratory
- Expansion and Modernization of Animal Quarantine Unit

Furthermore, project proposals for 12 on-going projects of the DAPH for continuation for coming years were reviewed, forwarded and necessary approvals have been obtained.

## 7.2. Monitoring, Evaluation and Economic Analysis of Livestock Development Programmes and Projects of the Department

### 7.2.1. Physical and financial progress review of Departmental programs

#### a. Action plan and progress

Action plan for physical and financial progress review of the DAPH was prepared for the year 2010. The physical and financial progress was monitored monthly on the thrust area basis and reports were submitted to the Ministry.

Capital expenditure utilization of the DAPH had been 66.09% in 2010 which is more than the previous year's progress of 34.5%. The progress of utilization of recurrent funds was 98.22% in 2010, which is higher than the corresponding figure of 93.36% in the year 2009. The details are given in *Section 10*, under the Finance division.

#### b. Progress Review Meetings of the department

Physical and financial progress of departmental programmes is reviewed at progress review meetings represented by respective Directors and relevant officers of divisions. Two (02) such meetings were coordinated by the LPE division during the year.

### 7.2.2. 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 offices in the country. Data were processed and monitored, and the analysis reports were prepared, to be communicated to the Provincial DAPH.

Dispensary and Field Cases  
 Artificial inseminations  
 Health Certificates issued  
 Immunizations  
 Pasture and Fodder establishment  
 Training/field days conducted  
 Loans and Insurance  
 Farms Registered

Analysis of selected data is given in *Annex XIII*. Data on immunizations and Animal Breeding activities are given separately under Sections on Animal Health and Animal Breeding divisions respectively.

## 7.3. Economic Studies and Surveys

One of the main functions of the division is to conduct economic studies, surveys and pilot projects to support policy formulation and for future planning pertaining to livestock sector.

### 7.3.1. Environmental issues

A sample survey was carried out to find out the nature of the environment issues reported in Livestock farms in Sri Lanka. Livestock farms (poultry, swine, cattle and mixed farms) which have been reported to the Central Environmental Authority (CEA) with environmental issues were selected for the survey based on random stratified sampling methods. Total of 30 samples were selected, and the survey was carried out by using a pre-structured questionnaire. The survey sample (30) was composed of 18 swine farms, 08 poultry farms, 01 cattle farm and 03 mixed farms. Most of the Farms with environment issues were found in the Western Province. Field activities of the survey was commenced in June and continued until December 2010. The report of the survey is expected to publish in 2011.



### 7.3.2. Cost benefit analysis of Foot and Mouth Disease Control Program

Foot and Mouth is an endemic disease in Sri Lanka. A control program is implemented by the DAPH to minimize losses caused by this disease. The direct cost incurred for FMD control (vaccine and vaccination) is 21.3 million rupees on an average and it is around 10% of total expenditure of the annual budget of the DAPH. Therefore, a study was planned to estimate the cost and benefits on FMD control program in Sri Lanka.

A sample survey was carried out in farms reported with FMD outbreaks in late 2008 and early 2009 to develop certain parameters to estimate the cost and benefits (CBA) of FMD control program. The data on losses on FMD at farm level, regional level and national level were collected for CBA. The preliminary findings are planned to discuss at a forum of DAPH officers in early 2011 and report is planned to be finalized by mid 2011.

### 7.3.3. Baseline Survey on Goat Farms in Sri Lanka

Goat industry is the least industrialized sub sector among other livestock sub sectors in Sri Lanka. Further, published information of this sector for last two decades or so is not available in the country. Baseline data is the key factor in any future planning process. Therefore a survey was planned to uncover the present status of goat industry. A pre structured questionnaire was designed and pretested in the NCP in late 2010 and the pilot survey is planned to carry out in mid 2011 in the Northern Province of Sri Lanka.

### 7.4. Review of Livestock Industries and Management of Livestock Database at National Level

Availability of reliable statistics is one of the main prerequisite for any planning and monitoring pertaining to the livestock sector. This is also one of the main responsibilities of the LPE Division which was facilitated by the data processing unit and the data bank.

#### 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. Initiatives were taken by the division to convert this as an electronic livestock statistics database. Ten year data document has been updated and published.

##### a. Milk Collection

Data on the milk collection by leading organizations contributing to formal milk market was collected for the year 2010. Total milk collection by 12 key organizations in the year 2010 totalled 136.18 million litres and from this 35.93% and 17.63% collected from the Central Province and the North-Western Province respectively. Total milk collection of all provinces has been increased compared to the year 2009. Overall milk collection has shown an increase of 13.78 million liters in the year 2010, which is a growth of 11% over the corresponding volume in 2009. Moreover, milk collection in the war-affected Eastern Province has shown a growth of 23% over the corresponding figure in the year 2009. District -wise milk collection data for the year 2010 is given in *Annex XIV*.

**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 2010 was obtained from Sri Lanka Customs and analysed. Quantities of Dairy products, Meat and Meat products imported into the country in 2010 totalled 75,482 MT and 1,556 MT with the value of Rs 29.03 billion and Rs 246.04 million respectively. Import of Dairy products, meat and meat products has been increased in the year 2010 when compared with the previous year.

Total of 444 MT of dairy products and 2,396 MT of meat and meat products have been exported to other countries during year 2010.

**c. Market information**

Market information on purchasing price, wholesale price, and retail prices of livestock products were continued to collect for analysis and dissemination of information. Eggs and chicken meat prices were collected weekly from Kandy and Colombo town to study market fluctuation of prices. Average retail prices of livestock products in Kandy and all-island are depicted and tabulated below.

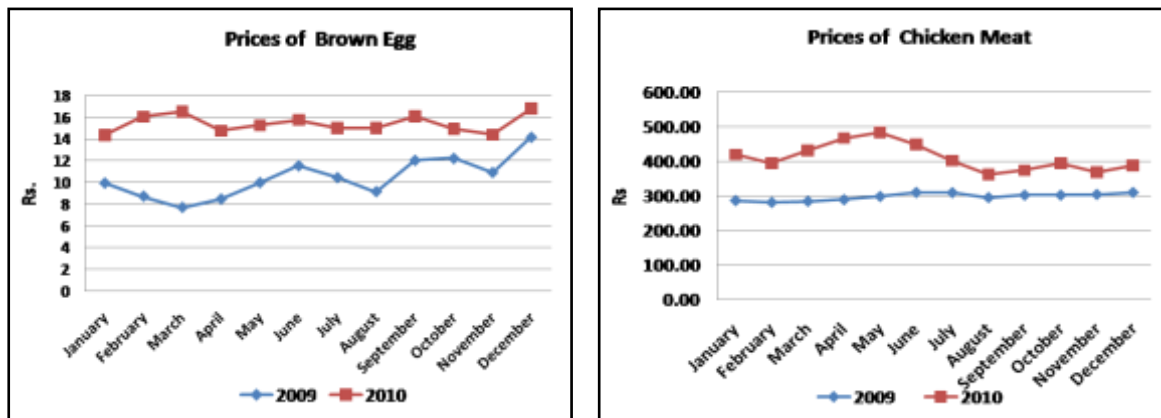


Figure 7.1: Average Retail Prices of Eggs and Chicken Meat - Kandy Town (2009-2010)

Table 7.1: Annual Average Retail Prices of Eggs and Chicken Meat (Rs/Kg) (2009-2010)

Month	Kandy			All Island		
	Brown Eggs Rs/egg	White Eggs Rs/egg	Chicken Meat Rs/Kg	Brown Eggs Rs/egg	White Eggs Rs/egg	Chicken Meat Rs/Kg
January	14.33	13.33	420.00	13.45	12.67	329.27
February	16.05	14.56	395.00	13.89	10.38	385.97
March	16.50	15.50	431.25	15.49	14.23	389.38
April	14.75	14.50	467.50	14.01	13.73	411.22
May	15.25	14.25	483.75	13.79	13.28	394.49
June	15.75	14.69	448.75	14.60	13.76	384.13
July	15.00	13.63	402.50	13.37	12.85	394.60
August	15.00	13.75	362.50	15.55	12.94	355.94

**Table 7.1: Annual Average Retail Prices of Eggs and Chicken Meat (Rs/Kg) - (2009-2010) contd**

Month	Kandy			All Island		
	Brown Eggs Rs/egg	White Eggs Rs/egg	Chicken Meat Rs/Kg	Brown Eggs Rs/egg	White Eggs Rs/egg	Chicken Meat Rs/Kg
September	16.06	15.00	375.00	14.75	14.19	371.15
October	14.91	13.91	395.00	14.61	14.04	383.53
November	14.38	13.50	369.38	13.61	13.55	431.48
December	16.81	15.44	388.75	15.60	15.13	352.26
<b>Average(2010)</b>	<b>15.40</b>	<b>14.34</b>	<b>411.62</b>	<b>14.39</b>	<b>13.40</b>	<b>380.80</b>
<b>Average(2009)</b>	<b>10.45</b>	<b>10.05</b>	<b>298.04</b>	<b>10.55</b>	<b>9.93</b>	<b>315.02</b>

**Table 7.2: Annual Average Retail Prices of Meat (Rs/Kg) - All Island (2009-2010)**

Month	Beef	Broiler Chicken	Mutton	Pork
January	356.03	329.27	735.00	396.19
February	368.75	385.97	736.88	399.11
March	366.06	389.38	737.50	532.50
April	360.45	411.22	753.33	401.25
May	383.07	394.49	774.23	351.25
June	376.06	384.13	751.67	415.63
July	374.15	394.60	746.07	441.00
August	373.65	355.94	750.54	413.96
September	387.25	371.15	421.46	421.46
October	392.70	383.53	752.03	421.67
November	377.55	431.48	749.63	595.23
December	387.43	352.26	744.75	383.31
<b>Avg.(2010)</b>	<b>375.26</b>	<b>380.80</b>	<b>721.09</b>	<b>431.05</b>
<b>Avg.(2009)</b>	<b>343.74</b>	<b>315.02</b>	<b>660.84</b>	<b>383.48</b>

Source: Weekly bulletin, HARTI

**d. 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, University/ diploma students and private entrepreneurs. The data bank has been utilized by 100 users and 2,250 website users in 2010. Ten (10) news reports and 100 journals and bulletins were received during the year.

**e. Dissemination of data/statistics**

Important livestock statistics and findings of surveys, studies conducted by the division need to be communicated to relevant officers/organizations and stakeholders. *Livestock Statistical Bulletin* was compiled and published by the division in 2010. One issue was released during the year 2010 and, survey findings and the reports on cost of production, latest livestock Statistics were distributed

among the DAPH and related organizations, through this publication.

**f. Sector Review Meetings**

The livestock planning and economics division conducted a review on the poultry sector in December, in order to assess the current status of poultry industry, to review policies pertaining to poultry development and to review present and future supply and demand pattern of the sector. The necessity to take steps to improve productivity in highly commercialized intensive large farms with high inputs, and to support small scale farmers by way of offering services such as providing chicks and feed at low cost, conducting educational training programs for farmers, diagnostic services and distribution of vaccines free of charge were highlighted at this review. Further, it was recommended to strengthen the farm monitoring activities in relation to performance, bio security, disease control, animal welfare and health of the workers.

**7.5. Coordination of Development Programmes with Provincial DAPH and special development projects**

Several development programmes are jointly implemented by the National and Provincial DAPH and technical back-up services and inputs are mostly provided by the National DAPH.

**7.5.1. Provincial Director’s Meetings**

LPE division organizes and coordinates Provincial Director’s meetings to review on-going livestock development programmes and to discuss on administrative and financial matters. Three (03) such meetings were held during the year 2010.

**7.5.2. Special Livestock Development Projects**

**a. Farm Registration Program**

*Livestock Farms (excluding poultry)*

Around 190,000 Livestock farms were registered with divisional veterinary offices in 2008. A CD on list of all livestock farmers and their address were prepared and distributed to the Ministry and the Provincial Directors.

*Poultry*

Poultry farm registration program was implemented islandwide in 2009-2010 in collaboration with provincial DAPH. A total of 35,866 farms were registered under respective veterinary officers and the program was further extended until April, 2011.

A user friendly data entry program was prepared and distributed to all district VSS to enter data gathered by divisional veterinarians. A database will be prepared upon registration and entry of all data.

**c. Veterinary Service Improvement Program**

Majority of livestock development programs planned by the National DAPH are implemented by Provincial DAPH through regional level functional units, namely divisional veterinary offices. Thus, these offices should have basic facilities to render efficient and effective services to implement development programmes/activities. As an initiative, project to improve services of provincial veterinary offices was commenced in year 2008 as a ten (10) year development plan aiming at improving infrastructure facilities of veterinary offices.

This programme was continued in year 2010 and under this construction work of seven (07) veterinary offices were commenced in Western (Katana-Second Phase), Eastern (Padiyathalawa), Uva (Etampitiya), North Western (Bingiriya), Southern (Imaduwa and Bentara-second phase) and Sabaragamuwa (Kalthota) in the year 2010. Funds were also provided to Uva province to purchase computer units.

**d. Programme to Mitigate Environment Issues Pertaining to Livestock Industry**

Environmental related problems continued to be the main problem suppressing further development of the livestock sector. A technical back-up system to support Provincial DAPH and the livestock industry in handling matters related to environmental issues had been identified as a priority area by the DAPH. Therefore following initiatives were taken by the LPE division in the year 2010:

- Establishment of a Technical Committee to handle environmental issues (*Three meetings were held during the year*);
- Initiation of Field visits to livestock farms reported with environment related issues, by members of the technical team along with the respective veterinary surgeon and, provide necessary guidance/advise (*Three farm visits were made and recommendations given in 2010*);
- Liaise with Provincial/Central Environmental Authorities (CEA) to facilitate the process;
- Organization of a national level workshop in November in collaboration with the Central Environment Authority and the Ministry of Health to initiate a dialogue among three institutes and plan out for a collaborative work programme.

- Based on the outcome of the workshop, initiation to appoint Steering Committees at National and Provincial level to deal with environmental issues in the future and appoint technical committees to update existing technical guidelines for livestock farms.



**Figure 7.1: Workshop on Eco-Friendly Livestock Farming**

**7.6. Publications**

The division compiled following publications/reports during the year 2010.

