



# GUJARAT VETERINARY COUNCIL

(Statutory Body of Government of Gujarat established under Indian Veterinary Council Act, 1984)

## News Link

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### President's Message

*Greetings from Gujarat Veterinary Council*

*In the beginning of year 2020, we have lost an enthusiastic personality and elected member of GVC Dr. M. K. Patel. He will remain alive in our hearts and mind and surely he will not be forgotten. My deepest sympathies to his family.*

*In fact in the early month of 2020, we had planned a seminar and some events for the month of March 2020 but due to Covid-19 and lockdown unfortunately we had to cancel.*

*We are living through an unprecedented global situation. All of us are suffering in one way or the other and are compelled to adjust to the 'New World'. At the same times we have learnt a lot from COVID-19 pandemic. It has given us time to reflect on who we are and what was important to us before the pandemic struck.*

*At this time, there is no scientific evidence that companion animals play a significant role in spreading SARS-CoV-2, the virus that causes corona virus disease 2019 (COVID-19). Based on the limited data available, the risk of animals spreading COVID-19 to human is considered to be low. We are still learning about this virus, and it appears that, in some rare situations, people can spread the virus to animals. Further studies are needed to understand if and how different animals could be affected by the virus, and the possible role of animals in the spread of COVID-19.*

*I came to know that a few of our Veterinarians tested positive for the COVID – 19 and most of them have fortunately recovered but sadly we have lost some of our fellowvets.*

*As we move through this challenging and uncertain time, I wish good health and safety to all veterinarians, colleagues and their loved ones. Take care of yourselves so that you can continue to help others. I truly appreciate the hard work and ingenuity shown by all of you.*

*FsThakar*

(Dr. Falguni S. Thakar)

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## GVC NEWS & APPEAL

- Dr. M. K. Patel, The Executive Member (Elected), Gujarat Veterinary Council and Asst. General Manager (P&I), Panchamrut Dairy, Godhra had passed away on 25<sup>th</sup> January, 2020. May his soul rest in peace. Our sincere condolences are with his family. He had contributed a lot to our profession and Veterinary fraternity.
- The post of Assistant Registrar, GVC, which was previously filled with Veterinary Officer (Class-2) is upgraded with effect from 01/08/2020 and filled with Assistant Director of AH (Class-2).
- As per Gujarat State Veterinary practitioner's register, details of the GVC members as on 31st March, 2020, are as below.

a. Active Members	:	-	3518
b. Deregistered Members	:	-	127
c. Internship Pre. Registration	:	-	265
d. Registration transferred to other States	:	-	52
e. Invalid Registration Numbers	:	-	798
f. Deceased Members	:	-	176
<b>Total</b>			<b>: - 4936</b>
- The Government of Gujarat re-constituted Gujarat Veterinary Council with notification No. GHKH/131/2019/GVC/112014/27/P.2, dated 16th November, 2019; of Agriculture, Farmers Welfare & Co-Operation Department, Govt. of Gujarat. Dr. Falguni S. Thakar, Director of Animal husbandry has been nominated as ex-officio member of Gujarat Veterinary Council in place of Dr. A. J. Kachhiapatel; Dr. Hita Patel, Joint Director, Animal husbandry, as Registrar, Gujarat Veterinary Council, in place of Dr. Poshak R. Patel and Dr. M. N. Brahmabhatt (I/C), Dean/Principal, College of Veterinary Science and Animal husbandry, Anand, in place of Dr. A. M. Thaker.
- Those Veterinarians who have not renewed their registration as per the I. V. C. Act and if any negligence occurs within that period, he/she may face the criminal/legal consequences thereof and will be solely responsible for the said matter.
- All GVC members are also requested to inform the Council for any change in Postal address, Mobile number, e-mail address, Place of working etc to update your record in the Council.
- According to the I.V.C. Act, 1984, Section 30(a), no person other than a registered veterinarian, shall hold office as veterinary physician or surgeon or any other like office (by whatever name called) in Government or in any institution maintained by a local or other authority.

As the objective of this news letter is to develop continuous interaction between the council and the registered veterinarians, any achievement / significant contribution made by the registered professionals may please be communicated (at registrar@gvc.org.in or mkjhala\_2003@yahoo.co.in) for sharing the same with all concerned through this News letter. This News letter is also available on the website of the Council [www.gvc.org.in](http://www.gvc.org.in).

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## ◆ ANIMAL HUSBANDRY DEPARTMENT

### ➤ **Shreshth Pashupalak Puraskar Distribution Program**

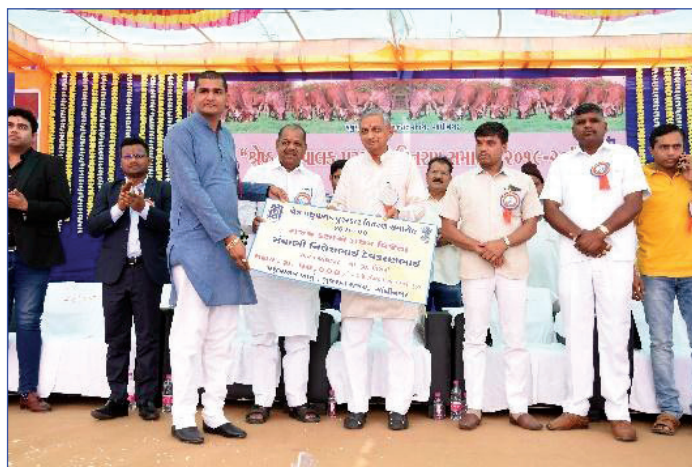


In Gujarat State, a scheme “*Shreshth Pashupalak Puraskar Distribution Program*” was started in 2014-15. Objective of the scheme is to motivate the Dairy farmers who are keeping Cows and Buffalo for milch purpose for their livelihood in rural areas, so as to improve their income by diverting them from traditional to scientific approach of animal keeping.

The awards are given under three categories at Taluka level, District level as well as State level. The selection of the winners is done on the basis of Management, Health, Breeding, Milk Production with value addition, Record Keeping etc. The scheme does not directly benefit to animal productivity, but in the field of Animal Husbandry, the Dairy Farmers are motivated for the maintenance of animals with high genetic traits, get assistance for the Animal Husbandry improvement program and practical guidance on the Animal Husbandry practices. Other Dairy Farmers get motivation (guidance) from the award winner Dairy Farmers to improve their Animal Husbandry practices and

as a result improve profitability and economic status. They will also get motivation to maintain high genetic (genetic preservation) qualities of the best breeds of cows and buffaloes in the State and thus, native livestock breeds will be preserved.

This scheme requires online application by the Dairy Farmers through the *i-khedut* portal. The first, second and third prizes for the State level are Rs. 50,000/-, Rs. 30,000/- and Rs. 20,000/- respectively, while first and second prizes for District level are Rs. 15,000/- and Rs. 10,000/- respectively, and first and second prizes of Taluka level are Rs. 10,000/- and Rs. 5,000/- respectively. The selection of the winners is done after a field visit of the Dairy Farmers by the selection committee of various levels.



The *Shreshth Pashupalak Puraskar* Program for the Year 2019-20 was organized at *Krishi Vigyan Kendra*, Muwalia Farm, Dahod on 29<sup>th</sup> February, 2020 and was presided and inaugurated by Shri Kunwarjibhai Bavaliya, Hon'ble Minister of Water Supply, Animal Husbandry, Rural Housing and Shri Bachubhai Khabad, Minister of State for Animal Husbandry.

