30

STANDING COMMITTEE ON AGRICULTURE
(2020-2021)

SEVENTEENTH LOK SABHA

MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING
(DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING)

'STATUS OF VETERINARY SERVICES AND AVAILABILITY OF ANIMAL VACCINE IN THE COUNTRY'

THIRTIETH REPORT

LOK SABHA SECRETARIAT
NEW DELHI

AUGUST, 2021 / SHRAVANA, 1943 (Saka)

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Presented to Lok Sabha on	10.08.2021
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<CONTENTS>

COMPOSITION OF THE STANDING COMMITTEE ON AGRICULTURE (2017-18)

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27. Shri K.K. Ragesh
28. Shri Ram Nath Thakur
29 Shri R. Vaithilingam
*30. Shri Harnath Singh Yadav
31. Dr. Chandrapal Singh Yadav

@ Shri Praveen Kumar Nishad, MP Lok Sabha nominated *vice* Shri Nephiu Rio, MP Lok Sabha w.e.f. 27.04.2018 *vide* Bulletin Part II, No. 6866, dated 27.04.2018.

Vacant due to resignation of Shri B.S. Yeddyurappa from the Membership of Lok Sabha w.e.f. 18.05.2018 *vide* Bulletin Part-II, Table Office (B) No. 6885, dated 19.05.2018.

**vice* Shri Janardan Dwivedi, Shri Meghraj Jain, Shri Vinay Katiyar and Shri Shankarbhai N. Vegad, who ceased to Members of the Committee on their retirement from Rajya Sabha on 27.01.2018, 02.04.2018, 02.04.2018 and 02.04.2018, respectively.

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10. Dr. Tapas Mandal
11. Shri Janardan Mishra
12. Shri Praveen Kumar Nishad
13. Shri Devji M. Patel
14. Shri Mukesh Rajput
15. Shri Konakalla Narayana Rao
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17. Shri Arjun Charan Sethi
18. Shri Virendra Singh
19. Shri Dharmendra Yadav
20. Shri Jai Prakash Narayan Yadav
21. VACANT

RAJYA SABHA

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23. Shri Rajmani Patel
24. Shri Narayan Rane
25. Shri Kailash Soni
26. Shri Mohd. Ali Khan
27. Shri K.K. Ragesh
28. Shri Ram Nath Thakur
29 Shri R. Vaithilingam
30. Shri Harnath Singh Yadav
31. Dr. Chandrapal Singh Yadav

COMPOSITION OF THE STANDING COMMITTEE ON AGRICULTURE (2019-20)

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17. Shri Mohammad Sadique
18. Shri Virendra Singh
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27. Shri Vaiko
28. Shri R. Vaithilingam
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30. Dr. Chandrapal Singh Yadav
31. Shri Harnath Singh Yadav

 # Nominated to this Committee w.e.f. 22.07.2020 *vice* Shri Ram Nath Thakur, MP Rajya Sabha who ceased to be a Member of the Committee w.e.f. 09.04.2020 due to his retirement.

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13. Shri Kinjarapu Ram Mohan Naidu
14. Shri Vinayak Bhaurao Raut
15. Shri Pocha Brahmananda Reddy
16. Shri Mohammad Sadique
17. Shri Virendra Singh
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19. Shri Mulayam Singh Yadav
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24. Shri Kailash Soni
[#]25. Shri Ram Nath Thakur
26. Shri Vaiko
27. Smt. Chhaya Verma
28. Shri Harnath Singh Yadav
[$]29. VACANT
[$]30. VACANT
31. VACANT

Dr. Chandrapal Singh Yadav ceased to be a Member of the Committee on his retirement from Rajya Sabha w.e.f 25.11.2020 *vide* CB-I Note dated 06.10.2020.

Shri R. Vaithilingam ceased to be a Member of the Committee on his resignation from Rajya Sabha w.e.f. 06.05.2021.

Nominated to the Committee as a Member w.e.f 11.06.2021 *vide* Bulletin Part-II No. 2510 dated 16.06.2021

$ Shri Bhagwanth Khuba, MP Lok Sabha, Shri Narayan Rane, MP Rajya Sabha and Shri B.L. Verma, MP Rajya Sabha ceased to be Members of the Committee on being appointed as Union Ministers on 07.07.2021.

SECRETARIAT

1.	Shri Shiv Kumar	-	Joint Secretary
2.	Dr. Vatsala J. Pande	-	Director
3.	Ms. Divya Rai	-	Asst. Executive Officer

INTRODUCTION

I, the Chairperson, Standing Committee on Agriculture (2020-21), having been authorized by the Committee to submit the Report on their behalf, present this Thirtieth Report (Seventeenth Lok Sabha) on the Subject 'Status of Veterinary Services and Availability of Animal Vaccine in the Country' pertaining to the Ministry of Fisheries, Animal Husbandry and Dairying (Department of Animal Husbandry and Dairying).

2. The Standing Committee on Agriculture had selected the Subject for examination during 2017-18. As the examination of the Subject could not be completed during 2017-18, the Committee again selected the Subject for examination during 2018-19, 2019-20 and 2020-21. The Committee took Briefing from the representatives of the Ministry of Agriculture and Farmers Welfare (Department of Animal Husbandry, Dairying and Fisheries) on 16th November, 2017. Evidence of the representatives of the Ministry of Fisheries, Animal Husbandry and Dairying (Department of Animal Husbandry and Dairying) was taken by the Committee in their Sitting held on 11th January, 2021. The Report on the Subject was considered and adopted by the Committee at their Sitting held on 5th August, 2021.

3. For facility of reference and convenience, the Recommendations / Observations of the Committee have been printed in bold letters in Part-II of the Report.

4. The Committee wish to express their thanks to the representatives of the Department of Animal Husbandry and Dairying for appearing before the Committee and furnishing requisite information in connection with the examination of the subject.

5. The Committee would also like to place on record their deep sense of appreciation for the invaluable assistance rendered to them by the Officials of Lok Sabha Secretariat attached to the Committee.

NEW DELHI;
05 August, 2021
14 Shravana, 1943 (Saka)

P.C. Gaddigoudar
Chairperson,
Standing Committee on Agriculture

PART – I

CHAPTER – I

INTRODUCTION

INTRODUCTORY :

1.1 India has a vast resource of livestock and poultry, which plays a vital role in improving the socio-economic conditions of rural masses. There are about 535.78 million livestock including 192.49 million cattle, 109.85 million buffaloes, 74.26 million sheep, 148.88 million goats, 9.06 million pigs and 1.23 million others, as per the 20th Livestock Census in the country.

1.2 Animal diseases, however, pose an impediment to the growth of the livestock sector. Among the animal diseases of national and economic importance are Foot & Mouth Disease (FMD) and Brucellosis in cattle and buffaloes, *Peste des Petits* Ruminants (PPR) in sheep and goats and Classical Swine Fever (CSF) in pigs. In addition, diseases in poultry include Avian Influenza or Bird Flu and Ranikhet Disease(RD). Other diseases such as Haemorrhagic Septicaemia (HS), Black Quarter (BQ), Anthrax, Rabies, African Swine Fever (ASF), Porcine Reproductive & Respiratory Syndrome (PRRS) and Lumpy Skin Disease (LSD) also affect livestock productivity.

1.3 Animal Health in the country is looked after jointly by Central and State Governments. The Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India handles animal health at the Centre. As a part of control of animal diseases of national importance, the Central Government implements various national programmes for eradication of number of animal and poultry diseases. Central Government formulates projects and policy guidelines and issues advisories to the various State Animal Husbandry Departments to prevent / control various animal diseases of national importance.

1.4 Mandates of the Central Government for Animal Health include :

- Policies and provisions related to animal quarantine;
- Prevention of inter-state transmission of animal diseases;
- Regulatory measures for quality of biologicals and drugs;
- Import of biologicals, livestock, livestock products; and
- Control of animal diseases of national importance.

1.5 As prevention of Animal Diseases is a State subject, Veterinary Services are provided by State Governments through Polyclinics / Veterinary Hospitals, Dispensaries and First-Aid Centres including Mobile Veterinary Dispensaries available with them. For this, each State and Union Territory Government has its own Animal Husbandry and Veterinary Services Department. Prevention, control and surveillance of animal diseases are important functions of each State Veterinary Service.

1.6 Joint Responsibilities of Centre & States / UTs in Animal Healthcare –

While State Governments are responsible for providing basic infrastructure, necessary qualified manpower for the implementation of policies and budget for animal husbandry development and disease control; Government of India supplements these activities of State Governments and helps them to effectively tackle issues of livestock health by providing financial assistance through the Centrally Sponsored Scheme on 'Livestock Health & Disease Control' and the Central Sector Scheme on 'National Animal Diseases Control Programme'. Through these Schemes, the Central Government assists State and UT Governments for prevention, control and containment of economically important animal diseases like Foot and Mouth Diseases (FMD), Classical Swine Fever (CSF), Brucellosis, *Peste des Petits* Ruminant (PPR) and other animal diseases.

GOVERNMENT SCHEMES RELATED TO LIVESTOCK HEALTH IN THE COUNTRY :

A. SCHEME ON LIVESTOCK HEALTH & DISEASE CONTROL (LH&DC) –

1.7 This is a Centrally Sponsored Scheme aimed at providing financial assistance as Central share to States / UTs for control & containment of animal diseases. The funding pattern is 60:40 between Centre and State (90:10 for North Eastern & Himalayan States and 100% for UTs). The sub-components under LH&DC Scheme are as mentioned below :

(i) Assistance to States for Control of Animal Diseases (ASCAD) – Under this sub-component, assistance is provided to States / UTs for control of economically important diseases of livestock and poultry by way of immunization, strengthening of existing State Veterinary Biological Production Units, strengthening of existing

Disease Diagnostic Laboratories and in-service training to Veterinarians and Para-veterinarians.

(ii) National Project on Rinderpest Surveillance and Monitoring (NPRSM) – Under this project, surveillance of various animal diseases including syndromic diseases with focus on Contagious Bovine Pleuropneumonia (CBPP) and Bovine Spongiform Encephalopathy (BSE) are undertaken throughout the country to maintain India's freedom status from these diseases. This physical surveillance is done with the help of the staff of Animal Husbandry Department of the States & Union Territories.

(iii) Peste des Petits Ruminants Control Programme (PPR – CP) – Peste des Petits Ruminants (PPR) is a viral disease characterized by high fever, inflammation of the gastro-intestinal tract leading to necrosis and ulceration of the mucous membrane and diarrhoea. PPR causes huge losses to the rural economy, both in terms of morbidity and mortality in sheep and goats. The PPR Control Programme involves vaccinating all susceptible goats & sheep and three subsequent generations.

(iv) Classical Swine Fever Control Programme (CSF – CP) – Classical Swine Fever (CSF) or 'hog cholera' is a viral disease of pigs. Its outbreaks cause heavy economic losses to pig farmers. In order to control this disease, the Department implements the sub-component CSF – Control Programme (CSF-CP) focussing on the North Eastern States of the country.

(v) National Animal Disease Reporting System (NADRS) – In order to streamline the system of animal disease reporting from States/UTs, a web based Information Technology system for reporting the diseases from the field level has been implemented, known as National Animal Disease Reporting System (NADRS). The objective of NADRS is to record and monitor livestock disease situation in the country with a view to initiate preventive and curative action in a timely and speedy manner. NADRS is a web-based System which will report the occurrence of animal diseases from the Block & District level Veterinary Units.

(vi) Professional Efficiency Development (PED) – Under this component, the Central Government provides 100% funds for functioning of Veterinary Council of India (VCI) and 50% funds to State Veterinary Councils for their operations including running their Continuing Veterinary Education (CVE) programmes.

(vii) Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD) – Under this component, the Department provides funds and financial assistance to States / UTs in order to assist them to set up infrastructure for new veterinary hospitals and dispensaries and to strengthen / equip the existing ones.

1.8 Two other sub-components under LH&DC, namely, Foot and Mouth Disease Control Programme (FMD-CP) and Brucellosis Control Programme (Brucellosis-CP) were withdrawn from LH & DC and covered under the new Central Sector Scheme called 'National Animal Disease Control Programme for Foot and Mouth Disease and Brucellosis (NADCP)'.

1.9 The Allocation and Expenditure details of the Department under the Scheme on Livestock Health and Disease Control (LH & DC) are as follows :

(Rs. in crore)

Year	BE Proposed	BE	RE	AE	Percentage (%)
2017-18	1553.03	298.77	298.77	298.40	99.88
2018-19	746.63	508.77	391.43	390.67	99.81
2019-20	508.77	474.98	346.00	340.85	98.51
2020-21	500.00	438.00	250.00	194.45*	77.78
2021-22	909.39	370.00			

***as on 12.02.2021**

Year-wise details of Financial progress made under each component of the LH & DC Scheme are given at **Annexure – I.**

1.10 Year-wise details of Physical Achievements under each component of the LH & DC Scheme are given at **Annexure – II.**

1.11 On being asked by the Committee about the steps taken by the Department to ensure that the projects, policy guidelines and advisories issued by the Department are followed by the State Animal Husbandry Departments across the States and UTs, the Department in its written reply informed :

> "This Department scrutinizes proposals received from the States/UTs for release of funds under various components of Livestock Health & Disease Control (LH&DC) Scheme and ensures that the proposals comply with guidelines issued by this Department. Further, Regional Review Meetings

(RRMs) / Video Conferences (VCs) are held with the States and UTs for monitoring the physical progress & utilization of funds released. Besides, the Officers of the Department make visits to the States / UTs for assessment of the progress of various activities / programmes."

B. NATIONAL ANIMAL DISEASE CONTROL PROGRAMME FOR FOOT & MOUTH DISEASES AND BRUCELLOSIS (NADCP) –

1.12 A new Central Sector Scheme 'National Animal Disease Control Programme for Foot & Mouth Disease (FMD) and Brucellosis (NADCP)' has been launched on 11th September, 2019. The Scheme has been approved for a total outlay of Rs.13,343.00 crore for five years from 2019 to 2024 (Rs.12,652 crore for control of FMD and Rs.691 crore for control of Brucellosis for five years from 2019-20 to 2023-24). It has two components, namely, Foot & Mouth Disease Control Programme (FMD-CP) and Brucellosis Control Programme (B-CP).

1.13 NADCP envisages complete control of FMD (100% vaccination coverage of cattle, buffaloes, sheep, goats and pigs at six months' interval) by 2025 with vaccination and its eventual eradication by 2030 and control of Brucellosis (once-in-a-lifetime 100% vaccination of female cattle and buffalo calves {4-8 months of age}). Under the Scheme, all animals are also being identified with 12-digit unique ID number using ear tags.

1.14 Foot and Mouth Disease (FMD) vaccine - As per available information provided by present manufacturers, total production capacity is sufficient against the current requirement. Presently, there are **three** FMD vaccine manufacturers in the country, namely : India Immunologicals Ltd. , Brilliant Bio Pharma Ltd. and Biovet Private Ltd.

1.15 Brucellosis vaccine – Presently there are **four** Brucellosis vaccine manufacturers in the country, namely : M/s Indian Immunologicals Ltd., M/s Hester Biosciences Ltd., M/s Sanvita and M/s Biovet Pharma Pvt. Ltd. These account for 580 lakh doses to meet the present requirement.

VETERINARY EDUCATION AND LEGISLATIVE BACK-UP IN VETERINARY SERVICES :

1.16 Veterinary Education in the country is regulated through the **'Indian Veterinary Council Act (IVC Act), 1984'** which also regulates veterinary practice. At present,

there are 54 recognized Veterinary Colleges and 15 Veterinary Universities in India which cater to the need of Veterinary Education in the country.

1.17 **'The Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009** (amended, 2011)**'** provides legislative back-up for control and eradication of livestock and poultry diseases. This Act also provides legislative back up for detention of animals at check post, compulsory vaccination and controlling the movement of animals in the zones.

1.18 **'Livestock Importation Act, 1898 (amended, 2001)'** regulates import of livestock and livestock products to prevent ingress of exotic animal diseases in the country.

AVAILABILITY OF VETERINARY VACCINES :

1.19 State Veterinary Biological Production Centers (20) in the country are under the control of State Animal Husbandry Departments. These production units are producing various vaccines like Haemorrhagic Septicaemia (HS), Blue Tongue (BT), Classical Swine Fever (CSF), Anthrax, Black Quarter (BQ), New Castle Disease (NCD), Rabies, Sheep and Goat Pox, Fowl Cholera, PPR, Fowl and Pigeon Pox, Enterotoxaemia, Duck Cholera, Duck Virus Hepatitis, etc.

1.20 Vaccination drives against FMD and Brucellosis are being carried out under the Central Sector Scheme on NADCP.

CHAPTER – II

STATUS OF VETERINARY SERVICES AND INFRASTRUCTURE IN THE COUNTRY

2.1 The three Sub-components of LH & DC Scheme that are chiefly responsible for Veterinary Services and Infrastructure in the country are :

a) Assistance to States for Control of Animal Diseases (ASCAD) through strengthening of existing Disease Diagnostic Laboratories;

b) National Animal Disease Reporting System (NADRS) to record and monitor livestock disease situation in the country with a view to initiate preventive and curative action in a timely and speedy manner; and

c) Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD) through funding and financial assistance to States / UTs in order to assist them to set up infrastructure for new veterinary hospitals and dispensaries and to strengthen / equip the existing ones.

VETERINARY INFRASTRUCTURE :

2.2 There are a total of 65,894 Institutions for animal disease surveillance, reporting, control and containment. These include 37,726 Veterinary Hospitals / Polyclinics and Veterinary Dispensaries. The details are as follows :

- 12,129 Veterinary Hospitals and Polyclinics;
- 25,597 Veterinary Dispensaries; and
- 28,168 Veterinary Aid Centers and Mobile Veterinary Clinics.

These Disease Reporting units form the backbone of veterinary services and render services to approximately 535.78 million livestock population of the country.

2.3 The State / UT-wise list of Veterinary Hospitals / Polyclinics / Veterinary Dispensaries during 2019-20 and 2020-21 is given at **Annexure – III.**

2.4 According to the Background Note furnished by the Department during 2018-19, 2019-20 and 2020-21, the details of number of Veterinary Hospitals / Polyclinics and that of Veterinary Dispensaries is as follows :

Years	Veterinary Hospitals / Polyclinics	Veterinary Dispensaries	Total
2018-19	12235	27149	39384
2019-20	12099	25263	37362
2020-21	12129	25597	37726

2.5 On being asked by the Committee about the reasons behind this reduction in figures regarding Veterinary Infrastructure over the years, the Department in its written reply submitted that:

> "It is mentioned that in the Background Note furnished to the Committee in 2018-19, the figures were as on 31/3/2017 while in that furnished in 2019-20, the figures were as on 31/3/2018. Further, it is mentioned that the figures were received from the States. Few States have revised the number of veterinary institutions based on their types as well as their nomenclature. However, there is an overall increase from the 2018-19 report (as on 31/3/2017) and till date in the number of veterinary institutions, that includes Mobile Dispensaries and Veterinary Aid centres. The total number of Veterinary Instituions in the country in 2019-20 was 64,990 whereas that in 2020-12 is 65,894."

2.6 As per data submitted by the Department, the average number of villages per Veterinary Institution in the country stood at 9.86 until 2018-19. The State and UT-wise details of Number of Villages per Veterinary Institution is given at **Annexure – IV.**

2.7 In its written reply to the Committee, the Department informed about one of the Recommendations of the National Commission on Agriculture (NCA) given in 1976 in its detailed Report on aspects of attention in Animal Husbandry Sector. The Recommendation was made by NCA regarding measures necessary for disease control in animal population to increase their efficacy and the details of the Recommendation, as submitted by the Department, are :

> "In its detailed report, regarding veterinary infrastructure availability to provide accessible veterinary health care in the country, the National Commission on Agriculture (NCA), 1976, recommended that there should be one Veterinary Doctor / Institution for 5000 cattle units by 2000 AD.
>
> As per the above recommendation, a total of 67,520 veterinary hospitals / dispensaries are required in the country. However, during 2010-11, there were only 8,732 veterinary hospitals / polyclinics and 18,830 veterinary dispensaries in the country, which were inadequate in number. Currently, there are 37,726 Veterinary Hospitals, Dispensaries and Polyclinics in the country along with 28,168 Veterinary Aid Centres."

2.8 During the evidence of the Representatives of the Department, held on 11th January, 2021, the Representative of the Department while elaborating on the Recommendation of the NCA given in 1976, submitted before the Committee:

"...केन्द्र सरकार की तरफ से सन् 1976 में एक कमेटी गठित हुई थी, जिसने यह कहा था कि 5,000 की पॉपुलेशन पर एक डॉक्टर होना चाहिए। उस समय नेशनल कमीशन ऑन एग्रीकल्चर नामक कमेटी थी।... सर, 5,000 पॉपुलेशन कैटल यूनिट की है। 5 हजार गायों से ऊपर या इसके इक्विलेंट जैसे सुअर या बकरी का लिया जाए, तो इनके नम्बर अलग-अलग होते हैं। इसका मतलब है कि इतने सुअर मिलाकर एक कैटल यूनिट होती है या इतनी भेड़ या बकरियां मिलाकर एक कैटल यूनिट होती है। बेसिकली रिक्वायरमेंट के मुताबिक जितनी संख्या में हॉस्पिटल्स होने चाहिए, उतने नहीं हैं। आज की तारीख में लगभग 66 हजार के करीब वेटनरी हॉस्पिटल या डिस्पेंसरीज़ होनी चाहिए। इसमें कोई दो राय नहीं है कि ये आज की तारीख में बहुत कम हैं। इसके लिए सेन्ट्रल गवर्नमेंट और स्टेट गवर्नमेंट को मिलकर एफर्ट्स करने चाहिए। स्टेट गवर्नमेंट के बजट से भी होना होता है और सेन्ट्रल गवर्नमेंट की तरफ से भी जितना मैक्सिमम बनता है, उतना हम करने की कोशिश कर रहे हैं।..."

2.9 In its Background Note furnished to the Committee, the Department also informed that Veterinary hospitals, dispensaries, polyclinics, etc. are set up by respective States / Union Territory Governments depending upon the livestock population in a particular area and availability of resources and that these numbers are currently inadequate and need strengthening so as to cater to the needs of providing better veterinary services.

2.10 Elaborating on the structure of Veterinary Health Care being provided in rural as well as urban areas, the Department in its written reply informed :

"There is a well-knit infrastructure of Government Veterinary Service Units at each administrative level. Broadly, the State head quarter and large towns in the State have Veterinary Polyclinics. Each Tehsil head quarter has a Veterinary Hospital. At Panchayat level and further below in large villages, veterinary services are provided through Veterinary Dispensaries and Aid Centers. In this regard, it is the Veterinary Aid Centre which is the first disease information unit at the grass root level.

At the rural level i.e. at the Block level there is a Veterinary Hospital manned by a Veterinarian and below the Block level there are Veterinary Dispensaries / Livestock Aid Centres / Sub Centres which are manned by the Para-vets which provide Veterinary Service at the village level. In the urban areas, there are Veterinary Polyclinics or Super Speciality Hospitals which are manned by Specialist Veterinarians. In addition, Veterinary Colleges and Milk Federations also operate doorstep Veterinary Health Services through Mobile Clinics."

2.11 However, the Representative of the Department, while apprising the Committee about the current population of livestock in the country, expressed a dire need to augment veterinary infrastructure to effectively cater to the country's livestock population and during the evidence meeting, submitted before the Committee:

"सर, गाय और भैसों को मिलाकर कुल 30 करोड़ की पॉपुलेशन है। 25 करोड़ के आस-पास भेड़, बकरियां और सुअर भी हैं और इसके अलावा पोल्ट्री है। अगर 5 हजार के मानक पर गायों की या भैसों की पॉपुलेशन को काउंट करें तो लगभग 30 करोड़ गाय-भैंस हैं और 5 हजार के ऊपर एक हॉस्पिटल या एक डॉक्टर चाहिए तो आप अंदाजा लगा सकते हैं कि कितने हॉस्पिटल्स और डॉक्टर्स चाहिए।

... सर, नम्बर जितने भी हो, लेकिन शॉर्टेज बहुत ज्यादा है। हमें जितने चाहिए उतने नहीं हैं।... सर, आज की तारीख में 5 लाख 45 हजार के करीब डॉक्टर्स या डिस्पेंसरीज़ की जरूरत हैं।"

'Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD)' –

2.12 In order to assist States / UTs to set up infrastructure for new veterinary hospitals and dispensaries and to strengthen / equip the existing ones as well as run Mobile Veterinary Units (MVUs), financial assistance and funds are provided by the Department under the sub-component on 'Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD)' of the LH & DC Scheme.

2.13 Details regarding BE and RE of the LH & DC Scheme and the Expenditure incurred under ESVHD sub-component for the duration from 2017-18 up to 2020-21 are as mentioned below:

(Rs. in crore)

Year	BE	RE	Expenditure / financial progress under ESVHD
2017-18	298.77	298.77	3.05
2018-19	508.77	391.43	7.20
2019-20	474.98	346.00	2.47
2020-21	438.00	250.00	14.42
Total expenditure under ESVHD			**27.14**

2.14 The Department, in its written reply, informed the Committee that since inception of the ESVHD sub-component under LH&DC Scheme in August, 2010, it has provided Rs. 351.20 crore to different States / UTs for establishment / strengthening of Veterinary Hospitals / Dispensaries.

2.15 State and UT-wise details of funds released under the ESVHD sub-component of the LH&DC Scheme from 2017-18 to 2019-20 are given at **Annexure – V.**

2.16 Physical Targets and Achievements made under the ESVHD sub-component of LH & DC Scheme from 2017-18 to 2019-20 as follows:

Year	ESVHD (Establishment and strengthening of existing Veterinary Hospitals / Dispensaries in Nos.)	
	Physical Targets	Achievements
2017-18	70	0
2018-19	70	112
2019-20	30	42
Total	**170**	**154**

2.17 State and UT-wise details of Physical achievements made under the ESVHD sub-component of the LH&DC Scheme from 2017-18 to 2019-20 are given at **Annexure – VI.**

Funding Pattern for developing Veterinary Infrastructure –

2.18 During the evidence meeting of the Committee, while highlighting the fact about sharing of funds between Centre and States for establishment of Veterinary infrastructure, the Representative of the Department submitted that:

"...हॉस्पिटल्स, डिस्पेंसरीज या डॉक्टर्स की सुविधाओं की रिस्पांसिबिलिटी स्टेट गवर्नमेंट की है। अगर वहाँ पर उनको हॉस्पिटल या डिस्पेंसरी को एस्टैब्लिश करने के लिए कुछ जरूरत

होती है तो उसके लिए हमारी तरफ से 60:40 की एक स्कीम चलती है। इसके तहत हम हॉस्पिटल या डिस्पेंसरी को एस्टैब्लिश करने के लिए 60 परसेंट तक पैसा दे सकते हैं।"

2.19 On being asked about the steps taken by the Department to ensure proper assessment and monitoring of funds disbursed to States and UTs for the purpose of development of Veterinary Infrastructure, the Department in its written reply submitted:

> "The Department while considering proposals for releasing funds to the States/UTs for the purpose of development of veterinary infrastructure ensures complete utilization of funds released earlier to that particular State and also assesses physical performance report corresponding to the Utilization Certificate submitted by that State. The Department also convenes Regional Review Meetings / Video Conferencing periodically with the States for reviewing the progress for utilization of funds and corresponding physical achievements made by the States."

2.20 One of the measures adopted by the Department to enhance funds for States and UTs to strengthen Veterinary Infrastructure is by requesting and pursuing with them to explore the possibility of availing more funds under other Schemes such as Rashtriya Krishi Vikas Yojana (RKVY), Rural Infrastructure Development Fund (RIDF) including dovetailing with MPLAD funds etc. so as to cater adequate Veterinary Health Services in States / UTs.

2.21 The Department has informed about supporting proposals to the tune of Rs.1636.70 crore submitted by States and UTs for release of funds under RKVY – State Level Sanctioning Committee (RKVY-SLSC) which also include construction of new and renovation of existing veterinary hospitals & dispensaries. Such States /UTs include Andhra Pradesh, Bihar, Chhattisgarh, Goa, Haryana, Himachal Pradesh, Jharkhand, Madhya Pradesh, Odisha, Telangana, Uttar Pradesh, West Bengal, Assam, Arunachal Pradesh, Manipur, Mizoram, Sikkim, Tripura, Puducherry and Jammu & Kashmir.

2.22 However, in its written reply, the Department informed about the 10 major deficient States in Veterinary Infrastructure in January, 2019, as under :

S.No.	State/UTs	Existing Veterinary Institutions	Required no.	Gap	% Deficit
1	UP	2475	10498	8023	**76.4**
2	Gujarat	736	4247	3511	**82.7**
3	Rajasthan	2728	5973	3245	**54.3**
4	Bihar	1122	4271	3149	**73.7**
5	MP	2648	5760	3112	**54.0**
6	WB	722	3806	3084	**81.0**
7	Maharashtra	1941	4612	2671	**57.9**
8	Assam	456	2405	1949	**81.0**
9	Jharkhand	459	2193	1734	**79.1**
10	Chhattisgarh	1124	2374	1250	**52.7**

VETERINARY SERVICES :

Veterinary Services at the field level:

2.23 A veterinary aid center is the first unit at grass root level. Farmers / animal owners bring their animals to the Veterinary Aid Centre for primary treatment. Under provisions of the Prevention and Control of Infectious & Contagious Diseases in Animals Act, 2009 (amended in 2011), livestock owners or any other government or private personnel functioning in the area and having knowledge about any outbreak of an infectious livestock disease has the responsibility to inform the nearest veterinary dispensary / hospital / veterinary aid centre, for further communication to the Veterinary Officer / Surgeons and the information further flows to Director of Veterinary Services / Chief Veterinarian of the State. Each block of the country has Veterinary Dispensaries manned by Veterinary doctors. Similarly, at the sub-division and district level, veterinary services are rendered by the Sub Divisional or District Hospitals.

2.24 Each district in the country has a District Animal Husbandry Officer who is responsible for providing Veterinary Services in the respective district and report to the State Animal Husbandry Department. State Animal Husbandry Director is responsible for catering to veterinary services in the State and reporting disease to the Centre.

2.25 For rendering veterinary services in the country including the Animal Disease Surveillance & Reporting, on an average, one disease reporting unit caters to approximately 10 villages.

2.26 When questioned about the ways in which the Department ensures doorstep delivery and easy access of veterinary services along with availability of veterinary ambulance services, especially in the rural areas of the country, the Department in its written reply apprised the Committee:

> "The Department implements 'Establishment and Strengthening of Existing Veterinary Hospitals and Dispensaries' (ESVHD), which is a component of the Livestock Health & Disease Control Scheme, under which there is a provision of Mobile Veterinary Clinics (MVCs). Each Mobile Veterinary Clinic (MVC) has the basic diagnostic facility and treatment of animals and provision for sample collection / transportation from the field. Purpose of MVCs is to provide doorstep delivery of veterinary services specifically for remote / border and inaccessible areas."

2.27 However, the Department denied having any specific provision currently for Mobile Veterinary Diagnostic Labs under the Livestock Health & Disease Control (LH&DC) Scheme and in its written reply informed that :

> "There is no component on Mobile Veterinary Diagnostic Labs under the Livestock Health & Disease Control (LH&DC) Scheme. However, the current format of LH&DC is now under revision to have a more focused approach towards control of livestock and poultry diseases and accordingly, Mobile Veterinary Units are being proposed for funding support under the component Establishment and Strengthening of Veterinary Hospitals and Dispensaries (ESVHD)."

2.28 Further, the Department failed to furnish any conclusive replies when asked about the role of Mobile Veterinary Clinics (MVCs) and Dispensaries in providing doorstep delivery of Veterinary Services, vaccination facilities and in generating awareness regarding livestock management issues among livestock owners in the country, particularly in the far flung districts and rural areas. The Department also failed to apprise the Committee about any concrete progress made in improving the outreach and accessibility of veterinary services through MVCs.

2.29 Moreover, on being asked by the Committee about the steps taken by the Department to ensure availability of Mobile Veterinary Clinics (MVCs) at the grassroot level and about the presence of a monitoring mechanism for such MVCs at the highest level, the Department in its written reply submitted :

> "Department, presently has no specific scheme for ensuring availability of MVCs. However, several States are setting up such MVCs through funding under RKVY or through their own resources. The Department is working on a scheme for setting up of Mobile Veterinary Units (MVUs) under Livestock Heath & Disease Control Programme. The proposed scheme is yet to be approved."

