

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)(Registered with the Registrar of Societies vide Regn. certificate No.S-2/4471 of 1993 dated 7th July 1993)NEW DELHINAVS NEWSLETTERAPRIL, 2019

WORLD VETERINARY DAY APRIL 27, 2019

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Cover design assistance: Mr. Narendra Pandev

Cover Photo: Asiatic Lion (flickr) - One of the rare wild endangered animals which you can see only in India

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CH. 1: NAVS GENERAL INFORMATION

1.1: Governing Council (2017- 2019)

Office Bearers



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Vice-President Dr. D.V.R. Prakasha Rao Chairman and Managing Director Prakash Food & Feed Mills (P) Ltd, Chennai Cell : 09940099000 E-mail : <u>contact@prakashfeeds.com</u>



Secretary General Dr. S.K. Gupta Ex-Dean, COVS, LUVAS 206, Defence Colony, Hisar – 125 001 Cell : 09896068399 E-mail : drsurengupta@gmail.com



Treasurer Dr. Nem Singh SKE-218, Shipra Krishna Vista Plot 14, Ahimsa Khand Indrapuram, Gaziabad – 201 014 (U.P) Cell : 09818244710 E-mail : <u>singhnem1945@gmail.com</u>



Editor Dr. R.N. Kohli 922, Sector - A, Pocket - B&C, Vasant Kunj, New Delhi - 110070 Cell: 09968920200 E-mail: <u>rnkohli@gmail.com</u>

MEMBERS (ELECTED)

Dr. B.N. Tripathi, Hisar: <u>bntripathi1@yahoo.co.in</u> Dr. Sanjeev Kumar, Izatnagar: <u>skgcari@yahoo.co.uk</u> Dr. Minakshi Prasad, Hisar: <u>minakshi.abt@gmail.com</u> Dr. S.K. Srivastava, Izatnagar: <u>sksrivastava1093@gmail.com</u> Maj. Gen. Dr. M. L. Sharma, Delhi: <u>sharmaml@thebrookeindia.org</u> Dr. Ravindra Sharma, Hisar: <u>rsharma698@gmail.com</u> Dr. V.D.P. Rao, Vijaywada: <u>raovdp@rediffmail.com</u> Col. Dr. R. P. Garg, VSM, NCR, Noida, U.P.: email ID not available Dr. S.N. Singh, Bangalore: <u>snsingh.2006@gmail.com</u> Dr. S.K. Saha, Izatnagar: <u>subodhksaha@yahoo.com</u> Dr. A.B. Mandal, Izatnagar: <u>drab.mandal@gmail.com</u> Dr. S.S. Randhawa, Ludhiana: <u>sarnarinder@gmail.com</u> Dr. Mandeep Sharma, Palampur: <u>mandeepsharma289@hotmail.com</u> Dr. P. N. Khanna, Delhi: <u>pran_khanna@rediffmail.com</u> Dr. S. K. Tiwari, Durg: drtiwarisurgery@gmail.com

MEMBERS (PERMANENT EX-OFFICIO)

Incumbents holding following Official Govt. of India Positions are permanent Ex-Officio members: DG RVS; *DDG (A.S.), ICAR; AHC (GOI); and President VCI*

1.2: INSTITUTIONAL/CORPORATE LIFE MEMBERS

INSTITUTIONAL LIFE MEMBERS

LUVAS (Lala Lajpat Rai University of Veterinary & Animal Sciences), Hisar, Haryana. CKVU (Chattisgarh Kamdhenu Veterinary University), Raipur / Durg, Chattisgarh. MAFSU (Maharashtra Animal & Fisheries Sciences University), Nagpur, Maharashtra RAJUVAS (Rajasthan University of Veterinary & Animal Sciences), Bikaner, Rajasthan DUVASU (Deen Dayal Upadhadhaya Veterinary and Animal Scieces University, Mathura, U.P.

KCVAS (Khalsa College of Veterinary & Animal Sciences), Amritsar, Punjab Sri Venkateshwara Veterinary University, Tirupati, A.P. Kamdhenu University, Gandhinagar-382010, Gujrat Bihar Animal Sciences University, Patna (Bihar)

Karnataka Animal, Fishery & Veterinary Sciences University (KAFVSU), Nandinagar, Bidar (Karnataka)

CORPORATE LIFE MEMBERS M/S Indian Herbs, Saharanpur M/S Ayurvet Limited

1.3: PAST OFFICE BEARERS OF THE ACADEMY

Presidents:

* Dr. C.M. Singh - 1993 - 2004 (Founder President)

Dr. S.K. Ranjhan - 2004-2007 Dr. S.C. Adlakha - 1/7/2007 - 28-2-2008 Dr. R.R. Shukla - 28/2/2008 - 31/10/2010 Dr. M.P. Yadav - 31/10/2010 - 31/12/2013 Dr. K.M.L. Pathak 1/1/2014 - 22/4/2017

Vice-Presidents:

*Dr. R.P.S. Tyagi -1993 - 2004 Col. (Dr.) V.K. Bhatnagar- 2004-2007 Dr. R.R. Shukla - 1/7/2007 - 28-2-2008 Dr. P.N. Khanna - 28-2-2008 - 31/10/ 2010 Col. (Dr.) V.K. Bhatnagar- 31/10/2010 - 31/12/2013 Maj. Gen. (Dr.) Shri Kant Sharma 1/1/2014 - 22/4/2017

Secretary Generals:

Dr. P.N. Bhatt -1993 - 2004 * Dr. K.L. Sahani -2004-2007 * Dr. B.S. Nanda - 1/7/2007 - 23-5-2008 Dr. N.N. Pathak - 23-5-2008 - 6/7/2009 Dr. R.N. Kohli - 6/7/2009 - 31/10/2010 Dr. Gaya Prasad - 31/10/2010 - 31/12/2013 Dr. Rishendra Verma - 1/1/2014 - 22/4/2017

Treasurers: Dr. A. Ahmad and Dr. B.S. Malik} -1993 - 2004 Dr. P.N. Khanna - 2004-2007 Dr. Lal Krishna - 2007 to - 22/4/2017

Editors: Dr. R.N. Kohli - 6/7/2009 to Present Date (Founder Editor);

Since deceased

1.4: CHRONOLGY OF NAVS CONVOCATIONS-CUM-CONVENTIONS

- 1. First NAVS Convocation: 18th December 1996 at Vigyan Bhawan, New Delhi
- 2. Second NAVS Convocation: 30th January 2000 at Pragati Maidan, New Delhi
- 3. Third NAVS Convocation: 16th April 2002 at IVRI, Izatnagar, U.P.
- 4. Fourth NAVS Convocation: 7th May 2005 at GBPUAT, Pantnagar, Uttrakhand
- 5. Fifth NAVS Convocation: 5th May 2006 at JNKVV, Jabalpur, M.P.
- 6. Sixth NAVS Convocation: 28th June 2007 at KVAFSU, Bangalore, Karnataka
- 7. Seventh NAVS Convocation: 16 May 2008 at SKUAST, Jammu, J. & K.
- 8. Eighth NAVS Convocation: 23rd January 2009 at SVVU, Tirupati, Andhra Pradesh

9. Ninth NAVS Convocation: 30th October 2010 at NDRI, Karnal, Haryana.

10. Tenth NAVS Convocation: 12th November 2011 at RAJUVAS, Bikaner, Rajasthan.

11. Eleventh NAVS Convocation: 2nd November 2012 at DUVASU, Mathura, U.P.

12. Twelfth NAVS Convocation: 28th January 2014 at LUVAS, Hisar, Haryana

13. Thirteenth NAVS Convocation: 28th February 2015 at CGKV, Durg, Chhatisgarh

14. Fourteenth NAVS Convocation: 4th November, 2015 at IVRI, Izatnagar, U.P.

15. Fifteenth NAVS Convocation held on 22 October, 2016 at KCVAS, Amritsar, Punjab

16. Sixteenth NAVS Convocation held on 4-5 November 2017 at Tirupati, A.P.

17. Seventeenth NAVS Convocation held on 19-20 December 2018 at OUAT, Bhubaneswa Odissa.

1.5: DECEASED NAVS FELLOWS

- 1. Ahuja, Dr. Kanhaya Lal, Fellow Elected 1997
- 2. Baishya, Dr. Gajen, Fellow Elected 2005-06
- 3. Bajpai, Dr P.K., Fellow Elected 1996
- 4. Balain, Daya Singh, Fellow Elected 1996
- 5. Batta, Dr. Satish K, Fellow Elected 2006-07
- 6. Bhardwaj, Dr Madan Behari Lal, Fellow Elected 1996
- 7. Bhasin, Dr. Nek Ram, Honorary Fellow Elected 2011
- 8. Bujarbarua, Dr J.M., Fellow Elected 1996
- 9. Butuchaiah, G., Fellow Elected 1996
- 10. Chandna, I.S., Fellow Elected 2000-01
- 11. Chaudhary, Dr. Amrit Lal, Fellow Elected 1996
- 12. Gupta, Dr. Shiv Kumar, Fellow Elected 2000-01
- 13. George, Dr. P. O., Fellow Elected
- 14. Harbola, Dr P.C., Fellow Elected 1998-99
- 15. Jhala, Dr. V.M., Fellow Elected 1996
- 16. Kanwar, Lt. Gen. N.S., Fellow Elected 2010-11
- 17. Katoch, Dr. R.C., Fellow Elected 2005-06
- 18. Krishna, Gopal, Fellow Elected 2005-6
- 19. Krishnaswamy, Dr. S., Fellow Elected 2007-08
- 20. Kukreti, Dr. J.P., Hon. Fellow Elected 2012
- 21. Kumaran, Dr. Jay S., Fellow Elected 2007-08
- 22. Lal, Dr S.M., Fellow Elected 2000-01
- 23. Manickram, Dr R., Fellow Elected 1999
- 24. Mathur, Dr P.B., Fellow Elected 1996
- 25. Misra, Dr. Sarat Chandra, Fellow Elected 2006-07
- 26. Nair, Dr. P.G., Fellow Elected 1996
- 27. Nanda, Dr. B.S, Fellow Elected 2007-08