State Level *Shreshth Pashupalak Puraskar* winners – Year 2019-20

Sr. No.	Name of <i>Pashupalak</i>	Village	Taluka	District	Prize	Prize Rs.
1	Sanghani Nileshbhai Devkaranbhai	Chanchapar	Morbi	Morbi	First	50,000
2	Patel Kaushikbhai Ramanbhai	Kurchan	Amod	Bharuch	Second	30,000
3-1	Patel Manjulaben Naginbhai	Telnar	Kapadvanj	Kheda	Third	20,000
3-2	Rabari Vijaykumar Naranbhai	Gopalpura	Anand	Anand	Third	20,000



### ✦ **ANIMAL HUSBANDRY BRANCH, DISTRICT PANCHAYAT, KUTCH**

#### • **Surgical Management of Fetal Dystocia due to Breech Presentation in Kankrej Cow**

(by Dr. B. M. Rajan, Dr. K. G. Brahmaxatri, Dr. V. K. Chauhan, Dr. H. P. Gori)

There are maternal and fetal indications for performing a caesarean section. In posterior presentation, when both hind legs are retained in uterus, a common condition than unilateral retention, is called breech presentation. Breech presentation constitutes one of the most difficult types of dystocia dealt by obstetrician. Usually on per-vaginal examination, calf's tail is recognized. Degree of engagement of fetus in maternal pelvis varies and in some cases the hand cannot be passed to hock of calf. The reported case is of prolonged dystocia in a Kankrej cow due to dead fetus having breech presentation inside womb with a history of completed gestation and rupture of water bag

normally without any further progress since last 6-7 hours. Per-vaginal examination was carried out and diagnosis of dystocia due to breech presentation was made as evidenced by presence of tail of the fetus in the birth canal along with bilateral hip flexion in the posterior presentation. Additionally, anal reflex was also absent. It was impossible to deliver the dead calf per-vaginally due to bilateral hip flexion, so caesarean section was performed.

The cow was pre-medicated with anti-shock therapy. Local infiltration anesthesia was achieved by using 2% lignocaine HCl. The left paramedian laparohysterotomy was performed after restraining the animal in right lateral recumbency and dead female fetus was delivered. The uterus, peritoneum, muscles and skin were sutured in the routine manner. The animal was treated with fluid therapy, antibiotic and supportive drugs. The same was repeated for subsequent 5 days post-operatively. Antiseptic dressing was done on alternate days using povidone iodine. The skin sutures were removed after 12 days of the caesarean section.

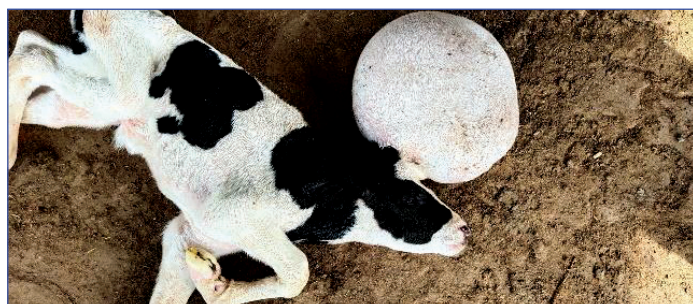


### **ANIMAL HUSBANDRY BRANCH, AMUL DAIRY**

#### • **Surgical Management of Hydrocephalus in a Calf**

(by Dr. Mohsin S. Vahora, Amul Dairy)

Hydrocephalus is an accumulation of excessive fluid in durameter or ventricles of brain thereby leading to the



swelling of the cranium. It is mainly due to abnormal development of the foetus during pregnancy; however, hereditary, infectious, and nutritional factors can also predispose this condition. This condition has been reported occasionally in the ewe, doe, mare, and sow, whilst it is rarely seen in cattle and buffalo. Hydrocephalus occurs mainly due to three reasons, as excessive production of CSF, defective absorption of CSF, and interference in the passage of CSF. Hydrocephalus may cause increased intracranial cerebral pressure, progressive enlargement of the head, convulsions, mental disability, and even death. This communication describes a case of congenital hydrocephalous in a day-old crossbred male calf.



An animal owner of village-Bochasan, taluka-Borsad, dist.-Anand registered a visit in AMUL DAIRY with a complaint that on his farm, a new borne calf had an abnormal growth on its head. On visit, the calf was found in lateral recumbency, showing the symptoms of the abnormal dome-shaped growth on skull, weakness, poor suckling reflex, head tremors and convulsions. It could not coordinate its movements to stand or walk at the time of examination.



The surgical site was thoroughly cleaned and shaved. After scrubbing and preparation of the site, 2% lignocaine hydrochloride was infiltrated around the swollen part of the head for achieving the local analgesia. The site was then scrubbed and painted with povidone-iodine. A circular stab incision was made around the site. The whole mass along with the fluid was removed by making deep incision. Then, the skin edges were opposed in horizontal mattress



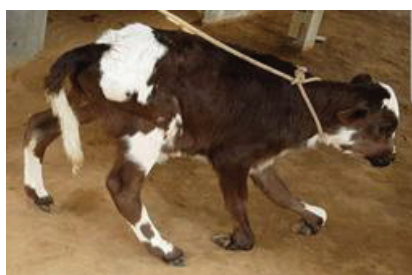
pattern with non-absorbable suture cotton thread. The calf was treated with Inj. Oxy LA @ 20mg/kg body weight i/m and Inj. Dexamethasone as total dose approx. 5 mg i/m for a calf (2mg/ml).

Antiseptic dressing of suture line with betadine was done daily for 10 days postoperatively. After 10 days, the sutures were removed and the animal showed uneventful recovery.

### • Surgical Management of Knuckling in a Calf

(by Dr. Mohsin S. Vahora, Amul Dairy)

In newborn calves, contraction or shortening of the flexor tendon results into knuckling of the fetlock joint frequently. It is an excessive flexed condition of fetlock joint occurring due to heritable factors i.e., congenital, or abnormal posture of foetus in uterus.



A case of a calf with improper and difficult gait with both forelimbs at village Bamangam was visited for treatment.

Upon examination, it was found that the calf had contracted tendons of both the forelimbs since birth. Hence, Tenotomy i.e surgical cutting of the contracted tendon was done.

The area was shaved. Local anaesthesia was given at the preparation site. The twisted limb was pulled and kept stretched throughout the surgical procedure. A vertical incision of 3-4 cms was given at the site and the tendons were located by careful palpations at the site. Tendons were then held and cut resulting in immediate extension of the fetlock joint. To prevent infection, antibiotic was used locally before suturing the skin flap. A tight support was provided by using P.O.P. Antibiotic and anti-inflammatory drugs were also given to the calf to prevent infection and to overcome the pain.



### • Surgical Management of Tube Cystostomy in a Calf

(by Dr. Mohsin S. Vahora, Amul Dairy)

Occurrence of urolithiasis is significantly more common in male ruminants compared to females due to their anatomical conformation of the urethral tract. Calculi formation usually results from a combination of nutritional, physiological, geographical, seasonal, age, sex and management factors. Treatment of obstructive urolithiasis is definitely surgical, once the obstruction is complete. Surgical tube cystostomy is the most commonly used treatment for long term management of urolithiasis in animals. It redirects the urine through a catheter placed from urinary bladder and existing through the abdominal wall. The present case study described the clinical signs and surgical management of obstructive urolithiasis.



Figure 1: Site for lumbo sacral nerve block



Figure 2: Site for tubecystostomy

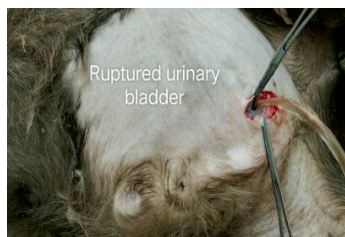


Figure 3: Showing ruptured bladder

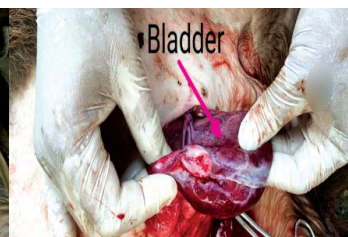


Figure 4: showing bladder



**Figure 5: Foleys catheter inserted into bladder**

**Figure 6: After 1 month of surgery**

A case of 3 months old buffalo male calf was referred having complete retention of urine since last 2 days at Borsad. Clinical signs were complete anorexia or inappetence, stranguria or anuria, reluctant to walk and frequent attempt to urinate due to partial or complete obstruction. On physical examination, bilateral distension of lower abdomen suggesting ruptured bladder was found.