- Physical and Financial Action Plan DAPH - 2010
- Action Plan DAPH - 2010
- Action Plan 2010 - LPE Division
- Annual Report - 2009
- Monthly physical and financial Progress Reports of DAPH
- Progress Reports for *Mahinda Chinthana Programme*
- Budget Report DAPH; Progress for 2009 and Plans for 2010
- Livestock Development Projects- 2010
- Statistical bulletin - one issue

**7.7. DAPH Website**

Action was taken to revamp the official website of the DAPH, [www.daph.gov.lk](http://www.daph.gov.lk) in the year 2010 in collaboration with the ICTA. The site was upgraded by using



new technology and launched in October 2010. Livestock data, maps, departmental activities and details of each division have been incorporated into the web site. Daily updating of news and the events of the department is a valuable item in the department web site. By the end of the year number of web users have become increased remarkably which has been calculated automatically as 90-100 users per day. The online application service (e-service) for import and export of animals is also an additional service provided by the department web site. The LPE division holds the responsibility of managing and updating the department website.

## **7.8. Capacity Building of the Staff**

### **Training of LPE Staff**

Training needs of the LPE staff were identified at the beginning of the year and facilitated training on the various fields according to their field of working. All officers were trained locally on various subjects in relation to the duties they have been assigned

## **7.9. Other Activities**

### **7.9.1. E - Government Programme**

Livestock planning and economic Division (LPE) is responsible to liaise with ICTA and to handle correspondences regarding Lanka Government Net work (LGN) and Government Information Centre (GIC). Dr. K.D. Ariyapala of the LPE division serves as a Chief Innovative Officer (CIO) for ICTA. Details of activities implemented under E government programme are appeared under the *Section 12* of this report.

### **7.9.2. Elephant Tranquilization**

The Elephant Tranquillisation Unit of the DAPH, coordinated by this division, continued to provide services in giving protection for elephants used in religious and other type of processions. Veterinarians attached to the DAPH participated in this activity and, during the year 2010 protection was given to 13 processions in various regions island wide.

## **7.10. Management of the Division**

### **7.10.1. Progress review of divisional programmes/ activities**

Progress of the performance of the division / officers was reviewed regularly at monthly meetings. Eight (08) such meetings were held during the year 2010. Accordingly, programmes were improved and officers actively participated in implementing programmes/activities identified for the year 2010.

### **7.10.2. Financial Progress**

Total allocation of capital budget for the LPE division was Rs 68.8 million and 98% of this budget was utilized during the year. From the allocated amount of Rs 880,000.00 of the recurrent budget 83.8 % was used during the year. Out of the capital allocation 99.9% were allocated during the year 2010 for various projects implemented by LPE division.



## 8. LAWS AND REGULATIONS IMPLEMENTING UNIT

Implementation of statutes made under the provisions of Animal Diseases Act and Animal Feeds Act are handled by the Laws and Regulations Implementing Unit (LRIU), functioning directly under the Director General, DAPH.

Functions of this unit are implemented by the staff attached to the Head Office, Peradeniya and, the Animal Quarantine Station (AQS) Colombo.

### 8.1. Animal Quarantine and Inspection Service

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. The Director General, DAPH is empowered to authorize import of live animals, animal products, animal by-products, and therein procedures under the provisions of Animal Diseases Act No. 59 of 1992. In order to facilitate imports, a system of obtaining approval prior to importation is in place. The export of live animals, animal products, and animal by-products has been delegated to the Chief Animal Quarantine Officer (CAQO). The Animal Quarantine Station (AQS) is located at Morgan Road, Colombo 02 and a sub unit has been established at the Bandaranaike International Airport (BIA), Katunayake.

#### 8.1.1. Quarantine Facilities available at Ports

Quarantine facilities available at AQS, Colombo are as follows:

Type of Animal	No. of Animals that can be quarantined
Cattle/ Buffalo	50
Goat / Sheep	200
Horses	10
Birds	
Large	30 - 50
Small	75 - 100

Quarantine holding (detained) facilities available in 2010 at AQ office at BIA Katunayake is as follows.

Type of Animal	No. of Animals that can be detained
Dogs	03

As limited space is available at the quarantine station, timely reservation of the quarantine space is required by the importers.

#### 8.1.2. Import of Animals, Animal Products and By Products

Due to the global threat of HPAI, import of Aviary birds were temporarily banned in 2004 and the ban continued in 2010 as well.

##### *Poultry*

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. As part of the active surveillance programme (HPAI preparedness programme) imports were closely monitored clinically and laboratory testing was done twice within the period of surveillance. (First week from AQS / Katunayake, and fourth week from AQS/Colombo)

Serum samples and cloacal swabs were taken at the point of entry and during the farm inspections. When mortality is above four (04) percent, the relevant farm/s were visited by AQO's immediately to investigate and to rule

out the possibility of HPAI infection. HPAI surveillance programme was carried out on the imported DOC by the AQS, Colombo and Katunayake, and all samples were found to be negative. Details are given below (Table 8:1).

**Table 8.1: HPAI Surveillance Programme 2009-2010 - laboratory test results**

No of farm visits	Total no of samples sent to the laboratory (2010)	Test results (2010)	Total no of samples sent to the laboratory (2009)	Test results (2009)
29 (AQS, Colombo)	Cloacal swabs - 599 Blood samples - 627	Negative	Cloacal swabs - 380 Blood samples - 380	Negative
44 (AQS,BIA )	Cloacal swabs - 880 Blood samples - 980	Negative	Cloacal swabs - 1,820 Blood samples - 700	Negative

**Trial batches of parent chicks under quarantine surveillance:**

Day old birds imported from a new source flock are treated as a *trial batch* and monitored closely. These batches are kept under quarantine till 16 to 18 weeks. Four (04) new poultry breeder farms registered in the year 2010 namely, Gayan Breeder Farm Pvt. Ltd in Anamaduwa, Dombawela Breeder Farm in Matale, Hansika Breeder Farm in Radawana and St. Mary's Breeder Farm in Divulapitiya and birds were tested for HPAI, Pullorum disease, Fowl typhoid and Mycoplasmosis. The batches were monitored for flock performance, vaccine response and to check the freedom from prescribed diseases.

AQO's participated in 13 site selections in 2010 for establishment of new poultry breeder farms.

**Salmonella surveillance program**

Salmonella surveillance programme was carried out on the imported DOC by the AQS, Katunayake, during the year.

A total of 93 samples (dead birds and beddings) taken from 93 consignments of DOC were dispatched for laboratory tests and found to be negative.

**Ornamental Fish**

Obtaining approval prior to import of fresh water ornamental live fish was strictly adhered in 2010. Imports were inspected at the port of entry and fish and water samples were sent to VIC, Welisara to check for parasites and bacterial diseases.

Freedom from OIE listed six (06) viral diseases is required for import of fresh water fish into Sri Lanka. Similarly, EU countries required certification in the accompanied International Veterinary Health Certificate (IVHC), the freedom from same viral diseases, for export of ornamental fish from Sri Lanka.

Quarantine of imported live fish consignments at a separate isolated Quarantine area was practiced in 2010. Fresh water Ornamental fish imports from Singapore were restricted due to our import requirement of the HPAI zone/area free certification. Following

importation, packing water was safely disposed in the presence of an AQO at the importers premises.

***Pet Animals***

Though airlines and embassies were reminded repeatedly not to accept the pets without the import approval from DG/DAPH there were instances in 2010 as well, where pets were imported without the prior approval.

Strict measures were taken regarding Anti Rabies vaccination when issuing the export certificates for pet animals.

***Bristles, Hair, Feathers***

The imported products, by products were fumigated / treated before they enter into the country to minimize the HPAI risk. 99 consignments containing *Bristles, Leather, Feather, Horse hair, Nails, Leather, hide, Fur felt hat bodies* were fumigated with formaldehyde gas.

***Frozen Fish***

The necessity of obtaining prior import approval of DG/DAPH for food fish was introduced in the year 2005 and continued thereafter. Documents were screened, consignments inspected and released to the owner following inspection. Samples were sent to MRI for laboratory testing.

***BSE Clearance***

The ban on import of BSE risk items from BSE positive countries were in force in 2010 as well. Albuminoids, gland and organ secretions, heparin related substances, pharmaceuticals, diagnostic substances, surgical items, blood grouping reagents, food related items, were screened for BSE. High and medium risk items require prior import

approval from DG/DAPH and other items were screened by the CAQO.

**8.1.3. Post import quarantine Activities**

**a. Quarantine Holdings:**

Quarantine holdings (other than the AQS) and the period of quarantine for large/ zoo animals in 2010 were given in *Annex XV*.

**b. Import and quarantine surveillance**

Details of consignments that were under quarantine surveillance in 2010 are given in *Annex XVI*.

**Measures taken at ports of entries to prevent entry of HPAI into Sri Lanka**

- All import of poultry, poultry products were either temporarily suspended / carefully scrutinized before imports;
- A special counter was maintained at BIA/Katunayake, requesting the passengers who have visited the poultry farms to register their names and addresses at the counter;
- All DOC consignments were closely monitored (farms inspected at least twice within the surveillance period apart from the weekly reports); and
- Samples collected and screened for HPAI (at the port, during on-farm quarantine inspections).

**Consignments Detained/ Destroyed/ re-exported in the Year 2010**

Consignments of Animals, Animal Products and Animal By-Products that were not allowed to enter into the country due to non-conformity with our import health requirements were either re-exported, detained or destroyed. *Annex XVII* provides details of consignments which were not allowed to enter into the country in 2010.

### 8.1.4. Inspection of Animal Feed Mills

Under the Animal Feeds Act provisions are made to facilitate import, export, processing, and local sales of animal feeds. As Authorized Officers appointed under the same Act AQO's participated in inspecting feed mills and shortcomings in the mills were discussed, advised feed millers and communicated to Registrar, Animal Feeds for future improvement and further action.

### 8.1.5. Exports

International Veterinary Health certificates are issued for export of ornamental fish, meat, etc by the CAQO, following inspection.

#### a. International Veterinary Health Certificates for Meat

Health certificates are issued for export of meat of domestic animal origin such as Bovine, Bubaline, Equine, Ovine, Caprine, Porcine and Avian species. It is mandatory that the processing establishments should at least have the

provisional registration (DAPH registration) in order to export meat from Sri Lanka. The said establishments should obtain the International Standards Certifications within three (03) years after obtaining the provisional registration.

Meat processing establishments namely, *Keells Food Products Ltd., Ekala, Ceylon Agro Industries, Seeduwa, Bairaha Farms Ltd., Pasyala, Maxies and Company (Pvt.) Ltd, Wennapuwa, Norfolk Foods, Homagama, New Anthony's Food Products, Hanwella and Cargills Food Products Pvt. Ltd.* have already obtained HACCP certification. *Gills Food Products Pvt. Ltd., Wattala and D & W Foods (Pvt.) Ltd, Pannala* have obtained ISO-22000 certification. Surveillance audits are carried out by the DAPH twice a year and Animal Quarantine Officers were participated in 19 audits as technical experts in 2010.

Details of export Health Certificates issued by the CAQO in 2010 are given in *Table 8.2.*

**Table 8.2: Health certificates issued for export - (2009 - 2010)**

Item	No. of Health certificates issued	
	2010	2009
Ornamental fish	2,674	3,175
Dogs	113	140
Cats	62	49
Poultry	46	11
Pet birds	22	02
Zoo animals	01	06
Elephant	01	-
Rabbit/Rat/Hamsters/G. Pig	16	04
Animal Products (Meat)	2,707	966
Table eggs	231	117
Fish & Fish products	206	123
Animal by-products	202	250
Prawn/Crabs/Lobsters	238	166
Leather	51	32

**b. Exports during Year 2010**

Details of export of Animals, Animal Products and Animal By-Products are given in *Annex XVIII*.

Year	No of samples sent	Stage of process	Remarks
2009	32	Cow Crust leather - 18 Finished leather - 14	Exported
2010	51	Cow Crust leather - 39 Finished leather - 10 Goat Leather - 02	Exported

**c. Export certification of hide / skin**

Determination of the stage of process of hide/skin through the Industrial Technology Institute (ITI) was continued in 2010. Results are given below:

**8.2. Regulatory Activities - Poultry Industry**

The Laws and Regulations Implementing Unit (LRIU) of the Department handles regulatory and related activities pertaining to Poultry and Aviary industries.

**8.2.1. Establishment of New Poultry Breeding Farms**

During the year 2010, ten (10) applications were received by the Department to establish new poultry breeding farms. Out of 10 applications three (03) broiler breeder farms and one layer breeder farm were established.

**8.2.2. Registration of Existing Breeding Farms**

Registrations of 28 poultry breeder farms were renewed during the year and renewal certificates were issued.

**8.2.3. Monitoring of Hatcheries / Poultry Breeding Farms**

Data pertaining to production and the performance of poultry breeder farms were regularly collected and analyzed. 54 breeder farms were visited during the year.

Two (02) discussions / meetings were held with the representatives from poultry sector and poultry breeding farms.

**8.2.4. Import of Live Poultry**

Grand Parent/ Parent birds are currently being imported from four (04) hatcheries/ breeding farms located in four (04) countries. During the year, 104 applications received by the Department to import broiler and layer Grand Parent/ Parent birds were reviewed and approved.

**8.2.5. Import of Poultry and Poultry Products**

Two hundred and fifty eight (258) applications received by the DAPH were reviewed and recommended for approval to import poultry and poultry products.

**8.2.6. Registration of Export Processing Centres**

All processing establishments intending to export meat products are required to register with the DAPH. Application of HACCP is considered as a requirement for such registration. The DAPH has signed a MoU with the Sri Lanka Standards Institution (SLSI) for certification of processing



establishments under the HACCP certification scheme. Seven (07) processing plants were registered with the department in 2010.

Officers from the Animal Quarantine Office and the LRIU/HQ were participated in four (04) surveillance audits carried out by the SLSI during 2010.

### 8.2.7. Monitoring Industry Status

Vital statistics on the poultry industry such as, production and prices of poultry and poultry products, import and export, production costs etc. were collected, collated and the computer data base was regularly updated during the year. Relevant information was disseminated to private and state sector organizations/ individuals. During the year production forecast for the year 2011, annual review 2010 and 12 monthly bulletins were compiled and disseminated. On requests made by poultry industrialists, all these bulletins/ reports were published in English medium. Private sector organizations/ individuals and institutions/ individuals received these bulletins/ reports regularly, during the year 2010.

### 8.3. Regulatory Activities - Other Livestock and Livestock Products

International trade in animals and animal products may create a certain risk of introducing animal diseases into the country. The Animal Disease Act, No. 59 of 1992 stipulates provisions to authorize importation of animals and animal products into the Sri Lanka.

