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# NAVS NEWSLETTER

(Quarterly)

*For Private Circulation Only*  
New Delhi



**Editor: Prof. Dr. R.N. Kohli**

**NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

Office: G-4, A Block, NASC, Dev Prakash Shastri Marg, New Delhi-110 012

**NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

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**NEW DELHI NAVS NEWSLETTER APRIL, 2020**

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(Calendar of Conferences, Conventions and Symposia in India and abroad)

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## **CH. 1: NAVS GENERAL INFORMATION**

### **1.1: Governing Council (2017- 2019)**

#### **Office Bearers**



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## **MEMBERS (ELECTED)**

Dr. B.N. Tripathi, Hisar: [bntripathi1@yahoo.co.in](mailto:bntripathi1@yahoo.co.in)  
Dr. Sanjeev Kumar, Izatnagar: [skgcari@yahoo.co.uk](mailto:skgcari@yahoo.co.uk)  
Dr. Minakshi Prasad, Hisar: [minakshi.abt@gmail.com](mailto:minakshi.abt@gmail.com)  
Dr. S.K. Srivastava, Izatnagar: [sksrivastava1093@gmail.com](mailto:sksrivastava1093@gmail.com)  
Maj. Gen. Dr. M. L. Sharma, Delhi: [gensharma1950@yahoo.com](mailto:gensharma1950@yahoo.com)  
Dr. Ravindra Sharma, Hisar: [rsharma698@gmail.com](mailto:rsharma698@gmail.com)  
Dr. V.D.P. Rao, Vijaywada: [raovdp@rediffmail.com](mailto:raovdp@rediffmail.com)  
Col. Dr. R. P. Garg, VSM, NCR, Noida, U.P.: **email ID not available**  
Dr. S.N. Singh, Bangalore: [snsingh.2006@gmail.com](mailto:snsingh.2006@gmail.com)  
Dr. S.K. Saha, Izatnagar: [subodhksaha@yahoo.com](mailto:subodhksaha@yahoo.com)  
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## **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 Sciences 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 Ayurved 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);

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\* Since deceased

#### **1.4: CHRONOLGY OF NAVS CONVOCATIONS-CUM-CONVENTIONS**

1. First NAVS Convocation: 18<sup>th</sup> December 1996 at Vigyan Bhawan, New Delhi
2. Second NAVS Convocation: 30<sup>th</sup> January 2000 at Pragati Maidan, New Delhi
3. Third NAVS Convocation: 16<sup>th</sup> April 2002 at IVRI, Izatnagar, U.P.
4. Fourth NAVS Convocation: 7<sup>th</sup> May 2005 at GBPUAT, Pantnagar, Uttrakhand
5. Fifth NAVS Convocation: 5<sup>th</sup> May 2006 at JNKVV, Jabalpur, M.P.
6. Sixth NAVS Convocation: 28<sup>th</sup> June 2007 at KVAFSU, Bangalore, Karnataka
7. Seventh NAVS Convocation: 16 May 2008 at SKUAST, Jammu, J. & K.
8. Eighth NAVS Convocation: 23<sup>rd</sup> January 2009 at SVVU, Tirupati, Andhra Pradesh
9. Ninth NAVS Convocation: 30<sup>th</sup> October 2010 at NDRI, Karnal, Haryana.
10. Tenth NAVS Convocation: 12<sup>th</sup> November 2011 at RAJUVAS, Bikaner, Rajasthan.
11. Eleventh NAVS Convocation: 2<sup>nd</sup> November 2012 at DUVASU, Mathura, U.P.
12. Twelfth NAVS Convocation: 28<sup>th</sup> January 2014 at LUVAS, Hisar, Haryana
13. Thirteenth NAVS Convocation: 28<sup>th</sup> February 2015 at CGKV, Durg, Chhatisgarh
14. Fourteenth NAVS Convocation: 4<sup>th</sup> 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, Bhubaneswar. Odissa.
18. Eighteenth NAVS Convocation held on 26-27 December 2019 at Gandhinagar, Gujarat, on "Futuristic Technologies in Animal Health and Production", Organized by Kamdhenu University.

#### **1.5: DECEASED NAVS FELLOWS**

##### **A REQUEST TO OUR READERS FOR HELP**

We have compiled the following 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 [www.navsindia.org](http://www.navsindia.org). Kindly email your suggestions to: [rnkohli@gmail.com](mailto:rnkohli@gmail.com).

1. Ahuja, Dr. Kanhaya Lal, Fellow Elected 1997
2. Attrey, Dr (Col.) D. P., Fellow Elected 1997
3. Baishya, Dr. Gajen, Fellow Elected 2005-06
4. Bajpai, Dr P.K., Fellow Elected 1996
5. Balain, Daya Singh, Fellow Elected 1996
6. Batta, Dr. Satish K, Fellow Elected 2006-07
7. Bhardwaj, Dr Madan Behari Lal, Fellow Elected 1996
8. Bhasin, Dr. Nek Ram, Honorary Fellow Elected 2011
9. Bujarbarua, Dr J.M., Fellow Elected 1996
10. Butuchaiah, G., Fellow Elected 1996
11. Chandna, I.S., Fellow Elected 2000-01
12. Chaudhary, Dr. Amrit Lal, Fellow Elected 1996
13. Chella, Dr. Jagannadham, Fellow Elected 2006-6
14. Deshpanda, Dr. S.K., Fellow Elected 1999
15. George, Dr. P. O., Fellow Elected 1999
16. Ghafoor, Dr. Mohd. Abdul, Fellow Elected 1996
17. Gupta, Dr. Shiv Kumar, Fellow Elected 2000-01
18. Harbola, Dr P.C., Fellow Elected 1998-99,
19. Jhala, Dr. V.M., Fellow Elected 1996
20. Kacker, Maj. Gen. R.N., Fellow Elected 2006-07,
21. Kaikini, Dr. A.S., Fellow Elected 1996
22. Kanwar, Lt. Gen. N.S., Fellow Elected 2010-11
23. Katoch, Dr. R.C., Fellow Elected 2005-06
24. Khan, Dr. A.G., Fellow Elected 1996
25. Krishna, Gopal, Fellow Elected 2005-6
26. Krishnaswamy, Dr. S., Fellow Elected 2007-08
27. Kukreti, Dr. J.P., Hon. Fellow Elected 2012
28. Kumaran, Dr. Jay S., Fellow Elected 2007-08
29. Lal, Dr S.M., Fellow Elected 2000-01
30. Manickram, Dr R., Fellow Elected 1999
31. Mathur, Dr P.B., Fellow Elected 1996
32. Misra, Dr. Sarat Chandra, Fellow Elected 2006-07
33. Nair, Dr. P.G., Fellow Elected 1996
34. Narainkhedkar, Dr. S.G., Fellow Elected 1999
35. Nanda, Dr. B.S, Fellow Elected 2007-08
36. Padmanabhan, Dr. V. D., Fellow Elected 1996
37. Panda, Dr. Bhagbat, Fellow Elected 1996
38. Pandey, Dr J.N., Fellow Elected 2000-01
39. Pandey, Dr. Ramayan, Fellow Elected 1996

40. Pathak, Dr. Ramesh Chandra, Fellow Elected 1996
41. Pathak, Dr. S.C., Fellow Elected 1999
42. Prasad, Dr. Gaya, Fellow Elected 1999
43. Rajya, Dr. Bhagwan Saran. Fellow Elected 1996
44. Ramachandran, Dr S., Fellow Elected 1996
45. Rao, Dr B.U., Fellow Elected 1996
46. Rao, Dr. Bedati Venkateshwar, Fellow Elected 1996
47. Rao, Dr. C. Krishnan, Fellow Elected 1996
48. Rao, Dr. Rama Mohan, Fellow Elected 1996
49. Rao, Dr. R.L.N., Fellow Elected 1999
50. Rathore, Dr. Sohan Singh, Fellow Elected 2011
51. Rastogi, Dr Anil K., Fellow Elected 2007-08
52. Sahni, Dr K.L., Fellow Elected 1996
53. Salam, Dr. Abdus, Fellow Elected 1996
54. Sen, Dr. G. P., Fellow Elected 1996
55. Sharma, Dr. Deepak, Fellow Elected 2010-11
56. Sharma, Dr. Gopal, Fellow Elected 1996
57. Singh, Dr A. K., Fellow Elected 2005-06
58. Singh, Dr. Balwant, Fellow Elected 1996
59. Singh, Dr. Bhanu Pratap, Fellow Elected 1996
60. Singh, Dr. C.M., Founder President 1996
61. Singh, Maj. Gen. Jagvinder, Fellow Elected 2010-11
62. Singh, Dr. Nagendra Prasad, Fellow Elected 1996
63. Singh, Dr. Prem Pal, Fellow Elected 1997
64. Singh, Dr. Raghu Nath, Fellow Elected 1998-99
65. Singh, Dr. Ratan, Fellow Elected 1999-2000
66. Singh Dr U.B, Fellow Elected 1996
67. Soni, Dr. Balbir Krishan, Fellow Elected 1996
68. Srivastava, Dr. G.C., Fellow Elected 2007-08
69. Talwar, Maj. Gen. Brij Mohan, Fellow Elected 2000-01
70. Tyagi, Dr. R.P.S., Fellow Elected 1996
71. Uppal, Dr. R.P., Fellow Elected 1998
72. Venkatakrishnan, Dr. R., Fellow Elected 2004-05
73. Verma, D.N. Fellow Elected 2004-5
74. Verma, S.K. Fellow Elected 1997
75. Yadav, Dr. J.N.S., Fellow Elected 1999





## **2: FROM THE PRESIDENT'S DESK**

Distinguished Fellows, Members and Associate members of the NAVS (I), it is an unprecedented time when I am writing last message as President of the Academy (tenure 2017-20) under national lock down due to COVID19 pandemic. More than 180 countries, including India, are passing through turbulence and rough waters. I am hopeful that we Indians under the dynamic leadership of our honourable PM stand united to fight this virus and emerge victorious.

As a microbiologist, I wonder on the emergence of this crisis from thin air despite the fact that global powers had agreed for implementation of an integrated approach to prevent emerging and reemerging zoonotic diseases. Although implementation of "One health" concept and regulations under "Tripartite agreements" advocated by WHO, FAO and WAHO (OIE) is very critical for prevention of zoonoses in developed countries. These countries have failed to identify and prevent the emergence of this virus despite availability of essential advanced technologies.

The 21st century has witnessed increased frequency of emergence/re-emergence and outbreaks of multiple zoonotic diseases in last 20 years. We have had three major pandemics since 2000, i.e., severe acute respiratory syndrome (SARS) in 2003; HINI in 2009 and now COVID- 19. The viruses that cause SARS, MERS, and COVID-19 are each novel coronaviruses that humans have no immunity against and are fully susceptible to.

