GOVERNMENT OF INDIA MINISTRY OF FISHERIES, ANIMAL HUSBANDRY & DAIRYING DEPARTMENT OF ANIMAL HUSBANDRY & DAIRYING RAJYA SABHA STARRED QUESTION NO. *76 TO BE ANSWERED ON 9TH FEBRUARY, 2024

"ESTABLISHMENT OF VETERINARY RESEARCH AND EDUCATION INSTITUTE"

*76 SHRI VIJAY PAL SINGH TOMAR:

Will the Minister of **Fisheries, Animal Husbandry and Dairying** be pleased to state:

(a) whether Government has established AIIMS like institutions for veterinary sciences;

(b) if so, the number of Central Government run veterinary institutions established alongwith the number of such institutes sanctioned and the timeline set for their completion;

(c) whether Government has taken initiatives to promote Research and Development (R&D) in veterinary services;

(d) if so, the details of the steps undertaken to promote the same;

(e) whether Government is planning to establish a model Veterinary Research and Education Institute to cater to the vast majority of livestock in the country; and

(f) if so, the details thereof, if not, the reasons therefor?

ANSWER

THE MINISTER FOR FISHERIES, ANIMAL HUSBANDRY & DAIRYING (SHRI PARSHOTTAM RUPALA)

(a) to (f) A Statement is placed on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PART (A) TO (F) OF THE RAJYA SABHA STARRED QUESTION NO. *76 PUT IN BY SHRI VIJAY PAL SINGH TOMAR: ON "ESTABLISHMENT OF VETERINARY RESEARCH AND EDUCATION INSTITUTE" DUE FOR ANSWER ON 9TH FEBRUARY, 2024

(a) and (b). No Sir.

(C) and (d). Yes Sir, The Central Government has taken several initiatives to provide better veterinary services supported by research and development and requirement in the field.

The Government started national vaccination programme against economically important diseases viz. Foot and Mouth Disease (FMD) and Brucellosis in 2019 on the strength of vaccine development by the research institutions of our country, specific to the circulating local strains. More than 50 crore doses of FMD vaccine have already been applied to cattle and buffaloes.

Similarly, indigenous vaccines have been developed and applied with 100% central funding against other important livestock diseases like *Peste des Petits Ruminants* (PPR) & Classical Swine Fever (CSF).

The Central Government is also supporting State Governments in bridging gaps in delivery of services by providing 100% funding to purchase Mobile Veterinary Units and funds in sharing, to supplement the efforts in delivery of veterinary services at farmers' doorstep. Central Government is also supporting Regional Disease Diagnostic Laboratories (RDDLs) for surveillance of animal diseases through Research and Development (R&D), for appropriate application in the field for control of animal diseases.

Department of Animal Husbandry and Dairying (DAHD), Government of India provides 100% financial assistance to promote R&D activities in veterinary services. So far, Rs. 2208.21 lakh has been released under National Livestock Mission Scheme during three years (2021-22 to 2023-24), details are at Annexure-I.

Under the Rashtriya Gokul Mission (RGM), the DAHD, GOI is promoting technology for In-Vitro Fertilization (IVF) and development of genomic chip for initiating genomic selection. The details are at Annexure-II.

(e) and (f). As informed by Indian Council of Agricultural Research (ICAR), no such proposal has been received in the Education Division of ICAR in this regard. However, there are 19 Animal Science Institutes under Indian Council of Agricultural Research (ICAR), which are already working on various R&D aspects of livestock and poultry. Indian Veterinary Research Institute (IVRI), one of the institute of ICAR, is a premier institute with advanced research facilities in veterinary sciences and also imparts graduate and post-graduation education in veterinary sciences.