The calf was anaesthetized with local anaesthetic 2% lignocaine at lumbosacral junction by lumbosacral nerve block along with line infiltration at the surgical site. The animal was placed on right lateral recumbency. Left side of the abdomen near the rudimentary teat was cleaned, shaved and scrubbed with antiseptic solution. After scrubbing, an incision was made nearly anterior to the rudimentary teat. Bladder was located after separating subcutaneous

tissue and muscles by blunt incision. The bladder was found ruptured and hence, Cystorraphy was done before using foleys catheter. After Cystorraphy, subcutaneous tunnel was made parallel to the prepuce by passing straight forcep through the subcutaneous tissue at the end, for the catheter outlet. Foleys catheter was passed from outside to abdominal cavity where the catheter tip was held in stillette and directly stabbed the bladder and its bulb was inflated with the normal saline for fixation. Muscles and sub cutaneous tissue were sutured with catgut no.2. The foleys catheter was sutured at multiple sites on the ventral abdomen.

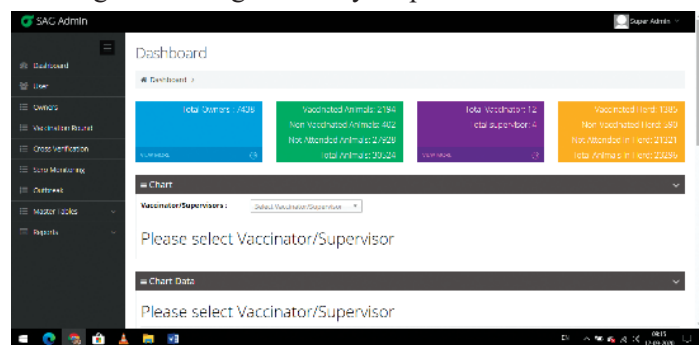
Postoperative treatment, 3 to 4 times long acting oxytetracycline @ 20mg/kg b.wt. and dexamithasone given on every 4th day along with ammonium chloride orally daily @ 200 mg/kg b.wt. b.i.d. for minimum 15 to 20 days. Application of local antiseptic dressing with povidone iodine was advised for a week. The catheter was allowed to drain freely for minimum 10 to 15 days until normal urination resumed. The catheter was removed on 11th day of surgery after the confirmation of normal urination through the external urethral orifice. The calf recovered completely.

## ✿ Sabarmati Ashram Gaushala, Bidaj Farm ✿

### • Use of Information Technology in Animal Husbandry – Case study of e-Rasiya mobile application

(by Dr. Jayesh Patel and Dr. C. T. Patel)

Sabarmati Ashram Gaushala established in 1915 by Mahatma Gandhi, is one of India's premium centre engaged in the use of advanced genetic improvement and reproductive technology to improve animal and agricultural productivity. The livestock of semen station has immense genetic potential for growth of country. The biggest obstacle to such a growth is the large-scale prevalence of diseases like Foot and Mouth (FMD), Haemorrhagic Septicaemia (HS), Brucellosis etc. which adversely affect the animals' productivity. In order to prevent these diseases, vaccination with higher coverage can only help.



To capture all kind of transaction pertaining to vaccination, e-Rasiya application has been developed with the intervention of Information Technology that makes the operations of mass vaccination stress free and can act real time for bridging the gap. The e-Rasiya app has two parts namely:

1. Android (Mobile) application for end user
2. Admin (web) application

The benefits of the intervention of Information Technology in programs like mass vaccinations could be as follows:

- 1) To have complete view about the day to day activity
  - With real time analysis we can real time identify the area of improvement.
- 2) To correct the deviation in the process
  - A real time cross verification of the vaccination is possible that not only helps in immediate correction of the deviation but also helps in taking preventive measures.
- 3) Help in real time analysis of village wise and farmer wise vaccination coverage trends
  - It helps a lot in making decision of the targeted area for pushing the activity during the



vaccination round and also planning awareness campaigns. This makes the micro level planning possible.

- 4) Make the processes more agile
  - Live location of vaccinators is visible on screen and capturing live location of animals in the data base accelerate the establishment of robust and transparent system.
- 5) Help in increasing coverage of vaccination by re-scheduling non-vaccinated animals
  - Usually we avoid vaccinating advance pregnant and sick animals. This tool helps in re-scheduling the vaccination of such animals at appropriate time.

Apart from this, the application is very much user friendly. It saves lot of time of the vaccinator. The entry of vaccination and all related transactions is just on the finger tips. It takes very less time compared to recording the same in registers.

### Android (Mobile) application

The app has various features viz. owner registration, animal registration, vaccination, cross verification, sero-monitoring, outbreak reporting, re-registration and re-tag. This app is very user friendly and everyone can use after brief training.

After owner and animal registration, vaccination page is designed in such a way that vaccination entry remains one touch away to enter and save the vaccination data of all animals of the farmer. Besides this, it has also facility like animal re-registration and re-tag at same site. This page is designed to collect each and every animal's vaccination record whether animal is vaccinated or not. It also captures latitude and longitude of the location of animals. Another amazing feature of e-Rasiya application is cross verification of vaccinated animals that helps us in building confidence with transparency for the data available in the database. During vaccination, this functionality facilitate in doing timely verification of the vaccination information by randomly selecting the animals from the data base.

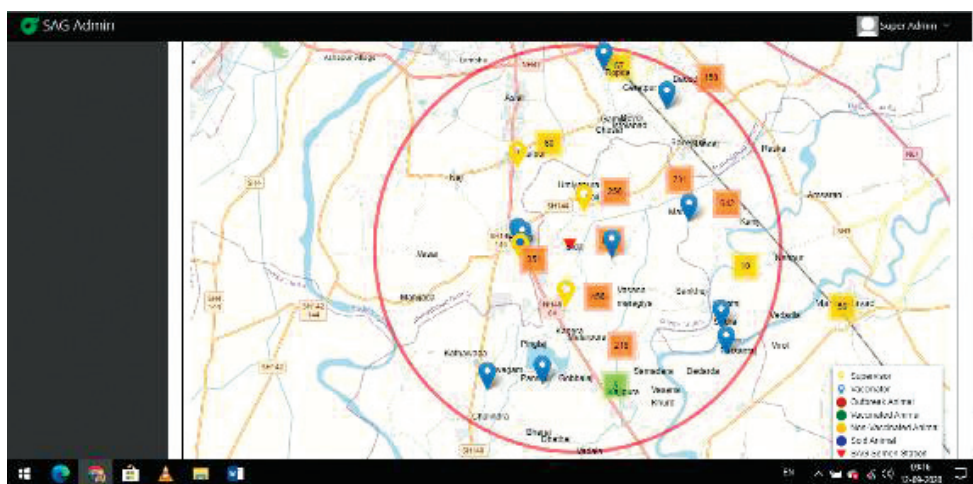
Sero monitoring is the gold standard tool for measuring population immunity. This feature is also provided in the e-Rasiya application. The user can add sample detail during pre-vaccination and app provides back countdown from 30th to 0 day to collect the post vaccination sample without fail. This is very easy, fast and efficient.