There are indications that the SARS and MERS viruses are more lethal than the COVID-19 virus, however, neither are as infectious as this latest novel corona virus. The case fatality rates for SARS and MERS have been 10% and 34% respectively. In marked contrast, the estimated fatality rate for COVID-19 ranges from less than 1% to as high as 3.4%, however, COVID-19 is highly infectious and well adapted to human-to-human transmission compared to SARS and MERS. It is believed that coronaviruses are more likely to evolve and gain the ability for interspecies transmission, similar to influenza viruses due to their ability to recombine and acquire mutations.

There are many bacteria and viruses existing in nature. However, when countries spend huge amounts of money to engineer viruses with the mala fide intent to attack life we have a big problem on our hands. Nations like America, China, Russia, France, UK and Israel have significant biological warfare weapons and they have enough stockpiles of these viruses to wipe out all human life a thousand times over. Unfortunately, some of the nations have no respect for Biological Weapon convention of 1972 and work clandestinely for their national interests. Although, a total of 183 states which are party to it as of August 2019 and are committed to prohibit the development, production, and stockpiling of biological and toxin weapons, owing to the absence of any formal verification regime to monitor compliance, the effectiveness of the Convention is rather limited.

There are reports that SARS (2002) and MERS (2012) epidemics were caused by viruses reported to have escaped BSLs (Bio Safety labs) in China. The Wuhan Institute of Virology is China's first level-4, Bio Safety lab (BSL-4) currently working on creating most dangerous strains of viruses.

The most advanced producer of biological weapons is America and it is reported to have spent US\$120 billion employing approx. 12,400 full time scientists to develop biological weapons. It seems China has been very clever in acquiring and stealing much of the knowhow and viruses, but not so clever and experienced in managing the development of biological weapons and their handling (Source: Never under estimate the Power of Nature nor the stupidity of Humans: [www.guruwonder.in](http://www.guruwonder.in))

It is gathered that the SARS and MERS viruses were originally American products, however, the COVID-19 Coronavirus is a Chinese modification to the SARS virus and they all leaked out of China, because of their incompetence or excessive cleverness.

As a veterinarian I am also concerned about "Reverse zoonoses". Veterinarians need to be an integral part of identifying the animal reservoirs and the intermediate hosts for these diseases with particular reference to wildlife medicine, such as understanding the habitats and diversity of bat species as reservoirs for coronaviruses and multiple other viruses. Veterinary Institutes like ICAR- IVRI (Bhopal), ICAR-NRCE Hisar and Veterinary Universities with BSL4 and BSL3 facilities should come forward and extend helping hands to the national/state health authorities in order to utilize these national assets optimally.

It is time that a national plan is mooted to counter this kind of epidemic/pandemic in future, under the aegis of Planning Commission in collaboration with Ministry of Health and Family Welfare, Ministry of Fisheries, Animal Husbandry and Dairying and Ministry of Science and Technology. Law-enforcement agencies may also be involved to deal with this kind of situation more effectively. An enforcement of strict diseases surveillance based on risk assessment in particular region along with effective national surveillance network will aid in prevention of this calamity to a greater extent and help evolve robust strategies to handle such pandemics in future.

I wish to thank Dr. Prakash Rao, Vice- President, and all the learned GC members and other professional colleagues for smooth running of the Academy soaring pinnacles and making my tenure as unique, memorable, satisfying and successful. Among various achievements during my tenure as President of the Academy, the finest achievement was the recognition of our Fellowship and making the Academy financially vibrant by addition of 58% additional funds. I wish to thank Dr. (Mrs) Usha Mandokhot specially for contributing Rs ten lakh to the Academy. I am sanguine that election process will be conducted smoothly and successfully under the impeccable integrity of Dr. Suresh Honnappagol, Returning Officer, and I wish GOD speed to the new Governing Council. Jai Hind

**CH. 3. EDITOR'S NOTE**  
**(Free Fair and Fearless)**



**3.1: India fights the Corona-19 pandemic**

March 23-25, 2020: March 22 was observed as a day of voluntary “Janata Cerfew” from 7 A.M. to 9 P.M. at the instance of the Hon’ble Prime Minister, which was later extended up to 6 A.M. today, March 23. With effect from today upto 31st March almost all the states and union territories of the country would remain under a complete lock down as a step towards the prevention of spread of Corona-19 disease.(This was later extended to mid April). We at the Academy stand committed for fully and actively co-operating with the Government in this moment of National Disaster in the interest of the whole nation including that of our own and that of our families.

But these are testing times and a reminder of the natural and manmade disasters that humanity has encountered in the past such as earthquakes, floods, tsunamis, fires etc and might face in future too. Humanity has encountered deadly epidemics and pandemics almost every year or couple of years, not to forget the dangers of global warming compounded by air and water pollution. And now, Covid-19. The global health experts have been saying that occurrence of another pandemic with a speed and severity similar to 1918 Spanish flu\* was not a matter of if but when. However, the experts’ understanding of how the current coronavirus spreads is limited because it is so new. There is no cure for this viral infection except one’s strong immunity. India is co-opetating with experts around the world to accelerate the work on treatments and vaccines. That takes time. Meanwhile it is not the time to promote the untested remedies. Despite being educated, many fall prey to social media posts that spread misinformation. The central and state Governments are conducting intensive awareness compaign to counter misinformation.

China is from where it began and spread to all over the world, has more experience with the disease than any other country. A Chinese whistleblower doctor who had forewarned of the possible outbreak was threatened by police not to spread the news. But when the wake up call finally came, Xi Jinping acted on a war footing and built make shift hospitals in an unbelievably record time.

As this global pandemic shows us ‘health is wealth, and it is time to make every effort to prevent the infection from spreading in public places and offices. Prevention is better than cure; so we must take all precautions recommended by WHO as well as the government advice from time to time. At the individual level it is all about sticking to basics: washing hands frequently

with an antiseptic hand wash, staying home in self imposed segregation, and social distancing in general and safe distance from infected/suspected persons in particular. But there is no need to panic. Infact, this crisis can be turned out in an opportunity for India to develop increased testing facilities and to upgrade disease-surveillance systems, so that we are able to meet the future challenges posed by more virulent viruses.

*\* The 1918-19 Influenza Pandemic:*

*One of the deadliest pandemics in history, the influenza of 1918-19 killed tens of millions of people — more than the number of those who perished in all of World War I. The Spanish flu (as it was known) infected an estimated one-third of the global population and hit young adults especially hard, sweeping over the planet in waves. Victims died quickly and painfully. As TIME wrote in "A Brief History of Flu Pandemics," "Undertakers were so overwhelmed that corpses were left inside homes for days. Cities passed laws requiring citizens to wear masks in public places, but the virus defeated that barrier. ... When autopsies were performed on flu victims, lungs were found to be blue and sodden. They had died by drowning."*

Director of the Day Hospital in Parma, Italy, who died on 23rd March 20-20 from COVID-19 while doing his job as a doctor. A bunch of many other Italian doctors also died during Corona pandemic in the hospitals. We can not



measure the immense sacrifices that the medical professionals have made and are making all around the world. We can't bring back those who have lost their lives but the least we can do is to keep them in our hearts and minds while dealing with the living ones in our lives and give them the love and respect that they deserve. Medical professionals have a history of making sacrifices and have always been a source of inspiration. We pray for eternal peace to their souls.

April 4, 2020: UPDATE: India reported 16 Covid-19

deaths on Friday — the highest single-day death count since the outbreak of the pandemic in the country — taking the toll to 85, even as the number of corona virus cases crossed the 3,000-mark at 3,082 with more than 500 new cases being reported from the states for the second straight day. The toll included three deaths in Maharashtra, two each in Delhi and Telangana and one each in Andhra Pradesh, Madhya Pradesh, Haryana, Karnataka and Gujarat. At 502, the number of confirmed cases on Friday was only a shade lower than the previous day's figure of 544, which is the highest single-day

**1918 INFLUENZA IN INDIA...**

India, then under colonial rule, was one of the worst hit by the epidemic. An estimated 18 million people died. Bombay, a port city, was one of the first cities where the infection spread. By early July in 1918, 230 people were dying of the disease every day, up nearly three times from the end of June. Several million were infected. One of them

was Mahatma Gandhi, who stayed at the Sabarmati Ashram and survived despite being on a liquid diet. According to Laura Spinney, author of *Pale Rider: The Spanish Flu of 1918 and How it Changed the World*, the epidemic affected the course of the struggle for independence, as the death and misery fuelled anger against the British.

count so far. At least 280 of the day's confirmed cases being those of Tablighi Jamaat delegates who attended the Nizamuddin congregation or their contacts. Health ministry officials said at least 647 of Covid-19 cases in the last two days reported from

14 states and Union territories are linked to the Jamaat meet and indicated that the event lent a major blow to the gains made from lockdown and social distancing measures. “If we see the rise in cases in the last few days, it has primarily been due to an increase at a particular level,” health ministry joint secretary Lav Agarwal said in an apparent reference to the TJ congregation. “We are dealing with infectious disease management and one slip or failure to comply with the rules takes us back and all our efforts are wasted,” he added.

The positive cases linked to Jamaat were reported from Delhi, Telangana, Karnataka, Maharashtra, Rajasthan, Tamil Nadu, Uttarakhand, UP, Andaman and Nicobar, Assam, Himachal Pradesh, Haryana, Jammu and Kashmir and Jharkhand. The highest number of cases on Friday was reported from Tamil Nadu – 102. As many as 100 of these are linked to the Nizamuddin congregation. Of the total 80 cases reported by Telangana (five of them were reported late Thursday night), 78 were linked to TJ while 42 of UP’s 48 cases were linked to the Nizamuddin meet. Delhi reported 93 cases, though 52 of these included Jamaat delegates admitted at Jhajjar which TOI had reported a day earlier. Telangana reported 80 cases in the last 24 hours – its highest single day tally since the outbreak of the disease. With two deaths reported on Friday, the toll in the state has gone up to 11. However, with 25 deaths and 490 confirmed cases, Maharashtra continues to top the chart. The southern states and Delhi are the worst affected by the Jamaat meet. While 116 of the total 229 cases in Telangana are linked to the event, in the neighbouring Telugu state of Andhra Pradesh, 140 of the total 161 cases are linked to the congregation. In Tamil Nadu, of the total 411 cases, 364 are linked to the Tablighi meet. (TNN April 4, 2020)

### **3.2: A message about COVID-19 from Katherine Maher, Executive Director, Wikimedia Foundation**

With the uncertainty surrounding the outbreak of the [Coronavirus disease \(COVID-19\) pandemic](#), we want to reassure our readers across the globe that our volunteers are working to bring you a trusted source of unbiased information. Throughout these challenging times, knowledge must and will remain open for all.

We find ourselves in remarkable circumstances this year. The COVID-19 pandemic makes clear our global human interconnectedness and the responsibilities we have to one another. We have no precedent for its challenges, but we do know that our best response relies on the sort of global empathy, cooperation, and community building that sit at the heart of our movement.

I want to acknowledge the invaluable work of all the contributors on Wikipedia. Thank you for keeping a close watch and keeping misinformation at bay. Our Corona virus articles have received tens of thousands of edits by thousands of editors since the start of the pandemic. We are proving that, even in a time of social distancing, we can celebrate our human bond by coming together online to share facts and information.