Review and recommendation of requests to import animals and animal products based on the animal disease

status of the exporting country, assessment of the disease situation, carrying out risk assessment and preparation of health requirements are the activities carried out in this regard.

#### 8.3.1. Import of animals:

##### a. Large Animals/other animals

Six (06) applications were received and approvals were given for importation of forty six (46) horses from India, UAE and Netherlands.

##### b. Zoo Animals

During the year 2010, three (03) approvals were issued to the Department of Zoological Gardens for the importation of Ring tail Lemurs, Meerkats, Leopards from UK and White Tigers from China.

##### c. Dogs and cats

A total of 214 permits were issued to import of 244 dogs and 64 cats from various countries.

##### d. Live Fish

Forty one (41) permits were issued to import 827,147 heads of Ornamental fish and (06) six permits were issued for importation of 390,000 Food fish fry from various countries during the year 2010.

#### 8.3.2. Import license and BSE control

To prevent entry of BSE into the country, all animals and animal products excluding poultry and poultry products were brought under the import license in 1996. For this purpose, global BSE status is continuously studied/ reviewed. Under this section 168 no objection letters and permission letters were issued.



**8.3.3. Import of animal products**

**a. Import of meat and meat products**

Sixty seven applications were received in 2010 for importation of beef, lamb, mutton and its processed products that are come under the Import license. These applications were reviewed and permits were issued for importation of 494 MT of meat items.

Nineteen new drugs were registered during 2010. These are as follows:

1. Anti Microbials	04
2. Anthelmintics	02
3. Immunobiologicals	05
4. Supplements	02
5. Hormone	01
6. Acaricide	03
7. Disinfectants	01
8. Udder Infusion	01

**b. Import of other animal products**

During the year 2010, a total of 43 applications were received for importation of tallow. These applications were reviewed and permits were issued for importation of 3,634 MT tallow in to the country.

<b>Total</b>	<b>19</b>
--------------	-----------

Manufacturing / Re-packing Licenses were issued for ten (10) products such as CanCan Shampoo, C-Tetra, Helmosol - 10%, Tylo200WSP, Zymer CTC, Square CTC, Toltrazuril OS, Coxitril, Haxitril and Tricox during 2010 and the period of validity is one year.

**c. Import of animals hair, fur, hide and skins**

A total of 159 applications were received and reviewed for the importation of fur, bristles, hair, animal skins/hides and finished leather.

**8.4.1. Invoice Approvals**

Five hundred and ninety seven (597) invoices were approved by VDCA to import veterinary pharmaceuticals and biological products into Sri Lanka during 2010 with the value of 1.028 Billion Sri Lankan Rupees.

**d. Semen/ Embryo**

Three (03) permits were issued.

**8.4.2. User Permit Approvals**

One hundred and sixty three user permits were approved. Details are as follows:

**8.4. Veterinary Drug Control Authority**

Animal Diseases Act, No.59 of 1992 and its regulations has provisions to establish the Veterinary Drug Control Authority (VDCA) to exercise control over the manufacture, import, export, sale and use of Veterinary Pharmaceuticals and biological products in order to safeguard the animal owners and the Livestock Industry. Therefore, the duties and functions of the VDCA ensure the implementation of the regulations of this Act. During the year, five (05) committee meetings of VDCA were held in Peradeniya.

1. Bacterial Poultry Vaccines	06
2. Viral Poultry Vaccines	53
3. Poultry Coccidial Vaccine	28
4. Hormones	11
5. Antimicrobials	38
6. General Medicaments	01
7. Anthelmintics	09
8. Larvicidals	04
9. Udder Infusions	06
10. Vitamin/Minerals Inj.	03
11. Viral Canine Vaccine	01
12. Poultry Disinfectant	01
13. Large Animal Sedatives	02

<b>Total</b>	<b>163</b>
--------------	------------

### 8.4.3. Committee of VDCA

The New committee of VDCA was appointed by the Honorable Minister for Livestock Development as per the letter, MLRCD/05/10/10 for next three years. The members are as follows:

1. Dr. Saliya Samarakoon
2. Dr. R.Wickramasinghe
3. Dr. S.Arulkanthan
4. Dr. (Ms) D.D.N.Silva
5. Dr. S.P.Gunarathna
6. Dr. Anil Pushpakumara
7. Mrs. L.C.P.T.Liyanaarachchi

Dr. A. Sivasothy continued as the Registrar of the VDCA.

Mr. W. Pathirana served continuously since 1994 as a committee member of the VDCA and retired from his post at the Faculty of Medicine, Colombo on 1<sup>st</sup> October 2009. After his retirement and on his recommendation, VDCA suggested Mrs. L.C.P.T. Liyanaarachchi, Senior Lecturer in Pharmacy, Faculty of Allied Health Sciences, Peradeniya to the Committee. Accordingly, Ministry of Livestock Development appointed Mrs. Liyanaarachchi to look after the pharmaceutical aspects of VDCA, in the absence of a suitable veterinarian to serve VDCA to contribute on manufacturing aspects, which is seriously lacking component of the VDCA. This could be remedied by providing short term training on manufacturing aspect to a member of VDCA either by the UGC or by the Ministry of Livestock and Rural Community Development/DAPH.

### 8.5. Implementation of Animal Feed Act

Year 2010 was the 12<sup>th</sup> successive year of implementing the Animal Feed Act No.15 of 1986. During the year the activities were continued to ensure the quality of registered Approved Animal

Feeds through implementation of the provisions of the Animal Feed Act.

Dr. (Mrs.) H.M.S.P. Herath DG/DAPH continued to function as the Chairman of the Animal Feed Advisory Committee (AFAC) until end March and succeeded by Dr A.D.N Chandrasiri.

Following members functioned as the members of Animal Feed Advisory Committee (AFAC) in 2010.

1. Mr.K.P. Krishnamoorthy, Managing Director of Eastern Traders Pvt. Ltd.
2. Dr.S.S.E. Ranawana, Professor of Livestock and Avian Sciences.
3. Dr.K. Samarasinghe, Senior Lecturer in Animal Science, Faculty of Agriculture.
4. Dr.S.S.P.Silva , Veterinary Research officer, VRI.
5. Dr.T.A.C. Tiskumara, Registrar Animal Feed functioned as the secretary of the AFAC.

Remarkable features during the year were reaching near self sufficiency in local maize production, increase in self mixed feed component and poor quality of feed raw materials in the market.

#### 8.5.1. Regular activities

Sixteen Large, medium and small-scale registered Animal feed manufacturing establishments were in operation during the year. Three (03) establishments for manufacture and export of feed additives, supplements and premixes were also in operation.

##### a. Renewals

In accordance with the *Section 5.3* of the Animal Feed Act, renewals of animal feeds registered during the period 1998 to 2009 were carried out in 2010. A total of 735 renewals were carried out during the year (*Imports - 577, Manufacture - 158*).

**b. Issue of new licenses**

In continuation of issuing new licenses, seven (07) new licenses were issued to animal feed importers and another three (03) licenses were issued to importers of shrimp feed. Accordingly, 171 Approved Animal Feeds (AAF) numbers were assigned.

**c. Collection of Turn over Returns**

One of the main features in 2010 is that there had been a 10% growth in compound animal feed production by

the large scale millers. Self mixing has also increased by 5% compared to year 2009.

**d. Compound Animal Feed Production**

In accordance with the Regulation 11 of the Animal feed Act, turnover returns were collected from all registered animal feed manufactures. Based on these turn over returns total animal feed production by registered animal feed manufacturers for the year 2010 is given below:

**Table 8.5: Compound Animal Feed Production - 2010**

Type of Feed	Quantity (MT)
Poultry Feed	285510.46
Cattle Feed	10534.28
Pig Feed	1229.61
Shrimp Feed	384.3
Horse Feed	124.9
Goat Feed	353.22
Feed Premixes	50.5
Other Feed	1113.47
<b>TOTAL</b>	<b>299,300.74</b>
<b>Self mixed</b>	<b>199,000 .00</b>
<b>Total</b>	<b>499,600.00</b>

\* Based on Raw material imports it is estimated that about 40-45% of Poultry feed is produced by self mixers who are mainly concentrated in the North Western Province and attribute their production mainly to Poultry (layer) feed.

Type and the quantity of poultry feed products manufactured by approved feed manufacturers in 2010 are stated overleaf.

**Break down of poultry feed production**

Feed	Quantity (MT)
Chick Starter	22,576.185
Layer Grower	8,446.595
Layer	34,947.570
Total Layer Feed	65,970.350
Broiler Starter	64,198.250
Broiler Finisher and Grower	122,516.200
Total Broiler Feed	186,714.450
Broiler Breeder	28,967.171
Layer Breeder	3,858.490
Total Breeder Feed	32,825.661
Total Layer Feed	65,970.350
Total Broiler Feed	186,714.450
Total Breeder Feed	32,825.661
<b>Total Poultry Feed</b>	<b>285,510.461</b>

*e. Usage of raw materials*

Based on approvals considered for imports by feed manufacturers and importers major raw material imports are given in *Annex XIX*.

*f. Implementation of BSE regulations on Animal feed imports*

As a measure to prevent entry of BSE causative agent to the country all imports of feed ingredients were screened prior to importation:

Bovine origin: 90 permits were issued to Meat and Bone Meal (Quantity- 21,291.1

MT) Non bovine origin -1,550 invoices for different products were screened.

*g. Export of Animal feed*

Government policy is to encourage exports. Three (03) export establishments were in operation during the year. A total of 76 products (poultry premixes) were manufactured for the export market. Number of certificates issued and the quantities are as follows:

No. of export certificates issued: 223  
Quantity exported: 7,242 MT and 39,750 Liters.

### 8.6. Financial Plan and Progress

The financial allocation for capital expenditure for the year 2010 was 1.0 million rupees and 86.63% of the allocation was spent during the year.

The total allocation under the recurrent budget was 0.586 million rupees and 106% was utilized in 2010.

	Allocation	Expenditure	%
Recurrent	586,000.0	620,896.9 *	105.95 *
Capital	1,000,000.0	866,306.8	86.63

\* An additional allocation was provided.

## 9. ADMINISTRATION DIVISION

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

**Main functions of the division are as follows:**

- Attend to establishment matters related to all staff of the Department of Animal Production and Health;
- Handling correspondences regarding implementation of Service Minute of the Animal Production and Health Service;
- 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; and
- Office Management.

### 9.1. 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, Administration and Finance) of the department amounted to 740 and actual cadre position was 580 (*Project I: 147, Project II: 239 and Project III: 194*). Details of cadre positions are given in the *Annex XX*.

### 9.2. Approval from the Management Service

Approval has been granted by the Management Services during the year to create one (01) post of Accountant

(*Director General's letter No. DMS/C/05/08/30 dated 03.02.2010*) and one (01) post of Animal Quarantine Officer (*Director General's letter No. DMS/C/05/08/30 dated 10.08.2010*).

### 9.3. Appointments

Officers have been appointed to cover up the duties of following posts:

- Director General from 22 March 2010.
- Deputy Director / Research from 13 October 2010.
- Deputy Director / HRD from 30 July 2010.
- Deputy Director / Veterinary Research from 19 November 2010.
- Deputy Director/ Research from 04 November 2010.
- Deputy Directors/ Animal Health, Animal Breeding, Dairy Development and Livestock Planning and Economics from 19 April 2010.
- Livestock Economist from 07 July 2010.

Following appointments were made during the year 2010.

- Thirty two (32) Veterinary Surgeons from 20 October.
- Six (06) Veterinary Research Officers from 20 October.
- Four (04) Livestock Development Officers from 01 September and one (01) Livestock Development Officer from 01 October.
- One (01) Research Assistant from 15 June and three (03) Research Assistants from 01<sup>st</sup> September.
- One (01) Translator (Sinhala/English) from 01 October.
- One (01) Permanent Labourer from 07 January.



- One (01) Labourer on contract basis from 10 August.
- One (01) Sanitary Labourer from 03 November.

#### 9.4. Promotions

Promotions given during the year are as follows:

- One (01) Veterinary Surgeon in the SLAPH service to Class II grade 1.
- One (01) Research Assistant from Class I to Special Class.
- Two (02) Management Assistants in Public Management Assistant Service to Class I.
- One (01) Driver from Class II/I to Class I.
- Two (02) KKS from Class III to Class II.

#### 9.5 Transfers (to and from the DAPH)

Details of transfers made to and from the DAPH are stated below:

##### *Transfers to the DAPH*

Livestock Officer (From MLRCD)	01
Veterinary Surgeons (From Provincial Councils)	06
Livestock Officer (From Provincial Council)	01
Veterinary Surgeon (From Department of National Zoological Gardens)	01
Monitoring Assistant	01
Development Assistant	01

##### *Internal Transfers*

Veterinary Surgeon	04
Livestock Officer	01
Research Assistant	01
Permanent Labourer	01

##### *Other Transfers from the DAPH*

Veterinary Surgeon (From VIC to Provincial Council)	01
--	----

#### Combined Service Transfers

##### *To the DAPH*

Management Assistants	05
KKS	07
Driver	03

##### *From the DAPH*

Management Assistants	03
KKS	04

#### 9.6. Retirements

Details of Staff members who have retired from the service in 2010 are as follows:

Mr. D. V. S. de S. Gamage, Deputy Director, Veterinary Research retired from the service from 30 March.

##### **Other Retirements**

Librarian	01
Livestock Development Officers	04
Management Assistants	04
Research Assistants	01
Drivers	02
Store man	01
Special Labourers	02
Labourers	02
KKS	01

#### 9.7. Resignations

There were no resignations in the year 2010.

#### 9.8. Vacation of Post

Veterinary Surgeon	03
Veterinary Investigation Officers	01
Research Assistant	01

Orders have been given assuming that they have vacated the post.

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

- Mr. A. M. C. L. Senadheera, Monitoring Assistant has been released to Ministry of Technology and Research from 31 August 2010.
- Ms. T. G. Y. Ranasinghe, Development Assistant has been released to Sabaragamuwa Provincial Council.
- Mr. P. S. Ekanayake, Management Assistant has been released to Department of Labour from 01 July 2010.

### 9.10. Loans

Details of loans approved and forwarded to Director / Finance for payment are as follows:

Type of loan	No.	Amount (Rs.)
<i>Distress Loan</i>	103	10,470,632.00
<i>Bicycle Loan</i>	02	12,000.00

Payment has been made for 92 distress loan applications and 02 bicycle loan applications during the year 2010.