2.30 On the issue regarding viability of Mobile Veterinary Units (MVUs) and increasing accessibility of veterinary services through MVUs, the Representative further apprised the Committee :

> "...एनिमल हेल्थ की हमें देख रेख कैसे करनी है, जिससे प्रोडक्टिविटी इनक्रीज हो और पशुओं में बीमारी कम हो। उसमें उस समय मैंने आपके समक्ष यह बिन्दु भी रखा था कि हम लोग मोबाइल वेटरिनरी यूनिट्स की संख्या बढ़ाएं, क्योंकि उसकी यूटिलिटी ज्यादा होती है। वह गांव-गांव में जाकर, कैम्प लगाकर चिकित्सा का काम कर सकती है, इसके बजाय स्टेशनरी हॉस्पिटल्स और डिसपेंसरीज तक पशुओं को लाना बड़ा ही प्राब्लमेटिक होता है। उसके लिए हम लोगों ने एक कार्यक्रम शुरू करने का सुझाव रखा है, अगर उसके बारे में आपकी तरफ से भी रिकमेंडेशन हो तो हो सकता है कि अगले साल से हमें उस कार्यक्रम में हेल्प मिले। उसके लिए हम लोगों ने यह सुझाव रखा था कि प्रति एक लाख पापुलेशन पर एक मोबाइल वेटरिनरी यूनिट हो और उसके कॉल सेंटर्स हर स्टेट में बन जाएं। वहां से कॉल आए और उसकी बेसिस पर वे डायवर्ट हों। उसका पूरा प्लान हमने बनाया हुआ है, लेकिन उसके लिए फण्ड हमारे पास बहुत सीमित है। हम वेटरिनरी मोबाइल यूनिट एप्रूव भी कर दें, लेकिन एक लाख पापुलेशन पर एक मोबाइल वेटरिनरी यूनिट को स्थापित करने के लिए जितना हमारे विभाग का बजट है, उससे इस काम को करने में दस साल लग जाएंगे। अगर उसके लिए फण्ड उपलब्ध हो जाए तो उसे हम दो साल में कर सकते हैं। इसके लिए हमने जो कार्यक्रम बनाया था, वह इस तरह से था कि मोबाइल वेटरिनरी यूनिट स्थापित करने का खर्च 100 प्रतिशत भारत सरकार दे और उसकी रनिंग कॉस्ट 60-40 शेयर हो, जिसमें 40 प्रतिशत स्टेट गवर्नमेंट करे और 60 प्रतिशत हम दें। उस समय यह बिन्दु भी मैंने आपके सम्मुख रखा था। अगर इसके ऊपर स्ट्राँगली

रिकमेंडेशन दी जाए तो हो सकता है कि बजट में एनाउंसमेंट हो जाए और हमारी कुछ मदद हो जाए।..."

"...जहां तक अपग्रेडिंग दी हॉस्पिटल्स एंड डिसपेंसरीज़ के लिए मेजर्स की बात है, हम लोग अब फोकस शिफ्ट करना चाह रहे हैं। वेटनरी हॉस्पिटल और डिसपेंसरी की जगह हम, क्योंकि केंद्र सरकार के रिसोर्सेज़ लिमिटेड हैं, उससे हम क्या मैक्सिमम और इफेक्टिवली कर सकते हैं, इसके लिए हमने सोचा कि अभी तक स्टेशनरी, हॉस्पिटल और डिसपेंसरी के लिए फंड देते आए थे, उससे कोई प्रभाव नहीं पड़ा, क्योंकि फंड बहुत लिमिटेड हमारे पास हैं और उससे ग्राउंड में इम्पैक्ट दिखाई नहीं देता है। अगर हम मोबाइल वेटनरी डिसपेंसरी का कार्यक्रम शुरू करेंगे, तो उससे ग्राउंड में इम्पैक्ट भी दिखेगा, अगर हमें कुछ फंड इनीशियली मिल जाए। इसके अलावा हॉस्पिटल्स और डिसपेंसरीज़ को अपग्रेड की जो जरूरत होगी, वह भी कम हो जाएगी। अगर एक बार मोबाइल डिसपेंसरीज़ चल गए तो ये स्टेशनरी, हॉस्पिटल और डिसपेंसरी बेकार हो जाएंगी, क्योंकि इनका बहुत कम यूज होगा।..."

2.31 In its written reply, the Department informed that State Governments carry out all the activities pertaining to animal husbandry, breeding and health including arrangement of block-wise Mobile Veterinary Clinics and presently, there are 1284 Mobile Dispensaries managed by States and these Mobile Veterinary Units provide veterinary services like treatment, vaccination, de-worming, etc. for the routes fixed on the scheduled dates.

2.32 However, the Department failed to furnish specific information when asked about steps taken for regular upgradation / modernization of MVCs, Veterinary Aid Centers, Veterinary Clinics, Veterinary Hospitals and Dispensaries in the country and about State-wise and UT-wise details of the last such upgradation exercise undertaken within the veterinary infrastructure.

2.33 On being specifically asked about the steps taken by the Department, particularly in West Bengal and the North Eastern States, to ensure that easy access to veterinary services is provided to livestock owners and also to ascertain adequate availability of trained manpower in veterinary services, the Department, in its written reply furnished to the Committee in January, 2019, informed that :

"Being a State subject, veterinary services are provided by respective State/UT Government for prevention and control of animal

diseases. Each State and Union Territory Government has its own Animal Husbandry and Veterinary Services Department. Government of India supplements the efforts and activities of the State/UT Governments, including West Bengal and the North Eastern States, by providing financial assistance through the various Centrally Sponsored Schemes; and at this instance, the Centrally Sponsored Scheme "Livestock Health & Disease Control (LH&DC)" launched since August 2010.

The States are required to send proposals based on their requirement. The proposals are examined in the Department and funds are released on the basis of eligibility of the proposal as per guidelines of the Scheme. So far, Rs.1695.25 lakh & Rs.6967.705 lakh respectively, have been released to State of West Bengal and NE States under ESHVD since inception of the scheme."

2.34 However, in its data furnished to the Committee for funds released under ESVHD sub-component of the LH & DC Scheme from 2017-18 to 2019-20, the Department has shown 'zero' funds released to West Bengal during all the three years, as also mentioned in Annexure – V.

2.35 Further, on being questioned about measures taken to attract and encourage private sector investments in Veterinary Services and Animal Healthcare Sector, the Department replied that it is not funding any such investments by the private sector.

2.36 Regarding Schemes of the Department to incentivise private sector investments in Animal Healthcare and Infrastructure, the Representative of the Department submitted before the Committee :

"हेल्थ इनफ्रास्ट्रक्चर के लिए अभी कोई कार्यक्रम हम लोगों का प्राइवेट सैक्टर में इनसेंटिवाइज करने के लिए नहीं है। मोबाइल वेटनरी क्लीनिक वाला कार्यक्रम अगर अप्रूव हो जाता है और आपकी अगर इसमें रिकमेंडेशन होती है, जिसमें हमने पीपीपी मॉडल रखा है। इसमें मोबाइल डिसपेंसरी के लिए जो गाड़ी होगी, उसका 100 पर्सेंट हम लोग भारत सरकार की ओर से पेमेंट करेंगे और जो रनिंग कॉस्ट होगी, वह 60-40 रेश्यो में होगी। उसमें 108 वाला जो सिस्टम है, उसी सिस्टम को इसमें परिकल्पित किया गया है। इसमें स्टेट गवर्नमेंट अपना आउटसोर्स करेगी। प्राइवेट कंपनी आकर उसका कॉल सेंटर चलाएगी

और उसको ऑपरेट करेगी। उसके लिए जो डॉक्टर, कंपाउंडर और ड्राइवर चाहिए, वही उसे रिक्रूट करके पेमेंट करेगी। इससे एक तो यह है कि इसकी डिमांड बढ़ेगी।"

2.37 On the issue of fulfilling the current shortfall of veterinary infrastructure in the country, the Representative of the Department, during the evidence meeting, submitted before the Committee :

"सर, इसका जवाब यही है कि हॉस्पिटल या डिस्पेंसरी का जो इन्फ्रास्ट्रक्चर है या उसके मैनपावर की जो रिक्वायरमेंट है, उसको मीट करने का दायित्व स्टेट गवर्नमेंट का है। आज की तारीख में ह्युमन हेल्थ में प्राइवेट सेक्टर आ गया है और इन्वेस्टमेंट हुआ है, लेकिन पशु चिकित्सा में प्राइवेट इन्वेस्टमेंट जीरो है। शहरों में केवल कुत्ते-बिल्ली के डॉक्टर्स मिल जाते हैं, लेकिन अगर पशुधन की बात की जाए, जिसमें गाय-भैंस, भेड़-बकरी, सुअर आते हैं, जो किसानों की आमदनी में कंट्रीब्यूट करते हैं, उन सभी की देखभाल करने के लिए गवर्नमेंट इन्फ्रास्ट्रक्चर के मुकाबले प्राइवेट इन्फ्रास्ट्रक्चर शून्य मात्र है। इसमें प्राइवेट सेक्टर की इन्वेस्टमेंट करने की बहुत ज्यादा जरूरत है जो कि आज की तारीख में जीरो है। ... मैं इसमें एक और चीज एड करना चाहता हूँ। इस एरिया में कोर्पोरेटिव्स के द्वारा थोड़ी-थोड़ी शुरूआत हुई है। इस इन्फ्रास्ट्रक्चर को शुरूआत करने के लिए मिल्क यूनियन्स, मिल्क फेडरेशन या मिल्क कोर्पोरेटिव सोसाइटी द्वारा कुछ इंवेस्टमेंट हुई हैं। गुजरात में या कुछ स्टेट्स में मोबाइल डिस्पेंसरीज़ चल रही हैं जो कि मिल्क यूनियन फंड चला रहे हैं। इस तरह से कुछ-कुछ चालू हैं, लेकिन आज की तारीख में सरकार के अलावा और कहीं से इन्वेस्टमेंट नहीं आया है। आज की तारीख में सरकार के पास इतने साधन नहीं हैं कि सभी जगह मानक के मुताबिक हॉस्पिटल्स बनें, डॉक्टर्स मिलें। ये कमियां ऐनिमल हेल्थ में भी हैं और ह्युमन हेल्थ में भी हैं।

...जहाँ पर जितने हॉस्पिटल्स होने चाहिए या डॉक्टर्स होने चाहिए, उतने नहीं हैं। मुझे इसमें एग्री करने में कोई शंका नहीं है। उसमें इंवेस्टमेंट की जरूरत है। स्टेट से जितनी डिमांड आती है उसके बेसिस पर हम जितना मैक्सिमम फंड दे सकते हैं, उतना देते हैं। इसके अलावा स्टेट के कंट्रीब्यूशन की जरूरत होती है, क्योंकि गवर्नमेंट ऑफ इंडिया की 100 परसेंट की स्कीम नहीं है।"

<u>Disease Investigation & Reporting :</u>

2.38 Disease investigation is an integral part of the Veterinary Services. Accordingly, there are 256 State laboratories, 50 Veterinary College Laboratories,

33 ELISA laboratories, 5 Regional Disease Diagnostic Laboratories (RDDLs) and 1 Central Disease Diagnostic Laboratory (CDDL) in the country. The laboratories of RDDLs and CDDL are provided with dedicated facilities for screening, examination, diagnostic ability and have all essential modern equipment and trained manpower / mainly subject matter specialists. Central Government provides 100% assistance to RDDLs.

2.39 In addition, Indian Veterinary Research Institute (IVRI), Izatnagar and International Center for Foot and Mouth Diseases (IC-FMD), Mukteshwar; National Institute of Animal Health (NIAH), Baghpat; National Institute of High Security Animal Diseases (NIHSAD), Bhopal; Directorate on FMD (formerly, Project Directorate on FMD), Mukteshwar; National Institute for Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru; and National Dairy Development Board (NDDB), Anand provide additional laboratory facilities for early diagnosis of animal diseases and isolation of the causative agent. The Regional centres of All India Coordinated Research Project (AICRP) on FMD under Indian Council of Agricultural Research (ICAR) are also involved in animal disease surveillance.

2.40 Each State has a State-level Disease Diagnostic Laboratory headed by an Additional Director / Joint Director and assisted by specialists in veterinary science subjects. Each laboratory has separate facility for post-mortem of large and small animals and provision for incineration of cadaver. The technical personnel working in these laboratories carry out awareness programs and help in surveillance programmes.

2.41 On being asked about the smallest unit of Animal Disease Investigation in the country and its accessibility for livestock owners and poultry farmers in the remote parts of the country, the Department in its written reply submitted :

> "Veterinary Hospital / Dispensary / Veterinary aid centre is the smallest unit of animal disease reporting and investigation in the country. Animals are examined based on clinical signs and symptoms and necessary veterinary aid is provided. Wherever detailed disease investigation through the laboratories is required, the samples are sent to disease diagnostic laboratories available at the Block / District / State level as per the available testing facility by Veterinary Hospital / Dispensary / Veterinary aid centre. A few States also have Mobile Veterinary

Clinics/Units (MVC/Us) for providing doorstep veterinary services. The Department also provides financial support towards the recurring cost of MVUs under the Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD) component of the Livestock Health and Disease Control (LH & DC) Scheme."

2.42 On being asked by the Committee about the plans of the Department for setting up Disease Diagnostic Laboratories (DDLs) at the zonal level as presently there is only one Central Disease Diagnostic Laboratory (CDDL) to cater to the vast livestock population, the Department in its written reply informed the Committee :

"There are 5 Regional Disease Diagnostic Laboratories (RDDLs) under the Department of Animal Husbandry & Dairying located region-wise at Bangalore (Southern), Pune (Western), Jalandhar (Northern), Kolkata (Eastern) and Guwahati (North-Eastern). Besides, there is a Central Disease Diagnostic Laboratory (CDDL), located at Indian Veterinary Research Institute, Izatnagar, Bareilly with an extension to National Institute of High Security Animal Disease (NIHSAD, Bhopal).

The goal of establishing these laboratories is to provide facilities at the regional level for early confirmatory diagnosis of animal diseases as per OIE approved test procedure. These RDDLs have been of great help to the country for surveillance and diagnosis of various livestock and poultry diseases including Avian Influenza.

Further, Department also supports establishment and strengthening of District Disease Diagnosis Laboratory (DDDL) in each State for surveillance and diagnosis of diseases including the diseases of economic and zoonotic importance in shortest possible time at local level. The DDDLs will support various on-going sero-monitoring programmes of the Department along with assisting Regional Disease Diagnostic Laboratories in detection of disease focal point within their jurisdiction / area of operation."

2.43 On being asked about the progress made by the Department in developing mobile applications to connect farmers and livestock owners to veterinary technicians for enabling timely help to diseased livestock and for providing quick solutions, the Department in its written reply informed :

"The Department has made efforts to develop mobile application for facilitation of farmers and livestock owners to report the probable symptoms of the ailing animals and get tentative diagnosis of major economically important animal disease primarily focusing on Foot and Mouth Disease, haemorrhagic septicaemia and mastitis. A prototype of the above has been developed in collaboration with NIC (NICSI), and further work on validation of the prototype is under progress.

It is further submitted that National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI) has also developed mobile application namely Livestock Disease Forewarning to provide to livestock disease forewarning and immediate preventive measures to be taken up in case of positive prediction/ disease confirmation."

2.44 When asked by the Committee about the present status of implementation of the National Animal Disease Reporting System (NADRS) in the States and UTs of the country and about the ease of utility and accessibility of NADRS 2.0, the Department in its written reply submitted :

"National Animal Disease Reporting System (NADRS) is a web-based platform for reporting of animal disease from the level of block veterinary institution on a real-time basis, enabling their effective management. The State/UT's update the information relating to animal diseases under NADRS through nodes available at each block. Funds are released under NADRS for connectivity / maintenance purpose. During 2019-20, Rs.6.79 crore was released.

Considering issues on account of old infrastructure and hardware, etc., the Department developed an android-based mobile application NADRS 2.0, which is a light version and can be accessed through mobile phones under android platform. The mobile application can be used for reporting of animal diseases on real time at the farmers doorstep which then will be validated by the district and State veterinary authority for smoother and quick flow of information and confirmation of the disease outbreak. Further, additional feature to upload photograph of ailing animal or the diseased body part of animal has also been included under the mobile application. The dashboard of NADRS contains First Information Report (FIR), Daily Incidence report (DI) along with information on

vaccination and animal health camps. The details on State and District wise Block reported through Web and Mobile is available on NADRS and the viewer can view the reports by entering the dates. The report window of NADRS also provides information on all villages, species wise diseases and veterinary centres up to the block level."

2.45 The National Animal Disease Referral Expert System (NADRES) developed by ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR- NIVEDI) uses the livestock disease data so generated by the DADF & its own 31 All India Coordinated Research Project (AICRP) centres for forewarning of 13 livestock diseases two months in advance. The livestock disease data aggregated at the district level is integrated with 24 other climatic and non- climatic parameters, which are extracted /collected from various sources including remote sensed images, in the server located at ICAR-NIVEDI. Following the data integration with sophisticated statistical models the districts are classified into six different risk categories according to the diseases being monitored. Presently 13 diseases namely Anthrax, Haemorrhagic Septicaemia, Black Quarter, Enterotoxemia, Bluetongue, Foot and Mouth Disease, Classical Swine Fever, Peste des Petits ruminants, Sheep and Goat pox, Fasciolosis, Theileriosis, and Trypanosomiases are being monitored. The forewarning outputs are generally depicted both in tables and GIS maps. The so generated forewarning information is circulated to DADF, GOI and the State Animal Husbandry Department two months in advance.

2.46 Other important institutes of the Department for diseases surveillance are the National Institute of High Security Animal Diseases (NIHSAD), Bhopal and the National Institute for Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru. When asked about the mandates of these institutes, the Department , in its written reply informed that :

"National Institute of High Security Animal Diseases (NIHSAD), Bhopal is the National Reference Laboratory for diagnosis / surveillance of Avian Influenza in the country. It is also the World Organisation for Animal Health (OIE) reference laboratory on Avian Influenza. Funds are released by the Department to the laboratory for carrying out testing of samples from animals and poultry for various emerging and exotic diseases.

The mandate for the National Institute of High Security Animal Diseases (NIHSAD), Bhopal is as follows:

- Basic and strategic research on exotic, emerging and re-emerging animal diseases.
- Bio-risk management and capacity building in the areas of biosafety, biosecurity and bio-containment for handling high risk pathogens.

The major objectives of the Institute include :

- To carry out basic & applied research on exotic, emerging and re-emerging diseases of animals.
- To develop competency for diagnosis & control of exotic/emerging diseases of animals.
- To create & update repository and data-bank on exotic/emerging pathogens
- To develop skills in bio-risk management & train manpower in the areas of biosafety, biosecurity and bio-containment.

National Institute of Veterinary Epidemiology And Disease Informatics (NIVEDI), formerly known as Project Directorate of Animal Disease Monitoring and Surveillance (PD-ADMAS), has a long successful history of delivering predicted informatics and solutions for various animal diseases. The institute has been setup under the regulations of Indian Council of Agricultural Research (ICAR) aiming towards providing the country with comprehensive animal health information, prevalence of diseases in temporal and spatial relation and forecasting and forewarning of the animal diseases.

Its mandate includes :

1. Epidemiology, informatics and economics of animal diseases including zoonoses
2. Surveillance, forecasting and forewarning of management of animal diseases including zoonoses
3. Repository and capacity building."

CHAPTER – III

STATUS OF VETERINARY EDUCATION AND TRAINING IN THE COUNTRY

3.1 As per List III of the Seventh Schedule to the Constitution of India, the Department of Animal Husbandry and Dairying has been allocated, for legislation, the Subject on *'Profession of Veterinary Practice'* and *'Preservation, protection and improvement of stocks and prevention of diseases of animals and birds, veterinary training and practice'*.

3.2 The two sub-components of LH & DC Scheme that are chiefly responsible for Veterinary Education and Training in the country are:

a) Professional Efficiency Development (PED) through 100% central funding to the Veterinary Council of India (VCI) and 50% funds to State Veterinary Councils (SVCs) for functioning including running their Continued Veterinary Education (CVE) Programmes.
b) Assistance to States for Control of Animal Diseases (ASCAD) through in-service training to Veterinarians and Para-veterinarians.

VETERINARY COUNCIL OF INDIA (VCI) AND VETERINARY EDUCATION :

3.3 Veterinary Colleges and Hospitals are established by State Governments depending upon the requirement of the State. However, Veterinary Education in the country is regulated through the Indian Veterinary Council (IVC) Act, 1984, under the provisions of which the Veterinary Council of India (VCI) has been established as a statutory body. VCI is responsible for regulating veterinary practices as well as for maintaining uniform standards of veterinary education through Minimum Standard of Veterinary Education (MSVE) Regulations in all veterinary institutes across the country.

3.4 When asked about the provisions under Indian Veterinary Council Act, 1984 and the status of implementation of legislations formulated under this Act within States and UTs, the Department in its written reply submitted that:

> "The Indian Veterinary Council Act, 1984 has been enacted on 21st August,1984 to regulate veterinary practice and to provide, for that purpose, for the establishment of Veterinary Council of India and State Veterinary Councils and the maintenance of registers of persons qualified to engage in veterinary practice for the whole of India and for matters connected

therewith or ancillary thereto. The Act has been framed in pursuance of Clause 1 of Article 252 of the Constitution. It consists of 67 Sections contained in Eight Chapters."

3.5 The Eight Chapters containing 67 Sections of the IVC Act, 1984 have been detailed in **Annexure – VII.**

3.6 The Act has been extended in the first instance, to the States of Haryana, Bihar, Orissa, Himachal Pradesh and Rajasthan and to all the Union Territories and thereafter, has been extended to all States and Union Territories under the provisions of Section 1(2) of the Act, except the State of Jammu & Kashmir.

3.7 Regarding Veterinary Education Infrastructure in the country, the Department, in its post-evidence replies informed that at present, there are a total of 54 Veterinary Colleges, as included in Schedule I of IVC Act, 1984, offering B.V.Sc. & A.H. Degree under 31 Universities in the country. Out of 31 Universities, 14 are Veterinary Universities having 37 Veterinary Colleges, 16 are Agriculture Universities having 16 Veterinary Colleges, and 1 Veterinary College at Puducherry is under the Puducherry University. Besides, ICAR-Indian Veterinary Research Institute (ICAR-IVRI) at Izzatnagar, Bareilly in U.P. is a Deemed Veterinary University.

3.8 The list of Veterinary Colleges along with Universities has been enclosed at **Annexure – VIII.**

3.9 During the evidence meeting held on 11th January, 2021, the Committee enquired about the efforts made by the Department to increase the present number of Veterinary colleges or Universities in order to reduce the shortage and meet the present requirement of trained Veterinary manpower in the country. In this regard, the Representative of the Department apprised the Committee as follows :

"सर, आपने जो तीसरी बात वेटरिनरी कॉलेजेज और यूनिवर्सिटीज की कही, जिनकी संख्या बहुत कम है, उसमें आज की तारीख में केन्द्र सरकार की ऐसी कोई स्कीम नहीं चलती है, जिसमें हम वेटरिनरी कॉलेजेज को स्थापित करने के लिए यहां से पैसा दें।"

3.10 When the Committee asked about the details of total seats / vacant seats in the Veterinary Colleges / Institutes in the country along with details of latest revision of the IVC Act, the Department in its written reply submitted:

> "The Indian Veterinary Council Act was enacted in the year 1984 with no amendments till date. The number of veterinary colleges has increased from 35 (year 2000) to 54 (year 2020) with an annual increase in the number of admissions from 60 to 80 per college, thereby resulting in total increase of admissions from 2100 in 2000 to 4320 in the current year. Seats are allotted by VCI under 15% All India quota. However, the balance 85% seats are allotted by these veterinary colleges under their respective 'State/UT Quota'. For the academic session of 2020-21, there were 104 vacant seats including 25 seats under PH category (15% All India quota) in these Veterinary Colleges, as per latest information.
>
> Further, to enhance veterinary manpower, the Central Government has framed Veterinary Council of India (Procedure for recognition and derecognition of Veterinary Colleges and Veterinary Qualifications) (Amendment) Rules, 2019 to make provisions / standards for annual intake up to 160 in every recognised college."

3.11 The VCI conducts periodical inspection of the Veterinary Colleges as per provisions of Section 19 and 20 of the Indian Veterinary Council Act, 1984 in order to ensure the standards laid down in MSVE Regulations are followed at the College. The deficiencies pointed out in the inspection report are conveyed to the college concerned and the University as well as the State Government. Further, Government has framed the VCI (Procedure for recognition and de-recognition of Veterinary Colleges and Veterinary Qualifications) Rules, 2017 which provides the procedure to be followed by prospective colleges towards their recognition as well as recognition of the Veterinary Qualifications under the IVC Act 1984.

3.12 However, when asked about the efforts of VCI towards establishing any Model Veterinary Colleges that follow International Standards on Veterinary Education in the country, the Department in its written reply submitted that :

> "Veterinary Council of India, with the previous approval of the Central Government, and as per provision of Section 22 read with section 21 of the Indian Veterinary Council Act, 1984 has framed Minimum

Standards of Veterinary Education Regulations for the purpose of regulation of veterinary education at B.V.Sc. & A.H. Course. These regulations are periodically revised (last revised in 2016) in view of the advancement of knowledge and skills in the field of veterinary science and animal husbandry so that the standards are not compromised at the international level."

3.13 Further, on being questioned about any Autonomous Veterinary College or Academic Organization for Veterinary Studies under the direct control of the Department of Animal Husbandry and Dairying and about the funding of such an organization, the Department in its written reply submitted before the Committee that :

"There is no Autonomous Veterinary College or Academic Organization for Veterinary Studies directly under the control of the Department of Animal Husbandry and Dairying at present as Colleges come under the purview of the State and therefore are necessarily established by States /UTs."

3.14 On being asked by the Committee about steps taken by the Department to address the issue of inadequate autonomy in Veterinary Council of India (VCI) and State Veterinary Councils (SVCs), the Department in its written reply submitted :

"Veterinary Council of India has been established under Indian Veterinary Council Act, 1984 to regulate veterinary practice in the country. However, veterinary practice is actually regulated through States, as Animal Husbandry is a State subject. The Department provides funds for the mandated activities of the Council including its Secretariat whereas State Veterinary Councils are provided funds under Professional Efficiency Development (PED) component of LH & DC Scheme.

VCI is autonomous vis-à-vis its mandated activities. However, to increase its autonomy, the Department has already taken steps like conducting elections of the Council so as to rejuvenate it from its immediate past. The Council was hitherto unable to carry out its functions regarding inspection of potential Veterinary Colleges for recognition and de-recognition of Veterinary Colleges due to absence of its President and Vice President. Further, steps like having greater involvement of VCI and SVCs in matters regarding capacity building, manpower deployment, upgradation of veterinary hospitals / dispensaries, disease diagnostic laboratories and

veterinary services for their effective delivery are necessary. This is important not only for service institutions but also for veterinary educational institutions. States require harmonization with regard to veterinary education especially for para-veterinarians. Sources of funds including from Membership fees of registered veterinarians, transfer fees from one State to another, conducting entrance examination for admission to recognized veterinary colleges, etc. need emphasis. Further, VCI and SVCs need to look for raising funds by way of conducting seminars, workshops, training programmes including letting out their infrastructure for such activities. The Department plans to address these issues in a time bound manner."

3.15 On being asked about the process of intake of students for the Professional Course on Veterinary Sciences (B.V.Sc.) and the frequency of revision of course curriculum related to the Degree Course by VCI, the Department, in its written reply submitted that:

"Criteria for admission and selection of students are done as per Minimum Standards of Veterinary Education Regulations (MSVE, 2016). Out of the total admissions in each recognized veterinary college included in the First Schedule of the Act, 15% of the total number of seats is filled on an All-India basis through Common Entrance. Rest of the 85% seats in each veterinary college is filled up by the respective University/State Government as per these Regulations.

The course curriculum is revised by way of amendment to the MSVE Regulations. The Executive Committee or any other Committee constituted under section 12 of the IVC Act, 1984 from time to time report to the Council on the efficacy of the regulations and recommend to the Council such amendments thereof as it may think fit. The VCI consults State VCs as well as the State Governments and thereafter send the recommendations to the Department, which in turn consults Indian Council of Agricultural Research before approval of such regulations or amendments thereto. As gathered from VCI, there has been amendments to MSVE regulations thrice till date – in 1993, 2008 and in 2016."

3.16 On being questioned whether the Course Curriculum of B.V.Sc. includes internship facility for Graduates, the Department in its written furnished details as follows :

"Yes. The course curriculum under the MSVE Regulations 2016 includes a compulsory internship of "one year" duration undertaken after successful completion of all credits as prescribed in the syllabus. The Internship programme is conducted as per regulation Part IV 12 of MSVE Regulations 2016. Under these regulations internship is conducted at the following veterinary services:

(i) posting in Veterinary Clinical Complex for Clinical training covering veterinary medicine, surgery and radiology, gynaecology and obstetrics, clinical emergencies, indoor ward care, lab diagnosis, ambulatory, hospital management, record keeping etc;

(ii) posting at Veterinary Clinical Complex of veterinary college of other state in India with provision of rent free accommodation;

(iii) posting in any four of Zoo or wild life center or National Parks, Meat Plant or Abattoirs, Milk Plants, Poultry Farms, Field Hospital, Animal Welfare Organization, Vaccine Institute, Remount Veterinary Corps, Pharmaceutical, Feed Industry for hands on training in each establishment;

(iv) entrepreneurial training and management covering farm routines of cattle and buffalo farms, pig or rabbit farms, sheep and goat farms, and equine or camel units etc., poultry production and management covering layer and broiler production, hatchery and chick management and learning farm practices like record keeping and other related activities."

ETHNO-VETERINARY MEDICINE (EVM) & RELATED COURSE CURRICULUM :

3.17 When asked by the Committee about the measures adopted by the Department to ascertain strengthening and documentation of traditional and time tested medicinal practices followed in rural areas for combating various animal disease, the Department in tis written reply submitted that :

"The Department has already initiated in consultation with the ICAR for development of Ayurvedic Course curriculum; the process is still underway. The MSVE Regulations, 2016 also contains syllabus for ethno-veterinary medicine. ICAR has a Scheme titled 'Outreach Programme on Ethno-Veterinary Medicine' wherein ICAR-IVRI is coordinating with 12 collaborating centres across the country."

3.18 On being asked to provide details regarding ethno-veterinary medicine and about measures being adopted by the Department and NDDB for popularizing this practice, the Department in its written reply submitted :

> "The application of indigenous knowledge to manage ailments in animals is called Ethno-veterinary medicine (EVM). It provides an extremely cost-effective, simple and efficacious management option to farmers to manage many common ailments in their animals that seriously dent their income. This would also help rationalize the use of drugs, especially antibiotics, and thereby stall the emergence of antimicrobial resistance (AMR). Most ethno-veterinary preparations can be prepared from ingredients readily available in the farmer's home thereby making it a simple and sustainable option to the farmer especially as a first line of disease management.
>
> NDDB has been propagating the concept of EVM in all its project areas through preparation of booklets and posters in local vernaculars, namely, Hindi, Malayalam, Tamil, Kannada, Telugu, Marathi, Gujarati, Punjabi, Bengali, Odia, Assamese and, English for management of common ailments in bovines along with QR codes for each ailment, scanning of which will play the respective EVM video on its preparation and application on YouTube. NDDB is also organizing seminars, workshops and training on EVM for propagating its implementation in the country for management of animal diseases. Posters of the same are also displayed in DCSs for wide publicity."

3.19 In its written reply, the Department further informed the Committee:

> "Ayurveda Veterinary Medicine (AVM) for management of over 20 common ailments other than mastitis that cause economic losses to the farmer are being propagated by NDDB with the collaboration of Trans-disciplinary University, Bengaluru, to reduce usage of drugs, especially antibiotics. Extensive use of AVM will go a long way in stalling the emergence of antimicrobial resistance, which is a major emerging public health issue. Brochures for preparation and application of AVM for most of these ailments including mastitis have been published in 12 vernacular languages and are accessible from the following link at the NDDB website

https://www.dairyknowledge.in/section/manuals. Videos of the same are also being prepared in 12 vernacular languages for each ailment. A sample video on AVM for Mastitis (in Hindi) is available on the following YouTube link: https://www.youtube.com/watch?v=ZelaMZazR7. Over 2.26 lakh cases of these common ailments (other than mastitis) have been recorded through an on-line system with a success rate of around 83%.

Some of the Milk Unions promoting AVM have reported monthly savings on medicine costs of more than Rs. 8.5 lakh. Similarly, the number of monthly visits of veterinary doctors to the farmers was also reduced by over 6300 i.e. more than 60%."

3.20 When asked if Ethno-veterinary Medicine (EVM) is a part of the course curriculum and veterinary practices, the Department in its written reply submitted :

"Yes, ethno-veterinary medicine is a part of the course curriculum and veterinary practices in the country. According to Minimum Standards of Veterinary Education (MSVE), 2016, ethno-veterinary medicine is included in the course curriculum at -

a) Veterinary Medicine – Unit 3- Metabolic and Deficiency Disorders- Alternative or integrated or ethno-veterinary medicine in animal disease management
b) Veterinary Pharmacology- Unit 5- Veterinary Chemotherapy- Pharmacology of indigenous medicinal plants: Scientific name, common names, active principles, pharmacological actions and therapeutic uses of ginger, ocimum, neem, piper longum, withania, leptadenis, tinospora, embilica, eucalyptus a, glycerrhiza, trichospermum, curcuma, adhantoda, butea, aloes, sena, rheubarb, catechu, etc."

3.21 In its written reply, the Department also informed the Committee about its efforts to develop regulatory framework and guidelines on Ethno-Veterinary Medicine (EVM) so that the benefits of EVM may be extended to the farmers at large. It stated that a Committee comprising of officers from Department of Animal Husbandry & Dairying, Ministry of AYUSH and National Dairy Development Board has been constituted to develop a roadmap for formalization of use of AYUSH Medicines in the Veterinary Sector.

