

# Annual Report 2019-20



। पशुधनं नित्यं सर्वलोकोपकारकम् ।

**Rajasthan University of Veterinary and Animal Sciences**  
**Bikaner-334 001 (Rajasthan)**



# ANNUAL REPORT

2019-20

वार्षिक प्रतिवेदन

2019-20



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**Rajasthan University of Veterinary and Animal Sciences**

**Bikaner-334 001**



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## Rajasthan University of Veterinary & Animal Sciences Bikaner (Rajasthan)

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### Foreword

After remarkable beginning in 2010, and phenomenal growth, Rajasthan University of Veterinary and Animal Sciences has entered in its tenth year of establishment. The Decade year is a historic occasion and during this year university has started many new initiatives to serve the cause of livestock farmers, society and veterinary students and fraternity of the state.

Livestock continues to be a sustainable source of livelihood and the only asset for millions of rural families. There is need to pay more attention to animal husbandry for doubling income of farmers from the agriculture sector. Therefore, to produce more trained human resources, the Hon'ble Chief Minister of Rajasthan has announced establishment of a new Veterinary College at Jodhpur during 2020.

It is matter of great pleasure that RAJUVAS has been recognized under UGC 12 B Act by University Grants Commission. All the Constituent Colleges of the University have been included in the first schedule of VCI. RAJUVAS has been awarded by Hon'ble Chief minister of Rajasthan the "e Governance Rajasthan Award" - 2019 in Rajasthan innovation meet. The efforts of RAJUVAS to save environment including establishment of rain water harvesting system, solar power stations and Bio-gas system etc which have become the model for state. RAJUVAS has set up solar power stations in all the constituent colleges in CVAS, Bikaner (491 KW), CVAS, Navania, Udaipur (93KW) and in PGIVER, Jaipur (125 KW).

RAJUVAS is promoting conservation and improvement of six indigenous cattle breeds viz. Rathi, Tharparker, Gir, Sahiwal, Kankrej and Malvi with the concept of Heritage Gene Bank at its eight Livestock Research Stations located in different districts of the Rajasthan. In order to develop awareness about importance of indigenous cow milk and milk products in society, indigenous cow milk and milk products parlours have being started in all the three constituent colleges of the University. Under the RKVY (RAFTAR) project a feed plant has been established at LRS, Beechhwal. The RAJUVAS mineral mixture is being prepared and provided to livestock owners at nominal cost.

The university has expanded its research and academic initiatives through signing of memorandum of understanding (MoUs) both at national and international level to promote collaborative research on important aspects of Veterinary and Animal Sciences. During this year, eight MoUs have been signed with Indian Oil Corporation, Central Institute for Research on Buffalos, Central Institute for Research on Cattle, National Agri-Food Biotechnology Institute (NABI), Mohali (Punjab), SKRAU, Bikaner, Startup Oasis, Rajasthan Woolen Industries Association, Bikaner and Umbrella ICAR, New Delhi. The RAJUVAS has established Livestock Innovation, Knowledge and Entrepreneurship Skill (LIKES) cell in its all the constituent colleges for skill development and self employment of students.

In order to expand the extension activity and animal husbandry services at villages and farmer door step level, Pashu Vigyan Kendra have been established in 14 districts of the state. RAJUVAS has adopted one gaushala in different districts of the state through Pashu Vigyan Kendra to provide technical guidance to each gaushala. Hon'ble Chief Minister of Rajasthan has announced that four thousand livestock owners of the state will be trained about animal husbandry techniques and management through Pashu Vigyan Kendra. A skill development centre is also being set up at RAJUVAS for capacity building of farmers, livestock owners and youth. Farmers and livestock owners of the state are getting direct benefits of new techniques and innovations developed by University through 24x7 toll free helpline service and "Dhine Ri Batayan" radio programme broadcast on all the radio stations of Rajasthan state at a time.

University is also pursuing its efforts to execute state-specific research through state sponsored 10 centers of advanced research viz. Space-based Technology in Animal Sciences, Wild life Management and Health, Ethno-Veterinary Practices and Alternative Medicine, Livestock Feed Resources Management and Technology, Engineering and Technology, Conservation and Animal Biodiversity, Organic Animal Products Technology, Disaster Management Technology for Animals, Vaccinology and Biological Products Research Centre, Animal Bio-Medical Waste Disposals Technology.

Annual Report is the manifestation of sincere commitment and unremitting endeavors of Directorate of Prioritization, Monitoring and Evaluation. I compliment the whole team for abiding and unswerving efforts in this venture for bringing out this Annual Report. This report reflects the successful outcome planners, Scientists, students and other Stakeholders. I on behalf of the University sincerely thank the office of Hon'ble Chancellor and Govt. of Rajasthan, Indian Council of Agriculture Research, Rashtriya Krishi Vikas Yojana authorities of Govt of India, Govt. of Rajasthan for their continuous support to RAJUVAS.

(Satish K. Garg)  
Vice-Chancellor



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## Executive Summary

The Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner is a constituted body corporate established under Sub-section (3) of Section 1 of the Rajasthan University of Veterinary and Animal Sciences Act, 2010. The University came into existence on 13<sup>th</sup> day of May, 2010 with Prof. (Dr.) Col. A. K. Gahlot as the Founder Vice-Chancellor of the University. The University is marching ahead to provide technical and scientific support for transforming state animal husbandry from sustainability to improved profitability. Improved production in association with productivity spurt has led the state to be one of the leaders in the country for milk, meat and wool production with the support of scientific and technological interventions and favorable policy environment. The university has three constituents colleges i.e. CVAS, Bikaner, CVAS, Vallabh Nagar (Udaipur), PGIVER, Jaipur and three private veterinary colleges affiliated to RAJUVAS, out of which two are situated in Jaipur district and one in Sikar district. The graduate education is imparted as per Veterinary Council of India's minimum standards of Veterinary Education regulation 2016. RAJUVAS is offering a 5½ years Bachelors degree of the B.V.Sc. & A.H., two years Master degree in 18 subjects and 3 years Doctoral degree (Ph.D.) in 16 subjects and two years Animal husbandry Diploma at all three constituents colleges, LRS, Chandan, LRS Nohar, LRS Dug ( Jhalawar ), LRS Bojunda (Chittorgarh) and 73 affiliated diploma institutes. University also has one KVK and 14 VUTRC and 8 LRS center

### Academic

As per the role and mandate of the Rajasthan University of Veterinary and Animal Science, Bikaner, the University is envisaged to take up "Teaching, Research and Extension" programmes in the field of Veterinary & Animal Sciences. RAJUVAS

educates and train the students through its various educational and training programmes to develop knowledge and leadership and to make them skilled professionals to face the challenges of global economic policy and system. Teaching is under the direction of chairman of the faculty of Veterinary and Animal Science, Deans of the colleges and Head of Academic Departments. Teaching is mostly by delivering lectures, use of electronic educational aids and practical in laboratory, hospitals and livestock farm. The system of examination in UG degree programme is external evaluation whereas in Master's and Doctoral programmes, internal evaluation followed. During the year 252 students graduated in B.V.Sc. & AH degree. During the period under report, 90 students were awarded M.V.Sc. degree and 23 students obtained Ph.D. degree. During the year total 4800 students were enrolled in AHDP. The constituent's colleges under RAJUVAS are:

### College of veterinary and Animal Science, Bikaner

This college was started at Bikaner on 16<sup>th</sup> August, 1954. The college is spread in an area of around 200 acres of lush green campus with well built infrastructure providing a scenic beauty, which is unique amongst the campuses of veterinary colleges of the country. Veterinarians produced by this college are globally distributed. The college has richest clinical facilities with indoor and outdoor facilities including diagnostic lab, critical care unit for pet animals, super-speciality block and Veterinary ambulatory services. Veterinary clinical complex (VCC) has been working 24x7 under Directorate of clinic. Various units of VCC are Veterinary Medicine, Veterinary Surgery & Radiology and Veterinary Gynaecology & Obstetrics. Total number of cases attended during 2019-20 was 19357. In Veterinary diagnostic



laboratory total number of sample examined 3249 for diagnosis of various ailments. During this year emergency cases treated in odd hour is 1268. Total strength of the students was 629 and 74 faculty members engaged in teaching, research and extension. During the period under report, 78 students awarded B.V.Sc. & AH degree, 52 students were awarded M.V.Sc. degree and 16 students obtained Ph.D. degree. Eleven faculty members were awarded at national level and 114 research papers have been published by faculty member. Faculty members attended 22 various conference/symposia/ workshop/ seminar.

### **College of Veterinary & Animal Science, Navania Vallabhnagar, Udaipur**

It is the second constituent veterinary college of the RAJUVAS, which is situated in the southern region of Mewar in Udaipur district. The foundation stone of this college is about 45 km from the city of Udaipur, about 7 km interior from Udaipur-Chittorgarh National Highway on Bhatewar-Navania road. The college is situated at Navania village in Vallabhnagar tehsil of Udaipur district. The premises of the college are spread over an area 892 bighas (224 hectares) of land. This college possesses well equipped laboratories, an adequate number of classrooms, requisite number of hostels, guest house, library, computer lab, stores, canteen, clinical and research facilities. It is bound to fulfill the needs of farmers and livestock owners of Southern Rajasthan. Total number of cases attended during 2019-20 was 11218. In Veterinary diagnostic laboratory total number of sample examined 512 for diagnosis of various ailments. Three health camps and four training were organized for farmer. 88 students awarded B.V.Sc. & AH degree, 23 students were awarded M.V.Sc. degree and 4 students obtained Ph.D. degree. Eight faculty members were awarded at national level and 66 research papers have been published by faculty member. Faculty members attended 13 various conference/symposia/ workshop/ seminar and 4 winter school.

### **Post Graduate Institute of Veterinary Education & Research (PGIVER) Jaipur**

Post Graduate Institute of Veterinary Education & Research (PGIVER), Jaipur was established under 12<sup>th</sup> five year plan by Govt. of Rajasthan on 18<sup>th</sup> December, 2012 and University intends to develop the Institute as 'Centre of Excellence for Higher Veterinary Education' on 5<sup>th</sup> August, 2014. Prior to this, the institute was functioning as the Apex Centre for disease diagnosis, monitoring, surveillance and further as a research centre. PGIVER, Jaipur is located on National Highway, Agra Road, Jamdoli. Total strength of the students was 489 and 67 faculty members engaged in teaching, research and extension. During the period under report, 15 students were awarded M.V.Sc. degree and 4 students obtained Ph.D. degree. Total number of cases attended during 2019-20 was 8763 and five health camps were organized for farmer. Thirteen faculty members were awarded at national level and 20 research papers have been published by faculty member. Faculty members attended 27 various conference/symposia/ workshop/ seminar.

### **Research**

Under the canopy of the Directorate of Research, eight livestock Research Station located at Chandan (Jaisalmer), Nohar (Hanumangarh), Beechwal (Bikaner), Navania (Vallabhnagar), Kodamdesar (Bikaner), CVAS, Bikaner, Bojunda (Chittorgarh) and Dug (Jhalawar) for improvement in performance traits of indigenous breeds of animal. The aims and objectives of research are to increase the overall production from livestock and to raise the living standards of weaker sections. The main activities and programmes are breed improvement programmes using superior germplasm, production of livestock feed and fodder, animal health care, nutrition and management aspects. The research at Rajasthan University of Veterinary and Animal Science is helping the state government in





production of superior bulls and up gradation of indigenous cows by providing superior germplasm and technology.

- Four types of research works are being conducted at RAJUVAS is farm based research, field based research, institutional research and students research.
- During year 2019-20 total of 43 research schemes were operational including 06 ICAR project, 18 State Plan projects, 09 RKVY project, 10 Revolving fund projects.
- Own heritage gene bank concept for development of indigenous breeds of cattle (Rathi, Tharparker, Sahiwal, Kankrej, Gir and Malvi) in Rajasthan by shaking hands with progressive Goshalas.

## **Livestock Research Station, CVAS, Bikaner**

Research project undertaken is "Evaluation and Improvement of Rathi Cattle through Breeding". The herd strength of Rathi cattle was 174 female and 50 male. Total revenue generated is 52,35,820 through sale of milk, animals, manure and vermicompost. A total 56 male and 109 female animals were distributed and sold to different gaushals/farmers/ development agencies. RAJUVAS Milk Parlour was also started at this center and different milk products like Paneer, Shrikhand, Full cream lassi and Chhach were sold. Four cattle sheds have constructed with advance techniques.

## **Livestock Research Station, Kodamdesar (Bikaner)**

It is situated 30 Km away from the district headquarter and RAJUVAS University. At present three research projects were undertaken namely "Conservation, Evaluation and Improvement of Kankrej cattle", "Conservation, Evaluation and Improvement of Sahiwal cattle" and Magra sheep unit. The herd strength of Kankrej cattle was 117 female and 43 male and revenue generated from this project is 4718923. A total 174 bull calves, 160

female calves/heifers and 108 adult cows were distributed and sold to different gaushals/farmers/ development agencies.

The herd strength of Sahiwal cattle was 193 female and 56 male and revenue generated from this project is 4204648. A total 51 bull calves, 45 female heifers and cow were distributed and sold to different gaushals/farmers/ development agencies.

Magra sheep unit with a strength of 244 (85 male and 159 female) are also maintained on farm. Under technology transfer mandate during this financial year a total of 40 animals (17 female and 23 male) were sold to different farmers /institute/NGOs.

## **Livestock Research Station, Beechwal**

Three Projects are running at this station namely "Conservation, Evaluation and Improvement Tharparker Cattle Farm", "Sirohi Goat Breeding Project" and Green Fodder and Seed Production. The herd strength of Tharparker cattle was 121 female and 39 male. Total milk production during the year was 114584.0 lit. The wet average and herd average was 8.55 and 5.62 respectively. Under technology transfer mandate, total of 21 Tharparker animals including 14 male and 7 females were distributed to Rajasthan and other states. Further, Sirohi Goat breeding unit with strength of 136 (44 male and 92 female) are also maintained under research project.

During the year 5537 Qtl. of green fodder was produced of which 2550.20 Qtl. was used for the farm animals and remaining 2986.80 Qtl. was sold to other units of RAJUVAS. During this financial year 409.70 Qtl seed/grain was produced. Total revenue generated during 2019-20 was 70,39,494.

## **Livestock Research Station, Nohar**

Research project undertaken is "Conservation, Evaluation and Improvement of Rathi Cattle through Breeding". Total herd strength of Rathi cattle was 187 female and 65 male. A total 51 bull calves, 45 female heifers and cow were distributed and sold to different gaushals/farmers/





development agencies. Total revenue generated is 83.87 lac.

## **Livestock Research Station Chandan (Jaisalmer)**

Three Projects are running at this station namely "Genetic Improvement of Tharparkar Cattle Breed", "Conservation and Development of Marwari Goat and Fodder and Fodder Seed Production. Total herd strength of Rathi cattle was 252 female and 45 male. Further, Marwari Goat breeding unit with strength of 187 (65 male and 180 female) are also maintained under research project. During the year 126 kidding took place. Total 625 Qtl. green fodders and 50 Qtl. dry fodders produced during this year. One lac sixty eight thousand seven hundred rupees incomes were generated from green fodder.

## **Livestock Research Station, Vallabhnagar**

Three Projects are running at this station namely "Gir Cattle Breeding Farm", "All India Coordinated Research Project on Goat Improvement (Sirohi Field Unit)" and Network Project on Buffalo Improvement (NPBI). Total herd strength of Gir cattle was 101 female and 43 male. Sirohi Goat breeding unit are also maintained at this center. Total 54 breeding bucks were distributed to registered farmers for further genetic improvement in the field. Total herd strength of Surti Buffalo was 84 female and 42 male. This center supplied high pedigree test bulls as well as semen of Surti Buffalo to dairy farmers.

## **Livestock Research Station, Bojunda, Chittorgarh**

Total strength of Sirohi goat was 280 female and 67 male. Total 65 breeding buck were distributed to NGO, govt. and farmers. Total 1607.02 Qtl. green fodder, 542.90 Qtl. dry fodder and 688.52 grain were produced during the reporting year.

## **Livestock Research Station, Dag, Jhalawar**

Total herd strength of Malvi Cattle was 311 female and 84 male. Total 58 male Calves and Bull were supplied to the different animal breeders and farmers during this year. Total green fodder production was 1617 Qtl.

## **State Plan Project**

### **Apex Centre for Animal Disease Investigation, Monitoring and Surveillance**

- Three disease outbreaks were attended by Apex centre which were diagnosed to be due to Avian botulism, Marek's disease and Heat stroke.
- District-wise data were collected and analysed for Pneumonic pasteurellosis, Glanders and epidemiological maps were prepared.
- Total of 692 samples were screened for different test bacterial infections including culture and antibiotic sensitivity 178, Parasitic infections 15, Brucellosis testing 219, CMT, Somatic cell count 276.

### **Centre for Ethno-Veterinary Practices and Alternative Medicines**

- The clinical trial work on the two herbal formulations (Herbal formulation No. 1 and Herbal Formulation No. 2) for dermatological disorders is still in progress, in the field and in clinics.
- Study of therapeutic potential and anti oxidative potential of Prosopis cineraria, in subclinical Mastitis in crossbred cattle
- Study of therapeutic potential of Dalbergiasisoo and Aegle marmelos on Colibacillosis and Calf diarrhoea.
- Herbal mixture has also been developed in two forms in different composition as like herbal formulation A and herbal formulation B for treatment of impaction. The developed mixture provided to animal owner on free of cost.
- Antiseptic and soothing herbal soap is being developed.

### **Animal Bio-Medical Waste Disposal Technology Centre**

- Three hands on training were organized by the center and total 128 personals were trained during this training.



## Centre for Conservation of Animal Biodiversity

- Awareness regarding conservation of Biodiversity is spread through various on campus and off campus training.
- Three health care camp were organized in different villages like Likhmisar, Sajrasar and Kaporiasar (Total 102 farmers/pashu palak and 449 animals were benefited in these camp.)

## Centre for Disaster Management Technology for Animals

- Total 24 trainings organized by the centre from April 2019 to March 2020.
- The centre preparing module on Drought and famine module.

## Centre for Organic Animal Products Technology

- Establishment of Organic farm at LRS, Beechwal, LRS, Kodamdeser, LRS, Chandan. The Organic production certification of agricultural land and goat farm are issued for First year by OneCert International Private Ltd.
- A vermi-compost unit being maintained as organic manure production at LRS, Bikaner for income generation as well as demonstration purpose for farmers and students at college.
- A unit of azolla production being maintained at LRS, Bikaner as a sustainable organic feed for animals and for demonstration of farmers as well as students.

## Engineering and Technology Centre for Animal Sciences

Engineering and technology centre developed Model of Nipple Drinking System for Poultry Farm, Temperature control system for poultry, maintain solar power plant and RAJUVAS saved approx. 12 Lacs in electricity bill till date. The centre provided drawings of various design of shed for cow, horse, camel, dog etc. This innovative activity has provided comforts for treatment of animals.

## Centre for Excellence for Use of Space-based Technology in Animal Science

- GIS mapping of farms and gaushalas were also help in better management of land

- Mapping of disease prevalence and disease outbreaks
- Mapping of migration patterns of birds at Jorbeer Conservation Reserve.

## Centre for Studies on Wildlife Management and Health

To work as knowledge centre for wildlife protection and propagation and to design strategies for protection of endangered species of wildlife.

## Livestock Feed Resource Management and Technology Centre

- RAJUVAS mineral mixture was manufactured with the team work of LFRMTC & LRS, Beechwal. A total of 6982 Kg of mineral mixture was manufactured at this plant
- Rehabilitation of Sewan grass through the development of Fodder nursery at Beechhwal and transplanted 8250 seedlings of sewan grass at pasture land of Jaimalsar, Beechawal, RD-489 and Raisar villase of Bikaner Districts.
- This center developed a Hybrid Napier grass and propagated 7800 cuttings at Jaimalsar, Beechhawal, and Raisar.
- During disaster at Sambhar lake, Fortified Feed for Birds was manufactured and handed over to rescue centre at Kachroda, Sambhar.
- This center also produced 300 kg of vermin-compost, 135 Ltr. of vermin-wash and 100 kg azolla. A total of 364 samples were analysed by feed and fodder analysis laboratory.