			Annexure-I			
Sr.	Торіс	Total outlay Approved by Empowered Committee for 3 years (In lakhs)	Fund Released (In lakhs)		Total Released till date	
			I Year	II Year	(In Lakhs)	
			(2021-22)	(2023-24)		
A. Fin	year: 2021-22	•				
1	Conservation and Intensive Propagation of Superior Germplasm of Deccani sheep in Telangana (Dr. P. Amreshwari, PV Narsimha Rao Veterinary University, Telangana)	335.97	194.85		194.85	
2	Development of Goat Value Chain in Bundelkhand Region of Uttar Pradesh (Dr. A. K. Dixit, ICAR Central Institute for Research on Goats, Uttar Pradesh)	84.15	37.83	24.88	62.71	
3 (a)	Bioprocess development for the production of poultry feed from agro residues by solid state co-fermentation (Dr. Gaurav Chaudhary, Chaudhary Charan Singh Haryana Agricultural University, Haryana)	259	170.73		170.73	
3 (b)	Bioprocess development for the production of poultry feed from agro residues by solid state co-fermentation (Dr. Sanjoy Ghosh IIT Roorkee, Roorkee)		17.42	8.42	25.84	
4	Meat & Egg Sustainability through integrated poultry productivity improvement (Dr.Subhasis Batabyal, West Bengal University of Animal & Fishery Sciences, West Bengal)	175.1	105.2		105.2	
5	Characterization of bluetongue virus strains/serotypes and assessment of their suitability as vaccine candidates to the current field scenario (Dr. Divakar Hemadri, ICAR - National Institute of Veterinary Epidemiology and Disease Informatics, Bengaluru)	256.2	132	64.2	196.2	
6	Optimization of Procedures for non-surgical recovery and bio-banking of Marwari breed horse embryos (Dr. Thirumala Rao Talluri, ICAR National Research Centre on Equines, Bikaner)	100	50	25	75	
7	Surveillance of rotavirus genotypes in bovine and equines of India for identification of potential vaccine candidates (Dr. Baldev Raj, ICAR National Research Centre on Equines, Hisar)	81.34	33.44	23.44	56.88	
8	Utilization of Desert plants for the treatment of skin disease of Horses (Dr. R K Dedar, ICAR National Research Centre on Equines, Hisar)	119.6	49.2	47.2	96.4	

9	Development and evaluation of efficient regimen for Estrus synchronization in major Indian goat breeds (Dr. Yogesh Soni, ICAR Central Institute for Research on Goats, Uttar Pradesh)	62.31	25.95	18.18	44.13
	Sub Total A	1473.67	816.62	211.32	1027.94
Catego	bry: Research				
B. Fin	Year: 2022-23	1		1	l
Sr.	Торіс	Total outlay Approved by Empowered	Fund released (In lakhs)		Total Released till date
		Committee for 3 years (In lakhs	I Year	Π	(In Lakhs)
			(2022-23)	(2023- 24)	
10	Cryopreservation of embryos and semen of sheep and goats for the genetic improvement of non-descript breeds to improve farmers' livelihood (Dr. Ashish Mishra, ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru)	239.28	139.03		139.03
11	Development of innovative approaches for extensive application of estrus synchronization and Artificial Insemination techniques in sheep (Dr. Ajit Singh Mahla, ICAR- Central Sheep and Wool Research Institute, Rajasthan)	194.4	52.4		52.4
12	Wool profile of Indian sheep breeds (Dr. Vinod Kadam, ICAR- Central Sheep and Wool Research Institute, Rajasthan)	101.72	24.77		24.77
13	Development of surveillance and mitigation tools for the management of anthelmintic resistance in small- ruminants (Dr. Nirbhay Kumar Singh, Guru Angad Dev Veterinary and Animal Sciences University, Punjab)	89.1	10.73	21.46	32.19
14	Technological interventions for development of sustainable Kajali sheep production model vis a vis prevailing intensive paddy-wheat cropping system of Punjab (Dr. Amit Shrma, Guru Angad Dev Veterinary and Animal Sciences University, Punjab)	232.15	41.5	83	124.5
15	Improvement of Rural Backyard Poultry Lines Through Genetic and Managemental Interventions Under Low Input System (Dr. P P Dubey, Guru Angad Dev Veterinary and Animal Sciences University, Punjab)	163.62	23.91	47.82	71.73
16	Development of Recombinant antigen based Novel Epi-diagnostics and Sub unit Vaccines for Anthrax in Small Ruminants (Dr. Sathish B. Shivachandra, ICAR - National Institute of Veterinary Epidemiology and Disease Informatics, Bengaluru)	92.6	14.2		14.2
17	Comparative Genomics and Epidemiology of Capripoxviruses in India (Dr. Manjunatha Reddy, ICAR - National Institute of Veterinary Epidemiology and Disease Informatics, Bengaluru)	150.62	19		19