3.22 Further, during the evidence meeting of the Committee with the Representatives of the Department, held on 11th January, 2021, the Representative informed the Committee:

> "आयुर्वेदिक ट्रीटमेंट और फैसिलिटीज़ के लिए जो आपने कहा, वह बहुत ही उपयुक्त है। उसके लिए हम लोगों ने आयुष डिपार्टमेंट के साथ एक डिटेल्ड इंट्रैक्शन किया और एक टास्क फोर्स इसके लिए बनाया है। प्रधान मंत्री जी के द्वारा ई-गोपाला ऐप लांच किया गया। एक कंपोनेंट उसमें यह भी है कि इथेनो वेटनरी मेडिसिन जो बोलते हैं, आयुर्वेदिक ट्रीटमेंट के लिए जो मेडिसिंस हैं, घरेलू दवाइयां क्या बन सकती हैं और उनके द्वारा पशुओं को किस तरह से ट्रीट किया जा सकता है, किस तरह से उनकी बीमारी दूर की जा सकती है कि अगर उनको कुछ बीमारी है, तो कैसे उसे ठीक किया जाए, उसकी इनफोर्मेशन भी हम ई-गोपाला ऐप के द्वारा दे रहे हैं। इसके अलावा एनडीडीबी भी इस एरिया में आयुष के साथ मिलकर कई सारे काम कर रही है, जिससे कि इथेनो वेटनरी मेडिसिंस और इसके उपयोग के बारे में किसानों को जागरुक कर सकें, जिससे कि वे ज्यादा से ज्यादा इस तरह की मेडिसिंस का उपयोग करें, न कि कीटनाशक दवाइयां या एंटीबायोटिक्स का प्रयोग करें।"

VETERINARY MANPOWER :

3.23 The Minimum Standard of Veterinary Education (MSVE) Regulations 2016, regarding Degree Course on Bachelor of Veterinary Sciences & Animal Husbandry (B.V.Sc. & A.H.), provide minimum standard requirements for a veterinary college for 80 admissions annually including trained manpower. The Regulations provide that each Veterinary College shall have Seventeen Departments under the Administrative control of the Dean or Principal or Associate Dean. MSVE Regulations, 2016, also state that every veterinary college awarding a recognized B.V.Sc. & A.H. qualification should have 76+1 faculty (17 Professors, 16 Associate Professors, 41 Assistant Professors and 02 Farm Managers).

3.24 The details of Department-wise minimum requirement of trained manpower in a Veterinary College, are enclosed at **Annexure – IX.**

3.25 In its written reply to the Committee, the Department informed that State Governments are responsible for providing basic infrastructure and necessary qualified manpower for veterinary health care in respective States and they are therefore, continuously advised to strengthen their veterinary infrastructure so as to bridge the gap between demand and availability of veterinary professionals as

well as veterinary infrastructure in the country. Since the recruitment of qualified manpower, at each level, is a State subject, Veterinary professionals are recruited through State Public Service Commission and other manpower recruitment is done through other modes as per the job level and State rules.

3.26 Regarding its efforts to increase the availability of Veterinarians in the country and to meet the shortage of personnel staff in Veterinary Services, the Department informed that with increase in number of Veterinary Colleges from 36 in 2014 to 54 in 2020 (49 in the Public Sector and 05 in Private Sector), the number of Veterinary Graduates in the country has increased.

3.27 Elaborating on the actions taken by the Government of India for ensuring availability of trained veterinary manpower in the country during the last six years, the Department submitted to the Committee in writing that :

> "Number of recognized colleges increased to 54 from 36 from September 2014, till date and the total number of annual Veterinary graduates increased to 3823 from 2311 in recognized Veterinary Colleges, which is an increase of around 65 %. Therefore, the availability of veterinary professionals from recognized veterinary colleges has increased owing to increase in the number of such veterinary colleges."

3.28 However, as on date, the actual number of field Veterinarians in the country stands at 28,328 as against a sanctioned strength of 36,623. Similarly, the actual strength of in-service Para-veterinarians in the country, as on date, is 54,928 against a sanctioned strength of 78,013. State and UT-wise data regarding sanctioned and actual strength of field Veterinarians and Para-veterinarians is given at **Annexure – X.**

3.29 Highlighting issues related to Veterinary services and shortage of trained and qualified Veterinary manpower in the country, the Representative of the Department, during the evidence, briefed the Committee as follows :

> "...सर, दूसरा पॉइंट वेटेनरी डॉक्टर्स की जरूरत है। यह बहुत ही रेलेवेंट प्वायंट है। अगर डॉक्टर्स नहीं होंगे तो फिर अस्पताल या डिस्पेंसरी बनाकर क्या करेंगे? इसलिए वेटेनरी डॉक्टर्स की संख्या को कैसे बढ़ाना है, उसके लिए भी एक मोटिवेशन की जरूरत है क्योंकि आज की तारीख में, जैसा कि आप जानते होंगे, अगर कोई यहां वेटेनरी डॉक्टर हैं तो उन्हें

शायद यह सुन कर बुरा लगे, लेकिन यह वास्तविकता है कि जो ह्यूमन मेडिकल डॉक्टर नहीं बन पाता, वही वेटेनरी डॉक्टर बनता है। उसके मन में हमेशा यह रहता है कि मैं आदमी का डॉक्टर नहीं बन पाया, इसलिए मैं यहां आकर 'घोड़ा डॉक्टर' बन गया। लेकिन, 'घोड़ा डॉक्टर' भी महत्वपूर्ण है। पशुओं के चिकित्सक भी महत्वपूर्ण हैं। उसमें उन्हें कैसे गर्व महसूस हो, कैसे उनकी इन्कम बढ़ाई जाए? गर्व होने से ज्यादा बड़ी बात है कि उसे प्रॉफिटेबल कैसे बनाया जाए, उसके लिए जब तक प्राइवेट सेक्टर को मोटिवेट नहीं किया जाएगा और प्राइवेट सेक्टर इंवेस्टमेंट नहीं करेगा, तब तक उनकी इनकम भी नहीं बढ़ सकती क्योंकि जो सरकारी तनख्वाह मिलती है, उसके अलावा आज की तारीख में वेटेनरी डॉक्टर्स की इम्प्लॉयमेंट कहीं नहीं है। वे केवल शहरों में आकर कुत्ते, बिल्लियों को ट्रीट करने के लिए अपनी क्लीनिक खोल सकते हैं, नहीं तो अगर कोई प्राइवेट डॉक्टर गांव में अपनी प्रैक्टिस चलाना चाहता है तो उसकी प्रॉफिटैब्लिटी बहुत कम है। इसलिए जनसाधारण में एक जागरूकता लाने की बात है कि कैसे उन्हें सुझाव दिए जाएं। आप लोगों के जो आज सुझाव आए हैं, उन्हें भी हम लोग लेंगे।"

3.30 State-wise and UT-wise details of Veterinarians, Veterinary Institutions and No. of Cattle heads per unit Veterinarian and per unit Veterinary Institute in the country are available at **Annexure – XI.**

3.31 When asked by the Committee about the efforts made by the Department for enabling private sector investment in Veterinary Education and also to be able to meet shortage of manpower, the Department in its written reply submitted :

"Central Government recognizes public and private veterinary colleges in the States on the recommendations of Veterinary Council of India (VCI) as per VCI (Procedure for recognition and de-recognition of Veterinary Colleges and Veterinary Qualifications) Rules, 2017 and Minimum Standards of Veterinary Education (MSVE) Regulations, 2016. The Central Government has recognized 54 Veterinary Colleges including 5 Private Veterinary Colleges in the country."

3.32 Stressing on the need for a Public Private Partnership (PPP) in the area of Veterinary Services, the Representative of the Department, during the evidence meeting submitted before the Committee that :

"**आज की तारीख में आप वेटनरी कॉलेज बना दीजिए, लेकिन वेटनरी डॉक्टर्स की डिमांड ही नहीं है केंद्र या स्टेट गवर्नमेंट के इंप्लायमेंट के अलावा, तो इसलिए डॉक्टर**

बनने के लिए कोई आना भी नहीं चाहता। वह सीट आप बनाकर भी रख लो, लेकिन बच्चे वहां एडमीशन ही नहीं लेते हैं। वहां सीटें खाली चली जाती हैं। प्राइवेट सैक्टर में पीपीपी मॉडल के द्वारा जब डिमांड बढ़ेगी, तो उससे भी लोग उत्साहित होंगे और वेटनरी डॉक्टर भी बनना चाहेंगे, जिससे कि इस तरह के कार्यक्रम में सम्मिलित हो पाएं।"

TRAINING OF VETERINARIANS & PARA-VETERINARIANS :

3.33 The Scheme of the Department on Livestock Health and Disease Control (LH & DC), through its sub-component on Professional Efficiency Development (PED), is responsible for providing 100% funds for functioning of Veterinary Council of India (VCI) and 50% funding to State Veterinary Councils (SVCs) for their operations including running their Continuing Veterinary Education (CVE) programmes; while the sub-component on Assistance to States for Control of Animal Diseases (ASCAD) provides for in-service training to Veterinarians and Para-veterinarians.

Professional Efficiency Development (PED) –

3.34 Professional Efficiency Development (PED) envisages improvement in efficiency of veterinary professionals. Veterinary Council of India (VCI) and the State Veterinary Councils are mandated to impart training to veterinarians on the latest technical knowledge by way of Continuing Veterinary Education (CVE). The Department provides funds to States in this regard. The funding pattern is 50:50 between Centre and State respectively and 100% funding to the UTs and Veterinary Council of India (VCI).

3.35 Details of BE and RE of the LH&DC Scheme along with Actual Expenditure incurred from 2017-18 to 2020-21 under the PED sub-component of LH & DC Scheme of the Department is as follows :

(Rs. in crore)

Year	BE	RE	Expenditure / Financial Progress under PED
2017-18	298.77	298.77	1.01
2018-19	508.77	391.43	3.60
2019-20	474.98	346.00	6.12
2020-21	438.00	250.00	0

3.36 The latest figures regarding Physical Targets achieved in terms of CVE trainings under the PED sub-component from 2017-18 to 2020-21 are as under:

Year	No. of batches of CVE conducted @ 20 Veterinarians per batch
2017-18	12
2018-19	75
2019-20	105
2020-21	0

3.37 State and UT-wise details of Physical achievements, in terms of no. of CVE Trainings conducted, under the PED sub-component of the LH&DC Scheme from 2017-18 to 2020-21 are given at **Annexure – XII.**

3.38 When asked about the steps being taken by the Department for providing training to practicing veterinary professionals across the country for Mid Term Career Enhancement to upgrade their knowledge and skill based on latest research and new techniques, the Department in its written reply submitted that :

> "Under Assistance to States for Control of Animal Diseases (ASCAD) component, assistance is provided to State/Union Territory Governments for training of Veterinarians and para-veterinarians. 100% assistance is provided for conducting training. Professional Efficiency Development (PED) envisages improvement in the efficiency of Veterinary professionals. Veterinary Council of India and States are mandated to impart training to veterinarians on the latest technical knowledge by way of Continuing Veterinary Education (CVE)."

3.39 However, when asked about details regarding provisions or guidelines of VCI specific to Veterinary Research and Continued Veterinary Education (CVE) in the country, the Department informed that there are no such provisions or guidelines specific to Veterinary Research and CVE programme framed so far by the Council. Under the sub-component on PED (Professional Efficiency Development) of LH & DC Scheme, the Department funds State Veterinary Councils for conducting CVE in the States.

3.40 Further, on being questioned about details of CVE conducted by the Department, in its written reply, the Department informed that:

"VCI had conducted CVE through identified training centres, the following programmes for field veterinarians during 2007-08 and 2008-09 on the Department's direction -

(i) Diagnosis of Brucellosis
(ii) Diagnosis of Rabies
(iii) Diagnosis of Glanders
(iv) Diagnosis and Control of Bird flu
(v) Handling of Frozen Semen
(vi) Reproductive Health Management in Bovines

Due to manpower constraints, the Council did not carry on with CVE thereafter. However, State Veterinary Councils undertake CVE programmes funded by the Department through the PED component of the LH & DC scheme."

3.41 Regarding core areas for Continued Veterinary Education (CVE) training among in-service Veterinarians and Para-veterinarians , the Department in its written submitted before the Committee that :

"VCI does not regulate Para-veterinarians, however, support is provided by the Department under the ASCAD sub-component of the LH&DC Scheme to State / UT Governments engaged in training of Para-veterinarians. VCI had conducted few programmes for field veterinarians, primarily in the area of disease diagnosis, control and treatment. Further, the State Veterinary Councils (SVCs) conduct training programmes for field veterinarians. However, no CVE programme is conducted for Para-veterinarians by Veterinary Council of India. VCI has not identified any core areas for CVE programme as it has not conducted any CVE programme during the last three years."

3.42 In its written reply, the Department submitted data regarding total no. veterinarians and para-veterinarians trained through In-service Training Programmes undertaken by States and UTs under the ASCAD component of LH&DC from 2014-15 up to 2017-18, as follows :

S.No.	Year	Vets. Trained	Para-vets Trained	Total trained
1.	2014-15	2724	1507	**4231**
2.	2015-16	2876	6230	**9106**

3.	2016-17	2118	2104	**4222**
4.	2017-18	1592	1365	**2957**

3.43 When asked about measures envisaged by the Department to encourage States and UTs to take up Training Programmes for veterinarians and para-vets more religiously, as was planned under the ASCAD component of LH&DC, the Department in its written reply informed the Committee that :

> "Under the ASCAD sub-component of LH&DC, assistance is provided to State/Union Territory Governments for training of Veterinarians and Para-veterinarians. 100% assistance is provided for conducting training. Funds under ASCAD are released based on the action plan of the state and utilization of funds under the component of ASCAD. The release of funds is against submission of physical achievements including training programme, which is monitored by the Department. The State / UT Governments ought to utilize the released funds completely as per the action plan submitted by them. Fresh release of funds is also based on the proposed deliverables by the State / UT under its action plan."

3.44 In response to a query by the Committee, in its written reply the Department also informed about the assistance provided to State / UT Governments for providing In-service Training to Veterinarians and Para-veterinarians regarding Veterinary Care and Skills including upkeep and management of high altitude animals, livestock etc. and submitted before the Committee :

> "In order to tackle the issue of livestock health effectively, the Department is supplementing the activities of the State Governments / Union Territories by way of providing assistance through 'Livestock Health & Disease Control Scheme (LH&DC)'.The funding pattern is 60:40 between Centre and State (90:10 for the North Eastern states and 02 Himalayan states and 100% for 2 UTs of Jammu & Kashmir and Ladakh).
>
> In addition, ICAR-IVRI through its regional stations and campuses has implemented the Central Schemes for North Eastern & Himalayan (NE&H) Region through its Eastern Regional Station, Kolkata. TSP programme has been implemented in Himachal Pradesh and Uttarakhand during the last 3 years, which was an attempt to raise the socio-economic standard of the poor and marginal farmers through different livestock

enterprises. Animal samples received from high altitude states and UT are routinely tested for equine diseases at ICAR-NRCE, Hisar. Veterinarians from Himachal and J&K have been trained for testing of Glanders and also provided testing kits to establish the diagnostic facilities in these states."

3.45 In the context of rampant annual occurrences of Avian Influenza in the country, when specifically asked about provisions or guidelines laid down by VCI for training and education in the field of poultry farming and poultry health and vaccination, the Department denied having any separate guidelines to that effect.

3.46 Further, on being questioned about the steps taken by the Department to provide training and extension services to livestock owners and apprise them of the technologies developed in the field, the Department denied providing any such direct training to livestock owners, however, informed about financial assistance being provided under ASCAD to the States / UTs for training of in-service veterinarians and para-veterinarians and also about financial assistance to the Regional Disease Diagnostic Laboratories (RDDLs) to impart training to Veterinarians and Para-Veterinarians for extension of veterinary services / technologies at the field level.

VETERINARY RESEARCH :

3.47 When asked about the mandates of the Indian Veterinary Research Institute of the country, the Department in its written reply informed that :

"The mandate of Indian Veterinary Research Institute (IVRI) is as follows:

1. To conduct research, provide postgraduate education and transfer of the technology in all areas of animal sciences with emphasis on animal health and production.
2. To act as national referral centre for veterinary type cultures, disease diagnosis, biologicals, immunodiagnostics, etc."

3.48 The Department informed that under the component of Professional Efficiency Development (PED) of the LH&DC Scheme, funds are provided to Veterinary Council of India (VCI) and the State / UT Veterinary Councils (SVCs) for their establishment, cost of administration and for Continuous Veterinary Education (CVE) for VCI, SVCs and also for State Veterinary/Agriculture Universities.

3.49 However, when questioned about funding for Veterinary Academic and Research Institutions for infrastructural support and capacity building under the LH&DC sub-component of Professional Efficiency Development (PED), the Department informed that during the last three years, no funds have been released to any State Veterinary / Agriculture Universities and the PED sub-component has no provision for infrastructural support and capacity building for Research Institutions.

3.50 Further, on being questioned about whether the VCI has identified areas for collaboration and capacity building for organizations to improve Veterinary Services delivery, the Department denied having taken any action to that effect and instead stated that it is envisaged that the Council would formalize Continued Veterinary Education (CVE) in future and that efforts are also being made to include the concepts of AYUSH for which necessary collaboration is underway.

3.51 When asked about the steps taken by the Department to raise standards of Veterinary practitioners, para-vets, academicians and Veterinary Colleges in keeping with international standards, the Department in its written reply informed that :

> "At present, veterinary education as well as recognized veterinary colleges are required to strictly adhere to Minimum Standards of Veterinary Education – Degree course (BVSc & AH) Regulations 2016. These regulations provide for minimum standards of infrastructure requirements in terms of land, building, laboratory equipment, class room facility, space required in each department, manpower facility in terms of teaching and non-teaching manpower, admission criteria, course curriculum, teaching veterinary clinical complex, livestock farm complex, examination and their evaluation for admission to BVSc & AH course.
>
> The Department disseminates among States/UTs the guidelines towards day-one competencies, PVS Evaluation report brought out by OIE among states/UTs. Further, the Department provides financial support to State Veterinary Councils to carry out Continual Veterinary Education (CVE) for in-service veterinarians. These trainings / seminars dwell upon recent and contemporary topics relating to the field of veterinary services drawing from global practices. The State/UT Governments are responsible

for training and re-training para-veterinarians while the Department provides financial support for such programmes.

The Department, in collaboration with European Union (EU) organized training of trainers on FMD vaccination under the "Better Training for Safer Food" initiative. Further, trainings / workshops /Table top exercises on "One Health and Zoonosis" were organized in collaboration with US Centres for Disease Control (CDC), National Centre for Disease Control (NCDC under MoH & FW) and US Biological Threat Reduction Programme (BTRP) for State level veterinary and human health officials. In collaboration with NCDC and Global Alliance for Rabies Control (GARC), workshop on Stepwise Approach for Rabies Elimination (SARE) in India was held. The Department organized a workshop on Disease Regionalization to provide an increased understanding and use of regionalization as a disease control and surveillance strategy. The Department also pursued with State veterinarians who participated in online training programmes / workshops on exotic disease that affected the country like African Swine Fever (ASF) and Lumpy Skin Disease (LSD)."

3.52 The Department, in its Background Note furnished to the Committee, informed that Veterinary Science Research in the country is carried out mostly by ICAR Institutes and the Veterinary Colleges affiliated to Veterinary Universities or Agricultural Universities. The Indian Veterinary Research Institute (IVRI), Izatnagar (UP) is a premier institution of the country; carrying out research in Veterinary Science for more than a century and is also engaged in development of Vaccines for livestock and poultry. Chaudhary Charan Singh National Institute of Animal Health (NIAH), Baghpat (UP), under the Department of Animal Husbandry and Dairying (DAHD) at the Centre, is responsible for carrying out quality control testing of Veterinary Biologicals. The Directorate on Foot and Mouth Diseases (FMD) under ICAR is specifically involved in surveillance, epidemiology and diagnosis of FMD in the country. In addition, both Public and Private Institutes also carry out research in the field of Veterinary Biologicals and Diagnostics.

CHAPTER – IV

MANUFACTURE AND AVAILABILITY OF ANIMAL VACCINE IN THE COUNTRY

4.1 With improvement in the quality of livestock through cross-breeding programmes, the susceptibility of these livestock to various diseases including exotic diseases has increased. Major livestock and poultry diseases are controlled by way of prophylactic vaccination with the required quantity of vaccines being produced in the country.

COMPONENTS OF LH&DC SCHEME FOCUSING ON VETERINARY VACCINE :

4.2 The components of the LH&DC Scheme focusing on Veterinary vaccine are–

(a) Assistance to States for Control of Animal Diseases (ASCAD) which provides assistance to States / UTs for control of economically important diseases of livestock and poultry by way of immunization and strengthening of existing State Veterinary Biological Production Units.

(b) Peste des Petits Ruminants Control Programme (PPR – CP) which involves vaccinating all susceptible goats & sheep and three subsequent generations.

(c) Classical Swine Fever Control Programme (CSF – CP) which focuses on vaccination of the pig population of the North Eastern States of the country.

(d) Foot and Mouth Disease Control Programme (FMD-CP) and Brucellosis Control Programme (B-CP) were also two sub-components under the LH&DC until 2019.

4.3 Additionally, a new Central Sector Scheme 'National Animal Disease Control Programme for Foot & Mouth Disease (FMD) and Brucellosis (NADCP)' has been launched on 11th September, 2019. The Scheme has been approved for a total outlay of Rs.13,343.00 crore for five years from 2019 to 2024 (Rs.12,652 crore for control of FMD and Rs.691 crore for control of Brucellosis for five years 2019-20 to 2023-24). It envisages complete control of FMD (100% vaccination coverage of cattle, buffaloes, sheep, goats and pigs at six months' interval) by 2025 with vaccination and its eventual eradication by 2030 and control of Brucellosis (once-in-a-lifetime 100% vaccination of female cattle and buffalo calves {4-8 months of age}). Under the Scheme, all animals are also being identified with 12-digit unique ID number using ear tags.

Financial allocation and Physical achievements of related sub-components under LH&DC:

4.4 As per data submitted by the Department in its written reply, the total amount of funds released to States under the related sub-components of LH&DC Scheme from 2015-16 up to 2020-21, is as follows :

(Rs. in crore)

S.No.	Year	FMD-CP	ASCAD	PPR-CP	B-CP	CSF-CP
1.	2015-16	149.77	49.72	11.79	3.11	1.58
2.	2016-17	174.91	43.87	6.81	2.58	0.92
3.	2017-18	262.94	21.03	0.41	0.93	1.50
4.	2018-19	308.79	22.23	34.46	0.69	0.76
5.	2019-20	223.04	93.61	8.88	0.30	2.22
6.	2020-21	Under NADCP	35.84	12.35	Under NADCP	0.00
	Total	**1119.45***	**230.46**	**74.7**	**7.61***	**6.98**

*before NADCP

4.5 Year-wise details of Physical Achievements, in terms of vaccination doses, under the following sub-components of the LH & DC Scheme, are as mentioned below :

(Vaccination doses in Million)

S.No.	Year	FMD-CP	ASCAD	PPR-CP	B-CP	CSF-CP
1.	2015-16	196.79	353.13	66.68	1.05	0.45
2.	2016-17	284.00	265.39	33.33	1.26	1.18
3.	2017-18	380.99	511.67	23.61	1.32	1.25
4.	2018-19	382.75	140.64	46.47	0.17	0.25
5.	2019-20	182.50	71.29	38.90	0.02	0.30
6.	2020-21	Under NADCP	221.00	91.70	Under NADCP	0.00
	Total	**1,427.03***	**1,563.12**	**300.69**	**3.82***	**3.43**

*before NADCP

4.6 The State and UT-wise details of vaccinations conducted from 2018-19 up to 2020-21 are given at **Annexure – XIII.**

4.7 Vaccination of animals against various animal diseases is carried out by the State / UT Governments. The Department supplements their efforts towards vaccine and vaccination cost by proving funds under the LH & DC scheme. Accordingly, the summary of the eligible target animals and the vaccination carried out during 2019-20, is as under:

Name of component	2019-20	
	Target	Achievement*
FMD – CP (Vaccination doses in millions)	456	182.5
ASCAD (Vaccination doses in millions)	150	71.2
PPR-CP (Vaccination doses in millions)	50	38.9
CSF-CP (Vaccination of pigs in NE States in million doses)	No specific target	0.3

* The achievement depends on the availability of budget, release of State share by the states, logistics,vaccine availability in the state and utilization of released fund by the State. FMD-CP was carved out from LH & DC scheme and was made into NADCP, a Central Sector scheme in 2019-20.

Classical Swine Fever Control Programme (CSF – CP) –

4.8 On being asked about States that have been worst hit by the CSF in the recent past, the Department in its written reply informed the Committee :

"States of Assam, Meghalaya, Mizoram, Arunachal Pradesh, Manipur, Tripura and Nagaland are the worst hit by CSF. In order to control CSF, the Department is implementing the CSF-control programme, a component under Livestock Health & Disease Control (LH & DC). The scheme has a funding Pattern of 90:10 Centre:State, focussing on the North Eastern Region (NER) States. The States accordingly submit their respective annual action plan for implementation of CSF-Control Programme to undertake CSF vaccination in pig population so that the outbreak of CSF may be controlled in pigs."

4.9 When asked by the Committee about the current status of the Cell Culture Vaccine developed by IVRI, Izatnagar for prevention of the deadly Classical Swine Fever (CSF) in pigs and if the Department has distributed the vaccine to States and UTs for use, the Department in its writtend reply informed the Committee :

"The lapinized cell culture CSF vaccine technology has been transferred to M/s. IIL Hyderabad and PVVI, Ludhiana. IIL, Hyderabad has released the vaccine and it is available in the market. The PVVI, Ludhiana is producing vaccine for use in Punjab. Further, the request has been received from IAHV&B, Palode, Kerala and HVVI, Hisar, M/s. SanvitaPvt. Ltd, M/s. Brilliant Bio Pharma and Government of Nepal, etc. but the decision to transfer this technology is yet to be taken.

Further, indigenous cell culture swine fever vaccine, developed by IVRI has been transferred to Agrinnovate India Ltd for commercialization."

NATIONAL ANIMAL DISEASE CONTROL PROGRAMME FOR FOOT & MOUTH DISEASE AND BRUCELLOSIS (NADCP) :

4.10 NADCP, a Central Sector Scheme, envisages 100% vaccination coverage of cattle, buffaloes, sheep, goats and pigs in the country for biannual vaccination against FMD and also envisages 100% vaccination of female cattle and buffalo calves (4-8 months of age) once in a life time against Brucellosis. Further, Department is in the process of revising the current format of central sponsored scheme 'Livestock Health and Disease Control (LH&DC) to have more focused approach towards control of livestock and poultry diseases.

4.11 Foot and Mouth Disease (FMD) is among the most serious diseases of animals in terms of economic impact and is globally recognized as a priority disease for control and eradication. The economic losses suffered by the farmers on account of FMD alone is enormous and continue during the life cycle of the animal (Estimated national loss due to FMD – Rs.20,000 crores per annum – source ICAR). FMD also leads to lack of access to export markets, despite India being the world's largest milk producer. Similarly, Brucellosis is also an economically important animal disease affecting productivity of animals and it also has zoonotic implications.

4.12 The proposed allocation, BE, RE and Actual Expenditure figures for NADCP were furnished as follows :

(Rs. in crore)

Years	Proposed allocation	BE	RE	Actual Expenditure
2019-20	-	500	811.07	811.02
2020-21	2705.00	1300.00	858.00	506.90*
2021-22	1560.00	1100.00		

*up to 31.12.2020

4.13 Details of financial outlay under the NADCP Scheme for FMD and Brucellosis :

Sl. No.	Year	Funds for FMD control	Funds required for Brucellosis control	Total
1	2019-20	2536.00	146.84	2682.84
2	2020-21	2540.00	136.04	2676.04
3	2021-22	2516.00	136.04	2652.04
4	2022-23	2534.00	136.04	2670.04
5	2023-24	2526.00	136.04	2662.04
	TOTAL	**12652.00**	**691.00**	**13343.00**

4.14 NADCP Physical targets and achievement for the year 2019-20 & 2020-21:

Financial year	Action Point	Target	Achievement	Remarks, if any
2020-21	FMD Vaccinations – animals covered (In crore)	**20.0**	**15.24**	Due to slow uptake of vaccination for covid-19 in some States after May, 2020
	Brucella Vaccinations animals covered (In crore)	**3.6**	**0**	The tender for Brucella vaccine procurement is under process.
2019-20	FMD Vaccinations – animals covered (In crore)	**1.5**	**1.46**	Shortfall of around 3% due to COVID-19 lockdown in the States undertaking FMD vaccination.
	Brucella Vaccinations animals covered (In crore)	**0**	**0**	-

4.15 **Requirement and availability of FMD vaccines :** Presently there are three FMD manufacturers in the country. As per the available information provided by present manufacturers, total production capacity (in million doses) year-wise is as follows :

(in Million doses)

Name of FMD Manufacturers	Year 2020-21 (July onwards)	Year 2021-22	2022-23
India Immunologicals Ltd	237	448	464
Brilliant Bio Pharma Ltd	190	288	350
Biovet Pvt Ltd	170	300	300
Total	**597**	**1036**	**1114**

Therefore, the vaccine availability, at present, is not a constraint to carry out the FMD vaccination under NADCP on mission mode as in the first round of FMD vaccination, only cattle and buffaloes are vaccinated.

4.16 **Requirement and availability of Brucella vaccines :** There are an estimated 39 million female cattle and buffalo calves and the doses required are around 38-39 million. Presently there are four Brucella vaccine manufacturers in the country:

- M/s Indian Immunological Limited, Hyderabad (Telangana)
- M/s Hester Biosciences Limited, Ahmedabad (Gujarat)
- M/s Sanvita, Hyderabad (Telangana)
- M/s Biovet Pharma Pvt. Ltd., Hyderabad (Telangana)

4.17 M/s Indian Immunologicals Ltd. will be able to supply 4 lakh doses per month from November 2020. M/s Hester Biosciences Ltd. will be able to deliver 20 lakh doses per month from October, 2020 to April 2021 and 30 lakh doses from May 2021 onwards. M/s Biovet Pharma Pvt Ltd. is in the position to deliver 20 lakh doses per month from November 2020 onwards. M/s Sanvita Pharmaceuticals Pvt. Ltd. will be able to supply 4 lakh doses per month and annual production will be around 50 lakh doses.

(in lakh doses)

Company	Annual supply (5 doses pack from Oct - Nov 2020 onwards)
M/s Indian Immunologicals Ltd.	50
M/s Hester Biosciences Ltd.	240
M/s Biovet Pharma Pvt Ltd.	240
M/s Sanvita Pharmaceuticals Pvt. Ltd.	50
Total	**580**

4.18 However, regarding details of targets achieved for Brucella vaccination under NADCP, the Department submitted to the Committee in writing that :

"As per information received from the States, a total 375.36 lakh vaccine doses against Brucellosis are required annually. At present, bids have been received for procurement of Brucella S-19 vaccine by the programme logistic agency, NAFED from 3 companies viz. M/s Biovet Pvt. Ltd., Malur, Karnataka; M/s Sanvita Biotechnologies Pvt. Ltd., Hyderabad and M/s Hester Biosciences Ltd., Ahmedabad. The post bidding operations are underway. Accordingly, under NADCP, vaccination against Brucellosis is yet to commence."

4.19 When asked to furnish details of action taken with respect to vaccination under the NADCP as a whole, the Department in its written reply submitted that :

"Aiming at control and gradual elimination of FMD and control of Brucellosis in livestock within a given timeframe, the programme envisages vaccinating 100% of cattle, buffalo, sheep, goat and pig population against FMD which counts to about 53.5 crore in numbers and 100% bovine female calves of 4-8 months of age against Brucellosis. Funds will be utilized

towards vaccines and vaccination, identification of animals, awareness programmes, surveillance, animal movement control and support to research and vaccine testing Institutes.

Actions taken so far -

- The Administrative approval for the Scheme was issued on 9th October, 2019 and Operational guidelines for implementation of the Scheme by the States at the field level were issued.
- The Joint Secretary concerned has been designated as 'Mission Director' in order to implement the programme in a mission mode.
- All animals are being identified with unique identification system of 12-digit number Ear tag (PashuAadhar) to ensure traceability of animals and recording vaccination details.
- After ascertaining availability of vaccine doses and ear tags (for identifying the animals with 12 digit Unique Identification to ensure registration and recording of vaccination), bi-monthly calendar for vaccination of only cattle and buffalo population in the first round was envisaged with a cluster approach so as to maintain herd immunity. FMD vaccine doses have already been supplied to the States/UTs as per schedule.
- Funds have already been released to the States for cold chain infrastructure, for accessories required to administer the vaccines, for incentive to be paid to vaccinators and for mass awareness campaign.
- Vaccination was started under NADCP since 31/01/2020 from Andhra Pradesh. However, in wake of COVID-19 situation in the country and lockdown thereon, identification of animals by ear tagging with 12 digit unique ID (PashuAadhar) and vaccination under NADCP was stopped since 23rd March, 2020 in all the States which were initially scheduled for the first phase of vaccination.
- Due to the continuous persuasion and following of the MHA guidelines, States could start activities from May 2020 in spite of lockdown pauses. Intensive monitoring of NADCP implementation was done during and post COVID-19 lockdown.

- Therefore, taking into account relaxation under lockdown and expected availability of ear tags in the field, month-wise and State/District -wise FMD vaccination schedule has been restructured. Accordingly, vaccination has already resumed from May, 2020 for the first round and is expected to continue up to October, 2020 and the second round during 2020-21 will be undertaken from September-October in most of the States onwards covering all sheep, goats and pigs in addition to cattle and buffaloes.
- So far, cumulatively, around 5.10 crore animals have been vaccinated against FMD. Cumulatively, the number of animals registered so far in the country are 6.10 crore."

4.20 Conversely, in its data submitted to the Committee, the Department has informed that against a target of 53.5 crore only 5.06 crore animals have been vaccinated for FMD under NADCP. When asked about the reason behind this, the Department in its writted reply submitted :

"The total requirement for 5 species of animals (Cattle, Buffaloes, Sheep, Goats and Pigs) for every round of FMD vaccine was 43.5 crore doses (87 Cr doses per year for two rounds), the total committed availability by FMD vaccine manufacturers at the time of starting the programme was only 7 crore doses per month adding up to 30.5 crore doses from January to July 2020 (76.6 crore doses from Jan 2020 to Jan 2021).