- 28. Padmanabhan, Dr.V. D., Fellow Elected 1996
- 29. Panda, Dr. Bhagabat, Fellow Elected 1996
- 30. Pandey, Dr J.N., Fellow Elected 2000-01
- 31. Pandey, Dr. Ramayan, Fellow Elected 1996
- 32. Pathak, Dr. Ramesh Chandra, Fellow Elected 1996
- 33. Pathak, Dr. S.C., Fellow Elected 1997
- 34. Prasad, Dr. Gaya, Fellow Elected 1999
- 35. Rajya, Dr. Bhagwan Saran. Fellow Elected 1996
- 36. Ramachandran, Dr S., Fellow Elected 1996
- 37. Rao, Dr B.U., Fellow Elected 1996
- 38. Rao, Dr. C. Krishna, Fellow Elected 1996
- 39. Rao, Dr. Rama Mohan, Fellow Elected 1996
- 40. Rao, Dr. R.L.N., Fellow Elected 1999
- 41. Rastogi, Dr Anil K., Fellow Elected 2007-08
- 42. Sahni, Dr K.L., Fellow Elected 1996
- 43. Salam, Dr. Abdus, Fellow Elected 1996
- 44. Sen, Dr. G. P., Fellow Elected 1996
- 45. Sharma, Dr. Deepak, Fellow Elected 2010-11
- 46. Sharma, Dr. Gopal, Fellow Elected 1996
- 47. Singh, Dr A. K., Fellow Elected 2005-06
- 48. Singh, Dr. Balwant, Fellow Elected 1996
- 49. Singh, Dr. Bhanu Pratap, Fellow Elected 1996
- 50. Singh, Dr. C.M., Founder President 1996
- 51. Singh, Dr. Nagendra Prasad, Fellow Elected 1996
- 52. Singh, Dr. Prem Pal, Fellow Elected 1997
- 53. Singh, Dr. Raghu Nath, Fellow Elected 1998-99
- 54. Singh, Dr. Ratan, Fellow Elected 1999-2000
- 55. Singh, Dr U. B., Fellow Elected 1996
- 56. Soni, Dr. Balbir Krishan, Fellow Elected 1996
- 57. Srivastava, Dr. G.C., Fellow Elected 2007-08
- 58. Tyagi, Dr. R.P.S., Fellow Elected 1996
- 59. Verma, S.K. Fellow Elected 1997
- 60. Venkatakrishnan, Dr. R., Fellow Elected 2004-05
- 61. Yadav, Dr. J.N.S., Fellow Elected 1999

A REQUEST TO OUR READERS FOR HELP

We have compiled the above tentative updated list of deceased fellows of the Academy which is regularly being revised with the help of our readers who are requested to kindly help us in this process by providing us the required information that may be available with them or their colleagues. List of all the fellows can be found in the NAVS Handbook 2016 which is also posted on <u>www.navsindia.org</u> Kindly email your suggestions to: <u>rnkohli@gmail.com</u>.

Ch. 2: NAVS NEWS

<mark>2.1: </mark>NAVS(I) Felicitates Professor A.K. Mishra and Lt. Gen. P.R. Venkatesh

The National Academy of Veterinary Sciences (India) felicitated Professor A.K. Mishra, newly appointed Chairman of Agricultural Scientists Recruitment Board (ASRB) on 16.03.2019. In addition, the Academy also felicitated Lt. Gen. P.R. Venkatesh, Director General of Remount Veterinary Services for having received the award of Sena Medal from the Hon'ble President of India.



Prof. Mishra appreciated the efforts of the Academy to promote veterinary education and research in the country. Lt. Gen. Venkatesh assured the Academy for the continued support from RVC in its future endeavour.



2.2: NAVS Governing Council Meeting Held on 16th March

A scheduled G.C. meeting of NAVS (India) was held in the Committee Room No.2 of NAAS Office Block of NASC Complex in New Delhi on 16th March 2019. It was attended by 13 members. After observing a 2-minute silence in the memory of Dr. S.S. Rathore (see obituary in chapter 6), the President, NAVS (I) in his opening remarks briefed the house regarding the efforts made so far by the Academy regarding establishment of ICVR, parity of NAVS fellowship with that of NAAS and other academies and financial aid to the academy.

All the G.C. members whole heartedly appreciated the gesture of Prof. H.D. Narayanaswamy, Vice-Chancellor of KVAFSU for enrolling the university as an institutional life member of NAVS (I), a gesture that will certainly motivate the other veterinary universities to join us as institutional members.

Following are some of the decisions taken at the meeting:

- 1. The 18thConvocation-cum-Scientific Convention of NAVS (I) will be held at Kamdhenu University, Gujarat, on the theme of 'Futuristic Technologies in Animal Health and Production'.
- 2. The last date for the receipt of applications for the award of Fellowships, Memberships and Associate Memberships was extended up to 15.04.2019 on popular demand by the prospective candidates.
- 3. A round table / brain-storming session on antimicrobial resistance would be organized as an awareness measure regarding this menace. A Committee was constituted for working out the modalities of the event to be organized jointly with Ayurvet Limited and FSSAI, who had been consulted before the start of the GC meeting in an interaction with their representatives.
- 4. It was decided to get G.B. approval to have two seats reserved for women in the Governing Council of NAVS (I).
- 5. It was agreed upon to bring out annual report of the Academy in the form of soft as well as hard copy.
- 6. It was agreed upon that the directory of NAVS (I) (NAVS Handbook) be updated every three years. The last time it was updated in 2016 so it was decided to update the same before the next GB meeting. Further it was decided to identify region-wise fellows, who shall be collecting the information pertaining to Fellows/Associate members/members of their region and will be sending the same to the Editor –in Chief. A committee was constituted for this purpose.
- 7. A request of the CEO, Brooke India for Institutional membership of NAVS (I) was discussed in detail and a committee was constituted to suggest the guidelines for admitting NGOs or Pvt. Organizations associated in Animal Welfare and upliftment of Veterinary Sector as Institutional member of NAVS (I) :

2.3: NAVS' Proposal for a Veterinary University in Odisha

Professor Ganeshi Lal Ji, Hon'ble Governor of Odisha, was invited as Chief Guest at 17th Convocation of National Academy of Veterinary Science (NAVS) and National Seminar on "Livestock Sector towards One Health, Food Security and Safety" at Bhubaneswar on 20 Dec 2018. He had accepted the invitation. However, he had to go to Kurukshetra for GEETA MAHOTSAVA and could not join us. On his return Maj Shri Kant, the President paid a courtesy call on him along with Dr. Ravindera Sharma and Dr. SK Gupta. During the course of discussion, the President briefed the Hon'ble Chancellor about the activities of NAVS (I) and tried to impress upon him the necessity of a Veterinary University in the state of Odisha. He was convinced and this was followed by a DO letter dated 21 Feb 2019 giving full justification of a Veterinary University. A similar DO was also written to the Hon'ble Chief Minister, Odisha. Subsequently, the faculty of the Veterinary College was apprised of



the development and advised to meet the Governor and the CM for further progress on the issue.

<mark>2.4:</mark> NAVS (I) Interacts with its Fellows at Tirupati

At the request of President and Vice-President of NAVS (I) to reach out to its Fellows residing in Tirupati, Dr. Chandershekhar Rao, the Dean of Colleges, Sri Venkateswara Veterinary University organised an interactive session of the NAVS Fellows in the Committee room of the Vice-Chancellor. The meeting was also attended by Dr. Y Hari Babu, Hon'ble Vice-Chancellor, Registrar, Dean of the Colleges and Controller of Examination of the University. Maj Gen Shri Kant and Dr. DVR Prakasha Rao briefed the Fellows regarding the activities and initiatives under taken by the Academy like Parity of our Fellowship with that of NAAS and other Academies; establishment of Indian Council of Veterinary Research (ICVR); planning of national seminar on Paravets in collaboration with Govt of India, Ministry of Agriculture (DADF) and improvement in financial condition of the Academy etc. There was a request from women Fellows regarding their representation and reservation of two seats for women Fellows in Governing Council in view of emphasis on women empowerment these days. This request has been agreed to unanimously by all the Hon'ble members present in the GC meeting held on 16 March 2019. This kind of regional meeting of the Fellow has been held, possibly, for the first time. The Academy is thankful to the Hon'ble VC and all the Fellows for their warmth and hospitality.

2.5: Antimicrobial Resistance: Ayurvet Collaborting With Navs(I)

There is global concern arising out of developing microbial resistance agaist the antibioics. Antimicrobial resistance (AMR) occurs when bacteria and other microbes adapt and become less susceptible to medical treatment. The concern has been shared by all the international agencies like United Nations and FAO. In year 2017, Govt of India formulated national plan for curtailment of AMR. Antimicrobial resistance causes an estimated 700,000 deaths annually worldwide, and every country is potentially affected. If not properly addressed, the number could grow to 10 million per year by 2050.

Ayurvet has been associated with development of alternative natural solutions and also monitoring AMR issues in the country. Our Academy, being appex body in the country on veterinary and animal husbandry matters, issues policy papers on various subjects. Ayurvet, therefore, wish to collborate with the Academy to undertake the program for creating awareness and undertake projects for promoting the responsible use of antibiotics.

As resolved in the NAVS GC meeting held on 16 March 2019, preliminary meeting was organised in conference room of head office of Ayurvet in Ghaziabad to plan strategy for resolving very important issue of AMR in the present context jointly by NAVS and Ayurvet by organising round table



confrence on 22 March 2019. Maj Gen Shri Kant, Maj Gen ML Sharma and Dr. Ravindera Sharma participated in the deliberation on behalf of NAVS whereas Mr MJ Saxena, Managing Director and his team of executives including Dr. AC Varshney and Dr. R.S. Khanna represented the Ayurvet. Dr VP Singh, Deputy Director, represented Food Security, Safety Authority of India (FSSAI). Dr.Azad Kaushik, Professor of Guelph University Canada and Dr Parveen Malik, Director NIAH Bagpat also participated in the deliberations. The proceeding will be finalised soon and next course of action will be decided under the chairmanship of Maj Gen ML Sharma.

2.6: NAVS President attends Indian Veterinary in Kolkata

Maj Gen Shri Kant, President NAVS attended 19th Indian Veterinary Congress, XXVI Annual Conference of IAAVR and National Symposium at West Bengal University of Animal and Fishery Sciences, Kolka from 1 – 2 Feb 2019 as a guest of honour.

