

## CONTENTS

|                                  |       |
|----------------------------------|-------|
| • Vice Chancellor's Desk         | 1-2   |
| • Workshops, Seminars & Training | 3-8   |
| • Events                         | 9-14  |
| • Extension Activities           | 15-16 |
| • Achievement                    | 17    |
| • MoU's                          | 18    |
| • Farewell and Welcome           | 19    |
| • BASUe Media                    | 20    |

## EDITORIAL BOARD

### Chairman

**Dr. Rameshwar Singh**  
Vice-Chancellor  
Bihar Animal Sciences University

### Members

**Dr. (Captain) A.G. Bandyopadhyay**  
Registrar, BASU

**Prof. (Dr.) Veer Singh**  
DRI-cum-Dean PGS, BASU

**Dr. Ravindra Kumar**  
Director Research, BASU

**Dr. R.K. Trivedi**  
Director Students Welfare, BASU

**Dr. J.K. Prasad**  
Dean, Bihar Veterinary College, Patna

**Prof. (Dr.) Veer Singh**  
Dean, Sanjay Gandhi Institute of Dairy  
Technology, Patna

**Dr. A.K. Thakur**  
Director, Extension Education, BASU

**Dr. V.P. Saini**  
Dean, College of Fisheries, Kishanganj

### Member Secretary-cum-Editor

**Mr. Satya Kumar**  
Public Relations Officer, BASU

### Sub-Editor

**Dr. Gargi Mahapatra**  
Asst. Professor, Dept. of LPT, BVC, Patna

### Contact

Bihar Animal Sciences University  
Bihar Veterinary College Campus  
Patna-800014, Phone : 0612-2222221  
Website: [www.basu.org.in](http://www.basu.org.in)  
Email : [probasupatna@gmail.com](mailto:probasupatna@gmail.com)

## Vice Chancellor's Desk



We are all facing the burden of pandemics inflicted on us by Covid19. Lockdowns have taken the students to the safety of their homes but away from the university campuses. The only recourse left to continue pursuing academic progress was to switch over to an online mode of education. The University has made tremendous progress in all areas of academic, non-academic, and capacity-building relevant to staff and students. Though we started on this new course under the emergent conditions it has steadily resulted in the development of a sizable digital library in animal sciences. The number of lectures on our YouTube channel has reached to over 1600 and the subscription to over 7600. Some of the video lectures have gained tremendous popularity with views of over 3,59,493 attracting visitors from more than 20 countries including our neighboring countries.

Masterplan for the construction of our new campus is ready and has been taken forward by the Building Construction department. Hopefully this year we will step into the construction of a new university building. The land of the new campus is about 224 acres and the project cost of more than Rs. 800 crs. The new buildings include an administrative block, academic block, Clinical complex, indoor and outdoor stadia, a magnificent auditorium, a Community center, officers' quarter's staff flat, recreation centers, and much more. The most building will have ground plus three floors. We are thankful to the state government for their endless support and cooperation in this regard.

In the month of January, we were fortunate to organize the review meeting of A&FRD, Bihar at our university in which Hon'ble Minister, Animal Husbandry, Fisheries and Dairy, Govt. of India Shri, Giriraj Singh graced the meeting as the chairman with Shri Mukesh Sahani, Hon'ble minister, A&FRD, Bihar. Hon'ble Union Minister suggested many ways and innovative ideas to carry out pilot studies aimed at strengthening the livelihood of the smallholder livestock farmers and underprivileged rural poor.

We recently welcomed the new batch of students for B.V.Sc. & A.H and M.V.Sc by conducting the Diksharambh Karyakram. The 29th annual conference of the Society of Animal Physiologists of India (SAPI) was hosted by Bihar Animal Sciences University, the conference attracted many animal physiologists from all over the country who registered and joined the deliberations through video conferencing. A number of other webinars, talks, and programs were organized during this period including a National Webinar on Health issues in wildlife and their management for benefit of students and veterinarians; A four Days training program on Fish Farming and Aquaculture; a training program on techniques of hygienic production and processing of meat; seminar on the role of teachers in new education policy; workshop on Canine Grooming and Spa; Poultry Training Program; and training program on Functional Foods of Dairy Origin. Bihar Veterinary College has been entrusted by the Government of India to impart hands-on Practical Training in the Artificial Insemination acronymed as "MAITRI". This will be an ongoing training activity on regular basis.

This year we signed MoU with Government Ayurvedic College, Patna for the promotion of inter-institutional research collaboration. This collaboration will go a long way in establishing the knowledge and practices of Ayurveda in the field of Veterinary Sciences. Another MoU was signed with Brooke India under this MoU, the University and Brooke India will jointly provide health advice, treatment, and training to horse and mule owners of the state. It is also planned to provide special training to field veterinarians and para-vets for better treatment of horses and mules.

I hope that the coming days be brighter for all of us. Also, my heartfelt thanks and Congratulations to the officers, faculty, staff members and Students for their fruitful effort.



**Dr. Rameshwar Singh**



## National Webinar on "Health issues in wildlife and their management"

A National Webinar on "Health issues in wildlife and their management for the benefit of students and veterinarians" was conducted by the Department of Veterinary Anatomy, Bihar Veterinary College, Patna, on 23rd January 2021. Padam Shri Dr. K.K. Sarma an eminent Veterinary surgeon widely recognized as the "Elephant man of Asia" was the speaker for this webinar. Dr. Sarma delivered his lecture on the present challenges encountered during the wildlife diagnosis, treatment, and management. He also explained about conservation of wildlife and also compared the facilities provided by Government of Indian with that of the other countries. The presidential remark for this webinar was given by the Hon'ble Vice Chancellor, Dr. Rameshwar Singh. He discussed the present course content of wildlife in V.C.I. course (B.V.Sc. & A.H.) as well as the present status of wildlife experts in India. The Dean, Bihar Veterinary college, Patna, Dr. J.K. Prasad had suggested the participants on techniques to improve one's interest in the field of wildlife, conservation and medicine.

## Training program on "Fish Farming and Aquaculture"



A four-day training program on "Fish Farming and Aquaculture" under the joint aegis of Bihar Kosi Basin Development Project and Animal and Fisheries Resources Department, Govt of Bihar was organized at College of Fisheries, Kishanganj on the 9th of January 2021. In the training program, fish farmers were trained about various practices of fish culture. For this program, out of ten approved programs, three training programs were conducted for the Araria and Purnea districts whereas the remaining 7 training programs will be organized for the farmers of Saharsa, Madhepura, and Supaul districts. A total of 350 farmers will be trained under this program. Shri Mukesh Sahani, Minister Animal & Fisheries Resources Dept., Govt. of Bihar graced the closing ceremony of the 3rd training program on 12.1.2021. He addressed the gathering and distributed the certificates to the trainees. Honorable Vice-chancellor Dr. Rameshwar Singh, Dean, College of Fisheries, and other Sr. Officers were also present during this program.



## Training program on Technique of hygienic production and processing of meat

One-day training program on the Technique of hygienic production and processing of meat was organized under the joint aegis of BASU, Patna, and the National Agricultural Higher Education Project on February 4, 2021. The training program witnessed the participation of restaurant owners and meat shopkeepers of Patna including students and teachers. At the outset, Vice-Chancellor Dr. Rameshwar Singh said that diseases are not just limited to the eaters but those who are associated with this employment are also under the risk radar.



He said that in such a business special care should be taken for cleanliness and hygiene, this will attract the customers as well as provide growth to the business.

Dean, Bihar Veterinary College, Dr. J.K. Prasad stated that "Taking small steps in the entire process of cutting the meat and opting for a safe and hygienic process of delivering the fresh meat can lead to the growth in this business". He further said that following the hygiene measures will increase the credibility of the business.

Director Research Dr. Ravindra Kumar said that it is very important to take care of its storage after cutting the meat, so as to save the customer and society from getting sick. Dr. Sushma, Head-Department-cum-Training Coordinator, Department of Livestock Products Technology, said that eating meat immediately after it is cut is scientifically wrong, but in India, we make it edible through our cooking method. "Do not cut it lying on the ground, it contaminates the meat with soil, many harmful bacteria and viruses which are harmful to the human body" she said. While delivering her lecture she laid special emphasis on the packaging of meat and said that it is better to pack and sell meats, as well as pay attention to the dress code (apron, gloves, head covers, mask) while cutting the meat. Dr. Anjay, Assistant Professor, Department of Public Health and Epidemiology delivered on meat parasitic zoonoses, Dr. P. Kaushik delivered on awareness about zoonotic diseases related to meat, and Dr. Bhumika informed the people on inspection of carcasses and Dr. Gargi Mahapatra delivered her lecture on scientific slaughtering of meat animals.

Dear Readers,

This is your platform. We request you to send reports on major achievements, events, and happenings in BASU. Articles, success stories, and research-based features are also invited. Please mail your contributions along with high resolutions pictures (.jpeg format) to: [probasupatna@gmail.com](mailto:probasupatna@gmail.com), [pashuvigyan@gmail.com](mailto:pashuvigyan@gmail.com)

-Editor

## One-month training on Artificial Insemination "MAITRI"



Hands-on training on Artificial insemination is being imparted by the government with the aim to make unemployed youth self-reliant and to connect them with self-employment, after training they can start up their own work by artificial insemination of animals in their village and surrounding area. Sponsored by the Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, and BLDA, Bihar the first batch of artificial insemination training "Maitri" conducted by Bihar Veterinary College, Bihar Animal Sciences University, Patna ended on the college campus on 17th of February 2021. After one month of residential training, all the trainees will receive 2 months of practical training at the veterinary hospitals and artificial insemination centers of their respective districts. At the outset of the closing ceremony, University Vice-Chancellor Dr. Rameshwar Singh spoke to the trainees on the need for breed improvement along with artificial insemination and development in this field. On this occasion, the Dean of Bihar Veterinary College, Shri J. K. Prasad shared the technical information related to artificial insemination with the trainees.