## All India Network Programme on Diagnostic Imaging and Management of Surgical Conditions in Animals (AINP on DIMSCA)

- Computed Tomography (CT scan) examination was performed in 48 clinical cases in dogs and cats affected with various disorders.
- Ophthalmic affections were treated in 120 small and large animals.
- Cataract surgery done in 10 cases using Phacoemulsification and ESE



- Electro Retino Graphy (ERG) was done in 58 canine cases of cataract
- Orthopaedic affections in 245 small animals were treated by internal fixation technique and external fixation techniques
- Orthopaedic affections in 414 large animals were treated by splints, walker splints, POP/Fibercast and ESF as external immobilization technique.
- Orthopaedic affections in 28 wild animals and birds were treated
- Spinal injuries in 15 canines were managed by cart and 49 downer large animals by orthopaedic rehabilitation with slings and "Downer Animal Bay".

## Development of Teaching Technological Tool

CVAS, Navania (Udaipur) develop teaching technological tools for graduate students. Preservation and Articulation of bones of different species of animal. Now, the developed tools and articulated skeletons are handy to meet out the thrust of students for different states.

## Extension-

Extension education is one of the pillar of the university, is working for the technology transfer to the farming communities through its various programmes. Under an umbrella of the Directorate of Extension, the work of the field extension is mainly carried out through University's colleges, Krishi Vighyan Kendra (KVK), Veterinary University Training and Research Centre (VUTRC's) and centers sanctioned under state plan for the livestock, dairy poultry and fish farmers. These imparting skill based training for strengthening the entrepreneurial activities in the rural area. The directorate is actively involved in training and capacity building initiatives for the farmers and the unemployed youth across the state. Various programmes are being implemented through projects sponsored from agencies like ICAR, RKVY,

ATMA and other government and nongovernment organizations.

The University has 1 KVK at Nohar (Hanumangarh) and 14 VUTRCs (Veterinary University Training and Research Centres) at Churu, Kumher (Bharatpur), Malpura (Tonk), Bakalia (Nagaur), Dungarpur, Kota, Suratgarh (Sriganganagar), Bojunda (Chittorgarh), Sirohi, Ajmer, Loonkarnsar (Bikaner), Dholpur, Jodhpur, Jhunjhunu. The mandate of VUTRC is to impart service of trainings to farmers on new technologies of animal husbandry and veterinary science to sustain and improve production of animal for better livelihood of farmers.

## KVK Activities

- During 2019-20 KVK organized total training 36, Vichar gosthi 6, and demonstration/transfer of technology 290, field day 3 and success stories 4. In these activities total 1043 farmers and livestock owners were benefitted.

## VUTRC Activities

- During this year VUTRC organized farmer training 953, transfer /demonstration of technology 300, Vichar gosthi 238, farmer scientist interaction 113, Awareness camps 174, field veterinary consultancy 496, Pashu mela/ Kishan mela 5, Success story 48. In these activities total 24680 farmers and livestock owners were benefitted.
- In laboratory diagnosis total 2084 samples were examined. Among these 466 blood sample, 947 faecal sample, 82 urine sample, 1037 milk sample and 49 skin scrapping were examined against various ailments.

## Other Centers Activities

- Training programmes organized by other Centers of RAJUVAS in 2019-20 were 151. Total 5011 participant were benefitted among them 1951 male and 2700 female.



- Training programme for Gaushala manager and Dairy moderator were organised in collaboration with Gopalan, Govt. of Rajasthan and DEE, RAJUVAS, Bikaner. Total 109 Gaushala Manager/Dairy Moderator participated and benefited.

## Publication

The University is regularly bringing out publication like monthly "Pashu Palan Naye Ayaam" and quarterly "Pashu Aahar Evam Chara Bulletin". Five thousand copies disseminated to the farmers by post and during trainings.

## Radio Programme

- Dhine Re Batya Radio Programm is broadcasted from all the 17 Aakashwani Kendras of Rajasthan for half an hour from 5.30 PM to 6.00 PM on first and third Thursday of every month. In 2019-20, total 24 programmes of "Dhine Re Batya" were broadcasted through 17 Aakashwani Kendra of Rajasthan.
- Toll free help line (1800-180-6224) for the benefit of livestock farmers, veterinary doctors and the students.

## Kishan/Pashu mela-

- Total 5 Kishan/Pashu mela were organised. Pabulav Talab Pashu Mela at Jaswantgarh Ladnoo on 2-5<sup>th</sup> September, Kishan mela at CAZRI, Jodhpur on 16<sup>th</sup> September, Kishan Mela at Chittorgarh on 17<sup>th</sup> September, Kishan mela at Jaipur 17<sup>th</sup> December, PUSA Krishi Vighyan Mela at New Delhi 1-3<sup>rd</sup> March.
- Exhibition- In this year five exhibition were organized ie CSWRI, Bikaner on 30<sup>th</sup> August 2019, CVAZRI, Jodhpur on 16<sup>th</sup> September, 2019, DIPR, Jaipur on 17<sup>th</sup> December 2019, Durgapura, jaipur on 4-6<sup>th</sup> February 2020, PUSA, New Delhi on 1-3<sup>rd</sup> March 2020.

## Mera Gaon Mera Gaurav Programme:

RAJUVAS constituted 41 teams of multidisciplinary scientists. These teams have adopted 142 villages. Teams have conducted 236 visit to village, 200 interface meetings, 18 demonstrations related to

animal husbandry and 42 training programmes covering animal nutrition, breeding, health care and reproduction, 434 Mobile based advisories, 220 Literature support provided and 166 General Awareness created aspects in adopted villages. In these activities total 19389 farmers and livestock owners were benefitted. The teams are regularly visiting the selected villages and imparting the latest information on animal husbandry and agriculture to the farmers through different extension tools like gosthi, mobile phones, literature, community radio etc. They are also sensitizing them with issues of national interests like Swatchh Bharat Abhiyan, Climate change, Water Conservation etc.

## Orientation Training Programmes

Three orientation training programmes were conducted for newly recruited Assistant Professor of RAJUVAS on "Teaching Methodology" to strengthen the faculty performance on 28 March to 17 April 2019, 10-30 May 2019 and 21 June to 11 July 2019 and 33, 35 and 32, total 100 faculty members were participated and benefitted, respectively.

## What's New

- **New Constituent Veterinary College at Jodhpur**

Hon'ble Chief Minister of Rajasthan Sh. Ashok Gahlot has announced establishment of new veterinary college at Jodhpur in State budget presented on 10th July, 2019. This will be the fourth constituent veterinary college of RAJUVAS. Financial sanction of 41 posts (29 teaching and 12 non teaching staff) has also been accorded by the government.

- **Super Specialty Block, CVAS Bikaner**

Inauguration of Super Specialty Block in Surgery and Radiology Department of CVAS, Bikaner. This block equipped with different facilities including units of CT scan, sonography, laparoscopy, laser surgery, ophthalmology, orthopedic and dental care.





## • Inauguration of RAJUVAS Parlour CVAS, Navania

RAJUVAS Parlour was inaugurated at CVAS, Navania, Udaipur. A single-window facility was started for the sale of products like paneer, khoya, shrikhand, lassi, vermi-compost, eggs, dogs, Azola etc. to various stakeholders.

## • Indigenous Milk and Milk Product Parlour CVAS, Bikaner

Indigenous Milk and Milk Product Parlour as new initiatives under Decade Year of RAJUVAS was inaugurated. A single-window facility was started for the sale of various milk products like paneer, shrikhand, full cream lassi.

## • Partner Centre of INFAAR

RAJUVAS has been included as a partner centre in the Indian Network for Fishery and Animals Antimicrobial Resistance (INFAAR). The Food and Agriculture Organization (FAO) of the United Nations has implemented the network project through the Indian Council of Agricultural Research in the country and FAO shall provide technical assistance to INFAAR in strengthening national efforts to mitigate AMR in India.

## ICAR grant for Skill Development Centre at RAJUVAS

Indian Council of Agricultural Research (ICAR) has granted one crore rupees for the skill development centre at RAJUVAS. This skill development centre will be set up at RAJUVAS for skill up-gradation and capacity development of farmers, livestock and youth. The accommodation, training and other equipment and facilities of the trainees will be arranged in the skill development training centre.

## Moments of Pride

### • RAJUVAS in 101-150 Band of NIRF-2019

RAJUVAS has topped the National Institute of Ranking of the National Institutional Ranking

Framework -2019 released by the Ministry of Human Resource Development, Government of India on 8th April, 2019. In the category of Veterinary and Animal Sciences Universities, RAJUVAS has become one of the top three universities in the entire country. In 1479 universities of the country, RAJUVAS has been included in the ranking of 101-150 bands. RAJUVAS is the only State University in the Rajasthan who have achieved first position in the State Funded Category in NIRF-2019.

### • Rajasthan e-Governance Award to RAJUVAS

Hon'ble Chief Minister of Rajasthan Sh. Ashok Gahlot awarded "e-Governance Rajasthan Award" to Prof. Vishnu Sharma, Vice-Chancellor on 19th August, 2019 during "Rajasthan Innovation Meet" organized by the Department of Information Technology and Communications at Birla Auditorium, Jaipur.

### • ICAR Rankings

Rajasthan University of Veterinary and Animal Sciences, Bikaner got 42<sup>nd</sup> rank amongst all the Agricultural and Veterinary Universities of the country. RAJUVAS has also secured second place amongst the Agricultural/Veterinary Universities of the Rajasthan State.

### • Prof. Vishnu Sharma Took Over Additional Charge of VC, JNVU, Jodhpur

The Hon'ble Governor and Chancellor of Rajasthan has given additional charge of the Vice-chancellor of Jai Narayan Vyas University, Jodhpur to Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS, Bikaner.

### • Vice-Chancellor Prof. Vishnu Sharma Honoured by Rajasthan Hindi Granth Academy

Vice-Chancellor Prof. Vishnu Sharma was honored on the occasion of 150th Birth Anniversary of Mahatma Gandhi and Golden Jubilee Celebrations of Rajasthan Hindi Granth





Academy, Jaipur for his special contribution in writing and book publishing in the field of veterinary science in Hindi.

## • Six New Projects Sanctioned under RKVY "Raftar"

A grant of Rs 11.95 crore for the year 2019-20 was sanctioned by Government to the RAJUVAS under Rastriya Krishi Vikas Yojna "Raftar". Total six new projects will be started in the university, on which an amount of Rs 9.60 crore will be spent and 2 crore 35 lakh will also be given for 4 ongoing projects under RKVY.

## • Early Diagnosis of Avian Botulism by RAJUVAS Team

In November 2019, a severe disease outbreak in the birds which migrated from various parts of the world to Sambhar Lake (Jaipur) and nearby areas was reported. A team from RAJUVAS was investigating the disease. On the basis of history, epidemiological observations, classical clinical symptoms and post-mortem findings, diagnosis was made as Avian Botulism. The recommendations were given to the concerned authorities to control the mortality included immediate removal of carcasses from the area, deep burial/burning of carcasses in order to stop eating of carcasses by healthy birds.

## • ANSI Fellow Award to Vice-Chancellor Prof. Sharma

Vice-Chancellor Prof. Vishnu Sharma has been conferred with prestigious Fellow Award of Animal Nutrition Society of India at Biswa Bangla Convention Center, Kolkata during International Conference of Animal Nutrition on nutritional strategies for improving farm profitability and clean milk production organized by WBUAFS, Kolkata from 17-19 December, 2019.

## Capacity Building by collaborations

The university has continued efforts to increase collaborations with other institutions in 2019-20 and

signed 8 MoU (Memorandum of Understanding) for meaningful collaboration in the area of mutual interest with following institute

- MoU with Indian Oil Corporation
- MoU with Central Institute for Research on Buffaloes, Hisar
- MoU with Central Institute for Research on Cattle, Meerut
- MoU with NABI, Mohali (Punjab)
- MoU with SKRAU, Bikaner
- MoU with Startup Oasis
- MoU with Umbrella ICAR, New Delhi
- MoU with Rajasthan Woollen Industries Association, Bikaner

## Faculty Accomplishment

- University organized one national conference of ISAPM at PGIVER, Jaipur and 140 training.
- Faculty members and Students of University attained 62 various seminar/conference/workshop at national and international level.
- The faculty published 200 research publications, 2 books, 5 book chapter, 3 Practical and training manual.
- Faculty member of RAJUVAS were honored with 37 awards at national level.
- Four cadets of 1<sup>st</sup> Raj R&V SQN NCC, Bikaner participated in Republic Day Camp 2020 at New Delhi, cadet begged one gold, two silver medal and runner-up trophy in different events at RDC, New delhi.

## Vice-Chancellor Participation in Conference/Meeting

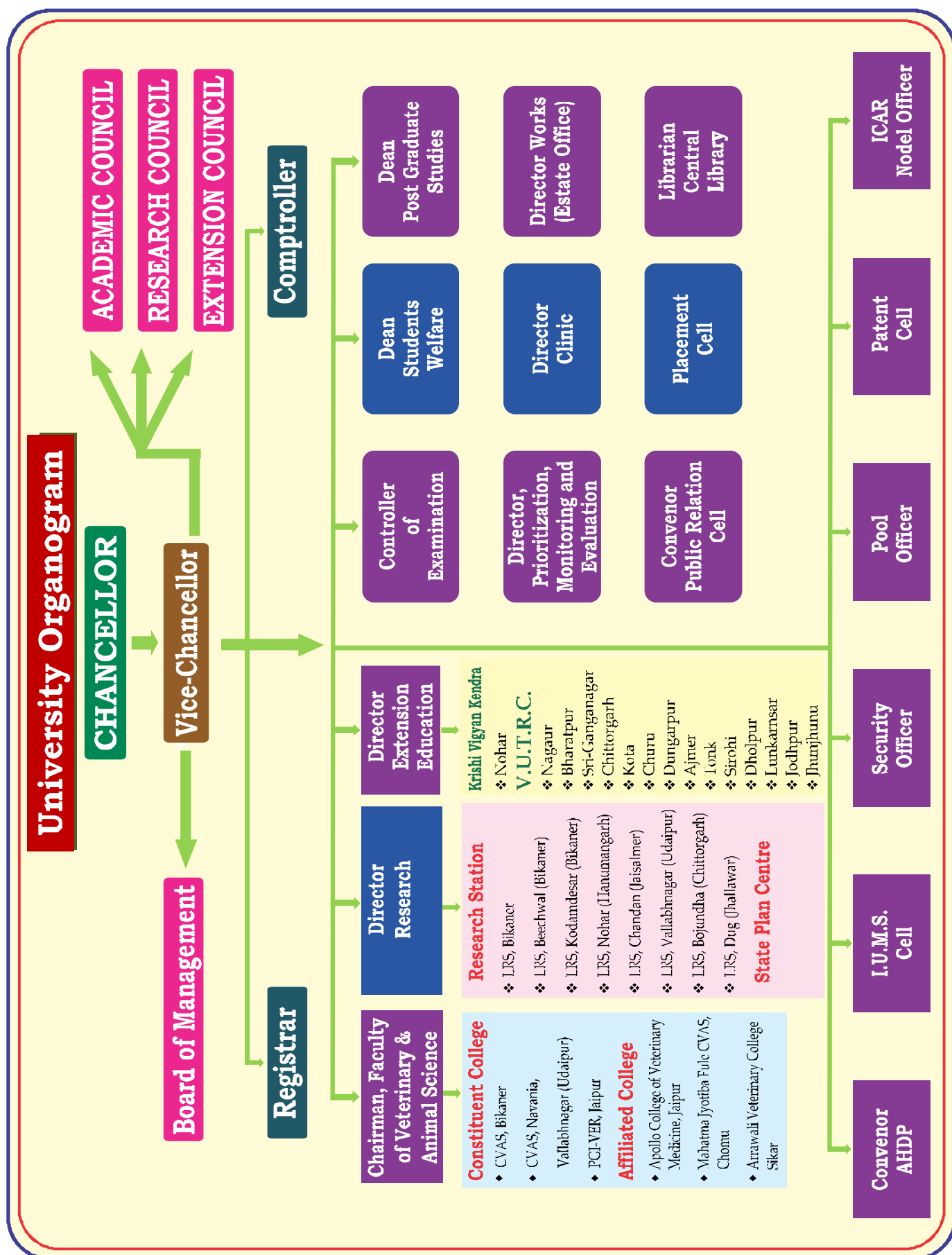
### National Conference at Birla Auditorium: Jaipur

Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS, Bikaner participated in following conferences & meetings.

- ❖ National Conference on Enhancing Farmers' Income through Integrated Farming System



- (IFS) Approach organized OCP Foundation and Indian Society of Agribusiness Professionals (ISAP) at Birla Auditorium from 10-11 April, 2019.
- ❖ National workshop on academic excellence through building partnerships and resources generation organized at ICAR-NAARM, Hyderabad from 30<sup>th</sup> April to 1<sup>st</sup> May, 2019.
- ❖ SEA Rapeseed- Mustard Conclave 2020 organized by The Solvent Extractors Association of India at Jaipur from 4-5 May, 2019.
- ❖ State Level Executive Committees (SLEC) on 13<sup>th</sup> June, 2019 held under the Chairmanship of Chief Secretary at Government Secretariat, Jaipur for approval of projects under National Livestock Mission, GoI.
- ❖ Meeting of Minds- Academia and Industry on Inspiration Day organized by IB Group of Industries at Rajnandgaon, Raipur from 22-23 June, 2019.
- ❖ All India Vice-Chancellors Conference (Indian Agricultural University Association) New Delhi organized at CSK Himachal Pradesh Krishi Visvavidyalaya, Palampur from 28-29 June, 2019.
- ❖ Vice-Chancellor Coordination Committee Meeting organized under the Chairmanship of Hon'ble Governor of Rajasthan Sh. Kalraj Mishra on 7<sup>th</sup> February, 2020 at Rajbhawan, Jaipur.
- ❖ Brain storming session on technological innovations and strategies for farmers' prosperity in Rajasthan organized by the Natural Resource Management Division of ICAR at NASC Complex, PUSA, New Delhi on 13<sup>th</sup> July, 2019.
- ❖ As part of joint delegation of State VC, Hon'ble Minister of Higher Education, and Secretary Higher Education participated in the UK Universities Vice-Chancellors meet in New Delhi on 2<sup>nd</sup> September, 2019 to explore opportunities of mutual interest in the higher education sector with Indian stakeholders, including the government and the institutes.
- ❖ Advisory Committee attended meeting of Department of Animal Husbandry, Dairying and Fisheries, Govt. of India, New Delhi on 13<sup>th</sup> September, 2019.
- ❖ 18th Annual Convocation-cum Scientific Convention on futuristic technologies in animal health and production organized by National Academy of Veterinary Sciences in collaboration of Kamdhenu University, Gandhi Nagar, Gujarat from 26-27 December, 2019.
- ❖ Workshop on productivity enhancement in goats through artificial insemination: Scope, Challenges and strategies organized by Deen Dayal Upadhyaya pashu Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan (DUVASU) on 13<sup>th</sup> January 2020. Hon'ble Minister of Animal Husbandry, Dairying and Fisheries, Govt. of India Sh. Giriraj Singh was Chief Guest of the workshop.
- ❖ Indian VETopia-2020 and FASAVA CPD -2020 at Marriot Hotel, Jaipur from 15<sup>th</sup> February, 2020.
- ❖ Advisory Committee attended meeting of Department of Animal Husbandry, Dairying and Fisheries, Govt. of India, New Delhi on 18<sup>th</sup> February, 2020.