We will keep working around the clock to bring you reliable and neutral information. Now, as ever, our priority is to remain worthy of your trust. Take good care,

### **3.3: Here is Your Chance to Contribute in India's War against Covid-19!**

Keeping in mind the objective of dealing with any kind of emergency or distress situation, like the COVID-19 pandemic, and to provide relief to the affected, a public charitable trust under the name of Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM CARES) Fund has been set up.

This fund also accepts micro-donations, as a result of which, a large number of people will be able to contribute with smallest of denominations.

#### **HOW TO CONTRIBUTE?**

Name of the Account: PM CARES

Account Number: 2121PM20202

IFSC Code: SBIN0000691

SWIFT Code: SBININBB104

Name of Bank & Branch: State Bank of India, New Delhi Main Branch

UPI ID: pmcares@sbi

You can also go to the website [www.pmindia.gov.in](http://www.pmindia.gov.in) and donate.

Following modes of payments are accepted:

Debit Cards and Credit Cards

Internet Banking

UPI (BHIM, PhonePe, Amazon Pay, Google Pay, PayTM, Mobikwik, etc.)

RTGS/NEFT

\*Donations to this fund will be exempted from income tax under section 80(G). **CONTRIBUTE NOW!** [www.pmindia.gov.in](http://www.pmindia.gov.in)

**We often encourage all the veterinary and medical professional recipients of our Newsletter to forward their copies to anyone with similar interests or to whosoever requests them for it. If it is done under intimation to us, we shall immediately include the new recipients in our mailing list for future issues and note any changes in email Ids of regular existing recipients. This helps to update our list and also increase our circulation:**

**Editor, NAVS (India)**

## **CH.4: LETTERS TO THE EDITOR**

Dear Prof. Kohli: Thank you so much for forwarding January 2020 issue of the NAVS Newsletter. You are doing a wonderful job for our academy and deserve all the praise. Wish you and your family a very happy and healthy New Year. Warm regards: Dr. J. L. Vegad PhD (New Zealand), Visit. Prof. (USA), FNAVS, FIAVP; Email: [jawaharlalvegad@gmail.com](mailto:jawaharlalvegad@gmail.com)

Sir: The January 2020 issue of NAVS Newsletter is very nicely done issue as always. Thanks for promptly including the information about the publication of the 2nd Edition of our book: "Ruminant Surgery - A Textbook of Surgical Diseases of Cattle, Buffaloes, Camels, Sheep and Goats" in January 2020 under the heading: 'STOP PRESS'. It is so nice of you sir. Regards:

Dr. Jit Singh, Former Professor of Veterinary Surgery and Radiology, HAU, Hisar, Haryana, and Former Dean, College of Veterinary and Animal Sciences, Navania Vallabh Nagar, Udaipur, Rajasthan.

Dear Prof. Kohli: Every issue of NAVS News Letter, over score the previous one. Commendable job. Since the News letter contain plethora of information covering wide spectrum of professional and social material pertaining to livestock and allied sector, I suggest the nomenclature of this publication be modified to NAVS BULLETIN/ CHRONICLE. Regards:  
Dr. Jitendra Bhatia <[bhatiajs05@gmail.com](mailto:bhatiajs05@gmail.com)>

Dear Dr Kohli: I sincerely wish you very happy New Year. I have received the January 2020 issue of NAVS Newsletter. The whole profession must be indebted to you for your great service to Veterinary profession since last so many years. Prof D.P. Monga, former Professor and Head, Department of Veterinary Microbiology and Immunology, COVS, Hisar and ormer Professor of Medical Microbiology, School of Medicine, Addis Ababa University, Addis Ababa Ethiopia From 2002- 2018. Email: <[drdpmonga@yahoo.com](mailto:drdpmonga@yahoo.com)>

Dear Sir: Once again you have come out an excellent issue of NAVS News letter packed with information capsules. My salute to you Sir! Best regards:

Dr. Abhijit Mitra, Director, ICAR-National Research Centre on Mithun, Medziphema- 797 106, Dimapur (Nagaland) INDIA; EMail: [director.nrcmithun@icar.gov.in](mailto:director.nrcmithun@icar.gov.in); [drabhijitmitra@gmail.com](mailto:drabhijitmitra@gmail.com);

Phones: +91-3862-247340; Fax: 3862-247341; Cell: +91-436276862; Web: [www.nrcmithun.res.in](http://www.nrcmithun.res.in); ; [orcid.org/0000-0003-4011-2579](https://orcid.org/0000-0003-4011-2579)

Respected Dr. R.N. Kohli: Thanks a lot for sending me the January 2020 issue of NAVS Newsletter which, as usual, is always very informative. Regards:

Dr. T.K. Walli; <[tkaywalli@gmail.com](mailto:tkaywalli@gmail.com)>; Chief Editor, "Think Grain Think Feed", A Benison Media Publication on Feeds and Feed Technology.

Thank you for the latest issue of the Newsletter which is quite informative and elaborate. Regards: Maj. General Shri Kant Sharma, President, NAVS (India),  
Email: <[shrikant28@hotmail.com](mailto:shrikant28@hotmail.com)>

Dear Sir: I thank you very much for considering the ICAR-NIANP, Bengaluru events to publish in your esteemed NAVS Newsletter - January 2020 issue which is very informative and wonderfully designed with wide range of issues pertaining to animal sciences. Thanking You Sir. With Best Regards  
Dr.G Krishnan <[vet.krish@gmail.com](mailto:vet.krish@gmail.com)>

Dear Dr. Kohli: Thank you for taking a lot of pains in providing very informative January 2020 issue of NAVS Newsletter with beautiful cover page. It definitely helps me to keep in touch with the activities of NAVS and other news related to Veterinary and Animal Sciences. I am especially thankful for giving a good coverage and bringing to the notice of veterinarians about my new book covering specialized areas in veterinary toxicology, published in 2019 Springer Nature. Needless to say your contribution to the profession is marvellous, and I appreciate for the same, and also for the coverage about my award from UP Book of Records for excellent and record contributions in medical publications. With best regards: Dr. P K Gupta <[drpkg1943@gmail.com](mailto:drpkg1943@gmail.com)>

Thank you Dr. Kohli, a beautifully designed and well presented covering almost all corners of the profession. We get inspiration from old stalwart like you. Pl carry on, May He bless you long life and good health, so that you can continue to serve the profession. Dr. S P Gautam, <[sp\\_gautam2000@yahoo.com](mailto:sp_gautam2000@yahoo.com)>

Dear Kohli Saheb: Many thanks for the latest copy of your Newsletter. It is amazing how you bring out such excellent material in each issue. Even though it is not my area of work, I find it very interesting. I particularly liked your editorial and the coverage of the programme for the Milk Day. Write up about the A2 milk was also useful. With best wishes to you and your family for the year 2020. Dr. Sartaj S. Mathur, <[sartajmathur@yahoo.co.in](mailto:sartajmathur@yahoo.co.in)>

Kohli sir: Nice to hear from you. The January 2020 issue of NAVS Newsletter is wonderful, giving lots of information and details of the activities. Hats off for your efforts. I was a little lazy on activities of NAVS for some time. I have now activated myself and shall attend the next meeting/convention. My heartiest congratulations to you, sir.

Brig Dr N M SINGHVI, Jodhpur, <[singhvnm@gmail.com](mailto:singhvnm@gmail.com)>



All the members of NAVS family in particular and the Veterinary Fraternity in general will remain thankful and indebted for the untiring and great service rendered by the editor, Prof. Dr. R.N. Kohli sir so far. We wish that honorable Kohli sir continues to serve the veterinary profession in the future years to come through his knowledgeable and meticulous editorship. With Best Regards, Dr. V. R. B. Sastry, <[vrbsastry@gmail.com](mailto:vrbsastry@gmail.com)>  
Principal Scientist (Retd.) (ICAR-IVRI), H.No. 30- 276/ 14/ 22/ 1 (Plot No. 22),  
Beside Mercy Model School, Poolapalli Balayya Road, Safi Nagar, Old Safil  
Guda, R.K. Puram Post, Secundarabad - 500 056, Telangana

*(Editor's Response: Thank you very much Dr. Sastry for appreciating our work, which would not have been possible without the cooperation and support of the NAVS family in general and the members of its past four NAVS Governing Councils, readers, contributors and professional colleagues in particular).*

Dear Dr. Kohli: I also strongly feel that all of these elections including our NAVS (I) should be postponed till Next year say till June of 2021. (Even the Olympics is being postponed for a year!!). Meanwhile these Organizational leaders should do some soul searching and brainstorming to come up with a fool proof system of election process so that the credibility of our whole profession remains preserved. I am willing to serve in any capacity to help streamline and regularize our procedures for fair, transparent election process, I am happy to be a part of this collective effort to save the professional image and prestige of our great noble profession. With regards and respects:

Dr. Srinivasan Ramanathan, B. V. Sc., M.P.H., D.V.M., FNAVS (I), Chief of Staff & Director of Veterinary Medical Services, North Olympia Animal Hospital, 3523 Pacific Ave SE, Olympia, WA 98501.USA  
(360)456-6006 (Hosp.) (360)627-1887(Mobile) Email: [animaldr1@gmail.com](mailto:animaldr1@gmail.com)



**BIHAR ANIMAL SCIENCES UNIVERSITY**  
Patna-800014  
Web. : [www.basu.org.in](http://www.basu.org.in)

**Employment Notice No. : 02/2020**

Bihar Animal Sciences University, Patna invites applications for the posts of **University Professor-cum-Chief Scientist - 03 Posts, Associate Professor-cum-Senior Scientist-18 Posts and Assistant Professor-cum-Jr. Scientist- 15 Posts of Sanjay Gandhi Institute of Dairy Technology, Patna** on direct recruitment basis. Candidates may read the general instructions and important notice carefully as placed on website of the University <https://www.basu.org.in>

**Last date for submission of the application form is 17/04/2020**

**Note:-** Those who have already applied earlier need to submit only updated information in proforma and Score Card as per re-advertisement. Re-submission of fee is not required for those who have already submitted requisite fee earlier in response to Employment Notice - 07/2019.

**Sd/-  
Registrar**

## **CH. 5: NAVS NEWS**

NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)

**G-4, A BLOCK, NASC COMPLEX, DPS MARG, NEW DELHI -110 012**

### **5.1: Elections to NAVS Governing Council: Update**

Prof (Dr) Suresh S. Honnappagol, Veterinary College, Hebbal, Bengaluru-560 024 (Karnataka) was appointed as the Returning Officer for conducting the elections to the Governing Council of the Academy by postal ballots. The nominations received as on 16-03-2020 have been declared by the returning officer (obviously after approval by the screening committee). It has been observed that some individuals in this approved list are contesting for more than one position in the Governing Council. Rule No. 10 of the Academy under the heading “Composition, strength and mode of election” in its clause number **10.2 (e)** states: ‘No Fellow may hold more than one office of the Academy at one and the same time”. This clause is in existence since the beginning of the Academy. The fact that never before in the past elections held so far have the contestants been nominated to contest for more than one position proves its acceptance by the Academy. The essence of the rule was being followed so far. When this was pointed out to the concerned contestants’ some argued that they will withdraw from some of nominations that they filed earlier. As the persons who file nominations on multiple posts gets them an unfair advantage, whether they withdraw before elections or chose to select the position of their choice later on, if they get elected for more than one position, it is not just to ignore this issue.