## Seminar on the role of teachers in new education policy

A one-day seminar was organized under the joint aegis of Bihar Animal Sciences University, Patna, Bharatiya Shikshan Mandal, South Bihar Province, and Niti Aayog on February 20, 2021, to create awareness, policy formulation, address the challenges, and gather feedback before implementing the new education policy in educational institutions. Dr. Pankaj Mittal, Secretary-General of the Association of Indian Universities was present as the keynote speaker in the seminar on the role of teachers in the new education policy, along with Vice-Chancellor of Dr. Rajendra Prasad Central Agricultural University, Pusa Dr. R.C. Srivastava was present as the Chief Guest. At the outset, Dr. Pankaj Mittal stated that under the new education policy, teachers must decide how to teach children and assure the use of digital technology in the teaching-learning process. She further said that "establish your reach to the students and take the help of online training and courses to update the teaching method over time".



Vice-Chancellor of Dr. Rajendra Prasad Central Agricultural University, Pusa, Dr. R.C. Shrivastava said that basic science and engineering courses need to be introduced in all universities, he shared his views on how the course design can be done and emphasized making the university multi-disciplinary. Dr. Rameshwar Singh, Vice-Chancellor of Bihar Animal Sciences University, said that the new education policy has been framed as the focal point for the all-around development of teachers and students which will give impetus to the education sector of India. He told that in the direction of better implementation of this policy, thirty percent of help will be provided by the government and the remaining seventy percent is to be done by



the teachers and the institute. Efforts are being made to re-establish the position of teachers with this policy, as well as a plan to create a value-added learning environment by changing the job and earnings-based learning policy. At the beginning of the program, Seminar Convener, Director Student Welfare Dr. Raman Kumar Trivedi welcomed everyone and the Dean, Bihar Veterinary College, Dr. J.K. Prasad proposed the vote of thanks.

## Workshop on new techniques in disease diagnosis of farm and pet animals

A two-day workshop on the latest approaches to the pathological diagnosis of farm and pet animals was organized under the joint aegis of Bihar Animal Science University and the National Agricultural Higher Education Project on March 16, 2021. On the first day of the workshop, Dr. Ajit Kumar Saxena, Head of Department of Molecular Pathology, All India Institute of Medical Sciences, and Dr. PK Verma, Senior Consultant, Savera Cancer Hospital were present as experts. The two-day workshop was inaugurated by Director Research Dr. Ravindra Kumar, Dean, Bihar Veterinary College, Dr. J.K. Prasad, Assistant Professor-cum-Workshop Coordinator of Veterinary Pathology Department Dr. Sanjeev Kumar, and experts of Veterinary College by lighting the lamp. Dr. Ajit Kumar Saxena delivered his lecture on Molecular Approach and Karyotyping in Disease Diagnosis while on the other hand, Dr. P.K. Verma lectured on the use of new techniques in histopathology for the detection of infectious diseases and cancer.



On the second day of the program. Dr. Ashish Gupta, Assistant Professor, Department of Pathology, NMCH, Patna threw light on the methodology of advanced diagnosis in onychopathology. Dr. S.K. Mukhopadhyay informed about new experiments in the diagnosis of fungal diseases in animals. Dr. Kaushal Kumar, Head of the Department of Veterinary Pathology, Bihar Veterinary College explained in detail the importance and use of proliferative markers in cancer diagnosis.

## One day training program on functional foods of dairy origin (March 17,2021)

A one-day training program was organized by the Livestock Production Technology Department of Bihar Veterinary College under the joint aegis of Bihar Animal Sciences University, Sanjay Gandhi Institute of Dairy Technology, and the National Agriculture Higher Education Project on functional foods of dairy origin on March 17, 2021. In this one-day training program, Dr. AK Singh, Principal Scientist, Department of Dairy Technology, National Dairy Research Institute, Karnal, and scientist Dr. Heena Sharma were present on this occasion, Dr. Singh delivered his lecture on the effect of HPP on the bacteria present in milk and the benefits of HPP treatment. He said that the customer expects better quality, safe milk and such milk which has a longer shelf life.



In the present situation, many types of chemicals are used to increase the shelf life of liquid milk and other milk products, due to which the nutrients present in the milk are destroyed. He further said that the climate of India is hot and tropical which is favorable for harmful bacteria and they spoil the milk and other milk products very quickly. The pasteurization technology that is being used at the present time needs to be changed and it has become mandatory to use the UHT (Ultra High-Temperature Treatment) method which can increase the self-life of milk saving its nutrients. He emphasized using technology to save the elements that increase immunity.



Dr. Heena Sharma, while presenting her lecture on goat's milk and products made from them, said that there is a need to promote maximum use of goat's milk. Goat's milk contains a lot of nutrients, as well as those who are allergic to cow's and buffalo's milk, goat's milk can be of great benefit to them. She said that the consumption of goat's milk is very beneficial in diseases like dengue. She informed that during the last 20 years, goat milk is witnessing the biggest increase in production, it is easily digestible as well as has high therapeutic value in medicine and human nutrition.

On this occasion, Dr. JK Prasad, Dean of Bihar Animal Science University said that dairy products and milk are important requirements of daily life, but today the biggest challenge is to get quality products. Every day we read and hear the news of adulteration, so getting clean and quality products is everyone's priority.

## Workshop on Canine Grooming and Spa

A workshop on Canine Grooming and Spa was organized at Bihar Veterinary College on March 10, 2021. The workshop was organized under the joint aegis of ICAR-National Agricultural Higher Education Project and Bihar Animal Science University. Dr. V.K Sinha, former Head of Department of Veterinary Medicine, Bihar Veterinary College, was present as an expert. In this workshop, the method and importance of cleaning & grooming were highlighted by the expert. Dr. V.K. Sinha said that grooming is the demand of the time, grooming in humans is considered as an essential factor to be presentable which showcases the personality of an individual, in the same way grooming for dogs, cats, and other pets is equally important. Dr. Sinha also gave information about brushes and tools used in grooming and spa.



On this occasion, the Vice-Chancellor of Bihar Animal Science University, Dr. Rameshwar Singh said that this is a unique and latest experiment by the college which is commendable. He further said that it is our endeavor that we can give comprehensive knowledge in the art and science of treatment to the students so that they can satisfy society with their knowledge and efficiency of treatment in the times to come. Speaking on Canine Grooming and Spa, he said that this is a subject that is not covered in the formal curriculum, but we should not hesitate to try new things and we think that in the coming days it will be included in the curriculum of veterinary science studies.

## Six-day Poultry Training Program organised



There is a continuous increase in the possibilities of poultry farming in Bihar, many schemes are being run by the government, but the untrained youth are facing problems in getting benefits from these schemes. With the aim of making the unemployed youth of Bihar job-oriented and self-reliant, a six-day poultry training program was organized at the Poultry Research and Training Center of Bihar Animal Science University. Twenty-three youths from three districts of Bihar namely Patna, Nalanda, and Vaishali were involved in this six-day training program. Under this program, youths were trained to successfully carry out the business of broiler and layer farming. They were trained by eighteen experts from the university, in which many key factors like poultry production management, nutrition, health and diagnosis, bio-safety measures, hygiene, and hatchery management were covered.

## Training-cum-workshop Organized on farmer-friendly mobile app

A two-day training-cum-workshop was organized at Bihar Animal Science University, Patna under the *Krishi Mantrana* Project on a farmer-friendly Artificial Intelligence-based multimodel mobile app on August 28, 2021. The project is funded by the Ministry of Electronics and Information Technology, Government of India, in which detailed information about animal health, diet, and animal-agriculture-related information in Hindi, Bangla, and other regional languages are made available to the farmers and cattle owners through the app, which is beneficial for them.



The project is being operated by CDAC, Noida, CDAC, Kolkata, Bihar Animal Science University, Patna, and Birsa Agricultural University, Ranchi. In this workshop, the participants were informed about the working of the application and how to get the advisory on the problems of veterinary and animal husbandry. Early warning systems and other information signals were practiced in the workshop for emergency management of animals. Dr. Pankaj Kumar, in charge of the Agriculture Advisory Project, said that this is an ambitious research project of the Government of India. He further said that in the first phase, in collaboration with C-DAC Noida, the work of building an app for artificial intelligence-based multi-modal dialogue has been almost completed, and in the second phase, it is being tested by voice recognition of people from different areas. Farmers told in the workshop that it would be beneficial for them. Director Research Dr. Ravindra Kumar said that this scheme will greatly benefit the livestock farmers and youth of remote areas and they will save both the expenditure and time on veterinary consultation.

## One-day mobile app based training cum workshop organized

Under the *Krishi Mantrana* Project, a one-day training-cum-workshop was organized at Bihar Animal Science University, Patna on November 18, 2021, to train the farmers and various stakeholders from the veterinary sector about the A.I. based multi-model dialogue mobile application for veterinary advisories. The application developed under the project is funded by the Ministry of Electronics and Information Technology, Govt. of India, which will benefit the animal keepers and farmers by providing advisory on the issues related to health, food, nutrition, and animal-related diseases by speaking or writing on the *Krishi Mantra* application and the answer to the related question will be delivered by the app in the local language and accent immediately.