After ascertaining availability of the FMD vaccine doses as well as ear tags for large animals, vaccination against FMD of only cattle and buffalo (around 28 crores), in the first round, was proposed to be undertaken. FMD vaccination started from Kadappa district of Andhra Pradesh on 31.1.2020 under NADCP. As per Reports received till date, against the total target of around 28 crore cattle and buffalo, the total animals vaccinated and ear tagged are 16.60 crore and 16.75 crore, respectively.

Lockdown since March, 2020 adversely affected FMD vaccination programme by way of halting of production as well as supply of ear tags by domestic suppliers; vaccination stopped in almost all States scheduled for

the first phase due to issues of logistics and resistance from animal owners in the wake of COVID 19 pandemic situation.

Further, due to the fact that the quality control test results of the vaccines against FMD did not comply with the set criteria, vaccination had to be suspended. Intensive exercise to harmonise the quality control testing in close collaboration with the vaccine manufacturers who are undertaking corrective measures is underway. After assessment of their in-house quality control measures the vaccine manufacturers will commit the supplies. The earliest supply is expected to be by the end of February, 2021 and after quality testing of the vaccines, vaccination is likely to commence again from April, 2021 onwards."

4.21 During the evidence meeting, the Committee raised the issue of poor quality of vaccine leading to huge financial losses and pertinent delay in vaccination while also suggesting testing of individual batches of vaccines to ensure foolproof quality testing. To this, the Representative of the Department submitted before the Committee :

"...हमारी रिसर्च इतनी डैवलप नहीं है। अगर हम सब बैच टैस्ट करेंगे तो समय बहुत लगेगा, क्योंकि एक बैच टैस्ट करने में तीन महीने लगते हैं। हमने तय किया था कि पांचवां बैच टैस्ट करेंगे, अगर एक फेल हुआ तो पांचों बैच फेल माने जाएंगे।..."

4.22 Further, on being asked by the Committee to ensure liability for failed quality tests of batches of vaccine, the Representative of the Department stated that :

"The Manufacturer is responsible for it. He is replacing 100 per cent of the vaccine doses. अगर वह वैक्सीन फ्री में लगी तो हर वैक्सीन की छः रुपये कॉस्ट भी रिकवर हो रही है।"

4.23 On the Government's announcement regarding 100% FMD Vaccination of cattle and goat, when asked about the details of action plan chalked out to fulfil this objective, the Department in its written reply apprised the Committee as follows :

"NADCP envisages vaccinating 100% of cattle, buffalo, sheep, goat and pig population against FMD which counts to about 53.5 crore in numbers. The Department in consultation with States and based on their existing

schedule without compromising on immunity period of last vaccination dates had prepared a schedule of vaccination adopting a Cluster approach to ensure herd immunity. The other consideration for planning vaccination schedule is also availability of FMD vaccine and tags to be applied to each animal prior to its vaccination.

After assessment of all pre requisite factors, the following cluster based schedule for vaccination starting from January, 2020 to June, 2020 was drawn up to cover all States:

S.No.	Months	States
1.	Jan-Feb, 2020	Andhra Pradesh, Telangana, Tamil Nadu, Chhattisgarh, Odisha, Madhya Pradesh, Puducherry, Kerala
2.	March-Apr, 2020	Rajasthan-I, Bihar-I, Uttar Pradesh-I, Maharashtra, Karnataka, Gujarat, Jharkhand, Daman& Diu, D & Nagar Haveli, Goa, Himachal Pradesh
3.	May-June, 2020	Rajasthan-II, Bihar-II, Uttar Pradesh-II, West Bengal, Uttarakhand, Haryana, Punjab, Jammu & Kashmir, Manipur, Meghalaya, Mizoram, Assam, Nagaland, Sikkim, Tripura, Arunachal Pradesh, Delhi, Chandigarh, A & N Islands, , Ladakh, Lakshadweep

It was planned that first round would get completed by June-July, 2020 and second round would commence from August, 2020. However, the planned programme got disrupted due to lockdown across the country in terms of disruption of ear tag supply and due to farmers not allowing vaccinators to visit the villages and touch the animals owned by those farmers. Thereafter, continuous persuasion with States was done during lockdown and accordingly, vaccination has already been resumed from May, 2020 and revised schedule has been drawn up for the country in consultation with States and approved by National Steering Committee (NSC) with first round getting completed by Oct, 2020. Revised plan is based on schedule of vaccination falling due and based on ensuring cluster-based approach for herd immunity. It has also been planned to start the second round from Sept., 2020 covering all animals i.e. cattle buffalo, sheep, goats and pigs (about 53 crore animals) against FMD including tagging them as well."

4.24 When asked if research and development activities related to Animal Vaccines had been affected due to the COVID-19 pandemic, the Department

denied having received any such Reports. However, on being asked about the emergency preparedness of the Department with regard to Veterinary Services and Animal Vaccine in the wake of the COVID-19 pandemic, the Department failed to apprise the Committee of any concrete measures specifically taken to tackle the sudden disruption of Vaccination Drive among cattle and instead submitted :

"To effectively tackle the challenges posed by the Covid-19 pandemic and lockdown situation in the Animal Husbandry and Veterinary Sector, Government of India requested States to ensure continuous emergency services in the animal husbandry and veterinary sector, especially in emergent animal health issues situations which may include, but are not restricted to, emergency services like disease diagnosis and treatment, monitoring of any emergency livestock and poultry diseases, immediate disease reporting, etc. following all precautionary measures as per guidelines of MHA.

Further, the following steps are being undertaken by the Department to curb infections livestock diseases with zoonotic diseases.

a. Advisories have been issued to States/ UTs from time to time to take necessary measures to prevent the spread of zoonotic diseases

b. For real time reporting of animal diseases including zoonotic diseases, the Department has got a web-based reporting system called the National Animal Disease Reporting System (NADRS), through the mobile application.

In addition to this, multi-sectoral coordination approach is being adopted for prevention, control and containment of the diseases. Efforts have been made by the Department to establish well-coordinated surveillance for zoonotic diseases like Avian Influenza (H5N1) and Pandemic Influenza (H1N1), Glanders, Rabies, etc. with the other Departments. The Department has collaboration with Ministry of Health and Family Welfare. Department has also formulated a National Action Plans for Prevention, Control and Containment of Avian Influenza, for Glanders and for African Swine Fever (ASF).

Further, in order to prevent the ingress of exotic diseases, the import of livestock and livestock products are controlled through quarantine stations located at Delhi, Mumbai, Chennai, Kolkata, Hyderabad and Bengaluru having International Airports/seaports. Import of livestock and livestock products is allowed only through these stations where they are subjected to quarantine inspection, testing, laboratory examination, de-contamination etc., before being allowed to mix with the local stock. In light of the foregoing procedures there are adequate safeguards to prevent introduction of any exotic disease from abroad into India. All livestock products are allowed to be imported only through a Sanitary Import Permit (SIP) issued by the Department

Health regulatory control on import of livestock and livestock products from abroad is exercised by the Government of India, Ministry of Fisheries, Animal Husbandry and Dairying, Department of Animal Husbandry and Dairying. The Central legislation "*The Livestock Importation Act,* 1898" controls all import and export of livestock and livestock products in the country. Under section 3A of this Act, the Central Government has powers to regulate, restrict or prohibit entry of livestock and livestock products, which may adversely affect human and animal health."

MANUFACTURE AND AVAILABILITY OF ANIMAL VACCINES :

4.25 There are 20 State Veterinary Biological productions Centres in the country which are under the control of State Animal Husbandry Departments. These production units are producing various vaccines like Haemorrhagic Septicaemia (HS), Blue Tongue (BT), Classical Swine Fever (CSF), Anthrax, Black Quarter (BQ), New Castle Disease (NCD), Rabies, Sheep and Goat Pox, Fowl Cholera, PPR, Fowl and Pigeon Pox, Enterotoxaemia, Duck Cholera, Duck Virus Hepatitis, etc.

4.26 State-wise and UT wise details of the State Veterinary Biological Production Units in the country are give at **Annexure – XIV.**

4.27 When asked about the status of manufacturing and availability of Animal Vaccines in the country vis-à-vis the requirement for each of the disease, the Department, in its written reply stated :

"The biggest impediment to growth of the livestock sector is the large-scale prevalence of animal diseases like FMD, PPR, Brucellosis, Classical Swine Fever, Avian Influenza,Newcastle Disease, African Swine fever, Haemorrhagic septicaemia, etc., which adversely affect animal productivity. Under various programmes / components of this Scheme, efforts have been made for prevention and control of animal diseases of economic importance like Foot & Mouth Disease (FMD), Peste des Petits Ruminants (PPR), Brucellosis, Anthrax, Haemorrhagic septicaemia (HS), Black Quarter (BQ), Classical Swine Fever, Newcastle disease and etc. The Department is aware of the requirement of vaccines for animal disease control programmes. For example, there is requirement of about 982.00 Million doses of FMD Vaccine, 41.4 Million doses of Brucella vaccine, 223.14 Million doses of PPR, 18.12 Million doses of CSF vaccine for covering the entire eligible population. Sufficient production capacity of most of the required vaccines, except for Brucellosis and CSF, are available in the country. However, manufacturers are increasing their production capacity so as to meet the increased demand.

Apart from the 20 State Veterinary Biologicals, there are private vaccine manufacturers. However, the vaccines required to implement the disease control programmes are mainly manufactured by M/s. Indian Immunological, Hyderabad, M/s Brilliant Bio Pharma, Hyderabad, M/s.Biovet Pvt Ltd, Bangalore and M/s. Hester etc.

There are leading private vaccine manufacturers in the country. The vaccines required to implement the disease control programmes are mainly manufactured by these private manufacturers. The manufacturers have increased their production capacity and also are in the process of further augmenting them with the increasing demand of the vaccine. Moreover, one new private manufacturer i.e. M/s.Sanvita, has also established its animal vaccine manufacturing plant."

4.28 Claiming total self-dependence in the area of manufacture of Animal Vaccines in the country, the Representative of the Department, during the evidence meeting, briefed the Committee as under :

"...जहां तक वैक्सीन मैनुफैक्चरिंग में आत्मनिर्भरता की बात है, आज की तारीख में वैक्सीन मैनुफैक्चरिंग में हम कह सकते हैं कि हम लोग आत्मनिर्भर हैं। कुछ एकाध वैक्सींस हैं, जिसके कुछ कांस्टीटुएंट्स बाहर से आते हैं, लेकिन मैनुफैक्चरिंग टोटल यहीं होती है। स्टेट डायग्नोस्टिक्स लैब्स और हमारी स्टेट्स की जो लैबोरेट्रीज़ हैं, उसमें होती है या प्राइवेट सैक्टर की जो कंपनियां हैं, जैसे एफएमडी या ब्रुसलेया वैक्सीन है या एचएस वैक्सीन है, कुछ इस तरह की वैक्सींस हैं, वे प्राइवेट सैक्टर वाले भी करते हैं।**..."**

4.29 With respect to self-sufficiency in FMD Vaccine and its indigenous manufacturing for the Central Sector Scheme on NADCP, the Representative of the Department, further submitted before the Committee :

"...हम एमएफडी वैक्सीन बाहर से आयात नहीं करते हैं। हमारी जो टोटल रिक्वायरमेंट है, उनको हम यहीं से मीट करते हैं। इतने बड़े स्तर पर यह कार्यक्रम पहली बार हुआ है, जिसमें हम **100** परसेंट वैक्सीनेशन कर रहे हैं। इसमें हम **30** करोड़ गाय-भैंस और **23** से **24** करोड़ बकरी, भेड़ तथा सुअरों का वैक्सीनेशन कर रहे हैं। उसके लिए जितने डोजेज की रिक्वायरमेंट है, उसको हम लोकल ही मीट कर रहे हैं। इसमें जो फेल कर रहे हैं, उसके लिए जो प्रायोजन है, उसके मुताबिक उन पर पेनाल्टी लग रही है। रिप्लेस करने में उनको समय लगेगा। कुछ मैन्यूफैक्चरर्स ने कहा है कि इसमें तीन महीने लगेंगे। कुछ मैन्युफैक्चर्र ने कहा है कि दो महीने का समय समय लगेगा। हमने उनसे कहा है कि आप बता दीजिए कि आप कैसे मैन्यूफैक्चरिंग करते हैं। हम उनको सीखा भी रहे हैं कि आपको इस प्रकार से ट्रेनिंग दिलवानी चाहिए। आज की तारीख में हमारे यहाँ टेक्निकल टीम सारे मैन्यूफैक्चरर्स फैसिलिटिज़ को विजिट कर रही हैं। उनकी मैन्यूफैक्चरिंग फैसिलिटिज को चेक करके देख रही है कि उसमें क्या कमियाँ हैं, जिसको ठीक किया जा सके। वैक्सीन के लिए मैन्यूफैक्चरर्स का जो सारा सिस्टम हैं, उनको ठीक किया जा रहा है। अगर देश में इतने सालों से यह प्रोग्राम चल रहा था तो एफएमडी की बीमारी खत्म हो जानी चाहिए थी, लेकिन वह खत्म नहीं हुई है। अब मुझे आशा है कि जब यह प्रोग्राम सही तरीके से चालू हुआ है, जिसमें **100** परसेंट केन्द्र सरकार का अंश है तो इस प्रोग्राम के द्वारा हम क्वालिटी को इम्प्रूव कर पाएंगे। एफएमडी वैक्सीनेशन का हमारा अल्टीमेट लक्ष्य है कि हम वर्ष **2025** तक इस बीमारी को वैक्सीनेशन के द्वारा कंट्रोल कर सकें। मुझे बहुत उम्मीद है कि हम इस बीमारी को कंट्रोल कर लेंगे।**..."**

4.30 When asked by the Committee about the issues and challenges associated with the manufacture and distribution of Animal Vaccines in the country and about

the measures being adopted by the Department to overcome these challenges, the Department in its written reply informed :

> "While vaccines for diseases other than FMD, Brucellosis, CSF are manufactured by the State Biological units, yet due to lack of Good Manufacturing Practices (GMP) compliance of these units in a few States, these are not eligible for manufacturing vaccines as per the extant Drugs & Cosmetic Rules. In order to be self-sufficient in vaccine production, States need to take initiative to upgrade their Biological Units to GMP level. Department has been supporting up-gradation of such biological units by way of financial assistance under the ASCAD component of LH & DC scheme.
>
> Further, there are availability issues in respect of the vaccines against FMD, Brucellosis and CSF in the country. While production capacity has been increased by the private vaccine manufacturers, there is still shortage of vaccine against Brucellosis and CSF. The requirement in case of Brucella vaccine is around 376 lakh doses whereas the present capacity is around 197 crore. The present manufacturers are increasing their capacity so as to meet the increased demand for the vaccine.
>
> There is also a need to develop thermo-stable, long-duration immunity vaccine for FMD for which ICAR has already been requested to expedite their research."

4.31 Regarding issues related with increasing manufacturing capacity of Animal Vaccine and Veterinary drugs in the country, the Representative of the Department, during the evidence meeting, apprised the Committee :

> **"...**सर**,** आपका जो पहला ऑब्जर्वेशन था**,** वह दवाइयों की कमी के बारे में था। आज की तारीख में भी दवाओं की कमी जारी है। पिछले कुछ महीने से वैक्सीन और ड्रग्स मैन्युफैक्चरर्स और उनके एसोसिएशंस के साथ हम बातचीत भी कर रहे हैं कि किस तरह से इस क्षेत्र में क्या-क्या ऐसी रुकावटें हैं**,** जिनकी वजह से इनकी मैन्युफैक्चरिंग बढ़ नहीं पा रही हैं और उन्हें बढ़ाने के लिए क्या कदम उठाए जाने चाहिए**,** जिससे कि हम**,** जैसे कि आज की तारीख में हम जेनेरिक मेडिसिन में वर्ल्ड लीडर हैं**,** we are known as the manufacturing hub of the world for generic medicines on human health, उसी तरह से आज की तारीख में एनीमल वैक्सीन और ड्रग्स की मैन्युफैक्चरिंग में भी वर्ल्ड लीडर

हो सकते हैं, लेकिन उसके लिए क्या उपाय करने चाहिए, उसे कैसे आगे बढ़ाना चाहिए, उसके बारे में मैं प्राइवेट मैन्युफैक्चरर्स और रेगुलेटिंग एजेंसीज के साथ सारे लोगों के साथ बातचीत कर रहा हूं कि किस तरह से इको सिस्टम को इम्प्रूव किया जाए। इसमें अभी हम लोगों ने कई विशेषज्ञों को भी समाहित किया है, जैसे प्रधान वैज्ञानिक सलाहकार डॉ. विजय राघवन और उनकी टीम को भी इसमें सम्मिलित किया है और रिसर्च वगैरह के भी जो वैज्ञानिक हैं, उन्हें भी इसमें सम्मिलित किया है, ताकि हम किस तरह से इसे आगे बढ़ा सकें। आज की तारीख में जो है, उसे और कई गुना आगे कैसे बढ़ाएं। इसके लिए जो कदम उठाने की जरूरत है, जैसे जो रेगुलेटरी मेजर्स हैं, क्लियरेंस के इश्यूज हैं, या टेस्टिंग के इश्यूज हैं या अगर मैन्युफैक्चरिंग सुविधा स्थापित करने के लिए कोई लाइसेंसिंग के इश्यूज हैं, जैसे अगर इसके रास्ते में कोई रोड ब्लॉक है, तो उसे कैसे रिमूव किया जाए, उसके ऊपर एक पूरी डिटेल रिपोर्ट तैयार की जा रही है। मुझे यहां करीब एक-डेढ़ साल हो गया। इसमें जो काम करने चाहिए, उसके लिए प्रयास जारी है। इसके बारे में हम लोग एक संक्षिप्त रिपोर्ट भी कमेटी को भेज देंगे।..."

4.32 When asked to provide details about the steps being taken by the Department to ensure percolation of vaccination practices to the Livestock in the remotest and most backward locations of the country, the Department in its written reply informed :

"Animal Husbandry is a State subject. The Department, under vaccination related Scheme provides assistance to States/UTs to undertake vaccination programmes for control/eradication of diseases like FMD, Brucellosis, PPR, CSF. States/UTs submit their annual action plans which include activities like publicity and awareness amongst animal owners, vaccination programmes and their schedules, etc. as per the livestock population and the States' requirements. State/UTs are responsible for vaccinating the livestock as per their action plans including vaccinating livestock in remote and backward areas and their monitoring.

The release of funds is against submission of physical achievements, which are monitored by the Department. Fresh release of funds is also based on the proposed deliverables by the State under the action plan."

4.33 On being asked by the Committee about ways in which the Department works towards raising awareness about animal vaccine, the need for timely

administration of vaccines and vaccination schedule charted by the Government among livestock and poultry owners in the far flung rural areas of the country, the Department in its written reply submitted :

> "The States plan their vaccination programme keeping in view the vaccination schedule for the specific disease, availability of logistics, vaccines and species of animal population in the State. The programmes are also scheduled keeping in view the factors like disease epidemiology, climatic conditions and geography of the area. The Department supplements the efforts of the State governments by providing financial assistance for State-specific vaccination programmes and for national disease control programmes under LH&DC scheme. Under the ASCAD component of the LH&DC Scheme, the Department provides funds towards generating awareness among farmers by way of holding awareness camps at block level, animal health camps, workshops, seminars, etc.
>
> Further, in order to control FMD and Brucellosis diseases in the country, Government of India approved National Animal Disease Control Programme (NADCP) with 100% central funding. The Scheme is being implemented in mission mode as prior to 2019-20, FMD vaccination programme was being implemented with State's funding in addition to the Central contribution, therefore, every State was following a different schedule of FMD vaccination and even six monthly intervals for undertaking next vaccination round was also not adhered to completely. However, under NADCP, the Department, in consultation with the States, has prepared a schedule of vaccination to be followed at different times in different States adopting a cluster approach to ensure herd immunity. The other consideration for planning vaccination schedule is also availability of the FMD vaccine and ear tags to be applied to each animal prior to its vaccination."

4.34 However, during the evidence of the Representatives of the Department, held on 11th January, 2021, one of the Representatives apprised the Committee about issues related to timely administration of vaccine due to lack of timely release of State share of funds. The Representative apprised the Committee :

"...जहां तक समय पर टीकाकरण की बात है, इसके लिए 2019-20 से पहले तक जो कार्यक्रम चलता था, उसमें 60 प्रतिशत अंश केन्द्र सरकार से और 40 प्रतिशत अंश राज्य सरकार से आता था। जो 40 प्रतिशत अंश राज्यों की ओर से जाता था, बहुत सारे राज्य उसे नहीं दे पाते थे, उसके कारण वह प्रोग्राम प्रभावित होता था। हम 60 प्रतिशत पैसा दे देते थे, लेकिन बाकी 40 प्रतिशत पैसा न होने के कारण वह प्रोग्राम फील्ड में इम्प्लीमेंट नहीं होता था और जो टीका उपलब्ध होना चाहिए था, वह सही मात्रा में उपलब्ध नहीं हो पाता था। इसी के कारण, 2019-20 से हम लोगों ने भारत सरकार के 100 प्रतिशत एसिस्टेंस से एफएमडी और ब्रूसेलोसिस के लिए एक नया कार्यक्रम शुरू किया। इसमें हम लोगों की यही कोशिश है कि टीका ग्राउण्ड पर समय से लग जाए। टीका लगाने में जो सारी कठिनाइयां हैं, उनका उत्तर खाली यही प्रोग्राम नहीं है। इसके अलावा, स्टेट को और वहां के किसानों को जागरूक होना होगा कि हमें अपने पशुओं को समय पर टीका लगवाना है। उसके लिए भी हम लोग यहां से अवेयरनेस कैम्पेन समय-समय पर चलाते रहते हैं। स्टेट्स को एनिमल कैम्प और मेला लगाने के लिए यहां से फण्डिंग दी जा रही है कि आप वहां जाकर मेले लगाकर, पशुओं के बारे में किसानों को बताइए कि एफएमडी का टीका कब लगाना है, ब्रूसेलोसिस एवं अन्य बीमारियों के टीके कब लगने हैं। इसके लिए हम यहां से फण्डिंग स्टेट्स को उपलब्ध कराते हैं।"

4.35 Nonetheless, on being questioned about monitoring of the 60% of Central share of funds being given to States, the Representative of the Department, during the evidence meeting, informed the Committee :

"...सर, सारे स्टेट्स को समय-समय पर इसके लिए चौकन्ना किया गया है। इसके लिए समय-समय पर हमारे यहां से चिट्ठियां जाती हैं। आपकी इनफॉर्मेशन के लिए हम वह पत्राचार पेश कर सकते हैं।..."

<u>Formation, Approval and Licensing of Animal Vaccines in the country –</u>

4.36 Steps involved for a manufacturer to obtain a manufacturing and marketing permission for animal vaccines in India are discussed briefly as follows:

(a) The Manufacturer applies for a Test license to the State Drug Regulatory Authority. Simultaneously the Manufacturer also applies for NOC from The Central Drugs Standard Control Organisation (CDSCO - Central authority in New Delhi under MoH&FW).

(b) The CDSCO in turn refers it to Department of Animal Husbandry and Dairying (DAHD, MoFAH&D) and an NOC for the same is obtained related to the issuance of Test licence.

(c) Inspection of the Manufacturer related to manufacture of the test batches is jointly conducted by CDSCO, State Drug Department and IVRI (ICAR, MoA&FW) Expert.

(d) After the manufacture of test batches, the Manufacturer submits three continuous batches to IVRI for testing for use in field trials. After testing, the report is provided to the manufacturer.

(e) The Manufacturer then makes an application to CDSCO seeking permission to conduct Field trials to evaluate the new vaccine candidate. In the application, the protocol for conducting the study, Investigator detail, Veterinary University detail and location are all provided. CDSCO then seeks the opinion (NOC) from the Technical Expert Committee at DAHD (MoFAH&D). On positive opinion from DAHD, CDSCO permits the Manufacturer to conduct field trials with the vaccine candidate. The individual study centres also need to obtain approval for doing animal trials from the Committee for the Purpose of Control and Supervision of Experiments on Animals (CPCSEA).

(f) Field trials are carried out to demonstrate various parameters such as Safety, Efficacy and Quality etc. in target animal species. The report at the end of the study is prepared by the investigators and submitted to the manufacturer.

(g) The Manufacturer submits the field trial reports to CDSCO and seeks manufacturing permission using Form 44. CDSCO sends it to the Technical Expert Committee at DAHD for review and on positive opinion from the Committee provides Form 46 to the Manufacturer (manufacturing authorization).

(h) The Manufacturer on obtaining Form 46 applies using Form 27D to the State Drug Licensing Authority for Manufacturing and Marketing permission.

(i) The State Drug Licensing Authority verifies the application and issues Form 28 D (the license) to the manufacturer, after getting it counter signed by CDSCO.

(h) The Manufacturer then produces the vaccine and the first three batches have to be tested and released by IVRI (ICAR, MoA&FW).

(i) The sale / permission of all veterinary drugs fall under the jurisdiction of Drugs Controller General of India (DCGI), under the Drugs and Cosmetics Act, 1945. The Department gives its Recommendation on the proposals on a case to case basis.

Role of National Dairy Development Board (NDDB) in Animal Vaccine manufacturing in the country –

4.37 NDDB and its fully-owned subsidiary viz. Indian Immunologicals Ltd. (IIL) undertakes research on development of animal vaccines which are not produced in the country. IIL undertakes commercial production of these vaccines. NDDB and IIL have developed and made available many animals vaccines in India through its innovative research in the past and Research and Development on vaccines against many other animal diseases are under progress.

4.38 IIL is the largest manufacturer of Veterinary biologicals in the country. IIL's R&D mandate is to develop quality vaccines at an affordable cost to the farmers. IIL has a DSIR approved R&D centre with more than 50 scientists and pursues vaccine development. It also has collaborations with premier institutes within the country and abroad. IIL has pioneered the development of animal vaccines in the country has several firsts to its credit, for example, First combination vaccine for Foot and Mouth Disease (FMD) + Haemorrhagic Septicaemia (HS), first vaccine for Rabies using tissue culture in India etc.

4.39 When questioned about the role of NDDB in making animal vaccine available at the grassroot level, the Department in its written reply informed that :

"Indian Immunologicals Limited (IIL), a wholly-owned subsidiary of NDDB, through its Institutions division participates in various state tenders and supplies various vaccines to the state governments and cooperatives. IIL through its trade division also supplies vaccines through a distribution network comprising of stockists and retailers across India (including

villages). IIL Trade division conducts various awareness programmes such as Farmer Contact Programme (FCP), Video on Wheels Programme and Continuous Medical Education (CME) for Veterinary doctors."

4.40 When questioned about the role of Dairy Cooperatives in Veterinary Health Care and availability of Animal Vaccines within the country and in bringing research from lab to land, the Department, in its reply submitted :

"Dairy farmers need timely access to Veterinary and Nutrition Services for dairy animals in the village itself. Dairy Cooperatives Union or Milk Unions (MUs) in some part of the country ensure access to these services. Farmers desiring to avail such services, register their requests with Village Dairy Cooperatives or Dairy Cooperative Societies (DCS) with advance payment or on credit. DCS in turn ensure delivery of services at the farmers' doorstep. In case the services are provided on credit, deductions are made through Milk Bill Payments. Some of the Milk Unions / DCSs also coordinate with Government Veterinary facilities for extending services to the farmers. Mus / DCSs also arrange periodic vaccination and deworming camps for farmers. Central / State Governments and Indian Immunologicals Limited (IIL) bank on the network of Cooperatives to reach out to the farmers for Veterinary and other input services."

4.41 When asked about extension of vaccine cover to cattle owned by private dairies, the Department informed that all cattle owned by private dairies are also covered under vaccination as the Scheme on LH&DC is implemented uniformly in the States / UTs irrespective of whether the livestock animals belong to an individual farmer or to private dairies.

QUALITY CONTROL OF ANIMAL VACCINES :

4.42 On being questioned about the measures adopted by the Department to streamline availability of necessary animal vaccines and their quality control in the country, the Department, in its written reply, submitted that :

"Under various components of Livestock Health & Disease Control Scheme, funds are provided to States for procuring veterinary vaccines. The 'No Objection Certificate' (NOC) to import vaccine is given to various importers,

based on which the Drugs Controller General of India (DCGI) issues them the import licenses. As per the provision of Drugs and Cosmetic Act, the batches of vaccines are tested at IVRI. The testing of vaccines is also being started soon in Chaudhary Charan Singh National Institute of Animal Health (CCSNIAH), Baghpat."

Chaudhary Charan Singh National Institute of Animal Health (CCSNIAH), Baghpat –

4.43 Chaudhary Charan Singh National Institute of Animal Health (CCSNIAH) has been established at Baghpat, Uttar Pradesh to undertake the quality control and assurance of standard, efficient and safe Veterinary Biologicals in India and to act as a nodal institute to recommend licensing of Veterinary Vaccines in the country with a vision to promote healthy and productive livestock in Indian sub-continent using standard, efficient and safe veterinary biologicals.

4.44 The mandate of the Institute is as follows :

(a) To act as a Nodal Institute to recommend licensing of Veterinary Vaccines in the country ;

(b) To make available facilities for quality control of Veterinary Vaccines and Diagnostics ; and

(c) To make available standards for Veterinary Biological and Diagnostics.

4.45 Details of the fund allocated and expenditure incurred by Institute from 2013-14 to 2017-18 is :

(Rs in lakh)

S.No	Year	Allotted Budget	Expenditure
1.	2013-14	320.00	271.52
2.	2014-15	300.00	294.18
3.	2015-16	264.15	263.36
4.	2016-17	403.00	400.84
5.	2017-18	368.15	359.51

4.46 Regarding quality control in Vaccine production, when asked about the ways in which the Department ensures quality control and handles lapses on this front, the Deparment in its written reply submitted that :

"As far as FMD vaccine is concerned, ten (10) vials of each batch of FMD vaccine produced by the manufacturer are collected on a random basis out of the lot of each batch of FMD vaccine. One out of 5 batches of vaccine

supplied are tested for quality by designated laboratories of the Department by randomizing method.

In case any sample tested fails to conform to the set specifications, that batch along with its representative batches are rejected. The supplier has to replace the rejected vaccines free of cost. In addition, if the rejected batches have been used in the field for vaccination then the supplier has to also refund the cost of vaccination as prescribed.

For Brucella S-19 vaccine all the batches of vaccine will be tested for quality bythe designated laboratories, viz, ICAR-IVRI, Izatnagar and CCSNIAH, Baghpat prior to their application in the field."