Upon the request of a couple of contestants to postpone the remaining process of elections (in view of Covid-19 pandemic), the President of the Academy has sought views of all members of the existing (2017-19) Governing Council. Most of the members seem to agree to the said postponement. Final decision in the matter is awaited. Placed below are the views expressed by the GC members, some of whom have made suggestions which go beyond the issue of postponement of current election process:

Shri Kant Mar 30, 2020.

I am forwarding the request received from Dr. MP Yadav regarding postponement of the election process in view of the COVID-19 Pandemic. Dr. Uppal has also spoken to me in this regard yesterday. Please offer your comments. Regards.....Gen Shri Kant

Dr. M.P. Yadav March 29, 2020 <[yadav mp@hotmail.com](mailto:yadav_mp@hotmail.com)>

Dear Maj. Gen. Shri Kant Sharma,

In view of the National and International scenario due to COVID-19 Pandemic, it is suggested that the election announced for the Governing Council of NAVS, may be differed time being till the situation become normal. In the mean time,

the President along with the present G. C. may run the activities in the best interest of the Academy. With regards. Prof. (Dr.) M. P. Yadav

Bhupendra\_Tripathi; Mar 30, 2020

Yes, it has to be postponed. Otherwise also, Is it possible to hold the election in current situation in the country?. Postal services are suspended.

May be postponed pl. Thanks & regards, Bntripathi

Raghunath Kohli Mar 30, 2020.

Dear Gen. Shri Kant, "The conduct of elections in the current period of international crisis may seem unwise (to say the least), but apart from that, the general Veterinary Organizations such as NAVS, IVA and VCI etc are often in the news on the issue of method(s) used for elections, the unfair practices associated with them and of plugging of their loop holes, if any. Some subject matter organizations may also be facing similar issues. To replace the postal elections with some sort of foolproof electronic method has been informally or semi-formally discussed at NAVS also, but nothing concrete seems to have been finalized so far. Defaults in record-keeping and tendency of tweaking the rules to suit the self interest of some, are some of the other issues that affect the end results of elections to the aforesaid professional organizations, also need our attention.

I retired from active service at the age of 65+ but have been actively associated since then with the aforesaid organizations for the past two decades in various capacities only in professional interest. I have no personal motive in making the aforesaid observations. Prof. R.N. Kohli, March 30, 2020"

Rishendra Verma Mar 30, 2020,

Few days ago, I spoke to the Returning Officer that the post office is not accepting registered/speed post letter(s) hence the schedule of election may be rescheduled. The Returning Officer stated he will take appropriate action on the basis of situation analysis. It is Returning Officer who is competent himself to reschedule the election. No permission of any body is required since he has been authorized to conduct the election. It is also established that the present GC will work till new GC is elected. It is obvious automatically.

I am copying this mail to the Returning Officer.

Srinivasan Ramanathan Mar 31, 2020.

Dear Dr. Kohli, I also strongly feel that ALL of these elections including our NAVS I) should be postponed till Next year say till June of 2021. (Even the Olympics is postponed for a year!!). Meanwhile these Organizational leaders do some soul searching and brainstorming to come up with a fool proof system of election process so that the credibility of our whole profession will be preserved. I am willing to serve in any capacity to help streamline and regularize our procedures for fair, transparent election process, I am happy to

be a part of this collective effort to save the professional image and prestige of our great noble profession. With regards and respects.

Nem Singh Mar 31, 2020, 11:08 PM (6 days ago)

Yes, I also feel that due to Postal problems it is not advisable at this point of time.

Sarnarinder Randhawa Apr 1, 2020, 9:05 PM (5 days ago)

Yes; Governing Council Elections needs to be postponed, keeping in view Shutdown of POSTAL SERVICES in the Country as well as unprecedented COVID-19 Pandemic. May be postponed, please.

Dr. Sanjeev Kumar Apr 2, 2020, 8:27 AM (4 days ago)

Respected NAVS (I) GC Members,

There is no second opinion that besides several constraints, the postal services are also not in operation, as the country is under complete lock down until 14th April 2020. However, I request all to please re-look the election schedule (also embedded below), which mentions that the "Issue of ballot papers" is scheduled from 20th April 2020. Therefore, I very humbly submit that the recommendation from GC to reschedule or postpone the balloting process should wait till 20th April 2020. Further, since the election process has already started, the Returning Officer may decide it or else it may be done with consent of contesting candidates, to avoid conflicts and complications.

There are my personal comments, as asked by President, NAVS(I).

Thanks and regards,

## **NATIONAL ACADEMY OF VETERINARY SCIENCES (INDIA)**

### **CONTACT US**

**PRESIDENT:** Maj. Gen. (Retd.) Shri Kant Sharma, SM, VSM;

Ex-Vice-Chancellor, LUVAS, Hisar (Haryana). Ph. 9416314967;

Email: [shrikant28@hotmail.com](mailto:shrikant28@hotmail.com)

**VICE-PRESIDENT:** Dr. D.V.R. Prakash Rao, Chennai. Ph. 9940099000

Email: [Contect@prakashfeeds.com](mailto:Contect@prakashfeeds.com); Ph. 9940099000

**SECRETARY GENERAL** Prof. Dr. S.K. Gupta, LUVAS, Hisar (Haryana).

Contact#: +9896068399(M), Email: [drsurengupta@rediffmail.com](mailto:drsurengupta@rediffmail.com)

**TREASURER:** Dr. Nem Singh, Ghaziabad, U. P. Ph. 9818244710, 9711760402

Email: [singhnem1945@gmail.com](mailto:singhnem1945@gmail.com)

**EDITOR:** Prof. Dr. R.N. Kohli, 922, Sector-A (B&C), Vasant Kunj, New Delhi-70

Ph. 011-46065021; 9968920200. Email: [rnkohli@gmail.com](mailto:rnkohli@gmail.com)



## CH.6: VET TRACK

### 6.1: Dr. B.N. Tripathy is the new DDG (Animal Sciences) ICAR

Dr. B. N. Tripathy, an eminent Veterinary Pathologist and a member of the Governing Council of NAVS (India) has recently taken over as Deputy Director General (DDG) Animal Sciences in the Indian Council of Veterinary Research (ICAR). The Academy is elated at his appointment.

Dr. Bhupendra Nath Tripathy was born in Varanasi on 20th July 1961, got his B V Sc. & A.H. from Veterinary College, Mathura, in 1984, M.V.Sc. from IVRI in 1987 and Ph. D. in 1990 from Compton, U.K. He also did his post doctoral work at the Institute of Animal Health, Compton U.K. (1998-99) and at Moredun Research Institute Institute, Edinburgh, Scotlad, U.K. (2003-04). He has attended several conferences organized abroad by FAO and Welcome Trust, London. He was awarded as Best Teacher IVRI (2009), Outstanding Pathologist (Jain and Vegad Award 2005) and best PhD. Thesis and several other Best paper Awards. He is the Editor and Member of Editorial Boards of several Journals.

Dr. Tripathy's main area of research has been immunopathology and diagnosis of Infectious diseases. He has published over 110 research papers, Written & Edited three Book Chapters, 16 Conference Proceedings papers etc., apart from several popular papers.

Prior to his appointment as DDG (A.S.), Dr. Tripathy has served as Director NRCE, Hisar; Director National Institute of Animal Health, Baghpat; Head CSWRI, Avikanagar; and Principal Scientist, IVRI, Izatnagar etc.

We heartily congratulate Dr. Tripathy upon occupying this well deserved coveted new position and are sure that he will have a very successful tenure and come up to the expectations of the profession.

### 6.2. Dr. M.S. Chauhan takes over as the Director, ICAR-NDRI, Karnal



We are happy to learn that Prof Dr. M.S. Chauhan has taken over as Director, ICAR-NDRI, Karnal on January 30, 2020. Prior to this he served as Director of ICAR-Central Institute for Research on Goats, Makhdoom, Mathura for four years during which period he significantly contributed towards the development of Assisted Reproductive Technology e.g., Embryonic Stem Cell technology, production of five embryonic buffalo Stem Cell lines and two spermatogonial stem cell lines; ovum pick up IVF technology in cattle and yak and produced India's first OPU-IVF Sahiwal calf 'Holi' and

OPU-IVF yak calf 'Norgyal'. He developed a simple hand guided Cloning Technology in buffalo that produced 14 cloned buffaloes including World's first cloned

Prof. Dr. Manmohan Singh Chauhan, was the Principal Investigator of 11 externally funded projects with total outlay of Rs. 23.88 crore granted by DST, DST, buffalo calf 'Garima'. Both the OPU-IVF and Cloning Technology have been transferred to the field.NAIP-ICAR and NASF of ICAR. He has guided 10 Doctoral and nine Master's dissertations. He is Fellow of National Academy of Agricultural Sciences (NAAS) and National Academy of Dairy Sciences as well as is a recipient of many prestigious awards including Rafi Ahmed Kidwai Award ICAR, 2015;, Rao Bahadur B. Viswanath Award IARI 2019, New Delhi; and many others from India and abroad.. He has authored 142 research papers and 7 books and 44 scientific and technical publications.

We join the rest of the professional fraternity to congratulate him for this achievement. Being a product of this institution he is bound to take his alma mater to greater heights during his tenure like his predecessors.

#### Here are some of the Former Recent Directors of NDRI



Dr. Nagendra Sharma  
2002-2005



Dr. Sushil Kumar  
2005-2008



Dr. A.K. Srivastava  
2008-2017

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The old timers in NAVS (India) and NDRI would happily recollect that the 9th convocation of the Academy was held 10 years back at NDRI Karnal on 30th October 2010 during the tenure of Dr. A.K. Srivastava, when the current founder editor of the Academy was also the Secretary General of the Academy. Great Memories !!!



### **6.3: Dr. Harpreet Singh Kochhar is Canada's Associate Deputy Minister of Health.**

We are extremely pleased to inform our readers that a graduate of Veterinary College, Ludhiana of P.A.U. (now GADVASU), Dr. Harpreet Singh Kochhar, has been appointed as Associate Deputy Minister of Health of Canada by Prime Minister Hon Justin Trudeau.

In his new role, Dr. Kochhar will support the Government of Canada's ongoing efforts to fight COVID-19 through a whole-of-government, comprehensive, and coordinated approach. This is the actual recognition and practice of One Health Concept. Dr. Kochhar is the former Chief Veterinary Officer of Canada and Ex Assistant Deputy Minister of Immigration. This is indeed a proud moment for all Veterinarians of India in general but particularly for those who have been associated with the Veterinary College of Ludhiana of PAU & GADVASU. Congratulatory messages are constantly pouring in on the social media from the friends, colleagues and teachers of Dr. Kochhar and the Editor, NAVS (India) will not hide his pride for being the founder head of the Surgery & Radiology department of the College and the University where Dr Harpreet Singh Kochhar studied.