The workshop-cum-training witnessed 30 farmers from Gorakhpur district of Uttar Pradesh who got the detailed information about the application, also they were made to record the Q&A. Farmers asked many questions related to animal husbandry from their mobile through *Krishi Mantra* App and got their satisfactory solutions. Farmers greatly appreciated this application and described it as beneficial in emergencies. In this workshop, Dr. Basant Kumar Jha, Principal Scientist of the Agriculture Advisory Project of Birsa Agricultural University, threw light on its experimental aspect in detail. University's project in-charge Dr. Pankaj Kumar helped the farmers and stakeholders to resolve the issues that occurred during the recording of Q&A in the app. University scientists Dr. Saroj Kumar Rajak, Dr. Pushpendra Kumar Singh and S.R.F. Prabhat Shankar, and Aditya Raj presented their views about the app in the workshop. Dr. Pankaj Kumar informed that the *Krishi Mantrana* Project would be made fully operational for the farmers of the country from the month of April 2022.

## International workshop on "Production from animals in the changing climate scenario" organised at BASU



A three-day international workshop was organized under the joint aegis of Bihar Animal Science University, Patna, Australia-India Council, and the University of Melbourne, Australia on September 22, 2021. The workshop which lasted till September 24 witnessed eminent scientists from India and Australia and they presented their lecture on the topic "Production from animals in the changing climate scenario".

In the inaugural session of the workshop Leshi Singh, Chairman, Australia-India Council Board said that this project will lead to the exchange of the latest technology used in the direction of increasing the productivity of animals and traditional methods already being used in India between the two countries, which will lead to new dimensions resulting from the advancements of old practices and implication of newer technology and methods, moreover, the relations between the two countries will also be strong. Through this workshop, there will be a discussion on how to improve animal production in the changing climate scenario, which will help in increasing the productivity of the livestock.

On this occasion, Dr. Rameshwar Singh, Vice-Chancellor, BASU said in his address that the climate change and shrinking productivity in animals is a burning issue in the present time, putting a concrete solution to this issue the production of animals will increase manifold. He also said that this international project has been accorded to this new university, which will be carried out by the scientists of Bihar Animal Science University and Melbourne University together, and the scientist will work out to reduce the heat stress on animals by various elements of nutrition.

Dr. B.N. Tripathi, DDG (Animal Science), ICAR said that the various negative impact on animals can be reduced with the help of house management, genetic selection, a balanced diet, and use of bypass fat, etc.

University's Director Research Dr. Ravindra Kumar said that the effect of heat stress can be reduced by the change in the feeding technique and choice of balanced nutritional diet for the animals, management of the house and fodder.

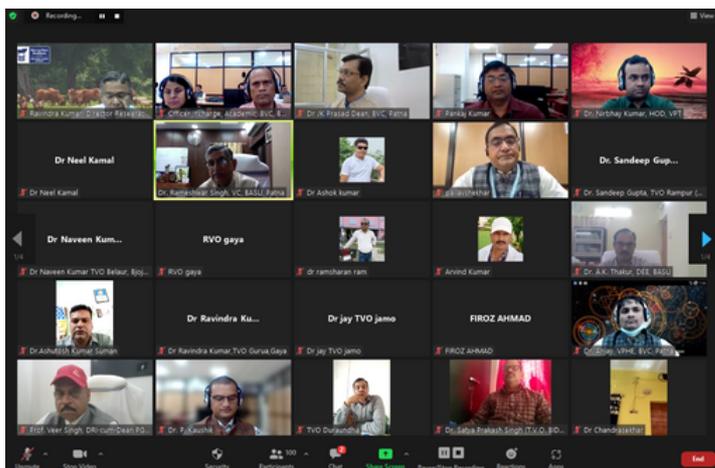
The workshop was conducted by Dr. Surendra Singh Chouhan from Melbourne University, Australia. In the second shift of the workshop, an interaction session was organized with farmers, in which the livestock farmers from Patna and adjoining districts discussed the problem in animals arising out of climate

change and the experts delivered the solution. Scientists, Professors, Students, Farmers, Progressive Farmers, Volunteer Entrepreneurs, etc. participated in the workshop. At the end of the inaugural session, Dean, Bihar Veterinary College, Patna, Dr. J.K. Prasad presented the vote of thanks.



## Webinar organized on Antimicrobial Awareness Week in Bihar Veterinary College

Antimicrobials Awareness Week was observed from 18 to 24 November 2021 by the World Health Organization with an aim to raise awareness globally about antimicrobial resistance. As part of the awareness week, a webinar on "Threats of Emerging Antibiotic Resistance and Way Forward" was organized at Bihar Veterinary College. Dr. Rameshwar Singh, Vice-Chancellor, Bihar Animal Science University was present as the chief guest. Addressing the webinar, Dr. Rameshwar Singh said that antibiotic has made a very important contribution to the field of human and veterinary medicine. Before the invention of antibiotics, it was very difficult to treat any infectious disease but at present, the overuse of antibiotics is proving to be fatal for tomorrow. He further said that due to the excessive use of antibiotics, the bacteria in the human and animal bodies have developed the ability to fight them and neutralize the effect of antibiotics which is very dangerous. The webinar was presided over by Dr. J.K.Prasad, Dean of Bihar Veterinary College, in his address, he said that nowadays there is more misuse and overuse of antibiotics due to which the situation is getting serious day by day resulting in pneumonia, TB, blood poisoning and many other common foodborne diseases are becoming increasingly difficult and, in some cases, impossible to treat, due to which the resistance of the bacteria present in the body to the antibiotic used in the treatment is increasing and the action of the antibiotic is deactivating.



## Five-day All-India Faculty Development Program Organised



A five-day All-India Faculty Development Program funded by Atal Academy of All India Council for Technical Education was organized in virtual mode at Bihar Animal Science University, Patna on November 22, 2021. This program was based on the topic *Gene and Genome Technology for Biologists* where a total of 106 professors and scientists from almost all the states of the country participated.

The FDP witnessed eminent experts from the USA, Japan, Sweden, and Norway as well as leading institutes of India like IIT, ICAR, etc. who threw light on gene and genome technology. The program was presided over by Dr. Ravindra Kumar, Director Research, BASU, Patna and Dr. Anil Gattani conducted the program as Organizing Secretary.

On this occasion, University Vice-Chancellor Dr. Rameshwar Singh informed the gathering that Bihar Animal Science University is the first among all animal sciences universities in the country, which has been provided financial assistance by the All India Council for Technical Education for such programs. He highlighted the utility of this program in today's perspective in many areas alike genetically modified food/crop, insect tolerance, diagnostic techniques, recombinant vaccine, gene therapy, microbiome, proteomics, etc. He further said that this pandemic has made us realize the importance of genome technology, through this we came to know about the changes taking place in mutants and viruses. This area is very important, and such events will provide an opportunity to understand the new technological research and advances happening in the country and abroad. He also said that we should take full advantage of technology and training, and should not shy away from using and implementing it.

The five-day faculty development program was attended by biologists, students, and professionals interested in gene and genome technology from seventy different universities and institutes in the country. This FDP consisted of fifteen sessions, thirteen technical sessions, and two other sessions on stress management and participant evaluation. Experts in the Faculty Development Program delivered lectures on the topic Epigenomic and Epigenetics, Use of Chromatography in Gene Techniques, Q-PCR Gene Review, Use of Stem Cell Techniques in Incurable Diseases, Clean Meat Processing, Use of Codon Bias for Development of Antimicrobial Vaccines, Presented lectures on the use of aptamers in the diagnosis of life-threatening diseases, flow cytometry, the process of drug manufacturing, next-generation sequencing techniques, biosensors, genome editing techniques, the genetic fingerprint of pathogens and mental health, stress management. Prof. Subramaniam, Vikrant Singh Chauhan, Dr. Praveen, Dr. Vijay Pandey, Dr. Yogesh, Dr. Ajit, Dr. Ajay, Dr. Madhu Biyani, Dr. Kumar Sanjeev, Dr. Ajit Singh, Dr. Praveen Singh, Dr. Meeti Punetha, Dr. Arijit Shome, and Dr. Madhulika Bajpai were present as experts.

## "SAPICON" XXIX: Annual Conference of Society of Animal Physiologists of India

The 29th annual conference of the Society of Animal Physiologists of India (SAPI) was hosted by Bihar Animal Sciences University on 25-26 February 2021, the conference noted many animal physiologists from all over the country and registered an online presence through zoom. The two-day conference was inaugurated at the university campus by the lightening of lamp by the Vice-Chancellor, Dr. Rameshwar Singh, Director Research Dr. Ravindra Kumar, and Dean, Bihar Veterinary College Dr. J. K. Prasad. Dr. Ravindra Kumar initiated the event by formally addressing the audience with his welcome speech.

On this occasion the President of SAPI, Dr. S. K. Rastogi, Professor & Head, CoVAS, GBPUAT, Pantnagar highlighted the work of SAPI and the role of the physiologist, he said that SAPI, established in 1984 is one of the oldest societies in the field of veterinary and animal sciences, the number of active members and life members since inception has witnessed a huge increase. Dr. Rastogi stated that "Physiologists

have contributed greatly through academia and research in the fields of veterinary medicine, animal science development, and livestock production, including stress physiology, climatology, reproductive and endocrine physiology, stem cell technology, electrophysiology, molecular body science, and many other specialized fields. In the light of nationwide uniformity, revision of academic syllabus in the field of Physiology is also the demand of this time".



Dr. Amrish Tyagi, Assistant Director General (Animal Nutrition and Physiology) of the Indian Council of Agricultural Research, New Delhi was present as the special guest. He highlighted the importance of physiology at the present time. Dr. Mihir Sarkar, Director, NRC Yak, said that livestock is the backbone of India's economy. We have witnessed during the time of severe lockdown imposed during covid-19, that the dairy sector has helped to sustain the livelihood of the farmers. "When it comes to energy production, the most important thing is to ensure enabling the animals to produce their physical optimum, which is still is a great challenge," he said.