## VISION

Generate appropriately trained human resources, suitable technologies and transfer of knowledge and technology to stakeholders for enhancing income and livelihood.

## MISSION

- ♦ To impart quality professional education, develop technologies suitable for promoting animal production and transfer it to the state of Rajasthan.
- ♦ Augmenting livestock productivity, profitability and sustainability in Rajasthan.

## GOALS

- ♦ Empowerment of the society in terms of economic upliftment, entrepreneurship development and employment generation through animal husbandry.
- ♦ Furthering the advancement of learning and conducting of research and undertake extension education.
- ♦ Promoting partnership and linkages with national and international educational institutions.



## 1. Introduction

The animal husbandry sector in India in general and Rajasthan in specific harboring a fabulous livestock wealth, having very significant in providing subsidiary source of income to the large number of small farmers, marginal farmers, BPL familiar and agricultural laborers. Distribution of livestock wealth in more equalitarian compared to land. Marginal farmers contribute core livestock production center. Over 50 percent of all species are owned by marginal farmers and livestock sector is extremely livelihood intensive as well as major source of substance. In Rajasthan animal husbandry is not merely a subsidiary to agriculture but it is a major economic activity specially in arid and semiarid regions, thus providing much needed insurance against prominently occurring scarcity conditions. This sector among all agricultural sectors has the highest potential for rural self employment with the lowest possible investment and risk. Development of livestock sector therefore, is critical to rural prosperity.

### 1.1 Initiation of Rajasthan University of Veterinary and Animal Sciences

The State Government took major initiative in education, research and extension in the field of Veterinary and Animal Science by establishing a separate Rajasthan University of Veterinary and Animal Sciences, Bikaner was 13th may, 2010, bifurcating the Veterinary and Animal Science faculty from Swami Keshwanand Rajasthan Agricultural University, Bikaner and Maharana Pratap University of Agriculture and Technology, Udaipur. The Headquarter of Rajasthan University of Veterinary and Animal Sciences is located at the premises of College of Veterinary and Animal Science building at Bikaner.

### 1.2 Role and Mandate of the University

The RAJUVAS is envisaged to accomplish the following roles under the mandate of the University:

- ❖ To plan, initiate, guide, co-ordinate and monitor the research in the field of Veterinary and Animal Science.

- ❖ To maintain liaison with State and Central Government, ICAR, DST and other National and International Funding agencies for obtaining the financial support for various veterinary and animal science research programmes.
- ❖ To monitor animal health programme through disease investigation and surveillance.
- ❖ To impart quality professional education.
- ❖ To develop technologies suitable for promoting animal production in the state of Rajasthan.
- ❖ To transfer the technologies to field functionaries.
- ❖ To develop a center of higher learning, research and extension in the field of veterinary and animal science.

### 1.3 Objectives of the University

The RAJUVAS has been established to achieve following objectives:

- ❖ Making provisions for imparting education towards development of quality human resource, in different branches of specialization of veterinary and animal sciences.
- ❖ Furthering the advancement of learning and conducting of research;
- ❖ Undertaking extension education.
- ❖ Promoting partnership and linkages with national and international institutions.
- ❖ Liaisoning and establishing vital linkages with the concerned line departments working in the fields of animal husbandry, fisheries and dairy development, animal technology in the State, by whatever name called, governed by the Government of Rajasthan as well as the Union Government;
- ❖ Liaison with National and International Research Institutes, specialized in the field of veterinary, animal, dairy and fishery science technologies with a view to keep abreast of the latest technology.

### 1.4 Powers and Functions of the University

As per the provisions in the act, the RAJUVAS has been entrusted following powers and functions to achieve its objectives:





- ❖ To provide instructions, training and research in veterinary and animal sciences including self finance mode.
- ❖ To provide and disseminate the findings of research and technical information through extension education programmes.
- ❖ To institute degrees, diplomas and other academic distinctions in veterinary and animal sciences.
- ❖ To institute courses of study and hold examinations for and confer degrees, diplomas and other academic distinctions on persons who have perused and qualified for a prescribed course of study or research or both in the University.
- ❖ To confer honorary degrees or other distinctions as may be prescribed by statutes.
- ❖ To provide lectures, training and instructions for field workers, livestock farmers and other persons not enrolled as regular students of the University.
- ❖ To collaborate in academic, research and extension education programmes with other universities, institutes of Indian Council of Agricultural Research and public or private research and development organizations or institutions.
- ❖ To establish, run and maintain colleges, research stations, Krishi Vigyan Kendra and any other institutions relating to veterinary and animal sciences.
- ❖ To affiliate colleges, institutions or units to the University under conditions prescribed and to withdraw affiliation from colleges, institutions or units.
- ❖ To establish and maintain laboratories, libraries, research stations and institutions and museums for teaching, research and extension education.
- ❖ To institute teaching, research and extension education posts and to appoint persons to such posts.
- ❖ To create administrative and other posts and to appoint persons to such posts.
- ❖ To institute and award fellowships, scholarships, studentships, bursaries, exhibitions, medals and prizes in accordance with the statutes.
- ❖ To establish and maintain hostels, to recognize hostels not maintained by the University and to withdraw recognition there from.
- ❖ To establish and maintain residential accommodation for the employees of the University.
- ❖ To fix, demand and receive such fees and other charges as may be prescribed
- ❖ To supervise and control residence, conduct and discipline of the students of the University and to make arrangements for promoting their health and welfare.
- ❖ To do all such and things, whether incidental to the powers and functions aforesaid or not, as may be necessary or desirable to further the objectives of the University.
- ❖ The University would also work
  - 1) To provide trained work force in the field of Veterinary and Animal Sciences
  - 2) To enable the professionals to identify problems of the community and carry out research work
  - 3) To enable the professionals to generate self-employment opportunities by way of field level trainings.



## 2. University Administration

His Excellency, the Governor of Rajasthan, is the Chancellor of the University, Vice Chancellor is the Academic Head and Principal Executive office of the University. The University is governed by the following Authorities.

1. **The Board of Management**
2. **The Academic Council**
3. **The Faculties**
4. **The Board of Studies**
5. **The Research Council**
6. **The Extension Education Council**
7. **The Planning Board**
8. **The Finance Committee**

Besides these the Vice-Chancellor has also constituted a core Advisory Committee, Public Relation Cell, Prioritization Monitoring and Evaluation (PME) Cell, Directorate of Clinics, Dean Students Welfare, University Students Placement Cell, IUMS, Dean Postgraduate Studies, Director works, Controller of Examination, ICAR Nodel Office and R&V NCC Squadron and Regiment.

### 2.1 Board of Management (BOM)

The Board of Management (BOM) is constituted under Sub Section (1) of Section 11 of the Rajasthan University of Veterinary and Animal Sciences Act, dated 13th May 2010. H.E. the Governor of Rajasthan and Chancellor of Rajasthan University of Veterinary and Animal Sciences, Bikaner

constituted the Board of Management on 11th Nov., 2010 in accordance to the provisions of the Act. Hon'ble Vice- Chancellor, Rajasthan University of Veterinary and Animal Sciences, Bikaner is the Ex-officio Chairperson of the BOM. The other ex-officio members of BOM are Principal Secretary, Animal Husbandry, Dairy & Fisheries Department, Government of Rajasthan, Additional Principal Secretary, Finance Department Government of Rajasthan, Managing Director of Rajasthan Co-operative Dairy Federation, Director Animal Husbandry, Director of Fisheries, Rajasthan, and the Registrar, Rajasthan University of Veterinary and Animal Sciences, Bikaner. Two members are nominated by Hon'ble Governor of Rajasthan and three members are nominated by Vice-Chancellor. Four members by Government of Rajasthan & one member is also nominated by Veterinary Council of India.

The BOM is the policy making body responsible for the management of the university. The chancellor is the Honorary Chairman and Vice-Chancellor is the working Chairman of the Board. The nominated members of the BOM are Dr. Kamal Jaiswal, Dr. A. K. Mishra, Sh. Govind Ram MLA, Sh. Purkha Ram, Sh. Ashok Modi, Smt Krishna Solanki and Dr. Anand Prakash Vyas, Dr. Ranjit Singh, Animal Husbandry and a person nominated by Veterinary Council of India.

#### List of Honorable Members who attend the meeting of the Board of Management for the year 2019-20

S. No.	Name	Designation	
1.	Prof. (Dr.) Vishnu Sharma	Vice-Chancellor, RAJUVAS	Chairperson
2.	Dr. A.K. Mishra,	Former Vice-Chancellor. G.B. Pant University of Agriculture & Technology, Pantnagar (U.P.)	Chancellor's Nominee
3.	Dr. Kamal Jaiswal,	Professor & Head, B.S.B.R., Ambedkar University, Lucknow	Chancellor's Nominee
4.	Sh. Govind Ram	M.L.A., Khajuwala	Member
5.	Sh. Purkha Ram	Livestock Farmer	Member
6.	Dr. Bharti Upneja	Rep. of Managing Director, Rajasthan Co- operative Dairy Federation	Member
7.	Smt. Krishna Solanki	Women Social Worker	Member
8.	Dr. Anand Prakash Vyas	Eminent Educationist, Outside University	Member
9.	Dr. Rakesh Rao	Dean & Chairman Faculty, CVAS, Bikaner	Member
10.	Dr. R.K.Singh	Director Research, RAJUVAS, Bikaner	Member
11.	Dr. Virendra Netra	Dy. Director, Rep. Director, A.H.	Member
12.	Smt. Meena Songara	Comptroller, RAJUVAS, Bikaner	Invitee
13.	Dr. Ajeet Singh	Registrar, RAJUVAS, Bikaner	Member Secretary



## **2.2 Academic Council**

The Academic Council is constituted as per provision of Section 15 of the Rajasthan University of Veterinary and Animal Sciences Act, dated 13<sup>th</sup> May, 2010. The Academic Council is a statutory body consisting of Vice-Chancellor as its Chairman and Registrar as its Member Secretary. Other members of the Council are Secretary to Government, Department of the Animal Husbandry, Dairy and Fisheries, Managing Director of Rajasthan Co-operative Dairy Federation, Director, Animal Husbandry, GOR, Director Fisheries, GOR, Chairperson, Faculty of Veterinary and Animal Science, Dean, CVAS, Bikaner and Navania, Dean, Post Graduate Studies, Dean, Students' Welfare, Director Research, Director Extension Education, and Director Clinics of Rajasthan University of Veterinary and Animal Sciences, Bikaner, ten members amongst Head of the Departments to be nominated by Vice-Chancellor and three persons having special or practical experience in different aspect of veterinary and animal science to be nominated by Vice-Chancellor.

## **2.3 Faculties**

The Rajasthan University of Veterinary and Animal Sciences, Bikaner is to look after the work of teaching, research and extension in the fields of veterinary and animal science, dairying, fisheries and allied sciences in the state of Rajasthan.

At present only the Faculty of Veterinary and Animal Science is there. Dr. Rakesh Rao has been appointed as the Dean and Faculty Chairman of the Faculty of Veterinary and Animal Science from 22.01.2019 by the Vice Chancellor under Section 17 of the RAJUVAS Act.

## **2.4 Board of Studies**

Under the Section 18 of the RAJUVAS Act a Board of Studies for each faculty is to be constituted by the Dean of the respective faculty. The Board of Studies of the faculty of Veterinary and Animal Science has been constituted as: Dean of Faculty is the Chairperson of the Board and the other members are Deans of the constituent and affiliated colleges, four Principals of affiliated Animal Husbandry Diploma

Institutions, all Heads of the Departments-cum-Chairperson of Committees of Courses along with conveners of the Committees of Courses of the concerned departments, one senior faculty member from each Department nominated by the Dean of Faculty and two external experts nominated by the Dean and Chairman of the Faculty and approved by the Academic Council for a term of two years. Senior most Head of the Department shall be the Member Secretary of the Board of Studies.

## **2.5 Research Council**

The Research Council is constituted as per provision of Section 19 of the Rajasthan University of Veterinary and Animal Sciences Act, dated 13<sup>th</sup> May, 2010. The Research Council is a statutory body consisting of Vice-Chancellor as its Chairman and Director Research as its Member Secretary, Managing Director of Rajasthan Co-operative Dairy Federation, Director of Animal Husbandry, GOR, Director of Fisheries, GOR, Director of Extension Education, Deans of constituent colleges CVAS, Bikaner, CVAS, Navania, PGIVER, Jaipur, Directors of the University, all Head of the Departments of constituent colleges, all Incharges of Livestock Research Stations, all Principal Investigators of research schemes and projects and four co-opted members as members of the council. The research in University is under the control of Director of Research with its head-quarter at Bikaner.

## **2.6 Extension Education Council**

The Extension Education Council (EEC) is constituted as per provision of Section 20 of the Rajasthan University of Veterinary and Animal Sciences Act, dated 13<sup>th</sup> May, 2010. The EEC is a statutory body consisting of Vice-Chancellor as its Chairman and Director Extension Education as its Member Secretary, Managing Director of Rajasthan Co-operative Dairy Federation, Director Animal Husbandry, GOR, all Deans of the constituent colleges, all Directors of the University, all Heads of the Departments of constituent colleges of RAJUVAS, all Incharges of Krishi Vigyan Kendra (KVKs), two eminent persons in the field of Extension Education from outside nominated by the Vice-Chancellor, two progressive livestock or



fisheries farmers nominated by Vice-Chancellor and CEO, URMUL Trust, Bikaner as its members.

## 2.7 Planning Board

Under the Section 21 of the RAJUVAS Act, a Planning Board of the University is to be constituted by the Vice Chancellor of the University. The Planning Board of Rajasthan University of Veterinary and Animal Sciences shall advise generally on the planning and development of the University and keep under review the standard of education and research in the University. The Board has the right to advise the Board of Management, Academic Council, Research Council and Extension Education Council on any academic, research and extension matter. The Planning Board shall consist of the Vice-Chancellor, RAJUVAS as ex-officio chairperson and not more than eight persons of high academic standing nominated by the Vice-Chancellor.

## 2.8 Finance Committee:

The Finance Committee is constituted as per provision of Section 22 of the Rajasthan University of Veterinary and Animal Sciences Act, dated 13<sup>th</sup> May, 2010. The Finance Committee is a statutory body consisting of Vice-Chancellor as its Chairman and Comptroller as its Member Secretary. Principal Secretary to the Government Animal Husbandry, Dairying and Fisheries Department, Principal Secretary Finance Department and Dean, College of Veterinary and Animal Science, Bikaner are its members.

## 2.9 Core Advisory Committee

The Vice-Chancellor has constituted a Core Advisory Committee and nominated Registrar as its Member Secretary. The meeting of the above committee will be presided by Hon'ble Vice-Chancellor. Chairman Faculty and Dean, CVAS, Bikaner, Dean Post Graduate Studies, Director Extension Education, Director Clinics, Director Research, Veterinary and Animal Science, Dean, CVAS, Navania, Vallabh Nagar, Dean Students' Welfare, Controller of Examinations, Director (PME) and Comptroller are the members of the committee.

## 2.10 Public Relations Cell

The Public Relations Cell was established to provide

help to animal owners, farmers and general public of the state with regard to expertise as well as better diagnostic facilities available in University, advise for getting first aid to diseased animals nearest available at field functionaries of Department of Animal Husbandry, better use of animal products through extension services, organization of camps at village level. Public Relations Cell since its inception publishing newsletter quarterly named as "RAJUVAS Newsletter" including all research, extension and educational activities conducted during particular quarter. Four issues of RAJUVAS Newsletter were released during this year. This cell also published the RAJUVAS Calendar, RAJUVAS in Headlines and New Year Greetings in this year. This cell is also responsible for giving publicity to Press & Media.

## 2.11 Dean Students' Welfare

The office of the Dean Students' Welfare started working in the May 2010 with the establishment of the new University. The Dean Students' Welfare also looks after the work of Coordinator, NSS and Chairman Sports Board. Besides the routine work of Dean Students' Welfare office, the election of the Students' Union of University was conducted in 27<sup>th</sup> August 2019. Mr. Nikhil Pal Bajia was elected President of Students Union of University while other portfolios were elected unopposed. Sachin Patidar was elected Vice President, Mr. Ranvir Singh was elected General Secretary and Mr. Prem Chand Tard was elected as Joint Secretary. Oath ceremony was held in the presence of Hon'ble Vice-Chancellor Prof. Vishnu Sharma and other university officials. To develop leadership qualities and awareness of rights of the students as well as progress of the professional spirit a Students Association is there in the College of Veterinary and Animal Science, Bikaner. Mr. Dharam Raj was elected Vice President of Veterinary Students Association of CVAS, Bikaner.

## 2.12 Directorate of Prioritization, Monitoring and Evaluation (DPME):

The Directorate of Prioritization, Monitoring and Evaluation was established in the year 2010-11, with the objective to plan and monitor education, research, extension activities, human resource,





finance etc. Directorate of Prioritization, Monitoring and Evaluation is responsible to explore and establish the priorities, monitor ongoing activities and evaluate the complete activities of the University. Its major objective was to enhance process of making funds for the University and their proper allocation, on the basis of thrust/ priority areas and consider its monitoring aspects, so as to get desired results. The directorate is responsible for coordinating all the units of the university in terms of seeking information, compilation and preparation of various types of university documents viz: annual reports, Varshik Pragati Prativadan for vidhan-sabha etc. for furnishing to ICAR, government of Rajasthan and various agricultural Universities.

## 2.13 University Student's Placement Cell

To create and enhance the career opportunities to veterinary graduates and postgraduates, University Placement Cell was established by RAJUVAS. This cell is maintaining a computerized database of veterinary graduates and postgraduates. With the help of this database, the cell sponsors list of students to the recruiting agencies for employment opportunities. A software company has developed and installed the software programme for University placement Cell and is now in operation.

## 2.14 Integrated University Management System (IUMS)-

IUMS is web enabled application that takes care of almost all the functions of University. RAJUVAS has achieved new-found operational efficiency after successful implementation of the Integrated University Management System. After Implementation of IUMS, the University effectively manages the student's entire academic cycle beginning from pre-admission to alumni management; taking them through admission, academics, fee management, exams and results processing with issuance of the degree/certificate. It is also powered with user-friendly reports and user-friendly interface thereby ensuring maximum user efficiency (bring analytical ability of reports here). With increasing number of students every year, this system helps RAJUVAS to maintain students' entire

life cycle details, which is accessible on a click. System also helped university in generation of various Dynamic & Analytical reports for planning & decision making. University has also implemented Employee/Student portal that has given great ease to students & employees in their normal day-to-day activities and interaction with university.

Now, Students applies their exams through online portal and get various notifications related to their attendance, fee, exams & results. Employee applies/approves their leaves through employee portal, generates their salary slips, get loan and advances details online. RAJUVAS has fully automated the entire Finance & HR practices of university like the recruitment, employee personal & professional details, payroll process, salary slip generation, detailed bank statement to be sent to the bank and conveyance as per the vouchers to name a few. It also helped RAJUVAS in documentation required in appointment letters, creation of masters, maintenance of increments, other allowances like arrears, calculation of supplementary bills, advances taken against salary, etc. The various modules were installed in IUMS i.e. OSES-on Screen Evaluation & Advanced Examination Management, Pre-Admission, Recruitment, Self Service Portal (SSP), HRMS, Payroll & Establishment, Stores & Purchase, Budget Management, Placement Service, VC & Administrative Offices, GPF & Pension, Financial Accounts, Admission & Academics, Examination & Results, Veterinary Hospital Management, Live-Stock & Farm Management, Industry University Interaction, Alumni Management, Research, Letter Movement System, File Movement System, Attendance & Fee management System, Meetings & Committee Management, Events & Seminar Management, Assets & Estate Management, Mail Server & SMS Server, Smart Class, Library Automation through RFID Technology.