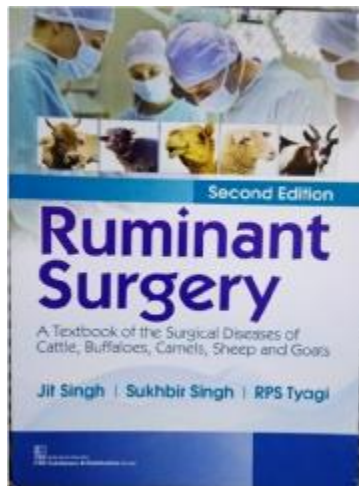
### **6.4: BOOK(S) BY VETERINARIANS**

#### **6.4.1: RUMINANT SURGERY: NEW SECOND EDITION BY EMINENT VETERINARY SURGEONS RELEASED:**

We are delighted to inform that Dr. Jit Singh and his team have brought out the second edition of their highly appreciated text book on the surgical diseases of cattle, buffaloes, camels, sheep and goats. Here's the story:

In 1993 Dr. R.P.S. Tyagi and Dr. Jit Singh published the first edition of the book - Ruminant surgery - as a pioneering venture in providing a text book primarily for Indian veterinarians and veterinary students that could also be useful to other developing countries. The demand for such a book was so great that it was sold out as hot cake and soon became such a popular favorite that its 13 reprints had to be published between 1995 and 2017. This phenomenal success of the book fully justified the original motive of the authors to provide a source book for the clinical practice of most Asian countries which was somewhat different from other countries, particularly in respect number and variety of ruminant species, such as cattle, sheep, goat, water buffalo, camel and other livestock species encountered by the veterinarian of this region. The necessity of a





book specifically on ruminants was essential in view of the physiological (and therefore the pathological) differences between the mono-gastric and poly-gastric animals. The recognition of this fact has been more emphatically followed by adopting an integrated approach to include, wherever necessary, the considerations of regional anatomy and pathophysiology while revising the book to produce the present most welcome second edition of the book released in January 2020.

The second edition the book “Ruminant Surgery: A Textbook of Surgical Diseases of Cattle, Buffaloes, Camels, Sheep and Goat” Edited by Jit Singh, Sukhbir Singh and RPS Tyagi has been revised with substantial updating of its contents keeping in view the progress made since the first edition was published. The book has a total of 27 chapters. The first chapter on history of surgery has been replaced with an entirely new exhaustive chapter titled ‘History and Orientation of Veterinary Surgery’. It is followed by chapters on instrumentation and equipment, general surgical considerations and fluid therapy, antimicrobial therapy, wound healing and tissue repair, suture material and techniques, physical restraint and anaesthesia (both local and general). There are separate chapters on pain management in ruminants, abdominal ultrasonography, laparoscopic surgery, physiotherapy, electrocardiography, acupuncture and diagnostic radiology (for field vets) and postoperative care. The chapter on neoplasm is also entirely replaced. New sections in a couple of chapters include application of prosthetic limb, antioxidants and use of corticosteroids. Major changes have been made in chapters on antimicrobial therapy, musculoskeletal system and urinary system. Section on acupuncture from anesthesia chapter has been removed and included separately as introduction to acupuncture. Language used is simple and easy to understand. System-wise description of surgical diseases and techniques as well as the entire text of the book has been supported with number of photographs, illustrations and tables.



The book contains contributions by a plethora of very eminent highly qualified Veterinary Surgeon Specialists who have covered the text of various chapters in this monumental book which can safely be classified as the ‘Bible of Veterinary Surgery of Ruminants in India’. Those of us who learnt surgery during 1950s and before had seen the times when Dollar’s book was the only comprehensive one available to the students of almost all the veterinary colleges in India. It used horse as a type at the cost of information





on ruminants and small animals. Some books by Indian authors did appear subsequently but most of them were handbooks to help students to pass the theory examinations rather teach them the art and science of modern surgery.

This reviewer is extremely pleased at the publication of this edition during his lifetime. He has been so constantly and regularly inquiring from Dr. Jit Singh about the publication status of the book that he might have perhaps been annoyed. I am also overjoyed at the publication because I had the fortune of being Dr. Jit Singh's major advisor for his Ph.D. and later his

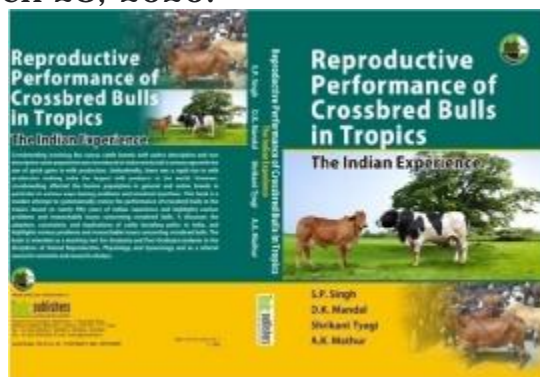
close colleague. It gives me immense happiness to see so many his students-cum-colleagues, some of whom I can unjustifiably claim to be my grand students-cum-colleagues. Nothing makes one happier than seeing one's students and grand students-cum-colleagues reaching great levels of professional capability and universal acceptance.

We strongly recommend the availability of this book in the libraries of all colleges and universities for use by all UG and PG veterinary students for their studies and as regular reference manual for their teachers. It will also be an extremely useful book for the Veterinary Practitioners and research workers.

- Prof. Dr. R.N. Kohli

**Ruminant Surgery - A Text Book of the Surgical Diseases of Cattle, Buffaloes, Camels, Sheep and Goats, 2nd Edition, 2020, Published by CBS. Publishers price --- Rs 525; Pages 646 excluding prelims- double column**

**STOP PRESS: 6.4.2** "Reproductive Performance Of Crossbred Bulls in Tropics- The Indian Experience" by S.P. Singh, D.K. Mandal, Shrikant Tyagi and A.K. Mathur; March 28, 2020:



Dr. Satya Pal Singh writes to inform us about the publication of their book which, according to him, is perhaps the first book on the results of crossbreeding of cattle in tropics.

(<satyapsingh@gmail.com>)



### **6.5: Indian Veterinary Medical Professor Earns Appreciation and Felicitations for Community Services in Ethiopia:**

Professor (Major) R.S. Bansal, an Indian Professor of Obstetrics and Gynecology in the College of Veterinary Medicine, Haramaya University, Ethiopia since October 2014. has written to inform us that in addition to his teaching assignments in the Veterinary College he is deeply involved in the community development works in Ethiopia, especially with regard to helping the physically handicapped persons ((amputees)) in Ethiopia. He has been instrumental in getting

*three Artificial Foot Projects* worth several Crores from India - two sponsored by an NGO and one by the Government of India, enabling the fitting of a total of 1268 Artificial Foot to physically challenged people of Ethiopia during the year 2016, 2017 and 2019 (400, 330 and 538, respectively, at Mekelle, Haramaya University and Addis Ababa).

**2016:** During the year 2016, he was awarded by His Excellency Dr Workeneh Gebeyehu, Honorable Foreign Minister of Ethiopia (then) and by His Excellency Abaya Weldu, Honorable President of TIGRAY region in a ceremony held at Tigray Disabled Veterans Association Centre, Mekelle.

**2017:** His Excellency Dr Mulatu Teshome, Honorable President of Ethiopia, during the valedictory function held on 15<sup>th</sup> January, 2017 at Haramaya University, Ethiopia, awarded Professor (Major) R S Bansal, in recognition of his valuable role in initiating and facilitating the artificial legs fitment for 730 physically disabled (amputees) citizens of Ethiopia. The ceremony was attended His Excellency Anurag Srivastava, Honorable Ambassador of India in Ethiopia, Chief Ministers of Oromiya and Harare region (States), Education Minister of Ethiopia and several dignitaries from Ethiopia inclusive of Member of Parliaments, Haramaya University Vice Chancellor, Four Pro Vice Chancellors, Dean and Directors of all the colleges and various other institutes of the University. The Honorable President in his speech appreciated the work done by Professor (Major) R S Bansal. The function was telecasted by various T V channels in Ethiopia for 2-3 days. As per the statement of Prof Nigussie Deseccha, Pro-Vice Chancellor Academic affairs of the University, this is the first time that a teaching faculty from India getting award from the Honorable President of the Country” and also bringing laurels to the University. The award/certificate reads as “This certificate is awarded to Professor (Major) R S Bansal with high gratitude in recognition of his valuable role in initiating and facilitating the support by BMVSS and JMC Projects India Ltd in artificial Leg fitment for physically disabled citizens of Ethiopia.

Since honorable President of country was the chief guest, leading TV channels had broad cast this news several times daily for 2-3 days. Prof. Major Bansal has the distinction of not only of being the only

Veterinarian, but also the first Indian in the last 50 years, to have received such an award by the President of Ethiopia.

**2019:** During the inaugural ceremony of Artificial Foot Project on 29<sup>th</sup> November 2019 at Addis Ababa, I had received an award from Her Excellency Dr Ergogie Tesfaye, Honorable Minister, Ministry of Labor and Social Affairs, on behalf of Her Excellency Mrs. Sahle Work Zawde, Honorable President of Ethiopia. The award reads- Ministry of Labor and Social Affairs, Extends its gratitude to Professor R S Bansal, For supporting the people with disability to regain their mobility.

**January 2020:** On 7<sup>th</sup> January, 2020 on the eve of Christmas celebration in Ethiopia, he was invited as a special guest to the Unity park, official residence of Honorable Prime Minister of Ethiopia, to attend the ceremony organized for physically challenged people. His Excellence, Dr Abiy Ahmed, Honorable Prime Minister of Ethiopia, highly appreciated his work in the august gathering of people from various walks of life. Honorable Prime Minister had mentioned that, he was doing a tremendous service to Ethiopia, by facilitating Artificial Foot camps for physically challenged people, by making them to walk in few hours, who had been without foot for years. He was given an opportunity to honor the honorable Prime Minister, in Indian Tradition.

#### **Professional back ground Professor (Major) R S Bansal:**

Professor Bansal, graduated from Bikaner Veterinary College (1974, Gold Medalist), had his post-Graduation from PAU, Ludhiana, PhD in Obstetrics and Gynecology from RAU, Bikaner. He had the privilege of serving the prestigious Corps of Remount and Veterinary Services (Indian Army) for a period of 10 years w.e.f 22<sup>nd</sup> Nov 1976 to 4<sup>th</sup> Feb 1987. He had served the Rajasthan Government for 10 years. There after he had a stint of about 15 years in ICAR, serving at National Research Centre on Equines for 12 years and Project Directorate on Cattle, Meerut Cantt, for around 3 years as the Senior Scientist. Prof.(Major) Bansal is an Equine Practitioner and is the Panel Veterinarian of the Stud Book Authority of India (SBAI).

*Prof (Major) R S Bansal's Contact particulars: Mobile (Ethiopia): +251-9391-14708; Mobile India: 094141-38700.*

We congratulate Prof. Major Bansal for his selfless exemplary services even as an NRI in a developing country of Africa.