### 9.11. Insurance Payments

During the year 2010, following applications have been forwarded to Sri Lanka Insurance Corporation for payment.

Hospitalization/Surgery and Spectacles - 124

Cardiac Heart Surgery - 03

Out of these, 23 persons have informed in writing that they received the claims amounting to Rs. 338,220.00

### 9.12. Other

- Restructuring of the department staff has been commenced and the recommendations were forwarded to the Ministry.
- During the year, 02 *Housing Committee Meetings* have been held.
- Two (02) *Institutional Coordinating Committee* meetings were held.

## 10. FINANCE DIVISION

The Departmental Head pertaining to the financial activities for the year 2010 was 292. The activities of the department were performed under the program No. 01, operational activities and Program No. 02, development activities. Financial allocations and the expenditure summary for the year 2010 is as *Annex: XXI*.

A sum of Rs. 270 million for the recurrent expenditure and Rs. 284 million for the capital expenditure was made available for the Department in the year 2010, totaling Rs. 706.71 million.

### 10.1. 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.)	275,766,000	_____	275,766,000	270,846,241	98
Capital (Rs.)	430,950,000	_____	430,950,000	284,820,569	66
<b>Total (Rs.)</b>	<b>706,716,000</b>	<b>_____</b>	<b>706,716,000</b>	<b>555,666,810</b>	<b>79</b>

#### b. Allocations received from other Ministries and Departments

Vote	Allocation (Rs)	Expenditure (Rs)	Percentage of the expenditure
253-1-2-1-1502	3,521,760	3,521,760	100

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

		Limits of the Annual Estimates	Actual Value (Rs.)
Balance carried forward			66,365,805.76
Maximum debit limit	29,217,000	Debits affecting the limits	27,024,394
Minimum credit limit	13,000,000	Debits not affecting the Limits	1,548,845
Maximum limit of the debit balance	109,000,000	Credits affecting the limits	18,968,978
		Credits not affecting the Limits	1,124,141
		Balance brought down	74,845,924.97

### 10.3. General Deposit Account

The balance of the General deposit account of the Department as at 31 December 2010 was Rs.3,599,833.09/=

It was prepared as follows:

6000/0000/00/0003/0208/000 -	1,603,711.86
6000/0000/00/0015/0147/000 -	1,996,121.23

### 10.4. Departmental Income

The income received by the Department for the year 2010 is given in *Table 10.1*:

**Table 10.1: Departmental income -2010**

Income Subject No.	Particulars of the Income	Total income Received (Rs)
2002.01.01	Rent on government buildings and housing	3,861,486.41
2002.02.99	Other	7,195,125.15
2003.01.00	Departmental sales	26,340,923.09
2003.99.00	Other receipts	3,026,173.99
2004.01.00	Social security contribution	7,930,505.16

Rs.472,736,500 million was obtained from the Treasury for the activities of the department and Rs.48,354,213.80 million received as income, miscellaneous revenue and there was no balance.

## 11. FOREIGN FUNDED PROJECTS

There were three (03) foreign funded projects in operation during the year 2010.

### 11.1. Avian Influenza Preparedness and Response Project

Sri Lanka Avian Influenza Preparedness and Response Project (AIPRP) was designed with the broader objective of strengthening animal health sector in order to minimize the global threat posed by Highly Pathogenic Avian Influenza (HPAI) and similar communicable diseases.

This project was specifically designed to prepare the “*Animal Health Sector*” of the country for immediate and rapid response against animal diseases posing high public health risk such as HPAI. The project had been approved by the World Bank in March 2007.

The project has been operating since April 2008 with activities planned on five major areas indicated as follows

and, with a budgetary provision of US\$ 1.4 million equivalent to Rs. 163 million.

1. Strengthening HPAI prevention and preparedness planning capacity.
2. Strengthening disease surveillance, diagnostic capacity and virus research.
3. Strengthening control programs and outbreak containment plans.
4. Compensation fund.
5. Surveillance of migratory birds.

#### Physical performance of the five components up to end of December 2010:

##### 1. Enhancing HPAI prevention and preparedness planning capacity.

###### a. Training / awareness programs

Progress of training and awareness programs are as follows.

**Table 11.1: Progress of Training and Awareness Programs**

Programme	No. of Programmes	Participants
School children Awareness	261	24,990
Teacher Awareness	82	2171
Non Technical staff	138	10,081
Training	02	194
Poultry Farmer Training	396	15,076
Top level technical staff	10	693
Middle level technical staff	18	1,660
Other stake holders	20	1,231
Community groups - Hot spot	27	1,224
Culling and Safe Disposal	05	79
Table top exercises	11	539
<b>Total</b>	<b>970</b>	<b>57,938</b>

**b. Training center improvements**

- Public address systems supplied to Seepukulama and Wannigama Training Centres and;
- Furniture supplied to Institute of Continuing Education of DAPH (ICEAPH), Seepukulama and Wannigama Training Centres.

**2. and 3. Strengthening disease surveillance / diagnostic capacity, virus research and Strengthening HPAI control program and outbreak containment plan**

In order to strengthen disease surveillance and diagnostic capacity, the project has contributed largely by assisting in acquiring capital assets as well as consumables.

Vehicles were supplied to Animal Health Division, Veterinary Research Institute, one (01) Veterinary Investigation Center and Animal Quarantine Office, Colombo. In addition, Veterinary Research Institute, Veterinary Investigation Centers were supplied with laboratory equipment, reagents etc. Hardware and software for

disease information system was also provided to Animal Health Division.

**3. Compensation Fund**

The compensation fund program has been updated and poultry farm registration process been launched at Veterinary Range level with the assistance of Provincial Directors of DAPH. Initiation of establishing the compensation mechanism visualizing the nature of the poultry industry will facilitate compensation available to appropriate stakeholders at correct time in case of a HPAI outbreak.

**4. Migratory bird surveillance and training of local staff**

Migratory bird surveillance activity is another important activity which is provided with the financial assistance under the project. This has been continued up to the end of the year as well. Under the “Hot Spot Surveillance” program samples for surveillance for HPAI are collected from 35 Hotspots belong to seven Districts Island wide.

**Table: 11.2. Financial Performance up to end of 2010:**

Component	Allocation (Rs)	Expenditure (Rs)	Balance (Rs)	Performance %
Enhancing HPAI prevention and preparedness capability	31.8	34.39	-2.59	108.14
Strengthening disease surveillance and diagnostic capacity and virus research	68.5	27.90	40.60	40.73
Strengthening HPAI control program and outbreak contingency plan	31.2	11.13	20.07	35.66
Compensation Fund	28.3	1.87	26.43	6.59
Migratory bird surveillance and training local staff	3.4	0.08	3.32	2.35
<b>Total</b>	<b>163.2</b>	<b>75.36</b>	<b>87.84</b>	<b>46.18</b>



**11.2. Project on small Scale Farming Improvement through Genetic and Feeding Management Improvement in Sri Lanka (Implemented by Animal Breeding Division – JAICA funded)**

**Duration:** April 2009 – March 2014  
(05 years)

**Target Areas:**

- Progeny testing - It is operated in NLDB farms such as Dayagama and Andigama,
- Improve AI - It is implemented with Kundasale and Polonnaruwa AI centers
- Introduce proper management and feeding demonstration units - It is operated with selected veterinary offices in Kandy, Matale, Nuwaraeliya and Kurunegala Districts.

**Target Group:**

- Relevant government officials in Dairy Sector and Dairy Farmers
- Training of artificial insemination, feeding and dairy management, relevant officials, technicians and dairy farmers from island wide

**Project purpose**

The techniques and institutional set-up for small scale dairy farming improvement are developed through breeding, feeding and dairy management in the target areas.

**Outputs**

- Suitable progeny testing methods are developed in Sri Lanka
- Techniques related to AI are improved

- Feeding and dairy management of dairy farmers are improved

**Activities**

- Analyse production and production capacity of Jersey and its crossbred(s)
- Analyse problems for establishment of progeny testing program in Jersey and its crossbred(s)
- Improvement of data management and pedigree management to selected NLDB farms
- Development of demonstration of the appropriate progeny testing method
- Demonstration of recipients and planned mating and official milk measurement scheme to the project counterparts
- Introduction of the manual of progeny testing method for project counterparts.
- Analysis of the problems of AI program such as semen production and distribution, import of semen, training program and field AI scheme.
- Provision of trainers training of improved AI program to the staff in AI centre (Polonnaruwa) and trainees (veterinary surgeons and AI Technicians)
- Provision of on site training of improved AI techniques to the field staff at field veterinary office and NLDB farms
- Analysis of the current situation of feeding and dairy management
- Develop appropriate feeding and dairy management techniques and demonstrate it for field staff through establishing model dairy farms
- Preparation of technical manual for improved feeding and dairy

management by experts and counterparts, preparation of training and demonstration of improved feeding and dairy management for field staff at model farms



**Figure 11.1: Model farm established under the GFMI project**

**Achievements -2010**

- Adequate number of daughter calves selected
- Drawing up a feasible planned Mating for candidate bulls (PM/CB) which is compatible with the national dairy herd maintenance, and launch the mating.
- Partially complete the distribution scheme of imported proven semen straws for the field AI, contribution, and monitoring the use of them in coordination with P/DAPH and VSOs staff members
- To complement the existing AI scheme in Sri Lanka (follow up), for instance, by improving the database assorting system at the Kundasale AI centre.
- Established 20 model farms, improving the technical packages of the model farms and donated 20 first-aid kits.

- About 7 training programmes were held for satellite farmers among the model farms.

**11.3. Dairy Cattle and Buffalo Improvement Project (Implemented by Animal Breeding Division - FAO Funded)**

The specific objective of the project is to establish a Pedigree and Performance Recording Scheme (PPRS) for dairy cattle and buffalo, to allow the identification of superior dams for production of young bulls for the Artificial Insemination program (AI) and for Natural Breeding program.

**Outputs and activities:**

**Output 1:** A Pedigree and Performance Recording Scheme (PPRS) established involving about 2500 lactating animals plus young stock from Kurunegala and Nuwara Eliya districts.

Activities are:

- Selection of project sites and farms
- Performance recording
- Identification and training of recorders
- Animal identification and tagging
- Start recoding and continued monthly recording
  - 500 animals recorded by September 2010
  - 1,500 animals recorded by December 2010
  - 2,500 animals recorded by March 2011
- Monthly breeding value evaluation and feed back to farmers

**Output 2:** Superior dams are selected; inseminated and young bulls for the AI and Natural mating program are produced.

Major activities are:

- Import of semen and start insemination
- Insemination of bull dams
- Calves born tagged and purchased

**Output 3:** Improved on-farm productivity

The major activities involved are:

- Determine current reproductive management status on farms
- Regular farm visits to improve reproductive performance
- Determine current nutritional & management status on farms
- Regular farm visit to improve feeding and management
- Identify needs of needs of farms for information and training

**Output 4:** Trained extension staff of Department of Animal Production and Health in performance recording and genetic improvement.

**Output 5:** Trained extension staff on feeding and reproductive management.

The activities are:

- Two day residential training - course no.1
- Assignment1: Records on reproduction and feeding
- Assignment2: Develop reproductive and nutritional goals and targets
- Residential training after six months - Monitoring progress

**Output 6:** The National dairy cattle breeding strategy reviewed and endorsed by stakeholders.

### Achievements - 2010

Initiation of activities in April 2010 and field work started in June 2010;

- Total of 138 farmers were selected (113 in Kurunegala and 25 in Nuwara Eliya Districts). The number of cows selected was around 580.
- Five clusters of 20 farms each, have been developed,
- Four farmer training programs were held,
- Three Lacto Scans were commissioned
- Total of 876 milk samples analyzed.

Letter of Agreement has been signed with the Faculty of Veterinary Medicine and Faculty of Agriculture to develop Training Modules on Dairy Reproduction and Nutrition.

## 12. E Government Program

Department of Animal Production and Health (DAPH) was incorporated into E- government program since year 2004 under the Re-engineering Government Program of the Information and Communication Technology Agency of Sri Lanka (ICTA). Accordingly, the department participated in many of IT related activities as one of the counterpart organizations of ICTA. The DAPH was connected to Lanka Government Network (LGN) in 2005 which is one of the main components of the e-government program. Accordingly, DAPH has been able to connect with more than 300 government organizations through Information Technology (IT).

Simultaneously, DAPH has been connected to Government Information Centre (GIC) which provides services to general public through 1919.

As the department came to an agreement with ICTA to revamp its website in 2009, the website of the DAPH was developed as a trilingual and online service providing website in 2010. Online facilities for importation of animals into the country are available in the website at present.

E-mail facilities provided to key officers of the department with [www.daph.gov.lk](http://www.daph.gov.lk) domain is one of other initiatives taken by the department with the assistance of ICTA.

As the information technology is one of the key priority areas for development in the present government policies, DAPH has been able to apply IT based implementation and monitoring procedures for livestock development

programs implemented by the department. Several IT based databases have also been developed for farm registration program, disease information system and animal breeding program.