The outbreak reporting is equally important parameter to take immediate action in preventing further spread of disease. With the help of e-Rasiya app., the user can report the disease outbreak at field level itself to concern authority immediately to take necessary action to counter it. This feature has all the facility that require to report any outbreak viz. owner detail (Name, Village, Hamlet, Mobile number), animal detail (Species, Breed, Sex, Age), outbreak reported by, outbreak reported date, date of first sign of disease, sample details, lab selection, vaccination details of animals of last two rounds of particular farm, upload images (facility to upload images of various lesions of disease on animal itself).

### Administrator (web) application

It helps in managing the entire activity of vaccination program. The dashboard provides details pertaining to population, number of vaccinated and not vaccinated animals. Admin can monitor performance of each vaccinator by viewing vaccinator graph showing number of vaccinations each day. The system can generate and export various reports viz. animal registration, vaccination, herd, owner not attended, animal status, cross verification, sero-monitoring, disease outbreak and laboratory test result. The user can also track the exact location of each animal and vaccinator working in field by using map.

Similar to e-Rasiya, various app can be developed and integrated to each other for ease of working and managing resources in the field of Animal Husbandry and Veterinary Treatment. The success of any app mainly depends on ease of operation to the user and gives desired information to the farmers, Middle Level Management and Top Management on real-time basis. This can be achieved by keeping requirement of each stake holders. It should also aim to reduce time and efforts and get rid of paper management. While developing the e-Rasiya app, team has consulted various stake holders and organized series of meetings with them to get requirement of each stake holders.



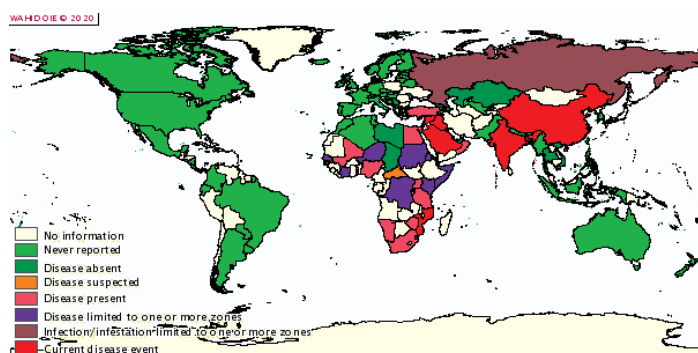


# Lumpy skin disease: An emerging threat for Indian Cattle and Buffaloes



Dr. Amit Kanani, Dr. Nisha Shah and Dr. Bhavin Patel  
Department of Animal husbandry, Government of Gujarat

Lumpy skin disease (LSD) is an infectious, eruptive, occasionally fatal disease of cattle characterized by nodules on the skin and other parts of the body. Secondary bacterial infection often aggravates the condition. LSD has been termed a “neglected disease” due to its historic natural occurrence of being restricted to Africa and, occasionally, Israel. However, after its slow spread throughout the Middle East, the disease is now experiencing a resurgence of research interest following a recent and rapid spread into more northern latitudes. Since 2000, it has spread to several countries of the Middle East and in 2013 was confirmed in Turkey. In India, the first occurrence of LSD in cattle reported from five districts of Odisha state in August 2019. Now disease is rapidly spread to many other states of India included Assam, Kerala, and Maharashtra. LSD like symptoms also noticed in Karnataka and Madhya Pradesh. So far in Gujarat no confirmed cases reported but veterinarian must have to be alert for this new emerging disease.



(Disease distribution maps: Lumpy skin disease, World Animal Health Information Database (WAHIS) Interface)

## Etiology:

LSD is caused by Lumpy skin disease virus (LSDV), a virus from the family *Poxviridae*, genus *Capripoxvirus*. Sheeppox virus and Goatpox virus are the two other virus species in this genus. LSDV is very resistant to inactivation, surviving in necrotic skin nodules for up to 33 days or longer, desiccated crusts for up to 35 days, and at least 18 days in air-dried hides. It can remain viable for long periods in the environment. The virus is susceptible to sunlight and detergents containing lipid solvents, but in dark environmental conditions, such as contaminated animal sheds, it can persist for many months.

## Hosts :

LSDV is highly host specific and causes diseases only in cattle (*Bos indicus* and *B. taurus*) and water buffalo (*Bubalus bubalis*). LSDV is considered as not zoonotic but recent finding in Egypt, suggested that LSDV can infect human, showing skin affections resembling that of cattle. Modes of transmission are by direct contact with infected cattle, infected utensils, aerosol, laboratory acquired infections and person to person transmission, and apparently have a highly contagious nature in man.

## Epidemiology :

Morbidity rate varies between 10 and 20%. Mortality rates of 1 to 5% are considered usual. During Odisha outbreak in August 2019, 182 of 2,539 cattle were affected with an apparent morbidity rate of 7.1% and no mortality. The principal means of transmission is believed to be by arthropod vector. Though no specific vector has been identified to date, mosquitoes (e.g. *Culex mirificens* and *Aedes natrionus*), biting flies (e.g. *Stomoxys calcitrans* and *Biomyia fasciata*) and male ticks (*Rhipicephalus appendiculatus* and *Amblyomma hebraeum*) could play a role in the transmission of the virus. Infected bulls can excrete the virus in the semen, however transmission of LSD via infected semen has not been demonstrated. Skin nodules, scabs and crusts contain relatively high amounts of LSDV. LSDV can be isolated from blood, saliva, ocular and nasal discharge, and semen. LSDV is found in the blood (viraemia) intermittently from approximately 7 to 21 days post-infection at lower levels than present in skin nodules.

## Clinical Signs:

Clinical signs range from inapparent to severe disease. There is no current evidence of variation in virulence regarding





the different LSDV strains. Fever that may exceed 41°C with marked reduction in milk yield in lactating cattle with depression, anorexia and emaciation. Cutaneous nodules of 2–5 cm in diameter develop, particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of the febrile reaction. These nodules are circumscribed, firm, round and raised, and involve the skin, subcutaneous tissue and sometimes even the underlying muscles. Large nodules may become necrotic and eventually fibrotic and persist for several months (“sitfasts”); the scars may remain indefinitely. Small nodules may resolve spontaneously without consequences.

### Differential Diagnosis:

Severe LSD is highly characteristic, but milder forms can be confused with 1) Bovine herpes mammillitis (*Bovine herpesvirus* 2) (sometimes known as pseudo-lumpy skin disease) 2) Bovine papular stomatitis (Parapoxvirus) 3) Pseudocowpox (Parapoxvirus) 4) Vaccinia virus and Cowpox virus (Orthopoxviruses) – uncommon and not generalized infections 5) Dermatophilosis 6) Demodicosis 7) Insect or tick bites 8) Besnoitiosis 9) *Hypoderma bovis* infection 10) Photosensitization 11) Urticaria 12) Cutaneous tuberculosis 13) Onchocercosis.

### Sample Collection and Dispatch for Diagnosis :

- 1) **Whole Blood:** Collect sufficient volume of blood (a minimum of 5 ml) from the jugular or tail vein (coccygeal vein) in sterile vacutainers (10 ml) with EDTA (purple stoppers) and store at refrigerated temperature (4°C) until shipping in ice within 2-3 days.
- 2) **Serum:** Collect sufficient volume of blood (3/4 vol. of tube) from the jugular vein in sterile vacutainers (10 ml) without anticoagulant (red stoppers). After collection, tubes should be allowed to stand at ambient temperature for at least 1-2 hours in an upright position to let the clot begin to contract. Store the serum vacutainers at refrigerated temperature (4°C) until shipping in ice within 2-3 days. If shipping period is >48 hrs., ship on dry ice.
- 3) **Skin nodular lesions or scabs:** Restrain the animal and use suitable local anaesthetic to avoid injury to both animal and sample collector. Collect skin biopsy from skin nodules or scabs (2-4 numbers) preferably from upper body parts of each animal and place them in sterile leak-proof containers having 4-5 ml of viral transport medium or sterile phosphate buffer saline with antibiotics (Streptopenicillin). Store the samples at refrigerated temperature (4°C) until shipping in ice. If shipping period is >48 hrs., ship on dry ice.