Information required for news items about new books published by veterinarians

Author(s) may send a brief draft of the news item including the title of the book, name(s) of author(s) as given in the book, name, address and contact particulars of the publisher, Year of publication, Edition, Price, and total number of pages etc may be sent in MS Word format via email to the editor (rnkohli@gmail.com) at least two to three weeks before month of issue (January, April, July & October). The Newsletter is released in the last week of the month previous to the month of issue given on the cover for technical reasons. Any additional information including a photograph of the cover page of the book etc may also be sent. Authors' address and contact numbers, email IDs may kindly be provided so that readers can contact them (if necessary).

OUR MISSION

"To consolidate and promote the views of scientific community on all policy matters related to Veterinary Science and Animal Husbandry in the welfare of India; to encourage better training and utilization of veterinary talent and enterprise in the country; to strive for advancement of livestock sector in the national economy; to promote animal welfare; to protect environment; and to safeguard the interests of the profession and to gain greater recognition and acclaim for it".



3.1: Rare and Wild: Endangered Animals Which You Can See Only in India



World Animal Day is a day in which people all over the world celebrate animals and work towards the well-being and rights of animals. It is celebrated on October 4th of each year, which is fitting since that is also the feast day of Francis of Assisi – the patron saint of birds and animals. The mission of World Animal Day is to improve welfare standards for animals around the world and work to make the world a better place for all animals.

As we celebrate the World Animal Day this year, let us look at some rarest of the rare animals that are endemic to the Indian subcontinent. The photo on the cover of this issue



of NAVS Newsletter is that of an Asiatic Lion (flickr) which is one of the rare and wild endangered animals which you can see only in India. We decided to know a little bit about them this quarter. Asiatic Lion

Restricted to a region of roughly 1,000 sq km around the Gir National Park in Gujarat, the Asiatic Lion's (*Panthera leo persica*) population has gone up and down over the years, but its status remains endangered with 523 individuals on the last count.

About 200-280 cm long and 110 cm tall — as big as a full-grown tiger — the Asiatic Lion appears much bigger than other big cats thanks to their majestic mane. Twenty-three Asiatic Lions have <u>died</u> within the last twenty days due to viral infection, raising alarm bells across the country. Poaching is the biggest threat to this big cat apart from road accidents, as lions have been spotted crossing the roads near the forest on multiple occasions. As a result of this crossing over of habitat boundaries, lion-human conflict in the region has also been increasing.

Andaman White-toothed Shrew

Shrews are the smallest mammals in the world. The smallest among them is the four cmlong Etruscan Pygmy Shrew, weighing only about 1.8 grams. They are often confused with rats, but, in reality, the two are not even remotely related. Andaman White-toothed Shrew



(*Crocidura russula*) is a type of shrew found only within a 51 sq km area on Mount Harriet in the South Andaman Island — and nowhere else on the planet. The population of this tiny animal is unknown but has suffered immensely due to natural disasters like the tsunami and the manmade ones like deforestation. It is now listed as



'Critically Endangered' in the IUCN Red List. Apart from the fact that it is a nocturnal being, this shrew is also fast, small and good at hiding between rock crevices, so spotting one is nearly impossible for the untrained eye. (Photo: Greater white-toothed shrew (Crocidura russula)

Hard-ground Barasingha (Swamp Deer)

The Barasingha, or the 12-tined swamp deer, is categorised a 'vulnerable species' and can be found in India, Pakistan, Nepal and Bangladesh. However, the rarer subspecies, hard-ground barasingha (*Rucervus duvaucelii branderi*), is endemic to central India, specifically to the beautiful Kanha National Park. The differentiating factor of this subspecies is its hard hooves, adapted to the hard ground of the sal forests and grasslands of Kanha. They are one of India's best conservation stories! This beautiful animal was almost extinct, with less than 100 individuals left at the turn of the century, but extraordinary conservation work saved its population, which today stands at around 500. This year, a population of <u>20 hard-</u>



ground Barasinghas have been introduced into the Satpura National Park to save the gene-pool in case of an epidemic or natural disaster in Kanha. However, it is too early to say if this experiment will work.

(Photo: A stag of Hardground Barasingha at Kanha Tiger Reserve, Madhya Pradesh (Pranad Patil / CC-BY-SA-4.0 / Wikimedia Commons)

<mark>Kashmir Stag</mark>

Locally called Hangul, the Kashmir Stag (*Cervus* elaphus hanglu), once spread across Jammu &

Kashmir and Himachal is now restricted to the Kashmir valley and is categorised as 'critically endangered'. A subspecies of the red deer, it can be seen at Dachigam National Park, a small sanctuary near Srinagar, where about 110 of the total approximately 200 individuals find a safe haven. <u>Due to poaching</u> and habitat loss, the population of the Hangul is declining at an alarming rate of about 25% per generation (14 years), and the number of mature males may now be much smaller. For a better chance at spotting this beautiful animal with high antlers, do a day trek to Upper Dachigam in October, which is also Hangul rutting season.



(Photo: Sketch of a Kashmir Stag from the book Mammals of other lands published in 1917 (flickr)

Lion-tailed Macaque

An old world monkey, the endangered Liontailed Macaque (*Macaca silenus*), is so called because of its bushy tail but is more identifiable by its lion-like silver-grey mane. It is a small macaque weighing no more than 10 kg. Endemic to the Western Ghats, you can see the Lion-tailed Macaque in the forests of the southern states of Karnataka, Tamil Nadu and Kerala, where less than 2,500 individuals live among coffee and tea plantations. Timber smuggling has destroyed its habitat and made these monkeys rare and threatened primates. <u>Recent conservation efforts</u>, however, have revived its population to a certain extent. (Photo: Lion-tailed Macaque in Kerala (Mithun 1111 / CC 4.0 / Wikimedia Commons)

Malabar Civet

India's most endangered animal, the Malabar Civet (*Viverracivettina*) is listed as 'critically endangered', but there is a possibility of it being already extinct – no confirmed sightings have been recorded of this small, elusive, nocturnal animal since 1987. Endemic to the Western Ghats, mainly Kerala and Karnataka, its population size is assumed to be less than 200 individuals. A key factor responsible for its population dwindling, rather unexpectedly, is Ayurveda. Civetone, a component in civet oil, is still used in some Ayurvedic preparations and it was believed that until a few decades ago the Malabar Civet was hunted widely for this purpose. If you are trekking out in the forests of the Western Ghats, look out for this small grey mammal with dark marks on its back, neck and cheek. For now, we can only hope that the biodiversity-rich Western Ghats has kept this rare species safe and hidden.

Namdapha Flying Squirrel



The Namdapha flying squirrel (*Biswamoyopterus biswasi*) is a sub-species of the flying squirrel endemic to north-eastern India. The exact number of this critically endangered species is unknown. However, many claims to have sighted it as recently as 2002. Part of the <u>Most Wanted Lost</u> <u>Species</u> — a global project to find and protect rare animals — it remains one of the most endangered species that is endemic to India. Landslides, flooding

and deforestation, as well as hunting for food, has made this mammal nearly extinct. Its habitat is believed to be reduced to less than 100 sq km. Sighting this furry reddish creature — now restricted to the Namdapha National Park in Arunachal Pradesh — is rare and quite special.

Representative image of a flying squirrel (Peter Trimming / CC / geograph.org)

<mark>Nilgiri Tahr</mark>

As the name suggests, the Nilgiri Tahr (*Nilgiritragus hylocrius*) is found in the Nilgiri Hills, Tamil Nadu, and other parts of the Western Ghats in Kerala. With around 2,500 individuals surviving, the species is listed as Endangered and your best bet is to see them is the Eravikulam National Park in Kerala. Hunting and deforestation have led to a reduced



population, which is continually decreasing as of now. It looks like a goat, but the Nilgiri Tahr is identifiable with its distinctive and elegant curved horns, plus it's much larger too, being about 100 kg in weight and 40 inches in height. Apart from Eravikulam, the <u>other region you can spot the Nilgiri</u> <u>Tahr</u> is, fittingly, the Nilgiri Biosphere Reserve, a 5,520 sq km area across the southern states that includes several national parks and listed as a UNESCO World Heritage Site. (Photo: Nilgiri Tahr (NA Nazir, CC-by-SA 3.0 / Wikipedia Commons)

Pygmy Hog

A critically endangered small mammal, the Pygmy Hog (*Porculasalvania*) attains a maximum weight of 11 kg and is about 12 inches tall. It is the smallest and rarest wild pig in the world.



Once spread across Nepal, Bhutan and eastern India, it is now found only in Assam, and its population is believed to be less than 250 individuals. Agricultural encroachment and unsupervised 'prescribed' burning during dry season have led to the loss of habitat for this tiny creature. Efforts are on to save the last remaining Pygmy Hogs, and you can still spot this rare animal at the Manas National Park in Assam.

Pygmy hog in a Research and Breeding Centre, Guwahati, Assam (A. J. T Johnsingh, WWF-India and NCF, / CC 3.0 / Wikimedia Commons)

Tiger toad

A critically endangered small mammal, the Pygmy Hog (*Porculasalvania*) attains a maximum weight of 11 kg and is about 12 inches tall. It is the smallest and rarest wild pig in the world. A critically endangered small mammal, the Pygmy Hog (*Porculasalvania*) attains a maximum weight of 11 kg and is about 12 inches tall. It is the smallest and rarest wild pig in the world. A critically endangered small mammal, the Pygmy Hog (*Porculasalvania*) attains a maximum weight of 11 kg and is about 12 inches tall. It is the smallest and rarest wild pig in the world. A critically endangered small mammal, the Pygmy Hog (*Porculasalvania*) attains a maximum weight of 11 kg and is about 12 inches tall. It is the smallest and rarest wild pig in the world. It's just a toad, but it finds special mention on our list due to its unique features - it has tiger-like black stripes on its yellow body with a glow similar to the big cat. Just an inchlong, this amphibian is listed as critically endangered and is found only in Amboli in Maharashtra, in an area that measures less than ten sq km!

Loss of forest cover and climate change are the two major drivers threatening the Tiger Toad (*Xanthophryne tigerina*). With no official conservation efforts currently on-going (who cares about a poor toad?), you better make it to Amboli fast if you want to catch a glimpse of this beautiful creature.



3.2: Sanjay Gandhi Animal Care Centre, New Delhi

India's oldest and Asia's largest all-animal shelter, the Sanjay Gandhi Animal Care Centre (SGACC) was founded in 1980 from a legacy bequeathed by the late Mrs Ruth Cowell of New South Wales, Australia to Sanjay Gandhi.