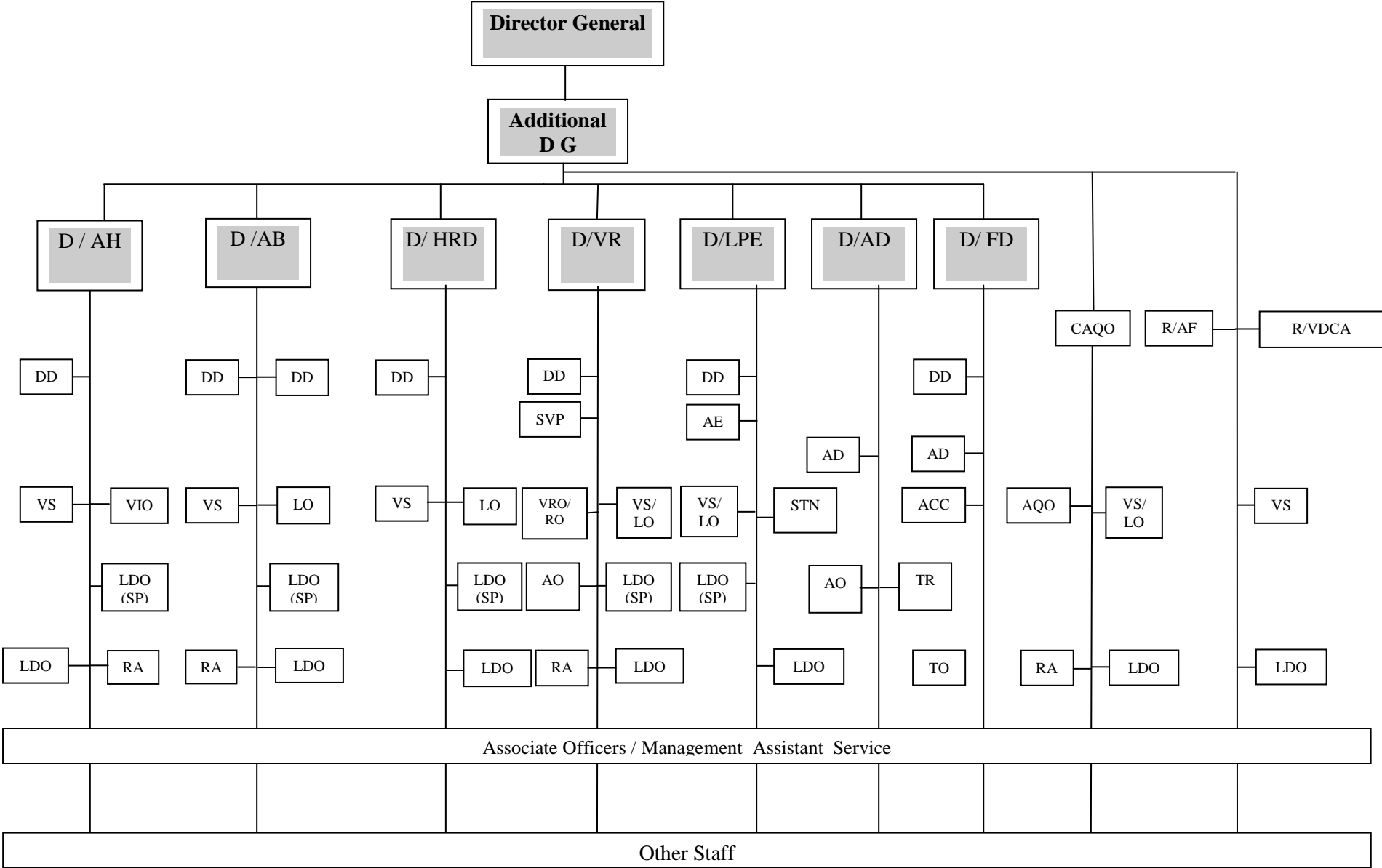
With all developments in IT field and in line with e-government program of the government, upgrading of ADSL line of the department, continuous maintenance of IT infrastructure and organize capacity building programs related to IT field are the other main activities implemented by the department with the initiative of IT group which consists of main IT personnel from each division and unit of the department.

Training opportunities were provided by ICTA for DAPH officers involved in Web Designing, Networking, System Administration etc. and, relevant officers participated in seminars, workshops conducted by ICTA during the year 2010.

## **Annexures**

Annex I	Organizational Structure of the DAPH
Annex II	Key Data on the Poultry Industry (2009 - 2010)
Annex III	Activities performed at Veterinary Investigation Centres - 2010
Annex IV	Details on HPAI Surveillance Programme - 2010
Annex V	Details of Rinderpest Sero - surveillance Programme - 2010
Annex VI	Bull Wise semen issues 2010
Annex VII	Research Publications - 2010
Annex VIII	VRI Income Through Provision of Services
Annex IX	Names of officers underwent overseas training
Annex X	Names of officers underwent local PG and short term training
Annex XI	Details of examinations conducted in 2010
Annex XII	Results of Departmental exams released in 2010
Annex XIII	Provincial Activities
Annex XIV	Milk Collection by Main Milk Collecting Organizations - 2009-2010
Annex XV	Quarantine Holdings and the Period of Quarantine - 2010
Annex XVI	Details of Consignments under Quarantine Surveillance in 2010
Annex XVII	Details of Consignments Detained in 2010
Annex XVIII	Export of Animals, Animal Products and Animal By-Products - 2010
Annex XIX	Raw material usage - 2010
Annex XX	Present Cadre Positions of the Department
Annex XXI	Financial Allocation and the Expenditure Summary 2010

Organizational Structure of the Department of Animal Production and Health





**ABBREVIATIONS**

ACC	: Accountant
AD	: Assistant Director
AE	: Agriculture Economist
AO	: Administrative Officer
AQO	: Animal Quarantine Officer
CAQO	: Chief Animal Quarantine Officer
D/AB	: Director, Animal Breeding
D/AD	: Director, Administration
D/AH	: Director, Animal Health
D/FD	: Director, Finance
D/HRD	: Director, Human Resource Development
D/LPE	: Director, Livestock Planning and Economics
D/VR	: Director, Veterinary Research
DD	: Deputy Director
LDO	: Livestock Development Officer
LO	: Livestock Officer
RA	: Research Assistant
R/AF	: Registrar, Animal Feeds
R/VDCA	: Registrar, Veterinary Drug Control Authority
RO	: Research Officer
STN	: Statistician
SVP	: Superintendent, Vaccine Production
TO	: Technical Officer
TR	: Translator
VIO	: Veterinary Investigation Officer
VRO	: Veterinary Research Officer
VS	: Veterinary Surgeon

## Key Data on the Poultry Industry (2009 - 2010)

Activity	2009	2010	Growth (%)
1. Procurement of Grand Parent and Parent stock			
Grand Parent Stock (Broiler)	13,880	15,254	9.90
Parent Stock			
Broiler	777,848	919,145	18.17
Layer	55,107	80,142	45.43
2. Production of Day - Old Chicks(m)			
Broiler	77.21	82.45	6.79
Layer	4.49	5.08	13.14
3. Production of Poultry Feed (MT)	454,000	499,600	10.04
4. Export of Poultry Products			
Day-old chicks	42,371	46,327	9.34
Chicken and Chicken Products (MT)	1,513.85	661.87	-56.28
Table Eggs	486,193	768,201	58.00
5. Import of Poultry Products			
Day Old Commercial pullets	~	102,362	100.00
Hatching Eggs	~	340,640	100.00
Chicken and Chicken products (MT)	1,004.18	1,235.14	23.00
Table Eggs	~	100,238	100.00
Egg Products (MT)	101.64	21.00	-79.34

## Activities performed at Veterinary Investigation Centres - 2010

Programme	Activity	Matara	Hambantota	Welisara	Pannala	Chilaw	Polonnaruwa	Anuradapura	Peradeniya	NuwaraEliya	Matale	Kegalle	Ratnapura	Badulla	Jaffna	Ampara	Homagama	Total	
1. Disease Investigation in the field	1.1 Field Investigation	12	39	5	13	27	49	59	28	20	13	23	18	38	48	22	2	416	
	1.2 Sample collection for testing	225	126	79	80	154	111	338	77	66	131	197	110	487	45	6	14	2246	
	1.3 Investigation Reports	12	35	5	14	30	53	44	22	15	13	16	11	36	53	24	2	385	
	1.4 Follow-up / further investigation	0	8	3	3	8	43	16	20	1	9	2	41	11	14	4	6	189	
2. Laboratory Service for disease diagnosis	2.1 Post-mortem examinations																		
	- Poultry	124	14	203	1387	640	46	114	28	8	11	119	36	195	103	4	0	3032	
	- Other Species	2	10	9	160	27	47	13	1	3	0	10	1	8	11	0	0	302	
	2.2 Testing of samples																		
	- Bacteriological	112	13	774	857	504	38	117	34	12	69	71	28	107	42	0	0	2778	
	- ABST	15	0	192	188	19	22	46	41	5	20	33	18	69	6	0	0	674	
	- Parasitological																		
	- Blood	43	46	2283	569	85	38	81	17	66	35	349	240	156	31	42	20	4101	
	- Dung	279	156	257	365	207	170	193	70	129	77	89	36	373	47	27	1	2476	
	- Skin	0	6	15	3	5	3	18	1	0	3	1	7	10	19	0	0	91	
	2.3 Testing of milk samples																		
	- CMT	42	326	191	672	57	28	588	316	67	63	100	101	242	58	0	0	0	2851
	- ABST	14	0	129	103	15	17	54	72	12	17	31	22	49	2	0	0	0	537
	-Gurber test	0	0	4	5	0	0	56	0	0	0	0	0	0	0	0	0	0	65
	- Milk Analysis (SG/Fat/SNF/TS)	0	0	4	5	0	0	52	0	0	0	0	0	0	0	0	0	0	61
2.4 Urine analysis	0	5	54	0	0	2	7	11	0	23	1	20	7	0	0	0	0	130	
2.5 Laboratory reports	91	48	2556	990	285	101	202	168	45	14	361	265	121	123	0	0	21	5391	
2.6 Samples dispatch for further testing	0	29	227	49	55	58	128	14	48	43	11	3	177	0	0	0	0	842	
3. Vaccine Production & Vaccination	3.1 CPD Vaccine	0	0	1	0	2	22	50	0	0	0	0	0	0	400	0	0	475	
	3.2 Wart Vaccine (No. of doses)	51	2	28	37	14	9	10	32	2	11	7	11	15	0	0	0	229	

## Activities performed at Veterinary Investigation Centres – 2010

Programme	Activity	Matara	Hambantota	Welisara	Pannala	Chilaw	Polonnaruwa	Anuradapura	Peradeniya	NuwaraEliya	Matale	Kegalle	Ratnapura	Badulla	Jaffna	Ampara	Homagama	Total
4. Supply of lab. Inputs to Veterinary Offices	4.1 Distilled water (Litre)	1	0	0	100	0	65	13	42.5	0	10	38.5	6	100	120	0	0	496
	4.2 CMT reagent (Litre)	0.8	13	0	1	4	17	7	13.5	5	10	9.5	2.5	23.5	200	0	0	306.9
	4.3 Udder base (vials)	0	6	0	0	0	54	98	336	0	0	0	2	0	0	0	0	496
	4.4 Teat dip solution (Litre)	56.5	22	148	415.5	79	84	43.5	241.5	49.5	20	43.5	64	55	10	0	0	1332
	4.5 Slides	6	4	742	125	0	130	20	80	0	0	244	125	0	0	52	0	1528
	4.6 Swabs	0	0	88	0	0	18	0	20	0	0	60	0	0	0	0	0	186
5. Dairy farm Health Improvement project	5.1 New farm registration	17	6	5	7	20	19	17	12	30	28	9	16	29	36	0	0	251
	5.2 GIS Mapping	4	6	5	6	16	19	17	21	30	36	5	19	13	0	0	0	197
	5.3 Farm Visits	44	100	3	37	60	19	117	104	0	38	21	53	27	118	0	0	741
	5.4 No. of Dairy cows tested	132	637	46	201	405	255	1044	353	160	415	192	206	174	451	0	0	4671
	5.5 Mastitis screening (CMT)	208	344	152	840	1300	224	684	1412	456	372	516	408	425	553	0	0	7894
	5.6 milk sample testing (ABST)	8	0	37	0	74	10	39	80	9	31	74	44	41	2	0	0	449
	5.7 Animal tested for parasitism	236	507	129	178	324	263	360	361	156	518	224	273	49	430	0	0	4008
	5.8 Teat dip solution issued (L)	47	17	10	123	130	70	113	169	65	35	74	57.5	49.5	79	0	0	1039
6. Brucellosis control Programme	6.1 Field investigations	1	10	0	2	14	46	44	47	5	2	0	36	3	44	0	0	254
	6.2 Screening dairy herds (MRT)	0	0	4	0	10	19	18	78	0	292	1	159	64	240	0	0	885
	6.3 Animal screening in suspected herds (RBPT)	9	154	1	12	36	102	254	13	43	239	3	89	47	12	0	0	1014
	6.4 Vaccination of Animals	0	62	0	3	0	1131	741	0	0	27	0	0	0	0	0	0	1964
7. Salmonella Control Programme	7.1 No of Breeder farm visits	5	0	10	6	21	0	10	12	0	15	8	10	0	11	0	2	110
	7.2 No of birds tested	1145	0	2475	535	1196	0	1060	3305	0	730	0	4230	0	2180	0	1100	17956
	7.3 No of birds culled	0	0	0	8	0	0	5	0	0	5	0	39	0	10	0	0	67
	7.4 No of Hatchery visits	0	0	14	13	26	1	10	11	0	10	28	7	0	5	0	0	125
	7.5 No of Hatchery samples tested	12	0	238	1245	295	6	66	18	0	12	0	239	0	3	0	0	2134

## Activities performed at Veterinary Investigation Centres – 2010

Programme	Activity	Matara	Hambantota	Welisara	Pannala	Chilaw	Polonnaruwa	Anuradapura	Peradeniya	NuwaraEliya	Matale	Kegalle	Ratnapura	Badulla	Jaffna	Ampara	Homagama	Total
8. Avian Influenza surveillance programme	8.1 No of serum samples	210	270	45	180	646	210	240	195	0	275	75	238	105	25	30	0	2744
	8.2 No of dropping samples at Hotspots	0	311	2	0	0	20	11	0	10	27	0	0	80	25	65	0	551
	8.3 No of cloacal swabs (Backyard)	0	53	31	0	665	65	95	0	0	27	30	105	137	67	405	0	1680
	8.4 No of Training as resource personal	0	0	7	1	0	5	5	1	1	0	0	3	0	0	0	0	23
9. Animal Feed Analysis	9.1 Testing of Feed samples	13	0	0	0	43	0	0	0	0	0	0	0	0	0	0	0	56
	9.2 Samples dispatch for further testing	0	0	0	0	34	0	0	0	0	0	0	0	0	0	0	0	34
	9.3 Feed formulation ( poultry )	0	0	0	0	0	0	23	0	0	0	0	0	0	0	0	0	23
10. Inspection of Export aquaculture farm	10.1 Aquaculture Farm visits	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	10.2 Testing of samples	0	0	431	0	0	0	0	0	0	0	0	0	0	0	0	0	431
	10.3 Advisory service	0	0	85	0	0	0	0	0	0	0	0	0	1	0	0	0	86
11. Revenue (Rs.)	42900	5440	268295	103794	79540	14903	16220	26007	12697	6775	41150	17480	10465	3896	0	2000	6515612	