- 4) **Swabs (Ocular, Nasal or Oral):** Collect samples using sterile swabs and place into leak-proof sterile tubes having 1ml of viral transport medium or sterile phosphate buffer saline with antibiotics (Streptopenicillin) and store at refrigerated temperature (4°C) until shipping in ice. If shipping period is >48 hrs., ship in dry ice.

Samples should be labelled properly before their dispatch to diagnostic laboratory as soon as possible to prevent them from deteriorating and to ensure a reliable result, as well as to prevent the samples and the environment from being contaminated during transport. In India, NIHSAD, Bhopal and NIVEDI, Bengaluru are the ICAR institutes where confirmatory laboratory diagnostic facility is available.

### Laboratory Tests:

LSDV is often strongly suspected based on the characteristic clinical signs. PCR and real-time PCR are used to detect viral DNA in fluids or tissues to confirm the disease. Virus isolation and electron microscopy can be used for diagnosis but are relatively expensive and time-consuming techniques.

Serological test like Virus neutralization test can be used to detect neutralizing antibodies in immune cattle. ELISA-based serological tests to detect antibodies to LSDV have proved challenging to develop due to the complex and variable antibody response to poxvirus infection.

During Odisha outbreak in August 2019, out of 102 samples from 60 LSD suspected and 17 asymptomatic in-contact cattle tested, 29.87% cattle were positive by capripoxvirus generic PCR and 37.66% were positive by LSDV real-time PCR. All the in-contact cattle tested were negative for LSDV. Among affected cattle, LSDV genome was detected more in scabs (79.16%) than blood (31.81%) and frozen bull semen (20.45%).

### Prevention and Control:

- 1) Immediate isolation of sick/ infected animals from the healthy animals.
- 2) Any animal suspected of febrile nodular skin disease should not be introduced into the unaffected holding or farm.
- 3) In affected villages and animal holdings, the affected animals should be kept separate from unaffected animals by avoiding common grazing and thereby direct contact.

- 4) Efforts should be made to reduce the vector population in the affected areas. Unaffected animal should be applied with insect (ticks, flies, mosquitoes, fleas, midges) repellent to minimize mechanical transmission of LSD.
- 5) Ensure strict control of animal movement from affected areas to free areas and to local animal markets.
- 6) Trade of live cattle, participation in fairs, shows should be banned immediately upon confirmation of the disease in the affected areas. Cattle markets located within 10 km radius of the epicentre of infection should be closed
- 7) All biosecurity measures and strict sanitary measures for disposal of personal protective equipment (PPE) etc. used during sampling from affected animals should be followed.
- 8) Thorough cleaning and disinfection of affected personnel, premises and contaminated environment including vehicles plying through the affected animal holdings should be carried out with appropriate chemicals/disinfectants [Ether (20%), chloroform, formalin (1%), phenol (2%/15 minutes), sodium hypochlorite (2–3%), iodine compounds (1:33 dilution), quaternary ammonium compounds (0.5%)].
- 9) In cases of mortality, animal carcass should be disposed of by deep burial.
- 10) Awareness campaign regarding the clinical signs and production losses due to LSD should be conducted. Reporting to the veterinary authority should be done immediately when suspected cases are noticed.
- 8) Feeding of liquid food, soft feed and fodder and succulent pasture is recommended for the infected animals.

### **Prophylactic Vaccination:**

- 1) “Homologous” LSDV live attenuated vaccine strain for example “Neethling” LSD strain
- 2) “Heterologous” sheeppox or goatpox virus live attenuated vaccine strain.
- 3) A local reaction at the site of inoculation, as well as fever and reduction in milk yield, may follow vaccination with live, attenuated capripox virus.
- 4) Currently, no new generation recombinant capripox vaccines are commercially available.

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### **Treatment:**

- 1) Sick animals are to be kept in isolation.
- 2) Symptomatic treatment of affected animals may be carried out in consultation with veterinarian.
- 3) Administration of antibiotics for 5-7 days to check secondary infection may be considered on case to case basis.
- 4) Administration of anti-inflammatory and anti-histamine preparation may also be considered.
- 5) In case of pyrexia, paracetamol can be given.
- 6) Application of antiseptic ointment with fly-repellent property over the eroded skin is recommended.
- 7) Parenteral / oral multivitamins is advised.



## COLLEGE OF VETERINARY SCIENCE & A.H., AAU, ANAND

### Fellowship Awarded:

Dr. M.N. Brahmabhatt, Principal & Dean, has been conferred upon Fellowship Award of Association of Animal Scientists (F.A.A.S.-2020) for his outstanding contribution for advancement of Science and Welfare during first Annual Convention of Association of Animal Scientists at College of Veterinary Science and Animal Husbandry, Mhow (M.P.) on 06/03/2020.



### New Building of Animal Biotechnology:

A new feather of a building for Animal Biotechnology Laboratory, being constructed with grant from Government of Gujarat, ICAR and generous donation from Dr. (Late) Mahendra Varia family (presently in USA), has been added to the infrastructural facilities for faculty of Vet.Science. The building was named as “Dr. Mahendra and Dr. Chandra Varia Research Centre”, and inaugurated by Dr. R.V. Vyas,



Hon'ble Vice-Chancellor, AAU, Anand and Dr. (Mrs.) Chandraben M. Varia (a leading Human Gynaecologist & Practitioner, Kentucky) with her more than a hundred members of entire family as well as other dignitaries of AAU on 7th January, 2020.

### Recognition of new Livestock Breeds:

Recognition of New Livestock Breeds Dagri Cow (in 2020) Kachchhi Donkey (in 2020) Dept. of Animal Genetics & Breeding got recognition of Dagri cattle and Kachchhi donkey by NBAGR, Karnal, in January 2020, as 46th indigenous breed of cattle (Accession No. INDIA\_CATTLE\_0400\_DAGRI\_03046) and 3rd indigenous breed of donkey (Accession No. INDIA\_DONKEY\_0400\_KACHCHHI\_05003), respectively.



### Release of Booklet on FAQs on Rabies:

Dept. of Vet. Microbiology, published a booklet in vernacular entitled “Rabies: Frequently Asked Questions and Answers” edited by Dr. V.R. Nimavat, Dr. B.B. Bhandari, Dr. R.A. Mathakiya, Dr. M.K. Jhala and Dr. M.N. Brahmabhatt. The booklet was released by Dr. R.V. Vyas, Hon'ble Vice Chancellor, AAU, Anand during the inaugural function of 16th Joint AGRESCO Meeting held on 12th March, 2020 at Auditorium Hall of B. A. College of Agriculture, AAU, Anand. The Booklet is accessible in PDF format on AAU's website.



### Rabies Awareness Program for school children and parents

Dept. of Vet. Microbiology organized an interactive session under Rabies Awareness Program for children



in collaboration with BAPS Vidya Mandir, Bakrol (Dist. Anand) (300 students) on 7th Feb., 2020, and Gyanyagya Vidhyalay, Mogri, Anand, (460 students) on 4th March 2020 at Seminar Hall, Kapila Complex.



#### • **Unlocking the “Lockdown”**

During the lockdown period, multiple complicated surgeries were performed successfully in large and small domestic animals including pet animals at Surgery department, along with counselling of pet owners on Whatsapp or others forms of communication, inquiring if COVID -19 can infect animals or not and counselling was done including safety measures.