A foundation set up in her memory, The Ruth Cowell Foundation, resolved to establish an animal care centre in Delhi that would serve as a prototype for other centres around India. The hospital-cum-shelter was envisaged as a 24x7 facility that would rescue, home, treat, and rehabilitate animals; serve as a training centre for vets and animal handlers; run an OPD; offer diagnostic services; provide burial facilities; and serve as a holding centre for animals of cruelty cases.

Inaugurated in September 1983, the SGACC is home to over 3000 animals at any given point. Spread over four acres of tree covered land in West Delhi's Raja Garden, between Shivaji College and the Home Guards' HQ, it assures space in a secure natural environment for animals and birds. SGACC is open 24/7 and runs a round-the-clock free animal ambulance service and helpline. Its busy OPD treats over 200 animals a day providing medical, diagnostic, surgical, and dental services. It is part of the city municipality's ABC (Animal Birth Control) programme wherein it sterilises and vaccinates street dogs. It works closely with the police to take in and care for animals confiscated in cruelty cases such as overloading and neglectful ownership. It organises a thrice weekly adoption stall at a shopping mall through which it has placed over 2000 Indian puppies in loving homes. Under the patronage of Maneka Gandhi, this pioneering facility named after her husband, Sanjay Gandhi, has thus flourished into a well-staffed, well-equipped, veterinary centre that is a boon for animals and their well wishers.

While the Chairperson, Maneka Gandhi, visits regularly and is actively involved, the day-today management is headed by the Hospital Director while veterinary services are supervised by the Medical Director. Each separate department has an administrative head.

> Prof. Dr. R.N. Kohli, Editor, NAVS (India)

THOUGHT OF THE DAY

There are some people out there who may not express happiness for your successes. They may not say how proud they are of you or won't bring themselves to show joy for your accomplishments. Don't seek their approval or validation if they are not willing to give to you freely. Search for blessings inside yourself and be confident that you have done greatness. You do not need anyone's praise to make you feel valuable. Believe in yourself that you are worthy and that no one's opinion or lack of approval makes you or breaks you. What others think about you in not as important as what you think of yourself. Believe in You! ~Brigitte Nicole

CH. 4. LETTERS TO THE EDITOR

Dear Professor Kohli: The NAVS News Letter of January 2019, as has always been, is a very informative useful document for the entire fraternity of Veterinary and livestock professionals. It is equally valuable documents for policy planners, academic managers and regulatory authorities. Further, the Academy is taking some new initiatives which deserve appreciations.

Sir, during the recent past many new dynamic Vice Chancellors have been appointed in State Veterinary Universities (SVUs) and ICAR National Institutes. It also is a sense of pride that some veterinarians have also occupied pivotal positions in SAUs. The decision of the Government to appoint Dr. A. K. Misra, former VC, as chairman ASRB is laudable.

May I suggest that the academy to invite all VCs to felicitate new incumbents Chairman, VCs and Directors by the Academy. This will provide opportunity for the Academy to gather on spot projections of national scenario. On the other hand, they will provide constructive suggestions for effective participation of the NAVS (I) to coordinate in faster growth. One of the universities may be requested to sponsor such a meeting. Some of the outgoing VCs, many of whom are fellows of the Academy, may also be invited to participate. The VCI and ICAR may also be invited. My suggestions may be considered on its merit and program may be structured well within the boundaries of NAVS and Universities mandates. With personal regards:

Dr. Jitendra Singh Bhatia, Former ADG (EDU), ICAR, B-101 Sector-2, Plot-3C, Mandakini Apartment, Dwarka, New Delhi 110075; Ph. 9316612588, 9311039604; Email ID: www.ebatiajs05@rediffmail.com

Thank a lot sir for the January 2019 issue of the NAVS Newsletter. It is a very well edited wonderful issue full of exciting news and events related to veterinary science. It felt so nice and encouraging after reading the progress of ICVR made by NAVS, especially the dedicated efforts of NAVS President Maj. Gen. (Retd) Shri Kant sir. The parity of NAVS with NAAS is another burning issue which needs to be pursued vigorously, and I am very happy that our NAVS leaders are not leaving any stone unturned in this endeavour. The current issue looks so beautiful & gorgeous and indeed quite informative.

Thanking you for bringing out such an issue once again, With sincere regards:

Dr. RAJVEER SINGH PAWAIYA, Chief Editor, Indian Journal of Veterinary Pathology, & Principal Scientist (Vet. Pathology), Division of Animal Health, ICAR-Central Institute for Research on Goats, Makhdoom, P.O. Farah, Mathura – 281122, Uttar Pradesh, INDIA, Mobile: +91-9410844980; 9045828870; Alternative E-mail: <u>rvspawaiya@rediffmail.com</u>

Dear Prof. Kohli, Thank you very much for January issue of the NAVS Newsletter. Nice and timely presentation, in deed! With regards:

Dr Ajit Singh, Emeritus Scientist (ICAR), Fellow, NAVS (I), Dept. of Veterinary Microbiology, LUVAS, Hisar-125004; ajit singh singh <a href="mailto:singh singh <a href="mailto:singh <b style="mailto:singh <b style="mailto:singh;">style="mailto:singh <b style="mailto:singh <b style="mailto:singh;">style="mailto:singh <b style="mailto:singh;">styl

Dear Dr Kohli: I read with interest your experience as a surgeon. It is the hands- on experience that counts a lot in the professional career. This is the big casualty in the present large-scale production of graduates. Colleges have mushroomed in number but with inadequate facilities of clinics or laboratories. In some colleges even buildings are not there. How do we expect competence in the professionals? The other issue we had earlier discussed is teachers required in large numbers. Many do not have the aptitude. VCI inspection has not been effective. MCI has been replaced by a Board. I do not know if that is going to improve medical education. Basic training is very important.

Another issue you have addressed is formation of ICVR. I am glad that serious efforts are being made by NAVS. We have now Veterinary Universities in almost all states. Research in most has taken a back stage. It will be a travesty on academic progress to ignore this. The Universities also should jointly convince the Government the need for formation of ICVR. Most of us who have worked under ICAR and Agricultural universities know the step-motherly treatment in the system. The issue has been going on for over two decades. I hope we will have it resolved soon. Regards

Dr. B.S. Keshavamurthy, <<u>bskmurthy@hotmail.com></u>

Thanks for the very informative January 2019 issue of NAVS Newsletter. Dr P.K. Gupta <a href="https://www.engligen.engli

Dear Sir, Thank you very much for sharing the NAVS Newsletter January 2019.

Recently, ILRI and ICAR have jointly organized an Epidemiology Training for the scientists from ICAR Institutes, State Agricultural / Veterinary Universities and State Animal Husbandry Departments. I am enclosing one write-up on the event for favor of publication in the ensuing issues of your esteemed NAVS Newsletter. Hope you will consider the publication for the interest of the Veterinary Fraternity of the country and the region.

Dr. Habibar Rahman | Regional Representative for South Asia, International Livestock Research Institute (ilri.org), Block-C, First Floor, NASC Complex, CG Centre, DPS Marg, Pusa, New Delhi -110 012; Mobile: +91 9483527849 | Tel: +91 11 2584 7885 | Skype: hricar; Email: <u>r.habibar@cgiar.org</u>. (ILRI is a CGIAR research centre)

Dear Sir, Thank you for sending the NAVS Newsletter. I would like to continue receiving it regularly. Regards: Dr. Rajesh Roshan<r/>rjsh.roshan@gmail.com>

Thanks a lot Dr Kohli for sending me a copy of your esteemed NAVS Newsletter - January 2019 Issue. It is a very informative publication and is worthy of reading. I shall be grateful if I receive this newsletter regularly.

Dr. Ish Narang, Consultant (Dairying), 207, Dayanand Vihar, Delhi 110092, India. +91 9911160975; Email: Ish Narang <u><iknarang@yahoo.co.in></u>

5: FROM THE PRESIDENT'S DESK



National Workshop on Paravets

India's livestock sector is one of the largest in the world and it plays an important role in the national economy and employment generation. This sector is being looked after by trained (Veterinarians) and trained/semi-trained (Paraveterinary personnel). It is estimated that total availability of para-vets in the country is about 52,000 as against the requirement of at least 2,59,000.

The education of veterinary paraprofessionals varies greatly in our country both in duration and quality. Recognized categories of veterinary paraprofessionals are not well defined.. This occurs because almost all states except Himachal Pradesh do not have a veterinary statutory body whose mandate includes establishing recognized categories of veterinary paraprofessionals, identifying their prerogatives and activities and defining their training requirements for licensure or registration. The situation is further compounded by the fact that different states may use the same term or category, for example, 'animal health technician OR veterinary livestock diploma assistant and so and so forth'.

In many of the states, there is no uniform policy of admission, duration of training, syllabi and nomenclature of the diplomas awarded. Further, there is no policy of registration after the diploma or certification except for the state of Himachal Pradesh. Absence of a regulatory authority at state level is harming the veterinary cover to the animal husbandry sector. It is pertinent to mention that India ranks fifth (3.93)) whereas Sri Lanka ranks No. one (16.59) among neighboring countries so far as adequacy of veterinary services are concerned.

The OIE recognizes the important role that veterinary paraprofessionals can play in support of strong National Veterinary Services and the OIE's Sixth Strategic Plan for the period 2016-2020 commits to a better definition of the role of paraprofessionals and non-veterinary specialists, including their education and training.

NAVS (I) took an initiative and made a sincere effort in collaboration with Brooke India to deliberate the issue during year 2018. Govt. officials, Deans / Director of Veterinary Colleges / national laboratory and non-govt. organizations participated. The recommendations were issued in the form of Policy Paper 4 by the NAVS during March 2018. The policy paper was sent to DADF, Govt. of India, Animal Husbandry departments of various states and Vice-Chancellors of the Veterinary & Animal Sciences Universities and Deans of Veterinary Colleges in India for perusal and necessary action.

This issue needs to be discussed *de novo* at national level to have uniform syllabi, admission procedure, requisite qualification for admission, guide lines / judicious control over opening of new private institutions, regulatory authority at state level and mandatory affiliation with Veterinary Universities.