## Details on HPAI Surveillance Programme - 2010

Districts	Serum samples				Cloacal swabs / fresh droppings	
	ELISA Test for AI			HI Test for H5,H7,H9	Migratory Birds	Backyard Poultry
	No. collected	No. tested	No. of (+ve) Reactors	Test Results		
Colombo	583	397	4	(-ve)	180	39
Gampaha	617	309	8	(-ve)	340	0
Kalutara	75	75	0		0	0
Kandy	196	136	6	(-ve)	0	0
Matale	275	60	0		27	27
Nuwara Eliya	60	60	0		10	0
Galle	60	60	0		0	0
Matara	150	90	3	(-ve)	0	68
Hambantota	270	75	0		311	53
Jaffna	25	0	0		114	67
Kilinochchi	0	0	0		0	0
Mannar	0	0	0		42	0
Vavuniya	0	0	0		14	0
Mullaitivu	0	0	0		0	0
Batticaloa	45	0	0		0	0
Ampara	45	0	0		66	28
Trincomalee	0	0	0		0	27
Kurunegala	195	0	0		5	0
Puttalam	646	388	17	(-ve)	80	110
Anuradhapura	270	210	11	(-ve)	11	95
Polonnaruwa	210	120	0		20	65
Badulla	45	15	2	(-ve)	34	37
Monaragala	60	60	0		46	100
Ratnapura	238	148	9	(-ve)	19	105
Kegalle	75	0	0		0	30
<b>Sri Lanka</b>	<b>4,140</b>	<b>2,203</b>	<b>60</b>		<b>1,319</b>	<b>851</b>



## Details of Rinderpest Sero - surveillance Programme - 2010

Province	District	No. of samples collected	Initial Test			Repeated Test		
			No. tested	No. - ve	No. + ve	No. tested	No. - ve	No. + ve
East	Ampara	225	225	224	1	1	1	nil
	Batticaloa	240	240	238	2	2	2	nil
	Trincomalee	165	166	166	0	0	0	-
North-Central	Anuradapura	615	616	615	1	1	1	nil
	Polonnaruwa	165	181	180	1	1	1	nil
Uva	Badulla	210	210	210	0	0	0	-
	Monaragala	315	315	315	0	0	0	-
North	Vavuniya	90	90	90	0	0	0	-
	Mannar	75	76	75	1	1	1	nil
	Mulativu	120	123	122	1	1	1	nil
	Kilinochchi	105	105	105	0	0	0	-
	Jaffna	150	148	148	0	0	0	-
North West	Kurunegala	690	621	616	5	5	5	nil
	Puttalam	255	255	255	0	0	0	-
West	Gampaha	120	75	75	0	0	0	-
	Colombo	45	30	30	0	0	0	-
	Kalutara	90	75	74	1	1	1	
South	Hambantota	255	257	255	2	2	2	nil
	Matara	60	60	59	1	1	1	nil
	Galle	75	75	74	1	1	1	nil
Central	Kandy	105	105	105	0	0	0	-
	Matale	105	105	104	1	1	1	nil
	Nuwara Eliya	90	90	90	0	0	0	-
Sabaragamuwa	Ratnapura	75	75	75	0	0	0	-
	Kegalle	60	60	60	0	0	0	-
All Island		4500	4378	4360	18	18	18	nil

## Bull Wise semen issues 2010

	Bull code	Breed	Semen Type	No. Doses
1	260	Jersey	Local	9,595
2	263			22,333
3	271			15,500
4	272			11,419
5	273			26,700
6	274			18,379
7	275			100
8	276			100
9	277			100
10	399	Friesian	Imported	13
11	400			5
12	401	Friesian	Local	10
13	415			4,360
14	416			13,473
15	417			8,848
16	419			7,235
17	431			2,504
18	437			325
19	438			225
20	439			200
21	840			Sahiwal
22	842	Sahiwal	Local	1719
23	847			6641
24	848			6052
25	849			2789
26	979	Fr X Sw	Local	6,000
27	978	Jy X Sw	Local	16,313
28	983	AFS	Imported	25
29	985	AFS	Local	7,565
30	986	AFS	Local	5,239
31	1008	Jamnapari	Imported	54
32	1009	Jamnapari	Local	1,010
33	1012			2,142
34	1100	Murrah	Imported	35
35	1108	Nili Ravi	Imported	90
36	1109			10
37	1114	Murrah	Local	6,628
38	1023	Saanan	Imported	5
39	1024			2
40	2100	Jersey	Imported	20
41	2107			25
42	2108			25
43	2109			25
44	2110			25
<b>Total</b>				<b>204,173</b>

**Research Publications  
(2010)**

1. Fernando, P. S., Rose, S. P., Silva, S. S. P. And Mackenzie, A. (2010). In Vivo efficacy of locally sourced competitive exclusion bacteria to control sub-clinical necrotic enteritis in broiler chickens. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka.
2. Fernando, P. S., Rose, S. P., Silva, S. S. P. And Mackenzie, A. (2010). In vitro evaluation of the efficacy of lactobacilli strains to use as competitive exclusion agent to control subclinical necrotic enteritis in poultry. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka.
3. Priyantha M. A. R., A. A. Vipulasiri, Samarakoon S.A.T.C.Fasi., Thaiba., Nowshard.,Shifaya., Senewirathne. (2010). The serological survey on bovine brucellosis at slaughter houses in Eastern Province, Sri Lanka. Proceeding of Fifth Asian biotechnology conference.Pp25-26.
4. Priyantha M.A.R., Gunawardana G.A., Puvanenderan S. Wijemuni M.I. and P.S.De Alwis (2010). Serological Detection of Leptospira Serovars from aborted water Buffaloes in Sri Lanka. Proceeding of 9<sup>th</sup> World Buffalo Congress: Infectious diseases. Pp :480-483.
5. Priyantha M. A. R., De Alwis P.S., Ubeyrathne J.K.H., Bandara W.M.P., Gunawaradana G. A., Fernando P.S., Liyanagunawardana, N.. (2010). Protective efficacy of locally prepared BQ vaccine against field isolates of recent outbreaks in Sri Lanka, 2008-2009. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka. Pp 8.
6. Mukthar Z.A.M., Dangolla A, Priyantha M.A.R.(2010).Serologiccal detection of Lepospira serovars in house rata(*Mus musculus*) and roof rat (*Rattus rattus*) in Kandy. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka. Pp 6.
7. Priyantha M. A. R., GunawaradanaG.A., Vipulasiri A.A., Fernando P.S., N. Liyanagunawardana. (2010). Evaluation of antibody levels of HS antigen with different adjuvants by indirect haem agglutination test in cattle. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka. Pp 31.
8. Priyantha M. A. R., Gunawaradana, G.A., Wijemuni M.I., Fernando P.S.,& N. Liyanagunawardana. (2010). ISA 50V<sub>2</sub> as a potential adjuvant for Leptospira vaccine in laboratory mice. Proceedings of Annual Scientific Session of the Sri Lanka Veterinary Association, 7 May 2010, Kandy, Sri Lanka. Pp 34.
9. Sinclair, L.A., Weerasinghe, W.M.P.B., Wilkinson, R.G., de Veth, M.J. and Bauman, D.E. 2010. A supplement containing *Trans*-10, *Cis*-12 conjugated linoleic acid reduces milk fat yield but does not alter organ weight or body fat deposition in lactating ewes. Journal of Nutrition. 140: 1949-1955.

10. Weerasinghe, W.M.P.B., Silva, S.S.P., Priyankarage, N., Mangalika, U.L.P. and Chandima, R.A.T. 2010. Effects of supplementation of nitrogen through urea molasses multinutrient block (UMMB) on the performance of dairy cows fed with good quality forage based diets. Abstracts of the 5<sup>th</sup> International nitrogen conference, New Delhi, India. p-419.
11. Weerasinghe, W.M.P.B., Bodaheewa, A.P., Mangalika, U.L P., Silva, S.S.P., Priyankarage, N., Nandajeewa, N.R.S. and Chandima, R.A.T. 2010. Effects of supplementation of good quality forage based diets with cement free urea molasses multinutrient block (UMMB) on the performance of dairy cows. Abstracts of scientific papers of the 62<sup>nd</sup> annual convention of the Sri Lanka veterinary association. P-21
12. Fernando, P.S., Rose, S.P., Silva, S.S.P., Mackenzie, A. (2010) In vivo efficacy of locally sourced competitive exclusion bacteria to control sub-clinical necrotic enteritis in broiler chicken. In: Proceedings of the 62<sup>nd</sup> Annual Convention and Scientific Sessions of the Sri Lanka Veterinary Association, Peradeniya, May 2010, pp 9
13. Fernando, P.S., Rose, S.P., Silva, S.S.P., Mackenzie, A. (2010) In vivo efficacy of locally sourced competitive exclusion bacteria to control sub-clinical necrotic enteritis in broiler chicken. In: Proceedings of the 62<sup>nd</sup> Annual Convention and Scientific Sessions of the Sri Lanka Veterinary Association, Peradeniya, May 2010, pp 9
14. Fernando, P.S., Rose, S.P., Silva, S.S.P., Mackenzie, A. (2010) In vitro evaluation of the efficacy of lactobacilli strains to use as competitive exclusion agent to control subclinical necrotic enteritis in poultry. In: Proceedings of the 62<sup>nd</sup> Annual Convention and Scientific Sessions of the Sri Lanka Veterinary Association, Peradeniya, May 2010, pp 37
15. Fernando, A.N.D., Silva, S.S.P., Adikari, J.B. (2010) The effect of commercial organic acid blend in drinking water on broiler performances. Sri Lanka Association of Animal Production (SLAAP) Journal (Accepted for Publication & In Press)
16. Fernando, P.S., Rose, S.P., Silva, S.S.P., Mackenzie, A. (2010) In vitro evaluation of the efficacy of lactobacilli strains to use as competitive exclusion agent to control subclinical necrotic enteritis in poultry. British Poultry Science (Accepted for Publication & In Press)
17. Priyankarage, N., Silva, S.S.P., Gunaratne, S.P. (2010) A review of use of probiotic as an alternative to antibiotic growth promoters in animal feeding. Sri Lanka Veterinary Journal (Accepted for Publication & In Press)
18. Wickramaratne, S.H.G., Ulmek, B.R, Dixit, S.P, Kumar, S., Vyas, M.K (2010). Use of growth hormone gene polymorphism in selecting Osmanabadi and Sangamneri goats. Tropical Agric. Research 21 (IV) 2010

*Annex VII - contd*

19. Wickramaratne, S.H.G., Ulmek, B.R, Dixit, S.P, Kumar, S., Vyas, M.K (2010). Genetic polymorphism in growth hormone gene for selection of elite goats. Proc. Fifth Asian Biotechnology conference, 15-17, December 2010 Pp 83-84
20. Iddmaldeniya SS, Rajapaksha RSJP, Lauerman LH, Navarathne MB, Senasinghe ND, Chandrasekera SG, Abeyrathne Bandara SK, Attanayake AI, Kaluarachchi SM Development of a Paramphistomum genus specific primer and a PCR protocol to be used in situations where diagnosis is difficult.
21. C.Herath et al./Vaccine 28(2010)2284-2289 Experimental iron-inactivated P.multocida A:1 vaccine adjuvanted with bacterial DNA is safe and protects chickens from Fowl Cholera. Poster presentation for the 5<sup>th</sup> Asian conference on Biotechnology and development on Efficacy and safety of CpG DNA adjuvanted P.multocida experimental vaccine for chickens.
22. Monitoring of Village Chicken for Avian Influenza, JMKGK Jayasundara , H Kothalawala, T Sivakumar, S Ralapanawe, HA Wijithasiri and RWMKGC Rajapakshe, Annual Scientific Sessions of the Sri Lanka Veterinary Association, 7 May 2010
23. Sero-surveillance of Village Chicken Against Selected Viral Diseases, JMKGK Jayasundara , H Kothalawala, T Sivakumar, S Ralapanawe, HA Wijithasiri and R W M K G C Rajapakshe, Annual Scientific Sessions of the Sri Lanka Veterinary Association, 7 May 2010

## VRI Income Through Provision of Services

	Products & Services	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Annual Income (Rs.)
1	Yoghurt & curd cultures		700.00			500.00	12,000.00	6,000.00	7,250.00	8,500.00	5,500.00	3,000.00	6,250.00	49,700.00
2	Milk - Buffalo					1,200.00	7,020.00	9,915.00	12,820.00	13,665.00	11,080.00	13,680.00	-	69,380.00
	- Cattle	1,264.50	8,577.00	18,810.00	46,425.00	9,945.00	13,345.00	9,625.00	15,622.50	11,760.00	13,650.00	14,385.00	14,205.00	177,614.00
3	Feed analysis	11,000.00	14,500.00	23,250.00	30,350.00	55,450.00	37,850.00	45,950.00	80,750.00	41,050.00	74,150.00	35,250.00	52,950.00	502,500.00
4	Feed formulation	300.00	600.00	<b>1,140.00</b>	500.00	3,000.00	4,000.00	11,250.00	1,000.00	6,500.00	4,500.00	500.00	500.00	33,790.00
5	Examination of blood smears	635.00	200.00	700.00	1,025.00	600.00	950.00	1,200.00	1,800.00	2,400.00	2,525.00	4,100.00	1,700.00	17,835.00
6	Examination of dung sample	1,080.00			750.00			575.00		900.00		375.00	375.00	4,055.00
7	Poultry postmortems & disease diagnosis	775.00	425.00	750.00	1,100.00	1,250.00	1,850.00	950.00	650.00	1,400.00	2,400.00	2,100.00	1,900.00	15,550.00
8	Milk sample and milk products analysis	410.00	1,840.00	1,050.00	1,850.00	4,090.00	350.00	4,000.00	3,200.00	4,000.00	2,000.00	9,420.00	1,040.00	33,250.00
9	Analysis of soil samples	4,200.00		1,200.00					4,000.00					9,400.00
10	Grass sample testing													0.00
11	Pullorum antigen	12,000.00	41,566.00	23,800.00		50,294.00	30,000.00	70,000.00	150,000.00	28,520.00	23,928.00	118,000.00	98,000.00	646,108.00
12	Day Old /Month old chicks	87,985.00	24,102.00	81,850.00	19,880.00	50,650.00	12,030.00	12,630.00	73,800.00	4,407.00	36,690.00	12,970.00	56,490.00	473,484.00
13	Poultry meat		2,000.00	84,110.00						1,300.00		69,245.00		156,655.00
14	Eggs	8,976.00	3,108.00	13,950.00	1,474.00			540.00	9,990.00	13,258.00		450.00	7,406.00	59,152.00
15	Poultry litter	2,080.00		500.00			1,000.00	220.00						3,800.00
16	Goat & pig postmortems													0.00
17	Rabbit									1,000.00				1,000.00
18	Rabbit postmortems													0.00
19	Guinea pigs		275.00	200.00		100.00								575.00
20	Mice	18.00	88.00	542.00		15.00	500.00	2.00	190.00				85.00	1,440.00
21	Wart vaccine			150.00								10,000.00		10,150.00
22	Department Manuals													0.00
23	Miscellaneous	2,765.00	191,445.00	51,748.00	20,933.00	133,069.00	50,275.00	28,582.38	21,571.75	46,762.92	40,278.50	6,971.00	105,304.25	699,705.80
													<b>Total</b>	<b>2,965,143.80</b>