On this occasion, Dr. M.L. Madan said that physiology plays a very important role in achieving an increase in animal productivity. The livestock sector is the primary contributor to the economic development of the country.

It is the backbone of the country's agricultural system. He also mentioned the diversity in animal production systems. He said "land is getting scarce and hence we need to think about the landless farmers, on how they can get improved productivity by practicing animal husbandry in constricted places.

Vice-Chancellor Dr. Rameshwar Singh encouraged the panel to discuss the techniques that will increase the productivity and profitability of farmers. He said that India does not have large farms like western countries as well as the number of farms is decreasing, but the number of animals is increasing, hence an emphasis should be given to increasing productivity per animal. Animal physiology is responsible for reducing animal stress, maintaining animal health, sustaining production, and increasing excellent production from our livestock sector, he said.

On this occasion, the secretary of SAPI, Dr. S. D. Ingole presented the report of the Society while Dr. Khurshid gave his presentation on the status and history of livestock in India.



## CAT SHOW



Cat show was organized at Bihar Veterinary College, Patna on March 5, 2021. Dr. Rameshwar Singh, Vice-Chancellor, Bihar Animal Science University was the Chief Guest, and Mrs. Usha Singh was the Guest of Honor. At the beginning of the program, Dr. J.K. Prasad, Dean of Veterinary College welcomed the august gathering. In his speech, he appraised the audience with the various facets of cat keeping. Citing recent research, he further informed that the risk of cardiovascular diseases can be reduced by 30%-40% in people who keep cats as their pets.

Hon'ble Vice-Chancellor in his address said that very little information/literature is available online or offline on the management and health care of Cats and the number of cat lovers is increasing day by day, In view of this, there was a need to prepare a handbook to understand the management and health care of Cats. Working in this direction, a book on "Cat Care and Management" written by the experts of the college and other eminent Cat experts of the country has been released, which will prove helpful to the Cat owners. He further said that cats are the only carnivorous animals that we keep, which are very intelligent and cute. There is also a positive psychological effect of having a cat.

Cats of different breeds participated in the Cat Show which included Persian, Indian, Seames, Burmese, and Mongolian. Dr. Dhiraj Kumar Gupta from GADVASU, Ludhiana, Dr. Noore Alam Toofani from Sher-e-Kashmir Veterinary University, Kashmir, and Dr. S.P. Sharma, retired surgeon from Bihar Veterinary College, Patna were present as the jury.

## DOG SHOW

The Dog Show at Bihar Veterinary College was organized on March 6, 2021, and was inaugurated by Dr. Ashok Choudhary, Hon'ble Minister, Building Construction Department, Government of Bihar. While addressing the gathering he said that "I am also a dog lover myself, I have the passion to have dogs and they work as a stress buster for me". He further said that the dog is now part of the family. In Hindu customs, the dog is worshiped as the Bhairav, and the importance of dogs has been there since time immemorial.

On this occasion, he inaugurated the Grooming Center for Dogs and other Pets in the Veterinary Clinical Complex of Bihar Veterinary College, where all the solutions related to Hair Cut, Manicure, and Grooming of Dogs can be done.

At the beginning of the program, Dr. JK Prasad, Dean of Bihar Veterinary College welcomed the Hon'ble Minister, Dignitaries, Dog owners, and others attending the function. Speaking on the occasion he said that dogs are playing a very important role in our lives. He referred to a recent article that showed that dogs could be involved in the diagnosis of cancer in the human body, as they are able to find out by their sense of smell, which part of the body has cancerous cells.

The main attraction of the dog show was the floral welcome of guests by the dog squad of NDRF, The demonstration of the working methods of the dog Squad during the disaster received huge applause. Total of 82 dogs were registered for the show.





## Review meeting of Animal and Fisheries Resources Department

University was privileged to host the review meeting of Animal Husbandry and Fisheries Resources Department, Govt. of Bihar at the auditorium of Bihar Veterinary College, Patna under the chairmanship of Honorable Union Minister, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India, Shri. Giriraj Singh on January 30, 2021. Minister of Animal and Fisheries Resources, Govt. of Bihar Shri Mukesh Sahni, Secretary Dr. N. Saravana Kumar, Special Secretary-cum-Director (Fisheries) Dharmendra Singh, Managing Director, COMFED, Smt. Shikha Srivastava, Director (Animal Husbandry) Dr. Vinod Singh Gunjyal, Joint Secretary (Fisheries) Shri Nishat Ahmed, Special Secretary, Keshvendra Kumar, and Vice-Chancellor Dr. Rameshwar Singh were also present for this meeting.

The Honorable Union Minister of Fisheries, Animal Husbandry and Dairying, Government of India, Shri Giriraj Singh said that a lot of work has to be done in Bihar. While focusing on fisheries he said that it

should be acted upon to take the inland fisheries forward. Describing snail farming as an opportunity for better trade, he said that there is no hatchery system for snails in the country but even today it is a big source of protein for the economically weaker section of the society, and efforts need to be made on developing such system. He further discussed artificial insemination and embryo transfer technology, and stated that "we need to research on how to get better results at low cost for Invitro-Fertilization Technology, but before that, it is necessary to provide training to the para-vets and establish a trained manpower". The Hon'ble Minister pointed out that this mechanism should be worked as a pilot project in collaboration with Milk Union. If this is made possible, the state of Bihar would be in a better place to breed reform. He expressed concern over the lack of green fodder, saying that the yield of Silage, Moringa, and Sugarcane grass, needs to be increased.

Talking about the development of fisheries, he said that there is a lot of potential in the wetland of Bihar, promoting fisheries in the wetland, and giving incentives for production need to be increased. Cage culture also needs to be promoted. The Hon'ble Union Minister laid special emphasis on the establishment of call centers for animal healthcare, fish rearing, and sex-sorted semen.



## Diksharambh (Students Induction Programme)



An online induction program for newly admitted undergraduate (B.Sc. & AH) students was organized at Bihar Veterinary College, Patna on February 2, 2021. In the enrollment for 60 seats for the bachelor's degree in

Veterinary, apart from the students from Bihar, students from the state of Madhya Pradesh, Rajasthan, Haryana, and New Delhi have also been admitted. The Vice-Chancellor Dr. Rameshwar Singh welcomed the students and congratulated them for being a part of this historic Veterinary College. In his address, he said that the history of this college has been very old, and after studying at this college, many students are serving in high positions in the country and abroad. The field of Veterinary and Animal Sciences has immense potential, and this field has a very wide scope. Dr. J.K. Prasad, Dean, BVC threw light on the history of the college as well as detailed information on the functioning of the university, various directorates, exam patterns, course patterns, etc. Director Student Welfare Dr. Raman Kumar Trivedi informed the students about the university facilities and co-curricular activities and encouraged them to participate in fields other than studies. On this occasion, Officer-in-charge Academic Dr. Ajit Kumar made the students aware of the syllabus and rules and regulations of the course run by the Veterinary Council of India, Library In-charge Dr. Manoj Kumar Sinha explained the Library Rules, and Hostel Warden Dr. Purushottam Kaushik briefed the rules for residing in the hostel. Dr. Sanjay Kumar Bharti offered a vote of thanks.

## Inner wheel club installed sanitary napkin vending machine in Bihar Veterinary College girls' hostel

Sanitary Vending and Napkin Disposal Machine were installed by Inner Wheel Club, Patna in the Girls Hostel of Bihar Veterinary College on March 3, 2021. The Napkin Vending and Disposal Machine were inaugurated by the President of Inner Wheel Club, Smt. Usha Sinha and District Chairman Smt. Sheela Ranjan. The club president informed the students about the use of the machine and told them that by putting a five-rupee coin in the machine, napkins can be dispensed. 500 pads have been given to the college by the club. On this occasion, the Dean of Veterinary College Dr. J.K. Prasad expressed his gratitude to the members of the club and said that the work of the club is commendable and will prove to be very beneficial for public health and the environment.



## World Environment Day celebrated at Bihar Animal Science University

World Environment Day was celebrated at Bihar Animal Science University on June 5, 2021, which was organized by the N.S.S. wing of the university. On the occasion Vice Chancellor Dr. Rameshwar Singh, Registrar



Dr. SK Garg, Director Postgraduate Education Dr. Veer Singh, Dean Bihar Veterinary College Dr. J.K. Prasad, Director Student Welfare Dr. Raman Kumar Trivedi, Director Research Dr. Ravindra Kumar, Dr. Manoj Singh, and others celebrated this day by planting saplings. On this occasion, Vice-Chancellor Dr. Rameshwar Singh said that the concern for the environment has become worldwide, and our entire ecosystem has been affected by anthropogenic activities. Rivers, ponds, and other water sources have become polluted due to which they are no longer usable. The water level of the rivers and ponds is continuously going down and the dumping of plastic waste and domestic waste in it is putting the entire ecosystem in danger. We are seeing many animals becoming extinct in front of us. We are all responsible for this and it is our responsibility to preserve what nature has given us.

## Launch of E-Samadhan Yojna for the fisherman of the state

Honorable Minister, Animal, and Fisheries Resource Department, Government of Bihar Shri Mukesh Sahni visited the Fisheries College, Kishanganj, and reviewed the fisheries education and extension activities of the college. The honorable minister was welcomed by the dean of the college, Dr. VP Saini by giving him corsets and mementos, as well as apprised the honorable minister about the present activities and future plans of the college. Hon'ble Minister launched the e-Samadhan scheme at CoF, Kishanganj. Under this scheme, the problems faced by the farmers in fish farming will be redressed by using communication media. The Hon'ble Minister in his address highlighted the work being done by the state government to promote fisheries and assured that in the near future state will witness tremendous growth in the export of fish from Bihar. Addressing the students, he said that the State Government is providing all kinds of facilities for fisheries education and will continue to do so in the future. He directed the college administration to commence a certificate course in Fisheries. He suggested the students to grasp the best practical knowledge to meet the expectations of the fishermen of the state.