Surgery of an extensive growth at hoof region in a Police Horse, Surat Horse with extensive traumatic injuries repaired under general anesthesia Operative Surgery Treatment of corneal ulcer in a Pug During the lockdown period due to COVID-19, approx. 850 animals, comprising 646 dogs, 114 sheep and goats, 17 horses, 16 cows, 09 buffaloes and 15 birds and 36 animals of other species being brought from various



parts of state were provided emergency and critical care including major and minor surgeries by the technical and other staff members of the Veterinary Clinical Complex. The ailments like colic in horses, fractures and injuries due to automobile accidents, food poisoning, dystocia, urinary obstruction and certain congenital anomalies were attended through surgical intervention on emergency bases.

#### • **One Day Seminar Organized on “The Legal System and Veterinarian’s Role”**

A one day seminar on “The Legal System and Veterinarian’s Role” was organized on Feb., 1, 2020 Dept. of Vet. Med., in collaboration with Dept. of AH, GOG under the aegis of “Assistance to State for Control of Animal Diseases (ASCAD)” in presence of Dr. M. N. Brahmhatt, Dean, Dr. N. H. Kelawala, VC, Kamdhenu Univ., Gandhinagar, Dr. Falguniben Thakar, Dir. of AH., Chitra Ratnoo, Addnl. Chief Judicial Magistrate & Senior Civil Judge, Anand, and Dr. Vikram Desai, Retd. Principal, Law College, Surat. Four lead papers, viz., Legal Procedures in Veterolegal Cases (by Madam Shubhada D. Tulankar, President, Consumer Disputes Redressal Forum, Mumbai), Wildlife Laws: Basic Aspects and Role of Veterinarians (by Dr. Ram Ratan Nala IFS, Director of Sardar Patel Zoological Park, Gujarat), Rational Approach to Vetero-legal cases in the Field (Dr. A.N. Kanani, In-Charge Jt. Dir. of Animal Husbandry) and Forensic Toxicological Investigation in Veterinary Cases (by Dr. J. F. Mansuri, Senior Faculty, Gujarat Forensic Science University, Gandhinagar) were presented. Seminar was cloncluded by vote of thanks by Dr. S.K. Raval, organising secretary.





## COLLEGE OF VETERINARY SCIENCE & A.H., SDAU, SARDARKRUSHINAGAR

### • INAUGURATION OF A NEW BUILDING OF VETERINARY CLINICAL COMPLEX

A newly built Veterinary Clinical Complex at Sardarkrushinagar was inaugurated on November 29, 2019 by Shri Acharya Devvrat, Hon'ble Governor of Gujarat and the Chancellor of the University, Shri Ranchodhbhai Chanabhai Faldu, Hon'ble Minister of Agriculture, Rural



Development and Transport, Govt. of Gujarat and Dr. R.K. Patel, Hon'ble Vice Chancellor, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar.

### • Training Programme on "Basic statistical techniques used in Veterinary and Animal Sciences"

Department of Animal Genetics and Breeding organised a training programme for Post-Graduate students on "Basic statistical techniques used in Veterinary and Animal Sciences" during 28-29 January, 2020. Total 37 students from different disciplines of Veterinary & Animal Sciences actively participated in this training. During the training hands-on practice for basic statistical operation using MS-Excel and R programme were given to the participating



students. In valedictory session, Dr. D.V. Joshi, Dean & Principal, Veterinary College urged all the participants to utilize the skill received during these two days for refining research planning and interpretation of the results.

### • Webinar on "Environment Protection for Improving Human and Animal Health"

College of Veterinary Science & Animal Husbandry celebrated the World Veterinary Day 2020 by organising the Webinar on "Environment Protection for Improving Human and Animal Health" on 25<sup>th</sup> April, 2020 at 16:30 to 18:00 PM. The webinar started with reading of message by Hon'ble Vice Chancellor Dr. R. K. Patel. He, in his message appreciated the contribution of veterinary community in society and specially mentioned the round the clock clinical services render to sick animals by Veterinary Clinical Complex of the College. He appreciated the efforts of Veterinary College to organize such event using virtual platform and wished grand success. Dr. D. V. Joshi, Dean Veterinary College, in his opening remarks and welcome address, congratulated all the students and faculty members on occasion of World Veterinary Day and informed regarding contribution of Veterinary Professionals towards welfare of animal and farming community. It was followed by expert lectures by invited speakers viz., Dr. Surendra Gupta, Renowned Physician and Health Care Consultant, Palanpur and Dr. Sunil Patel, Veterinary Officer, State Animal Husbandry Department, Government of Gujarat. Both the speakers delivered the theme based lectures with in depth illustration and illuminated the participants on the current issues related to human and animal health. More than 80 students and faculty members joined the webinar. Few participants from JAU, NAU, RAJUVAS also attended

and appreciated the event. The entire event was technically managed by IT team of University lead by Dr. H.B. Patel, Director, IT.

- **Technical seminar on “Recent trends in animal disease diagnosis and management to enhance health and productivity”**



Technical seminar on “Recent trends in animal disease diagnosis and management to enhance health and productivity” was organized by Department of Veterinary Surgery and Radiology, on 14<sup>th</sup> March, 2020 in association with Department of Animal Husbandry, Gujarat State, Gandhinagar at SDAU, Sardarkrushinagar. Dr. D. V. Joshi, Dean Veterinary College in his address welcomed all the invited guests, speakers and delegates and gave a brief account of activities carried out by the College. The dignitaries on the dais were Hon’ble Vice Chancellor Dr. R.K. Patel as a President, Dr. Falguni Thakar, Director Animal Husbandry, Gujarat State as a Chief Guest, Dr. R.N. Singh, Director of Research and Dean PGS and Dr. V.T. Patel, Director of Extension Education as Guests of Honour. Dr. R.K. Patel, in his Presidential address stressed on the need of increased production for food security of the Nation. Dr. Falguni Thakar, emphasized on the vital



role played by the Veterinarians forefront of Animal Health Issues. Expert lectures were delivered by learned speakers viz., Dr. G. N. Purohit, Professor and Head, Department of Gynecology, College of Veterinary Science, RAJUVAS, Rajasthan, Dr. Amit Kanani, Deputy Director Animal Husbandry FMD typing scheme, Ahmadabad and Dr. P. B. Patel, Professor and Head, Department of Veterinary Surgery and Radiology on animal reproduction, law and legislation and surgical abdominal disorders of large animals, respectively. The seminar was attended by 206 veterinarians from Department of Animal Husbandry, Dairy, Private Practitioners and post graduate students. Live discussions lead to concrete deliberations between veterinary practitioners and technocrats. The program concluded with Vote of Thanks by Dr. P. B. Patel, Organizing Secretary and Professor and Head, Department of Veterinary Surgery and Radiology.

- **National Webinar on “Sustainable Dairy Production through Breeding Interventions”**

Department of Animal Genetics and Breeding organised a two days National webinar on “Sustainable Dairy Production through Breeding Interventions” during 16-17 June, 2020. Total 219 participants belonging to 23 states comprising 55 field veterinarians, 68 Academicians, 26 Scientists and 70 PG students from 34 different universities and ICAR institutions participated in the event. Hon’ble Vice Chancellor, Dr. R. K. Patel in his inaugural speech noted the unique nature of this webinar where most of the stake holders of dairy sector have joined hands for idea sharing. Dr. D. V. Joshi, Dean & Principal, Veterinary College welcomed all the guest speakers and participants. Invited speakers, Dr. Vikash Vohra, Principal Scientist from Animal Genetics & Breeding division of ICAR-NDRI, Karnal, Dr. P. B. Patel from Banas Dairy and Dr. P. A. Patel from Dudhsagar dairy delivered interactive lectures on the theme of sustainable dairy production. Dr. S. S. Patil, Associate Professor in Animal Nutrition Department, Dr. J.



P. Gupta and Dr. J. D. Chaudhari from AGB Department of SDAU also delivered lectures. The online programme was concluded with Vote of Thanks by Organizing Secretary, Dr. J P Gupta.