## 2.15 Dean Post-Graduate Studies

The responsibility of the Dean, PGS is mainly to plan, articulate, coordinate, monitor and achieve the new dimension of post-graduate education and student research in consultation with the Deans of





constituent colleges and Heads of the Departments. It is one of the prime responsibilities of Dean, PGS to maintain high standards of PG education and research at the University. At present, the University offers Master of Veterinary Science and Doctor of Philosophy degree programmes in 17 disciplines. More than 550 students got approved their theses in M.V.Sc. and Ph.D. since its establishment. This office conducts Pre-PG test for M.V.Sc and Ph.D. programmes annually for admission in various disciplines. Besides this, the approval of programmes of work and plan of research for thesis, appointment of examiners, evaluation of theses and to maintain of records of PG and Ph.D. students are carried out.

### **2.16 Directorate of Clinic**

The Directorate of clinic was created with the objectives to run the clinical services at all the campuses of RAJUVAS and to make such services as referral facilities. The post and office of Director Clinic is at the University head office. At all the three campuses namely CVAS, Bikaner, CVAS, Navania, Udaipur, PGI-VER, Jaipur and the three clinical departments as Veterinary Gynaecology and Obstetrics, Veterinary Medicine and Veterinary Surgery and Radiology are providing, the clinical services to the farmers and animal owners 24X7. Time to time out skirt animal treatment camps are also organized specially in rural areas. A regular ambulatory service is in practice at all campuses which not only provide clinical services at distant places within the city but also become a good clinical academic learning for students. Under all the Veterinary Clinical Complexes everywhere a state-of-the-art Clinical Diagnostic Laboratory is working. One pet animal ICU is developed at Bikaner VCC campus. Separate indoor ward facilities are there for indoor animal patients at Surgery, Medicine and Gynecology & Obstetrics departments. Farmers' hostel facility is developed with all essential facilities.

### **2.17 Controller of Examinations**

The Controller of Examinations office is responsible for the enrolment of student in various academic programme (UG, PG, Ph.D. and Two-year Diploma

programme), preparation of question papers, conduction of examinations, evaluation of answer scripts, declaration of results and issuing of Mark sheet, grade sheets and transcript. For the first time in the history of Rajasthan, the University has implemented On Screen Evaluation and Advanced Examination Management System (OSES), which may act as a catalyst to change the existing examination evaluation process. The unique strength of this project lies in its comprehensive and ground-breaking approach to reduce errors and save time in examination evaluation process. Using OSES system in the examination the university is able to declare the result of the different programme within 2-3 weeks after the examinations.

### **2.18 Director Works (Estate Office)**

Directorate of Works (Estate Office) plays an instrumental role in the management of assets of the University and responsible for the administration and management of Estates Residential/ Office Accommodation of RAJUVAS at Bikaner, Jaipur, Udaipur and other stations of the University located in different districts. The Estate Office deals with the entire gamut of activities involved in construction of building, their maintenance, maintenance of water and electricity supply as well as record keeping of all buildings and infrastructure.

### **2.19 ICAR Nodal Office**

ICAR nodal office is a link office between the university and ICAR. This office explores the logistics, amenities of the university and justifying the needs of the university raises the financial demands under various heads from ICAR. It also communicates with the ICAR regarding students' fellowships of the ICAR sponsored students and also monitors the proper and timely utilization of funds provided by the ICAR. The office also monitors the allocation of ICAR funds in discussion with the university.

### **2.20 R&V NCC Squadron and Regiment**

In order to inculcate the spirit of community service amongst students, there are two NCC units functional at CVAS, Bikaner and CVAS, Navania



(Udaipur). 1 R&V NCC Sqn located at CVAS, Bikaner is fully equipped with horse line (having 13 army horses), an arena for exercising and show equestrian sports. 2 R&V Regiment located at CVAS, Vallabhnagar, Udaipur (having 26 army horses) is the largest R&V Regiment of India with an arena for exercising, horse shelter, drill ground and show equestrian sports. These units provides institutional training as well as various camp trainings, National integration, Advance leadership, Summer camp, Rock climbing, Para jumping, Mountaineering, Army attachment camp, Republic day camp etc.

## Faculty Strength

The Cadre-wise Strength of Teaching & Administrative Staff of RAJUVAS is Shown in Below.

Sr. No.	Name of Post	Sanctioned	Filled	Vacant
1	Professor	54	22	32
2	Associate Professor	101	14	87
3	Assistant Professor	208	102	106
	Total	363	138	225

## Officers of the University

Vice-Chancellor	Prof. Vishnu Sharma
Chairperson of the Faculty and Dean CVAS Bikaner	Dr. Rakesh Rao
Dean, College of Veterinary and Animal Science, Navania	Dr. Tribhuwan Sharma
Dean, P.G.I.V.E.R., Jaipur	Dr. G. C. Gahlot
Dean, Post Graduate Studies	Dr. A. K. Kataria
Dean Students' Welfare	Dr. S.C. Goswami
Convener PRC	Dr. R. K. Dhuria
Director Research	Dr. R.K.Singh
Director Clinics	Dr. J.S. Mehta
Director (Extension Education)	Dr. A. A. Gauri
Director (PME)	Dr. Anju Chahar
Director Works (Estate Office)	En. M.R. Choudhary
Controller of Examination	Dr. Sunil Maherchandani
Comptroller	Sh. Arvind Bishnoi
Registrar	Dr. Ajeet Singh
University Students Placement Cell	Dr. Sunil Maherchandani



## University Heads of the Departments

Department	Name of the Head/Incharge
Anatomy and Histology	Dr. Sanjeev Joshi
Animal Breeding & Genetics	Dr. Urmila Paanu
Animal Nutrition	Dr. R. K. Dhuria
Animal Reproduction, Gynaecology and Obstetrics	Dr. J.S. Mehta
Animal Husbandry Extension	Dr. Devi Singh
Assistant Librarian	Sh. Kuldip Chand
Biochemistry	Dr. Meenaxi Sareen
Clinical Veterinary Medicine	Dr. A.P. Singh
Epidemiology and Preventive Medicine	Dr. Anju Chahar
Livestock Production Management	Dr. Vijay Kumar
Livestock Products Technology	Dr. Basant Bais
Microbiology	Dr. A.K. Kataria
Physiology	Dr. Nalini Kataria
Pathology	Dr. Sunita Rani
Parasitology	Dr. B.N. Shringi
Public Health	Dr. Rakesh Rao
Pharmacology & Toxicology	Dr. Nalini Kataria
Surgery and Radiology	Dr. Praveen Bishnoi

## Important Meetings of University

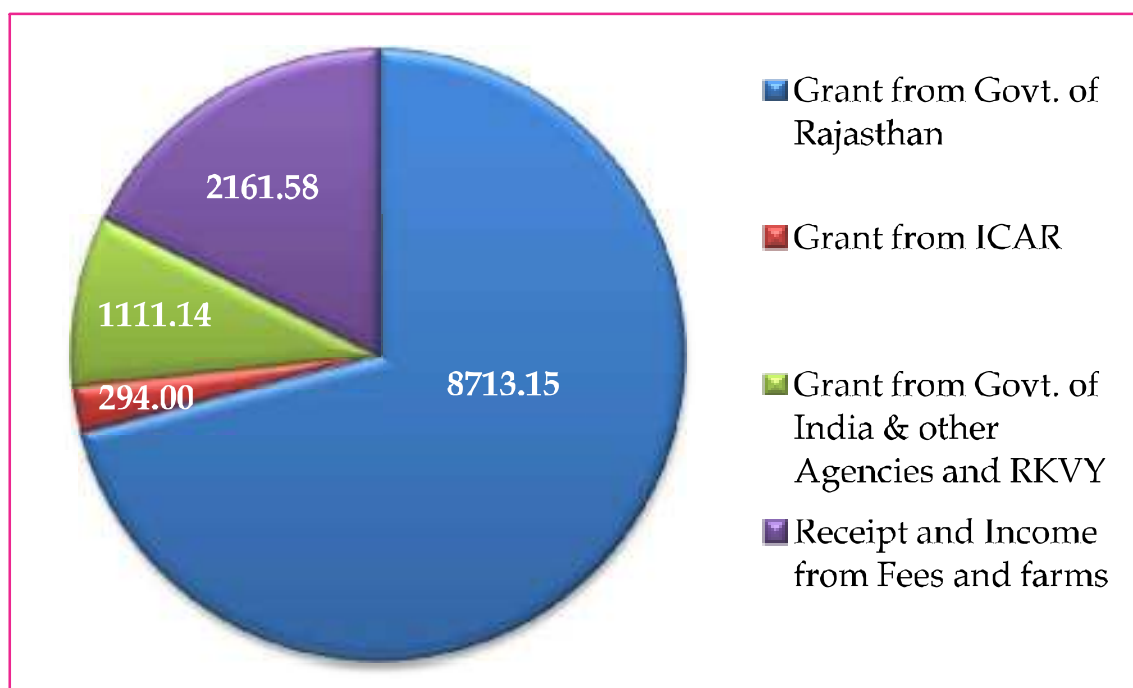
S.No.	Meetings	Dates
1	XXI Meeting of Board of Management	07/08/2019
2	XIV Meeting of Academic Council	07/08/2019
3	IX Meeting of Finance Committee	28/08/2019
4	Review Meeting of Advanced Research Centers	19/10/2019
5	Review Meeting of VUTRCs	01/11/2019
6	X Meeting of Board of Studies	26/12/2019
7	XV Meeting of Academic Council	15/01/2020
8	VI Meeting of Research Council	14/02/2020
9	VI Meeting of Extension Education Council	14/02/2020

## 3. Finance and Budget

Rajasthan University of Veterinary and Animal Sciences, Bikaner had been given a financial grant of Rs. 8713.15 lacs for the financial year 2019-20 under State Plan. A grant of Rs. 1111.14 lacs was obtained against the RKVY projects being run under RAJUVAS, Bikaner for the year 2019-20. The University also got an assistance of Rs. 294.00 lacs under ICAR Projects. The total budget of RAJUVAS for 2019-20 was Rs. 10118.29 Lacs. The University through its internal resources added Rs. 2161.58 Lacs during 2019-20.

### FINANCIAL RESOURCES FOR RAJASTHAN UNIVERSITY OF VETERINARY AND ANIMAL SCIENCES, BIKANER 2019-20

S.No.	Sources	Budget for 2019-20 (Lacs)
1	Grant from Govt. of Rajasthan	8713.15
2	Grant from ICAR	294.00
3	Grant from Govt. of India & other Agencies and RKVY	1111.14
	<b>Total = 1+2+3</b>	<b>10118.29</b>
4	<b>Internal Resources</b>	
	Receipt and Income from Fees and farms	2161.58
	<b>Grand Total</b>	<b>12279.87</b>







## 4. Academics

Teaching is under the direction of the Chairman of the faculty of Veterinary and Animal Science, Deans of the Colleges and Head of Academic Departments. Teaching is mostly by delivering lectures, use of electronic educational aids and practical in the laboratory, hospitals and livestock farms. Evaluation of undergraduate and postgraduate students is through internal and external examinations. In external evaluation system of examinations advisors, instructors, professors and advisory teams make evaluations.

The University plays an important role in the State by way of training students at the Diploma, Bachelor's, Master's and Doctoral level in various disciplines related to Veterinary Science and Animal Husbandry. Rajasthan University of Veterinary and Animal Sciences educates and train the students through its various education and training programmes to develop knowledge and leadership, to make them skilled professionals to face the challenges of global economic policy and system.

### Courses Offered

At present following course Programmes are offered by the Rajasthan University of Veterinary and Animal Sciences, Bikaner in the Faculty of Veterinary and Animal Science.

Bachelor of Veterinary and Animal Science (B.V.Sc. & A.H.) is being offered at all the constituent and affiliated private veterinary colleges.

Master of Veterinary and Animal Science (M.V.Sc.) is being offered at all the constituent colleges in the subjects of:

Veterinary Anatomy and Histology  
 Veterinary Pathology  
 Livestock Production and Management  
 Livestock Production and Technology  
 Animal Breeding and Genetics  
 Veterinary Obstetrics and Gynaecology  
 Veterinary Epidemiology and Preventive Medicine  
 Veterinary Clinical Medicine

Veterinary Surgery and Radiology

Veterinary Public Health

Veterinary Parasitology

Veterinary Biochemistry

Veterinary Physiology

Animal Nutrition

Veterinary Microbiology

Animal Biotechnology

Pharmacology & Toxicology

Veterinary & A. H. Extension Education

Master of Science (M.Sc.) is being offered at College of Veterinary and Animal Science, Bikaner in the subject of Animal Biotechnology.

Doctoral Degree (Ph.D.) is being offered at College of Veterinary and Animal Science, Bikaner in the subjects of:

Veterinary Anatomy and Histology  
 Veterinary Pathology  
 Livestock Production and Management  
 Livestock Production and Technology  
 Animal Breeding and Genetics  
 Veterinary Obstetrics and Gynaecology  
 Veterinary Clinical Medicine  
 Veterinary Surgery and Radiology  
 Veterinary Parasitology  
 Veterinary Biochemistry  
 Veterinary Physiology  
 Animal Nutrition  
 Veterinary Microbiology  
 Animal Biotechnology  
 Pharmacology & Toxicology  
 Veterinary & A. H. Extension Education

Two Years Diploma in Animal Husbandry is being offered at College of Veterinary and Animal Science, Bikaner; College of Veterinary and Animal Science, Navania-Vallabh Nagar; PGIVER, Jaipur; LRS, Chanddan; LRS, Nohar; Dug, Jhalawar; Bojunda, Chittorgarh, Rajasthan Government's Animal Husbandry Training Institutes located at Udaipur, Jodhpur, Bassi (Jaipur) and Kota and at 69 private affiliated diploma institutes.



## Constituent and Affiliated Colleges of the University :

The University has three Constituent institutes, viz. College of Veterinary and Animal Science, Bikaner, College of Veterinary and Animal Science, Navania-Vallabh Nagar, Udaipur and Post-Graduate Institute of Veterinary Education & Research, Jaipur and 3 Affiliated Colleges. Addresses and contact numbers of Dean of constituent and affiliated veterinary colleges of the university are given below:

S.No	College Name	Year of Establishment	Telephone No.	Official Email of College
1.	College of Veterinary and Animal Science, Bikaner	1954	8107110011	cvas901@gmail.com
2.	College of Veterinary and Animal Science, Navania, Vallabh Nagar, Udaipur	2007	9414264997	cvas902@gmail.com
3.	Post Graduate Institute of Veterinary Education and Research, Jaipur	2012	7015550890	pgiverjaipur@gmail.com
4.	Aravali Veterinary College, Sikar	2009	9649600419	cvas908@gmail.com
5.	Mahatma Jyotiba Fule College of Veterinary & Animal Science, Chomu	2007	9829793001	mjfcvs@gmail.com
6.	Apollo College of Veterinary Medicine, Jaipur	2003	0141-2682335	apollovetjaipur@gmail.com

## M.V.Sc. Thesis 2019-20

S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
1	Jyoti Srivastav	Livestock Production and Management	Dr. Arun Kumar Jhirwal	Study on the Effect of Different Roofing Patterns on the Performance of Magra Lambs in Arid Zone of Rajasthan.
2	Anil Kumar	Veterinary Surgery and Radiology	Dr. S.K. Jhirwal	Clinical Diagnosis and Surgico-therapeutic Management of Ocular Affections in Cattle.
3	Narendra Singh	Veterinary Surgery and Radiology	Dr. Sakar Palecha	Clinical Evaluation of Xylazine and Dexmedetomidine as Preanaesthetic with Propofol Anaesthesia in Dogs.
4	Jagriti Srivastav	Animal Nutrition	Dr. Rajesh Nehra	Effect of Supplementation of <i>Moringa oleifera</i> Leaves on Nutrient Utilization and Growth Performance in Goats.
5	Kamlesh Kumar Dhawal	Veterinary and Animal Husbandry Extension	Dr. Devi Singh Rajput	Knowledge and Adoption Level of Camel Owners about Scientific Management Practices in Arid Zone of Rajasthan.
6	Himanshu Vyas	Veterinary Surgery and Radiology	Dr. Sakar Palecha	A Clinical Study on the Diagnosis of Non-Cardiac Thoracic Disorders Using Computed Tomography in Dogs.
7	Pushpa Lamba	Livestock Production and Management	Dr. A.K. Jhirwal	Study on the Effect of Roof Modifications on Performance of Sahiwal Calves in Arid Region of Rajasthan.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
8	Hemant Kumar	Veterinary Surgery and Radiology	Dr. Anil Kumar Bishnoi	Comparative Evaluation of Healing of Long Bone Doaphyseal Fractures Stabilised by Closed and Open Method of Intramedullary Pinning in Dogs.
9	Kshitiz Goswami	Veterinary Pathology	Dr. Hemant Dadhich	Occurrence and Pathology of Various Conditions of Cardiovascular System in Buffalo ( <i>Bubalus bubalis</i> ).
10	Rinku	Veterinary Anatomy and Histology	Dr. Pankaj Kumar Thanvi	Gross and Histological Studies on the Kidney of White Leghorn Chicken.
11	Pankaj Kumar	Animal Reproduction, Gynaecology and Obstetrics	Dr. Sandeep Dholpuria	Endoscopic and Ultrasonographic Evaluation of Abattoir Derived Female Goat ( <i>Capra Hircus</i> ) Genitalia.
12	Amit Saraswat	Veterinary Microbiology	Dr, Deepak Kumar Sharma	Prevalence of Enteric Viruses of Poultry in and Around Udaipur City of Rajasthan.
13	Muskan Kaushal	Veterinary Microbiology	Dr. Bincy Joseph	Molecular Characterization of Virulence Factors of <i>Salmonella enterica</i> subspecies <i>enterica</i> serovar Typhimurium.
14	Devkishan Gurjar	Livestock Production and Management	Dr. M.L.Gurjar	Study on Managemental Practices of Buffaloes in Chittorgarh District of Rajasthan.
15	Hitesh Kumar Meena	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. S.K. Sharma	Studies on Subclinical Mastitis in Sirohi Goats with Reference to Prevalence, Diagnostic and Therapeutic Aspects.
16	Chanderkant Suthar	Veterinary Microbiology	Dr.B.N. Shringi	Detection of enrofloxacin by magnetic molecularly imprinted polymer
17	Surya Prakash Pannu	Animal Reproduction, Gynaecology and Obstetrics	Dr. G.N. Purohit	Evaluation of Goat Uterine luminal Proteins by SDS Page During Different Reproductive Stages.
18	Jitendra Kumar	Veterinary Parasitology	Dr. Manzer Alam	Studies on Prevalence of Ticks and Acaricidal Resistance in Cattles of Udaipur District (Rajasthan).
19	Rakesh Kumar Tailor	Veterinary Surgery and Radiology	Dr. Satyaveer Singh	Clinical Study on Surgico-Therapeutic Management of Diverse Surgical Affections of Head and Neck Region in Bovines.
20	Arvinder	Veterinary Surgery and Radiology	Dr. Mahendra Tanwar	A Study on Intraocular Pressure and Ocular Ultrasonography in Small Ruminants.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
21	Durga Ram	Animal Genetics and Breeding	Dr. R.K. Joshi	Evaluation of Reproductive and Lifetime Fitness Traits in Marwari Sheep.
22	Harshvardhan Meena	Animal Genetics and Breeding	Dr. Urmila Pannu	Polymorphism in 9 <sup>th</sup> Intronic Region of SP90AB1 gene and its Association with Thermo -olerance and Milk Production Trait in Kankrej Cattle.
23	Manju Bissu	Animal Genetics and Breeding	Dr. Urmila Pannu	A Study of Reproductive and Lifetime Fitness Traits in Magra Sheep.
24	Yogesh Arya	Animal Nutrition	Dr. Dinesh Jain	Effect of Supplementation of Amla ( <i>Emblica officinalis</i> ) as Feed Additive on Growth Performance of Magra Lambs in Arid Zone of Rajasthan.
25	Ram Chander	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. Sunita Choudhary	Studies on Canine Demodicosis
26	Rekha Lohiya	Veterinary Public Health	Dr. Rakesh Rao	Evaluation of Hygienic Quality of Raw Fish Sold at Retail Outlets of Bikaner.
27	Praveen Kumar	Livestock Products Technology	Dr. Dinesh M. Chavhan	Studies on Production and Shelf life of Mango Flavoured Shrikhand Incorporated with Turmeric Powder ( <i>Curcuma longa</i> ).
28	Devilal	Animal Nutrition	Dr. Monika Joshi	Effect of Dietary Protein Replacement by Azolla ( <i>Azolla pinnata</i> ) on the Growth Performance and Carcass Characteristics of Broiler Chicks.
29	Purushotam Purohit	Animal Nutrition	Dr. Monika Joshi	Effect of Dietary Supplementation of Aloe vera ( <i>Aloe barbadensis</i> ) and Amla ( <i>Emblica officinalis</i> ) Powder as Feed Additives on Growth Performance and Nutrient Utilization in Broilers.
30	Dinesh Kumar Sunwasiya	Animal Genetics and Breeding	Dr. Lokesh Gautam	Studies on Growth Curve Parameters of Sirohi Goat Under Field Condition.
31	Lakshmi Kant	Veterinary Pharmacology and Toxicology	Dr. Amita Ranjan	Pharmacokinetic Study of Cefquinome and its Interaction with Meloxicam in Camel.
32	Cajendra Singh	Veterinary Anatomy and Histology	Dr. Hemant Joshi	Gross Histomorphological and Histochemical Studies on the Kidney Guinea Fowl ( <i>Numida meleagris</i> ).
33	Narendra Godara	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. Tarunpreet	Clinical Studies on Parvo Viral Enteritis in Dogs.
34	Ashish Tanwer	Animal Reproduction, Gynaecology and Obstetrics	Dr. Mitesh Gaur	Comparative Study of Different Hormone Protocol in Relation to Nutritional Supplementation in Anoestrus Cattle ( <i>Bos indicus</i> ).