## Six-day Aayushman Bharat Camp Organized at BASU

In order to spread awareness and provide the benefit of the world's largest health coverage scheme "Ayushman Bharat Pradhan Mantri Jan Arogya Yojana" A six-day Ayushman Bharat camp was organized, which was inaugurated by Dr. Vibha Kumari, Civil Surgeon of Patna and Dr. Anand Gopal Bandyopadhyay, Registrar of the University, in the premises of Bihar Veterinary College on Dec 16, 2021. Under this event, Ayushman cards were made for the students, employees, and outsourced staff of the university who are eligible as per the scheme. Addressing the awareness program, Civil Surgeon Dr. Vibha Kumari said that this is the biggest scheme being run by the Central Government, whose benefit should be given to all those who are eligible for this scheme. Dr. Anand Gopal Bandyopadhyay, Registrar of the University, who was present as the chief guest, said that the

## National conference-cum-seminar on "One Health Approach: Veterinary Perspective"



Animals and Birds had different importance in the life of humans since ancient times, our Indian culture and glorious tradition have stayed around the animals and birds. Even today, the welfare and protection of animals, birds, animals, etc. is the responsibility of every state, said Bihar Deputy Chief Minister Tarkishore Prasad. He was speaking as the chief guest at the national conference-cum-seminar on "One Health Approach: Veterinary Perspective" organized under the joint aegis of the Indian Veterinary Association and Bihar Animal Science University at Bihar Veterinary College, Patna on December 26, 2021. He further said that the soul of India resides in the villages, and the role of veterinarians is very important in strengthening the rural economy. He further said that government schemes mainly provide cow and buffalo for the livelihood of the villagers, but I believe that along with that, goat, chicken, and fish should also be given to them so that they can perform integrated animal husbandry practices so that if there is a loss in one, profit can be made from the other and the life cycle is not broken.

Dr. Praveen Mallick, Commissioner, Animal Husbandry Department, Government of India, who was present as the guest on this occasion, said that we often discuss One Health but it is very important to discuss how to implement it. The role of a veterinarian seems very instrumental in implementing one health successfully. "Before we understand One Health, we need to know all the sciences, a vet has the best understanding of infectious diseases, and the role of a vet in One Health will be crucial," he said. Further speaking he said that there is some deficiency in our system which needs to be rectified, we pay more attention to animal production, and more towards the treatment whereas we need to work on the prevention of diseases. There is a need to do better work on animal health management in which diagnosis should be given priority, diagnosis facilities should be taken up to the field level, and attention should be given to institutional building so that diseases can be detected at the early stage.

On this occasion, the President of the Veterinary Association of India, Dr. Chirantan Kadian urged the commissioner of animal husbandry to give the status of Veterinary Officer to the Touring Veterinary Officer working all over India as well as to implement DACP for Veterinary officers working in the field.

Contd...Page 12



### Six-day Ayushman Bharat....

students should come forward and work to take this scheme to the people and give your full cooperation in taking this scheme to the deprived sections. Dr. Raman Kumar Trivedi, the coordinating director of this camp in the university, said that the students should do the work of lighting a flame and show their participation in taking this scheme to the people. On this occasion, the District Program Coordinator of Ayushman Bharat, Dr. Manoj Kumar explained in detail the scheme and answered the questions of the people, as well as informed them that the Ayushman cardholders will get the benefit of free treatment up to Rs 5 lakh in listed private and government hospitals. The program was conducted by Dr. Manoj Kumar Singh, Incharge National Service Scheme, BASU.

### BASU Celebrated its Fourth Foundation Day

University celebrated its fourth foundation day on August 29, 2021. The program was graced by the Hon'ble Minister, Animal and Fisheries Resources Dept. Govt. of Bihar, Sh. Mukesh Sahni as the chief guest. Dr. Allauddin Ahmed Khan, former Vice-Chancellor, Sher-e-Kashmir University, Jammu was present as the special guest, along with Dr. Rameshwar Singh, Vice-Chancellor of the University, Dr. Arvind Kumar, Director of BIT, Patna, ICAR, Patna. Ujjwal Kumar, Director of the University, Dr. (Captain) Anand Gopal Bandyopadhyay, Registrar of the University and Dr. Ravindra Kumar, Director Research shared the dias.

Inaugurating the program, Dr. (Captain) Dr. Anand Gopal Bandyopadhyay, Registrar of the University welcomed the staggers and other guests.

On this occasion, the Hon'ble Minister said in his address that such an effort would be made to ensure that there would be no financial constraint in the scheme being made by the university for the development of animal husbandry and allied areas. He further said that soon the construction work of the new building of the university would be started for which all the procedures have been completed. "The university must work with the aim of benefiting the cattleman and farmers of the state", he said. Speaking on Saat Nishchay-II, he said that soon door-to-door ambulatory veterinary services will be started in the state, under which veterinarians would be required on a large scale. He further said that though being resourceful in fisheries, we take the support of other states, which is not good for the economical health of the state.



We are working to lessen our dependency on others and soon we will be self-sufficient in fisheries and will develop the ability to export it to other states. "The work of breed improvement is being done for the cattle owners in Bihar, which will benefit them, and the government is leaving no stone unturned for the advancement of the animal husbandry and allied areas of the state. Ninety percent grant is being given to the ST, SC, and EBC classes under the special plan of the government to encourage them and empower them to startup in poultry, goat rearing, pig rearing, and cow rearing" said minister.



Vice-Chancellor Dr. Rameshwar Singh in his address expressed his gratitude to Hon'ble Minister Shri Mukesh Sahni. He also thanked former ministers of the department Shri Awadhesh Kumar, Shri Pashupati Nath Paras, Dr. Prem Kumar, Secretary of the department, Dr. N. Vijayalakshmi, Dr. N. Saravana Kumar, and all the other officers of the department for the cooperation rendered for the establishment and progress of the university. Expressing his gratitude towards Hon'ble Chief Minister Shri Nitish Kumar, Vice-Chancellor Dr. Rameshwar Singh said that this newly formed university has made its mark in the country and abroad by successfully facing the challenges with the vision, guidance, and blessings of the Hon'ble Chief Minister.

The Vice-Chancellor mentioned the work done in the university in the last year, appreciating the teachers for their commendable work during covid lockdown he said that the teaching and learning were made easy and smooth even in the difficult circumstances of Covid through the upload of video lectures on YouTube and online classes. Referring to the model adopted for e-learning, he said that the YouTube channel of the university has been subscribed by about six thousand people and has been viewed three lakh times. Giving information about the research being done by the university, he said that special importance is being given to research in the university, to fulfill the aspirations of the people of the state, a total of fifteen externally funded and nine institutional research projects are being operated in the university. Externally funded projects include DADF, Government of India, New Delhi, Department of Science and Technology, CDAC, Noida; Directorate of Poultry Research, Hyderabad and NICRA scheme of Indian Council of Agricultural Research.

Further referring to a major achievement in recent times, he said that a Memorandum of Understanding has been signed with the University of Melbourne, whose funding is being fully funded by the India-Australia Council. Under this project, a study will be done to prevent the adverse effects of climate change on milk production. Under the Rashtriya Krishi Vikas Yojana (RKVY), four schemes have been approved.

Describing the establishment of Embryo Technology and IVF Lab under Rashtriya Gokul Mission funded by the Department of Animal Husbandry, Government of India, he said that the team of scientists at the university have been trained by leading institutes of the country.



Indigenous breeds of cows viz. Sahiwal, Red Sindhi, and Bachhor have been included in this project for breed development. "We are working on the Embryo Collection and Transfer technology at the lab established at the university, as a result of which *Nandini* a Sahiwal heifer was born on August 1, 2021, and *Nandan* on August 19, 2021, for the first time in the state," he said. The Vice-Chancellor congratulated all the scientists of the ETT team for this remarkable success and said that by developing IVF facilities in this project, a maximum number of offspring will be produced from a single donor cow. Bulls of high genetic merit will be prepared and will be used for breed improvement in the state, which will benefit the farmers and the cattle owners of the state.

Progressive cattle breeders and entrepreneurs who have done excellent work in the field of animal husbandry, fisheries, and dairy and teachers who have done excellent work in teaching, research, online teaching, and covid control programs were honored by the University by giving citations and mementos by Hon'ble Minister Shri Mukesh Sahni.



## Women's Day Celebration



International Women's Day was celebrated at Bihar Veterinary College, Patna on March 8, 2021. On this occasion, all the women employees and students of the college celebrated this day by cutting a cake. Dr. Sushma, Dr. Archana, Dr. Bhawna, Dr. Bhumika, Dr. Gargi, Dr. Sucheta, Dr. Prashansa, Mrs. Ragini, and others expressed their views on this occasion. College Dean Dr. J.K. Prasad said that today women are doing better in every field and are proving their mettle. It's the time to take the challenge, women must accept all the challenges and move on.

## Advisory given to farmers through audio conferencing

On the occasion of World Veterinary Day, 40 animal husbandry farmers of Patna district were consulted through a multi-location audio conference on the topic "Animal Health Medicine and Fodder Management" under the joint aegis of Bihar Animal Science University, Patna, and Reliance Foundation. The answers to the questions of the livestock farmers were given by Dr. Pankaj Kumar, Assistant Professor of Bihar Veterinary College, Department of Extension Education.

The expert laid special emphasis on regular vaccination and the use of anthelmintic medicines. Most of the questions were related to heatstroke, metabolic disorders like diarrhea, viral diseases, methods to increase milk production, lack of green fodder in the summer season, etc.