#### • **ONLINE 10 DAYS TRAINING ON FROZEN SEMEN TECHNOLOGY**

Department of Gynaecology and Obstetrics has organized a 10 days short term online training on **“Frozen semen technology in domestic animals”** during July 7-16, 2020 to utilize the time in the era of pandemic COVID-19 for continuing veterinary professionals knowledge. Total 205 participants from all over India registered for the training. The majority of the participants were from Maharashtra (32) followed by Gujarat (31), Uttar Pradesh (22), Tamil Nadu (14) and Kerala (13) whereas, rest of the 93 participants were from rest of the states of India including North East states as well as Jammu and Kashmir. Total 14 sessions and 21 online classes (Theory + Practical) were conducted. The live but virtual demonstration of CMU graded frozen semen station like Government frozen semen station, Patan, Banas Dairy semen station, Dama, Pashu Samvardhan Kendra, Dudh Sagar Dairy, Jagudan along with our own semen collection station of LRS as well as, the live semen collection from various domestic animals like cow, buffalo, stallion, pig, goat, sheep, camel and dog was also demonstrated to participants which was highly appreciated. The legends in the field of frozen semen technology from various reputed centers like National Dairy Development Board, Anand, National Dairy Research Institute, Bangalore and Karnal, Sabarmati Ashram Gaushala, Bidaj (Gujarat), Animal Breeding Centre, Salon (UP), ICAR- Central Institute of Goat, Mathura, National Research Centre (NRC) on Equine, Bikaner, NRC on Pig, Guwahati, NRC on Camel, Bikaner, National Agricultural Innovative Project, Bangaluru, Dudhsagar Dairy, Mehsana, Banas Dairy, Palanpur, Professor of Bombay veterinary College, Mumbai shared their experience and knowledge to enrich the professional aspirants in the field of frozen semen technology. All the sessions remained full of enthusiasm of participants which was reflected by their interactions with experts.

The Hon'ble Vice Chancellor, Dr. R. K. Patel remained present during online inaugural and valedictory function to bless the participants and organizers. Dr. D. V. Joshi, Dean and Principal was the Course Director and Dr. B. N. Suthar and Dr. H. C. Nakhashi were Co-course Director. Dr. C. F. Chaudhari, who conceived the idea of the online training, was the course coordinator with Drs. T. V. Sutaria, R. K. Chaudhari, B. S. Rathod and Dr. R. D. Joshi (Banas

Dairy) as course Co-coordinator. Hon'ble Vice Chancellor appreciated the initiative and congratulated the organizers on successful completion of the training.

#### • **National Online Seminar on “Feed Additives for Improving the Efficiency and Sustainability of Milk Production in Dairy Animals”**

Department of Animal Nutrition organised a two days National online seminar on **“Feed Additives for Improving the Efficiency and Sustainability of Milk Production in Dairy Animals”** during 20-21 July, 2020. The online seminar received excellent response with 650 registered participants from all over the India. Hon'ble Vice Chancellor, Dr. R. K. Patel in his inaugural speech emphasized role of nutrition in livestock production and health and congratulated Organizing Secretary Dr. S. S. Patil, Associate Professor & Head, Department of Animal Nutrition for organising first of its kind online national seminar in the subject of Animal Nutrition in India. Dr. D. V. Joshi, Dean & Principal, Veterinary College welcomed all the invited speakers and participants. Invited speakers, Dr. A. K. Pattanaik, Principal Scientist, Division of Animal Nutrition, Center of Advanced Faculty Training, ICAR - Indian Veterinary Research Institute, Izatnagar and Dr. Dinesh Bhosale, General Manager, AB Vista South Asia, Former Chairman, CLFMA, India delivered interactive theme based lectures on **“Feed Additives for Improving Health and Feed Efficiency in Dairy Animals: A Conceptual Framework”** and **“Role and Future of Feed Additives in Dairy Animals: An Indian Perspective”**, respectively. The expert lectures were followed by total 32 oral paper presentations by the faculty and PG students. Students and faculty of Department of Animal Nutrition have brought laurels to the college and university by securing First best paper presentation award in both student and faculty (shared) category. Dr. Chetna P. Modi and Dr. P.C. Joshi got selected for First and Third best paper presentation award, respectively in PG student category. While, in staff category, departmental research work was presented by Dr. S.S. Patil and got selected for First best paper presentation award (shared) in faculty category. The online programme was concluded with Vote of Thanks by Co-Organizing Secretary, Dr. M.M. Pawar, Assistant Professor, Department of Animal Nutrition.

## COLLEGE OF VETERINARY SCIENCE & A.H., JAU, JUNAGADH

### • Webinar and Online Paper Presentation Competition



One Day Webinar and Online Paper Presentation Competition on “Environment Protection for Improving Animal and Human Health” was organized on 30<sup>th</sup> May, 2020 under Institutional Development Plan, ICAR, New Delhi. The event was aimed to educate undergraduate students and provide them platform to interact with renowned scientists of national repute, faculty members and postgraduate scholars and among themselves. Hon’ble Vice Chancellor & Director of Research and PI of IDP, Dr. V. P. Chovatia presided over the function and delivered the presidential address and emphasized importance of such webinars with active participation of students. Principal and Dean, Veterinary College, Dr. P. H. Tank encouraged the participants by interacting with them during the whole session. Dr. A. R. Ahlawat and Dr. A. K. Sharma worked hard for organizing the event.

Overall, 244 participants joined in the webinar. The first technical session had a presentation on “Environment Protection for Improving Animal and Human Health” from Padmashri Dr. Kushal Sarma, Professor & Head, Department of Veterinary Surgery & Radiology, College of Veterinary Science, AAU, Guwahati. Second technical session had a presentation from Dr. P. H. Vataliya, Director of Extension Education, Kamdhenu University, Gandhinagar. Lead papers were followed by online paper presentation competition by undergraduate students of the host institute and the best three presentations from each of the technical sessions were selected.

### • “International Yoga Day” Celebration

Sixth International Day of Yoga, themed ‘Yoga at Home and Yoga with Family’, was celebrated on digital platforms in view of the coronavirus pandemic, as per guidelines



provided by Ministry of AYUSH, Government of India on 21<sup>st</sup> June, 2020. All faculty members and students performed yoga at home with their family. The programme was framed by Dr. R. J. Raval, NSS Programme Officer as per the guidelines provided by Ministry of AYUSH and under the guidance of Dr. P. H. Tank, Principal and Dean, CoVSc&AH, Junagadh.

### • Clinical activities for the sick animals during COVID-19 lockdown

During the period of lockdown, Veterinary Clinical Complex, College of Veterinary Science and Animal Husbandry, JAU, Junagadh had stepped in to support of sick animals through offering diagnosis and treatment of various affections in small and large animals by specialized faculties of all clinical departments like surgery, medicine and gynaecology amid crisis of COVID-19 pandemic. During last three months (April to June), total 1268 animals were diagnosed and treated for various affections including 717 cases of medicine, 434 cases of surgery and 117 cases of Gynaecology. For the confirmation of diagnosis, various laboratory examinations were also carried out viz. haematology (324), biochemical examinations (57), faecal examination (56), urine analysis (18), skin scrapping (2) and diagnosis of haemoprotozoan infection (241). Additionally, 44 animals were treated in nearby villages like Shapur and Dhanfulia during the visit of ambulatory clinic and provided doorstep health services to the animals’ owners.