4.47 During the evidence, the Representative of the Department apprised the Committee about issues regarding quality testing of FMD Vaccines and submitted:

"...एफएमडी टीके के बारे में जो क्वालिटी का इश्यू आया, उसमें मैं एक चीज जरूर कहना चाहूँगा कि हमारे देश में जो एफएमडी वैक्सीन बन रहा है, इसके जो मैन्यूफैक्चरर्स हैं, वे एफएमडी वैक्सीन बनाते थे और स्टेट उसको प्रोक्योर करती है। पहले प्रोग्राम 60:40 चलता था। उसमें क्वालिटी टेस्टिंग नहीं होती थी। पिछले 10 सालों में अगर एफएमडी वैक्सीन की क्वालिटी टेस्टिंग की बात की जाए तो टोटल 23 बैच सिर्फ 10 सालों में टेस्ट हुए। एक बैच में नॉमर्ली चार से पाँच लाख की संख्या होती है। जैसा मैंने आपको बताया कि टोटल मिलाकर 30 करोड़ गाय-भैंस हैं। यदि सभी को टीका लगना है तो समझ लीजिए कि 30 करोड़ डोजेज साल में दो बार चाहिए। इसका मतलब है कि हमें 60 करोड़ डोजेज चाहिए। 60 करोड़ डोजेज के लिए कितने बैच होते हैं, इसका आप अंदाजा लगा सकते हैं। इसलिए, पहले क्वालिटी टेस्टिंग का काम ही नहीं होता था। पहले बहुत ही कम होता था और जो होता था, वह स्टेट्स के द्वारा होता था। वह कितना गंभीर था, पता नहीं है...।"

4.48 The Representative, during the evidence, further apprised the Committee about the mechanism of quality testing of vaccines under NADCP and about holding manufacturers accountable for failed quality tests and penalizing them for the same :

"...हम लोगों ने जब 100 परसेंट गवर्नमेंट ऑफ इंडिया की स्कीम वर्ष 2019-20 से चालू की, तो हम लोगों ने कहा कि हम जो वैक्सीन बनाकर सप्लाई दे रहे हैं, उन वैक्सीन की हम क्वालिटी टेस्टिंग करेंगे। उसके लिए हम लोगों ने एक नियम बनाया। जब हमने टेंडर फ्लोट

किया तो उसमें हम लोगों ने नियम बनाया कि हर पाँचवें बैच का एक ग्रुप बनाया जाएगा। हर बैच में 4 से 5 लाख डोजेज होती हैं। पाँच बैच का 25 लाख डोजेज हो गया। इस 25 लाख डोजेज का एक ग्रुप बनाया जाएगा। उसमें रैन्डम्ली किसी एक बैच को हम पकड़ लेगें और उसकी क्वालिटी टेस्टिंग करेंगे। उस क्वालिटी टेस्टिंग का हमने प्रोटोकॉल बनाया है कि यह टेस्टिंग होगी। उसकी 100 परसेंट सेन्ट्रल फंडिंग हम लोगों ने दी है। उसके लिए हमने देश में तीन जगहों पर लैब डेजिग्नेट की है। वहाँ पर वह सैम्पल मैन्युफैक्चरर्स के द्वारा जाएगा और उसका टेस्ट होगा। उसकी टेस्ट चेक करने के बाद अगर उसकी क्वालिटी फेल होगी तो वे पाँचों बैच, यानि 25 लाख डोजेज पूरी की पूरी फेल मानी जाएगी और वह 25 लाख डोज फ्री में रिप्लेस करेगा। उसके अलावा अभी का नियम है कि जैसे ही वह वैक्सीन सप्लाई करता है, उसका 75 प्रतिशत पेमेंट 10-15 दिन के अंदर कर देते हैं और बाकी 25 प्रतिशत होल्ड करके रखते हैं। हम उससे कहते हैं कि अगर आपका बैच फेल किया तो आपके सारे के सारे 25 लाख डोजेज रिप्लेस करनी पड़ेगी। उसके अलावा आपका जो 25 प्रतिशत पेमेंट है, वह भी हम नहीं देंगे। अगर कहीं पर वह वैक्सीन सप्लाई हो चुका है और वह फील्ड में लग चुका है तो प्रति वैक्सीनेशन छह रुपये उसकी कॉस्ट भी देनी पड़ेगी। ये सारी जो पेनाल्टीज़ हैं, वे टेंडर में बिल्ड की गई हैं। उसी के मुताबिक अब जहाँ पर टेस्ट हो रहे हैं तो पता लगा रहा है कि बहुत सारे बैचेज फेल हो रहे हैं। एक-आध बैच कोई पास हुआ है, लेकिन बहुत सारे फेल हुए हैं। फेल होने पर उनकी जो पेनाल्टीज़ लगनी चाहिए, वह लग रही है। इसके ऊपर सबसे ऊँचे स्तर तक डिटेल प्रेजेंटेशन भी दिया जा चुका है। सभी को बताया भी जा चुका है कि उसके लिए हम लोग क्या कार्रवाई कर रहे हैं। उसमें कई मैन्यूफैक्चरर्स के बैचेज फेल हुए हैं, उनको रिप्लेस करने के लिए कहा गया है। उसमें मैन्यूफैक्चरर्स ने क्या गलती की है, उनको अच्छी तरह से मालूम है कि वे इतने सालों से एफएमडी मैन्यूफैक्चरिंग करते आए हैं...।"

4.49 Further, elaborating on the method of quality testing of Animal Vaccine currently being used in the Country, the Representative of the Department made the following submissions before the Committee :

"...53 करोड़ पशु हैं। पांच स्पीशिस हैं, 53 करोड़ पशुओं को साल में दो बार टीका लगाना है। एक डोज़ के लिए 43.5 करोड़ डोज़ की जरूरत है। 43.5 करोड़ डोज़ हर छ: महीने में आएंगी और अगर हम चार से पांच लाख डोज़ का एक बैच मान लें और हर बैच को टैस्ट करें तो यह असंभव हो जाएगा। अगर टैस्टिंग प्रोटोकॉल इतना डैवलप हो जाए कि टैस्ट ट्यूब में ही टैस्ट हो जाए तो कोई समस्या नहीं है। इसके लिए 20 पशु चाहिए जिनको पहले

टीका नहीं लगा। पहले चार से पांच महीने के बछड़े और बछड़ियां ढूंढो, वे ऐसे हों जिनको पहले कभी टीका न लगा हो, ऐसे हर्ड से आएं जहां एफएमडी की बीमारी न हुई हो। उस पशु को टैस्ट करने में चार-पांच दिन लगते हैं फिर उसे इस बैच का वैक्सीन जीरो डेट पर दिया जाता है। पशु के मिलने में काफी समय लग जाता है। टीका लगने के 28 दिन बाद ब्लड सैम्पल टैस्ट करते हैं कि उसके ब्लड में वैक्सीन की कितनी मात्रा है और एंटीबॉडी कितनी हैं। इसके लिए प्रेस्क्राइब्ड स्टैंडर्ड है। इसके बाद एक और टीका लगता है और 28 दिन बार फिर ब्लड सैम्पल लेते हैं और देखते हैं कि प्रोटीन की मात्रा कितनी है। इस तरह से 60 से 90 दिन लगते हैं और इसके बाद ही बैच को पास या फेल माना जाता है।..."

4.50 While also apprising the Committee about the Trivalent FMD Vaccine being unique to India and the challenges faced while performing quality tests on such vaccines, the Representative of the Department, during the evidence, submitted :

"...मैं साइंटिस्ट्स से यही रिक्वेस्ट कर रहा हूं कि इस टैस्टिंग मैकेनिज्म को कैसे इम्प्रूव करें ताकि सारे कार्यक्रम में पशुओं की जरूरत न पड़े और लैब में ही पता चल जाए कि मात्रा कितनी है और क्या क्वालिटी है। अभी साइंटिफिक मैकेनिज्म इस तरह से डैवलप नहीं हो पाया है। मैं विदेशों की एजेंसी से बात कर रहा हूं कि उनके वहां क्या टैस्टिंग मैकेनिज्म है। हमारे यहां वैक्सीन की तीन स्ट्रेन हैं, इन तीनों का ट्राई वैक्सीन लगाते हैं। इसकी क्वालिटी टैस्टिंग के लिए जो मैकेनिज्म हमारे यहां है, आज की तारीख में विदेशों में इस तरह की वैक्सीन नहीं लगती है।

यह मामला बहुत कॉम्पलीकेटिड है, थोड़ा समय लगेगा। इसके आउटकम से यह फायदा होगा कि आगे चलकर क्वालिटी वैक्सीन लगेगी। हमारा उद्देश्य है 2025 तक वैक्सीन द्वारा बीमारी को कंट्रोल में ला सकें और जीरो एफएमडी रिपोर्टिंग हो।..."

4.51 On being asked about the steps being taken by the Department to make the State Biological Units GMP (good manufacturing practices) compliant, the Department submitted to the Committee :

"In order to have the State Biological Production Units to comply the GMP guidelines, under Assistance to States for Control of Animal Diseases (ASCAD) there is a provision to upgrade the State Vaccine Production Units to Good Manufacturing Practice (GMP) compliance. There are about 20 State Biological production Units, out of which 4 laboratories have been

upgraded to GMP and 3 laboratories are under process for upgradation to GMP for which Central government has aided the State Governments."

4.52 On being asked whether the Department aids any Local and / or Private Firm in working towards and developing innovative solutions to prevent and mitigate livestock diseases among cattle and to educate farmers and livestock owners on the same, the Department denied having any provision for giving any such aid to a local and/or private firm under its Livestock Health and Disease Control Scheme.

4.53 Regarding distribution and availability of Animal Vaccine at the grassroot level, the Department, in its written reply stated :

"Vaccines are fragile biologics, and even slight temperature changes can alter their potency. Therefore, under Livestock Health & Disease Control scheme, there is provision of maintenance of cold chain and other logistic support to undertake vaccination. Under ASCAD, FMD-CP and ESVHD components of Livestock and Health Control Scheme, the funds are provided to State Govt. for maintenance of cold chain infrastructure and equipment and purchase of deep freezers, bottle coolers, refrigerators, ice boxes, vaccine carriers, etc."

4.54 When asked about any change or up-gradation in policies concerning veterinary services and animal vaccines in the country post creation of a separate Ministry of Fisheries, Animal Husbandry and Dairying and a consequential formation of a new Department of Animal Husbandry and Dairying, the Department informed that there is no change in the present Animal Vaccine policy. However, 9 (nine) State Vaccine Production Units are proposed to be strengthened to GMP standards as per the State Action Plans. Central assistance to the extent of Rs.10 crore would be provided and any expenditure over and above will be borne by the State Governments concerned.

4.55 When asked about the status of availability of Animal Vaccines in the country vis-à-vis the requirement for each of the disease, the Department, in its written reply stated :

"The biggest impediment to growth of the livestock sector is the large-scale prevalence of animal diseases like FMD, PPR, Brucellosis, Classical Swine Fever, Avian Influenza,Newcastle Disease, African Swine fever,

Haemorrhagic septicaemia, etc., which adversely affect animal productivity. Under various programmes / components of this Scheme, efforts have been made for prevention and control of animal diseases of economic importance like Foot & Mouth Disease (FMD), Peste des Petits Ruminants (PPR), Brucellosis, Anthrax, Haemorrhagic septicaemia (HS), Black Quarter (BQ), Classical Swine Fever, Newcastle disease and etc. The Department is aware of the requirement of vaccines for animal disease control programmes. For example, there is requirement of about 982.00 Million doses of FMD Vaccine, 41.4 Million doses of Brucella vaccine, 223.14 Million doses of PPR, 18.12 Million doses of CSF vaccine for covering the entire eligible population. Sufficient production capacity of most of the required vaccines, except for Brucellosis and CSF, are available in the country. However, manufacturers are increasing their production capacity so as to meet the increased demand.

There are 20 State Veterinary Biological productions centres in the country which are under the control of the State Animal Husbandry Departments concerned. These production units are producing various vaccines against Haemorrhagic septicaemia, Blue Tongue, Classical Swine Fever, Anthrax, Black Quarters, Newcastle Disease, Rabies, Sheep and Goat Pox, Fowl Cholera, PPR, Fowl and Pigeon Pox, Enterotoxaemia, Duck Cholera, Duck Virus Hepatitis etc.

Apart from the aforementioned 20 State Veterinary biologicals, there are private vaccine manufacturers. However, the vaccines required to implement the disease control programmes are mainly manufactured by M/s. Indian Immunological, Hyderabad, M/s Brilliant Bio Pharma, Hyderabad, M/s.Biovet Pvt Ltd, Bangalore and M/s. Hester etc.

There are leading private vaccine manufacturers in the country. The vaccines required to implement the disease control programmes are mainly manufactured by these private manufacturers. The manufacturers have increased their production capacity and also are in the process of further augmenting them with the increasing demand of the vaccine. Moreover, one new private manufacturer i.e. M/s.Sanvita, has also established its animal vaccine manufacturing plant."

Efficacy of Animal Vaccines :

4.56 On being questioned about working towards developing more effective vaccines for FMD and Brucellosis, the impact of which could last longer than 6 months, the Department informed the Committee that the Department of Agricultural Research (DARE under MoA&FW) / ICAR are doing research on thermostable FMD vaccine and ICAR-IVRI is also engaged in research on an adjuvant which is supposed to impart immunity lasting for more than 6 months in the vaccine against FMD.

4.57 When asked by the Committee about the viability and benefits of thermostable vaccines, the Department, in its written reply, submitted that :

> "As per the studies carried out at ICAR so far, thermostable vaccine induces a strong antibody response after primary vaccination which lasts for at least 6 months' duration. Booster vaccination further enhances the antibody response and stays at elevated levels even after 6 months post booster. Thermostable Vaccine stored for 8 months when vaccinated in animals offered sufficient protection indicating the stability of vaccine. However, the evaluation studies of the thermostable vaccine is still underway at ICAR.-IVRI."

4.58 On being enquired about completion of evaluation studies of thermo-stable vaccine by ICAR and about its impact on the status, availability and efficacy of animal vaccines in the country, the Department in its written reply stated :

> "A thermostable FMD virus serotype "O" developed by ICAR-Directorate of FMD was evaluated for its suitability as vaccine candidate at ICAR-IVRI, Bengaluru. The study indicated the superiority of the thermostable virus as vaccine strain over the parent virus in terms of elicitation and duration of neutralizing antibody response. However, the potency testing of the vaccine candidate in trivalent form along with currently used serotype A and Asia-1 viruses and the immune response against all the three serotypes need to be further investigated.The thermostable FMD vaccine is expected to impact the quality of the vaccine in terms of enhanced shelf-life and immune response, and also reduced loss of virus antigen on disruption of cold-chain."

4.59 Further, when asked by the Committee about the purpose of Sero Survey / Sero Monitoring in respect of Animal Population and about the benefits from such findings, the Department in its written reply informed :

"Sero-monitoring is essential to assess the efficacy of vaccine or vaccination in the field. Sero-surveillance is essential to understand the prevalence of the disease. In case of FMD, sero-monitoring serum samples are collected before vaccination and 28 days post vaccination as pre-vac and post-vac serum samples, respectively for each round of vaccination. Sero-surveillance is performed 5 months after FMD vaccination once every year.

The sero-surveillance report in case of FMD is showing decreasing trend in many regions during last few years indicating that prevalence of disease is gradually going down. The Department shares the sero-surveillance reports with States and wherever there is an increase, the States are requested to undertake intensive vaccination programme and other related measures. This benefits accrued are taking measures based on the sero-survey reports and helps control of the disease in a better way and eventual aim of eradication. In case of Avian Influenza also the sero-surveillance helps in determining if the infection is prevalent in an area and based on the results the affected area is declared free."

CHAPTER - V

LEGISLATIVE BACK-UP IN ANIMAL HEALTH SECTOR AND RECENT DEVELOPMENTS

LEGISLATIVE BACK-UP IN ANIMAL HEALTH :

5.1 One of the most important aspects for prevention, control & containment of any animal disease is to have legislative back-up in place in the country as a long term measure. Government of India has enacted two Central Acts in this regard, namely, *'The Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009'* and '*The Livestock Importation Act, 1898'*.

5.2 The Prevention and Control of Infectious and Contagious Diseases in Animals Act- This Act has the following objectives :

- To prevent spread of economically important infectious and contagious diseases from one part of the country to another.
- To establish "Controlled" and "Eradicated areas" within the country in order to reduce economic losses on account of major economically important infectious and contagious diseases of livestock.
- To control animal diseases of public health significance on a national basis and promote import and export of animals and animal products by meeting India's international obligations.

5.3 The Act also envisages compulsory reporting of scheduled diseases in animals to the nearest Veterinary Institution and also isolation of infected animals and disinfection of premises & vehicles. Under this Act, State Governments have framed Rules that provide for legislative back up for detention of animals at check posts, compulsory vaccination and controlling movement of animals in the zone.

5.4 When asked about updated provisions under this Act in the wake of the Covid pandemic, the Department informed the Committee that this Act provides legislative back up for the control and eradication of livestock and poultry diseases, including zoonotic diseases and therefore, there is no updation in the provisions of the Act during the current pandemic.

5.5 The Livestock Importation Act, 1898 (Amended in 2001) – This Act empowers the Central Government to regulate, restrict or prohibit the import of

livestock and livestock products into India in order to prevent ingress of exotic animal disease through such import which are likely to impact human and animal health.

RECENT DEVELOPMENTS IN THE AREA OF ANIMAL HEALTH AND VETERINARY SERVICES :

Animal Husbandry Infrastructure Development Fund (AHIDF) –

5.6 The Government of India has recently set up the Animal Husbandry Infrastructure Development Fund (AHIDF) with a corpus of Rs. 15000 Crore for incentivising investments by individual entrepreneurs, private companies including MSMEs, Farmers Producers Organizations (FPOs) and Section-8 companies to establish – (i) Dairy Processing and value addition infrastructure ; (ii) Meat Processing and value addition infrastructure ; and (iii) Animal Feed Plants.

5.7 During the evidence meeting with the Committee, the Representative of the Department informed about measures being taken under the Animal Husbandry Infrastructure Development Fund (AHIDF) to attract and incentivise the private sector in the area of Animal Husbandry and Dairying. The Representative submitted before the Committee :

> **"..**प्राइवेट सैक्टर इनवाल्वमेंट के लिए हम लोगों ने यहां से अभी पिछले एक-डेढ़ सालों में एक प्रोग्राम चालू किया है**,** जो आत्मनिर्भर पैकेज में एनाउंस हुआ था**,** एनीमल हसबेंड्री इनफ्रास्ट्रक्चर डेवलपमेंट फंड। आज की तारीख में केंद्र सरकार से या स्टेट गवर्नमेंट से भी मेरे ख्याल से नहीं है**,** जो मेरी असेसमेंट है कि प्राइवेट सैक्टर की इनवेस्टमेंट को इनसेंटिवाइज करने के लिए एनीमल हसबेंड्री सैक्टर में कोई कार्यक्रम नहीं था। पहली बार एनीमल हसबेंड्री इनफ्रास्ट्रक्चर डेवलपमेंट फंड हमने बनाया है। प्रोसेसिंग और वैल्यू एडीशन का जो इनफ्रास्ट्रक्चर है**,** इसको इनसेंटिवाइज करने के लिए यह स्कीम है**,** जिसमें इंट्रेस्ट सबवेंशन का कार्यक्रम है। बैंक से उसको लोन दिया जाता है। एनीमल हसबेंड्री इन्फ्रास्ट्रक्चर डेवलपमेंट फंड **15** हजार करोड़ रुपये का क्रिएट किया गया है और इसमें कहा गया है कि अगले तीन सालों में इससे फंड की डिस्ट्रीब्यूशन होगी। यह लोन की स्कीम है। इसमें इंट्रेस्ट सबवेंशन **3** प्रतिशत हम देते हैं। अगर वह प्रोजेक्ट एमएसएमई गाइडलाइन के अंतर्गत पड़ता है तो उसमें क्रेडिट गारंटी की सुविधा भी हम लोग दे रहे हैं**,** जिसमें **25** पर्सेंट तक प्रिंसिपल एमाउंट की क्रेडिट गारंटी भारत सरकार दे रही है। यह एनीमल हसबेंड्री इनफ्रास्ट्रक्चर डेवलपमेंट फंड है**,** जो फीड मिल प्रोसेसिंग यूनिट्स के

इनफ्रास्ट्रक्चर को और मिल्क और मीट के प्रोसेसिंग और वैल्यू एडीशन इनफ्रास्ट्रक्चर के प्राइवेट इनवेस्टमेंट को इनसेंटिवाइज करने के लिए यह कार्यक्रम चालू किया गया है।.."

Performance of Veterinary Services (PVS) Evaluation of India conducted by OIE - World Organization for Animal Health (OIE-PVS) –

5.8 The World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) Pathway of evaluation of Veterinary services, also called as the OIE PVS Pathway evaluation, allows Member countries to support Veterinary Services (VS) in establishing the current level of performance, identifying gaps and weaknesses in the ability to comply with OIE international standards and forming a shared vision with interested parties (including the private sector), with the goal of establishing priorities and securing the investments needed to carry out strategic initiatives. The overall objective is to improve governance of VS to enable to contribute effectively for achieving the priorities and to improve human and animal health and welfare.

5.9 On Government of India's request, the PVS Evaluation of India was conducted by OIE (World Organization for Animal Health) in two phases from 19th February to 9th March, 2018 and from 11th April to 2nd May, 2018. The OIE-PVS Mission Team visited 21 States and 2 Union Territories of India. During their visit, the Mission evaluated different veterinary institutions like Veterinary Universities, Veterinary Colleges, ICAR-Animal Science institutes, Disease Diagnostic Laboratories, Biological Production Units, Semen Stations, Livestock Farms, Slaughter houses, Feed Mills and Veterinary Hospitals & Dispensaries etc. and interacted with the different stakeholders and livestock farmers across the country. The OIE-PVS Evaluation Report is available on the OIE website.

5.10 Overall, the assessment of the Veterinary Services of India against the OIE standards is that they operate at a variable level with some great strength and unique approaches but also some significant limitations and there are opportunities for improvement. Key recommendations of the PVS Evaluation are available at **Annexure - XV.**

5.11 When asked about the steps taken by the Department to implement key recommendations of the OIE-PVS (The World Organization for Animal Health - Performance of Veterinary Services) Evaluation Report, particularly the Recommendations relating to Human Resources, Laboratories, Food Safety, Zoning and Compartmentalization and International Relations, the Department in its written reply informed the Committee that :

"The steps taken by the Department to implement key recommendations of the OIE-PVS Evaluation Report, particularly relating to Human Resources, Laboratories, Food Safety, Zoning and Compartmentalization and International Relations include -

a) Holding meetings with States/UTs vis-à-vis compliances with our communication regarding key recommendations of the OIE-PVS Evaluation Report
b) Pursuing with States/UTs to adopt a strategy for proper documentation of activities undertaken with respect to the Animal Husbandry Sector and for wide publicity thereof
c) Pursuing with States/UTs for harmonization of the Para-vet education
d) Emphasizing on animal identification thereby ensuring traceability
e) Pursuing with States/UTs for filling up vacant posts of Veterinarians and Para- veterinarians to ensure effective service delivery
f) Pursuing with States/UTs for ensuring timely disease reporting
g) Emphasizing on conducting CVEs regularly
h) Pursuing with States/UTs for greater emphasis on risk analysis and epidemiology
i) Pursuing States/UTs for up-grading Disease Diagnostic Laboratories
j) Emphasizing on establishment of Mobile Veterinary Clinics to ensure last mile veterinary service delivery
k) Pursuing with States/UTs to increase emphasis on technical, financial and administrative review of on-going Schemes on regular basis
l) States/UTs requested to compare the country PVS Evaluation report with the PVS Mock Evaluation report and report major gaps for their early address."

5.12 During the evidence of the Representatives of the Department held on 11th January, 2021, one of the Representative apprised the Committee about a detailed Report on actions taken by the Department on the Recommendations of the OIE-PVS Report and submitted :

"..**जहां तक ओआईई मिशन की बात है, जिसका स्पेसिफिक रिकमेंडेशन ऑन एक्शन प्लान आया था, इसकी एक डिटेल्ड रिपोर्ट आपको अलग से दे देंगे कि उसकी क्या रिकमेंडेशंस थीं और हमने क्या एक्शन लिया।**.."

Animal Health vis-à-vis Human Health –

5.13 When asked if the Department encourages States to formulate clear policies and guidelines to educate veterinary service professionals about the seriousness of misuse of veterinary drugs and hormones and about the fallouts of such misuse on human health, the Department in its writted reply informed the Committee :

"Following steps are being undertaken by the Department to create awareness regarding drug abuse and control of zoonotic diseases for protection of animal health.

a. To prevent spread of economically important infectious and contagious diseases from one part of the country Government of India has enacted a Central Act in this regard namely, 'The Prevention and Control of Infectious & contagious Diseases in Animals Act, 2009'
b. Advisories are issued to all the State Governments / Union Territories regarding the judicious use of antibiotics in animal treatment and stop the use of antibiotics as growth promoter in animal feed.
c. Advisories are issued to the states for further guidance of poultry farmers from time to time on various aspects of disease control, surveillance and importance of bio-security.
d. Advisory also sent to Ministry to Health and Family Welfare for restriction of use of antibiotics in food producing animals."

5.14 On being questioned about details of studies conducted by the Department to determine the ill-effects of Animal Drug Abuse in poultry farming and livestock rearing on Human Health, the Department in its written reply submitted :

"No such study has been conducted by the Department to determine the ill-effects of animal drug abuse in poultry farming and livestock rearing on human health. However, FSSAI being the regulatory body and National Codex Control Point in respect of food safety and standards, regularly notifies and develops tolerance limits of drugs and antibiotics and MRLs (Maximum Residual Limits) of pesticides in foods. Moreover, ICAR, Directorate of Poultry Research, Hyderabad, is conducting research on medicinal plants to use as replacements for antibiotic growth promoters.

ICAR with the support of FAO has started a network programme on Antimicrobial Resistance (AMR) Surveillance in food, animals and aquaculture since 2017, with 21 labs (12 in animal sciences and 9 in fisheries sciences) working in technical collaboration with FAO. ICAR-Indian Veterinary Research Institute, Kolkata / Izatnagar and ICAR-National Bureau of Fish Genetic Resources (NBFGR), Lucknow are functioning as the coordinating centres/Institutes for veterinary and fishery sectors, respectively. Successful implementation of the program will be a key component of the National Action Plan on Anitmicrobial Resistance (AMR) for protection of Human Health, Animal Health and Food Safety in India and can also be a component under 'One Health'. The objectives of Indian Network for Fisheries and Animal Antimicrobial Resistance (INFAAR) are –

a) To improve awareness and understanding of antimicrobial resistance through effective communication, education and training;
b) To strengthen the knowledge and evidence base through surveillance and research;
c) To reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures;
d) To optimize the use of antimicrobial medicines in human and animal health; and

e) To develop the economic case for sustainable investment that takes account of the needs of all countries and to increase investment in new medicines, diagnostic tools, vaccines and other interventions.

Presently the network laboratories are working on following key / indicator microbes :

(i) Livestock sector: *E. coli, Staphylococcus aureus*

(ii) Fisheries sector: *E. coli, Aeromonas, Vibrio .*"

5.15 Further, apprising the Committee about measures taken to prevent AMR in livestock and a resultant damage to Human Health, the Representative of the Department, during the evidence meeting apprised the Committee as follows :

"..सर, आपने दो बिंदु और उठाए थे। एक बिंदु था, जिसे टेक्निकल भाषा में 'एंटीमाइक्रोबायल रेसिस्टेंस' का नाम दिया गया है। जो कीटनाशक या एंटीबायोटिक दवाएं दी जाती हैं, उसके लिए जो अवेयरनेस जनरेशन है, उसे हम लोग कर रहे हैं, ताकि इस तरह की दवाइयों का उपयोग कम हो। आयुष विभाग के द्वारा भी हम लोग यह कैंपेन चला रहे हैं कि आयुर्वेदिक दवाइयां दी जाएं, जो कि हानिकारक न हों, दूध और खाने में ट्रांसफर न हों और उससे जानवरों को ही नहीं, मनुष्यों को भी जो नुकसान होता है, उसे कम किया जा सके।.."

5.16 The concept of 'One Health' envisages an integrated approach towards Animal Health, Human Health and the environment. When asked about the details of measures adopted by the Department under the 'One Health' Initiative in the healthcare practices in our country, the Department in its written reply submitted that :

"The One Health Initiative is a worldwide concept / strategy for expanding interdisciplinary collaborations and communications in all aspects of Health Care for humans, animals and the environment, etc. The synergism achieved will advance health care for 21st century and beyond by accelerating biomedical research, public health efficacy by expanding the knowledge base.

The following steps are being undertaken by the Department to tackle the issues related to spread of zoonotic diseases in the country :

a. To prevent spread of economically important infectious and contagious diseases from one part of the country Government of India has enacted a Central Act in this regard namely, 'The Prevention and Control of Infectious & Contagious Diseases in Animals Act, 2009'

b. Advisories have been issued to States/UTs from time to time to take necessary measures to prevent the spread of zoonotic diseases.

c. The Department has issued bio-security manual for the poultry farms to prevent zoonosis. Further, the Department has also developed action plan for prevention, control and containment of Avian Influenza which is a zoonotic disease.

d. The Department in collaboration with the US Centres of Disease Control and Prevention has been organising One Health Table Top exercise on emerging zoonotic diseases involving officers from Human Health and nimal health sectors.

e. For real time reporting of animal diseases including zoonotic diseases, the Department has got the web based reporting system called the National Animal Disease Reporting System (NADRS)

f. In addition to this,multi-sectoral coordination approach is being adopted for prevention, control and containment of the diseases. Efforts has been made by the Department to establish well co-ordinated Surveillance for Zoonotic diseases like Avian Influenza and Pandemic Influenza (H1N1), Glanders, Rabies, Crimean-Congo Haemorrhagic Fever (CCHF) etc. with the other Departments through the following joint mechanisms:

   i. Joint Monitoring Group on Avian Influenza with Ministry of Health and Family Welfare having representative from DADF, WHO, NCDC, Ministry of Environment and Climate Change, ICMR etc.
   ii. Task Force on Swine Influenza with Ministry of Chemicals & Fertilizers
   iii. Joint Action Committee on Rabies

iv. Joint working group on AMR

In addition to the above, regular meetings are held with Ministry of Health & Family Welfare and other stake holders. The Department has good co-operation with Ministry of Health & Family Welfare. As a part of inter-sectoral coordination, one Veterinary Officer for each district and each State has been nominated as a Member of the District and State level Rapid Response Team, respectively, for control and containment of major zoonotic diseases like Rabies, etc."

OTHER ISSUES REGARDING VETERINARY SERVICES AND ANIMAL HEALTH :

Lack of facilities to provide Free Veterinary Aid to Livestock Owners

5.17 On being asked if the Department has any Health Scheme / Panel for reimbursement of costs borne by Livestock or Poultry Owners while availing treatment for their diseased cattle or poultry**,** the Department denied having any such facility at present and also informed that there is currently no such policy. The Department also informed that under the LH&DC Scheme, there is a provision for free vaccination and deworming for livestock, poultry as well as for companion animals, however, there is no provision for free veterinary aid.

5.18 During the evidence meeting, the Representative of the Department apprised the Committee about the lack of any Central Government policy for recovery of losses due to diseases in livestock and submitted :

"..सर, जहां तक नुकसान की भरपाई का सवाल है, उसके लिए केन्द्र सरकार का कोई कार्यक्रम नहीं है। अगर समय-समय पर बीमारियां हो रही है, तो इनके लिए स्टेट गवर्नमेंट को अपने स्तर पर इस तरह के कार्यक्रम करने होते हैं।.."

Grievance Redressal & Easy Availability of Information for Livestock Owners

5.19 When asked about ways in which the Department ensures a grievance redressal platfrom for livestock owners and poultry farmers, the Department in its written reply submitted that :

"Centralized Public Grievance Redress and Monitoring System (CPGRAMS) is an online web-enabled system over NICNET developed by

NIC, in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG) which facilitates Ministry /Departments/ Organizations to receive, forward and monitor grievance from various sources. In addition, the States routinely organize Famers' Contact Meetings to discuss and redress the needs of livestock owners at Block Level (Raitha Samparka Sabha)."

5.20 When the Committee asked if the Department has any provisions for a 'One Stop Center' for Livestock Owners at the village and block level for raising awareness regarding nutritious feed / fodder, timely vaccination, prevention and spread of livestock diseases, location of veterinary hospitals or dispensaries etc., the Department informed that it assisted the UMANG portal wherein online information in respect of location of veterinary hospitals / dispensaries etc. would be available. The Department, however, did not submit any reply regarding any platform for providing relevant information to livestock and poultry owners about feed/fodder, vaccination or other general queries.

Lack of inclusivity in Veterinary Services

5.21 Keeping in view of the availability of milk from unconventional sources such as camel, goat, yak etc., on being asked if the Department has any mechanism to cover these animals under veterinary healthcare services and vaccination programmes currently operational within the country, the Department failed to furnish any specific information and instead replied :

"Veterinary healthcare services for animals such as camel, goat, etc is being given by the State Governments. However as far as vaccination for sheep and goat is concerned, this Department is implementing *Peste des Petits Ruminants*-Control Programme (PPR-CP), which is currently operational and involves vaccination of all susceptible goats & sheep."

PART – II

OBSERVATIONS / RECOMMENDATIONS

SCHEME ON LIVESTOCK HEALTH & DISEASE CONTROL (LH&DC)

1. The Committee note that the Scheme on Livestock Health and Disease Control (LH&DC) was formulated with a view to provide financial assistance as the Central share to States / UTs for control & containment of animal diseases, with a funding pattern of 60:40 between Centre and State (90:10 for North Eastern & Himalayan States and 100% for UTs). The Committee, however, are concerned to note the huge difference between figures on BE proposed and Budget allocated under the LH&DC Scheme from the year 2017-18 up to 2021-22. Against a proposed allocation of Rs.1553.03 crore, the Department was allocated a mere Rs.298.77 crore at the BE Stage in 2017-18 and this trend of drastic reduction at the BE Stage has continued up to the year 2021-22 with allocated BE being Rs.370.00 crore as against a proposed amount of Rs.909.39 crore. Moreover, funds allocated at RE Stage were further reduced from the years 2018-19 up to 2020-21. While expressing satisfaction over the total percentage expenditure of funds allocated to the Department, that has constantly been over 98% from 2017-18 to 2019-20, the Committee note with discontent that under some sub-components of LH&DC Scheme nil financial progress and zero physical achievements have been made at some point during the period from 2015-16 up to 2020-21.

The Committee are constrained to note that the Sub-components on Professional Efficiency Development (PED), National Animal Disease Reporting System (NADRS) and Classical Swine Fever Control Programme (CSF-CP) show 'Zero Allocations' for the year 2020-21. The Nil achievement of Physical Targets regarding vaccination doses to pigs in NE States under CSF-CP during 2020-21

and Zero Trainings conducted under PED during the years 2015-16, 2016-17 and also during 2020-21 further add to the displeasure of the Committee. The Committee further express utter dismay while taking note of the most significant fact that no Veterinary Hospitals / Dispensaries were strengthened or established under the Establishment and Strengthening of existing Veterinary Hospitals / Dispensaries (ESVHD) Sub-component of LH&DC Scheme during the years 2017-18 and 2020-21 as well as nil achievements made regarding searching of village/stock routes under the Sub-component on National Project on Rinderpest Surveillance and Monitoring (NPRSM) during the years 2015-16 and 2017-18. While the expenditure pattern of the Department with respect to the LH&DC Scheme, in totality, shows near 100% utilization of allocated funds, the status of financial progress and physical achievements under the aforementioned sub-components raise serious concerns with the Committee. Taking a negative view of such a misleading approach of the Department, the Committee strongly desire that necessary explanation be furnished with regard to non-achievement of Physical and Financial Targets with respect to States and UTs under the LH&DC Sub-components so far and also recommend the Department to take stock of the situation regarding effective implementation of the Scheme Sub-components at the grassroot level. On the issue of drastic cuts under the Scheme at the BE Stage, the Committee recommend the Ministry of Finance to bear in mind the proposed allocation projected by the Department and make fund allocations commensurate with the needs of this Department so that important Schemes and Programmes do not suffer for want of funds. The Committee would like to be apprised of the actions taken by the Department in each of these areas and the progress made therein.