Robin Ravi of Reliance Foundation, who was conducting the program, informed the audience that free scientific consultation can be taken from home by contacting Reliance Foundation's toll-free helpline number 1800-419-8800 anytime between 9:30 am to 7:30 pm.

## Program under National Service Scheme (NSS)

### International Yoga Day

International Yoga Day was celebrated on 21st June 2021, Every year university celebrates International Yoga Day. Due to covid restrictions, this year the International Yoga Day was celebrated online. A Yoga & Health Workshop was organized by the NSS unit under the Directorate of Students Welfare, BASU, Patna. The workshop was conducted by Mr. Yogesh Kumar, Yoga Trainer from Bihar School of Yoga, Munger. Hon'ble Vice-Chancellor, BASU was the Chief Guest, and about 100 staff including officers, faculty members, and students participated in this Yoga workshop. In his address, the Hon'ble Vice-chancellor emphasized the importance of Yoga and exercise in maintaining our physical as well as mental health.

### Workshop on Covid Helper's Skills for Student Community

As we know covid pandemic has a big impact on the life and living of human beings, preventive measures and psychosocial support skills can be very useful during this pandemic. Students and youth need to understand the significance of extending all kinds of supporting hands to the needy suffering from this deadly pandemic. Keeping the above objective in mind NSS wing of BASU in collaboration with Mahatma Gandhi National Council of Rural Education (MGNCRE), Department of Higher Education, Ministry of Education, GOI organized a two hours online workshop on June 19, 2021, on the topic "Covid Helper's Skills for Student Community" and the session was conducted by Ms. Ankita Kumari, Resource Person, MGNCRE, Ministry of Education, GOI. The coordinator for this workshop was Dr. Manoj Kumar Singh, Asstt. Prof., BVC, Patna and In-charge, NSS, BASU, Patna.

## Program under Placement & Counseling Cell, BASU, Patna

### Covid early detection, prevention & vaccination

With most of the people under "stay at home" situation due to the corona pandemic, online counseling has become a very important tool to provide medical and psychological help during this period. Today, the advantage of online advice for covid prevention & treatment has become more important than ever. Understanding about covid-19, its prevention, and its management is extremely important to avoid getting panic. Keeping the above facts in mind Placement & Counseling Cell, BASU, Patna organized an online webinar on the topic "Covid early detection, prevention & vaccination" and the speaker for this occasion was Dr. Rajiv Kumar Singh, HOD, PMCH, Patna on 26th May 2021. The coordinator for this webinar was Dr. Gyan Dev Singh, Asstt. Prof., BVC, Patna and In-charge, Placement & Counseling Cell, BASU, Patna. The chief guest of this webinar was Hon'ble Vice-chancellor, BASU, Patna. 150 participants including students, teachers, and staff attended this webinar.

### Effective interpersonal communication

Interpersonal communication skills are important tools for effective communication and interaction with other people, both individually and in groups. So to build up good interpersonal communication skills, the Placement & Counseling Cell under DSW, BASU organized an online webinar on the topic "Effective interpersonal communication" and the session was conducted by Dr. Madhulika Bajpai, Assoc. Prof., Psychology, Bhaskaracharya College of Applied Sciences, the University of Delhi on 4th June 2021. The chief guest of this webinar Dr. Rameshwar Singh, Hon'ble Vice-chancellor, BASU, Patna spoke about the importance of this talk and encouraged the students and teachers to improve their communicational skills.

### Campus Placement

Bihar Animal Sciences University (BASU), Patna organized a campus interview (Campus Placement) for final year students of M.V. Sc. and B.V. Sc. & A.H. programmers of Bihar Veterinary College (BVC), Patna in the year 2020-21. Bihar Koshi Basin Development Project (BKBDP), Patna conducted the interview on 22nd January 2021 for the post of Agribusiness Facilitator. Out of 12 students who appeared and 9 students of Bihar Veterinary College, Patna was selected for the Agribusiness Facilitator post.

## Program under Directorate of Students Welfare, BASU, Patna

### Covid-19 Vaccination Camp

Directorate of Students Welfare, Bihar Animal Sciences University, Patna organized a covid-19 vaccination camp from 03.05.2021 to 05.05.2021 and on 4th and 5th June 2021 under the leadership of the Director Students Welfare. About 500 employees, students, and their family member are vaccinated from Covaxin.

### COVID-19 test camp

Directorate of Students Welfare, Patna Bihar Animal Sciences University, Patna organized covid-19 test camps on 02.01.2021, 04.01.2021, and 22.02.2021. A total number of 320 faculties, employees, and students were tested.

### Ayurvedic way of health management during Covid-19

The corona pandemic has reminded the world of the importance of good health, and strong and resilient immune systems. Our best defense lies within our bodies. The Ayurvedic system goes beyond a curative treatment and emphasizes a healthy and all-encompassing healthy lifestyle. Ayurvedic prognosis also includes the extensive use of herbs, exercise, diet, and changes in lifestyle. BASU organized an online webinar on the topic "Ayurvedic way of health management in Covid-19" and the speaker was Dr. Achintya Mitra, Scientist, Central Ayurveda Research Institute, Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Government of India. This webinar was organized by the Placement & Counseling Cell of BASU, Patna under DSW, BASU on 28th May 2021. The coordinator of this webinar was Dr. Gyan Dev Singh, Asstt. Prof., BVC, Patna and Officer Incharge, Placement & Counseling Cell, BASU, Patna. The chief guest of this webinar was hon'ble Vice-chancellor, BASU, Patna.

### Psychological wellness and Positive Thinking

University students, all over the world are increasingly recognized as a valuable population, suffering from higher levels of anxiety, depression, substance abuse, and disordered eating compared to the general population. Especially during the covid-19 pandemic, the burden on the mental health of this valuable population is amplified. Since our community (students, faculties, staff, etc.) is important for nation-building and for this physical and mental wellness is very much required with positive thinking. Keeping these views in mind BASU organized two online webinars on the topic "Psychological wellness" and "Positive Thinking" the speaker for both webinars was Dr. Madhulika Bajpai, Assoc. Prof., University of Delhi. These webinars were organized by the Placement & Counseling Cell of BASU, Patna under DSW, BASU on 15th and 18th June 2021 respectively.

### Key to happiness

As a sequel to the online lectures series organized by the Bihar Animal Sciences University Patna, an online talk on 'Key to happiness and success' was organized on 29 May 2021 under NAHEP to motivate the students and faculty members of the university. The key speaker was Dr. SM Shivprakash, Former Director Extension and Dean, College of Fisheries, Mangalore, Karnataka who aptly unfolded the secrets of happiness and prescribed the keys to happiness and success. The pertinence of the topic goes beyond parlance particularly under the pandemic situations, as stress management has become more important to live a normally happy, and successful life. The talk was attended by more than ninety participants including Dr. Ravindra Kumar, Director Research & Nodal Officer, NAHEP, BASU, and other senior officers of the university. The introductory remarks were given by Dr. RK Trivedi, DSW, BASU whereas the vote of thanks was offered by Dr. JK Prasad, Dean, Bihar Veterinary College, Patna. The event was coordinated by Dr. AK Jha, Assistant Professor and Officer-in-charge of Cultural & literary Society, BASU.

## BASU Participated in State level farmers fair at DRPCA, Pusa, Samastipur, Bihar

Bihar Animal Sciences University, Patna participated in a state-level farmers fair held at Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur, Bihar from 07.02.2021 to 09.02.2021. In this Kisan Mela, important ongoing activities of the University were displayed. Information about various facets of Animal Husbandry was displayed in form of Flex, Standee, Posters, etc. In this Kisan Mela a total of 438 farmers advisory were given.

## Training on “Therapeutic application and Judicious use of the hormone in dairy animals”

Bihar Animal Sciences University organized Awareness Workshop on “Therapeutic application and Judicious use of the hormone in dairy animals” for veterinary officers of the Animal Husbandry Department, Bihar from 5-8 April 2021 in which 38 veterinary officers from different parts of the Bihar participated. Dr. Saroj K. Rajak coordinated the training program.

## Online training on “Advanced technique for Japanese Quail farming” organized

Directorate of Extension Education, Bihar Animal Sciences University in collaboration with Krishi Vigyan Kendra, Jamui organized one-day online training on “Advanced technique for Japanese Quail farming” on 4th June 2021. Dr. Rajesh Kumar, Scientist, Bihar Agriculture University, Sabour was Guest Speaker on this occasion. He described various aspects of Japanese Quail farming like breeds, hatchery management, brooding management, feeding management, disease prevention and control, marketing etc. to farmers from different parts of Bihar. A total of 32 farmers participated in the programme. Dr. Saroj K. Rajak coordinated the training programme. At the end of the training programme feedback from farmers was taken and doubts were cleared.

## Online training on “Summer management of poultry”

Directorate of Extension Education, Bihar Animal Sciences University in collaboration with Krishi Vigyan Kendra, Jamui organized one-day online training on “Summer management of Poultry” on 11th June 2021. Dr. Vijay Kumar, Senior Scientist, ICAR-Directorate of Poultry Research, Hyderabad was the Guest Speaker for this occasion. He described various aspects of summer management of poultry like the Mechanism of heat loss from the body of poultry, heat stress, roles of vitamins & minerals to cope with heat stress, housing management in summer, flock management in summer etc. to poultry farmers who arrived from different parts of Bihar. A total of 31 farmers participated in the programme. At the end of the training programme feedback from farmers was taken and doubts were cleared. The programme was coordinated by Dr. Saroj K. Rajak and Dr. Puspendra K. Singh.