### • Establishment of Zebrafish Research Facility

Department of Veterinary Pharmacology and Toxicology,

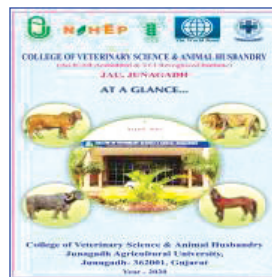


Veterinary College, JAU, Junagadh has established a new Zebrafish Research Facility under the guidance of Dr. P. H. Tank, Principal and Dean. The zebrafish is a newer emerging animal model in the fields of human and animal Pharmacology and Toxicology. Scientists all over the world are working for establishment and validation of the zebrafish as an alternative animal model for the research in Drug Discovery and Development. There are various advantages of zebrafish over other available laboratory animal models in the field of Drug development. Dr. U. D. Patel, Associate Professor and his team have made their efforts to undertake the research work in the field of Aquatic toxicology using this novel zebrafish animal model.



## • Publications

Department of Veterinary & Animal Husbandry Extension, Veterinary College, JAU, Junagadh published a booklet on 'College of Veterinary Science & A.H. at a Glance', in which all information related to college, like academic, admission process of UG & PG, all departmental information and other college activities like NSS, SRC, IDP, anti-ragging, anti-women harassment, Gender club etc. under the aegis of



ICAR-IDP funded by World Bank. Placement cell has also prepared students counselling booklet and student counselling brochure, in which every information related to students can be entered and record be kept for future.

## VANBANDHU COLLEGE OF VETERINARY SCIENCE & A.H., NAU, NAVSARI

### • Entrepreneurship training on "Commercial Poultry Farming"

Department of Instructional Livestock farm Complex, College of Veterinary Science and Animal Husbandry, NAU, Navsari organized two day training programme on "Commercial Poultry Farming" during February 27-28, 2020 under the Plan Project of Establishment of Poultry Unit. Business oriented training covered topics related to commercial management of birds with hands on training. The programme was inaugurated by the Dean & Principal, Dr. V. B. Kharadi. The programme was designed and coordinated by Dr. Yogesh D. Padheriya and Dr. J. K. Movaliya under the guidance of Dr. B. P. Brahmkshtri, Professor & Head ILFC. Total 21 poultry farmers were benefited by this training.

### • ASCAD-ISSAR- 2020

Department of Veterinary Gynaecology & Obstetrics organized a State Level seminar entitled "Innovative perceptions and tactics for improvement of Farm animals fertility" on March 07, 2020 in collaboration with Department of Animal Husbandry, GoG, Gandhinagar under the aegis of ASCAD and The Indian Society for Study of Animal Reproduction (ISSAR), Gujarat Chapter. The inaugural function was chaired by Dr. S. R. Chaudhary, Vice Chancellor, NAU, Navsari as a president; Dr. S. B. Bhagora, Regional Joint Director, Department of Animal Husbandry, GoG, Vadodara, as a Chief Guest and Mr. P. K. Patel, Managing Director, Dudhdhara Dairy, Bharuch and Dr. A. J. Dhami, President, ISSAR (Gujarat Chapter)



as a Guests of Honour. Three lead papers were delivered during the technical session. Total 158 participants from the State Animal Husbandry Department, Co-operative sector, faculties from the State Agricultural Universities and PG students of different Veterinary Colleges of Gujarat participated in the seminar.

### • Vet NAU Webinar Series-2020

During COVID-19 Pandemic situations, Veterinary college initiated VET NAU WEBINAR SERIES- 2020 from May 23, 2020 and till June 30, 2020, six technical lectures were delivered on the topics to the interest of undergraduate and postgraduate students, field veterinarians, private small and large animal practitioners and academicians using NAU e-learning facilities. Till now, total 4613 students and professionals across the country have taken advantage of these series of lectures till June 30, 2020. Dr. Dipak Suthar, Asst. Professor, Veterinary Surgery and Radiology and Dr. Lalit Modi, Asst. Professor, Veterinary Gynecology department in collaboration with IT Cell of the University are voluntarily working for organization of this webinar series. The Webinar series was also live telecasted on Facebook as well as You tube.



## KAMDHENU UNIVERSITY



### • Training program on "Hands' on In Vitro Production of Embryos"

A training program on "Hands' on *In Vitro* Production of Embryos" was jointly organized by Kamdhenu University (KU) and Gujarat Biotechnology Research Centre (GBRC), Gandhinagar during March 16-20, 2020. The training was funded by Gujarat State Biotechnology Mission (GSBTM), Dept. of Science and Technology (DST), GoG, Gujarat.

After selection, in total ten participants from different institutes of India have participated. Shri. Subhash Soni, Mission Director, GSBTM and Additional Secretary, DST, GoG; Hon. Vice Chancellor, KU, Dr. N. H. Kelawala; Dr. C. G. Joshi, Director, GBRC; Dr. D. B. Patil, Director of Research and Dean PG studies, KU graced the valedictory function and encouraged the participants to develop technicalities in this field.

## • Scientific Animal Husbandry Training Programme

Directorate of Extension Education, KU, organized one day "Scientific Animal Husbandry Training Programme" for the farmers of Satlasana taluka



on 29<sup>th</sup> February, 2020 at Shahupura, Dist. Mehsana. The programme was inaugurated by Dr. P. H. Vataliya, Director of Extension Education, KU. Shri Mulchandbhai Patel, President, Sadbhavna Trust; Dr. J. S. Patel, Associate Director of Extension Education, KU; Dr. B. N. Patel, Director Student's Welfare, KU; Shri Mangalbhai Patel and Shri Mahendrabhai Patel graced the programme. More than 175 dairy farmers and farm women from near about 30 villages of Satlasana taluka participated in the programme.

During the inaugural speech, Dr. P. H. Vataliya emphasized that although we have earned top place in milk production globally, we need to work very hard to improve the quality of raw milk as well as milk products. Shri Mulchandbhai Patel provided basic information on activities of Sadbhavna Trust and motivated farmers to adopt Integrated Farming System. Dr. J. S. Patel provided information on extension activities KU and emphasized on need of adoption of scientific animal husbandry practices by dairy farmers for their economic as well as social development. Dr. B. N. Patel informed about the academic programmes run by KU. During technical session, lectures were given by Dr. S. J. Vekariya, Dr. M. B. Rajput, Dr. G. R. Chaudhary, Mrs. Sangitaben Panchal and Mrs. Vimlaben Solanki, the latter two from Children's University, followed by question answer session and interaction with the dairy farmers and farm women.

## • Webinars

Directorate of Extension Education, KU organized two webinars on "Education Opportunities in the Veterinary, Dairy and Fisheries Sector" and "Education and Career Opportunities in the field of Veterinary Science" through Google Meet platform on 16<sup>th</sup> and 22<sup>nd</sup> June, 2020 respectively. The objective of organizing the webinar was to provide guidance to the students and their parents regarding courses and career opportunities in the Veterinary, Dairy and Fisheries sectors.

Dr. P. H. Vataliya, Director of Extension Education provided guidance on courses available for the students in KU and other SAUs and also the need of organizing such webinar. Dr. N. H. Kelawala, Hon. Vice Chancellor, Kamdhenu University also provided valuable guidance to the students and parents. Dr. R. G. Shah, Dr. V. M. Ramani and Dr. Smit Lende were the expert speakers and provided guidance on education and career opportunities in the field of Veterinary, Dairy and Fisheries Science respectively. The webinars are also available on KU facebook page.

BOOK-POST



**GUJARAT VETERINARY COUNCIL**  
(Statutory Body of Government of Gujarat established under Indian Veterinary Council Act, 1984)

To:

**From:**  
**The Registrar**  
**Gujarat Veterinary Council**  
1<sup>st</sup> Floor, Block No. 14,  
Dr. Jivraj Mehta Bhavan, Sector-10-B,  
Gandhinagar 382 010, (Gujarat)  
Tel.: 079 23244197  
**Web : [www.gvc.org.in](http://www.gvc.org.in)**  
**Email : [registrar@gvc.org.in](mailto:registrar@gvc.org.in)**