18	Epidemiological Surveillance of Antimicrobial Use (AMU) and Antimicrobial Resistance (AMR) in Sheep, Goats and Poultry with one health approach in Karnataka and Tamil Nadu. (Dr. Shivasharanappa N., ICAR - National Institute of Veterinary Epidemiology and Disease Informatics, Bengaluru)	83	10.25		10.25
19	Epidemiological survey on haemoprotozoan parasites and Mycoplasma suis in pigs of Lakhimpur and Dhemaji district of Assam (Dr. Gautam Bordoloi Assam Agricultural University, Assam)	34.8	7.7		7.7
20	Technological innovations in enhancing ovine and caprine production performance and its value addition for sustainable livelihood of nomadic shepherds of UT of Jammu and Kashmir (Dr. Arvind Kumar, Sher-e- Kashmir University of Agricultural Sciences and Technology, Kashmir)	99.6	14.8		14.8
21	Selective breeding of dual purpose Rajasri birds for sustainable entrepreneurship in rural poultry farming (Dr. P. Amreshwari, PV Narsimha Rao Veterinary University, Telangana)	323	45.39		45.39
22	Bio-fabricated Gold Nano-particle based improved semen extender to augment the postthaw quality of goat semen (Dr. Alok Kumar, Bihar Animal Science University, Patna)	130.33	23.48		23.48
23	Genetic Improvement of Forage Crops for Sustainable Livestock Production (Dr. Sultan Singh, ICAR- Indian Grassland and Fodder Research Institute, Jhansi)	376.84	50.82		50.82
24	Development of effective mass propagation techniques for rapid multiplication and easy transportation of quality planting material in Bajra Napier Hybrid (Dr. Vijay Kumar Yadav, ICAR-Indian Grassland and Fodder Research Institute, Jhansi)	179.39	25.91		25.91
25	Grassland Restoration and Rejuvenation for Enhancing Grazing Resources using Remote Sensing and Drone technologies (Dr. Amit Kumar Singh, ICAR- Indian Grassland and Fodder Research Institute, Jhansi)	117.41	22.74		22.74
26	Development of herbal fortified diluter for buck semen cryopreservation. (Dr. Chetna Gangwar, ICAR Central Institute for Research on Goats, Uttar Pradesh)	165.5	32.03	64.06	96.09
27	Development of strategies for competent embryo production and efficient cryopreservation for faster propagation of superior goat germplasm (Dr. S. P. Singh, ICAR Central Institute for Research on Goats, Uttar Pradesh)	145.25	22.56	45.12	67.68
28	Development of urine-based biosensor for pregnancy diagnosis in ruminants (Dr. Ashok Kumar Balhara, ICAR Central Institute for Research on Buffaloes, Hisar)	208.04	29.85		29.85
29	Applications of Infrared Thermography as innovative non-invasive technological solution in early mastitis detection (Dr. Sunesh Balhara, ICAR Central Institute for Research on Buffaloes, Hisar)	130.67	21.15		21.15