STATUS OF VETERINARY INFRASTRUCTURE IN THE COUNTRY

2. While noting the increase in total number of Veterinary Institutions in the country from 64,990 in 2019-20 to 65,894 in 2020-21, the Committee observe that the total number of Veterinary Institutions in the country have increased from 2019-20 to 2020-21, however, the number of Veterinary Hospitals / Polyclinics, Veterinary Dispensaries and Veterinary Aid Centers / Mobile Veterinary Dispensaries have been inconsistent in various States / UTs during these two years. While Arunachal Pradesh, Kerala and Jammu Kashmir have seen a reduction in the number of Veterinary Hospitals / Polyclinics from 2019-20 to 2020-21, States like Himachal Pradesh, Maharashtra and Madhya Pradesh have seen a decrease in the number of Veterinary Dispensaries in the year 2020-21 as compared to the previous year. Moreover, a number of States including Arunachal Pradesh, Nagaland, West Bengal, Goa, Karnataka, and Tamil Nadu show decrease in the number of Veterinary Aid Centres / Mobile Veterinary Dispensaries during 2020-21 as compared to 2019-20. Additionally, Delhi and Chandigarh do not possess a single Veterinary Aid Centre / Mobile Veterinary Unit to cater to the needs of the Livestock Owners. Though the Department informed the Committee that such reduction in figures is due to a few States revising the number of Veterinary Institutions based on their types as well as their nomenclature, the Committee express dissatisfaction over the present status of inadequacy of the Veterinary Infrastructure in the country.

3. The Committee further note that though the the average number of villages per Veterinary Institution in the country stood at 9.86 until 2018-19, a closer look at such data for individual States reveals a different picture. Jharkhand has as many as 36.3 villages per unit Veterinary Institution, Meghalaya has 28.5 villages per

Veterinary Unit whereas Assam, Madhya Pradesh and Uttar Pradesh have 21.6, 20.2 and 18.2 villages per Veterinary Unit, respectively. Moreover, according to the recommendation of the National Commission on Agriculture (NCA) in 1976, there ought to be at least one Veterinary Doctor / Institution for 5000 cattle units by the year 2000. With the present population of livestock in the country being 535.78 million, going by the recommendation of the NCA, there is a need for approximately 1,07,156 Veterinary Institutions in the country as opposed to the present number of 65,894. Evidently, an exponential increase in the population of Livestock has far outstripped the number of centres offering veterinary care in the country. This inadequacy in Veterinary Infrastructure not only affects the quality of Livestock and outreach of Government Schemes and Programmes to intended beneficiaries but also hampers the growth potential of the Livestock Sector, thus dampening its economic output. Dismayed to note this massive shortfall in Veterinary Infrastructure in the country, the Committee strongly recommend the Department to employ strict measures in cooperation with States and UTs, aimed at increasing the strength of Veterinary Institutions not just at the macrolevel but also at the microlevel in terms of villages per unit Veterinary Institution in each of the States and UTs and aspire to have at least one multi-speciality Veterinary Hospital in each district of the country. The Committee would like to be apprised of the action plan along with the timeline drawn up by the Department to tackle all the aforesaid issues highlighted by the Committee.

ESTABLISHMENT AND STRENGTHENING OF EXISTING VETERINARY HOSPITALS AND DISPENSARIES (ESVHD)

4. The Committee note that the Department provides financial assistance to States / UTs to set up Infrastructure for new Veterinary Hospitals and Dispensaries and to strengthen / equip the existing ones as well as run Mobile Veterinary Units

(MVUs) under the Sub-component on 'Establishment & Strengthening of Existing Veterinary Hospitals and Dispensaries (ESVHD)' of the LH&DC Scheme. In this context, the Committee note that an amount of Rs.351.20 crore was provided to different States/UTs under the ESVHD Sub-component since inception of LH&DC Scheme in August, 2010, a sum of Rs.27.14 crore was provided for the duration from 2017-18 up to 2020-21. However, a closer look at the State and UT-wise details of funds released under ESVHD from 2017-18 to 2019-20 reveals that less than one-fourth the total number of States/UTs received an allocation under the ESVHD Sub-component of LH & DC Scheme during each of these years. The Committee further note that although a countrywide achievement of establishing and/or strengthening 154 Veterinary Hospitals / Dispensaries was made from 2017-18 to 2019-20 against a cumulative target of 170, individual figures for States and UT paint a totally different picture. Whereas for the year 2017-18, 'Zero Veterinary Hospitals/Dispensaries' were established against a target of 70, during 2018-19, however, as against a target of 70 there was an establishment of 112 Veterinary Hospitals/Dispensaries. Nevertheless, this was limited to just one fourth the total number of States/UTs - with the remaining showing 'Zero Achievements'. Furthermore, a total of 42 Veterinary Hospitals/Dispensaries were strengthened or established during 2019-20 against a target of 30 and less than one fourth the number of States/UTs formed part of this achievement. It is clearly evident that cumulative figures for Financial Allocations and physical achievements under ESVHD Sub-component of LH&DC Scheme are not only misleading but also in stark contrast to the allocation and Physical achievements of individual States/UTs. The Committee note that while the responsibility of setting up Veterinary Hospitals / Dispensaries lies with individual State Governments, that of ensuring complete utilization of released funds and assessment of Physical

Performance corresponding to each State/UT lies with the Department. Deprecating the current status of implementation of the ESVHD Sub-component in individual States and UTs, the Committee strongly recommend the Department to take necessary action to ascertain that funds released to States/UTs under ESVHD Sub-component are used for the intended purpose and that accountability is ensured in case of poor performance with regard to Physical Targets under this Sub-component of LH&DC Scheme. The Committee would like to be apprised of actions taken in this regard and also of the State and UT-wise details of latest achievements thereunder.

5. While appreciating the efforts of the Department regarding dovetailing of funds under ESVHD Sub-component with that of Rashtriya Krishi Vikas Yojana (RKVY), Rural Infrastructure Development Fund (RIDF) and that of MPLAD Funds to enhance resources to cater to Veterinary Health Services in States/UTs, the Committee feel that efforts of the Department need to be focused on identifying the most vulnerable States/UTs and encouraging them to avail funds for strengthening Veterinary Infrastructure under the said arrangement. While observing the release of Rs.1636.70 crore towards proposals under RKVY-State Level Sanctioning Committee (RKVY-SLSC), the Committee are constrained to note that of the 10 major deficient States in Veterinary Infrastructure identified in January, 2019, only 7 have submitted proposals for receiving such funds. The remaining three States of Gujarat, Maharashtra and Rajasthan witnessed a percentage deficit of 82.7%, 57.9% and 54.3% respectively, with Gujarat being the top-most deficient in Veterinary Infrastructure among the 10 States in January, 2019. The Committee feel that such a huge deficit in Veterinary Infrastructure and Services not only hampers the quality and output of the Livestock Sector of these States but also deprives

individual Livestock Owners of basic facilities regarding health, upkeep and maintenance of cattle, poultry and other Livestock while also denying them the opportunity to optimize their output potential. The Committee, therefore, recommend that measures for positive reinforcements be devised to encourage States and UTs to not only submit proposals for funds but also to utilize these in the best possible manner to upgrade or establish necessary Veterinary Infrastructure. The Committee would like to apprised of actions taken and progress made by the Department in this direction.

MOBILE VETERINARY UNITS (MVUs)

6. While recognizing the need for increasing accessibility of Veterinary Services even to the remotest areas in the country, the Committee note that some of the States with difficult terrains such as the North Eastern States and West Bengal received an amount of Rs.69.67 crore and Rs.16.95 crore, respectively, under the ESVHD Sub-component since inception of the LH&DC Scheme. However, for the duration of three years from 2017-18 to 2019-20, three of the North Eastern States along with West Bengal received Zero allocation. The Committee are perplexed to note this disparity in figures and desire the Department to explain the reasons behind such a contrast and also its effect on the viability of Mobile Veterinary Units (MVUs) within these States. Currently, there are 1284 Mobile Veterinary Units operational within the country and managed by respective States/UTs. The Committee note that a Mobile Veterinary Unit has a basic diagnostic and treatment facility for animals along with a provision for sample collection / transportation from the field and is thus, capable of functioning as a Veterinary Aid Center at the grassroot level while also providing doorstep delivery of Veterinary Services especially in remote/border and inaccessible areas. The

Committee are, however, disconcerted to note that despite their immense potential, Mobile Veterinary Units continue to remain at a nascent stage of planning and execution as the Department has failed to evolve a method regarding maintenance, upgradation and utilization of MVUs while also being unable to ascertain the specific role of MVUs regarding disbursing important information related to vaccination and livestock management. The Committee are dissatisfied with this half-hearted approach of the Department and recommend that a fully-functional pragmatic and holistic Plan be evolved keeping in mind the aforementioned issues with respect to Mobile Veterinary Units.

During the evidence, the Representative of the Department apprised the Committee of a Scheme proposed for setting up of MVUs under the LH&DC Programme and about the need for a separate allocation to this effect. Recognizing the importance of having a focused Scheme for Mobile Veterinary Units in the country, the Committee feel that lack of resources would not only pose hindrances in implementation of the Scheme but also impede the progress of the Department in enhancing the accessibility of Veterinary Services in the country. The Committee, therefore, recommend the Ministry of Finance to provide separate allocation to the Department for its proposed Scheme on Mobile Veterinary Units and desire to be apprised of the serious efforts made by the Department in this direction.

7. The Representative of the Department informed the Committee about the investments made by Milk Unions, Milk Federations and Cooperative Societies in augmenting Veterinary Infrastructure, such as in case of Mobile Dispensaries in Gujarat. Nevertheless, such instances are only few and far between as Private Sector Investments in Veterinary Services continue to be negligible. While realising

the scope of advantages from involvement of Private Sector in operation and maintenance of MVUs, the Committee feel that sincere efforts need to be made by the Department to attract and involve Private players in this area of Veterinary Services. Steps like increasing expenditure on running Mobile Dispensaries and experimenting with PPP models in MVUs on pilot basis in a few States/UTs would encourage the participation of private players. The Committee, therefore, recommend the Department to formulate an action plan and take necessary measures to draw Private Sector Investments in Veterinary Services and Infrastructure, particularly in the area of Mobile Veterinary Units. The Committee would like to be apprised of the progress made in this direction.

DISEASE INVESTIGATION AND REPORTING

8. The Committee observe that at present there are 256 State Laboratories, 50 Veterinary College Laboratories, 33 ELISA laboratories, 5 Regional Disease Diagnostic Laboratories (RDDLs) and 1 Central Disease Diagnostic Laboratory (CDDL) for the purpose of animal disease investigation and reporting in the country. The Committee further note that at the village level, some States/UTs have a provision for Mobile Veterinary Units (MVUs) providing basic diagnosing facilities, however, percolation of MVUs across all villages in all States/UTs still remains an issue and this further translates to a lack of basic diagnostic services at the village level in most States/UTs. Even for those villages having access to MVUs, detailed disease investigation of Livestock Disease is still time taking with collected samples being transported to the Block/District/State level testing facility. The procedure thus involved is not only inconvenient to the Livestock Owners but also time consuming and could lead to potential threats of disease spread or delayed treatment post disease investigation. Taking a concerned view of the

matter, the Committee feel that recruiting trained manpower and specialized facilities at the grassroot level will not only lessen the burden on the Diagnostic facilities at the District/State level but also ensure effective utilization of precious time and limited resources which can then be directed towards treatment and management of animal diseases. The Committee, therefore, recommend that the Department work towards ensuring availability of MVUs at the village level and to enable differential diagnostic facilities within these MVUs along with availability of trained staff and technicians to cater to the specialized nature of the job. The Committee would like to be apprised of actions taken by the Department in this direction and State/UT-wise details of progress made therein.

9. While appreciating the efforts of the Department regarding upgradation of the Web-based platform of National Animal Disease Reporting System (NADRS) to an android based mobile application NADRS 2.0, the Committee feel that this was a much needed step to enable real time reporting of animal diseases and quick flow of information facilitating quick action. The Committee are, however, perturbed to note that the financial allocation for NADRS Sub-component of LH&DC Scheme went from Rs.6.79 crore in 2019-20 to Zero in 2020-21 and despite being upgraded to NADRS 2.0, the number of Active Nodes for updating information at the Block level remained at 7032 in 2019-20 and 2020-21. The Committee therefore, recommend the Department to take necessary measures to ensure adequate financial allocation and consistent development of physical parameters of the National Animal Disease Reporting System. The Committee desire to be apprised of the reasons behind 'Nil Allocations made to NADRS in 2020-21 and would also like to be informed about progress made in this regard.

10. The Committee are pleased to note the additional and highly skilled Laboratory facilities for animal disease diagnosis and surveillance available at the Indian Veterinary Research Institute (IVRI), Izatnagar and International Center for Foot and Mouth Diseases (IC-FMD), Mukteshwar; National Institute of Animal Health (NIAH), Baghpat; National Institute of High Security Animal Diseases (NIHSAD), Bhopal; Directorate on FMD, Mukteshwar; National Institute for Veterinary Epidemiology and Disease Informatics (NIVEDI), Bengaluru; National Dairy Development Board (NDDB), Anand; and the Regional centres of All India Coordinated Research Project (AICRP) on FMD under Indian Council of Agricultural Research (ICAR). The Committee also feel content to note that these institutes provide for robust forewarning systems for animal diseases based on data integration with Statistical Models. These Institutes along with the Regional and Central Disease Diagnostic Laboratories provide a solid base for efficient investigation and reporting of animal disease in the country. The Committee, however, feel that there is a need for Specialized Institutions to cater to the demands pertaining to Livestock residing in high altitude and arid regions of the country and also the need for a designated Regional Disease Diagnostic Laboratory for the same. The Committee, therefore, recommend the Department to explore the possibility of setting up Veterinary Infrastructure to cater to the aforementioned objectives and would like to be apprised of initiatives taken in this regard.

VETERINARY COUNCIL OF INDIA (VCI) AND VETERINARY EDUCATION

11. The Committee observe that the Veterinary Council of India (VCI) is a statutory body established under the Indian Veterinary Council (IVC) Act, 1984 and is responsible for regulating veterinary practice and ensuring uniform standards of

Veterinary Education in the country. The IVC Act of 1984 also provides for establishment of State Veterinary Councils (SVCs) with a similar mandate as that of VCI within individual States. The Committee further note that regulation of uniform standards in Veterinary Education is ensured through the Minimum Standards of Veterinary Education (MSVE) Regulations, 2016. Course curriculum pertaining to the Professional Degree course on Bachelor of Veterinary Sciences & Animal Husbandry (B.V.Sc. & A.H.) is revised by way of amendments to the MSVE Regulations, as recommended by an Executive Committee to the VCI, which, after consulting SVCs and State Governments are forwarded to the Department, that, post consultation with the Indian Council of Agricultural Research (ICAR) goes to approve and adopt such legislations into the MSVE Regulations, which were last amended thus in 2016. The Committee are pleased to note that revision of Course Curriculum for B.V.Sc. & AH is a well-thought out and elaborate procedure and that the Curriculum also includes a Compulsory Internship of one year duration to enable graduates to learn and pick practical skills on the field. The Committee, however, feel that the Degree course needs to be designed and remodelled as per International Standards of Veterinary Education and Services so that modern veterinary practices can be incorporated in the system early on. The Committee, therefore, recommend the Department to take steps to enable the VCI to identify and adopt International Standards in Veterinary Education followed by timely inspection of course curriculum. The Committee would like to be informed about action taken by the Department in this regard.

12. The Committee observe that a total of 54 Veterinary Colleges currently operational within the country have been providing admissions to the Professional Degree course on B.V.Sc. & A.H. through 4320 seats, 15% of which are filled through the All Indian Quota and the remaining 85% through respective 'State/UT

Quota'. However, considering the increasing population of Livestock and requirement of trained manpower for providing Veterinary Services, the present number of seats and Veterinary Colleges in the country are grossly inadequate and the Committee are of the opinion that merely increasing the number of seats in the Graduation course will not solve the problem of shortage of trained manpower. The Committee, therefore, recommend the VCI and SVCs to take actionable measures not only towards increasing the number of seats in existing colleges but also to towards recognising more number of Veterinary Colleges in the country while also taking steps for ensuring strict compliance to MSVE Regulations within the Colleges. The Committee would like to be informed about actions taken by the Department in this regard.

13. Veterinarians perform a crucial role in applying their skills to cater to a wide range of animals from livestock and companion animals to wildlife, essential for sustenance of the present-day world. At present, there is no such pre-eminent Veterinary College in the country to which other colleges can look to set the standards nor are there any Academic Staff Colleges to improve the skills and competency of University Teaching Staff and Field Veterinarians. Sensing the need to set a standard for Veterinary Education, Training and Practice, the Committee feel the need for having at least 4 Regional Academic Staff Colleges for every region to help develop skills of Academicians and Field Veterinarians, especially those at the start of their careers. The Committee also wish to have at least one Veterinary College established in the country with 100% funding from Central Government and which follows International Standards in Graduate Veterinary Education similar to those followed by Indian Institutes of Technology in the fields of Science and Engineering. The Committee, therefore, recommend the Department to work towards establishing at least one Academic Staff College for Teaching

Staff and Field Veterinarians and a Model Veterinary College that is Autonomous, follows International Standards of Veterinary Education and is directly under the control of the Department. The Committee would like to be apprised of initiatives taken and the progress made by the Department in this regard.

14. Expressing concerns over the problems of inadequate autonomy and lack of resources in the functioning of Veterinary Council of India and State Veterinary Councils, the Committee feel that the presence of Field Veterinarians, Academicians and Technical Experts as Members of the VCI and SVCs will enable these Bodies to have adequate representation and take a holistic view of situations, thus helping them to function more efficiently. The Committee feel discontent to note that the Department has not been able to go beyond conducting elections within the Councils for the posts of President and Vice President. Though the Department, in its written replies, has assured about addressing in a time bound manner the issues pertaining to greater involvement of VCI and SVCs in delivery of veterinary services, harmonization of Veterinary Education especially for para-veterinarians and sourcing of funds etc., there has been no headway in this direction. The Committee are further disappointed with the lack of a dedicated facility or an alternative body for regulation of para-veterinarians in the country. The Committee, therefore, recommend the Department to work towards drafting a roadmap to address issues concerning the VCI and SVCs while also coming up with a framework to establish as a capacity within the VCI or as an alternative body, a Regulator for governing and adequate representation of Para-veterinary professionals in the country. The Committee would like to be apprised of actions taken and progress made by the Department in these areas.

ETHNO-VETERINARY MEDICINE (EVM)

15. The Committee are pleased to note that the application of Indigenous Medicinal Knowledge to manage ailments in animals is being taken up by the Department as a separate curriculum in the name of Ethno-veterinary Medicine (EVM) as part of the B.V.SC. & A.H. Graduate Course. This Branch of Veterinary Medicine has the potential of preventing economic losses to Livestock Owners by providing simple and sustainable remedies for common ailments of Livestock and Poultry and thus reducing instances of drug overuse and Antimicrobial Resistance (AMR). Applauding the efforts of National Dairy Development Board (NDDB) in propagating the concept of EVM through the social media, booklets and posters in local vernaculars, the Committee also appreciate the attempts of the Department to form a Committee in collaboration with the AYUSH Ministry and NDDB for formalizing this discipline in Veterinary Science. During the evidence, the Representative of the Department informed the Committee about launching an e-Gopala App to educate Livestock and Poultry Farmers to identify and treat common ailments in animals using simple and effective remedies. While acknowledging the attempts of the Department to encourage sustainable methods of diseases management in animals, the Committee desire to be updated of progress made on this front and of the regulations formulated to facilitate the idea of Ethno-veterinary practices in Veterinary Science with a focus to stall antimicrobial resistance in Livestock and Poultry. The Committee would like to be apprised of action taken in this direction.

VETERINARY MANPOWER

16. The Committee note that the responsibility for providing basic infrastructure and recruiting qualified manpower in the Veterinary Services lies with the State Governments and that the Department, in its bid to ensure availability of Trained

Veterinary Manpower, has increased the number of recognised Veterinary Colleges to 54. Though the total number of annual Veterinary Graduates has gone up to 4320, the actual strength of field Veterinarians in the country remains at 28,328 against a sanctioned strength of 36,623. Further, the Actual Strength of Para-veterinarians in the country stands at 54,928 against a requirement of 78,013. This dire shortage of manpower has burdened the existing workforce such that there are 4915 cattle head units per registered Veterinarian and 8948 cattle head units per Veterinary Institute. The Committee also note that two of the significant reasons for this shortage of manpower can be attributed to the unprofitability of the area on Veterinary Services and also to the negligible involvement of private sector therein. Despite there being 5 Private Veterinary Colleges among the 54 that were recognized by the Central Government, Private Sector investments in the field remain inconsequential. Besides, the lack of motivation to join Veterinary Services may also arise from the seeming lack of demand in this Sector, which can be increased through restructuring the policies of the Central and State Governments and by considering the actual needs and tasks of sanctioned vacancies against a long term vision for the Veterinary Services Sector. The Committee, therefore, recommend the Department to employ corrective measures after undertaking rigorous Independent Evaluation of Schemes and Programmes run by the Centre and States with respect to output and cost effectiveness in terms of attracting Public Private Partnerships in Veterinary Services and bridging the gap between demand and availability of qualified manpower in the Sector. The Committee would like to be apprised of actions taken and progress made in this regard.

TRAINING OF VETERINARIANS & PARA-VETERINARIANS

17. The Committee note that the Scheme on Livestock Health and Disease Control (LH&DC), through its Sub-component on Professional Efficiency Development (PED), is responsible for providing 100% funds for functioning of Veterinary Council of India (VCI) and 50% funding to State Veterinary Councils (SVCs) for their operations including running their Continuing Veterinary Education (CVE) Programmes for training Veterinarians on latest technical developments; while the component on Assistance to States for Control of Animal Diseases (ASCAD) provides for in-service training to Veterinarians and Para-veterinarians. The Committee, however, are distressed to note that as per data submitted by the Department, 'Zero expenditure or financial progress' was made under the PED Sub-component during the year 2020-21 and the Physical Target in terms of CVE Trainings conducted during the year was also Zero. Moreover, State and UT-wise details of CVE Trainings conducted under PED Sub-component from the year 2017-18 to 2020-21 show that while no States/UTs conducted any training during the year 2020-21, those that did conduct CVE trainings from 2017-18 to 2019-20 were miniscule in number with Kerala being the only State to have conducted CVE Training Programmes continuously during all the three years. The Committee are further agitated with the reply of the Department that VCI lacks Guidelines or provisions specific to the CVE Training Programmes; and also with the ambiguity in the replies of the Department where, on one hand it has informed that VCI could not conduct CVE Programmes after 2008-09 due to manpower constraints and on the other, it has stated that VCI has not conducted CVE Programmes during the last three years. Programmes like CVE focus on improving staff competencies and capabilities through formal training and the Veterinary Council of India along with the State Veterinary Councils have been tasked with

conducting Continued Veterinary Education Programmes in the country but the performance of both these Bodies with regard to CVE has been dismal and the vagueness in the replies of the Department has only exacerbated the situation. Disapproving this half-hearted approach of the Department, the Committee strongly recommend that Proper Guidelines specific to CVE Trainings to be conducted by VCI and SVCs be laid down with a focus on incentivising State Veterinary Councils to conduct CVE Trainings routinely and that the Department take necessary steps to ensure that appropriate funds are released timely under the PED Sub-component of LH&DC Scheme. The Committee would like to be informed about action taken by the Department in this direction.

18. The Committee note that the VCI does not regulate Para-veterinarians, hence, the responsibility for in-service training and skill upgradation of Para-veterinarians lies on the ASCAD Sub-component of LH&DC Scheme, which receives 100% Assistance for conducting Training Programmes. The Department also informed the Committee that under the ASCAD Sub-component, financial assistance is provided to the Regional Disease Diagnostic Laboratories (RDDLs) to impart training to Veterinarians and Para-Veterinarians for extension of Veterinary Services / technologies to Livestock Owners at the field level. Appreciating the efforts of the Department regarding upkeep and management of high altitude animals through regular TSP Programmes being implemented by ICAR-IVRI in the Himalayan and North Eastern States, the Committee, however, express concern over the fact that despite having rampant annual occurrences of Avian Influenza in the country, the Department has failed to lay down separate and specific guidelines or provisions for VCI regarding training and education in the field of Poultry Farming, Poultry Health and Vaccination. The Committee, therefore,

recommend the Department to take necessary action to design Training Programmes based on prevailing situations in the country along with developing a robust framework for regular trainings to in-service Veterinarians and Para-veterinarians through ASCAD Sub-component of LH&DC Scheme. The Committee would like to be informed about steps taken by the Department in this regard.

VETERINARY RESEARCH

19. The Committee note that research in Veterinary Sciences is mostly carried out by the Indian Veterinary Research Institute (IVRI), Izatnagar, UP along with ICAR Institutes and Veterinary Colleges affiliated to Veterinary Universities or Agricultural Universities. The Department also informed that under the PED Sub-component of LH&DC Scheme funds are provided to Veterinary Council of India (VCI) and the State / UT Veterinary Councils (SVCs) for their establishment, cost of administration and for Continuous Veterinary Education (CVE) for VCI, SVCs and also for State Veterinary/Agriculture Universities. The Committee are, however, concerned to note that on being asked about area identified by VCI for collaboration and capacity building for Organizations to improve Veterinary Services delivery, the Department denied having taken any action to that effect. The Committee feel that accuracy and efficiency in our Veterinary Services can only be ensured by a sturdy Research base and this would not just require sincere efforts on the part of the Government but also the active involvement of Academicians, Research Institutes and the Private sector along with steady financial support for research activities. Applauding the efforts of the Government of India over the Budget Announcement of Rs.50,000 crore over 5 years for the National Research Foundation with a focus on Identified National-priority thrust areas, the Committee feel that inclusion of research activities in Veterinary

Sciences within the thrust areas would not just foster the growth and output of the Livestock Sector but also contribute to the objectives of the 'One Health' concept in the country. The Committee, therefore, recommend the Department to develop a pointed approach to encourage and support Veterinary Research Institutions in the area of academic and field research and to pursue with the Government of India to include R&D activities in Veterinary Sciences under the National-priority Thrust Areas and provide financial support accordingly. The Committee would like to be apprised of steps taken and progress made by the Department in this direction.

COMPONENTS OF LH&DC SCHEME FOCUSING ON VETERINARY VACCINE

20. The Committee note that Sub-components of the LH&DC Scheme focusing on Veterinary vaccination are Assistance to States for Control of Animal Diseases (ASCAD) which provides assistance to States / UTs for control of economically important diseases of livestock and poultry by way of immunization and strengthening of existing State Veterinary Biological Production Units, Peste des Petits Ruminants Control Programme (PPR – CP) - which involves vaccinating all susceptible goats & sheep and three subsequent generations and Classical Swine Fever Control Programme (CSF – CP) - which focuses on vaccination of the pig population of the North Eastern States of the country. Foot and Mouth Disease Control Programme (FMD-CP) and Brucellosis Control Programme (B-CP) were also two Sub-components under the LH&DC until 2019 but were later included in the new Central Sector Scheme on National Animal Disease Control Programme (NADCP). The Committee further note that Vaccination of animals against various Animal Diseases is carried out by the State / UT Governments with the Department supplements their efforts towards Vaccine and Vaccination Cost by proving funds under the LH & DC Scheme. However, achievements of Physical Targets under the

Sub-components in terms of vaccination in million doses during the year 2019-20, raise concerns with the Committee. Under FMD-CP, against a target of 456 million only 182.5 million doses were administered; under ASCAD only 71.2 million doses were administered against a target of 150 million; under PPR-CP 38.9 million doses were administered against a target of 50 million and under CSF-CP only 0.3 million doses of Vaccine in total were administered. The Committee are further constrained to note that despite the North Eastern States of the country being worst hit by the Classical Swine Fever, Vaccination doses administered under CSF-CP during the year 2020-21 stood at Zero and that the Department is yet to take a decision regarding technology transfer of Lapinized Cell Culture CSF Vaccine technology to Vaccine Manufacturers other than the Indian Immunologicals Ltd. (IIL), Hyderabad. The Committee, therefore, recommend the Department to take necessary steps to ensure timely Vaccination of Livestock in keeping with the targets set under LH&DC Sub-components and that Vaccine Manufacture may not be hampered due to Administrative Delays. The Committee would like to be apprised of steps taken in this direction.

NATIONAL ANIMAL DISEASE CONTROL PROGRAMME (NADCP)

21. The Committee note that NADCP is a Central Sector Scheme that envisages 100% Vaccination coverage of cattle, buffaloes, sheep, goats and pigs in the country for biannual vaccination against FMD and also envisages 100% Vaccination of female cattle and buffalo calves (4-8 months of age) once in a life time against Brucellosis. The Committee, however, are constrained to note that against a proposed allocation of Rs.2705.00 crore for the year 2020-21, the Department was allocated only Rs.1300.00 crore which was further reduced to Rs.858.00 crore at the RE stage. Further, for the year 2021-22, against a proposed

allocation of Rs.1560.00 crore, the Department was allocated only Rs.1100.00 crore for NADCP. The Committee are also dissatisfied to note that despite having sufficient vaccine availability to carry out the first round of FMD Vaccination of Cattle and Buffaloes, the first round of FMD Vaccination that was already delayed due to COVID-related lockdown since March, 2020 was further suspended due to the fact that the quality control test results of the vaccines against FMD did not comply with the set criteria. The Committee are also displeased with the 'Nil Achievements' made by the Department with regard to Brucellosis Vaccination. Further, the Representative of the Department informed the Committee that due to research hurdles, testing of Individual Batches of Vaccines is not possible. Expressing disappointment with the pace of implementation of the vaccination drive under the NADCP, the Committee recommend that the Department employ stringent measures with regard to Quality Testing and Vaccine Procurement while also setting realistic targets for Vaccination and focusing on their achievements within the given timeframe. The Committee would like to be apprised of action taken by the Department in this direction.

MANUFACTURE AND AVAILABILITY OF ANIMAL VACCINES

22. The Committee applaud the efforts and achievements of the National Dairy Development Board (NDDB) and its fully-owned subsidiary Indian Immunologicals Ltd. (IIL) in the areas of manufacture of Veterinary Biologicals including Animal Vaccine, its R&D collaborations with Premier Institutes within the country and abroad, its endeavours regarding awareness programmes for livestock farmers and Continued Veterinary Education (CVE) Programmes for Veterinarians and also its networking with Dairy Cooperatives which ensure delivery of Veterinary and input services at the farmers' doorstep. The Committee also appreciate the detailed

and well-defined procedure followed by the Department regarding Licensing for Manufacture and Marketing of Animal Vaccines.

The Department has informed about 20 State Veterinary Biological Production Centres, which are under the control of States and which produce vaccines. However, total self-dependence in the area of manufacture of Animal Vaccine is still elusive as shortfall in Vaccine production for Brucellosis and Classical Swine Fever still persists in the country and there is also a need to develop thermos-stable, long-duration immunity vaccine for FMD for which research is required. This problem is further exacerbated by the lack of Good Manufacturing Practices (GMP) compliance of some of the State Biological Units. Moreover, there exists a shortage of Veterinary Drugs in the country, as also admitted by the Representative of the Department during the evidence. The Committee observe that Animal Husbandry being a State subject, the onus of spreading awareness about Vaccination Programmes among Livestock Owners lies with the State Governments and so does the responsibility of drawing up Vaccination Plans based on Livestock Population and disease prevalence. However, manufacturing of Veterinary Drugs and Animal Vaccines is jointly undertaken by States, Central agencies and Private manufacturers and there still exists a shortage of these in the country and hence an issue of availability. Furthermore, despite the Department claiming to release Central share of funds to States for Centrally sponsored schemes like LH&DC after assessing their physical performance and monitoring the 60% of Central share, there still remain lacunae in the performance of Schemes affecting their implementation. Expressing concerns over such deficiencies, the Committee recommend the Department to thoroughly review the situation with all stakeholders such as State Governments, Regulating Agencies, Private manufacturers, etc. and work towards coming up with effective

solutions to the problems of administrative delays, testing issues and GMP compliance so that issues related to manufacturing and availability of animal vaccine and veterinary drugs in the country can be effectively resolved. The Committee would like to be apprised of the initiatives taken in this direction. The Committee would also like the Department to provide a 'Brief Report' on this matter.

QUALITY CONTROL IN ANIMAL VACCINE

23. The Committee note that Indian Veterinary Research Institute (IVRI), Izatnagar and the Chaudhary Charan Singh National Institute of Animal Health (CCSNIAH), Baghpat are Designated Centers for testing and quality control of Veterinary vaccines in the country. Though self-sufficiency in manufacture of Animal Vaccine has been attained except for Brucellosis and CSF Vaccines, the Committee are concerned to note that out of the 20 State Veterinary Biological Units, only 9 have been strengthened to Good Manufacturing Practice (GMP) standards. Besides, the quality testing of the unique Indian trivalent FMD Vaccine is a costly and time taking procedure. The Department informed the Committee about research regarding thermostability of the FMD Vaccine and that it is expected to enhance the quality of the Vaccine by increasing its shelf-life and immune response while reducing loss of virus antigen on disruption of cold-chain. The Department also briefed about Sero-surveillance report of FMD during the last few years showing a decreasing trend in many regions indicating reduced prevalence of the disease, however, this could turn out to be a painfully slow procedure if quality testing of the Vaccine is not expedited. The Committee, therefore, recommend the Department to facilitate R&D activities at the Designated Testing Centres and also at ICAR to enable them to develop a faster quality testing

mechanism for FMD and other Animal Vaccines so that more samples of Vaccine can be tested within less time and quality control measures can be exercised efficiently. The Committee would like to be apprised of progress made by the Department in this regard.