Keeping in view the above, I met Sh. Tarun Sridhar, Secretary, Govt. of India, Ministry of Agriculture (DADF) on 08 Jan 2019 along with Maj Gen ML Sharma and tried to impress upon him the necessity of organizing a brain storming consultative workshop at national level inviting all stake-holders on paravet services in our country. Subsequently, I wrote a DO letter to the Secretary 20 Jan 2019 requesting him to accord sanction for the event. It was informed vide Govt. of India, Min of Agri. letter No K-11053/86/2017-LH P dated 05 March that NAVS proposal to conduct the above mentioned National Seminar has been agreed to and that the CCS NIAH Baghpat shall be partner NAVS in conducting the same. Consultation with Director NIAH is on to work out the details like date, venue, participants etc regarding conduct of the workshop.

> Maj Gen Shri Kant, SM, VSM President

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6-A: OBITUARY

6-A.1: Dr. S. S. Rathore: A Veterinary Legend Passes Away

We are sad and sorry to inform you that Dr <u>Sohan Singh Rathore</u> an eminent veterinarian, great teacher and clinician - left for heavenly abode on 1st February 2019 at Jaipur.

Dr. Rathore was your Editor's class-mate at Bikaner Veterinary College (first batch 1954-58) as B.V.Sc. & A.H student, and

subsequently a colleague at Bikaner and Ludhiana (PAU) Colleges. Dr. Rathore was the founder Dean of Apollo College of Veterinary Medicine, Jaipur - presumably the first private Veterinary College established in India by two US Vets of Indian origin (Dr. Raj Khare & Dr. Ramanathan) in 1990s. He was also founder member and past president of Indian Society for Veterinary Surgery and a former member of NAVS Governing Council (2014 - 16). A large number of Veterinarians at all the institutions where he worked as well as many others elsewhere would miss Dr. Rathore. The out pour of hundreds of messages on the Social Media sites confirms that.

Dr. Sohan Singh Rathore was born in Kishengarh, Rajasthan on 14.12.1933 and got his M.S. from Michigan State University, USA, and his Ph.D. degree from Utrecht University (Netherlands) in 1968.

The NAVS President has sent a Condolence message to Dr. Rathore's family on behalf of the Academy and the Governing Council of the Academy observed two minutes of silence in its meeting held on 16th March 2019. We all pray for his soul to rest in peace. The bereaved family of Dr. Rathore can be contacted at this address: 299, Himmat Nagar, Jaipur, Rajasthan; Phones: Residence: 0141-2554608; Mobile: 9414068727.

6-B: Appointments, transfers, promotions, awards, honors and felicitations

6-B.1: Sri Padmavati Mahila University invites Maj. Gen. Shri Kant and Dr. DVR Prakash Rao as Guests of Honor at a Workshop in Tirupati

A workshop on theme "Innovation & Translation on Foods & Feed : The Journey of an Entrepreneur" was organised by Ministry of Science & Technology, Department of Science and Industrial Research (DSIR) in Collaboration with Sri Padmavati Mahila Vishvavidyalayam, Triputi on 13 March 2019. Maj Gen Shri Kant, President and Dr DVR Prakasha Rao, Vice-President of NAVS (I) were invited by the University as Guest of Honours. Prof V Uma, Vice-Chancellor of the University was the chief guest on the occasion. Keeping in view the vast experience and contribution of both the Fellows in the field of Animal Husbandry and allied sectors, both were honoured by way of CITATION. Dr Prakasha Rao delivered key note address on the subject," Innovation & Translation at Feed Sector: The Journey of an Entrepreneur" and mesmerised the audience with his communication skills, vast experience as Animal Nutritionist and his struggle as successful entrepreneur.

Dr. Ramanuj Benerjee, an Advisory Member and Govt of India representative gave a very effective and stimulating talk on ," Innovation & Translation at Food Sector –the Journey of an Entrepreneur".



6-B.2: Dr. Charan Singh Sharma Felicitated at IAAVR Conference held in Kolkata

Dr. Charan Singh Sharma, Dean Apollo Veterinary College Jaipur, was felicitated with an Award of Honour during inaugural session of 19th Indian Veterinary Congress and XXVI Annual Conference of IAAVR, held at West Bengal University of Animal and Fishery Sciences, Kolkata, 1-2 February 2019. The conference was attended by a large number of delegates and was graced by Vice-chancellors of seven Universities among others.



6-B.3: Dr. A.K. Misra appointed Chairman ASRB

Dr. A.K. Misra, Vice Chancellor, Maharashtra Animal and Fishery Sciences University, Nagpur, has been appointed as the Chairman of Agricultural Scientist Recruitment Board, New Delhi. He is an eminent Fellow of the Academy (1999-2000) and was felicitated by the



Academy at its Governing Council Meeting held on 16th March 2019 at New Delhi.

Dr. A.K. Misra was born in Bahjoi (Moradabad-UP) on 06-01-1957; Educated at: Veterinary College Mathura / CSA University of Agriculture and Technology, Kanpur: B.V.Sc.& A.H. (1979), M.V.Sc. (1981) and Ph.D. (1996). He has won several awards including Dr. P. Bhattacharya Award-2013-2014, NAAS; Rafi Ahmad Kidwai Award 2005-06 (Biannual

highest ICAR award); Jawaharlal Nehru Award (1997), ICAR, for PG research etc. He has also been the President, Indian Society for the Study of Animal Reproduction (ISSAR) since 2014. We heartily congratulate Dr. Mishra on his appointment to the coveted position. Contact of Dr. Misra: Phone: 8888873830, Email ID: <u>prof_misra@hotmail.com</u>.

<u>6-B.4: Prof. K.M.L Pathak</u> Completes his term and Prof. G.K. Singh takes over as Vice Chancellor DUVASU

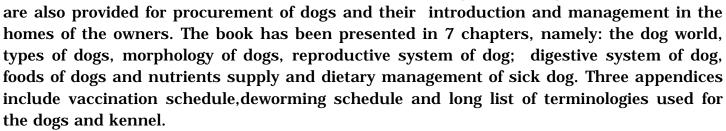
Dr. K.M.L Pathak has completed his as Vice Chancellor DUVASU, Mathura, and has handed over the charge to Prof. G. K. Singh.

Dr. Pathak would be residing at NOIDA and his mobile/whatsApp number will remain the same. He has thanked all of us for our kind support during his term as VC and will look forward for our sustained relationship and interaction.

6-B.5: New Books by Veterinarians

1. Text Book on Dogs for Veterinary Gradutes by Dr. Nityanand Pathak, Former Director, CIRB, Hisar and former General Secretary, NAVS(I). Published in 2018

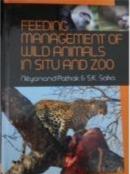
(First Edition) by Satish Serial publishing house, 403, Express Tower, Commercial complex, Azadpur, Delhi-110033 (India). Author may be contacted on mobile phone number 9412518313 for further details. This is a comprehensive book for education on Dog keeping and is educative and useful for undergraduate/graduate veterinary students as well as for dog lovers. Attempt has been made to cover important aspects of dog life. Brief guidelines



2. Feeding Management of Wild Animals in Situ and Zoo by Nityanand Pathak and S.K. Saha, First Edition Published in 2018 by Satish Serial Publishing House, 403, Express Tower, Commercial Complex, Azadpur, Delhi-110033

(India; First author may be contacted on mobile phone number 9412518313 for further details.

Health management including balanced feeding of wild animals in zoo is the main job of zoo veterinarians. He is also required to suggest measures for combating nutritional deficiency in the wild animals in situ. To equip veterinary graduates a course on feeding and management of wild animals has been included in the syllabus. This book has been synthesized in 10 chapters to meet the requirement of nutrition. The chapters are introduction, identification of domestic animal models for



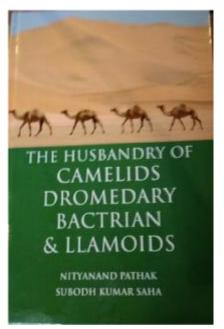


the nutritional assessment of wild and captive animals, food of wild and zoo animals, feeding habits of wild and zoo animals, balanced soil water air solar energy plant- animal relationship for sustaining wild animals in situ, behavior of wild animals affecting feeding in captivity and in situ, feeding of nursing starved mammalian neonates in early life Study tour to wild life reserve forest, zoo and wild life institute, harmful substances and important homes of wild life institutes. This is a concise book on the subject for the student of veterinary sciences and reference book for the teachers, zoo veterinarians and forest department personnel.

The book was released by the Dr. Trilochan Mahapatra, Hon'ble Director General ,ICAR in the presence of Dr. A.K. Srivastava, Chairman, ASRB, K. Pradhan, renounced Nutritionist and Dr. Pasupalak, VC, OUAT and Major General Srikant, President, NAVS(I) in the NAVS Convocation at OUAT Bhubaneswar on 19th December, 2018.

3. JUST PUBLISHED:

The Husbandry of Camelids Dromedary Bactrian & Llammoiods, by Nityanand Pathak and Subodh Kumar Saha, First edition published in 2019, ISBN 978-93-88020-42-8 by Satish Serial Publishing House, 403, Express Tower, Commercial Complex, Azadpur, Delhi-110033. This hard bound has a total number of 229 pages and is priced Rs. 30450/- The NAVS (India) Editor has just seen this very impressive and exhaustive book and intends to get it reviewed, if possible, in the columns of the one of the future issues of the NAVS Newsletter. First author may be contacted on his mobile phone number 9412518313 for further details of this recently published book.





7.1: Post Graduate Institutions (PGI) of Veterinary and Animal Sciences in India

Dr. Jitendra Singh Bhatia, Former ADG (Education) ICAR

In India, besides, 55-60 Colleges of Veterinary and Animal Sciences (both recognized and yet to be recognized by the VCI), there are 3 Colleges with the nomenclature of the Post Graduate Institutes. These are:

- 1. PGIVAS, Akola (MAFSU) M.S offers Master's and Doctoral programs in 11 and 8 disciplines, respectively. It started BVSc & AH degree course w.e.f 2016. The degree offered would be considered for recognition by the VCI on completion of one academic cycle that is likely to be in 2021.
- 2. PGIVER, JAIPUR (RAJUVAS) Rajasthan offer Master's and Doctoral programs in most of the major disciplines but actual intake is limited to the departments' commensuration to the availability of optimum human resource. The BVSc&AH degree course was started from 2015 and would only be considered for recognition by the VCI, on completion of one academic cycle that is likely to be in 2020
- 3. PGRI, Animal Sciences Kattupakkam (TANUVAS) Tamil Nadu offers PG programs in some of the Animal Science disciplines. No Undergraduate program is offered.