S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
35	Devender Choudhary	Veterinary Public Health	Dr. S.S. Shekhawat	Prevalence and Molecular Characterisation of <i>Staphylococcus Aureus</i> Isolated from Foods of Animal Origin.
36	Subhita Kumari	Livestock Production and Management	Dr. Vijay Kumar	Effect on Floor Space Under Katcha Housing on Performance of Magra Lambs in arid zone of Rajasthan.
37	Vikash Sharma	Livestock Production and Management	Dr. A.K. Jhirwal	Study on Body Condition Score and its Impact on Performance of Sahiwal Cattle.
38	Anand Kumar	Animal Reproduction, Gynaecology and Obstetrics	Dr. Ashok Kumar	Effect of Season on the Expression of Fertility Marker Genes in Marwari Stallion Sperm.
39	Shivangi Diwedi	Veterinary Surgery and Radiology	Dr. Praveen Bisnoi	Imaging of Abdominal Disorders Using Ultrasonography and Computed Tomography in Canines.
40	Tushar Maharishi	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. J.P. Kachhawa	Therapeutic Study of <i>Aegle Marmelos</i> in Calf Diarrhoea.
41	Lalit Kumar	Veterinary Pharmacology and Toxicology	Dr. L.N. Sankhala	Screening of in Vitro Antibacterial Activity of Extracts of Various Locally Available Plants in Bikaner Against <i>Rhodococcus Equi</i> .
42	Pyare Lal	Animal Biochemistry	Dr. N.S. Rathore	Study on Partial Purification of Motility Inhibitory Protein in Ram Cauda Epididymal Plasma.
43	Kalpana Jorasia	Animal Biochemistry	Dr. N.S. Rathore	Cloning, Prokaryotic Expression and Partial Characterization of <i>Ovis aries</i> CRISP- 1 Protein.
44	Devendra Prasad Pateer	Veterinary Parasitology	Dr. P.K. Pilania	Prevalence of Helminth Infections in Sheep Population of Hyper Arid Partially Irrigated Zone of Rajasthan and Ovine cysticercosis in Bikaner.
45	Kishan Pal Tanwar	Veterinary Physiology	Dr. Sunil Arora	Effect of Dietary Minerals, Vitamins and $\beta$ -Carotene Supplementation on Haemato-Biochemical Parameters and Biomarkers of Oxidative Stress in Cattle.
46	Saba Khan	Veterinary Pathology	Dr. Vikash Galav	A Study on Incidence and Histopathological Typing of Superficial Neoplastic Growths of Dogs in Jaipur.
47	Sonu Yadav	Veterinary Parasitology	Dr. Abhishek Gupta	Studies on Prevalence and Associated Risk Factors of Swine Gastrointestinal Helminth Infections in Six Agroclimatic Zones of Rajasthan.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
48	Rajendra Kumar Koted	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. A.P. Singh	Clinico-haemato-biochemical and Therapeutic Studies on Pica in Camels ( <i>Camelus dromedarius</i> ).
49	Gaurav Meena	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. D.S. Meena	Studies on Sero-Prevalence of Brucellosis in Cattle ( <i>Bos taurus</i> ) in Jaipur Region.
50	Pankaj Garhwal	Animal Genetics and Breeding	Dr. R.K. Nagda	Studies on Parameters of Growth Curve in Sonadi Sheep.
51	Rahul Tiwari	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. Rashmi Singh	Studies on prevalence of tuberculosis and paratuberculosis in cattle ( <i>Bos taurus</i> ) in Jaipur
52	Shrawan Kumar Meel	Livestock Products Technology	Dr. Anurag Pandey	Effect of age and sex on carcass traits and meat quality of Malpura sheep
53	Vilshan Kumar Chauhan	Livestock Products Technology	Dr. Anurag Pandey	Effect of whey incorporation on storage stability of mutton patties
54	Nirmal Kumar	Veterinary Public Health	Dr. Abhishek Gaurav	Assessment of Drinking Water in Urban & Peri-Urban Areas of Udaipur and its Health Implications.
55	Rajendra Singh	Veterinary Surgery and Radiology	Dr. M.C. Parashar	Evaluation of Dexmedetomidine in Different Combination with Butorphanol and Midazolam as Preanaesthetic to Ketamine Anaesthesia in Dogs.
56	Surendra Kumar Koli	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. J.P. Kachhawa	Clinico -Therapeutic Studies on Canine Parvovirus Infection in Dogs.
57	Manish Jangir	Veterinary Biochemistry	Dr. N.S. Rathore	Spectrophotometric Rapid Determination of Sperm Concentration and Biochemical Parameters in Magra Rams.
58	Nishant Parmar	Veterinary Anatomy and Histology	Dr. Hemant Joshi	Gross Anatomical, Histomorphological and Histochemical Studies on the Spleen of Guinea Fowl ( <i>Nunida meleagris</i> ).
59	Kalpesh Kumar Pargi	Animal Reproduction, Gynaecology and Obstetrics	Dr. Mitesh Gaur	Comparative Study of Different Estrus Synchronization Protocol in Pubertal Anoestrus Gir Heifers ( <i>Bos indicus</i> ).
60	Anshita Sharma	Animal Genetics and Breeding	Dr. Samita Saini	Comparative Evaluation of Indigenous and Exotic Breeds of Chicken for Growth, Carcass, Immune responsiveness and Growth Hormone Gene Polymorphism.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
61	Lokendra Singh	Livestock Products Technology	Dr. Umesh S. Suradkar	Studies on Technological Aspects of Paneer Making from Goat Milk.
62	Kiran Kumari Bhat	Animal Genetics and Breeding	Dr. Samita Saini	Genetic Analysis of Surti Buffalo for Test Day Milk Yield and Reproductive Performance Traits.
63	Gara Ram Saini	Veterinary and Animal Husbandry Extension	Dr. Sanjay Kumar Rewani	Comparative Analysis of Contract and Non-Contract Broiler Poultry Farming in Ajmer District of Rajasthan.
64	Yogendra Kumar Meena	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. Sita Ram Gupta	Clinical Studies on Obesity in Dogs.
65	Bhavsar Tanvi Dinesh Kumar	Veterinary Physiology	Dr. Nalini Kataria	Temperature Humidity Index Vis-À-Vis Organ Function Indicators of Murrah Buffalo Calves From Arid Tracts of Rajasthan.
66	Anil Harsh	Animal Genetics and Breeding	Dr. G.C. Gahlot	Analytic Studies of Polymorphism in AQP-3 Gene by SSCP and It's Association with the Milk Production Traits in Rathi Cattle.
67	Abishek Kain	Veterinary Physiology	Dr. Nalini Kataria	Heat Load Index Versus Antioxidant Profile and Hydration Status of Tharparker Cows from Arid Tracts of Rajasthan.
68	Praveen Kumar Damor	Veterinary Pathology	Dr. Mamta Kumari	Etiopathological Studies of Gastrointestinal Tract Disorders of Poultry in Southern Region of Rajasthan.
69	Naveen Kumar Sharma	Animal Nutrition	Dr. Monika Joshi	Effect of Feeding Green Azolla ( <i>Azolla Pinnata</i> ) on Growth Performance and Nutrient Utilization in Sirohi Kids.
70	Sandeep Kumar Yadav	Veterinary Microbiology	Dr. A.K. Kataria	Profiling of Some Genes for Virulence and Antibiotic Resistance in Staphylococcus aureus Isolates Obtained from Buffaloes with Clinical Mastitis
71	Om Prakash	Animal Nutrition	Dr. Dinesh Jain	Effect of Neem ( <i>Azadirachta indica</i> ) Leaf Powder and Fruit Powder as herbal Feed Additive on Performance of Broiler Chicks.
72	Luna Ram	Animal Nutrition	Dr. Dinesh Jain	Effect of Turmeric ( <i>Curcuma longa</i> ) Powder and Fennel ( <i>Foeniculum vulgare</i> ) Seed Powder as Herbal feed Additive on Performance of Broiler Chicks.
73	Aruna Panwar	Veterinary Anatomy and Histology	Dr. Sanjeev Joshi	Gross, Histological and Histochemical Studies on the Adrenal Gland of Large White Yorkshire Pig.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
74	Haripriya S	Veterinary Parasitology	Dr. Praveen Kumar Palaria	Epidemiological Studies on Bovine Tropical Theileriosis in and Around Bikaner.
75	Sudesh Sharma	Veterinary Microbiology	Dr. Taruna Bhati	Characterisation of Enterococcus species Isolated from Poultry form Some Virulence and Antibiotic Resistance Genes.
76	Veenu Singhal	Veterinary Microbiology	Dr. Taruna Bhati	Profiling of Some Virulence and Antibiotic Resistance Associated Genes in Staphylococcus aureus Obtained from Open Wounds in Cattle.
77	Pankaj Dhakarwal	Veterinary Microbiology	Dr. A.K. Kataria	Profiling of Some Genes for Virulence and Antibiotic Resistance in Staphylococcus aureus milk Isolates Obtained from Buffaloes with Subclinical Mastitis.
78	Navav Singh	Livestock Production and Management	Dr. Sanjita Sharma	Study on Quality and Bioactive Components In Milk of Various Indigenous Cattle Breeds in Hot-Arid Region of Rajasthan.
79	Vinod Yadav	Veterinary Pathology	Dr. Goverdhan Singh	Occurrence and Pathology of Various Tumor of Dog ( <i>Canis familiaris</i> ) In Southern Region of Rajasthan.
80	Ruchi Patwa	Veterinary Surgery and Radiology	Dr. Praveen Bishnoi	Efficacy of Demineralized Bone Matrix (DBM) Graft and Tissue Adhesive in Healing of Long Bone Fractures Stabilized with Interlocking Nailing in Canines.
81	Jorawar Singh	Livestock Products Technology	Dr. Basant Bais	Development and Quality Evaluation of Camel and Buffalo Milk Based Khoa Burfi Blended with Watermelon Seeds.
82	Pabu Ram Bishnoi	Livestock Production and Management	Dr. Sanjita Sharma	Effect of Neem Leaves as Supplementary Litter Material on Perfomance and Immune Response in Broiler Production.
83	Shiwangi Jorwal	Veterinary Surgery and Radiology	Dr. Sakar Palecha	Study on Focused Ultrasound and Computed Tomography Techniques for Abdominal Imaging in Traumatised and Non-traumatised Dogs.
84	Ashok Singh Rathor	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. A.P. Singh	Studies on Haemato-Biochemical, Oxidative Stress and Therapeutic Efficacy of <i>Dalbergia sissoo</i> and <i>Aegle marmelos</i> in Colibacillosis in Calves.
85	Narendra Singh	Veterinary and Animal Husbandry Extension	Dr. Neeraj Kumar Sharma	Knowledge and Adoption Level of Buffalo Owners about Scientific Management Practices in Bharatpur District of Rajasthan.





S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
86	Dushyant Dev Bhal	Veterinary Pathology	Dr. Anita Rathore	Occurrence and Pathology of Various Conditions in Urinary System of Goats ( <i>Capra hircus</i> ) in Southern Region of Rajasthan.
87	Shripal Siyak	Livestock Production & Management	Dr.M.L. Gurjar	Goat Management Practices in Marwar Region of South-Western Rajasthan.
88	Vikram Punia	Veterinary Parasitology	Dr. Hakim Manzer Alam	In-Vitro Study on Acaricidal Efficacy of <i>Azadirachta Indica</i> (Neem) Extracts Against Cattle Tick in Udaipur (Rajasthan).
89	Naina Manat	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. S.K. Sharma	Clinical and Therapeutic Studies on Colibacillosis in Goat Kids.
90	Avinash Kumar Chouhan	Veterinary Parasitology	Dr. P.K.. Pilania	Prevalence of Gastrointestinal Helminth Infections in Black Bucks at Tal Chhaper Sanctuary.

## Ph.D. Thesis 2019-20

S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
1	Alka Galav	Animal Biotechnology	Dr. S. Maherchandani	Epidemiology of PPR in Rajasthan and Role of DUSPI and KDM6A in PPRV Replication.
2	Priyank Vyas	Animal Genetics and Breeding	Dr. Urmila Pannu	Genetic Evaluation of Surti Buffalo on the Basis of Production and Reproduction Traits.
3	Deepak Kumar Sharma	Veterinary Microbiology	Dr. Bincy Josheph	Dynamics of Inflammasome Following Exposure to PPR ( <i>Peste des Petitis Ruminants</i> ) Virus.
4	Prerna Nathawat	Animal Biotechnology	Dr. S. Maherchandani	Identification, Characterization and Use of Unique Hypothetical Proteins for Detectio of Mastitis Causing Bacterial Pathogens.
5	Pramod Kumar	Animal Reproduction, Gynaecology and Obstetrics	Dr. J.S. Mehta	Effect of Addition of Cholesterol-Loaded Cyclodextrin on Quality of Semen in Marwari Horse and Poitou donkey.
6	Goverdhan Singh	Veterinary Pathology	Dr. Rohitash Dadhich	Pathomorphological & Haemato-biochemical Studies on Various Conditions of Digestive tract in Sheep ( <i>Ovis aries</i> ) in Southern Region of Rajasthan.
7	Shesh Asopa	Veterinary Pathology	Dr. Indu Vyas	Clinico-Pathological Study of Gastro-Intestinal Tract Affections in Camel ( <i>Camelus dromedarius</i> ).



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
8	Manisha Mehra	Veterinary Pathology	Dr. Manisha Mathur	Clinico-Pathological Study of Urinary System in Camel ( <i>Camelus dromedarius</i> ).
9	Manju Nehara	Animal Genetics and Breeding	Dr. Urmila Pannu	Genetic Evaluation of Rathi Sires Using Test Day Milk Yield Models.
10	Rakesh Kumar Khinchi	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. S.K. Sharma	Studies on Clinico-Therapeutic Aspects and Biomarkers of Oxidative Stress in Superficial Pyoderma in Dogs.
11	Sandhya Morwal	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. S.K. Sharma	Clinical and Ultra-Sonographic Studies on Fore-Stomach Disorders in Buffaloes ( <i>Bubalus Bubalis</i> ).
12	Tarun Preet	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. S.K. Sharma	Clinical Studies on Colibacillosis in Lambs and Therapeutic Evaluation of Oral Electrolyte Solutions and Herbal Medications as Supportive Therapy.
13	Pankaj Kumar Thanvi	Veterinary Anatomy and Histology	Dr. Sanjeev Joshi	Gross, Histological, Histochemical and Electron Microscopic Studies on the Tongue, Oesophagus and Stomach of Camel ( <i>Camelus dromedarius</i> ).
14	Vishal Singh Rathore	Animal Nutrition	Dr. Tribhuwan Sharma	Effect of Supplementation of <i>Aegle marmelos</i> (Bacl) and <i>Trigonella foenum-graecum</i> (Fenugreek) on the Performance of Broiler Chicks in arid Region.
15	Amit Kumar	Animal Reproduction, Gynaecology and Obstetrics	Dr. J.S. Mehta	Effects of Administration of Antioxidants on Biochemical, Hormonal, Antioxidants Profiles and Seminal Characteristics of Magra Rams in Arid Region of Rajasthan..
16	Anita	Veterinary Pathology	Dr. Rohitash Dadhich	Toxicopathological Study on Induced Subacute Toxicity of <i>Parthenium hysterophorus</i> L. and its Amelioration with Leaves of <i>Prosopis cineraria</i> (L.) Druce in Wistar Rats.
17	Naresh Kumar Sharma	Veterinary Pathology	Dr. Sunita Rani	Clinico-Pathological Study of Cardiovascular System in Camel ( <i>Camelus dromedarius</i> ).
18	Praveen Kumar Kaushik	Livestock Production & Management	Dr. S.C. Goswami	Studies on Morphometric Production and Reproduction Performance of Rathi Cattle in Arid Region of Rajasthan.
19	Mangesh Kumar	Animal Nutrition	Dr. R.S. Arya	Effect of Supplementation of Ginger Root Powder ( <i>Zingiber officinale</i> ) and Black Cumin Seed Powder ( <i>Nigella sativa</i> L.) on Performance of White Leghorn Layers.



S. No.	Name of student	Name of Department	Name of Advisor	Title of Thesis
20	Tara Chand Nayak	Veterinary Clinical Medicine, Ethics and Jurisprudence	Dr. A.P. Singh	Clinico-Haemato-Biochemical and Therapeutic Studies of Dalbergia Sissoo and Aegle Marmelos on Colibacillosis in Young Calves.
21	Hemant Joshi	Veterinary Anatomy and Histology	Dr. Balwant Meshram	Age Associated Anatomical, Ultrastructural and Histochemical Studies on the Cloaca in White Leghorn Fowl ( <i>Gallus gallus domesticus</i> ).
22	Saurabh Singh Singhal	Veterinary Physiology	Dr. Nalini Kataria	Environmental Elements Vis-à-Vis Physiological Intonations in Nali Sheep from Arid Tracts Necessitating Metabolic Controllers, Oxidative Stress Indicators, Hormone Levels Organ Semiotics and Fluid, Electrolyte and Acid Base Balance.
23	Govind Sahay Gottam	Veterinary Physiology	Dr. Nalini Kataria	Perusal of Varying Environmental Conditions Versus Physiological Cadence in Pugal Sheep From Arid Tracts Subsuming Environmental Variables, Hygric Analytes, Metabolic Regulators, Antioxidant System, Endocrine Responses and Functions of Organs and Tissues.