## Names of officers underwent overseas training during the year 2010

No	Name of the officer	Course/Programme	Country
1	Dr.A.D.N.Chandrasiri	Counterpart training under project small scale dairy farming improvement through genetic & feeding management improvement (GFMI project)	Japan
	Dr.D.R.T.G.Rathnayaka		
2	Dr.M.D.N.Jayaweera	Training workshop on genetic analysis (sequencing) of HPAI virus	Nepal
3	Dr.A.D.N.Chandrasiri	78 <sup>th</sup> annual session of the world assembly of the delegate of world organization of health (OIE)	France
4	Mr.L.P.A.S Jayawardana	Pasture based livestock farming development counterpart training under genetic and feeding management Improvement (GFMI) JICA project	Japan
	Mr.G.W.Ananda Gunapala		
5	Dr.M.Kodithuwakku	MVM/MPH Bio security	Singapore
	Dr.G.D.N.Kumarasinghe		
	Dr.G.G.A.Jayawickrama		
	Dr.N.D.Senasinghe		
	Dr.G.I.Shalika		
	Dr.B.C.Wickramasinghe		
6	Dr.W.M.P.Bandara	MTCP	Malaysia
7	Dr.(Ms) C.W.Liyanagamage	MTCP Training Programme-HACCP Based Inspection System	Malaysia
8	Mr.W.A.M.G.S.Abeysinghe	MTCP Training Programme-Animal Quarantine Management	Malaysia
9	Dr.T.C.K.Wimalaratne	Training course on surveillance, emergency preparedness and response	Thailand
10	Dr.T.A.C.Tiskumara	OIE-APHCA Regional workshop on animal feed safety	Japan
11	Dr.T.P.Wijethilaka	Regional meeting on public health research agenda for influenza in South-East Asia	India
12	Dr.B.D.R.Wijewardana	Production of vaccine for foot and mouth diseases	Thailand
13	Dr.I.W.N.Samaranayaka	2 <sup>nd</sup> training on breeding and genetics	Thailand
	Dr.S.Weerasinghe		
14	Dr.(Mrs) P.P.M.Kirindewela	Asian Regional Forum	Philippine
15	Dr.B.Sivayoganathan	Workshop for OIE National Focal Points for Animal production and Food Safety	Singapore

*Annex - IX - contd*

No	Name of the officer	Course / Programme	Country
16	Dr.(Ms)J.K.H.Ubeyratne	Alumini workshop for the Master of Vet Public Health (MVPH) holders	Thailand
17	Dr.K.M.T.Kendaragama	OIE Workshop on PVS	Nepal
	Dr.N.W.K.P.Wijewantha		
18	Dr.A.D.N.Chandrasiri	34 <sup>th</sup> session of APHCA	Thailand
19	Mr.R.M.R.B.Rathnayake	Public Procurement Training	India
	Mr.Prabath Chitraranjan		
20	Dr.Ranjani Hettiarachchi	Rinderpest control and other Trans-boundary Animal Diseases	Italy
21	Dr.N.W.M.R.Bandara Bothota	Training course on artificial Insemination on Dairy Cattle for developing country	Indonesia
22	Dr.T.P.Wijethilaka Dr.B.C.Wickramasooriya Dr.G.G.A.Jayawickrama Dr.G.D.N.Kumarasinghe Dr.N.D.Senasinghe Dr.G.T.Shalika Dr.M.Kodithuwakku	World Bank funded on line Masters in Vet Med in Bio Security in Massay University,2 <sup>nd</sup> workshop	New Zealand
23	Dr.S.A.Bandara	Networking event for the EU regional HPED Program	Thailand
24	Dr.Eranga Abeyrathne	Technical cooperation in FMD Vaccine Production, Quality Control and Diagnosis	India
	Mr.H.A.Wijithasiri		

### Names of officers underwent local PG and short term training

#### I. MVSc Programme

No	Officer	Designation	Course	Institute
1	Dr.N.D.T.Sirisena	VS	MVSc	University of Peradeniya
2	Dr.G.M.C.R.Karunaratne	VS	MVSc	University of Peradeniya
3	Dr.P.N.C.Fernando	VS	MVSc	University of Peradeniya
4	Dr.J.P.C.Chandana	VS	MVSc	University of Peradeniya
5	Dr.A.P.Bodahewa	VS	MVSc	University of Peradeniya
6	Dr.H.N.P.S.De Soyza	VS	MVSc	University of Peradeniya

#### II. MSc Programme

No	Officer	Designation	Course	Institute
1	Mr.W.G.L.Kumarasiri	Asst. Librarian	MA (Library & Information Science)	University of Kelaniya
2	Dr.R.A.S.A.Bandara	VS	MSc.(Computer Sc.)	University of Peradeniya
3	Dr.M.B.I.Lakmalie	VS	MSc. (Experimental Bio Technology)	University of Peradeniya

#### III. Short Term Courses

No	Officer	Designation	Course	Institute
1	Dr.T.P.Wijethilaka	VS, Project Manager	HRM	University of Kelaniya

**Details of examinations conducted in 2010**

	<b>Examination</b>	<b>No. of Candidates</b>
1	Livestock Development officer's second Department Examination	<b>04</b>
2	Diploma in Animal Husbandry-Final Examination	<b>52</b>
3	First Year Repeat Examination in Diploma in Animal Husbandry	<b>05</b>
4	Diploma in Animal Husbandry-Final examination (2 <sup>nd</sup> batch)	<b>17</b>
5	First Year Repeat Examination in Diploma in Animal Husbandry	<b>04</b>
6	National Language Oral Exam for AP&H Officers	<b>12</b>
7	Recruitment examination for LDO	<b>22</b>
8	Recruitment examination for RA	<b>18</b>
9	Livestock Development officer's first Department Examination	<b>11</b>
10	Research Assistant's first Department Examination	<b>12</b>
11	EB examination for HRMA (Human Resources Management Assistants)	<b>01</b>
12	National Language Oral Exam for AP&H Officers	<b>02</b>

## Results of Departmental exams released in 2010

	Examination	No. of Candidates
1	Livestock Development officer's second Department Examination	04
2	Diploma in Animal Husbandry-Final Examination	52
3	First Year Repeat Examination in Diploma in Animal Husbandry	05
4	Diploma in Animal Husbandry-Final examination (2 <sup>nd</sup> batch)	17
5	First Year Repeat Examination in Diploma in Animal Husbandry	04
6	National Language Oral Exam for AP&H Officers	12
7	Recruitment examination for LDO	22
8	Recruitment examination for RA	18
9	Livestock Development officer's first Department Examination	11
10	Research Assistant's first Department Examination	12
11	EB examination for HRMA (Human Resources Management Assistants)	01
12	National Language Oral Exam for AP&H Officers	02
13	National Language Oral Exam for AP&H Officers	19
14	National Language Oral Exam for LDO	12
15	National Language Oral Exam for RA	11
16	LDO's second Department Examination	04
17	AP&H Officers first EB Examination	
	2007 1 <sup>st</sup> EB	112
	2007 2 <sup>nd</sup> EB	101
	2008 1 <sup>st</sup> EB	74

## Provincial Activities

## Progress of Services / Activities of Provincial DAPH - 2010

<b>Dispensary Cases</b>	<b>WP</b>	<b>CP</b>	<b>SP</b>	<b>NP</b>	<b>EP</b>	<b>NCP</b>	<b>NWP</b>	<b>UP</b>	<b>SabP</b>	<b>Total</b>
Cattle / Buffalo	5,933	4,728	4,493	5,957	8,252	6,399	12,446	2,983	3,861	55,052
Goat/ Sheep	1,930	2,110	1,009	8,357	4,930	2,354	3,513	352	1,980	26,535
Pigs	941	176	168	41	36	472	1,890	62	831	4,617
Poultry	2,595	8,728	9,759	9,844	5,829	10,541	11,616	613	3,607	63,132
Dogs	7,068	4,653	2,845	6,867	403	2,283	5,174	1,764	2,837	33,894
<b>Sub Total</b>	<b>18,467</b>	<b>20,395</b>	<b>18,274</b>	<b>31,066</b>	<b>19,450</b>	<b>22,049</b>	<b>34,639</b>	<b>5,774</b>	<b>13,116</b>	<b>183,230</b>
<b>Field Cases</b>	<b>WP</b>	<b>CP</b>	<b>SP</b>	<b>NP</b>	<b>EP</b>	<b>NCP</b>	<b>NWP</b>	<b>UP</b>	<b>SabP</b>	<b>Total</b>
Cattle / Buffalo	5,621	6,460	3,753	2,238	7,533	6,216	13,264	4,665	4,107	53,857
Goat/ Sheep	1,716	1,579	658	1,788	3,955	1,504	2,703	320	1,910	16,133
Pigs	1,093	205	149	26	12	347	1,500	72	537	3,941
Poultry	83	196	64	147	268	61	106	34	47	1,006
Dogs	61	348	23	37	128	0	8	21	116	742
<b>Sub Total</b>	<b>8,574</b>	<b>8,788</b>	<b>4,647</b>	<b>4,236</b>	<b>11,896</b>	<b>8,128</b>	<b>17,581</b>	<b>5,112</b>	<b>6,717</b>	<b>75,679</b>
<b>Issue of Health Certificates</b>	<b>WP</b>	<b>CP</b>	<b>SP</b>	<b>NP</b>	<b>EP</b>	<b>NCP</b>	<b>NWP</b>	<b>UP</b>	<b>SabP</b>	<b>Total</b>
Cattle	378	669	166	115	806	902	686	572	77	4,371
Buffalo	1,283	1,537	524	358	6,107	5,406	2,544	3,800	134	21,693
Goats	105	83	84	10	116	22	43	59	22	544
Sheep	339	169	301	69	519	105	246	640	64	2,452
Poultry	83	196	64	147	268	61	106	34	47	1,006
Pigs	412	796	561	1,056	2,096	301	1,160	164	101	7,124
<b>Sub Total</b>	<b>2,600</b>	<b>3,450</b>	<b>1,700</b>	<b>1,755</b>	<b>9,912</b>	<b>6,797</b>	<b>4,785</b>	<b>5,269</b>	<b>445</b>	<b>37,190</b>



## Milk Collection by Main Milk Collecting Organizations - 2009-2010

Province	District	2009 Milk Collection (L)	2010 Milk Collection (L)	% Increase
Western	Colombo	907,754	1,081,194	19
	Gampaha	5,216,843	7,263,675	39
	Kalutara	1,139,674	1,383,517	21
Sub Total		7,264,271	9,728,386	34
Central	Kandy	11,998,891	11,263,805	-6
	Matale	4,798,642	5,501,531	15
	Nuwara Eliya	27,238,357	30,852,897	13
Sub Total		44,035,890	47,618,233	8
Southern	Galle	492,954	535,429	9
	Hambantota	388,302	499,776	29
	Matara	430,384	500,632	16
Sub Total		1,311,640	1,535,837	17
North Central	Anuradhapura	14,724,812	16,931,580	15
	Polonnaruwa	2,230,315	3,033,735	36
Sub Total		16,955,127	19,965,315	18
North Western	Kurunegala	15,450,013	15,186,493	-2
	Puttalam	9,070,240	9,829,710	8
Sub Total		24,520,253	25,016,203	2
Northern	Jaffna	-	948444	
	Kilinochchi	-	65,561	
	Mannar	-	152561	
	Mullaithivu	-	164,681	
	Vauniya	-	898,394	
Sub Total		-	2,229,641	
Eastern	Ampara	4,454,317	5,101,470	15
	Batticaloa	4,073,600	5,186,974	27
	Trincomalee	763,100	1,093,912	43
Sub Total		9,291,017	11,382,356	23
Uva	Badulla	10,287,934	10,651,604	4
	Monaragala	2,313,972	4,573,190	98
Sub Total		12,601,906	15,224,794	21
Sabaragamuwa	Kegalle	357,573	705,298	97
	Ratnapura	940,754	984,860	5
Sub Total		1,298,327	1,690,158	30
Other		5,078,239	1,789,684	-65
Island Total		122,356,670	136,180,607	11

Note: Province wise collection figures may not necessarily indicate the amount of milk produced in the same province. These figures indicate supply of milk, (may be from adjacent areas as well in other provinces) to milk chilling centers located in provinces.

\* collection details received from ; \* Ambewela Livestock Co. Ltd, Ambewela Products, Cargills Quality Dairies, Fontera Brands Lanka (Pvt.) Ltd, Lanka Dairies (Pvt.) Ltd, Lucky Dairies, Milco (Pvt.) Ltd., Nestle Lanka Ltd, Pattipola Livestock (New Zealand farm), Richlife Dairies Ltd., Swiss Cheese Company, Seven Hills Ltd.