ICAR INSTITUTES

Out of the 4 ICAR Institutes, 3 (IVRI Izatnagar, NDRI Karnal & CIFE, Mumbai) are conducting research related to animal cell (precisely IVRI & NDRI relates to livestock/ animal sciences and CIFE to Fishery Sciences), while the domain of IARI; New Delhi is limited to Plant related sciences. All the 4 ICAR institutes were established as Research Institutes well within their defined/ demarcated boundaries. Over the times after their establishment, on gaining strength in research and enhanced infrastructure facilities and manpower to enable them to cope up with the additional load of teaching, were granted 'Deemed to be University' Status by University Grants Commission (UGC). So, essentially these Primary RESEARCH INSTITUTES also acquired teaching status well within its defined jurisdiction. Presently, also these are primarily Research organizations. Education is an addendum responsibility.

Thus, Post Graduate Institutes (PGIs), ought to have a strong Research base. PG education will only gain strength in a research based organization having good infrastructure base along with competent and qualified faculty. Somehow, the PG institutes of the university system (SVU), are not adequately equipped to carry multidimensional topend RESEARCH PROGRAMS, and lack manpower (in requisite numbers & sub-specializations) of the stature and status needed for a PG teaching at the Institutes. If the PG Institute is governed and supported on the similar lines and treated its status equivalent to other colleges in the university than the nomenclature of PGI appears miss-matching/ misconceived. Since these PG Institutes are borne to cater to higher responsibilities to cohesively integrate teaching and research, they are required to be provided with the stature and support of high order. Though, most of the PGI's and ICAR Institutes now have added UG degree course as well, but such a change does not dilute institute's primary mandated responsibilities towards PG education. Additions of degree course or any type of lower educational programs are merely a subsidiary functions. The Universities, on the contrary, are shifting their greater emphasis on BVSc&AH degree course, since it require mandatory approval to run the program from the VCI, which has statutory authority. Further, State Governments bow to the statutory power of the VCI and thus agree to grant faculty positions as per MSVE. In a way thus, PG education has been pushed to back seat even at PG Institutes.

Both the MAFSU and the RAJUVAS Universities have undergone external reviews (PEERS REVIEW COMMITTEE for MAFSU and INTERNAL ENVIRONMENT ASSESSMENT COMMITTEE for RAJUVAS) in the recent past. Incidentally, I was a member of both the Committees. Both the committees pointed out certain shortfalls in PG Institutes and suggested various implementable recommendations to bring structural and functional changes at these institutions to enable these organizations to become unique (worth its name) in the university. The PGI's should be granted a status of HIGHER CENTERS OF LEARNING. The University may consider lodging the office of the DEAN PGS at PGI. The Dean of PGIs, factually should be Dean PGS.

Primary Issues-disjointed UG PG education

PG education by and large is still on the receiving end in the State Veterinary University (SVU) system. The VCI has restricted its activities to BVSc&AH degree course, while ICAR through its accreditation board, prescribe regulations, course contents for PG education in Veterinary and Animal Sciences, along with all other disciplines falling under the domain of Agricultural Sciences. With respect to regulations on Minimum Standards for PG education in Veterinary and Animal Sciences, ICAR did some exercise to lay down norms for PG education but I have no knowledge, if the exercise of ICAR, initiated to lay Minimum Standards with respect to PG in VAS were finally put in place or withdrawn for implementation. However, it is undoubted that, due to dual control mechanisms, especially for the PG education, confusion continues to prevail. During late 90's, the first Veterinary Council, under the chairmanship of Prof. C.M Singh did a mammoth exercise by drafting PG regulation and widely circulated. This exercise died down on completion of the tenure of Dr. Singh. None of the councils so constituted thereafter, attempted to push forward to revive that document or drafted fresh proposals. There is a need for the council to spell out its silence on this issue. On the other hand the VCI has revised MSVE twice for BVSc&AH course. Likewise, the ICAR has updated PG regulations once and exercise for second phase is on through its subject matter committees. Synchrony between the VCI and the ICAR in undertaking in revising regulations and course contents appears lacking.

Would the practice of dual control over Veterinary Education be in the interest of profession in long run- remains a point to ponder. Let the authorities and regulators of this professional system make in-depth analysis and lay down a system which is viable for the growth of the Veterinary education.

(Author's Contact Particulars: Dr. Jitendra Singh Bhatia, B-101 Sector-2, Plot-3C, Mandakini Apartment, Dwarka, New Delhi 110075; Email ID: https://www.ehatiajs05@rediffmail.com; Mobile Phones: 9316612588, 09311039604;

(Note: Views expressed and interpretations drawn are personal)

7.2: A teacher is meant to effectively deliver Dr J.S Bhatia Former ADG (Education) ICAR

Though, the Government is pumping lot of funds and initiated lot of faculty competence enhancement programs and liberally granted permission to increase qualification as well as deputing faculty for long/ short term training in India or overseas, yet the quality and skill needed by the out coming graduates are not up to the expected level.

It cannot be denied that the MSVE, regulations have rightly introduced a check mechanism while evaluating a student in Internship to be fully conversant with these basic skills, but it is doubted if these guidelines are rightfully adhered by many of the institutions. On the other side, are the needed skills are rightfully imparted during the course of training? May be a faculty is highly qualified with excellent academic record, yet it cannot always be assured him to be good teacher. Multiple factors including personal handicap in delivery and or the institutional politics and governance mechanisms may not be conducive. It is suggested that:

1. There should be 'ON SPOT EVALUATION OF A TEACHER' as a part of annual/ periodic assessment (Both for teaching and skill delivery). Teacher should be fully equipped for the entire UG course.

2. The VCI should develop a mechanism to get the quality of teaching faculty assessed. 3. While granting accreditation, randomly quality and commitments of faculty must be ensured.

4. Let there be a committee to assess how far the programs on Faculty competence enhancements are successful. Alternative could also be suggested. I personally feel that the NAVS (India) is a right forum that can use its wisdom and suggest measures to enhance skill competence in its true perspective.

(Author's Contact Particulars: Dr. Jitendra Singh Bhatia, B-101 Sector-2, Plot-3C, Mandakini Apartments, Dwarka, New Delhi 110075; Email ID: <u><bhatiajs05@rediffmail.com;</u> Mobile Phones: 9316612588, 09311039604;

Dr. Jitendra Singh Bhatia has also been a Professor of Veterinary Physiology)

7.3: Regarding Veterinary Internship <u>Raghu Nath Kohli</u>

On <u>2nd November 2015, I posted the following on the Social Media and got some</u> <u>comments. This is a Memory for the readers.</u>

In general, India lacks large field veterinary hospitals in towns and villages where interns can have some experience beyond what they have learned during the studentship. Village-level animal health care system is still primitive in most of the places. We can only boast of some good teaching hospitals attached to colleges / universities, but all the graduating interns of a class can not perhaps be accommodated there without over crowding. It is essential to develop and run large hospitals / farms etc at appropriate locations in all states with large livestock populations, before opening veterinary colleges to which they should eventually be attached. The medical colleges are usually opened around the existing nucleus hospitals of desired bed strength and quality multi disciplinary clinical facilities, and then these facilities are continually further expanded and improved upon.

4 Comments

<u>Prakash Rao Dvr</u> Excellent suggestion. All veterinary bodies must impress upon the government on this vociferous effort needed for this to achieve

<u>Prabhakar Rao Venepally</u> Even the existing hospitals in cities are not getting large animals at the hospitals. I endorse your views. I even go to the extent of suggesting that time is ripe enough to revisit the veterinary curriculum in this regard as I hold a view that there is scope to increase clinical credits by readjusting the credit load. This is my loud thinking. Hope your comments set the ball rolling

<u>Raghu Nath Kohli</u> We should welcome including the private clinics frequented by large numbers of patients in the internship programmes of the colleges after working out the modalities and signing MOUs. Bigger small animal clinics can be used for small animal practice and similar large animal private establishments for large animal practice. The administration of nearby veterinary universities should come forward and explore the possibilities. Private practitioners may also take an initiative in the regard.

<u>Prabhakar Rao Venepally</u> Yes sir as Vice-Chancellor of S.V.V.U. I mooted this idea and even implemented it in new colleges which were in smaller towns. Even inspecting teams of VCI were convinced of this arrangement.





8.1: ILRI-ICAR Training Program on Introduction to Analytical Veterinary Epidemiology

International Livestock Research Institute (ILRI)

organized a three days training on 'Introduction to Analytical Veterinary Epidemiology' training was organized at Bangalore on 3-5 Dec 2018, co-hosted by ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI) and ICAR-Indian Veterinary Research Institute (ICAR-IVRI).

Scientists from the International Livestock Research Institute (<u>ILRI</u>) and the Indian Council of Agricultural Research (ICAR) have trained more than 22 researchers from ICAR's institutes, state agricultural universities and state animal husbandry departments on epidemiology concepts, data analysis and different frameworks for risk analysis and risk management that could improve disease control and prevention in <u>India</u>.

During the inauguration, Dr. <u>Habibar Rahman</u>, ILRI's regional representative for South Asia briefed about the genesis and overview of the training on analytical epidemiology would be organized around such factors as the multidisciplinary nature of epidemiology, recent developments in information technology and bio-informatics, the emergence of new diseases, climate change and multi-level analysis.

While inaugurating the training, Dr. R. N. Srinivas Gowda, Former Vice Chancellor, Karnataka Veterinary, Animal and Fisheries Sciences University, the Chief Guest told that

epidemiology is one of the important tools for disease control and prevention and encouraged the participants to augment their understanding about epidemiology through this training program.