15<sup>th</sup> Academic Council Meeting

## **College of Veterinary and Animal Science, Bikaner**

### **Introduction:**

Veterinary education is an integral component of land grant system of education through the ICAR-SAUs network. Apart from some veterinary colleges imparting UG, PG and Ph.D. level education, institutes like IVRI and NDRI are also contributing significantly for human resource development and advancement of research in the field of veterinary and animal science. The education is uniformly being imparted as per the national syllabus prescribed by the VCI through the Minimum Standards of Veterinary Education (B.V.Sc. & A.H. degree course) Regulations, 1993 and 2008 under the Indian Veterinary Council Act, 1984. This College was the pioneer in implementing the VCI pattern in 1995 and 2009. In 2017 college implemented new VCI pattern 2016.

The state felt the need for qualified veterinarians some 50 years ago and consequently the present college was started at Bikaner, keeping in view the importance of livestock in the rural economy of the state in general and this arid region in particular. Since, then the college has provided more than 3600 graduates and postgraduates to the state and the country. Veterinarians produced by this college are globally distributed. Many of them are holding top positions within and outside the country. The college is spread in an area of around 200 acres of lush green campus with well built infrastructure providing a scenic beauty, which is unique amongst the campuses of veterinary colleges of the country. The college was amongst the leaders in creating all 17 departments as per the norms of the VCI. The level of teaching standards has been reflected by achievements of the students of this college in All India Pre-PG competitive test conducted by the ICAR. The alumni of this college are pursuing higher studies in the reputed institutes like IVRI, Izatnagar; NDRI, Karnal; GBPUAT, Pantnagar; LUVAS, Hisar; GADVASU, Ludhiana, etc. in high stake disciplines. The college is having ample student and faculty amenities. There are 2 UG, 1 internee, 2 PG boys'



hostels apart from UG and PG girl's hostel. Staff colonies of the college have 92 quarters for all cadres. Ample play grounds for football, cricket, hockey, basketball, tennis, volleyball, kabaddi, badminton and table tennis are there within the campus. Moreover, one Indoor hall for table tennis and badminton and Dr. Karani Singh Stadium are also located across the road. Heritage buildings amalgamate very well with latest ones in the campus.

The college has one of the richest clinical facilities with separate indoor, outdoor and examination-operation facilities for all the clinical departments. The annual turnover of the cases reaches 20-25 thousand per annum providing the students excellent material for clinical practice. The college is second in country to start 24 hour clinic services round the year from 9<sup>th</sup> Dec., 2012.

The college has also added animal biotechnology laboratory and a radioisotope laboratory. Computer facilities, LAN server, central instrumentation facility, animal house, Canine Welfare society, placement cell, internet facility, clinical and veterinary hospital facilities available 24x7 days a week, veterinary laboratory diagnostic facilities, NCC (R&V) squadron unit, numerous research projects with some having on-farm research component are some of the important specialities of the college. Since, last few years, the faculty of this college is contributing around 150 research papers annually. Much stress is being laid over improved practical training to the students. For this purpose,





the faculty has developed practical course manuals for almost all practical courses running in UG programme. Instructional power points presentation/video capsule of out breaks attended by University have also been developed as unique feature for exposure to students. Every Department is equipped with LCD projector to facilitate practical teaching. Departments like Vet. Anatomy, Vet. Pathology, Vet. Obstetrics & Gynecology and Vet. Clinical Medicine are having CCTV attached microscopes for collective display and explaining slide materials. All the departments are equipped with computers to help in generating teaching and examination materials. In addition to this seven smart class room systems have also been procured to strengthen the instructional hours.

With the zeal and enthusiasm, the faculty, staff and students are working hard, there is no doubt that this premier institute of the state would soon become a leading center of education and research in the noble profession of veterinary and animal science to achieve the mandate of the college to impart quality professional education, to develop technologies suitable for promoting animal production in the state of Rajasthan, to transfer the technologies to field functionaries and to develop a center of higher learning, research and extension in the field of veterinary and animal science.

## Education:

College has been involved in providing instructional training for various academic programmes, guiding masters and doctoral students in their research

formulations, imparting co-curricular skills at university and national levels, providing facilities for educational tours and internship training.

## Academic Programmes:

**B.V.Sc. & A.H:** Five and half year's duration (Four and half years course work and 1 year of internship as per the Veterinary Council of India norms). Currently the intake capacity is 80, with 12 seats from VCI and 68 seats of various categories belonging to the State quota including 28 regular seats and 40 payment seats. The admissions are made through the Rajasthan Pre Veterinary Test (RPVT) to 85% of state seats and through merit of NEET-UG examination by the VCI, New Delhi to 15% of All India quota seats.

**M.V.Sc.:** There are minimum of 3 and maximum of 6 seats in each discipline depending on the availability of the staff and facilities. Admissions to M.V.Sc. are made through a Pre-PG test on 75% of State seats and through a Central Pre-PG test conducted by the ICAR to 25% central seats. As on today, total 52 regular and 14 payment seats are available in M.V.Sc. programmes.

**Ph.D.:** Currently there are two seats in each department except in Veterinary Physiology and Veterinary Anatomy and Histology, Animal Biotechnology, Veterinary Microbiology and Veterinary Public Health where there is only one seat and Animal Breeding & Genetics where there are 3 seats. Admissions to Ph.D. are made through merit following reservation on the basis of roster.





PROGRAMMES OFFERED WITH DURATION		DURATION
PRE	<b>DIPLOMA IN ANIMAL HUSBANDRY PROGRAMME</b> (basic qualification for minor veterinary service providers as per Indian Veterinary Council Act, 1984)	2 years
UG	<b>B.V.Sc. &amp; A.H.</b>	5½ years
PG	<b>M.V.Sc.</b> Vety. Anatomy, Vety. Physiology, Vety. Biochemistry, Animal Nutrition, Animal Breeding & Genetics, Livestock Production & Management, Vety. Pathology, Vety. Microbiology, Vety. Parasitology, Vety. Public Health, Vety. Clinical Medicine, Veterinary Epidemiology & Preventive Medicine, Vety. Surgery & Radiology, Vety. Obst. & Gynecology, Animal Biotechnology, Livestock Product Technology Vety. & Animal Husbandry Extension Education, Vety. Pharmacology & Toxicology	2 years
Doctoral	<b>M.Sc. Animal Biotechnology</b>	2 years
	<b>Ph.D.</b> Vety. Anatomy, Vety. Physiology, Animal Nutrition, Animal Breeding & Genetics, Livestock Production & Management, Vety. Pathology, Vety. Microbiology, Vety. Parasitology, Vety. Public Health, Vety. Clinical Medicine, Vety. Surgery & Radiology, Vety. Obst. & Gynecology, Animal Biotechnology, Livestock Product Technology Vety. & Animal Husbandry Extension Education, Vety. Pharmacology & Toxicology	3 years

## Animal Husbandry Diploma Programme:

Self-employment oriented programme of two years is being run from academic session 2007-08 on self-finance basis. This University will increase utilization of the existing facilities including infrastructure, hostels, clinical facilities, farms, etc. for this programme. Short-term certificate courses: Twenty certificate courses have been identified by different disciplines ranging from 1-3 months duration. These courses shall be run on self-financed basis. Some of them are for livestock owners and school dropouts, while others are for professionals to enhance their professional competence in selected areas. Few of the courses in the former category, viz., Artificial Insemination, Poultry Farming, Dairy Farming, etc. are already running

for individuals or groups as per the demand. In the later category, 1-3 months' training programmes for Biotechnology Projects to the Graduate and Post-Graduate students of other institutes are running. The success and standard of the programme has led to advance bookings from reputed institutes.

In Animal Husbandry Diploma Programme (AHDP) hospital farm practice is undertaken by students in clinics, surgery, gynecology, dairy, poultry and apex centre. The students of First year and Second year received training in Apex Centre laboratory with specific emphasis on management of laboratory, working of laboratory equipments, preparation of glassware, reagents and different types of culture media, and collection of various samples for diagnostic purposes.

## Student's Strength at CVAS, Bikaner

B.V.Sc.&A.H.					Total	M.V.Sc.		Total	Ph.D			Total	2 Years Diploma in A.H.		Total	G. Total
I	II	III	IV	V		I	II		I	II	III		I	II		
80	71	65	65	92	373	63	56	119	21	20	10	51	42	44	86	629

**Scholarships and Endowments**

Name of scholarship/allowance	No. of recipient
Social Welfare Dept.	All eligible SC/ST/OBC students
Ward of Teacher Scholarship, Sec. Edu. Board	02
Educational Loan	20
Mohan Singh Memorial Scholarship	College Topper of IV year
<b>Department-wise scholarships awarded</b>	
Kaushal Vikash Yojana	03
Ward of Railway Employer	04
Ward of Police department	05

**Stipend**

PG/ Ph.D Stipend: Rs. 10,000 Per Month

Internship Stipend: Rs. 6500 Per Month (Rs. 3000 ICAR Per Month + Rs. 3500 State Plane Per Month)

**Students selected for ICAR's 25<sup>th</sup> All India Entrance Examination AIEEA(PG)-2020**

Sr. No.	Name	Rank	Subject & University	
1.	Manoj Kumar	206 (SC 8)	NDRI (Nutrition)	JRF
2.	Komal Rathore	73	NDRI (AGB)	
3.	Suman Ranwa	185	GBPUAT (Poultry Science)	
4.	Rohit Barwar	503	Jabalpur (AGB) NDVSU	
5.	Monika Meel		Jabalpur (AGB) NDVSU	
6.	Umesh Kr Jaiswal	200	LUVAS (Extension)	
7.	Virendra Kr Bishnoi	303	MAFSU (Extension)	
8.	Rajbala	207 (OBC 79)	Kamdheni University (Extension)	
9.	Jyotsna Rathore	240	LUVAS, Hisar (LPT)	
10.	Ayusha	383	Faizabad (Public Health)	
11.	Om Prakash Chabarwal	650	Faizabad (Anatomy)	
12.	Geeta Choudhary	664	OUAT (Anatomy)	
13.	Keshav Gaur	158	GBPUAT (LPM)	
14.	Ajay Saini	67 (OBC 24)	NDRI (LPM)	
15.	Kalpana	343	Jabalpur (LPM) NDVSU	
16.	Naushali Gujar	475 (SC 50)	BHU (Dairy Sci.)	



## Students selected for ICAR's 25<sup>th</sup> All India Entrance Examination AIEEA(Ph.D.)-2020

Sr. No.	Name	Subject & University
1.	Sudarshan Mahela	AGB, IVRI
2.	Manoj Kumar	AGB, IVRI
3.	Devendra Prasad Pateer	Veterinary Parasitology, IVRI
4.	Basant Godara	Animal Biotechnology, IVRI
5.	Chandra Pratap Singh	Veterinary Pathology, IVRI
6.	Hiteshwar Singh Yadav	Veterinary Pathology, IVRI
7.	Pavan Goyal	Veterinary Medicine, IVRI
8.	Surya Praksah Pannu	Veterinary Gynaccology and Obstetric, NDRI Karnal

## Students selected for ICAR-ASRB NET 2020

S.No.	Name	Department
1.	Surya Prakash Pannu	Veterinary Gynecology and Obstetrics
2.	Anand Kumar	Veterinary Gynecology and Obstetrics
3.	Suresh Kumar	Veterinary Gynecology and Obstetrics
4.	Jitendra Tanwar	Veterinary Medicine
5.	Sumnil Marwaha	Veterinary Medicine
6.	Kuldeep Kumar	Veterinary Medicine
7.	Dinesh Kumar	Veterinary Medicine
8.	Kshitiz Goswami	Veterinary Pathology
9.	Renu Kumari	Veterinary Pathology
10.	Basant Godara	Animal Biotechnology
11.	Anil Harsha	Animal Breeding & Genetics
12.	Durga Ram Beniwal	Animal Breeding & Genetics
13.	Manju Bissu	Animal Breeding & Genetics
14.	Devendra Prashad Pateer	Veterinary Parasitology
15.	Narendra Singh	Veterinary Surgery & Radiology
16.	Narendra Kumawat	Veterinary Surgery & Radiology
17.	Praveen Kaushik	Livestock Production Management
18.	Abhishek Joshi	Livestock Production Management
19.	Narendra Poonia	Livestock Production Management
20.	Jagriti Shrivastava	Animal Nutrition
21.	Shikha Saini	Veterinary Anatomy
22.	Kalpna Jorashia	Veterinary Biochemistry
23.	Aanandita Shrivastava	Veterinary Physiology
24.	Rekha Panwar	Veterinary Microbiology
25.	Ram Kumar	Veterinary Microbiology



## Veterinary Clinical Complex Activities:

TVCC, Bikaner working 24 X 7 under Directorate of Clinic and discharging services as teaching clinical practices as well as clinical services to animals owners. Various units of TVCC are veterinary Clinical Medicine, Veterinary Gynaecology & Obstetrics and Veterinary Surgery & Radiology with both indoors and outdoors facility including Veterinary Clinical Diagnostic Lab, Critical Care Unit for pet animals and Veterinary Ambulatory Services. Total number of cases attended during 2019-20 was 19357.

The Veterinary Gynaecology and Obstetrics department organized a two infertility camp at village Jalwali on 22.09.2019 and Bichwal on 18.05.2019 where 139 cases of infertility were treated and interaction with farmers was done to address their problems. In the Veterinary Clinical Diagnostic Laboratory total 3249 diagnostic lab tests were performed. During this period two anti-rabies vaccination camps were also organized and total numbers of vaccinations done were 118. During this period total artificial insemination was 342 (313 cattle and 29 buffaloes).

**Total Cases (VCC) : 19357**

**Diagnostic Lab Tests (VCC) : 3249**

**Vaccination (Rabies) : 118**

**Infertility Camp : 02**

**Artificial Insemination : 342**



*Veterinary Clinical Complex CVAS, Bikaner*



*ECG recording of Dog in Critical Care Unit*

## Veterinary Diagnostic Laboratory:

### Total work done during 2019-20

S.No.	Type of Sample	No. of Samples
1.	Blood	1247
2.	Faecal	112
3.	Milk	466
4.	Urine	1382
5.	Skin Scrapping	39
6.	Serum	03
Total		3249



*Culture of Candida albicans*





**TABLE 1: Number of case attended report (month wise):**

Month	CATTLE			BUFFALO			CAMEL			HORSE			DOG			GOAT			SHEEP			OTHER			TOTAL			G.TOTAL
	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	
APR.2019	410	95	134	25	17	20	33	15	0	14	13	3	440	116	7	257	159	55	0	1	1	60	17	0	1239	433	220	1892
MAY.2019	375	111	106	61	16	15	11	13	0	32	10	0	403	88	10	243	118	66	10	4	2	52	29	1	1187	389	200	1776
JUN.2019	296	154	81	50	18	11	10	25	0	13	11	3	315	137	6	148	200	43	4	3	1	29	40	0	865	588	145	1598
JUL.2019	330	217	93	54	37	21	9	70	0	13	17	1	358	193	5	200	277	52	3	2	0	36	60	1	1003	873	173	2049
AUG.2019	240	142	100	55	32	27	12	43	0	4	5	3	261	127	8	209	166	47	1	1	1	37	41	2	822	557	188	1567
SEPT.2019	362	143	88	56	20	20	10	19	0	13	8	1	373	118	14	232	165	44	3	3	0	48	38	2	1097	514	169	1780
OCT.2019	226	107	59	48	27	16	8	25	0	7	12	2	328	116	10	267	142	52	2	3	1	31	28	2	917	460	142	1519
NOV.2019	203	110	60	44	29	20	5	11	0	8	7	3	385	179	19	211	132	38	2	7	2	39	25	2	897	500	144	1541
DEC.2019	186	116	83	47	27	5	13	23	0	11	12	1	472	133	13	152	94	45	12	0	0	57	26	1	950	431	148	1529
JAN.2020	159	91	76	55	29	21	9	20	0	5	7	0	459	151	16	174	99	30	10	4	3	50	38	2	921	439	148	1508
FEB.2020	238	99	62	47	23	9	7	14	0	5	4	0	427	156	8	138	103	45	7	2	0	56	30	4	925	431	128	1484
MAR.2020	186	61	57	28	11	11	5	8	0	1	5	0	323	103	17	112	79	32	4	0	1	46	22	2	705	289	120	1114
TOTAL	3211	1446	999	570	286	196	132	286	0	126	111	17	4544	1617	133	2343	1734	549	58	30	12	541	394	19	11528	5904	1925	19357



## Feed and Fodder Analysis and Consultancy:

The Department of Animal Nutrition receives samples of feed and fodder from Border Security Force, state departments of Animal Husbandry, Panchayat Samities, Co-operative dairies, Feed factories, farmers and different charitable trusts, etc. for analysis. In the period, 2019-20 total 1191 samples were received by various agencies for analysis over and above the consultancy given to the farmers and agencies.

## Canine Welfare Society

The department has been instrumental in formation of a Canine Welfare Society involving Veterinarians including faculty members from the CVAS, Bikaner and pet owners with the objective to promote scientific pet-keeping and make the public aware of various zoonosis particularly rabies through certain extension activities organized for this purpose, viz registration of Dog Shows, stray dog sterilization programme (ABC programme), Seminars, hand-outs, press releases, video films, dog health records booklets etc. Canine Welfare Society for care of stray animals is functioning in the Clinical Veterinary Medicine Department.

Annual report of canine welfare society is as under (1<sup>st</sup> April 2019- 31<sup>st</sup> March 2020).

### The detailed annual report is as under -

1. Four Thousand four hundred four pet owners were educated for health care and management of pet dogs.
2. One hundred sixty pet owners were registered under Rabies control programme and vaccination token were issued to the owners.
3. Free Rabies vaccination and awareness camps were organized on World Zoonosis Day 6<sup>th</sup> July, 2019 for pet owner and 54 dogs were vaccinated against rabies. Gathering of 80 persons including dog owners, UG & PG students and teachers were present at the time of film show. Educational exhibits also displayed and pamphlets were distributed among students, pet owners and public at large.

4. World Rabies day was organized on 28<sup>th</sup> September, 2019 in the canine outdoor 64 dogs were vaccinated against rabies. Gathering of 85 persons including dog owners, UG & PG students and teachers were present at the time of film show. Educational exhibits also displayed and pamphlets were distributed among students, pet owners and public at large.
5. Under Rabies control programme overall 200 students had been educated for control of rabies in dog with help of pamphlets, posters and charts.
6. Two animals (Dogs-41 and Cattle -1) were brought to canine welfare society and treated as per their requirement.
7. Under mange control programme 99 stray dogs were treated.