## Training on “Precision feeding of Balanced ration added with bypass protein, Pro-biotics etc.”

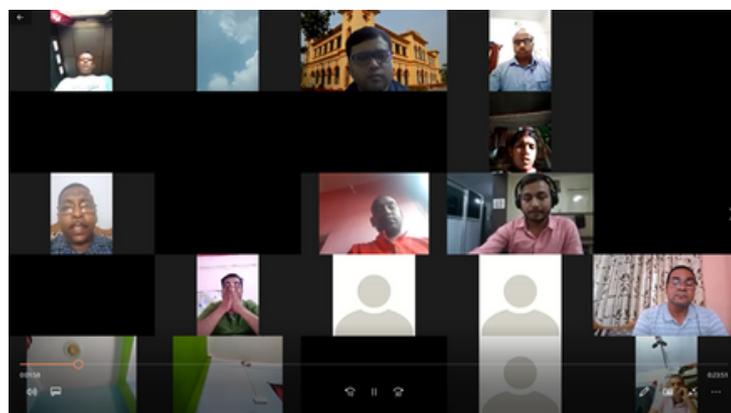
Bihar Animal Sciences University organized a refresher course on “Precision feeding of Balanced ration added with bypass protein, Pro-biotics, etc.” for veterinary officers of AHD, Bihar from 8th -11th March 2021 in which 38 veterinary officers from different parts of the Bihar participated. Dr. Saroj K. Rajak coordinated the training program.

## Training program on “Advances in Poultry Disease Diagnosis for field Veterinarians”

Bihar Animal Sciences University organized an Interactive Session On “Advances in Poultry Disease Diagnosis for field Veterinarians” For veterinary officers of AHD, Bihar from 15th to 18th March 2021 in which 38 veterinary officers from different parts of the Bihar participated. Dr. Saroj K. Rajak coordinated the training program.

## Online training on Commercial Goat Farming organized

Directorate of Extension Education, Bihar Animal Sciences University in collaboration with Bihar Veterinary College, Patna organized one-day online training on Commercial Goat Farming on 29th May 2021. Dr. Sushil Prasad, Dean, Ranchi Veterinary College was the resource person for this occasion. He discussed various aspects of Goat farming like breeding, feeding, marketing, and health management of goats to farmers from different parts of Bihar. A total of 76 farmers participated in the program. Dr. Saroj K. Rajak coordinated the training program. On this occasion, Sri Bipin Kumar Jha, Goat Entrepreneur also discussed various aspects of Goat Entrepreneurship.



## Training on Summer management of milching animals

Directorate of Extension Education organized an online training program on “Summer management of milching animals” on 29.06.2021. Dr. S. P. Sahu, HoD Livestock Production and Management, Bihar Veterinary College, Patna was the guest speaker for this occasion. A total of 54 trainees participated in this training programme.

## One-day online training on Vaccination in Animal & Poultry

Directorate of Extension Education, Bihar Animal Sciences University in collaboration with Krishi Vigyan Kendra, Jamui organized one-day online training on “Vaccination in Animals & Poultry” on 18th June 2021. Dr. Sanjay Kumar Sinha, Joint Director (Animal Health), Animal & Fisheries Resources Department, Govt. of Bihar was Guest Speaker on this occasion. A total of 28 farmers participated in the program.

## Animal Health Camp organized



An animal health camp was organized under the joint aegis of Reliance Foundation and Bihar Animal Sciences University, Patna at Shorampur panchayat of village Dharayachak in Phulwari block of Patna on February 13, 2021. Farmers from many local villages visited the animal camp with their livestock, where necessary advice related to a balanced diet during animal diseases and food management was given by the experts of the university. Free medicines were distributed after examination based on the symptoms occurring in animals. A team comprising Dr. Saroj Kumar, Dr. Ankesh Kumar, Dr. Sanjay Kumar, Dr. R.K Sharma, and Dr. Vipin Kumar from Bihar Veterinary College examined the problems of cattle and advised the owners on how to take good care of their farm animals.

## Training on Management of animals in emergencies

A series of training was conducted by the university, for the field livestock superintendents and supervisors of the Department of Animal and Fisheries Resources, Govt. of Bihar on the management of animals in emergencies. The three days training series started on August 23, 2021, and ended on October 30, 2021, which comprised six training sessions, in which 137 livestock superintendents and supervisors were trained by the experts of the Bihar Veterinary College, Extension Education Department on how to manage the animals during the time of emergencies and disaster. As it is well known that a major part of Bihar is prone to flood, in that case, it is very important to train the veterinary personnel to take proper care of the livestock and practice correct and effective measures to manage the health and save the life of livestock. The training was given by Dr. Pankaj Kumar, Dr. Pallav Shekhar, Dr. Saroj Kumar and Dr. Pushpendra Singh.



**Seminar on Food and Nutrition for farmers on 26.08.21 at village Chandrashekhar Nagar, Barhat**



**Seminar on 'Kuposhan ko maat-aapke hath' on 24.12.21 at village Lawatola, Chakai, Jamui**



**Program on production distribution by Krishi Vigyan Kendra, Jamui on 30.12.2021**



**Chick distribution program by Krishi Vigyan Kendra, Jamui at Ektarwa Village of Khaira on 18.12.2021**

## Three calves of Sahiwal born through ETT in a span of one month at University

With the efforts of scientists at Bihar Animal Science University, Patna, the third calf of the Sahiwal cow was born on Wednesday the 29th of September 2021 through embryo transfer technology. Scientists have so far obtained two male calves on August 19, 2021, and September 29, 2021, and one female calf on August 1, 2021, with this technique. The main objective of this project is to produce high-quality male and female cattle so that the dream of a second white revolution can come true and result in the improvement of the indigenous breeds. This result will be helping to develop a high-quality bull mother farm from male animals born with this technique.



**"Nandni" The first female calf born through ETT**



**The first calf was born through ETT on August 1, 2021. Hon'ble Vice-Chancellor, Director Research, and Dean BVC with the team of scientist at LFC of BASU**

The Vice-Chancellor of the University Dr. Rameshwar Singh congratulated the principal investigator of the project Dr. Ravindra Kumar and co-investigator Dr. J.K. Prasad along with the team of scientists comprising Dr. Shailendra Kishore Sheetal, Dr. Chandrashekhar Azad, Dr. Pramod Kumar, Dr. Dushyant and Dr. Ajit for this success. The Vice-Chancellor said that the way scientists are working in this lab is provided to the university under the Rashtriya Gokul Mission, an ambitious project of the Government of India, for the development and conservation of indigenous breeds, raising the income of livestock farmers, is commendable. The birth of three calves in the span of a month is a very great achievement and it is a positive sign in the direction of development in the sector of animal husbandry and breed improvement. It is worth mentioning that -

under the Rashtriya Gokul Mission scheme, the government is working on many other objectives besides promoting indigenous breeds, including the development and conservation of indigenous breeds, controlling the spread of diseases by increasing the population of disease-free high genetic quality female animals, and increasing the milk production to improve the income and standard of living for the cattle owners.



**The Second male calf " Nandan" born through ETT on August 19, 2021. Hon'ble Vice-Chancellor , Director Research and Dean BVC with the team of scientist at Livestock Farm Complex of the university**



**The third male calf born through ETT on September 29, 2021 with his surrogate mother a HF cow**



**Prof. Veer Singh**, Director Resident Instruction-cum-Dean Post Graduate Studies, Bihar Animal Sciences University, Patna is conferred with Fellowship of International Society for Noni Sciences (FISNS) for the year 2020 in recognition of his contributions in the field of Veterinary Sciences and was honored with citation and certificate

## MoU for the welfare of equines and mules of the state

A Memorandum of Understanding (MoU) was signed between Bihar Animal Science University, Patna, and Brooke India on March 12, 2021. Brooke India is a not-for-profit organization registered with the Animal Welfare Board and working for the welfare of commercially used horses and mules in the country. Under this MoU, the University and Brooke India will jointly provide health advice and treatment to horses and mules. It is also planned to provide necessary training to veterinary and para-vets for better treatment of horses and mules. In the presence of Vice-Chancellor Dr. Rameshwar Singh, Dean of Bihar Veterinary College Dr. J.K. Prasad, and CEO of Brooke India. Brigadier (Retd) Dr. Jyotikumar Dharmadhiran signed the memorandum.



## BASU inked MoU with Government Ayurvedic College, Patna



A Memorandum of Understanding (MoU) was signed on March 5, 2021, between Bihar Animal Sciences University, Patna, and Government Ayurvedic College, Patna for the promotion of inter-institutional research collaboration, staff and students' training/ postgraduate research/ doctoral research, and various other Research projects.

Dr. Rameshwar Singh, Hon'ble Vice-Chancellor, Bihar Animal Sciences University, Patna was present as Chief Guest on this occasion. Dr. Ravindra Kumar, Director Research, and Dr. Veer Singh, DRI-cum-Dean PGS, BASU along with all the faculty members of the Department of Veterinary Pharmacology and Toxicology were also present on this occasion.

During the opening remarks, Dr. Rameshwar Singh, Hon'ble Vice-Chancellor, BASU pointed out the importance of this event and hoped that the MoU will go long and be instrumental in establishing the knowledge and practices of Ayurveda in the field of Veterinary Sciences. He also said that although we are using Ayurveda for the treatment of various disorders of animals, the exchange of information after this MoU will help in the further development of Ayurvedic formulations for the treatment. Dr. Ravindra Kumar in his remarks highlighted the importance of collaborative research between the two parties and assured that the collaboration can go much further and research projects in the collaborative model can be formulated to strengthen the relationship. Dr. Veer Singh, during his address, highlighted the importance of drug resistance which can be countered with the use of herbal ayurvedic medicines.

## Farewell and Welcome

### BASU bids farewell to Registrar Dr. S.K. Garg



Dr. Satish Kumar Garg, Registrar, Bihar Animal Science University, Patna has been appointed as the Vice-Chancellor of Rajasthan University of Veterinary and Animal Science, Bikaner. The order related to the appointment was issued by the Rajasthan Raj Bhavan.