Dr. R. K. Singh, Director cum Vice-Chancellor, ICAR-Indian Veterinary Research Institute, Bareilly; Dr. M. Rajasekhar, Former Project Director, ICAR-NIVEDI and Dr. T. Shivarama Bhat, Director, Department of Animal husbandry and Veterinary Services, Govt. of Karnataka; Dr. B. R. Shome, Director, ICAR-NIVEDI and Dr. Aniket Sanval, Joint Director, ICAR-IVRI, Bengaluru highlighted the importance of the training programme and they mentioned about the relevance of epidemiology as a key tool in different disciplines of Veterinary and animal sciences, which will help in designing the disease control strategies. Dr. Johanna Lindahl and Dr. Elizabeth Cook, senior scientists from ILRI, Nairobi along with Dr. Sheik Shah Hossain, a former expert from the Center for Diseases Control and Prevention (CDC) Expert and other national experts explained risk assessment tools that

The training programme included basic epidemiological concepts-probabilities, introduction to analytical epidemiology, epidemiology study designs, sampling unit- inclusion and exclusion criteria; designing questionnaires for data collection, quality assurance; creation of database, data entry, data quality; different analytical methods and analysis of data in epi-Info and excel; introduction to GIS and demonstration of spatial data; introduction to risk analysis, risk management and communication.

would be used for risk analysis, management and communication.

The training manual was designed by ILRI scientists with the help of national experts that could help the researchers in India in disease prevention and control was released. Certificates were awarded to the participants of the epidemiology training programme after completing the training course.

8.2: IAVMI Symposium on Advances in Equine Health and Management

NAVS President writes to inform that ICAR-NRCE Hisar in collaboration with Indian Association of Veterinary Microbiologists, Immunologists and specialists in Infectious Diseases (IAVMI) organized a one day symposium on ,"Advances in Equine Health and Management" on 27 Feb 2019. In the inauguration session of the event in the forenoon held in the Auditorium of the Institute, Maj Gen Shri Kant, President of the NAVS, was invited as Guest of Honour. He also chaired a technical session. Further, an elite group of equine specialists, researchers, students and progressive equine farmers shared their ideas. Prof PK Uppal and Prof MP Yadav being Patron and President of the Association also graced the occasion.

8.3: Reorientation of Para-Veterinary Services in Assam State



A seminar was organized on 5th Jan 2019 at Nagoan (Assam) on the sidelines of the 27th Biennial general conference of the All Assam Veterinary Field Assistant Association. Maj Gen Shri Kant, President and Maj Gen ML Sharma, Member Governing Council, National Academy of Veterinary Sciences (I) were invited as Advisors. Govt of Assam vide their letter No.COM-AH & Vety /AH & Veterinary / 1 dated 26/12/2018 and Director, Animal Husbandry and Veterinary Department Government of Assam, vide their communication No. A5-48(a)/2018-19/11318-19 dated 31 /12/2018 facilitated the visit of NAVS delegates from 4-6th Jan 2019 in connection with the national seminar titled "Reorienting para-veterinary services".

Based on the deliberations held during the seminar, it was decided to work jointly with Vet Helpline India Pvt Ltd to prepare a policy proposal to department of Animal Husbandry and Veterinary for perusal and further necessary action. Subsequently, the policy paper has been prepared and vetted jointly by both Gen Officers and Vet Helpline India Pvt Ltd. The policy paper has been forwarded by Dr. Miftahul Barbaruah, Director Vet Helpline India Pvt Ltd to the Director Animal Husbandry for onward submission to the Govt. The proposal, if implemented, is likely to usher a new era of development of parveterinary services in the state of Assam. This was a unique initiative under-taken by state of Assam.

8.4: Transforming livelihoods in South Asia through sustainable livestock research for development

International Livestock Research Institute (ILRI) convened a regional meeting with partners from Bangladesh, India, Nepal and Pakistan on 13 and 14 November 2018. Together with ILRI senior staff and scientists, participants from public and private institutions reviewed country development outcomes, agricultural priorities and constraints and potential contributions of the livestock sector in the region. The aim was to identify issues and problems that could be tackled through sustainable livestock-related research for development in four priority areas: dairy development, goat development, feed and forage development and animal health.

The meeting was opened by Dr. H. Rahman, ILRI Regional Representative for South Asia. He called on participants to develop a roadmap to transform the livestock sector in the region. ILRI Director General, Dr. Jimmy Smith reminded participants of the importance of the livestock sector, pointing to adverse forces trying to remove livestock from the planet, and calling for renewed efforts to increase livestock productivity while protecting the environment.

Dr. Prakash Mathema, Secretary of the Nepalese Ministry of Agriculture and Livestock Development highlighted the importance of livestock in the economic development of Nepal. He said that livestock is an integral component of Nepalese agriculture, it contributes significantly to the GDP, and to food and nutrition security, provides employment opportunities, and supports rural economy. He argued that the productivity of livestock can grow tremendously if research can be linked to the needs of the farmers.

Dr. Trilochan Mohapatra, Secretary, Department of Agricultural Research and Education and Director General, Indian Council of Agricultural Research explained the roles of



livestock in the Indian economy and its potential to increase incomes and food security. He highlighted the ways that livestock can contribute to the Indian Prime Minister's goal to double farmers' by 2022. He particularly incomes argued enhanced regional for cooperation in research and development to enhance the

productivity of local and indigenous livestock breeds, expand One Health approaches, make livestock climate-resilient as well as productive and tackle transboundary animal and zoonotic diseases.



Dr. Dil Bahadur Gurung, Member of Nepal's National Planning Commission said that livestock contributes around 26.8 percent to the agricultural GDP in Nepal, giving it a vital role in increasing the incomes of smallholder farmers. He looked forward to stronger cooperation with ILRI and the other countries attending the workshop.

Following the opening session, ILRI's Bolek Stawicki gave a short presentation on ILRI's research for development approach, emphasizing its partnership elements and focus on outcomes. Introductory country presentations gave insights into sustainable livestock development priorities, challenges and opportunities in Bangladesh, India, Nepal, Pakistan and other SAARC Countries to identify regional challenges and priorities.

Following the country introductions, participants worked in groups to validate and prioritize country and regional priority outcomes, major bottlenecks and challenges, and potential interventions in four areas: dairy development, goat development, feed and forage development, animal health.

This work was inspired by six short presentations illustrating specific livestock research for development lessons, insights and outcomes, Dr. Michael Blummel showcased several spinoff technologies from 2nd generation biofuel development that can transform crop residues into high-quality concentrates, Dr. Sita Ram Ghimire introduced ILRI work on forages in Africa with potential for South Asia, Dr. Padmakumar shared lessons to deliver successful goat development programs in South Asia, Dr. Dieter Schillinger introduced ILRI's work on animal and human health, highlighting research on food safety, anti-microbial resistance, and the nutritional value of animal-source foods in the first 1000 days, Raj Kumar Gera from Hester Biosciences Ltd introduced a large-scale project to deliver Newcastle disease vaccines to smallholders in India and Dr. Jenny Hutchison from Ausvet. Australia explained how changing the focus of animal disease surveillance to focus on the information needs of those who generate data promotes system sustainability while applying advanced ICTs results in the timely submission of accurate, high quality data that can be summarised, analysed and monitored.

Drawing on the discussions on desired outcomes and challenges faced, participants identified promising livestock research for development (LR4D) interventions in areas of dairy development, goat development, feed and forage development, animal health.

These ideas are the basis for further collaboration to formulate concrete proposals for research activities in the region. They will be supported by stepped-up regional investor intelligence and engagement supported by ILRI globally and through its South Asia Regional Office.

Alongside the workshop sessions, the director generals of ILRI and the Bangladesh Livestock Research Institute signed a memorandum of understanding to undertake collaborative livestock research for development to enhance the economic status of smallholders in Bangladesh.

8.5: Indian Dairy Association holds 47th Dairy Industry Conference in Patna

The 47th Dairy Industry Conference was successfully organized by the Bihar State Chapter of IDA (East Zone) at the newly constituted Samrat Ashoka International Convention Kendra, Patna, in a very meticulous manner. About 3500 delegates participated in the Conference, which was inaugurated by Shri Nitish Kumar, Chief Minister of Bihar and addressed by Shri Sushil Kumar Modi, Deputy Chief Minister and Shri Pashupati Kumar Paras, Minister of State for Animal Husbandry & Fisheries, Bihar.

Shri Dilip Rath, Chairman of the National Dairy Development Board, delivered an elegant Keynote Address at the Inaugural function and recommended the introduction of innovative practices, new technologies product development and process improvement for achieving great efficiency across the dairy value chain from farm to retail point to increase farmers' income. Concerted efforts are being made to develop new generation producer owned cooperative institutions to ensure fair and transparent operations at milk collection points and to bolster the trust and confidence of dairy farmers for pouring large amount of surplus milk for getting food returns.

The Farmers' Session was chaired by Dr. Omveer Singh, Managing Director, NDDB Dairy Services, and addressed by persons of eminence like Dr. R.S. Sodhi, Managing Director, GCMMF; Shri Sanjay Kumar, Chairman of Vaishal Patliputra Dugdh Utpadak Sahakari Sangh; Shri Shyam Shankar Prasad Thakur of Mithila Milk Union Ltd., Samastipur (Bihar); besides Dr. B.S. Meena, and three other Principal Scientists of NDRI, Karnal. The issues raised by the farmers were discussed with assurances that dairying will play a very important role in multiplying farmers' income.



During the three parallel Sessions, the conference had 11 technical sessions on important subjects like Breeding Strategies for Sustainable Animal Production System, Harnessing value addition prospects for greater profitability & Sustainability, global dairy trade, optimizing animal feed resources for enhancing animal productivity and Milk quality etc. Two Industry Sessions were also organized to show the industrial growth in case equipment manufacturing, automation and its



instrumentation. A very impressive exhibition was also organized in which 142 national and international exhibitors participated with great fanfare. Poster sessions were also organized to communicate recent developments in dairy research in the area of production, processing and marketing. Two cultural evenings depicting the Eastern Indian culture and traditions were largely attended and greatly enjoyed by the participants.

The presence of Ms. Caroline Emond, Director General, International Dairy Federation, Brussels. Ms.

Caroline Emond, Director General, International Dairy Federation, Brussels, was a highlight of the conference.