## Publications

### Research papers in journals:

1. Manisha Mehra, O.P. Singh, Manisha Mathur, H. Dathich, G. Singh, Shesh Asopa and H. Chauhan (2019): Haemato-biochemical studies in renal affections in camels (*Camelus dromedaries*). Vet. Pract. 20(2): 244-245.
2. Goverdhan Singh, Rohitas Dadhich, Kamal Purohit, Mamta Kumari, Manisha Mehra, Bincy Joseph, SK Sharma and CS Vaishnava (2019): Pathomorphological and hematobiochemical studies on oral tumors in digestive tract of sheep (*Ovis aris*) in southern region of Rajasthan. Int. J. Chem. Stud; 7(2): 1581-1583.
3. Naresh Kumar Sharma, S. Rani, H. Dadhich, I. Vyas, M. Mathur, M. Mehra, S. Asopa and S. Kumar (2019): Occurrence and pathological conditions affecting blood vessels of Camels in North-western Rajasthan. Ruminant sci. 7(2) 257-260.
4. Pramod Kumar, Manisha Mehra, Satish, Shivendra Kumar Bhalothia, Tapendra Kumar, Bhanu Prakash, Sasi G, Tipu Sultan and Rajendra Mehra (2020): Clinical diagnosis and therapeutic management of transmissible venereal tumor in a German Shepherd dog: A



- case report. The Pharma Innovation Journal 2020;9(6): 128-130.
5. Kataria, Anil Kumar. "Molecular Detection of Some Virulence Genes of Staphylococcus aureus Isolates Associated with Bovine Mastitis in Arid and Semi-Arid Regions of India." *Int. J. Curr. Microbiol. App. Sci* 8.11 (2019): 2350-2362.
6. Bhati, T. and Kataria, A. K. (2019). Characterization of Staphylococcus aureus isolates from mastitic milk, udder surfaces and milkers' hands from arid and semi arid regions of India for capsular (cap5K and cap8K) and collagen adhesin (cna) genes. *Indian Journal of Animal Sciences*, 89(11), 1184-1187.
7. Rekha, P., Ram, K., Kritika, G., Mukul, P., & Sunil, M. (2019). Effect of a novel antimicrobial peptide (KK-20) in combination with antibiotics on Pseudomonas aeruginosa. *Veterinary Practitioner*, 20(2), 147-149.
8. Prerna, N., Sunil, M., Rathore, S. S., Anupama, D., Mukul, P., & Kritika, G. (2019). Evaluation of six different methods for the extraction and purification of DNA of bacterial pathogens in mastitis affected milk of dairy animals. *Veterinary Practitioner*, 20(1), 1-5.
9. Galav, A., Maherchandani, S., Galav, V., & Dadhich, A. (2019). Molecular basis of attenuation in recently circulating PPRV in Rajasthan. *Veterinary Practitioner*, 20(2), 240-243.
10. Zaidi, S., Gahlot, K., Anjum, F., & Kataria, A. K. (2020). Characterisation of Escherichia coli Recovered from Wild Animals Kept at Bikaner Zoo for Their Antibiotic Resistance. *Journal of Pharmaceutical Research International*, 1-8.
11. A Nirwan, M Shekhawat, D Suthar, Diwakar and AK Kataria (2020). The biofilm-forming potential of Staphylococcus aureus isolates from various sources using phenotypic and genotypic assays. *Journal of Entomology and Zoology Studies*, 8(1): 531-535.
12. A K Chaudhary, Govind Narayan Purohit, Jitendra Singh Mehta, S K Ravi and Thirumala Rao Talluri (2020). Serum testosterone profile in Marwari stallions and its relationship with testicular parameters, semen characteristics, reaction time, stallion age, bodyweight, and height. *Reproduction, Fertility and Development*. 32(2):198.
13. Prashant kumar, Ashok Kumar, JS mehta, G N Purohit, S K Ravi, Yash Pal, R A Legha, B N Tripathi and TR Talluri (2020). Impact of supplementation of semen extender with antioxidants on quality of cooled or cryopreserved Marwari stallion spermatozoa. *Indian Journal of Animal Sciences*. 90 (10): 1356-1361.
14. Pramod Kumar, Mehta JS, Ravi SK, Talluri T Rao, Purohit GN, Chaudhary AK and Dedar RK (2019). Effect of cholesterol loaded cyclodextrin (CLC) on sperm morphological abnormalities during cryopreservation of Poitou jack (*Equus asinus*) spermatozoa. *Veterinary Practitioner*. 20(2):218-222.
15. Pramod Kumar, Bhalothia SK and Kumar T (2019). Management of dystocia she camel. *Intas Polivet*. 20(II): 440-441.
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114. Rakesh Ranjan, Shirish Dadarao Narnaware, Ved Prakash, Amita Ranjan and R K Sawal (2019) Therapeutic Management of *Staphylococcus epidermidis* Mastitis and Hemolactia in a Dromedary Camel. Intas Polivet, 20 (2): 453-455.



## Seminar/Symposium/workshop attended

1. Dr. Manisha Mehra participated in National Symposium on 'Advances in veterinary Pathology for Fostering One Health, Food security and Environment Protection'' Veterinary Pathology Congress. CAUS Aiwzal. Mizoram from 6-8 November, 2019.
2. Dr. A.K. Kataria, Kritika Gahlot, Femina Anjum, Mukul Purva, Sophia Zaidi and Vasundhara Rathore participated in International conference on Environmental & Climate consequences: Challenges & Mitigation Strategies (ICECC-2019) organised by Sangam University, Bhilwara.
3. Dr. Sunil Maherchandani, Kritika Gahlot, Femina Anjum and Mukul Purva attended National symposium on Public health challenge mitigation strategies at the confluence of one health approaches and XIV biennial national conference of association of public health veterinarians-2020 organised by DUVASU, Mathura.
4. Dr. AK Khichar, Dr A K Choudhary and Dr P K Dhatarwal attended XXXI Annual Convention of ISSAR on "Global perspective to enhance livestock fertility through modern reproductive techniques for doubling farmers income" organized by Veterinary College and Research Institute, Namakkal, Tamil Nadu from 18- 20 December 2019.
5. Dr. AK Khicar attended 46<sup>th</sup> Annual conference of the International Embryo Technology Society (IETS), 16-19 January 2020, in New York (USA)
6. Dr P K Thanvi attended XXXII Annual Convention and National Symposium of Indian Association of Veterinary Organized by Anatomists Department of Veterinary Anatomy & Histology, Veterinary College, Hebbal Bengalurue. Karnataka Veterinary, Animal and Fisheries University, Bider (Karnataka) from 28 - 30 November 2019.
7. Dr D S Rajput Participated in 3<sup>rd</sup> National Conference of Society for Veterinary and Animal Husbandry Extension (SVAHE) organizing at College of Veterinary and Animal Sciences, GBPUA&T, Pantnagar during April 03-05, 2019.
8. Dr D S Rajput Participated in National workshop on "New Frontiers in Agricultural Extension" organized by National Institute of Agricultural Extension Management (MANAGE), Hyderabad during 29-31 May, 2019 at Hyderabad
9. Paper presented in ISEE National Seminar-2019 on "Holistic Approach for Enhancing Agricultural Growth in Changing Rural Scenario" at Swami Keshwanand Rajasthan Agricultural University held during 14-16 November, 2019
10. Dr. Bhavana Rathore, Monika and Haripriya attended XXVIII National Congress of Veterinary Parasitology and National Symposium on "Novel technologies and Strategies for Sustainable Control of Parasitic Diseases of Livestock, Poultry and Public Health Significance" 28-30<sup>th</sup> Jan. 2019 Organized by CoVS, Tirupati.
11. Dr Monika attended XXIX National Conference of Veterinary Parasitology and National Symposium on "Challenges and innovations in control ling parasitic diseases of livestock and poultry with changing climate" 05-07<sup>th</sup> Feb. 2020 Organized by College of Veterinary Science & A.H., NDVSU, Jabalpur, M.P., India.
12. Dr. Rajani Joshi, Dr. Deepika Dhuria, Dr. Praveen Bishnoi, Dr. R.K. Dhuria participated in National Conference of ISAPM - 2020, Jaipur "Paradigm Shift in Livestock Management to obtain High Quality Animal Products for Enhancing Farm Economy and Entrepreneurship" ISAPM at PGIVER of RAJUVAS, Jaipur, from 4-6 February, 2020.
13. Dr. Manohar Lal Sain, Dr. J.P.Kachhawa, Dr. S.R. Gupta, Dr. Sunita Choudhary and Dr. Tara Chand Nayak attended I annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium on





- “Sustainable Improvement in Animal Health and Production –Bridging Science and Policy For Economic Upliftment of Farmers” jointly organized by Department of Veterinary Medicine, College of Veterinary Science & A.H., DUVASU, Mathura and CIRG, Farah MATHURA held on 8-9 Nov.2019.
14. Dr. Manohar Lal Sain Attended the Brain Storming Session on Technological Innovation and Strategies for Farmers Prosperity in Rajasthan held on 13<sup>th</sup> July, 2019 at NASC Complex New Dehli
  15. Dr. Lokesh Tak and Dr. Parma Ram attended 9th IMSACON & International Symposium on Advances in Production and Processing and Quality Assurance of Muscle Foods for Improved Health and Nutritional Security, 06-08 November 2019, held by Department of Livestock Products Technology DGCN College of Veterinary & Animal Sciences, CSK HPKV, Palampur (HP) 176062
  16. Prof. Nalini Kataria and Mamta Saini attended Seminar on 1. Environmental stress in animals: A contemporary issue. International conference on environmental & climatic consequences : challenges & mitigation strategies sponsored by Department of Science & Technology, Government of Rajasthan 21-22 December 2019 at Sangam University, Bhilwara.
  17. Dr. Anju Chahar, Dr. A.P. Singh, Dr. Sunita Choudhary, Dr. Sita Ram Gupta and Dr. J.P. Kachhawa Participated in the 38<sup>th</sup> Annual Convention of Indian Society for Veterinary Medicine & National symposium on “Advancement in Veterinary Medicine in mitigating challenges to animal health from 5<sup>th</sup>-7<sup>th</sup> Feb 2020. Organized by Dept. of Veterinary Medicine & Vetreinary Clinical Complex, KVAFSU, Veterinary College, Hebbal, Bengaluru, Karnataka, India.
  18. Dr. P. Bishnoi, Dr. Sakar Palecha, Dr. S. K. Jhirwal and Dr. Anil Kumar Bishnoi. Participated and presented oral paper in 43<sup>rd</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on “Recent Advances on Amelioration of Anaesthetic and Surgical Stress in Farm and Companion Animals” from November 14-16, 2019 at LUVAS, Hisar
  19. Prof. T.K. Gahlot, Retd. Professor, Department of Veterinary Surgery and Radiology, CVAS, Bikaner was invited to People's Republic of China for attending 7<sup>th</sup> China Camel Industry Development Conference-2019 in Ejina Banner, Alxa League, Inner Mongolia, China from 25-27 November, 2019.
  20. Dr. Kuldeep Chand International Conference on library and Information Professionals Summit (I-LIPS 2019) on “Empowering Libraries with Emerging Technologies for Common Sustainable Future held on 22-24, November 2019 at Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh.
  21. Dr. Kuldeep Chand One day Training and Awareness Workshop on J-Gate@CeRA” for Northern Region held on 23<sup>rd</sup> October, 2019 at NASC, Complex, New Delhi.
  22. Dr. Kuldeep Chand Meeting organized by the Indian Council of Agricultural Research, New Delhi to finalize the uniform eligibility qualification and seat positions for online counseling/admissions during Academic Session 2019-2020.

## Books/Training Manuals

1. Prof. G.N. Purohit, Professor and Head, Department of Veterinary Gynaecology and Obstetrics, CVAS, Bikaner published e-Book on Bubaline Theriogenology hosted at [www.avis.org](http://www.avis.org) with 33 chapters, more than 600 pages and more than 6000 references. This eBook was published in two languages i.e. English and Spanish.
2. Sunil Maherchandani, Mukul Purva and Kritika Gahlot (2019). Training Manual:-Recent tools and technologies of Animal Biotechnology Regarding Conservation of Indigenous Animal Genetic Resources. Current Status, Emerging Issue and Future Scenario Regarding



- Conservation of Indigenous Breeds of Livestock- CVAS, RAJUVAS, Bikaner.
3. Kritika Gahlot, Mukul Purva and Narendra Singh Rathore (2019). Chapter on "Foot and Mouth Disease". Cattle Health Concerns in India. Agrobios (India). ISBN :9788193467398, Edition (01).
  4. Kritika Gahlot and Mukul Purva (2019). Chapter on "Recent Trends in Livestock Production". Cattle Health Concerns in India. Agrobios (India). ISBN :9788193467398, Edition (01)
  5. Mukul Purva and Kritika Gahlot (2019). Chapter on "The Significant Discovery and Characterization of Putative Therapeutic Drug Target in Various Pathogens". Agrobios (India) ISBN : 9788193467398, Edition (01)
  6. Bais, B. (2019). Quality and safety standards of milk for international trade. (Lead Paper presented in ICAR sponsored winter school on "Current status, emerging issue and future scenario regarding conservation of Indigenous Breeds of Livestock" organized by, CVAS, RAJUVAS, Bikaner from 05 Nov. 2019 to 25 Nov. 2019, published in training manual page no. 111-115.)
  7. Bais, B.(2019). Opportunities and challenges for Indian livestock and meat industry. (Lead Paper presented in ICAR sponsored winter school on "Current status, emerging issue and future scenario regarding conservation of Indigenous Breeds of Livestock" organized by, CVAS, RAJUVAS, Bikaner from 05 Nov. 2019 to 25 Nov. 2019, published in training manual on page no. 116-118.)

## HOSTEL FACILITIES

S. No.	Name of Hostel	Type of Hostel (Boys/Girls)	Wi-Fi	Accommodation Facilities in Number			Alternative Arrangements
				Rooms	Beds	Allotted Beds	Beds
1.	UG-1	Boys	Available	79	175	126	100 Beds are Available
2.	UG-2	Boys	Available	10	30	30	
3.	PG-1	Boys	Available	35	35	35	
4.	PG-2	Boys	Available	37	53	53	
5.	Intern Hostel	Boys	Available	11	33	-	
6.	Girl's Hostel (old wing)	Girls	Available	50	78	78	
7.	Girl's Hostel (new wing)	Girls		13	39	39	
8.	New Boys Hostel	Family Hostel	Available	13 families	-	13	

## RESIDENTIAL COLONY (FOR STAFF & STUDENT )

Family Quarters (Type)	No. of Quarters	Family lives
A, C, D, E, F, G, H, TH	92	92

**LIBRARY:**

The Library remains open on all working days during working hours of the college. Efforts are made to acquire latest useful text books/reference books needed specifically for students, researchers and faculty.

The Library has built up a very good collection of books to provide the college community enough to meet their various information needs and purposes. Recent publications are procured for the use of library users.

The library collection consists of about 60264 publications including textbooks, reference books, e-books, manuals, advances, encyclopedias, dictionaries and annual reports. During the year under report 371 Reports/Newsletter and pamphlets were added to the library collection.

In college library Journals are the most important medium of scientific communication because of its up-to-date ness, the library subscribes 35 Indian journals & 05 foreign Journals during the period under report. As well as Electronic information like CeRA provide for the improvement of academic and research programmes.

**JOURNALS:**

Back volumes of Journals play a vital role in reference service. Hence the back volumes of the Journals are carefully bound and kept as reference for students, faculty and researchers. The library has got a rich collection of about 6163 bound volumes of International and National Journals.

**BACK VOLUMES OF JOURNALS:**

The library helps the users to retrieve data from the CD-ROM database. The library procures important CD-ROM database to strengthen the CD-ROM database access facility. Various CD-ROM relevents to veterinary and animal sciences are also procured and kept for refernce in the library. At present there are 60 CD-ROM databases available in the library.

The library collection is consisting of 15 video cassettes with facility to make use of the resources.

**Library Services:**

1. Document landing Service
2. Reference service
3. OPAC Service
4. Reprography Service
5. General/SC/ST Book Bank Service
6. Newspaper Clipping Service.
7. Inter-Library Loan Service



*Security Gate Antenna With Two Pedestals*

**Library Collection as on 30.06.2020**

Sr.No.	Documents	Total
1.	General Books	31737
2.	Book-Bank Books	9637
3.	Social-Welfare Books	4792
4.	Mrs. Kusum Rathor Trust Books	232
5.	Bound Journals	6163
6.	Thesis	1455
7.	Reports	5955
8.	E-BOOKS	203
9.	Video-Cassette	15
10.	Books CD	100
11.	VET/BEAST CD-ROM DATABASE	48
12.	CAB-CD, CD-ROM DATABASE	36
	Total	60373

**Facility of e-library:**

A well furnished room with 50 reader capacities having all facilities for accessing the internet and CDROM data base and online access is available for use by the staff and student of RAJUVAS. The eagerness to use the e-library facility for acquiring their needful information is increasing day by day among the users.

**Information services:**

The library is providing various types of information services to the users, articles from current journals are sent to faculty members regularly.

**Digitization of information resources:**

The library has taken up digitization project entitled "e-Granth: strengthening of digital library & information management under NARS" of NAIP component -1. The library has been able to become one of the active partners in developing Agri-Cat: the union catalogue of agricultural institutes of India by this, the user of this university can be able to browse the holdings of other libraries affiliated to ICAR.

**Membership of Library consortium:**

1) CeRA: Consortium for e-Resources in Agriculture

**Extension programmes:**

The non credit paper PGS-501: library & information services are imparted to post graduate and Ph.D. students of university as prescribed by ICAR.

**STRENGTHENING OF COLLEGE LIBRARIES UNDER RAJUVAS:**

Post Graduate Institute of Veterinary Education and Research, Jaipur.

PGIVER Library strengthens with facility of foreign / Indian journals through Consortium for e-resources in Agriculture (CeRA), Strengthens with : 6804 books





## College of Veterinary and Animal Science, Navania, Vallabhnagar, Udaipur

CVAS, Navaina Library strengthens with facility of foreign / Indian journals through Consortium for e-resources in Agriculture (CeRA), Strengthens with: 11614 books

LRS, NOHAR: strengthens with 443 books.

LRS, Chandan: strengthens with 270 books.

LRS, Bojunda, Chittorgarh: strengthens with 256 books

## Mera Gaon Mera Gaurav

The selected villages were monitored closely by team members from time to time. The visits were made to inculcate alertness among animal owners and farmers regarding the health of the animals. Health aspects were closely monitored and suggestions were given to farmers and villagers for maintaining the health of the animals. Important lines of recommendations were given to farmers so that cleanliness can be sustained around them and in the animal houses. Members of the team attempted to propose healthier management of animals. The farmers were educated about management and feeding of their livestock and prevention of diseases during summer season. They were told about to get their livestock vaccinated against diseases expected to be encountered during coming months. Advised farmers on telephone as per their problems related to livestock farming. The major issues were related to infertility in cattle and goats, ticks and mice infestations in different animal species.

Name of institute	No. of Team of Scientists	No. of Scientists	No. of Villages	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
CVAS, Bikaner	10	50	50	4	01	50

Gosthies, training programme were organized in the adopted villages about advanced scientific management practices, anoestrous, repeat breeding, retention of placenta, dystokia, other gynecological disorders, commonly occurred diseases, seasonal diseases, vaccination, deworming, balance feeding, fodder conservation, organic livestock farming, poultry farming etc. Information regarding various schemes for animal husbandry was provided to the livestock farmers



## Activities undertaken

Activities organised by ICAR Institutes/ SAUs under MGMG

S.No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	74	2037
2.	Interface meeting/ <i>Goshthies</i>	42	1490
3.	Training organized	9	927
4.	Demonstrations conducted	9	927
5.	Mobile based advisories (No.)	85	462
6.	Literature support provided	59	1296
7.	Awareness created	90	1126
8.	Input support provided (q)		
	<b>Total</b>	368	8265

## Smart village (Jaimalsar) related activities:-

1. An *Ayurvedic* treatment camp was organised at *Panchayat Bhawan* of Jaimalsar village on 29.04.2019. A total of 41 patients were treated in the camp. Integrated Child Development Services (ICDS) created awareness among women regarding various issues of children.
2. An animal health camp was organised on 22.06.2019 by Veterinary Clinical Complex, RAJUVAS. About 150 animals suffering from various health problems were treated in the camp. Packets of mineral mixture were distributed to the livestock owners.
3. Hon'ble Vice-Chancellor along with university officials visited the Jaimalsar village on 27.07.2019 and interacted with sarpanch and villagers. Various issues related to village development like cleanliness, skill development, computer literacy, scope of dairy entrepreneurship, organic farming, and value addition were discussed in length.
4. Gosthi under Mission Antyodaya was organized in the Govt. Sr. Sec. School on 30.09.2019. The students were made aware about career in veterinary profession, skill development and self employment. Mr. Ramesh Tambia, NABARD representative briefed about their schemes in regards to different aspects of developmental activities.
5. An *eye testing* camp was organised with the cooperation of Zila Andhata Nivaran Samiti, Bikaner and Rotary Club, Bikaner on 21.12.2019. In all 89 patients were tested in this camp. Among those 11 patients were selected for operation.