After receiving information from Raj Bhavan, Rajasthan, Dr. Garg submitted his resignation to the Vice-Chancellor of Bihar Animal Science University on August 7, 2021. During his nine-month tenure as the Registrar of Bihar Animal Science University, he did many important works. A farewell ceremony was organized in his honor by Bihar Animal Science University. Vice-Chancellor Dr. Rameshwar Singh honored Dr. Garg with angavastra and memento and appreciated his work and wished him good luck for the new innings. All the officials and employees of the university were present on this occasion.

### University bids farewell to Er. Rammurti Chayel



A farewell ceremony was organized to bid farewell to Dy. Estate Officer, Er. Rammurti Chayel. He served the university till the completion of his term on October 25, 2021. Vice-Chancellor Dr. Rameshwar Singh honored Er. Chayel with angavastra and memento and appreciated his endeavor in carrying out all the civil construction works done under his supervision at the university. All the officials and employees of the university were present on this occasion and wished him good health and prosperity for his future.

## BASU bids farewell to Advisor to VC



Advisor to Hon'ble Vice-Chancellor, Dr. Hans Raj completed his tenure on July 17, 2021. University organized a farewell ceremony to honor Dr. Hans Raj for his extraordinary efforts made to uplift and develop the university's IT infrastructure and beautification of the campus. He was also very instrumental in the recruitment process, planning, and execution of various works and tender documentation, etc. University Registrar Dr. S.K. Garg along with university senior officers greeted him with best wishes and prosperity for his upcoming life.

## Dr. (Captain) A.G. Bandyopadhyay appointed as the new registrar of University



Dr. (Captain) Anand Gopal Bandyopadhyay contributed to the post of Registrar of Bihar Animal Science University. This post was vacant after the resignation of Dr. Garg, the former Registrar of the University, selected as the Vice-Chancellor in the Rajasthan University of Veterinary and Animal Sciences, Bikaner. Dr. Bandyopadhyay took over the charge on Saturday, August 21, 2021, before the Vice-Chancellor of the University, Dr. Rameshwar Singh.

After doing higher secondary education from Kendriya Vidyalaya Patna and Inter from Anugrah Narayan College, Patna, Dr. Bandyopadhyay graduated in Veterinary Science from Bihar Veterinary College and did post-graduation from Birsa Agricultural University, Ranchi, and obtained a doctorate degree in Veterinary Biochemistry from Calcutta University. Starting his career as Touring Veterinary Officer, Government of Bihar, he worked as Rural Development Officer in Union Bank of India, then in 1990, Dr. Bandyopadhyay contributed to the Remount Veterinary Corps of the Indian Army. Dr. Bandyopadhyay has contributed to many important positions like Director Animal Husbandry, Government of West Bengal, and Director Animal Husbandry, Government of Jharkhand in his long tenure. Vice-Chancellor Dr. Rameshwar Singh and other senior officials and employees congratulated him on taking the charge of Registrar, Bihar Animal Science University.

## New Joining's



### Er. Binod Kumar Jha

Director Works and Plant  
D.O.J: 27.09.2021



### Er. Vijay Kumar Alwela

Deputy Estate Officer  
D.O.J: 26.10.2021



### Sh. Dheerendra Singh

Asst. Registrar (Grade-II) (Academic)  
D.O.J: 26.10.2021



### Sh. Manoranjan Kumar

Asst. Registrar (Grade-II) (Examination)  
D.O.J: 05.10.2021

### **Published by**

**Dr. (Captain) A.G. Bandyopadhyay**

Registrar, Bihar Animal Sciences University, Patna

### **Designed and Compiled by**

**Sh. Satya Kumar**

Public Relations Officer, BASU, Patna

### **Editor**

**Sh. Satya Kumar**

Public Relations Officer, BASU, Patna

### **Sub-Editor**

**Dr. Gargi Mahapatra**

Asst. Professor, Dept. of LPT, BVC, Patna

FOLLOW US ON



परियोजना • एक गाव से एक साथ कई बाछा और बाछी मिल सकते हैं इस तकनीक से बिहार में पहली बार भ्रूण प्रत्यारोपण से साहिवाल नस्ल की बाछी का जन्म

परिचित रिपोर्टर | पटना

बिहार में पहली बार पशु प्रत्यारोपण से साहिवाल नस्ल की बाछी का जन्म रिकॉर्ड को हुआ। गुरुवार को साहिवाल नस्ल के एक भ्रूण को एक साहिवाल नस्ल की बाछी में प्रत्यारोपित किया गया।



बाछी का जन्म नौदनी रखा गया है। गाव और बाछी के साथ बिहार पशु विज्ञान विवि के कुलपति डॉ. रामेश्वर सिंह।

ज्यादा दूध देने वाली गाव से एक साथ कई भ्रूण पैदा किए जाते हैं

परियोजना के मुख्य अन्वेषक डॉ. रविंद्र कुमार ने बताया कि भ्रूण प्रत्यारोपण तकनीक के माध्यम से उच्च गुणवत्ता वाले भ्रूण पैदा करने की तकनीक से एक साथ कई भ्रूण पैदा किए जाते हैं।

कृत्रिम गर्भाधान ट्रेनिंग का हुआ समापन



पटना। बेरोजगार युवकों को आमनिर्भर बनाने और स्वरोजगार से जाड़ने को लेकर सरकार द्वारा कृत्रिम गर्भाधान का ट्रेनिंग दी जा रही है।

भ्रूण प्रत्यारोपण से दूसरी बार हुआ साहिवाल बाछे का जन्म

राष्ट्रीय सागर संवाददाता



पटना। बिहार पशु विज्ञान विश्वविद्यालय के ईटीटी एवं आईवीएफ प्रयोगशाला के वैज्ञानिकों ने फिर से बिहार को गौरवान्वित किया है।

आजाद एवं डॉ अजित ने भ्रूण प्रत्यारोपण तकनीक के माध्यम से यह दूसरी सफलता प्राप्त की है।

कार्यक्रम. बैठक में बोले गिरिराज सिंह उद्यमिता मॉडल से पशुपालन और डेयरी का विकास करें

Grooming centre for pets opens at veterinary college

Professors of veterinary medicine at Veterinary College in Patna. A pet getting haircut at Veterinary College Centre in Patna on Tuesday.

Professors of veterinary medicine at Veterinary College in Patna. A pet getting haircut at Veterinary College Centre in Patna on Tuesday.

निर्देश

राज्य के बाहर से चूने न मंगाएं • मुकेश सहनी



बैठक को संबोधित करते केंद्रीय मंत्री गिरिराज सिंह व मंत्री मुकेश सहनी।

केंद्रीय मंत्री गिरिराज सिंह के अध्यक्षता में शनिवार को वेटेनरी कॉलेज में बैठक आयोजित की गयी।

कि हम किसान एग्जोर्पो निकाल सकते हैं, पर सबसे पहले प्रशिक्षण दिलाया जाना है।

सोसाइटी ऑफ एनिमल फिजियोलॉजिस्ट ऑफ इंडिया के 29वें वार्षिक सम्मेलन का किया गया आयोजन



पटना। सोसाइटी ऑफ एनिमल फिजियोलॉजिस्ट ऑफ इंडिया के 29वें वार्षिक सम्मेलन की मेजबानी बिहार पशु विज्ञान विश्वविद्यालय द्वारा की गई।

चंपारण मीट को मिलेगी अब इंटरनेशनल पहचान



स्वच्छ मांस उत्पादन व प्रसंस्करण तकनीक पर वर्कशॉप का आयोजन।

वर्कशॉप

जीआइ टैगिंग की तैयारी

द्वारा करा ली जायेगी। पटना के कई रस्टोरेंट मालिक, मोट दुकानदार, छात्र व शिक्षकों को मांस को बेहतर ढंग से काटने, स्वच्छता का ध्यान रखने और मांस निकालने के लिए स्वस्थ पशुओं के चयन पर प्रकाश डाला।

राज्य के घोड़े और खच्चरों के कल्याण के लिए एमओयू

पटना/संवाददाता। बिहार पशु विज्ञान विश्वविद्यालय और ब्रुक इंडिया के बीच विश्वविद्यालय के कुलपति सचिवालय में समझौता ज्ञापन हुआ।

वेटेनरी कॉलेज में शुरू हुआ गो-काष्ठ का उत्पादन

जगरण विशेष 05 सभी किलोवॉट्स का बिहार केटीसीकॉलेज 02 रोटापाईट का गोकाष्ठ तैयार किया जा रहा।

वेटेनरी कॉलेज में शुरू हुआ गो-काष्ठ का उत्पादन

वेटेनरी कॉलेज में तैयार गोकाष्ठ • जलदाता

वर्चुअल ओरिएंटेशन के साथ पशु चिकित्सा महाविद्यालय में नए विद्यार्थियों का स्वागत



पटना। बिहार पशु चिकित्सा महाविद्यालय में नव प्रवेश प्राप्त स्नातक विद्यार्थियों के लिए ऑनलाइन दीक्षाबंध कार्यक्रम का आयोजन किया गया।

पटना। बिहार पशु चिकित्सा महाविद्यालय में नव प्रवेश प्राप्त स्नातक विद्यार्थियों के लिए ऑनलाइन दीक्षाबंध कार्यक्रम का आयोजन किया गया।

80 फीसद गोबर, 20 फीसद में अन्य अवशिष्ट गोकाष्ठ निर्माण में 80 फीसद गोबर का उपयोग किया जा रहा है।

उपयोग लकड़ी के विकल्प के रूप हो रहा है। इसके के अनुसार इसका साइज भी तैयार किया जा रहा है।