## Quarantine Holdings and the Period of Quarantine- 2010

Station	Type of Animals	Strain/breed	No. of animals	Country of Origin	Period of Quarantine
On farm quarantine	Zoo animals	Meerkats	02	UK	10. 03.2010 - 10.04.2010
On farm quarantine	Zoo animals	Ring tailed lemuras	02	UK	10. 03.2010 - 10.04.2010
AQS Colombo	Horses	Thoroughbred	06	India	12.03.2010 - 06.04.2010
AQS Colombo	Horses	Thoroughbred	06	India	26.03.2010 - 23.03.2010
AQS Colombo	Horses	Thoroughbred	06	India	13.04.2010 - 10.05.2010
On farm quarantine	Zoo animals	Lemuras	02	UK	07. 09.2010 - 07.10.2010
AQS Colombo	Horses	Thoroughbred Sindi	03 03	India	18.10.2010 - 16.11.2010
Police Stables Colombo	Horses	Belgisch	15	Netherlands	26. 11.2010 - 26.12.2010
AQS Colombo	Horses	Sindi Thoroughbred	03 03	India	04.12.2010 - continued

## Details of Consignments under Quarantine Surveillance in 2010

Type of Animal/Animal-product/Animal By-product		No. of consignments arrived		Quantity arrived (No / MT)		No. of consignments inspected	
		2010	2009	2010	2009	2010	2009
1.	DOC - Grand Parents	07	06	28,763	26,429	07	06
	- Layer Parents	195	12	90,124	57,858	195	12
	- Broiler parents	63	38	477,429	286,972	63	38
	- Commercial layer	04	-	102,500	-	04	-
2.	Meat - Poultry	40	27	1,201.68	983.18	40	27
	- Beef	23	25	64.33	44.68	23	25
	- Mutton	14	25	178.48	194.91	14	25
	- Lamb	12	22	60.00	84.0	12	22
	- Pork	02	-	1.92	-	02	-
	- Duck	02-	02	6.03	12.57	02	02
	- Turkey	02-	01	27.42	9.32	02	01
- Casings	07	02	5.91	4.05	07	02	
3.	Table eggs	01	-	100,238	-	01	-
4.	Hatching eggs	04	-	340,640	-	04	-
5.	Meat and Bone Meal	111	105	13,195.33	11,353.64	111	105
6.	Ornamental fish	267	259	2,413,248	2,056,717	267	259
		Marine - 227, Fresh water - 40	Marine - 222, Fresh water - 37			Marine - 227, Fresh water - 40	Marine - 222 Fresh water - 37
7.	Zoo animals	4	02	8	7	4	02
	Horses	05	01	45	6	05	
8.	Dogs/Cats	202	232	284	381	202	232
9.	Fish meal	197	178	11,492.60	10,149.19	197	178
10.	Prawn feed	178	208	3,375.28	4,820.58	178	208

*Annex XVI - contd*

Type of Animal/Animal- product/Animal By-product		No. of consignments arrived		Quantity arrived (No / MT)		No. of consignments inspected	
		2010	2009	2010		2010	2009
11.	Tallow	37	58	3,254.59	3,864.11	37	58
12.	Gelatine	26	20	334.30	212.95	26	20
13.	Egg powder	10	05	18.50	96.44	10	05
14.	Egg Albumin	5	03	3.00	5.2	5	03
	Whole liquid egg	3	02	41.28	34.56	3	-
15.	Feather /Skins/Bristles - Other Products	100	81	77.15	48.93	100	81
16.	Frozen fish	509	321	13,712.11	9,246.82	509	321
17.	Fish Food	25	16	223.67	231.18	25	16
18.	Leather	134	43	454.62	28.23	134	43
19.	Feed Ingredients	526	557	139,758.14	173,298.6	526	557
20.	Chicken products(Chicken powder, Chicken essence, Chicken extract, Chicken soup)	17	17	41.79	53.09	17	17
21.	Pet food	16	11	304.95	325.25	16	-
22.	Horse feed	01	-	0.82	-	01	-
23.	Vaccines	07	04	1,032,433.00 (doses)	38,248	07	04
24.	Veterinary drugs	01	-	1,000 (vials)	-	01	-
25.	Semen	02	02	6,660 (doses)	1,650 (doses)	02	-

**Note:**

*BSE clearance:* Screened the applications and released 836 consignments under BSE Clearance in year 2010.

*Animal Feed Ingredients of Agricultural Origin:* for HPAI Clearance – 526 Nos in year 2010

*Fumigation:* No. of by- products and feed ingredients fumigated before release in 2010 – 99

## Details of Consignments Detained in 2010

No	Type of Consignment	Country of origin	Reason for destruction/detention	Quantity Kg/ No	Action taken
1	Feathers	USA	No import permit and IVHC *	04 No	Destroyed
2	Meat and bone meal	New Zealand	Salmonella contamination	84.98 MT	Destroyed
3	Skin	USA	No import permit and IVHC *	50 Kg	Destroyed
4	Beef/Chicken meat	Israel	No import permit and IVHC *	60 Kg	Destroyed
5	Pet bird	Maldives	No import permit and IVHC *	01 No	Re-exported
6	Beef	USA	No import permit and IVHC *	213 Kg	Destroyed
7	Dog	India	Not fulfilled the requirements	01 No	Released after fulfilling requirements.
8	Dog	Thailand	No import permit and IVHC *	05 No	Re-exported
9	Chicken/Mutton	Singapore	No import permit and IVHC *	Chicken-4,200 kg Mutton-1,950 kg	Destroyed
10	Dog	Thailand	No import permit and IVHC *	01 No	Re-exported
11	Dog	Dubai	At arrival found to be dead	01 No	Incinerated
12	Pet bird	K.S.A.	No import permit and IVHC *	01 No	Re-exported
13	Peacock feather	India	No import permit and IVHC *	16 No	Destroyed

*Annex XVII - contd*

No	Type of Consignment	Country of origin	Reason for destruction/detention	Quantity Kg/No	Action taken
14	Dog	India	No import permit and IVHC *	01 No	Re-exported
15	Baby tortoise	Thailand	No import permit and IVHC *	14 No	Held until permit is submitted.
16	Hamsters	Thailand	No import permit and IVHC *	06 No	Held until permit is submitted.
17	Mutton	Thailand	No import permit and IVHC *	2.5 Kg	Destroyed
18	Bird food	Thailand	No import permit and IVHC *	6.0 Kg	Destroyed
19	Fish food	China	No import permit and IVHC *	75 Kg	Re-exported

*\*IVHC-International Veterinary Health Certificate*



## Export of Animals, Animal Products and Animal By-Products -2010

Category		Number/ Quantity 2010	Number/ Quantity 2009
	<b>Animals</b>		
01	Dogs	113 No	140 No
02	Cats	62 No	49 No
03	Aviary	22 con/741 No	02 con /20 N
04	Day Old Chicks	46 con:/46,327 No	11 con:/42,371 No
05	Live Fish	2,674 con:/18,783,478 No	3,175 con:/19,503,796 No
06	Zoo animals	01 con:/02 No	06 con:/07 No
07	Rabbit/Rat/Hamster/ Guinea pigs	16 con/173 No	04 con/04 No
08	Elephants	01 con/01 no	-
	<b>Animal Products</b>	Number/Quantity (MT)	Number/Quantity (MT)
08	Beef and Beef Products	870 con/34.28 MT	580 con/26.6 MT
09	Whole Chicken	01 con/0.15 MT	5con/0.94 MT
10	Chicken Products	1157 con/661.71 MT	586 con/37.95 MT
11	Pork products	601 con/147.01 MT	547 con/127 MT
12	Mutton	79 con/1.53 MT	28 con/1.37 MI
13	Fish and Fish Products	206 con/6.73 MT	123 con/3.88 MT
14	Prawn/Crabs/Lobster	238 con/13.23 MT	166 con/10.67 MT
15	Table eggs Numbers	231 con/768,201 No	117 con/486,192 No
	<b>Animal By-Products</b>	Number/Quantity (MT)	Number/Quantity (MT)
16	Chicken Paw	01 con /25 MT	-
17	Chicken feet	70 con/2,170.24 MT	38 con/932.18 MT
18	Cattle bone	05 con/75.42 MT	-
19	Hats	31 con/1,063 No	45 con/ 5,258 No
20	Dog Chew - Nos	09 con/3,288,173 No	08 con/3,340,310 No
21	Artist Brushes (pieces)	36 con/668,888 No	35 con/ 793,414 No
22	Bone Grist	01 con/20 MT	-
23	Cuttle fish bones/crushed	03 con /1.34 MT	-
24	Leather MT	51 con /71.34 MT	45 con /52.31 MT
25	Elephant dung recycle papers	07 con/37,660 pcs	05 con/37,914 pcs
26	Cattle hoofs/horns	01 con/8.12 MT	-
27	Other Products, No-(Hats, Caps, bags/drums)	109 con/113,922 No	139 con/111,574 No

## Raw material usage - 2010

Raw Materials		Local Usage	Imports
Cereals	1.Maize	83,482.39	10,721
	2.wheat	80	32,469
	3.Others(Sorghum)	40,83.61	2,921
Cereal by products	1.Rice Polish	34,621.3	1,080
	2.Rice Bran	2,474.25	0
	3.Wheat pollard	106.3	0
	4.Wheat Bran	22,370.6	0
	5.Wheat Flour	103	0
	6.Corn Gluten Meal	1,504	0
	7.Wheat Middlings	3,308	20
	8.Dhal Husk	104	0
Oil Meals	1.Coconut Meal	4,368.72	0
	2.Soya Bean Meal	5,646.395	7,3047.7
	3.Rape Seed Meal	88	50
	4.Other ( Hypro soya & full fat Soya)	0	3,834
Animal by Products	1.Fish Meal	2,368.79	3,214
	2.Meat & Bone Meal	400	12,911
	3.Others	9.52	0
Minerals	1.Calcium Carbonate	1232	20
	2.Salt	78	0
Vitamins	1.Mineral mixture	13.4	0
	2.Vitamin Pre Mixtures	0	0
Mineral Supplement	1.Shell Grit	6,588.152	50
	2.Di Calcium Phosphate	818.65	1,876
	3.Pre-Mixes	52.875	316,920
	4 Other ( Pam Oil Meal)	16	0
Additives	1.Vitamins	20.495	269.2
	2.Minerals & Trace Elements	2.543	227
	3.Binders	18.585	239
	4.Growth promoters	13.155	72
	5.Anticoccidial agents	17.555	52
	6.Enzymes	5.174	23
	Others	52	409
Amino Acids	1.L-Lysine	30.73	520
	2.Dl-Methionine	39.985	170
	3.Dl-Methionine Liquid	0	0
	Others	11.285	0
Others(Specify)	L-Thereonine	0	33
	Others	6,583.610	2724

**Present Cadre Positions of the Department  
(As at 31.12.2010)**

S. No.	Designation	Approved Cadre	Current		
			Project I	Project II	Project III
1	Director General	1	0		
2	Additional Director General	1	1		
3	Director (AP&HS)	5	1	1	2
4	Director (Administration)	1	1		
5	Director (Finance)	1	1		
6	Deputy Director (VR)	1		0	
7	Deputy Director (Research)	1		0	
8	Deputy Director (Technical Services)	1		1	
9	Deputy Director (AP&HS)	5	0	0	0
10	Deputy Director (Finance)	2	2		
11	Assistant Director (Administration)	1	1		
12	Accountant	2	1		
13	Registrar (Animal Feed)	1	1		
14	Registrar (Veterinary Drugs)	1	1		
15	Chief Animal Quarantine Officer	1	0		
16	Superintendent of Vaccine Production	1		1	
17	Animal Quarantine Officer	5	5		
18	Veterinary Research Officer	24		23	
19	Veterinary Investigation Officer	17		16	
20	Veterinary Surgeon	34	10	13	18
21	Agriculture Economist	1	0		
22	Livestock Officer	16	2	1	8
23	Research Officer	5		4	
24	Statistician	1	1		
25	Administrative Officer	2	1	1	
26	Translator	2	2		
27	Work Supervisor	1	1		
28	Livestock Development Officer	65	10	10	28
29	Librarian	1			0
30	Budget Assistant	2	1		
31	Development Officer	5	5		
32	Development Assistant	32	16	6	9
33	Legal Assistant	2	1		
34	Program Assistant (Archives)	2	1	1	
35	Program Assistant (Public Relations)	2	1	1	
36	Monitoring Assistant	20	1	3	2
37	Program Assistant	19	1	4	3
38	Program Assistant (Audio Visual)	10			2

*Annex XX - contd*

S. No.	Designation	Approved Cadre	Current		
			Project I	Project II	Project III
39	Program Assistant (Communication)	2			2
40	Program Assistant (Media)	5		1	1
41	Technical Assistant (Machinery)	1	0		
42	Assistant Librarian	1			1
43	Management Assistant	67	40	12	10
44	Research Assistant	64	1	44	2
45	Driver	47	11	21	15
46	Watcher	21	2		7
47	Laboratory Sub Assistant	12		11	1
48	KKS	32	13	5	7
49	Office Labourer		2	1	4
50	Special Labourer	19	1	1	1
51	Skilled Labourer	8		0	0
52	Workshop Technician	2		0	
53	Store men	1		0	
54	Mechanic	3		1	1
55	Boiler Men	1		1	
56	Carpenter	3		2	1
57	Electrician	2		1	
58	Tractor Operator	3			1
59	Lorry Cleaner	1			0
60	Bungalow Keeper	1			0
61	Water Pump Operator	4			0
62	Garden Labourer	2	1		0
63	Sanitary Labourer	3	0	0	2
64	Unskilled Labourer	141	7	49	54
	Thelahera			3	11
	Contract				1
<b>Total</b>		<b>740</b>	<b>147</b>	<b>239</b>	<b>194</b>

## Financial Allocation and the Expenditure Summary 2010

	Allocation (Mn.)	Expenditure (Mn.)	Balance at 31.12.2010 (Mn.)	Expenditure as % of Allocation
<b>Project 1</b>				
Capital Expenditure	15,650	14,356	1,294	91.73
Recurrent expenditure	70,176	69,453	723	98.97
<b>Total</b>	<b>85,826</b>	<b>83,809</b>	<b>2,015</b>	<b>97.65</b>
<b>Project 11</b>				
Capital Expenditure	213,000	154,086	58,913	72.34
Recurrent expenditure	113,390	112,409	981	99.13
<b>Total</b>	<b>326,390</b>	<b>266,495</b>	<b>59,893</b>	<b>81.64</b>
<b>Project 111</b>				
Capital Expenditure	202,300	116,378	85,922	57.53
Recurrent expenditure	92,200	88,984	3,216	96.51
<b>Total</b>	<b>294,500</b>	<b>205,360</b>	<b>89,138</b>	<b>69.73</b>
<b>Total Capital Expenditure</b>	<b>430,950</b>	<b>284,820</b>	<b>146,129</b>	<b>66.09</b>
<b>Total Recurrent expenditure</b>	<b>275,766</b>	<b>270,846</b>	<b>4,920</b>	<b>98.21</b>
<b>Total Capital &amp; Recurrent expenditure</b>	<b>706,716</b>	<b>555,666</b>	<b>151,049</b>	<b>78.62</b>

**Compiled and Edited by:**

**Livestock Planning and Economics Division**

**Department of Animal Production and Health**

**Peradeniya**

**Tel/Fax: +94-81-2388186**

**E-mail: [daphlpe@sltnet.lk](mailto:daphlpe@sltnet.lk)**

**LPE/2011/02**