30	Optimizing superior buck use in up-gradation of non- descript goats with seasonal fertility investigation and semen cryopreservation (Dr. S. N. Shukla, Nanaji Deshmukh Veterinary Science University, Jabalpur)	225.94	46.29		46.29	
31	Performance Appraisal of Large White Yorkshire Crossbred Pigs of Two Exotic Inheritance and Characterization of Local Pigs of Mahakaushal Region of Madhya Pradesh (Dr. Biswajit Roy, Nanaji Deshmukh Veterinary Science University, Jabalpur)	185.37	16.8		16.8	
32	Production of Cow-Bioplastic from Cow-Dung and its Application in Different Areas (Dr. Shuchi Verma, University of Delhi, Delhi)	100.85	15.06	30.12	45.18	
	Sub Total B	3769.48	710.37	291.58	1001.95	
Catego	bry: Research					
C. Fin	Year: 2023-24	1				
Sr. No.	Торіс	TotaloutlayApprovedbyEmpoweredCommitteeCommitteefor3 years(Inlakhs	Fund released (In lakhs)		Total Released till date (In Lakhs)	
			I Year	II Year		
			(2023-24)			
33	Surveillance, Molecular characterization and development of vaccine candidate for Porcine Parvovirus(Dr. S. Parthiban, Tamil Nadu Veterinary and Animal Sciences University, Chennai)	45.3	3.16		3.16	
34	Technological interventions towards sustainable livelihood for desi and improved pig farmers (Dr. C. Manivannan, Tamil Nadu Veterinary and Animal Sciences University, Chennai)	29.28	4.92		4.92	
35	Evaluation of genetic resistance against parasitic infection (Haemonchuscontortus) in indigenous goat breeds of Tamil Nadu through candidate gene approach (Dr. Gopu P., Tamil Nadu Veterinary and Animal Sciences University, Chennai)	83.7	7.44		7.44	
36	Evolving non forage fibre based Total Mixed Rations (TMR) from agro-industrial by-products to alleviate feed shortage in goats of Tamil Nadu (Dr. L. Radhakrishnan, Tamil Nadu Veterinary and Animal Sciences University, Chennai)	128.31	20.98		20.98	
37	Integrated analysis for the ultra-deep compositional characteristics of donkey colostrum and mature milk (Dr. Anuradha Bhardwaj, ICAR National Research Centre on Equines, Hisar)	107	16.25		16.25	
38	Development of novel semen extender for the enhancement of post thaw semen quality in equines (Dr. Thirumala Rao Talluri, ICAR National Research Centre on Equines, Bikaner)	112	22.5		22.5	
39	Development of Shelf-Stable Ready to Eat (RTE) Meat Products by Standardizing the Retorting Methods for Entrepreneurial Opportunities and Skill Development (Dr. I. Prince Devadson, ICAR Indian Veterinary Research Institute, Izatnagar)	105.56	20.34		20.34	

40	Unravelling the resistant signature of priority poultry pathogens for an integrated approach to address antimicrobial resistance. (Dr. Samiran Bandyopadhyay, ICAR Indian Veterinary Research Institute, Izatnagar)	130.1	22.25		22.25	
41	Centre for Food Safety and Quality Evaluation of Foods of Animal Origin (Dr. Sandeep P. Chaudhari, Maharashtra Animal and Fishery Sciences University, Mahrashtra)	138.14	22.83		22.83	
42	Sustainable Livelihood Improvement of Resource Poor Farmers through Livestock Productivity Augmentation by Standardization and Popularization of Value-added Animal Feed Supplements in Kashmir Himalayas (Dr. Yasir Afzal Beigh, Sher-e-Kashmir University of Agricultural Sciences and Technology, Kashmir)	59.19	8.88	8.88	17.76	
43	Development of the True Breeding Improved Native Chicken with Higher Productivity for Backyard Poultry Production (Dr Jaydip Rokade, Scientist, ICAR-CARI, Izatnagar, Bareilly, UP)	195.86	19.89		19.89	
	Sub Total (2023-24) C	938.58	169.44	8.88	178.32	
	Total released during 2021-22	816.62				
	Total released during 2022-23	710.37				
	Total released in 2023-24	681.22				
	Number of Proposals 43					

Annexure-II

The following technological initiatives have been undertaken under Rashtriya Gokul Mission:

- (i) Promotion of in-vitro Fertilization (IVF) technology through establishments of IVF labs and delivery of IVF services at farmer's doorstep. Under the component projects have been sanctioned for establishment of 43 IVF laboratories. Under the programme, subsidy at the rate of Rs 5000 per assured pregnancy will be made available to farmers.
- (ii) Development of genomic chip for initiating genomic selection. Indus and buff chip developed by National Dairy Development Board (NDDB) and more than 77000 animals genotyped. A common genomic chip has been developed by combining data generated by National Dairy Development Board (NDDB), National Bureau of Animal Genetic Resources (NBAGR) and National Institute of Animal Biotechnology (NIAB).
- (iii) Establishment of sex sorted semen production facility and delivery of artificial insemination using sex sorted semen at farmers' doorstep. As on date, Semen production facility has been created at 8 semen stations and 89 lakh sex sorted semen doses produced. Under the programme, subsidy of Rs 750 or 50% of the cost of sorted semen on assured pregnancy is made available to farmers.