## CH. 7: VIEW POINT

### 7.1: COVID-19: Looking beyond just diagnosis and quarantine

G. Padmanaban

There is need in India for a rapid response research and development team to handle viral onslaughts

A pandemic is upon the world and [coronavirus](#) is not the last word. Ebola, Zika, Nipah, SARS, MERS, H1N1 and now COVID-19 — the viral onslaughts will continue. Mutations of known viruses will periodically cause havoc, whatever be the reasons. While the Zika virus is spread by *Aedes* mosquitoes, the main reason for these viral infections seems to be the proximity and contact with animals including wild animals, either as exotic food menu or the use of animal parts as aphrodisiacs. Bats seem to be another constant source of new viruses. Seafood has also been stated to be a cause for the Wuhan outbreak.

In India, given the population density and unsatisfactory hygiene conditions and awareness, citizens can face serious situation even though the disease may have originated elsewhere. Bacterial infections such as cholera, typhoid have drug and vaccine options. Some of the viruses listed above do not have a vaccine or drugs available as yet. In India the options are always limited to diagnosis as per World Health Organization protocols and seem to be the exclusive domain of the National Institute of Virology (NIV), Pune and its designated centres. I feel that it is important for India to be able to do much better in terms of therapeutic options, although prevention is the best option. But, there are always leakages as can be seen with COVID-19 cases in the developed countries. India does have the expertise to put a team together to respond much more than just diagnosis and quarantine.

Coronavirus | Interactive map of confirmed coronavirus cases in India

On sequencing

What can be done? The first requirement is to sequence the genome of all the isolates from infected patients in India. COVID-19, for example, is an RNA virus. This would require conversion to DNA and then the sequence of the alphabets (ATGC) worked out. COVID-19 is less than 30kb (30,000) alphabets in size and can be sequenced in 24 hours in India. There was a suggestion in the article, “How is India containing COVID-19?” (‘FAQ’ page, *The Hindu*, March 8, 2020), that the virus in India is different from that in China on the basis of genome sequence made available by NIV, Pune.

The virus is evolving rapidly and the mutations seen in the virus isolates in the United States, for example, are different from those in China. There was also a hint that this could also be due to sequencing error. It needs to be realised that the copying mechanism of RNA to DNA can make errors.

In any case, it is important to sequence the virus isolates in at least three different institutions in India to ensure that sequencing errors are eliminated. A knowledge of genome sequence is essential to design drugs and vaccines.

**Coronavirus | India shares two SARS-CoV-2 genome sequences**

**In the short and long term**

A quick response is to evaluate repurposed known drugs (a drug development strategy predicated on the reuse of existing licensed drugs for new medical indications) including natural products, for therapy. For example, in the case of COVID-19, anti-HIV drugs are being evaluated. Even hydroxy chloroquine, an antimalarial, is suggested as an adjunct drug option, since it can make the acidic endosome compartment in which the virus replicates alkaline to prevent the process. One other option is to try passive immunisation with plasma derived from convalescing patients, who have completely recovered. Yet another strategy is to clone B cells from such patients to make therapeutic antibodies. All these would require informed consent from patients and policy decisions.

A long-term approach could be to clone the genome, make recombinant antigens and then test for vaccine potential and new drug design. A phage library expressing all possible human antibodies (single chain) is available for screening. The virus, or its mimic, needs to be cultured for drug screening. All these approaches would eventually need clinical trials to be taken forward on fast-track with the cooperation of the office of the Drug Controller General of India.

**Coronavirus | Infecting healthy people with coronavirus can speed up vaccine trials**

**Use the vast expertise**

My estimate of a quick response is three months, and long term is 18 months. In my opinion the expert team should represent the following areas with institutions listed in parenthesis as examples: clinical virology (NIV, Pune; Translational Health Science and Technology Institute, Faridabad, Haryana), molecular virology (Regional Centre for Biotechnology, Faridabad; the Indian Institute of Science, Bengaluru), scale-up of vaccine production (Serum Institute of India, Pune; Genovva, Pune; Bharat Biotech, Hyderabad), clinical trial and drugs (Sun Pharma, Ahmednagar, Maharashtra; Reddy Labs, Hyderabad; Drug Controller General of India), DNA/RNA sequencing expertise (National Institute of Biomedical Genomics, Kalyani; Centre for Cellular and Molecular Biology, Hyderabad; Institute of Genomics and Integrative Biology, New Delhi).

I want to emphasise the point that the institutions listed in parenthesis are only examples and there are many others and with over-lapping expertise, that includes the private sector. Such an expert committee can be overseen by an independent expert committee comprising senior, experienced scientists and administrators. The committees should cut across the territorial integrity of government science and technology departments and include the private sector.

## Coronavirus | India to join WHO's COVID-19 trials

The bottom line is to make use of the expertise built in the country over the years to scientifically respond to such challenges in terms of therapeutic options that are at least as important as sending up satellites into space or landing a man on the moon.

*Professor G. Padmanaban is a former Director of the Indian Institute of Science, Bengaluru, President, the National Academy of Sciences, India, and Chancellor, Central University of Tamil Nadu* March 30, 2020 00:02 IST

## CH. 8: NATIONAL & INTERNATIONAL VETERINARY NEWS

### 8.1: ILRI's Regional Representative for South Asia meeting with the Union Minister of Animal Husbandry, Dairying and Fisheries, Government of India

Dr. H Rahman, Regional Representative of South Asia had a meeting with Shri Giriraj Singh, Union Minister of Animal Husbandry, Dairying and Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India at New Delhi on 11<sup>th</sup> October 2019 and elaborated the objectives, mission and vision of ILRI, activities of ILRI in South Asia and in other countries across the World. He also discussed and explained about the ILRI's activities in India.

The minister welcomed the ILRI team and informed about the creation of separate ministry for Fisheries, Animal Husbandry and Dairying and he elaborated on it different activities such as doubling the farmers income by 2022; genomic selection for the improvement of indigenous animals; initiation of the national control programme for FMD, brucellosis, PPR and classical swine fever etc. The minister requested ILRI to help in identifying the disease-free zone for foot and mouth disease; nutritive evaluation of Moringa (*Moringa oleifera*) and its use as livestock feed and fodder; genomics and genomic improvement of backyard poultry, dairy animals. Dr. J. K. Jena, Deputy Director General (Animal Sciences & Fisheries), ICAR; Dr. Vineet Bhasin, ICAR Nodal Officer for ILRI; Dr. Praveen Malik, Animal Husbandry Commissioner,

Department of Animal Husbandry, Dairying and Fisheries, Govt. of India were also present during the discussion.

Dr Rahman submitted the three projects developed by ILRI earlier (1. Achieving a better understanding of the role of indigenous and improved backyard chickens for producers and consumers



in India; 2. Moving the frontier of dairy development in India: identifying strategies for dairy value chain transformation in selected underserved milk sheds; 3. Genetic and genomic improvement program of Gir cattle in the Saurashtra region of Gujarat State of India) and explained the projects to the minister. The minister showed interest on the improved backyard chicken production and genetic improvement program of Gir cattle and he ensured that he will discuss regarding the projects with concerned persons in the Ministry. He also suggested Dr H Rahman to submit the copies of the projects to Dr. O. P. Chaudhary, Joint Secretary, Animal Husbandry, Dairying and Fisheries, Animal Husbandry Commissioner and Joint Animal Husbandry Commissioner, Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India.

## 8.2: ILRI and India's National Institute of Animal Biotechnology explores collaboration opportunities in livestock disease diagnostics and vaccine development

Senior officials from the International Livestock Research Institute (ILRI) and the Department of Biotechnology of the National Institute of Animal Biotechnology (NIAB) held discussion to explore



collaboration opportunities in livestock research for development in the country. In a meeting Dr. Habibar Rahman, ILRI regional representative for South Asia, met with Dr. Subeer Suhash Majumdar, director of NIAB, on 17 October, 2019 to discuss ongoing research in the two organizations and

identify possible areas for collaboration. Dr. Majumdar said NIAB's research priorities include animal health, particularly disease diagnostics and vaccine development, biotechnology, rumen metagenomics, animal production, animal genomics for indigenous animal conservation and dairy development. He said tackling antimicrobial resistance (AMR) in poultry was also a priority area for NIAB. Dr. Rahman shared ILRI's global and regional activities including animal diseases economics, backyard poultry genomics, methane emission and its mitigation, feed and fodder, etc. Among the issues discussed was formalizing an agreement that will enable collaboration between researchers from ILRI and NIAB. Both organizations, Dr. Rahmansaid, would benefit from working together closely and be able to better contribute to improving the livelihoods of livestock keepers in the state. The meeting identified possible areas of future collaboration including animal disease diagnostics and vaccine development to tackle important diseases such as bovine tuberculosis, leptospirosis, brucellosis, theileriosis and AMR issues.

### 8.3: National Dialogue on Land use for integrated livestock development

The Indian Council of Agricultural Research, New Delhi; International Livestock Research Institute (ILRI), Consultative Group for International Agricultural Research (CGIAR); arid Zone Research Association of India and Trust for Advancement of Agricultural Sciences (TAAS), New Delhi jointly organized a “National Dialogue on Land Use for Integrated Livestock Development” at the National Agricultural Science Centre Complex during 1- 2 November 2019.

The Chief Guest, Dr. Trilochan Mohapatra, Secretary (DARE) & Director General (ICAR), applauded the scientists for their tremendous efforts to enhance the good health of the livestock. He emphasized on the land use plans as the greatest need of the hour and also accentuated on ensuring the quality of land for better production. The Director General stated that the wet lands are being used for feeding the animals in the Eastern India and urged for prompt diet schedules for rearing livestock in good and healthy conditions. He also opined to carry out the livestock grazing in such a way that would prevent the destruction of important crops effectively. Dr. Joykrushna Jena, Deputy Director General (Animal & Fisheries Sciences), ICAR



accentuated that the importing of livestock plays an important role in realizing the Hon'ble Prime Minister, Shri Narendra Modi's vision of doubling the farmers' income by the Year - 2022. The livestock is

deemed to be the bread earning partner for the small and marginal farmers. So, keeping the livestock healthy and disease free is one of the most important duties of the farmers. Dr. Jena stressed on the major problems of feed and fodders that the small and marginal farmers face. He urged to look for effective measures for ensuring the proper balance between the feed and fodders of the livestock. He also opined for effective measures for ensuring the prompt number or size of livestock with a farmer. This would help to have good and healthy livestock. Dr. R.S. Paroda, Former Director General (ICAR) & Chairman, TAAS accentuated on the effective use of land in ensuring the effective development of the livestock in the country. Dr. Paroda emphasized on taking-up effective measures for ensuring the balance between demand, supply and marketing of the fodder and livestock feed in the country. Dr. Paroda stressed on nutritional security of livestock as vital for enhancing the farmers' income. He also urged the youths to be trained and choose the livestock rearing as their career options. Dr. H. Rahman, Regional Representative, South Asia, ILRI briefed about the organization's major contributions made in the development and enhancement of good and healthy livestock around the globe. He emphasized about the organizations' main aim to provide food and nutritional security to the small and marginal farmers of the world and the country in particular. Dr. Rahman stated about the commitment of the ILRI for providing the livelihood to



the small and marginal farmers along with ensuring the sustainable animal agriculture in the world. He emphasized that the livestock provides livelihood to around 1.3 Billion poor people along with providing 39% protein to the globe. So, their protection from diseases and enhancement in productivity is essential to ensure the good livelihood of the farmers.