LEGISLATIVE BACK-UP IN ANIMAL HEALTH

24. The Committee note that there exist two Central Acts, 'The Prevention and Control of Infectious and Contagious Diseases in Animals Act, 2009' and 'The Livestock Importation Act, 1898', which respectively deal with compulsory reporting of Scheduled Animal Diseases along with Prevention and Spread of Economically Important Infectious and Contagious Diseases from one part of the country to another; and with regulation, restriction or prohibition of import of Livestock and Livestock Products into the country in order to prevent ingress of exotic animal disease. The Committee, however, sense the need for more Government legislation on some key areas related to Veterinary Services in the country, that, according to the Committee, interalia include indiscriminate use of veterinary drugs and hormones with minimal veterinary supervision giving rise to their residual accumulation in dairy and poultry products and also posing problems like Antimicrobial Resistance (AMR); policies on animal welfare and unethical treatment of animals for sale, at abattoirs, crossing State boundaries, etc. along with targeting & addressing cases of non-compliance; protocol for disposal of fallen animals and diseased cattle to prevent it from becoming a source of infection, etc. that require watertight legislation by the Department. The Committee, therefore, recommend the Department to take a holistic view of the problems plaguing Animal Health and work towards drafting relevant laws with a holistic

approach. The Committee would like to be apprised of measures taken in this direction.

ANIMAL HUSBANDRY INFRASTRUCTURE DEVELOPMENT FUND (AHIDF)

25. The Committee note that the Animal Husbandry Infrastructure Development Fund (AHIDF) has been created with a corpus of Rs.15000 crores for incentivizing investments by individual entrepreneurs and private companies, etc. to focus on processing and value addition in Livestock produce like dairy & meat and in cattle feed and fodder. The Committee, however, believe that the Animal Husbandry Infrastructure Development Fund can also be used to foster stronger public-private partnerships (PPP) in the area of Veterinary Services. The Department has often mentioned about the importance of making Veterinary Services a profitable enterprise by attracting private sector investments, which in turn, would increase the employability of the service. Further, private sector involvement in Veterinary Biologicals, Research, Education and Infrastructure, can be in terms of manufacture of veterinary drugs and animal vaccine, funding research initiatives, opening Veterinary Colleges, investing in Mobile Veterinary Units on the basis of PPP model and in upgradation of existing Veterinary Infrastructure etc. The Committee are delighted with the mere prospect of utilization of AHIDF to engage the private sector in Veterinary Services and therefore, recommend the Department to explore the possibility of employing resources from the Animal Husbandry Infrastructure Development Fund in Veterinary Services. The Committee would like to be apprised of developments in this regard.

PERFORMANCE OF VETERINARY SERVICES (PVS) EVALUATION OF INDIA CONDUCTED BY OIE – WORLD ORGANIZATION FOR ANIMAL HEALTH (OIE-PVS)

26. The Committee observe that the evaluation of performance of Veterinary Services in the country by the World Organization for Animal Health led to a number recommendations which came to be included in the OIE-PVS Report and which have been put together after an overall assessment of our Veterinary Services. The Committee observe that apart from the many recommendations of the OIE-PVS Report, emphasis is to be laid on the key recommendations along with some other areas including proper training and recruitment of human resource at every level; employing premier Veterinary Institutes like National Institute of High Security Animal Diseases (NIHSAD) Bhopal, Chaudhary Charan Singh National Institute of Animal Health (NIAH) Baghpat, Indian Veterinary Research Institute (IVRI), etc. for training in-service Veterinary and Para-veterinary professionals for skill upgradation and Continued Veterinary Education (CVE) Programmes; animal tagging for the purpose of traceability and Block-level formation of a database for Livestock Population on the lines of National Population Register (NPR) for which the Private Sector may also be involved; and the need to strive to maintain uniformity in implementation of Schemes and Programmes so that multiple channels of policy implementation do not result in unnecessary confusion. The Committee, therefore, recommend the Department to take necessary steps to meet the aforementioned objectives and to treat the OIE-PVS Report as a Guidebook to follow and implement with regard to the Veterinary Services. The Committee would like to be apprised of actions taken by the Department in this regard and would also like to be provided with the detailed Report on actions taken by the Department on recommendations of the OIE-PVE Report.

‘ONE HEALTH’ INITIATIVE

27. While noting that the concept of ‘One Health’ envisages an integrated approach towards Animal Health, Human Health and the environment, the Committee recognise the efforts made by the Department by way of enacting legislation regarding prevention and control of infectious animal diseases, Web-based Animal Diseases Reporting System – NADRS, encouraging use of Ayurvedic medicines in place of harmful antibiotics, etc. The Committee, however, realize that more work needs to be done regarding coordination and collaboration with other Ministries and Departments to optimise the role of Programmes and Policies with a focus on prevention of zoonosis; improved safety of animal origin foods; prevention and management of Anti-microbial Resistance (AMR) / Anti-microbial Use (AMU); conducting a study to determine the ill-effects of animal drug abuse in Poultry Farming and Livestock Rearing on human health; bringing in a legislation on Animal Welfare; and promotion of biosafety measures in all laboratories. The objectives defined by the Department under the Network Programme on Antimicrobial Resistance (AMR) Surveillance in Food, Animals and Aquaculture form the core of the activities directed toward prevention of zoonoses and ill-effects of drug overuse. The Committee, therefore, recommend the Department to pursue with all seriousness the objectives laid down by the Indian Network for Fisheries and Animal Antimicrobial Resistance (INFAAR) while also continuing its efforts to tackle issues related to spread of zoonotic diseases in the country in order to fulfil aspirations envisaged under the ‘One Health’ concept. The Committee would like to be apprised of action taken by the Department in this direction.

OTHER ISSUES REGARDING VETERINARY SERVICES AND ANIMAL HEALTH

28. The Committee observe that some lesser discussed problems within the Veterinary Services in the country include lack of facilities to provide free veterinary aid to livestock owners, grievance redressal & easy availability of information for livestock owners and inclusivity in Veterinary Services. The Department lacks any Facility / Health Scheme / Panel for reimbursement of costs borne by Livestock or Poultry Owners while availing treatment for their diseased cattle or poultry and instead only provides for free vaccination and deworming to livestock and poultry. The Committee, however, note that in case of vaccination with doses that failed the quality test, the Livestock owner is not liable for any compensation in case this leads to any serious health issue in the cattle or livestock. Further, regarding the issue on grievance redressal, the Committee note that an online web-based system called the Centralized Public Grievance Redress and Monitoring System (*CPGRAMS*) has been developed by NIC over NICNET, in association with Directorate of Public Grievances (DPG) and Department of Administrative Reforms and Public Grievances (DARPG), which facilitates Ministries / Departments / Organizations to receive, forward and monitor grievance from various sources. Additionally, the States routinely organize Famers' Contact Meetings to discuss and redress the needs of Livestock Owners at Block Level in the form of Raitha Samparka Sabha. However, there is no platform for providing relevant information to Livestock and Poultry owners about feed / fodder, vaccination or other general queries and instead there is an UMANG portal wherein Online Information in respect of location of Veterinary Hospitals / Dispensaries, etc. is available. The Committee feel constrained to note that the Department has no provisions for reimbursement to Livestock Owners losing their livestock to failed vaccination doses or deadly livestock diseases. The Committee are also

disappointed to note that there is no proper channel of communication between the Department and the Livestock / Poultry Owners. Taking cognizance of these seemingly minor issues, the Committee, therefore, recommend the Department to introduce a mechanism to ascertain aid to Livestock and Poultry Farmers losing their Livestock or Poultry to animal diseases or faulty vaccination doses while also working towards ensuring a direct channel of communication with stakeholders at the grassroot level and to provide a 'One-stop Centre' for solutions to veterinary issues and dissemination of information to the remotest areas of the country. The Committee would like to be apprised of action taken in this direction.

29. Regarding the lack of inclusivity in Veterinary Services, the Committee feel constrained to note that the Department has no specified mechanism to cover those animals under Veterinary Healthcare Services and Vaccination programmes that form unconventional sources of milk such as camel, yak, etc. and that still fail to be included within policies and programmes of mainstream Veterinary Infrastructure, Education and Services. The Committee, therefore, recommend the Department to work towards evolving an inclusive approach focused on increasing services, awareness and outreach in far flung areas of the country, especially the Himalayan States, the North Eastern States and the border areas. The Committee would like to be apprised of the efforts made by the Department in this direction.

New Delhi
05 August, 2021
14 Shravana, 1943 (Saka)

P.C. GADDIGOUDAR
Chairperson
Standing Committee on Agriculture

Annexure – I

Year-wise details of Financial progress under each component of the LH & DC Scheme

(Rs. in crore)

Components under LH & DC	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Assistance to States for Control of Animal Diseases (ASCAD)	49.72	43.87	21.03	22.23	93.61	35.84
National Project on Rinderpest Surveillance and Monitoring (NPRSM)	1.81	1.38	0.70	1.53	2.30	0.14
Professional Efficiency Development (PED)	4.70	3.08	1.01	3.60	6.12	0.00
Foot and Mouth Disease Control Programme (FMD-CP)	149.77	174.91	262.94	308.79	223.04	Under NADCP
National Animal Disease Reporting System (NADRS)	7.70	7.40	7.16	11.66	6.79	0.00
Peste des Petits Ruminants Control Programme (PPR-CP)	11.79	6.81	0.41	34.46	8.88	12.35
Establishment and Strengthening of existing Veterinary Hospitals / Dispensaries (ESVHD)	11.41	4.87	3.05	7.20	2.47	14.42
Brucellosis Control Programme (B-CP)	3.11	2.58	0.93	0.69	0.30	Under NADCP
Classical Swine Fever Control Programme (CSF-CP)	1.58	0.92	1.50	0.76	2.22	0.00
TOTAL	**241.59**	**245.80**	**298.73**	**390.92**	**345.73**	**62.75**

Annexure – II

Year-wise details of Physical Achievements under each component of the LH & DC Scheme

Name of component	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
FMD - CP (Vaccination in lakh doses)	1967.9	2840	3809.9	3827.5	1825	Under NADCP
ASCAD (Vaccination in lakh doses)	3531.36	2653.98	5116.7	1406.43	712.9	2210
PPR-CP (Vaccination in lakh doses)	666.88	333.36	236.14	464.78	389	917
B-CP (Vaccination of eligible female calves in lakh doses)	10.55	12.68	13.21	1.75	0.22	Under NADCP
CSF-CP (Vaccination of pigs in NE States in lakh doses)	4.54	11.81	12.54	2.54	3	0
Establishment and Strengthening of existing Veterinary Hospitals / Dispensaries (ESVHD) (in Nos.)	496	152	0	112	42	-
Professional Efficiency Development (PED) (No. of batch of CVE conducted @ 20 veterinarians/batch)	0	0	12	75	105	-
National Project on Rinderpest Surveillance and Monitoring (NPRSM) (No. of village/stock route searched)	0	215	0	100800	120000	27614
National Animal Disease Reporting System (NADRS) (No. of active nodes)	5094	4603	3182	6700	7032	7032

Annexure – III

Number of Veterinary Institutions in the country during 2019-20 and 2020-21

S.No.	States / UT	Veterinary Hospitals / Polyclinics		Veterinary Dispensaries		Veterinary Aid Centre (Stockman Centres / Mobile Dispensaries)		Total	
		2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21
1	Andhra Pradesh	335	337	1576	1576	1262	1275	3173	3188
2	Arunachal Pradesh	16	15	179	180	308	305	503	500
3	Assam	21	21	435	435	767	767	1223	1223
4	Bihar	39	39	1083	1098	1595	1595	2717	2732
5	Chhattisgarh	321	340	803	809	403	403	1527	1552
6	Goa	5	5	24	25	52	49	81	79
7	Gujarat	34	34	702	702	942	1057	1678	1793
8	Haryana	999	1029	1817	1817	21	22	2837	2868
9	Himachal Pradesh	440	444	1770	1767	1251	1251	3461	3462
10	Jammu & Kashmir	50	20	317	503	727	1301	1094	1824
11	Jharkhand	35	35	424	424	433	433	892	892
12	Karnataka	692	695	2135	2135	1388	1382	4215	4212
13	Kerala	279	278	867	868	20	20	1166	1166
14	Madhya Pradesh	1063	1063	1585	1583	65	65	2713	2711
15	Maharashtra	200	201	1741	1740	2906	2906	4847	4847
16	Manipur	56	56	109	109	34	34	199	199
17	Meghalaya	4	4	114	114	122	122	240	240
18	Mizoram	5	5	35	35	103	103	143	143
19	Nagaland	11	11	30	55	130	100	171	166
20	Odisha	541	541	3239	3239	314	314	4094	4094
21	Punjab	1389	1389	1489	1489	20	20	2898	2898
22	Rajasthan	2530	2530	198	198	5169	5169	7897	7897
23	Sikkim	18	18	61	61	54	54	133	133
24	Tamil Nadu	176	177	2601	2701	931	831	3708	3709
25	Telangana	108	108	909	909	1201	1201	2218	2218
26	Tripura	16	16	60	60	458	458	534	534
27	Uttarakhand	328	329	10	10	778	778	1116	1117
28	Uttar Pradesh	2208	2208	267	267	3396	3396	5871	5871
29	West Bengal	112	112	610	612	2687	2657	3409	3381
30	A&N Islands	10	10	13	13	13	13	36	36
31	Chandigarh	5	5	9	9	0	0	14	14
32	D&N Haveli	0	1	0	0	0	9	0	10
33	Daman & Diu	0	0	2	2	3	3	5	5
34	Delhi	50	50	26	26	0	0	76	76
35	Lakshadweep	3	3	6	9	1	1	10	13
36	Puducherry	0	0	17	17	74	74	91	91
	Total	**12099**	**12129**	**25263**	**25597**	**27628**	**28168**	**64990**	**65894**

Annexure – IV

State and UT-wise details of Number of Villages per Veterinary Institution (Veterinary Hospital / Dispensaries / First Aid Centres)

S.No.	States/UTs	Total No. of Veterinary Institutions	No. of Villages	No of Villages / Veterinary Institutions
1	Andhra Pradesh	5391	27800	5.16
2	Arunachal Pradesh	503	5589	11.11
3	Assam	1223	26395	21.58
4	Bihar	2717	44874	16.52
5	Chhattisgarh	1527	20125	13.18
6	Goa	81	334	4.12
7	Gujarat	1678	18225	10.86
8	Haryana	2837	6841	2.41
9	Himachal Pradesh	3461	20690	5.98
10	Jammu & Kashmir	1094	6553	5.99
11	Jharkhand	892	32394	36.32
12	Karnataka	4215	29340	6.96
13	Kerala	1166	1018	0.87
14	Madhya Pradesh	2713	54904	20.24
15	Maharashtra	4847	43665	9.01
16	Manipur	199	2582	12.97
17	Meghalaya	240	6839	28.50
8	Mizoram	143	830	5.80
19	Nagaland	171	1428	8.35
20	Odisha	4094	51311	12.53
21	Punjab	2898	12581	4.34
22	Rajasthan	7897	44672	5.66
23	Sikkim	133	451	3.39
24	Tamil Nadu	3708	15979	4.31
25	Tripura	534	875	1.64
26	Uttar Pradesh	5871	106774	18.18
27	Uttarakhand	1116	16793	15.04
28	West Bengal	3409	40203	11.79
29	A & N Islands	36	555	15.42
30	Chandigarh	14	5	0.36
31	Dadra & Nagar Haveli	0	65	0.00
32	Daman & Diu	5	19	3.80
33	Delhi	76	112	1.47
34	Lakshadweep	10	21	2.10
35	Puducherry	91	90	0.99
	TOTAL	**64990**	**640932**	**9.86**

Annexure – V

State and UT-wise details of Funds Released under LH&DC for ESVHD component from 2017-18 to 2019-20

(Rs. in lakh)

S. No.	States/UTs	ESVHD		
		2017-18	2018-19	2019-20
1	Andhra Pradesh	0	0	0
2	Arunachal Pradesh	0	23.13	15.75
3	Assam	0	0	0
4	Bihar	0	0	0
5	Chhattisgarh	103.68	262.24	0
6	Goa	0	0	0
7	Gujarat	0	0	0
8	Haryana	0	0	0
9	Himachal Pradesh	0	30	0
10	Jammu & Kashmir	0	0	0
11	Jharkhand	0	0	0
12	Karnataka	0	0	42.00
13	Kerala	0	30	0
14	Madhya Pradesh	0	230.4	0
15	Maharashtra	80	0	0
16	Manipur	0	0	17.50
17	Meghalaya	0	29.97	41.80
18	Mizoram	0	24.66	18.00
19	Nagaland	70	0	30.00
20	Odisha	0	0	42.00
21	Punjab	0	0	0
22	Rajasthan	0	0	0
23	Sikkim	0	30	40.00
24	Tamil Nadu	0	0	0
25	Telangana	0	0	0
26	Tripura	0	0	0
27	Uttar Pradesh	21	0	0
28	Uttarakhand	19.8	59.4	0
29	West Bengal	0	0	0
30	A&N Islands	10	0	0
31	Chandigarh	0	0	0
32	D&N Haveli	0	0	0
33	Daman &Diu	0	0	0
34	Delhi	0	0	0
35	Lakshadweep	0	0	0
36	Puducherry	0	0	0
	Total	**304.48**	**719.8**	**247.05**

Annexure – VI

State and UT-wise details of Physical Achievements under LH&DC for ESVHD component from 2017-18 to 2019-20

S. No.	States / UTs	Establishing Veterinary Hospitals/ Dispensaries and Strengthening of existing Veterinary Hospitals/ Dispensaries		
		2017-18	**2018-19**	**2019-20**
1	Andhra Pradesh	0	4	0
2	Arunachal Pradesh	0	0	1
3	Assam	0	0	0
4	Bihar	0	0	0
5	Chhattisgarh	0	30	0
6	Goa	0	0	0
7	Gujarat	0	0	0
8	Haryana	0	0	0
9	Himachal Pradesh	0	6	0
10	Jammu & Kashmir	0	0	0
11	Jharkhand	0	0	0
12	Karnataka	0	0	10
13	Kerala	0	7	0
14	Madhya Pradesh	0	48	0
15	Maharashtra	0	0	0
16	Manipur	0	0	1
17	Meghalaya	0	3	0
18	Mizoram	0	2	3
19	Nagaland	0	0	4
20	Odisha	0	0	7
21	Punjab	0	0	0
22	Rajasthan	0	0	0
23	Sikkim	0	5	6
24	Tamil Nadu	0	0	10
25	Telangana	0	0	0
26	Tripura	0	0	0
27	Uttar Pradesh	0	0	0
28	Uttarakhand	0	7	0
29	West Bengal	0	0	0
30	A&N Islands	0	0	0
31	Chandigarh	0	0	0
32	D&N Haveli	0	0	0
33	Daman &Diu	0	0	0
34	Delhi	0	0	0
35	Lakshadweep	0	0	0
36	Puducherry	0	0	0
	Total	**0**	**112**	**42**

Details of the Indian Veterinary Council Act, 1984

The Indian Veterinary Council Act, 1984 consists of 67 Sections contained in Eight Chapters that are as under :

1. Chapter I (Preliminary) - deals with the title, extent and commencement of the Act and definitions therein (Sections 1 to 2).
2. Chapter II (Indian Veterinary Council) - deals with establishment and composition of the Council, mode of election of members, terms of office of President, Vice-President and members, cessation of membership, casual vacancies, resignation, meetings of the council, vacancies in the Council not to invalidate acts, etc., appointment of Secretary and other officers or servants, Executive committee and other Committees, fees and allowances, information to be furnished by the Council and publication thereof, recognition of veterinary qualifications granted by veterinary institutions in India, recognition of veterinary qualifications granted by veterinary institutions in countries with which there is scheme of reciprocity, special provisions in certain cases for recognition of veterinary qualifications granted by veterinary institutions in countries with which there is no scheme of reciprocity, power to require information as to courses of study and examinations, inspection of veterinary institution and examinations, appointment of visitors, withdrawal of resignation and Minimum Standards of Veterinary Education (Sections 3 to 22).
3. Chapter III (Indian Veterinary Practitioners Register) - deals with Indian veterinary practitioners register, registration in the Indian veterinary practitioners register, issue of certificate of registration, registration of additional qualifications, removal of names from the Indian veterinary practitioners register, person enrolled on Indian veterinary practitioners register to notify change of place of residence or practice (Sections 23 to 28).
4. Chapter IV (Privileges of Registered Veterinary Practitioners) - deals with Privileges of persons, who are enrolled on the Indian veterinary practitioners register, Rights of persons who are enrolled on the Indian veterinary practitioners register. (Sections 29 to 30).
5. Chapter V (Discipline) - deals with professional conduct (Section 31).
6. Chapter VI (State Veterinary Councils) - deals with establishment and composition of State Veterinary Councils, Inter-State agreements, composition of Joint State Veterinary Councils. incorporation of State Veterinary Councils, President, mode of elections, terms of office and causal vacancies, resignation, Executive and other Committees, fees and allowances, appointment of Registrar and other officers or servants, information to be furnished by State Veterinary Councils (Sections 32 to 43).
7. Chapter VII (Registration) - deals with preparation and maintenance of State veterinary practitioners register, first preparation of register, qualifications for entry on

preparation of register, scrutiny of applications for registration, renewal fees, removal from the register, restoration to State veterinary register, printing of State veterinary register (Sections 44 to 51).

8. Chapter VIII (Miscellaneous) - deals with transfer of registration, bar of jurisdiction, issue of duplicate certificates, penalty for falsely claiming to be registered, misuse of titles, practice by unregistered persons, failure to surrender certificate of registration, cognizance of offence, bar of suit and other legal proceedings, payment of part of fees to Council, accounts and audit, appointment of Commission of Inquiry, Power of Central Government to make rules, power of State Government to make rules, power to make regulations, repeal and saving (Sections 52 to 67).

Annexure – VIII

Veterinary Colleges along with Universities as included in the First Schedule of the Indian Veterinary Council Act,1984

Sl. No	State	Sr.	Name of University	Name of College
1.	ANDHRA PRADESH	1.	Sri Venkateswara University, Tirupati Veterinary	1. NTR College of Veterinary Science, Gannavaram
				2. College of Veterinary Science, Proddatur
				3. College of Veterinary Science, Tirupati
2.	ASSAM	2.	Assam Agricultural University, Jorhat	4. College of Veterinary Science, Guwahati
3.	BIHAR	3.	Bihar Animal Science Patna, University, Bihar	5. Bihar Veterinary College, Patna
4.	CHHATTISGARH	4.	Chhattisgarh Kamdhenu Vishwavidyalaya, Anjora, Durg	6. College of Veterinary Science & Animal Husbandry, Durg
5.	GUJARAT	5.	Anand Agricultural University, Anand	7. College of Veterinary Science and Animal Husbandry, Anand
		6.	Junagadh Agricultural University, Junagadh	8. College of Veterinary Science and Animal Husbandry, Junagadh
		7.	Navsari Agricultural University, Navsari	9. College of Veterinary Science and Animal Husbandry, Navsari
		8.	Sardarkrushinagar Dantiwada University,Agricultural Sardarkrushinagar	10. College of Veterinary Science and Animal Husbandry, Sardarkrushinagar
6.	HARYANA	9.	Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar	11. College of Veterinary Science, Hisar
				12. International Institute of Veterinary Education and Research, Rohtak *(The college is under the Pvt. Sector)*
7.	HIMACHAL PRADESH	10.	CSK Himachal Pradesh Krishi Vishwavidyalay, Palampur	13. Dr. G.C. Negi College of Veterinary and Animal Sciences, Palampur
8.	JAMMU & KASHMIR	11.	Sher-e Kashmir University of Agricultural Sciences & Technology, Jammu	14. Faculty of Veterinary Sciences & Animal Husbandry, Jammu
		12.	Sher-e Kashmir University of Agricultural Sciences & Technology, Srinagar	15. Faculty of Veterinary Sciences & Animal Husbandry, Srinagar, Kashmir
9.	JHARKHAND	13.	Birsa Agricultural University, Ranchi	16. Ranchi College of Veterinary Science and Animal Husbandry, Ranchi
10.	KARNATAKA	14.	Karnataka Veterinary, Animal & Fisheries Sciences University, Bidar	17. Veterinary College Hebbal, Bangalore
				18. Veterinary College Nandinagar, Bidar
				19. Veterinary College, Hassan
				20. Veterinary College, Shimoga
11.	KERALA	15.	Kerala Veterinary and Animal Science University, Pookote	21. College of Veterinary & Animal Sciences, Thrissur

				22. College of Veterinary and Animal Sciences, Pookote
12.	MADHYA PRADESH	16.	Nanaji Deshmukh Veterinary Science University, Jabalpur	23. College of Veterinary Science & Animal Husbandry, Jabalpur
				24. College of Veterinary Science & Animal Husbandry, Mhow
				25. College of Veterinary Science & Animal Husbandry, Rewa
13.	MAHARASHTRA	17.	Maharashtra Animal & Fishery Sciences University, Nagpur	26. Mumbai Veterinary College, Mumbai
				27. Nagpur Veterinary College, Nagpur
				28. College of Veterinary & Animal Sciences, Parbhani
				29. K.N.P. College of Veterinary Sciences, Satara
				30. College of Veterinary & Animal Sciences, Udgir
14.	MIZORAM	18.	Central Agricultural University, Imphal	31. College of Veterinary Science & Animal Husbandry, Aizawl, Mizoram
15.	ODISHA	19.	Orissa University of Agriculture & Technology, Bhubaneswar	32. College of Veterinary Science and Animal Husbandry, Bhubaneswar
16.	PUDUCHERRY	20.	Pondicherry University, Puducherry	33. Rajiv Gandhi College of Veterinary & Animal Sciences, Puducherry
17.	PUNJAB	21.	Guru Angad Dev Veterinary and Animal Sciences University	34. Khalsa College of Veterinary and Animal Sciences, Amritsar (The college is under the Pvt. Sector)
				35. College of Veterinary Science, Ludhiana
18.	RAJASTHAN	22.	Rajasthan University of Veterinary & Animal Sciences, Bikaner	36. College of Veterinary and Animal Science, Bikaner
				37. Mahatma Jyotiba Fule College of Veterinary & Animal Science, Chomu, Jaipur (The college is under the Pvt. Sector)
				38. Apollo College of Veterinary Medicine, Jaipur (The college is under the Pvt. Sector)
				39. Post Graduate Institute of Veterinary Education and Research, Jaipur
				40. College of Veterinary and Animal Science, Navania, Udaipur
				41. Arawali Veterinary College, Sikar (The college is under the Pvt. Sector)
19.	TAMIL NADU	23.	Tamil Nadu Veterinary & Animal Sciences University, Chennai	42. Madras Veterinary College, Chennai
				43. College of Veterinary Science and Research Institute, Namakkal
				44. Veterinary College and Research Institute, Orthanadu
				45. Veterinary College and Research Institute, Tirunelveli
20.	TELANGANA	24	P.V. Narsimha Rao Telangana Veterinary	46. College of Veterinary Science, Hyderabad

			University, Hyderabad	47. College of Veterinary Science, Korutla
21.	TRIPURA	25	Tripura University, Agartala	48. College of Veterinary Science and Animal Husbandry at R.K. Nagar, Agartala, Tripura
22.	UTTAR PRADESH	26	Acharya Narendra Deva University of Agriculture & Technology, Kumarganj, Ayodhya	49. College of Veterinary Science and Animal Husbandry, Faizabad
		27	Uttar Pradesh Pandit Deen Dayal Upadhyay Pashu Chikitsa Vigyan Vishwavidyalay Evam Go-Anusandhan Sansthan, Mathura	50. College of Veterinary Science and Animal Husbandry, Mathura
		28	Indian Veterinary Research Institute, Izatnagar, Bareilly	51. ICAR-Indian Veterinary Research Institute
		29	Sardar Vallabh Bhai Patel University of Agriculture & Technology, Meerut	52. College of Veterinary and Animal Sciences, Meerut
23.	UTTARAKHAND	30	Govind Ballabh Pant University of Agriculture & Technology, Pantnagar	53. College of Veterinary & Animal Sciences, Pantnagar
24.	WEST BENGAL	31	West Bengal University of Animal & Fishery Sciences, Kolkata	54. Faculty of Veterinary & Animal Sciences , Kolkata

Annexure – IX

Department-wise minimum teaching staff requirement in a Veterinary College as per MSVE Regulations, 2016

S.No.	Department	Minimum Teaching Staff requirement			Additional requirement
		Professor	Associate Professor (A.P.)	Assistant Professor (As.P.)	
(i)	Veterinary Anatomy	1	1	2	-
(ii)	Veterinary Physiology & Biochemistry	1	1	3	-
(iii)	Livestock Production Management	1	1	2	-
(iv)	Veterinary Microbiology	1	1	2	One Faculty Member to be deputed Semester-wise on rotational basis for 3 hours during clinics
(v)	Veterinary Pathology	1	1	2	One Faculty Member for post-mortem on rotational basis
(vi)	Animal Genetics & Breeding	1	1	1	-
(vii)	Animal Nutrition	1	1	1	-
(viii)	Veterinary Pharmacology & Toxicology	1	1	1	One Faculty Member to be deputed Semester-wise on rotational basis for 3 hours during clinics
(ix)	Veterinary Public Health & Epidemiology	1	1	1	The college having separate Disease Diagnostic Centres will have additional faculty in this Department as per requirement
(x)	Veterinary Parasitology	1	1	2	One Faculty Member to be deputed Semester-wise on rotational basis for 3 hours during clinics
(xi)	Livestock Production Technology	1	1	2	One Faculty Member will be involved in Entrepreneurial training, milk processing etc.
(xii)	Veterinary & Animal Husbandry Extension Education	1	1	1	Extension activities and village tours
(xiii)	Veterinary Surgery & Radiology	1	1	3	At least two Faculty Members shall be

					involved for VCP on rotational basis and one Faculty Member for off-hours or Holidays on rotational basis
(xiv)	Veterinary Medicine	1	1	3	At least two Faculty Members shall be involved for VCP on rotational basis and one Faculty Member for off-hours or Holidays on rotational basis
(xv)	Veterinary Gynaecology & Obstetrics	1	1	3	At least two Faculty Members shall be involved for VCP on rotational basis and one Faculty Member for off-hours or Holidays on rotational basis
(xvi)	Veterinary Clinical Complex	1 Professor with specialization in any of the clinical subjects	1 A.P. (Internship)	1 As.P Clinical Pathology for Diagnostic Laboratory 1 As.P (Veterinary Biochemistry) As.P Medicine-2; Surgery-1; Gynaec.-1	These teachers of Pathology,Biochemistry, Medicine, Surgery and Gynaecology should be rotated in their respective Departments so that they are involved in teaching but not before two years
(xvii)	Livestock Farm Complex (LFC)	1 Professor with specialization preferably in Livestock Production & Management	-	6*	2 Assistant Farm Managers(One B.V.Sc.&A.H. and one Agriculture Graduate for Fodder Production Unit, preferably, M.Sc.Agronomy)

*One As.P each from Poultry production, Animal Genetics & Breeding, Animal Nutrition, Livestock Production & Management, Veterinary Medicine and Veterinary Obstetrics & Gynaecology. These teachers should be rotated in their respective Departments so that they are involved in teaching but not before two years. If the Herd Population exceeds the prescribed minimum required, additional Faculty from Production subjects can be recruited.