The 47th Dairy Industry Conference made the following recommendations:

- 1. For doubling dairy farmers' income by 2022, state-of-the-art animal breeding activities viz., artificial insemination, sexed semen, pedigree selection, embryo transfer technology, progeny testing and genomic selection are needed to be implemented widely and supported financially for increasing milk yield and multiplication of elite breeding bulls.
- 2. Sourcing nutrients from locally available feed resources is recommended for lowering feed cost and adopting feeding practices based upon the physiological status of animals for enhancing productivity. Government should subsidize concentrate feed supply to further reduce cost of milk production. The Central Government should set up a Animal Feed Regulatory Authority at the national level to ensure the supply of quality and safe animal feeds.
- 3. To protect milch animals, technologies such as GIS and remote sensing for early warning systems should be used to contain trans boundary diseases (TADs), and rapid and accurate diagnostic methods should be developed for detection.
- 4. Alternative approaches like ethno-veterinary practices should be adopted for control of mastitis, to alleviate the problem of antibiotic residues in milk. Profiling of antimicrobial sensitivity against mastitis causing microorganisms should be taken up at large scale throughout the country.
- 5. Region specific integrated farming systems should be promoted to enhance farmers' income and dairy business operators should adopt block-chain and IoT based technologies to improve process efficiency, product quality and animal health.
- 6. For enhancing farmers income, efforts should be made for product diversification along with value addition with special focus on indigenous dairy products and industry should adopt functional traditional Indian dairy products combining the healthfulness of milk and functional attributes of herbs and phytochemicals for enhancing profitability and better return to the farmers. Improved packaging systems based on ergonomics and sustainability should be promoted to enhance the quality, safety and shelf life of traditional Indian dairy products.
- 7. To ensure better milk price to the farmers', unique nutritional properties of buffalo milk components should be promoted by appropriate branding. Government should provide financial support to well designed clinical trials using buffalo milk and its constituents for mitigating metabolic syndromes like hypertension, type II diabetes, etc. Protected Designation of Origin (PDO) legislation of buffalo can bring advantage to Indian dairy sector and the farmers.

- 8. Cogeneration and hybrid system combining grid and solar power can provide uninterrupted power supply at milk chilling centers and milk processing industries for reducing power cost.
- 9. Modern ICT based interventions related to productivity, processing, quality, cost and value addition can accelerate growth of dairy business and help in increasing farmers' income.
- 10.Government should incentivize better quality raw milk by promoting hygienic milking and instant chilling to produce superior quality milk products from it. The purchase of Bulk Milk Coolers (BMC) should be subsidized for a period of 5 years to improve the basic quality of Milk.
- 11.For doubling of farmers' income, government should give support to dairy sector by reducing the GST on ghee from 12 percent to zero percent and providing more financial support to the farmers. The maximum GST on any of the dairy products should not exceed 12%
- 12.It is recommended that income tax on milk and milk products produced by the dairy plants of the district cooperative milk producers unions may be waived off on the pattern of agriculture. At present, primary milk cooperative societies are exempt from income tax. Money so saved will be paid back to milk producers to increase their income.
- 13. India's growth rate in milk production during the last one decade has been very impressive. Country is now facing the problem of disposing excess skimmed milk powder and ghee while the international markets are subdued. The effect of this aberration is that farmers' income got reduced due to demand supply gap. The conference recommends that school feeding programmes should be implemented on daily basis and similar action initiated in Anganwadi scheme by including milk as one of the supplement. This action will sustain domestic milk production, tackle nutritional deficiency and malnutrition in targeted population and ensure regular and remunerative price to farmers.
- 14.Women play significant role in dairy sector from rearing of animal to selling of milk. Women should, therefore, be trained in the field of scientific animal breeding and economic feeding. NDDB and NDRI should play major role in skill development of dairy entrepreneurs especially the women dairy farmers.
- 15.To sustain farmers' income, subsidy offered by the government needs to be continued. Indian dairy sector needs accelerated growth in establishing producer owned enterprises to overcome the pit falls of the existing co-operative structure.
- 16.To increase export of Indian milk products to countries not allowing import of Indian dairy products need to be persuaded through diplomatic channels and free trade agreements. NCDFI should also open their doors to private sector to facilitate export in large volumes. Cooperative and private trade should receive equal opportunity without compromising on quality of products.
- 17.Government should bring regulation to prevent misuse of veterinary drugs and milk producers needed to be educated about the regulations. Modern FTIR based analytical machines could be used for rapid analysis of milk, detection of adulterants, veterinary drug residues and hazardous contaminants instantly.
- 18.Manpower needs of dairy industry should be assessed accurately and the existing workforce needs to be continuously trained to improve their professional skills and competencies.

- 19.Dairy Technology curriculum should be revised and entrepreneurship courses should be introduced to create entrepreneurial mind set and start-up ecosystems among dairy graduates.
- 20.Use of isolated milk ingredients and technologies can reduce the common problems of marketing faced by Indian dairy industry and improvise attractiveness of the products.
- 21.Organic dairy farming, bee-keeping and fisheries should be encouraged for ensuring high economic returns to the farmers.
- 22. The North Eastern States have ample scope to adopt Dairying as a tool for economic prosperity. The Government should come out with appropriate schemes to develop Dairying in the region. The milk of Yak and Mithun should also be brought under main stream through regulation and branding needs to be done from the initial stage.

8.6: Delhi to have a Canine: Crematorium:

Capital's first government run crematorium for dogs, planned ten years ago is now coming up in Dwarka. It will meet the needs of numerous pet owners and make their final separation from their loved canines less stressful. The crematorium, which will be ready by March 2019, is a part of the 3.5 –acre multipurpose "dog complex" being built in sector-29, Dwarka. It will have an electric furnace that can cremate 50 kg per hour, besides an ash room, lockers and a prayer room. It takes around an hour to completely dispose of a dog's

9. SCIENCE, HEALTH & S**OCIETY**

The health information included in this publication, unless stated to be otherwise, has not been evaluated by the Food & Drug Administration or any other medical body. We do not aim to diagnose, treat, cure or prevent any illness or disease. Information is shared for educational purposes only. You must consult your doctor before acting on any content.

9.1: Stem cells restore body's ability to produce insulin

If you are concerned about your blood sugar, you should hear about an amazing study published in the *Journal of the American Medical Association*. A team of researchers treated patients with stem cells and 87% of the patients saw their body's ability to produce insulin COMPLETELY restored. But that's not the amazing part. The researchers took blood tests 5 years later and the patients STILL maintained healthy levels of insulin and blood sugar. This one stem cell treatment banished blood sugar worries for 5 full years! "I wouldn't use the word cure," said lead researcher Dr. Richard Burt. "But it appears we changed the natural history of blood sugar control. It's the first therapy for patients that leaves them treatment-free for almost five years."

(Source: <a href="mailto:<a href="mailto:

9.2: Vaccine-producing platform gets a \$10 million boost

The next time a new infectious disease emerges and starts making people sick, how will scientists be able to develop a new vaccine from scratch in a hurry? An innovative new platform might be a part of the solution — and it just scored a \$10.6 million boost from the Coalition for Epidemic Preparedness. The production system, created by scientists at the University of Queensland, is designed to be adaptable so it could be used to create a wide range of vaccines. It also relies on a new kind of "molecular clamp" to make those vaccines more effective. Vaccines contain proteins from the pathogens they target, but those proteins can be unstable and undermine how well a vaccine works. The clamps stabilize the proteins, making them a closer match to their targets.

(Source: newsletter@statnews.com)

9.3: How doctors can help weed out fake penicillin allergies

There's a common problem with penicillin allergies: Millions of people who think they have them actually don't. Now, experts have laid out recommendations for how doctors should handle unverified allergies. A key step: get the details about the reaction behind a reported allergy. That will help determine what might be a true allergy and what might have another cause, like a rash from a viral infection and not the penicillin used to treat it. That's important not just for patients, but also the fight against antibiotic resistance, since people with unverified allergies are often treated with more broad-spectrum antibiotics. "Penicillin allergy evaluations are an emerging important component of antibiotic stewardship," says study author Dr. Kimberly Blumenthal. (Source: newsletter@statnews.com)

9.4: Gene therapies could offer long-term fixes for a host of incurable illnesses except that many people's immune systems react to them. So researchers are looking help antibodies. for to the treatments sneak past our **Details:** ways (https://mosaicscience.com/story/gene-therapy-treatment-clinical-trial-immunity-aav-haemophiliagenetic-disorder/index.html?utm_source=STAT+Newsletters&utm_campaign=1e4771a4ef-MR COPY 12&utm medium=email&utm term=0 8cab1d7961-1e4771a4ef-150784933)

9.5: After 37 years of trying, this biotech nears a first drug approval in breast cancer:

Immunomedics (IMMU) was founded in 1982. Thirty-seven years later, the biotech is finally on the cusp of its first marketing approval — possibly ending one of the longest drug-development droughts in the industry's history.

(ADAM FEUERSTEIN @adamfeuerstein) JANUARY 16, 2019

9.6: Untreatable High Blood Pressure and Sleep Apnea Connection **Discovered**:

If you have high blood pressure that just will not go down no matter what you do (diet, exercises, drug), chances are high that it is caused by sleep apnea. And if you say, "I don't have sleep apnea", there is a 94% chance you're wrong - especially if you snore. This is according to new research published in the American Heart Association's journal Circulation.

(by Christian Goodman | Feb 6, 2019)

(Details: (Blue Heron Health News bhsupport@blueheronhealthguides)

9.7: Cancer rates predicted to fall in the EU

A new study predicts that 1.4 million people will die of cancer in the European Union this year, a roughly 5 percent decrease in overall cancer mortality rates since 2014. Scientists looked at patterns in cancer deaths from 1970 through 2014 to project for 2019. Lung cancer rates, for example, are expected to increase by 4 percent in women, while breast cancer rates in women are expected to decrease by up to 16 percent in some age groups. And even though the forecast points to a positive trend, "any prediction should always be considered with caution," the study authors write. <a href="mailto: study.authors. Mar 19, 2019,

10. F**ORTHCOMING** E**VENTS**

Calendar of Conferences, Conventions and Symposia in India and abroad

(Get your event listed in this section by mailing complete details to the Editor: rnkohli@gmail.com)

10.1: 35th World Veterinary Association Congress, San Jose, Costa Rica, April 27 - 30, 2019 ; Details: Frank Chavarría, Comité Organizador, *World Veterinary Association Congress-WVAC 2019*, Tel: 506 2224-4191 ext. 113, Tel Directo: 506 2283-4971, Email: info@wvac2019.com, WEB: www.wvac2019.com

10.2: 3rd FIL-IDF Symposium, **3** - **6** June, 2019, Montreal Canada, organized by International Dairy Federation. Theme: Microstructure of Dairy Products. Details: <u>www.fil.idf.org/events</u>.

10.3: 2019 BIO International Convention, June 3-6, 2019, Philadelphia, USA. Discover the next generation of cutting-edge products, therapies, and cures all week long. Learn more at <u>convention.bio.org</u>.

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