Earlier, in his welcome address, Dr. Gurbachan Singh, Trustee, Trust for Advancement of Agricultural Sciences (TAAS), New Delhi briefed about the two day-long programme. He regarded the livestock as the farmers' real treasure. Dr. Singh accentuated that for the small and marginal farmers, the health and productivity of the livestock plays a pivotal role in earning their livelihoods. So, it should be the uttermost duty of the farmers to ensure good health of their livestock. He also stressed on the feed and fodder-efficient livestock. Dr. Bhagmal, TAAS proposed vote of thanks. The main aim of the dialogue was to discuss and prepare a roadmap of the various measures to be taken to enhance the good quality of livestock in the country.

## CH. 9: DAIRY NEWS

### 9.1: IDA Holds the 48th Dairy Industry Conference on the Theme: "Dairying for Health and Wealth".

The 48th Dairy Industry Conference was organized by the Indian Dairy Association (North Zone) in collaboration with its Rajasthan Chapter during 20-22 February, 2020 at Birla Auditorium, Jaipur (Rajasthan). The organizers of the Conference have reported that 2255 persons participated in the Conference. A total of 186 exhibition stalls were installed which were hired by 75 exhibitors from India and abroad. The theme of the Conference was chosen as "Dairying for Health and Wealth". Some new innovative procedures were introduced in the organization of the Conference such as use of electronic identification tags with bar code, spacious food court with plenty of nutritious and hygienic foods, neat and clean environment and fine display of exhibition stalls at three different locations which avoided overcrowding of the visitors. The Conference was inaugurated by Dr. Sanjeev Kumar Balyan, Hon'ble Minister of State for Fisheries, Animal Husbandry and Dairying, Govt. of India in the presence of Shri Atul Chaturvedi, Secretary, Ministry of Fisheries,



Animal Husbandry and Dairying, Govt. of India, Shri Dilip Rath, Chairman, National Dairy Development Board and Ms. Caroline Emond, Director General, International Dairy Federation, Brussels.

**Dr. Sanjeev Kumar Balyan** mentioned that the Govt. of India was committed to the welfare of the farmers and all the programmes of dairy development should be centered towards them to fulfill the aspirations of Shri Narendra Modi, Hon'ble Prime Minister of India to double the farmer's income by 2022.

He stated that to enhance the productivity of dairy animals, all out efforts should be made to adopt newer technologies so that per animal, the milk production could be raised. He said that judicious use of all the inputs such as cattle feeds, artificial insemination and health coverage are necessary to provide a boost to milk production. The Govt. of India has allocated substantial funds to control Foot and Mouth Disease, Brucellosis and Mastitis in dairy animals and for infrastructure development in chilling, processing and transportation.



**Shri Dilip Rath**, in his Keynote Address, mentioned that Indian dairy sector has a big role to play in addressing the issues of public health and generation of rural and national wealth. NDDB has undertaken a number of initiatives to promote health of the human population and fight malnutrition amongst children using milk as a tool. NDDB has also initiated the 'Quality Mark' initiative for dairy cooperatives and producer companies to reinforce the trust of consumers in safety and quality of milk and

milk products. Dairying in India has played an important role in empowering women, bringing about socio-economic changes in the rural landscape, promoting health and education, besides providing the country with strategic nutritional security. The Govt. of India under Rashtriya Gokul Mission, in association with State Govt., NDDB and other animal breeding institutions, is working relentlessly to increase the genetic potential of dairy animals using the semen of high genetic merit bulls and use of assisted reproductive technologies. Imbalanced feeding of dairy animals prevents them from producing milk in quantity commensurate to their potential. The need for improving nutrition by changing feeding practices employing green fodder. The quality of crop residues should be improved by using appropriate technologies of conservation, diversification and enrichment.

**Ms. Caroline Emond**, Director General, IDF described the role of IDF in Global Dairy Development. IDF Annual World Dairy Situation Report developed by experts around the world provides an in-depth understanding of the current macro supply and demand trends, including the wide range of policies and economic factors in over 50 countries. In 2018, milk production growth

reached 2.4 per cent higher than the 8 year average of 2.2 per cent mainly because of the sharp increase in milk production in India. Rising growth rates for buffalo and goat milk indicate a growing appetite for these types of milk. The expected global milk production in 2019 should be 880 million tones. Strong international butter fat demand kept butter prices above long term average and the SMP prices remained very low under the pressure of high stocks.

India's demand for liquid milk is favourable, unlike most of other countries who are witnessing low milk demands. Yoghurt market has seen expansion with market growth of 10 per cent in India. Over the last few years, anti dairying discourses in many countries have questioned the benefits of dairy products, particularly in Western countries. This is not the case in India. Today dairy is one of the most vibrant and strategic sectors with a major import on national economies, public health and the environment. The vision of IDF is to help nourishment of the world with safe and sustainable dairy. The next World Dairy Summit (WDS) will be held in Capetown and the IDF WDS 2022 will be held in India. Ms. Emond advised the dairymen of India to participate at these Summits in large numbers.

The IDA for the first time has instituted Prof. M.R. Srinivasan Memorial Lecture and Oration Award. **Dr. R.P. Aneja**, Former Managing Director of NDDB, delivered the first Lecture in the series highlighting the significance of indigenous dairy products in India to add value and to harvest bigger dividends to double the farmers' income in shortest possible time. He recalled the research and development efforts of the students of Prof. M.R. Srinivasan in mechanization and modernization of traditional milk product technologies and those innovations are now ready for commercialization.

The thirteenth Dr. V. Kurien Award was bestowed upon Shri Narendra Balwantraai Vashi, Managing Director, The Valsad District Cooperative Milk., and. Union Ltd. Several Dairy Women Awards were awarded to the Best Producers of milk.



**13<sup>th</sup> Dr. Kurien Award 2020 being bestowed upon Shri Narendra Balwantraai Vashi, Managing Director, The Valsad District Cooperative Milk Producers Union Ltd.**

In the Panel Discussion involving panel experts from private, cooperative and corporate sectors was organized under the Chairmanship of **Shri Atul Chaturvedi**, Secretary, Ministry of Fisheries, Animal Husbandry and Dairying, Govt. of India., Shri Chaturvedi mentioned that experts should compare the life cycle chart of the indigenous and exotic breeds and exact inputs cost for productivity and sustainable breed improvement programmes. He appreciated the efforts of some private dairies in promoting new fodder varieties for enhancing milk productivity. He said that all the 53 crore animals will be vaccinated against Foot and Mouth Disease. Govt. has started tagging of dairy animals through an electronic chip and creating unique ID and barcode for each animal for addressing traceability issues. He invited private sector participation in dairy development as the loans on processing plants and value addition equipments will be available to the entrepreneurs at 6.5 per cent interest rate against 11-12 per cent charged previously. The national goal should be to increase milk production at competitive price and increasing the export share from one per cent to 10 per cent. He advised the delegates to promote the nutritional virtues of ghee and make it as an international product with a brand better than olive oil. In the Valedictory Session of the Conference, the Chief Guest **Dr. Rajesh Sharma**, Secretary, Animal Husbandry, Fisheries and Gopalan Department, Govt. of Rajasthan, Best Paper Awards and Poster Presentation Awards were given to the young scientists. The recommendations that emerged from 12 Technical Sessions of the Conference will be published in the next issue of the NAVS Newsletter. On the whole, the outcome of the 48 Dairy Industry Conference was highly useful for enhancing milk production, quality assurance and value addition to boost income of the farmers.

In his very effective Presidential Address **Dr. G.S. Rajorhia**, President, Indian Dairy Association (IDA), touched on all aspects of milk production, distribution, economics, marketing and role milk in human dietary requirements etc. He emphasized that considering the vagaries of monsoon and its adverse effect on production of crops, dairy farming is emerging as a major source of income, alleviation of poverty and for providing rural employment. All are aware, that for centuries, dairying has remained as an integral part of Indian agriculture and Indian farmers have maintained cows and buffaloes to supplement their income and to ensure nutritional adequacy of their families.



Dairy processing plants are playing a significant role in the production, marketing and distribution of milk and milk products, thereby directly contributing towards livelihood security of the millions of milk producers in the country. As Dairy animals play a significant role in the sustainable rural development, this conference will discuss the of dairying in the betterment of human health and generation of wealth of the Indian farmers.

It is necessary to understand changes in dairy consumption patterns around the world. Barriers are being created for milk consumption by anti milk fat lobby and anti milk discourse. In Western countries, vegan milk and dairy analogs are finding a place in daily diets as alternatives for milk. Although, the vegan milk formulae have been developed, none of them can match the nutritional value of natural milk drawn from the mammary glands. Though the nutritional composition of milk is very complex and its chemistry is not fully understood, it contains almost every single nutrient that human body needs. Milk is nearly a perfect food except for the absence of iron and dietary crude fibre. Casein as the main protein of the milk, increases the absorption of minerals in the body and lowers the blood pressure. Whey proteins have been associated with many beneficial health effects, such as decreased blood pressure and improved immunity during periods of stress. Whey proteins are essential for growing muscles and maintaining the metabolic functions in the body. High protein content makes one feel satiated or full for a longer period of time, which prevents over eating. Milk fat contains about 400 different types of fatty acids which make about 70 per cent saturated fats, 2.3 per cent polyunsaturated fats and less than 28 per cent of monounsaturated fats. Milk contains small amounts of trans-fat but good amount of conjugated linoleic acid. CLA in ghee has attracted considerable attention due to its various health benefits. Milk fat also contains Omega 3 fatty acids linked to many health benefits like prevention of diabetes and their anti-oxidative properties. Although cholesterol is no longer an issue in Indian dietary, half of the cholesterol in butter gets distributed into ghee residue. Higher milk fat consumption is associated with a lower risk of obesity and less weight gain. Milk fat contains a variety of minor components that may contribute to weight loss and prevent weight gain. Ghee for many of its known virtues can be promoted in the international markets. Milk contains all the minerals and vitamins necessary to sustain growth and human development. Calcium found in milk gets easily absorbed and it increases bone mineral density. Dairy products are a good source of phosphorus which is essential in biological processes. Milk is very high in Vitamin B12, Vitamin A and riboflavin (Vitamin B2). Grass fed cow's milk contains higher amounts of beneficial antioxidants such as Vitamin E and beta-carotene which would reduce inflammation and fight oxidative stress. Numerous studies have found a link between dairy food consumption with lower risk of cancers.

Few years ago, India was producing the least cost milk in the world. However, because of several reasons, the cost of inputs needed for milk production has gone quite high. As the cost of feed amounts to about 65-70 per cent of the value of milk, there is a strong possibility for lowering the cost of feeding.