Annexure – X

Current status of States / UTs regarding sanctioned and actual strength of Field Veterinarians

Sl. No.	State/UT	No. of sanctioned Post	Veterinarians in service
1.	Andhra Pradesh	1814	1615
2.	Bihar	2067	1207
3.	Chhattisgarh	759	548
4.	Goa	78	50
5.	Gujarat	1141	656
6.	Haryana	1126	910
7.	Himachal Pradesh	525	424
8.	Jammu &Kashmir	1343	1019
9.	Jharkhand	774	537
10.	Karnataka	3407	2492
11.	Kerala	1637	1591
12.	Madhya Pradesh	1671	1491
13.	Maharashtra	2630	1986
14.	Odisha	1480	1098
15.	Punjab	1423	973
16.	Rajasthan	3248	1983
17.	Tamil Nadu	3369	2949
18.	Telangana	1220	1036
19.	Uttar Pradesh	2451	2068
20.	Uttarakhand	504	429
21.	West Bengal	1333	1214
22.	Arunachal Pradesh	176	176
23.	Assam	1003	824
24.	Manipur	164	109
25.	Meghalaya	262	259
26.	Mizoram	115	105
27.	Nagaland	165	149
28.	Sikkim	115	100
29.	Tripura	348	152
30.	Puducherry	69	23
31.	NCT Delhi	64	52
32.	A&N Islands	45	33
33.	Chandigarh	05	05
34.	Dadra &Nagar Haveli	02	00
35.	Daman & Diu	02	01
36.	Lakshadweep	16	12
37.	Ladakh	72	52
	Total	**36623**	**28328**

Current status of States / UTs regarding sanctioned and actual strength of Para-veterinarians

Sl. No.	State/UT	No. of Sanctioned Post	Para-Vets in Service
1.	Andhra Pradesh	3120	2212
2.	Bihar	1221	465
3.	Chhattisgarh	2195	1363
4.	Goa	146	79
5.	Gujarat	2101	1324
6.	Haryana	3034	2595
7.	Himachal Pradesh	4009	3367
8.	Jammu &Kashmir	4072	2902
9.	Jharkhand	977	248
10.	Karnataka	6543	4640
11.	Kerala	2866	2857
12.	Madhya Pradesh	5795	3490
13.	Maharashtra	4967	3577
14.	Odisha	4045	2768
15.	Punjab	2006	1342
16.	Rajasthan	9663	8340
17.	Tamil Nadu	2782	1362
18.	Telangana	2071	1529
19.	Uttar Pradesh	5150	3582
20.	Uttarakhand	1366	930
21.	W. Bengal	3700	1200
22.	Arunachal Pradesh	314	205
23.	Assam	2504	2084
24.	Manipur	494	324
25.	Meghalaya	437	417
26.	Mizoram	260	172
27.	Nagaland	325	300
28.	Sikkim	209	114
29.	Tripura	712	456
30.	Puducherry	109	31
31.	NCT Delhi	113	31
32.	A&N Islands	281	255
33.	Chandigarh	16	16
34.	Dadra &Nagar Haveli	10	04
35.	Daman & Diu	08	05
36.	Lakshadweep	73	58
37.	Ladakh	319	284
	Total	**78013**	**54928**

Annexure – XI

State and UT-wise details of Veterinarians, Veterinary Institutions and No. of Cattle heads per unit Veterinarian & per unit Veterinary Institute in the country

S. No.	State /UT	No. of cattle head units	Registered Veterinary Practitioners as on 31/03/2019	No. of cattle head units per Registered Veterinarian	Number of veterinary institutions (Veterinary Hospitals & Dispensaries)	No. of cattle head units per Veterinary Institute
1	Andaman & Nicobar	67611	55	1229	23	2940
2	Andhra Pradesh	14312238	3236	4400	1913	7443
3	Arunachal Pradesh	1184116	168	7048	195	6072
4	Assam	12697158	2901	4377	456	27845
5	Bihar	24699035	3199	7721	1137	21723
6	Chhattisgarh	11870713	947	12535	1149	10331
7	Dadra & Nagar Haveli	42432	4	10608	1	42432
8	Daman& Diu	3786	3	1262	2	1893
9	Delhi	271428	427	636	76	3571
10	Goa	99012	174	569	30	3300
11	Gujarat	21121040	3342	6320	736	28697
12	Haryana	6859286	1912	3587	2846	2410
13	Himachal Pradesh	2696052	1195	2256	2211	1219
14	Jharkhand	14055344	890	15793	459	30622
15	Karnataka	13851421	4346	3187	2830	4894
16	Kerala	1899634	4218	450	1146	1658
17	Lakshadweep	9093	26	350	12	758
18	Madhya Pradesh	30419639	2269	13407	2646	11496
19	Maharashtra	21736810	9411	2310	1941	11199
20	Manipur	390498	336	1162	165	2367
21	Meghalaya	1155961	335	3451	118	9796
22	Mizoram	136388	246	554	40	3410
23	Nagaland	253370	267	949	66	3839
24	Odisha	11431248	2515	4545	3780	3024
25	Puducherry	84570	417	203	17	4975
26	Punjab	6792715	3658	1857	2878	2360
27	Rajasthan	30952500	3783	8182	2728	11346
28	Sikkim	180240	146	1235	79	2282
29	Tamil Nadu	12704391	5510	2306	2878	4414
30	Tripura	865703	324	2672	76	11391
31	Uttar Pradesh	53884309	6884	7827	2475	21771
32	Uttarakhand	2946029	852	3458	339	8690
33	West Bengal	22315972	2431	9180	724	30823
34	Telangana	11700342	1515	7723	1017	11505
35	Jammu & Kashmir	3927597	733	5358	523	7510
36	Chandigarh	26473	5	5295	14	1891
	TOTAL	**337569034**	**68680**	**4915**	**37726**	**8948**

Annexure – XII

State and UT-wise details regarding number of Continued Veterinary Education (CVE) Training Programmes conducted (with 20 Veterinarians per batch) from 2017-18 to 2020-21 under PED component of LH&DC Scheme

Sl.No	State/UT	2017-18	2018-19	2019-20	2020-21
1	Andhra Pradesh	2	0	0	0
2	Bihar	0	0	0	0
3	Chhattisgarh	0	0	0	0
4	Goa	0	0	6	0
5	Gujarat	0	0	0	0
6	Haryana	0	0	4	0
7	Himachal Pradesh	0	0	0	0
8	J. & K.	0	0	0	0
9	Jharkhand	0	0	0	0
10	Karnataka	0	12	0	0
11	Kerala	8	18	30	0
12	Madhya Pradesh	0	0	0	0
13	Maharashtra	0	0	0	0
14	Odisha	0	0	0	0
15	Punjab	0	10	0	0
16	Rajasthan	0	0	0	0
17	Tamil Nadu	2	10	0	0
18	Telangana	0	10	0	0
19	Uttar Pradesh	0	5	0	0
20	Uttarakhand	0	0	9	0
21	W. Bengal	0	0	22	0
22	Arunachal Pradesh	0	0	0	0
23	Assam	0	0	0	0
24	Manipur	0	0	0	0
25	Meghalaya	0	0	20	0
26	Mizoram	0	8	8	0
27	Nagaland	0	0	6	0
28	Sikkim	0	0	0	0
29	Tripura	0	0	0	0
30	Puducherry	0	2	0	0
31	NCT Delhi	0	0	0	0
32	A&N Islands	0	0	0	0
33	Chandigarh	0	0	0	0
34	Dadra &N Haveli	0	0	0	0
35	Daman & Diu	0	0	0	0
36	Lakshadweep	0	0	0	0
	Total	**12**	**75**	**105**	**0**

Annexure – XIII

State and UT-wise details of vaccinations conducted during the year 2018-19

S.No.	State	No. of Vaccination doses (in Million)				
		FMD	PPR	ASCAD	B-CP	CSF
1	Andhra Pradesh	17.32	17.385	32.94	0.060	-
2	Chhattisgarh	12.57	3.462	13.705	-	-
3	Bihar	32.97	-	16.489	0.086	-
4	Goa	0.10	-	-	-	-
5	Gujarat	28.04	5.179	-	-	-
6	Haryana	9.54	-	-	-	-
7	Himachal Pradesh	3.92	1.558	2.225	-	-
8	Jammu & Kashmir	3.19	3.7567	0.0289	-	-
9	Jharkhand	4.30	-	-	-	-
10	Karnataka	20.83	13.759	31.957	-	-
11	Kerala	2.08	-	-	-	-
12	Madhya Pradesh	24.09	-	-	-	-
13	Maharashtra	38.90	-	-	-	-
14	Odisha	6.91	-	-	-	-
15	Punjab	7.20	0.25	16.221	-	-
16	Rajasthan	32.10	-	-	-	-
17	Tamil Nadu	18.65	-	-	-	-
18	Telangana	14.14	-	20.0397	-	-
19	Uttar Pradesh	95.22	-	-	-	-
20	Uttrakhand	3.99	0.8795	0.996	0.005	---
21	West Bengal	1.53	-	-		---
22	Arunachal Pradesh	0.50	-	-	0.02	0.10
23	Assam	3.00	-	-	-	-
24	Manipur	0.00	-	3.612	-	-
25	Meghalaya	0.26	-	-	-	-
26	Mizoram	0.02	-	2.4268	0.004	0.125
27	Nagaland	0.00	-	-	-	-
28	Sikkim	0.04	0.0388	0.003	-	-
29	Tripura	0.88	-	-	-	-
30	Puducherry	0.08	-	-	-	-
31	NCT Delhi	0.08	-	-	-	-
32	A & N Islands	0.06	-	-	-	-
33	Chandigarh	0.04	-	-	-	-
34	Dadra & Nagar Haveli	0.00	-	-	-	-
35	Daman & Diu	0.19	-	-	-	-
36	Lakshadweep	0.00	-	-	-	-
	Total	**382.75**	**46.4776**	**140.6434**	**0.175**	**0.254**

State and UT-wise details of vaccinations conducted during the year 2019-20

S.No	Name of State /UT	No. of Vaccination doses (in Million)			
		FMD	PPR	ASCAD	CSF
1	Andhra Pradesh	8.06	6.20	15.00	-
2	Arunachal Pradesh	0.15	1.28	-	-
3	Assam	0.38	-	2.75	-
4	Bihar	16.50	-	-	-
5	Chhattisgarh	7.84	-	11.00	-
6	Goa	0.06	-	-	-
7	Gujarat	18.84	2.14	5.00	-
8	Haryana	3.50	0.19	-	-
9	Himachal Pradesh	2.24	0.40	-	-
10	Jammu & Kashmir	-	-	-	-
11	Jharkhand	-	-	-	-
12	Karnataka	10.38	8.20	16.00	-
13	Kerala	1.15	0.11	0.00	-
14	Madhya Pradesh	24.50	-	-	-
15	Maharashtra	19.15	0.0009	17.00	-
16	Manipur	0.25	-	-	0.13
17	Meghalaya	0.20	0.075	0.04	-
18	Mizoram	0.03	0.012	-	0.07
19	Nagaland	0.25	0.0047	-	0.10
20	Odisha	4.78	3.54	-	-
21	Punjab	-	0.076	-	-
22	Rajasthan	6.37	2.15	4.50	-
23	Sikkim	0.01	-	-	-
24	Tamil Nadu	6.20	-	-	-
25	Telangana	6.85	6.84	-	-
26	Tripura	0.20	0.16	-	-
27	Uttar Pradesh	43.10	7.26	-	-
28	Uttarakhand	1.51	0.26	-	-
29	West Bengal	0.00	0.00	-	-
30	A&N Islands	0.00	0.00	-	-
31	Chandigarh	0.02	0.00	-	-
32	D&N Haveli	0.00	0.00	-	-
33	Daman &Diu	0.00	0.00	-	-
34	Delhi	0.00	0.00	-	-
35	Lakshadweep	0.00	0.00	-	-
36	Puducherry	0.06	0.013	0.00	-
	TOTAL	**182.58**	**38.91**	**71.29**	**0.3**

State and UT-wise details of vaccinations conducted during the year 2020-21

S.No.	Name of State /UT	Vaccination (In Millions)		
		PPR	ASCAD	CSF
1	Andhra Pradesh	18.74	-	-
2	Arunachal Pradesh	-	-	-
3	Assam	-	-	-
4	Bihar	-	-	-
5	Chhattisgarh	-	20	-
6	Goa	-	-	-
7	Gujarat	-	-	-
8	Haryana	69.57	-	-
9	Himachal Pradesh	-	-	-
10	Jammu & Kashmir	-	-	-
11	Jharkhand	-	-	-
12	Karnataka	-	40	-
13	Kerala	-	-	-
14	Madhya Pradesh	3.32	-	-
15	Maharashtra	-	-	-
16	Manipur	-	11	-
17	Meghalaya	-	-	-
18	Mizoram	-	-	-
19	Nagaland	-	-	-
20	Odisha	-	-	-
21	Punjab	-	-	-
22	Rajasthan	-	150	-
23	Sikkim	-	-	-
24	Tamil Nadu	-	-	-
25	Telangana	-	-	-
26	Tripura	-	-	-
27	Uttar Pradesh	-	-	-
28	Uttarakhand	0.1	-	-
29	West Bengal	-	-	-
30	A&N Islands	-	-	-
31	Chandigarh	-	-	-
32	D&N Haveli	-	-	-
33	Daman &Diu	-	-	-
34	Delhi	-	-	-
35	Ladakh	-	-	-
36	Lakshadweep	-	-	-
37	Puducherry	-	-	-
	TOTAL	**91.73**	**221**	**0**

Annexure – XIV

State-wise and UT wise details of the State Veterinary Biological Production Units in the country

Sl. No.	State biological Name and location	Vaccines
1.	Veterinary Biological and Research Institute, Samalkot, Andhra Pradesh	RD K strain, RD F strain, Fowl pox, Duck Plague
2.	Veterinary Biological and Research Institute, Hyderabad, Telangana	HS, BQ, ET, PPR, Sheep pox, Goat pox
3.	Institute of Veterinary Biological, Guwahati, Assam	HS, BQ, ET, IBD, Lapinized FDSF, R2B, Duck plague, FDF1 (Ranikhet), BQ
4.	Institute of Animal Health and Production, Patna, Bihar	HS, BQ(bivalent), Anthrax, Enterotoxemia, RD F1 strain, R2B, Fowl pox, Fowl pox(Pigeon pox), Lapinized swine fever vaccine, PPR
5.	Animal Vaccine Institute, Gandhinagar, Gujarat	HS, BQ, ET, SP, RDF,R2B, FP, diagnostic antigen. (availability of vaccine is time specific)
6.	Haryana Veterinary Vaccine Institute, Hisar, Haryana	HS (alum precipitated), HS (oil adjuvant), ET, BQ, Sheep pox, Swine fever, PPR
7.	Institute of Animal Health and Biological Production, Zakura, Jammu & Kashmir	
8.	Anti-rabies Vaccine Laboratory, R S Pura,Jammu (J&K)	Anti-rabies (sheep brain), HS (AP)
9.	Institute of Animal Health and Production, Ranchi, Jharkhand	HS(alum precipitated), BQ (bivalent), Anthrax, Swine fever
10.	Institute of Animal Health and Veterinary Biologicals, Hebbal, Bangalore, Karnataka	HS, BQ, RP, Anthrax, ET, Anti-rabies, Sheep pox, R2B, F, Fowl pox, Pigeon pox, Duck cholera, BR. AB antigen, Salmonella Ag.
11.	Institute of Animal Health and Veterinary Biologicals,Palode Thiruvananthapuram, Kerala	Anthrax, HS, BQ, Swine fever, Fowl pox, RDF, RDK, Duck plague, Duck pasteurella, CMT reagent, Rose Bengal plate test Ag, reagents, antibiotic sensitivity test kit
12.	Institute of Animal Health and Veterinary Biologicals, Rasalpura, Mhow, Madhya Pradesh	HS(alum precipitated), BQ, ET, Anthrax, RDF, RDR2B, Fowl pox, Swine fever, Anti-rabiesmulti dose post bite, Antirabies single dose preventive, MD, Sheep pox
13.	Institute of Veterinary Biological Product, Aundh,Pune-411007, Maharashtra	HS alum treated vaccine IP
		ET vaccine type D (IP)
		BQ inactivated vaccine IP
		HS alum treated vaccine IP

14.	Odisha Biological Products Institute, Satellite Unit, Berhampur, Ganjam, Odisha	ET, Live anthrax spore vaccine
15.	Orissa Biological Products Institute, Bhubaneswar, Odisha.	Anthrax, ET
16.	Institute of Veterinary Preventive Medicine, Ranipet, Vellore, Tamil Nadu	Anthrax, BQ, ET, HS, Sheep pox, RDF, RD Lasota, RD Komorov strain, Duck plague, SPV, Brucella Ag, SPC Ag, Salmonella antigen, CMTR, PBS
17.	Punjab veterinary vaccine institute, P.A.U. Campus, Ludhiyana, 141004, Punjab	HS
		BQ
		RD
18.	Regional Veterinary Biological Unit, Jaipur, Rajasthan	HS, BQ, ET
19.	Institute of Veterinary Biologicals, Badshah Bag, Lucknow, Uttar Pradesh	HS, BQ, RD, Fowl pox
20.	Institute of Animal Health and Veterinary Biologicals, Kolkata, West Bengal	Anthrax, BQ,HS, Fowl Cholera, Duck Pasteurella, Fowl pox, Duck plague, Swine fever, RD(F strain), R2B, Goat pox, Brucella abortus plain and coloured Ag, Salmonella pullorumcoloured Ag

Annexure – XV

Key recommendations of World Organization for Animal Health (OIE) Performance of Veterinary Services (PVS) India Report

Key recommendations under each Critical Competency are as follows -

- **Human, physical and financial resource**

  - **Human resources**

    - Review the very large human resources of the VS considering the number of veterinarians, veterinary para-professionals and animal technicians, against the current and predicted requirements by role, competency and location.
    - Address the significant number of vacancies against 'sanctioned positions' – the actual need and tasks to be under taken need to be considered against along term vision of the VS and any vacancies filled.
    - Improve staff competencies and capabilities through a formal continuing professional development programme. Such a programme should focus on core skills that are currently weak or absent in the VS such as epidemiology, risk analysis and food safety. Continuing education should be made mandatory for re- registration by the VCI.
    - Introduce a merit-based system for promotion of veterinarians and other staff to ensure technical skills are well recognized, as well as used effectively and efficiently.
    - Review and define the roles of veterinary para-professionals and other personnel providing animal health services; implement training and registration to match the defined roles. Ensure all veterinary para-professionals and others are routinely and effectively supervised by veterinarians.

  - **Management and coordination**

    - Implement rigorous independent evaluation of programmes and their

effectiveness and efficiency with a focus on outcomes and not on merely reporting activities undertaken – include economic analysis.

- Review the organization of the VS at central and state levels to ensure high level technical input from veterinarians.
- Strengthen coordination with other ministries and 'Competent Authorities' both at national and state levels, to develop effective policies and programmes. Priorities are:
    - To effectively combat zoonoses, particularly rabies – with a greater emphasis on its surveillance and control in dogs and lesson post exposure prophylaxis in people;
    - To improve the safety of foods of animal origin;
    - To improve the risk management of antimicrobial usage and resistance (AMU/AMR);
    - To ensure an improved implementation of animal welfare legislation.

➢ **Financial and physical resources**

- Develop longer term budgets and funding for upgrades and routine repairs and maintenance of facilities and equipment; continue to invest in ESVHD and other supporting initiatives.
- Upgrade computer/internet access to facilitate NADRS; continue to develop the functionality of NADRS to meet the needs of the national VS, particularly programme monitoring and review.
- Promote emergency preparedness by funding the development of additional contingency plans and simulation exercise trainings. Review and extend compensation for diseases beyond HPAI and glanders.

Technical authority and capability

➢ **Laboratories**

- Review and upgrade, as necessary, the facilities, equipment and staff training at state and local laboratories (already underway in some states).
- Introduce electronic 'Laboratory Information Management Systems (LIMS) in all laboratories.
- Develop formal quality assurance programmes at levels appropriate for each laboratory – ISO 17025/NABL for the specialist and major diagnostic centres (C/RDDLs and SDDLs) and documented procedures for all lower level laboratories.
- Promote biosecurity/biosafety in alllaboratories

➢ **Risk analysis &quarantine**

- Establish risk analysis units with trained epidemiologists, economists and other specialists as required at central and state levels. These units should critically review the risks associated with disease detection/failure to detect, the finite resources available for disease prevention and control, and the mitigation of risk to human health aspriorities.
- Introduce effective border control at all land borders prioritizing major routes; develop awareness and risk mitigation programmes for cross border movement of animals.

➢ **Disease surveillance and control**

- Critically review the disease surveillance and disease prevention/control programmes and introduce more effective and efficient programmes with ongoing monitoring and evaluation and revision. The value of surveillance at aggregation points such as markets and slaughterhouses should not be overlooked.
- Address the limitations in disease surveillance and control caused by gaps in the field veterinary service, over-reliance on veterinary para-professionals, in sufficient diagnostic testing (with differential diagnostic testing not merely 'rule outs'), poor field epidemiological investigation of

outbreaks and their risk factors (including tracing), over dependence on vaccination (and not sufficiently reducing risk through awareness, biosecurity and movement control) and the limitations of NADRS/ADMAS with the lack of detailed review and sensitivity analysis to highlight weaknesses and opportunities for strengthened surveillance and improved disease control.

- Ensure vaccination programmes are effectively implemented with detailed reporting of vaccinations against target populations, monitoring of vaccination response and improved cold chain management with routine temperature monitoring.
- Review the current 12-digit identification programme used in some cattle and buffalo and develop a nationally coherent programme to cover all bovines. This will allow disease control activities to be more targeted and effective (e.g. by focusing on identified high risk populations through animal testing and the use and monitoring of vaccination).

➢ **Food safety**

- Continue to upgrade and build new slaughter facilities.
- Improve slaughter management by preparing guidelines on good slaughter practices and meat hygiene using the HACCP approach.
- Conduct ante-and post mortem inspections using well trained staff and report any findings so that the disease surveillance data may be used and the risks and developing issues identified; veterinary supervision of slaughter is required.
- Address the problem of the widespread use of veterinary medicines by veterinary para-professionals, with minimal veterinary supervision, and the largely uncontrolled dispensing by gopalmitras by tightening dispensing controls and the management and regulation of drug stores. The prudent use of antimicrobials is compromised by the use of‘ high end’ medicines in routine cases when other drugs would suffice. Veterinary pharmacies and drug stores should be routinely audited by the State Drug Controllers.

- Establish a rigorous national residue testing programme using risk analysis to target priority products. Following detection control measures should be taken to reduce the risk in future. DADF and state AHDs should work closely with FSSAI.

➢ **Animal welfare**

- Increase input from DADF into animal welfare policy development, legislation and enforcement. Appoint a designated animal welfare officer at DADF to ensure good liaison and coordination.
- Ensure effective reporting systems are in place for all animal welfare issues, use risk analysis and identify key issues to target and address non-compliance.
- Develop detailed rules guiding the sale and humane slaughter of animals.
- Consider options for improving the management of debilitated, moribund or diseased cattle and other animals which may be kept alive resulting in unnecessary suffering – and the risk of further disease spread. Current legislation does permit euthanasia of injured or diseased animals and much more use might be made of these provisions.

Interaction with interested parties

➢ **Communications and consultations**

- Develop a communications strategy with longer timelines and strategic planning; this applies at both national and state levels.
- Increase engagement with the private sector, producer and industry associations, and to develop stronger public-private partnerships for more effective and efficient programme delivery. DADF and state AHDs should encourage the development of industry and producer groups at national, state and local levels to build ownership and support for programmes.

- India should increase its leadership role in the development of international standards, policies and programmes – particularly given India's technical competence and professional staff.

➢ **Veterinary Statutory Body**

- Review the VCI and ensure it is more representative with increased funding provided directly from the registration of veterinarians and other assessment and licensing activities.
- Review any professional ethics and disciplinary issues more rigorously and hold more frequent disciplinary hearings; reports and annual summaries should be made publicly available.
- Establish the capacity within the VCI or an alternative body for the regulation of veterinary para-professionals.

Access to markets

➢ **Legislation**

- Review and replace out dated legislation.
- Develop technical regulations, currently not available, on issues such as animal feed safety, meat inspection and the stunning of animals.
- Review state legislation to identify gaps and inconsistencies.
- Ensure reports are maintained on compliance activities undertaken and outcomes to allow routine analysis and review of activities; also report on awareness and compliance activities.
- Improve the implementation of the legislation as highlighted in the report and taking into account the results of reviews and analysis as suggested in other recommendations.

➢ **International relations**

- Take greater international and regional leadership with increased consultation with the private sector in the preparation of submission papers as standards and programmes are developed.

- Make notifications to OIE, WTO-SPS, trading partners and others in real time without undue delays.

➢ **Zoning and compartmentalization**

- Support the establishment of the Equine Disease Free Zones (EDFZ) for sport horses.
- Review progress and options for FMD zoning recognising OIE standards for zone freedom - there is a need not only to determine the health status of the proposed zones but also to be able to define and manage sub-populations of all susceptible animals which requires the effective movement control and identification of animals.
- Continue to promote poultry disease free compartments and ensure formal documented recognition of the compartments by trading partners

APPENDIX – I

STANDING COMMITTEE ON AGRICULTURE BRANCH
(2017-18)

MINUTES OF THE FOURTH SITTING OF THE COMMITTEE

*****

The Committee sat on Thursday, the 16th November, 2017 from 1100 hours to 1245 hours in Committee Room No.2, Block 'A' Extension to Parliament House Annexe Building, New Delhi.

PRESENT

Shri Hukm Deo Narayan Yadav – Chairperson

MEMBERS

LOK SABHA

2. Shri Sanganna Amarappa Karadi
3. Dr. Tapas Mandal
4. Shri Nityanand Rai
5. Shri C.L. Ruala
6. Shri Jai Prakash Narayan Yadav

RAJYA SABHA

7. Sardar Sukhdev Singh Dhindsa
8. Shri Janardan Dwivedi
9. Shri Mohd. Ali Khan
10. Shri K.K. Ragesh
11. Shri Ram Nath Thakur
12. Shri Shankarbhai N.Vegad

SECRETARIAT

1.	Smt Juby Amar	-	Additional Director
2.	Shri C.Vanlalruata	-	Deputy Secretary

LIST OF WITNESSES

MINISTRY OF AGRICULTURE AND FARMERS WELFARE
(DEPARTMENT OF ANIMAL HUSBANDRY,DAIRYING AND FISHERIES)

S.No.	NAME OF THE OFFICER	DESIGNATION
1.	Shri Devendra Chaudhary	Secretary (ADF)
2.	Dr. Suresh S. Honappagol	AHC
3.	Shri P.K.De	Adviser Statistic

NATIONAL DAIRY DEVELOPMENT BOARD (NDDB)

1.	Shri Dilip Rath	Chairman, NDDB
2.	Dr. S.K.Rana	Dy. General Manager (NDDB)
3.	Shri Anantha Padmanabhan	Dy. General Manager (NDDB)
4.	Dr. Anand Kumar	Managing Director, Indian Immunologicals (IIL) Ltd.

2. At the outset, the Chairperson welcomed the members and the representatives of the Department of Animal Husbandry, Dairying and Fisheries to the Sitting of the Committee and apprised them of the confidentiality of the proceedings. The Committee, then, took up the subject 'Status of Veterinary Services and Availability of Animal Vaccine in the Country' with the representatives of the Department of Animal Husbandry, Dairying and Fisheries (DAHDF).

3. After the introduction, the Chairperson initiated the discussion which was followed by a power point presentation by the representatives of the Department and the discussion was taken forward by them and the Members of the Standing Committee. The Committee raised several issues/points as briefly mentioned below and sought clarification/information from the Department :

i) The issue of deficiency of resources available to the DAHDF and the need to work in collaboration with the States and UTs;

ii) Deployment of Krishi Mitra, MGNREGA workers etc. along with the involvement of Panchayati Raj Institutions for animal vaccination programmes which need to be taken up on lines similar to that of Mission Indradhanush, designed for vaccinating children;

iii) Steps to tackle the deadly Foot and Mouth Diseases (FMD) widely prevalent among cattle;

iv) Incorporating traditional knowledge and practices in treating animals and using local and regional treatment / methods to cure animal diseases;

v) Scientific interventions for livestock rearing need to be done in keeping with the needs of the livestock owner;

vi) To take up the issue of veterinary institutions which are non-functional due to lack of manpower, especially in the case of border states like Mizoram, from where small farm animals can be smuggled into the country;

vii) To look into the working of private dairies and monitoring them to keep a check on animal diseases and timely administration of animal vaccine and to consider the issue of location of private dairies in populated areas, making it even more dangerous for resident population to shield themselves from the spread of zoonotic diseases;

viii) Need to strengthen the veterinary infrastructure in all the States;

ix) The launch of a mobile app to link livestock owners directly to veterinarians in order to help them receive speedy veterinary aid; and

x) The issue of huge delay in the approval of indigenously manufactured veterinary drugs and vaccines by the Drug Controller General of India (DCGI) under the Ministry of Health and Family Welfare leading to delays in the process of manufacturing and distribution.

4. The Representatives of the Department responded to most of the queries raised by the Members. The Chairperson then thanked the witnesses for sharing valuable information with the Committee on the subject and directed them to send, in writing, the requisite information in points/items, which was not readily available with them, to the Committee Secretariat at the earliest.

The Committee then adjourned.

APPENDIX – II

STANDING COMMITTEE ON AGRICULTURE BRANCH (2020-21)

MINUTES OF THE FOURTH SITTING OF THE COMMITTEE

*****

The Committee sat on Monday, the 11th January, 2021 from 1500 hours to 1700 hours in Committee Room No.3, Block 'A' Extension to Parliament House Annexe Building, New Delhi.

PRESENT

Shri P.C. Gaddigoudar – Chairperson

MEMBERS

LOK SABHA

2. Shri Afzal Ansari
3. Shri Devendra Singh (Alias) Bhole Singh
4. Shri Devji Mansingram Patel
5. Smt. Sharda Anilkumar Patel
6. Shri Pocha Brahmananda Reddy

RAJYA SABHA

7. Shri Pratap Singh Bajwa
8. Sardar Sukhdev Singh Dhindsa
9. Shri Kailash Soni
10. Shri B.L. Verma
11. Smt. Chhaya Verma
12. Shri Harnath Singh Yadav

SECRETARIAT

1. Shri Shiv Kumar - Joint Secretary
2. Smt. Vatsala J. Pande - Director

LIST OF WITNESSES

MINISTRY OF FISHERIES, ANIMAL HUSBANDRY AND DAIRYING (DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING)

S.No.	NAME OF THE OFFICER	DESIGNATION
1.	Shri Atul Chaturvedi	Secretary (AHD)
2.	Shri Upmanyu Basu	Joint Secretary (LH)

2. At the outset, the Chairperson welcomed the Members and the Representatives of the Department of Animal Husbandry and Dairying to the Sitting of the Committee and apprised them of the confidentiality of the proceedings. The Committee then took up for discussion the subject 'Status of Veterinary Services and Availability of Animal Vaccine in the Country' with the Representatives of the Department.

3. After the introduction, the Chairperson initiated the discussion which was followed by a Powerpoint presentation by the Representatives of the Department. The Committee raised several issues / points as briefly mentioned below and sought clarification / information from the Department:

1) Need to increase the strength of Veterinarians in the country and augment veterinary infrastructure including Veterinary Educational Institutions;
2) Need to increase the number of seats in Bachelor of Veterinary Science (B.V.Sc.) along with increasing the number of Colleges and Universities;
3) To revamp the course curriculum of Veterinary Sciences in keeping with modern practices and professionalism and to ensure Continued Veterinary Education (CVE) to practitioners;
4) The need to include ethno-veterinary practices in course curriculum and also raise awareness about these in livestock owners and Local Veterinary Practitioners;
5) To encourage Dairy Cooperatives to venture into building and providing infrastructure for veterinary education;
6) To focus on accurate reporting of cattle population so that effective policies can be formulated;
7) To develop a mechanism to ensure review and timely utilization of allocated funds by respective States;

8) Steps being taken to increase the capacity of vaccine production and to become self-sufficient in manufacturing quality Veterinary Drugs/Medicines and vaccine within the country;

9) To ensure a monitoring mechanism for timely availability and administration of Animal Vaccines and take adequate measures for providing assistance to livestock owners losing cattle due to lack of proper vaccination;

10) Need to reduce the time taken by the Manufacturing Companies for testing of Vaccines;

11) To ascertain quality control in vaccine production and take strict measures to tackle any lapses in this regard on the part of their Producers or Manufacturers;

12) Need to make sure adequate Veterinary Practitioners at all Veterinary Aid Centers, Hospitals and Dispensaries;

13) The urgent need to deploy Mobile Veterinary Clinics (MVCs) with well-trained Veterinarians at the grassroot levels;

14) Need to make concerted efforts to raise awareness among Livestock Owners regarding importance of timely vaccination;

15) To involve bodies such as Panchayats, Rural banks, Post offices, etc. in programmes aimed at creating awareness among livestock owners and providing Short Term Training in Veterinary Practices to youth in Rural and Backward Areas;

16) Need to focus on livestock insurance in order to guarantee deserving reimbursements to livestock owners losing cattle due to accidents or Veterinary Diseases;

17) The urgent need to address the issue of indiscriminate use of Chemical Fertilizers in farming which affects the quality of Cattle Feed and Fodder thereby causing disease in Livestock and deterioration in their overall health;

18) To tackle the menace of loitering cattle and issues arising out of this;

19) To focus on programmes aimed at increasing production and productivity of Cattle Breeds and to take steps to prevent damages occurring to breed improvement due to rising no. of bulls;

20) To take measures to make Veterinary Services and Animal Healthcare Sector a profitable enterprise in order to attract and encourage private investments in the field;

21) The urgent need to formulate a holistic plan to tackle the issue of insufficient Veterinary Services and infrastructure in the country and recognize the potential of a robust veterinary service in doubling farmers' income.

22) To make concrete efforts to tackle the rising number of cases of Avian Influenza in the country;

4. The Representatives of the Department responded to most of the queries raised by the Members. The Chairperson then thanked the witnesses for sharing valuable information with the Committee on the subject and directed them to send, in writing, the requisite information in points / items, which was not readily available with them, to the Committee Secretariat by 22nd January, 2021.

The Committee then adjourned.

APPENDIX – III

STANDING COMMITTEE ON AGRICULTURE
(2020-21)

MINUTES OF THE FIFTEENTH SITTING OF THE COMMITTEE

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The Committee sat on Thursday, the 05th August, 2021 from 1500 hours to 1810 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri P. C. Gaddigoudar – Chairperson

MEMBERS

LOK SABHA

2. Shri Afzal Ansari
3. Shri Horen Sing Bey
4. Shri Devendra Singh 'Bhole'
5. Shri A. Ganeshamurthi
6. Shri Abu Taher Khan
7. Shri Mohan Mandavi
8. Shri Devji Mansingram Patel
9. Smt. Shardaben Anilbhai Patel
10. Shri Bheemrao Baswanthrao Patil
11. Shri Shriniwas Dadasaheb Patil
12. Shri Kinjarapu Ram Mohan Naidu
13. Shri Vinayak Bhaurao Raut
14. Shri Pocha Brahmananda Reddy
15. Shri Mohammad Sadique
16. Shri V.K. Sreekandan
17. Shri Ram Kripal Yadav

RAJYA SABHA

18. Shri Partap Singh Bajwa
19. Shri Kailash Soni
20. Shri Ram Nath Thakur
21. Smt. Chhaya Verma
22. Shri Harnath Singh Yadav

SECRETARIAT

1.	Shri Shiv Kumar	–	Joint Secretary
2.	Smt. Juby Amar	–	Director
3.	Shri Prem Ranjan	–	Deputy Secretary

2. At the outset, the Chairperson welcomed the Members to the Sitting of the Committee. Thereafter, the Committee took up for consideration the following Reports :

*(i) XXXX XXXX XXXX XXXX XXXX ;

(ii) Draft Report on the Subject 'Status of Veterinary Services and Availability of Animal Vaccine in the Country' of the Ministry of Fisheries Animal Husbandry and Dairying (Department of Animal Husbandry and Dairying).

3. After some deliberations, the Committee adopted the Draft Reports without any modifications and the Committee authorized the Chairperson to finalize and present these Reports to Parliament.

*4. XXXX XXXX XXXX XXXX XXXX

*5. XXXX XXXX XXXX XXXX XXXX

*6. XXXX XXXX XXXX XXXX XXXX

The Committee then adjourned.

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*Matter not related to this Report.