There is a need for reducing the cost of milk production to make Indian dairy farmers globally competitive. The researchers of NDRI have recently published the results of a survey of 160 farmer families in Pune

district belonging to different socio-economic status to ascertain the cost of milk production.

To increase the animal productivity, new technologies such as embryo bio-technology, sexed semen technology, genomics, progeny testing and other breed improvement programmes should be implemented on mass scale to cover most of the dairy animals. Although FSSAI have not fixed any standard for A2 milk, some business houses sell it as A2 milk at high prices. All Indian breeds of cows, buffaloes and goats produce A2 milk and we may take advantage of this fact in capturing international markets.

Organic milk production has great future in India and the consumers are ready to pay higher price for this milk to ensure that they are not consuming unsafe milk laden with contaminants such as pesticides, antibiotic residues and Aflatoxins. For doubling the farmers' income, there are many alternatives available for value addition, and product diversification, energy saving, eco-friendly packaging and low cost compounded feed mixtures. The significance of new innovations in dairy industry will be presented by the learned speakers at different sessions of this conference.

## **9.2: Cabinet Committee on Economic Affairs (CCEA) raises interest subvention up 2.5%**

The Cabinet Committee on Economic Affairs (CCEA), chaired by the Prime Minister Shri Narendra Modi, has given its approval for upward revision of interest subvention from “up to 2% - 2.5% p.a.” under the scheme Dairy processing and Infrastructure Development Fund (DIDF) with the revised outlay of Rs. 11184 Cr. The scheme envisages to have interest subvention component of Rs. 1167 crore to be contributed by DAHD during the period of 2018-19 to 2030-31 with spill over to first quarter of the FY 2031-32. The scheme also has a loan component of Rs. 8004 crore to be contributed by NABARD. Rs. 2001 crore shall be contributed by Eligible End Borrowers and Rs. 12 crore would be jointly contributed by National Dairy Development Board (NDDB)/National Cooperative Development Corporation (NCDC).

## **9.3: New method can detect pesticide residue in milk**

A Ph.D. student of the dairy chemistry division of the National Dairy Research Institute (NDRI) has developed a nano-particle-based colorimetric method to detect pesticide residue in milk. It is reportedly a first-of-its-kind nano-particle-based method which is cost-effective, rapid and easy to use. At present, sophisticated instruments are being used to detect pesticide residue in milk, which require trained technicians. For developing this method, Mr. Wangdare Sachin has been awarded first prize at the National Conference on “Emerging trends for development of functional food” at MAFSU-Nagpur Veterinary College on 7th February, 2020. The gold nano-particle method is an alternative to conventional methods for detection of pesticide residue in milk. He decided to develop nanotechnology-based method so that detection can be done easily. In his method, one can determine pesticide residue visually using gold nano-

particles as an analytical tool. One can determine pesticide residue in 20 to 25 minutes compared to around two hours while using sophisticated machines. Nanotechnology is very easy to handle. It involves mixing supernatant of pesticide-containing milk in nano-particle solution. If there is pesticide in milk, red nano-particles turn blue.

#### **9.4: AMT exemption to boost investment in Dairy Sector**

Proposed reduction of tax on cooperative societies to 22 percent plus surcharge and cess as well as exemption from Alternative Minimum Tax (AMT) will help increase investments in the dairy sector. The relief to cooperatives has come at a time when milk processing capacity is being doubled in the country.

The cooperative sector proposals will also lead to more creation of jobs and remunerative prices to farmers. Gujarat Cooperative Milk Marketing Federation along with 18 district level milk unions will be able to save Rs. 15 crore on account of the reduction in tax and AMT exemption.

Cooperatives had demanded level playing field by seeking lower tax on the lines of reduced corporate tax offered to companies. This discrepancy has been eliminated. Farmers will now try to earn more profits from animal husbandry. Gujarat's dairy cooperatives have 36 lakh farmers as their members and they are currently paying nearly Rs. 150 crore as taxes. Both GCMMF and the National Dairy Development Board had demanded reduction in tax ahead of the budget.

## **10. SCIENCE, HEALTH & SOCIETY**

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.

### **10.1: Alcohol-related deaths have increased in recent years**

The rate of alcohol-related deaths has accelerated in recent years, according to a [new analysis](#) of U.S. mortality data between 2000-2016. Here's more:

**Overall trends:** There were more than 425,000 alcohol-induced deaths during the study period. The annual percentage change in such deaths increased among both men and women, but rose significantly starting in 2012.

**Causes:** Alcoholic liver disease accounted for the majority of deaths among men and women, followed by mental or physical disorders due to alcohol and accidental poisoning.

(Source: Morning Rounds [newsletter@statnews.com](mailto:newsletter@statnews.com) Feb.24, 2020)

## 10.2: Mumbai doctors remove 41-year-old man's 12.8kg 'giant' kidneys

City doctors have removed giant kidneys weighing 7kg and 5.8kg from a Goan man living with a life-threatening genetic condition. While a normal kidney weighs 120-150 gram and is 8-10cm long, 41-year-old Roman Pereira's were nearly 26cm and 21cm in length.

MUMBAI: City doctors have removed giant kidneys weighing 7kg and 5.8kg from a Goan man living with a life-threatening genetic condition. While a normal kidney weighs 120-150 gram and is 8-10cm long, 41-year-old Roman Pereira's were nearly 26cm and 21cm in length.

Pereira suffered from kidney failure due to a genetic condition called autosomal dominant polycystic kidney disease (ADPKD), where normal kidney tissues are replaced by cysts. Though he was living with the condition since a decade, it had gradually begun to disrupt his life, often leaving him breathless and weak to walk since the past one and a half years. His haemoglobin levels, too, had begun to deplete. In November last year, though, his condition turned serious after he began to bleed.

Nephrologist Dr Bharat Shah of Parel's Global Hospital said ADPKD was an uncommon condition seen in around 5% of patients who develop kidney failure.

Renal transplant surgeon Dr Pradeep Rao said since the kidneys were of a gigantic size, they could not take the laparoscopic approach and instead had to do an open surgery. "Through a single incision, we could remove both kidneys which weighed 12.8kg in total," he said.

Pereira's life could be saved through a swap transplant. While his wife Placima wanted to donate a kidney, her blood group was incompatible with him. Doctors found a match in Amravati couple Nitin and Radha Tapar. Radha, too, could not donate to Nitin as they had incompatible tissue types. "We transplanted Pereira with Radha's kidney and Nitin with Placima's in December. Both are well," said Dr Shah. (ET Health World, Feb. 2020)

## 10.3: Sleep Turns on Infection-Fighting T Cells

Numerous studies show a good night's sleep improves immune cells known as *T cells*. T cells are a specialized white blood cell that fights what are known as *intracellular pathogens*... viruses that live inside your cells, including flu, HIV, cancer – and Corona virus.

In a new study from Germany, researchers compared immune-boosting T cells from volunteers who slept eight hours to those who stayed awake. They found that the T cells in the study participants who slept were much better equipped to fight off an invading virus than the T cells in than those who didn't. It turns out that there's a strong connection between stress hormones like adrenaline, T cells and sleep. Stress hormones decrease dramatically when you're asleep. If you can't sleep, levels of these hormones remain high. And high levels of these hormones prevent T cells from getting inside infected cells



and killing the pathogens. When cells in your body recognize a cell infected with a virus, they activate something called an integrin. This is a sticky type of protein that allows them to attach to and kill infected cells. During these troubling times and sleepless nights, you might be tempted to ask your doctor for a sleep aid. But I don't recommend it.

Dr. Al Sears, MD, CNS, 11905 Southern Blvd., Royal Palm Beach, FL 33411

#### **10.4: Ventilators are in high demand for Covid-19 patients.**

##### **How do they work?**

As the number of Covid-19 cases in the U.S. grows, the need for ventilators is also growing. But hospitals across the country are facing a shortage of ventilators, which some Covid-19 patients need because they suffer respiratory symptoms so severe that they need these machines to continue breathing. In the absence of normal lung function, ventilators can supply oxygen through a tube and face mask. But for severe Covid-19 cases, physicians have to insert a tube into a patient's airway. Intubation in these instances forces breathing because fluid build-up in the lungs doesn't allow the organs to otherwise take in much oxygen.

(Source: STAT: Morning Rounds [newsletter@statnews.com](mailto:newsletter@statnews.com) Mar 30, 2020, 3:38 PM)

#### **10.5: Determinants of COVID-19 Spread, Morbidity and Mortality**

Childhood BCG Vaccination, Population Density, Median Age, Poverty are Important Determinants of COVID-19 Pandemic Spread, Morbidity and Mortality as per a study.

In the study per cent positivity among the tested population, morbidity and mortality rate in Coronavirus disease-19 (COVID-19) is analyzed. Data for 81 countries available in public domains were analyzed in relation to compulsory vaccination with BCG vaccine, per capita GDP, literacy rates, population density, the median age of the country, the religious structure of the nation and per cent of the population tested for the infection. The compulsory BCG vaccination had highly significant ( $p, <0.0001$ ) negative correlation with COVID-19 morbidity ( $r, -0.59$ ) and mortality ( $r, -0.49$ ) rates. The median age of the nation had significant ( $p, <0.01$ ) positive correlation with COVID-19 morbidity ( $r, 0.34$ ) and mortality ( $r, 0.30$ ) rates. The pandemic had higher ( $p, <0.05$ ) morbidity ( $r, 0.45$ ) and mortality ( $r, 0.24$ ) in high-income countries than in lower per capita GDP countries. The COVID-19 mortality rates not varied significantly among countries with different majority religious faiths and population density of nations.

## 11. FORTHCOMING EVENTS

### 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](mailto:rnkohli@gmail.com)

11.1: 36th World Veterinary Association Congress 2020, **6-8 April, 2020**, in **Auckland, New Zealand**. It will be hosted in conjunction with the highly successful NZVA Annual Conference and will bring veterinarians from all over the world to Auckland to share ideas, learn and to have fun. The congress will explore and seek solutions to some of the biggest animal health and welfare challenges facing all species in the fast changing world.

The WVAC 2020 programme will focus primarily on clinical veterinary medicine, veterinary public health, animal welfare and academic research across all domestic species. Other topics to be covered include companion animal nursing, large animal veterinary technicians and equine. At the World Veterinary Association Congress 2020 in Auckland there will be a specific space for academic posters where researchers and clinicians can share their findings in a poster session.

Contact for details: <https://www.wvac2020.com/>

11.2: VIV Meat & Poultry Russia, **May 9-11, 2020, Moscow, Russia**. For details Contact: Email: [infomeatindustry.ru](mailto:infomeatindustry.ru); Web: [meatindustry.ru](http://meatindustry.ru)

11.3: IDF World Dairy Summit 2020, **Cape Town, South Africa, September 28-October 1, 2020**, Contact for details: <https://idfwds2020.com>

11.4: Dairy Industry Expo 2020, along with conference, **Pune, India; 16-18 October 2020**. For details visit: <http://dairyindustryexpo.com>



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