*Eye testing camp*



*Infertility Camp*

6. An ayurvedic health camp was organised with the cooperation of Department of ayurveda, Bikaner on 25.01.2020. Herbal preparation (Kaadha) was given to 610 school children to boost the immunity against seasonal diseases. The students were also made aware about the hygienic, preventive measures and seasonal diseases like Dengue, Malaria, Chickengunia etc.



*Ayurvedic health camp*



*Herbal preparation (Kaadha) Distribution*

## NSS Activities of CVAS, Bikaner

Shramdaan activities were conducted at Livestock Feed Resource Management Technology Centre by the NSS volunteers on 26.04.2019 & 27.04.2019. About 4500 Sewan Grass Saplings were prepared by 66 NSS volunteers.

- On the occasion of *World No Tobacco day* on 31.05.2019 a poster competition was organised by NSS Volunteers on theme "Tobacco and lungs health". About 54 NSS volunteers were also took the oath never to use Tobacco in life. The youth were sensitized about harmful effect of smoking and Tobacco chewing. The efforts were made to not sell Tobacco products on college canteen.
- On the occasion of *International Yoga day* on 21.06.2019 a Yoga camp was organised in university campus. About 53 NSS volunteers participated in the camp and 71 other students and staff members participated in the camp. Various types of Yogaasan and Pranayaam were conducted under the guidance of Yoga teacher.
- A plantation drive was organised in the university campus on 4 August, 2019. There were 62 saplings of *Neem*, *Gulmohar*, *Karanj* were planted on both the sides of university road by NSS volunteers. One volunteer adopted one plant.
- A cleanliness drive was organised in the university campus on the occasion of *Gandhi Jayanti*, 2 October, 2019. The event was inaugurated by Dean and Faculty Chairman. All the faculty members, NSS volunteers and other students participated in this drive. Elocution and Debate competition were also conducted on this occasion.



## NCC Activities of CVAS, Bikaner

1 RAJ R&V NCC, CVAS Bikaner has carried out following activities during the year 2019-20. Activities were carried out by Lt. (Dr.) Sunita Choudhary, ANO, NCC, CVAS Bikaner under the guides of commanding officer Lt. Col. Ashok Singh Rathore.

S.No.	Activities	Date	Cadets attended
1.	Vote Parade rally 2019	05 April	50 cadets
2.	Anti pollution rally	22 Oct	
3.	Republic day camp 2020	29 Dec- 30 Jan	5 cadets
4.	Wild life conservation rally	04 Dec	
5.	Firing camp for cadets	03 Dec	All the cadets
6.	B certificate exam	08-09 Feb	84 cadets
7.	C certificate exam	22-23 Feb	51 cadets

### Voters Awareness Rally by NCC Squadron:

The 250 cadets of 1 Raj R&V Squadron NCC of RAJUVAS and Bharat Scout Guide organized a voter awareness rally on 5<sup>th</sup> April to make the public aware about importance of vote casting. The Chief Electoral Officer of the state, Sh. Anand Kumar administered the oath of voting to all the participants at the Collectorate premises, Bikaner.



*Vote Parade by NCC cadets*



*NCC Firing Camp*

### Wild life conservation rally

Wild life conservation rally was organised by 1 RAJ R&V Sqn NCC, CVAS Bikaner on 4<sup>th</sup> Dec 2019 in which 45 cadets participated in the rally to bring awareness for conservation of wild life and importance of wild life among the public. Rally was led by Lt. Col. AS Rathore, CO, NCC stride on horse and in presence of Lt. Dr. Sunita Choudhary, ANO, NCC.

### B and C Certificate exam

B certificate exam 2<sup>nd</sup> year of NCC cadets was conducted on 08-09 Feb 2020 which was taken up by 84 cadets. C certificate exam for 3<sup>rd</sup> year NCC cadets was conducted on 22 -23 Feb 2020 in which 51 cadets were present.

### RDC camp 2019

Republic day camp was from 29<sup>th</sup> to 30<sup>th</sup> Jan 2020 at New Delhi in which 5 cadets, 3 boys cadets and 2 girls cadets, from 1 Raj R&V Sqn NCC CVAS Bikaner participated. In this camp our unit had won 1<sup>st</sup> position in All India trophy. In tent pegging our cadet got runner up trophy. Apart from this our unit fetched two gold and four silver medals in different events. All India Overall position of our unit was third.



- Cadets of 1<sup>st</sup> Raj R&V SQN NCC Unit, CVAS, Bikaner grabbed five gold and one silver medal during National Integration Camp “Ek Bharat Shresht Bharat” held at Kasaragod, Kerala from 21<sup>st</sup> December to 01<sup>st</sup> January. Akhil Tiwari, Shubham Sharma, Deepak Devra, Om Prakash Solanki and Payal Meena students of III BVSc & AH won medals in various competitions.
- Anita Kavya student of Final Year BVSc & AH won 1<sup>st</sup> prize in Essay Competition during CATC Camp, Jodhpur organized by NCC Unit.
- World Wildlife Day was celebrated on 03<sup>rd</sup> March. NCC cadets of 1<sup>st</sup> Raj R&V SQN participated in the programme conducted by Center for Wild Life studies.
- Air Commodore R M Kumarasami, Deputy Director General, NCC Directorate Rajasthan, Jaipur visited 1<sup>st</sup> Raj R&V SQN, CVAS, Bikaner on 05.11.2019. Horse show was held on this occasion by the cadets of unit.



S.No.	Activities	Date	Cadets attended
1.	Vote Parade rally 2019	05 April	50 cadets
2.	Anti pollution rally	22 Oct	
3.	Republic day camp 2020	29 Dec- 30 Jan	5 cadets
4.	Wild life conservation rally	04 Dec	
5.	Firing camp for cadets	03 Dec	All the cadets
6.	B certificate exam	08-09 Feb	84 cadets
7.	C certificate exam	22-23 Feb	51 cadets

## Extra Curricular Activities

### Ophthalmology Camps at Jodhpur:

Ophthalmology camps were organized by Department of Veterinary Surgery and Radiology, CVAS, Bikaner at Shri Pannalal Gaushala, Unit screened more than 100 blind cattle for various ophthalmological disorders. Total 90 ophthalmic surgeries had been performed at the gaushala.



### Health Checkup Camp at CVAS, Bikaner:

A health checkup camp was organized on 18<sup>th</sup> June under the joint aegis of the SP Medical College, Bikaner and Red Cross Society. Prof. B.K. Gupta from SP Medical College and his team, Sh. Vijay Khatri from Red Cross society provided their services and made different check-up like blood pressure, sugar, body mass index etc. Total 198 staff and students go through health check-up.



### Animal Health Camp:

An animal health camp was organized in the adopted village Jaimalsar village on 22<sup>nd</sup> June by





Veterinary Clinical Complex, RAJUVAS, Bikaner. About 150 animals suffering from various health problems like anoestrus, repeat breeding, fever, heat stroke, pica, ecto-parasitic, endo-parasitic infestation etc. were treated in the camp. Mineral mixture packets were also distributed to the livestock owners.

## Motivational Seminar:

A motivational seminar for students and faculty was organized on 16<sup>th</sup> April by the University Placement Cell under the Chairmanship of Vice-Chancellor Prof. Vishnu Sharma. Tanushree Pareek, the first woman Assistant Commandant of the country in the Border Security Force delivered lecture.



## Internship Orientation Programme:

A one-day Internship orientation programme was organized for internship students of the year 2019 of constituent colleges of RAJUVAS on 8<sup>th</sup> April, 2019.



Total 78 students of CVAS, Bikaner and 88 students of CVAS, Navania, Udaipur participated in this programme.

## World Earth Day:

World Earth Day was celebrated on 22<sup>nd</sup> April. Students were educated and warned about the misuse of plastic and they take oath to save the earth on this occasion.



## World No Tobacco Day:

On the occasion of World No Tobacco day on 3<sup>rd</sup> May a poster competition was organized among NSS Volunteers on theme "Tobacco and Lungs Health". About 54 NSS volunteers were participated in the programme and also took the oath never to use Tobacco in life.



## RAJUVAS Foundation Day:

Decade year of RAJUVAS was celebrated on 18<sup>th</sup> May with great enthusiasm. The Chief Guest of the ceremony was former Vice-Chancellor of RAJUVAS Prof. A.K. Gahlot. The special guests of the function were Prof. Bhagirath Singh Bijarniyan, Vice-Chancellor, MGSU, Bikaner, Prof. H.D. Charan, Vice-Chancellor, Bikaner Technical University, Bikaner, Dr. N.V. Patil, Director, CIRC, Meerut and Dr. S.S. Dahiya, Director, CIRB, Hisar. Hon'ble guests of the function released the 'logo' of the decade year celebrations. RAJUVAS has signed two





## International Yoga Day:

Students, NCC and NSS volunteers, and faculty members perform various types of Yogaasan and Pranayaam at “Deewame-a-Aam” lawn of RAJUVAS on 21<sup>st</sup> June on the occasion of fifth International Yoga Day. Sh. Jagdish Lal Taylor from Patanjali Institute invited as yoga instructor to perform and guide the participants about the yoga position.



separate MOUs with Central Institute for Research on Buffaloes, Hisar and Central Institute for Research on Cattle, Meerut. Anti-rabies vaccination camp was organized at CVAS, Bikaner with courtesy of Mahavir International. An infertility camp was also organized by Department of Veterinary Gynecology and Obstetrics, CVAS, Bikaner at Beechwal village.

## World Milk Day:

World Milk Day was celebrated on 1<sup>st</sup> June. Students were made aware about the milk borne diseases through raw milk consumption. A film was shown to students on this occasion.



## Publication of eBook:

Prof. G.N. Purohit, Professor and Head, Department of Veterinary Gynaecology and Obstetrics, CVAS, Bikaner published eBook on Bubaline Theriogenology hosted at [www.avis.org](http://www.avis.org). This eBook was published in two languages i.e. English and Spanish.

## International Training Programme for Bangladesh's Veterinary Officers:

A nine days International training programme was organized by RAJUVAS for 15 veterinary officers of Bangladesh from 10-18<sup>th</sup> May. The RAJUVAS was selected by the Government of India for international training under South Asia Pashudhan Development Project. A training manual was also released on this occasion. The team coordinator of the Bangladesh delegation, Dr. K.M. BazlurRahman said that excellence and advancement of veterinary facilities in RAJUVAS will benefit the veterinary officers of our country through this training.

## World Veterinary Day:

World Veterinary Day was celebrated on 27<sup>th</sup> April. Various competitions were held for the students on this occasion like poster making, quiz and elocution. Winners were awarded with memento and certificates. Theme lecture was presented by Prof. R.K. Tanwar on the theme i.e. Value of Vaccination.





**Orientation Training of Assistant Professors:**

Two orientation trainings programme of 21 days for newly selected Assistant Professors of the University were organized in this quarter from 10-30<sup>th</sup> May and 21<sup>st</sup> June to 11<sup>th</sup> July. Total 67 Assistant Professors of three constitutes colleges of RAJUVAS has participated in the programme. Expert lectures on academic skills, administrative and financial management were delivered by subject experts.

**Training on Laparoscopic Surgery:**

Three days training on Laparoscopic Surgery in dogs was organized in the Department of Veterinary Surgery and Radiology, CVAS, Bikaner from 23-25<sup>th</sup> June. In this training, faculty from Bombay Veterinary College Prof. G.S. Khandekar, Dr. R.K. Tripathi and Dr. Ashish A.K. Rao Pawar shared the technical expertise and skills in instrumentation and operative procedure/protocols for laparoscopic surgery in dogs.

**Educational Tour:**

Thirty-nine students of third year B.V.Sc. & A.H. of CVAS, Bikaner visited the RAJUVAS units situated at Udaipur and Chittorgarh as educational tour from 21<sup>st</sup> to 25<sup>th</sup> April. The tour was conducted under supervision of Dr. Manohar Sain, Assistant Professor.

**Third Convocation of RAJUVAS:**

Third convocation ceremony of the RAJUVAS was organized on 8<sup>th</sup> August. Prof. Vishnu Sharma, Vice-Chancellor RAJUVAS read the convocation message of Hon'ble Governor of Rajasthan and Chancellor Sh. Kalyan Singh Ji. Hon'ble Minister of Animal Husbandry Sh. Lal Chand Kataria, Hon'ble Minister



of State for Higher Education Sh. Bhanwar Singh Bhati, MLA Khajuwala, Sh. Govind Ram, Chairman, ASRB, New Delhi Prof. A.K. Mishra and other renowned dignitaries graced the occasion. Total 433 students were awarded B.V.Sc. & A.H. degree, 198 students received M.V.Sc. degree, 38 students conferred Ph.D. degree, 31 students received gold medals and 1 student was awarded with Chancellor gold medal. The convocation was broadcasted directly on the university website, which was also seen by many people in India and abroad.

**MoU with CIRB, Hisar**

RAJUVAS, Bikaner and Central Institute for Research on Buffalo, Hisar have joined hands for research activities on buffaloes health and production on 18<sup>th</sup> May, 2019. The facilities available in both the institute will be utilized for need based research on buffaloes and will not only benefit the faculty members, scientists and students of these





organizations but also livestock owners in the area of buffalo treatment, production and management.

## MoU with CIRC, Meerut

A MoU was signed between Central Institute for Research on Cattle, Meerut and RAJUVAS, Bikaner on 18<sup>th</sup> May, 2019. According to this MoU, both the organizations will collaborate in research activities on cattle health and production. This will not only benefit the scientists of these organization but cattle owners will also be benefitted in the area of cattle treatment, production and management.



## One Student-One Plant Campaign:

Plantation drive was held under “One Student One Plant” initiative on 4<sup>th</sup> August at Bikaner campus. Total 62 saplings of Neem, Gulmohar, Karanj were planted on both the sides of University road by faculty members and NSS volunteers.



## Lecture on Stress Relieving Techniques:

Placement Cell of the University conducted a lecture of BK Suman Kumar from Brahm Kumari International University on the topic Stress Relieving Techniques for students and faculty members on 21<sup>st</sup> September.

## World Zoonoses Day:

World zoonoses day was celebrated on 6<sup>th</sup> July. Hon'ble Vice-Chancellor Prof. Vishnu Sharma inaugurated a free Anti rabies vaccination camp organized under the joint aegis of the RAJUVAS and Canine Welfare Society. Total 62 dogs were vaccinated for prevention of Rabies. An extension folder entitled “Pashujany Rogon Se Bachav” was released by Vice-Chancellor Prof. Vishnu Sharma.



## 73<sup>rd</sup> Independence Day:

73<sup>rd</sup> Independence Day was celebrated with full fervour of patriotism in the Bikaner campus of RAJUVAS. Vice-Chancellor Prof. Vishnu Sharma hoisted the tricolour flag at the Diwan-e-Aam. A short cultural programme was presented by the students and faculty members. Total 43 staff members were felicitated on this occasion for their outstanding contribution in the field of teaching, research and extension. Merit holder students were felicitated with a certificate and memento. After this, a plantation drive was organized in the campus.





**World Rabies Day:**

World Rabies Day was celebrated on 28<sup>th</sup> September. A free Rabies vaccination-cum-health check-up camp was organized under the collaboration of Canine Welfare Society. In this camp, total 60 dogs were vaccinated against Rabies. A quiz programme was held for students on this occasion.

**Educational Tour:**

A ten days educational tour was conducted for fourth year B.V.Sc. & A.H. students from 07<sup>th</sup> July to 16<sup>th</sup> July. The students visited i.e. IVRI (Izzatnagar), Wildlife Institute of India (Dehradun), DUVASU (Mathura), GADVASU (Ludhiyana), Veterinary colleges at Pantnagar and Jaipur.

**Motivational Lecture:**

A motivational lecture was organized for the Internee students on 28<sup>th</sup> July. Hon'ble Vice-Chancellor Prof. (Dr.) Vishnu Sharma addressed the students and oriented them for various aspects of veterinarian. Motivational speaker Dr. Gaurav Bissa boosted mental health of the internee students and motivated them for service of nation.

**Election of Student Union:**

Student Election was held in the University in peaceful manner on 27<sup>th</sup> August. Total 1208 students casted their votes out of 1700 students of three



constituent colleges at Bikaner, Jaipur and Udaipur along with four constituent AHDP Colleges. Results were declared on 28<sup>th</sup> August.

**Disaster Management Training:**

42 NSS school girls of Maharani Girls School were trained for disaster management on 24<sup>th</sup> August by the experts of Disaster Management Center.

**Teachers Day Celebration:**

Teachers Day was celebrated on 05<sup>th</sup> September. Hon'ble Vice-Chancellor Prof. (Dr.) Vishnu Sharma remembered Dr. Sarvpalli Radhakrishnan and emphasized his contribution in the development of country.

**Hindi Divas celebration :**

Students of CVAS, Bikaner participated in Hindi Divas celebration organized at Sardar Patel Medical College, Bikaner on 14<sup>th</sup> September. Mr. Akhil Tiwari student of III BVSc & AH won Third prize in debate





competition on the topic “अभिव्यक्ति की संवैधानिक आजादी-सुरक्षित एवं खण्डित”

## Anti Ragging Committee Meeting:

Anti Ragging Committee meeting was held on 23<sup>rd</sup> September as per the guidelines issued by the UGC & Raj Bhawan. Members from district administration, police, NGO, print media representative, electronic media representative, students and parents participated in the meeting and expressed their views to prevent the incidents of ragging in the campus.



## Birth Anniversary of Mahatma Gandhi:

On the occasion of 150<sup>th</sup> Birth Anniversary of Mahatma Gandhi, different programmes were organized on 2<sup>nd</sup> October. All officers of University, teaching and non-teaching staffs and students participated in the Cleanliness Drive organized on this occasion. Debate competition was held on this occasion for the students. Cleanliness Awareness Rally was held by 90 NCC cadets of 1<sup>st</sup> Raj R & V SQN in the morning.



## Workshop:

Placement cell of RAJUVAS, Bikaner organized a workshop on the topic “Employment Avenues in Veterinary Field” on 19<sup>th</sup> November. Marsh India marketing Head Dr. Shweta Singh addressed the gathering about the chances in companies, firms and



industries for veterinarians along with dog nutrition. Students of Final year BVSc & AH and Internees participated in the workshop.

## National Unity Day Celebration:

National Unity Day was celebrated on 31<sup>st</sup> October. A rally was held by NCC cadets of 1<sup>st</sup> Raj R & V SQN. Dean & Faculty Chairman flagged off the rally and addressed the students also on this occasion.



## Educational Tour:

Under decade year initiatives educational tour of M.V.Sc. and Ph.D. students was arranged for enhancement of their entrepreneurship skill and knowledge. 37 students of CVAS, Bikaner visited ultra-modern dairy farm at Shahpura on 07<sup>th</sup> November. Students also visited Pig Farm and PGIVER, Jaipur campus.

## Constitution Day

70<sup>th</sup> anniversary of Indian Constitution was celebrated as “Constitution Day” on 26.11.2019.



Live telecast of Hon'ble President Sh. R. N. Kovind's address was arranged for the students and faculty members.

## Sports & Cultural Week SPIRIT-2019:

Sports & Cultural Week SPIRIT-2019 was organized from 25<sup>th</sup>-30<sup>th</sup> November. Various sports events of athletics, badminton, table tennis, lawn tennis, cricket, volleyball, basketball, kabaddi were organized. Various competitions of cultural and literary events in Music, Dance, Skit, Mime, Painting, Collage, Clay Modeling, quiz, essay, debate etc. were also organized for the students during this. Prize distribution function was held on 30<sup>th</sup> November. Sh. Jose Mohan, Inspector General of Police, Bikaner Range was the chief guest.



## ICAR Sponsored Winter School:

Twenty-one days ICAR sponsored winter school on current status, emerging issues and future scenario related to the conservation of indigenous breeds of cattle was organized at Department of LPM, CVAS, Bikaner from 5-25 November, 2019. Seventeen Assistant Professors from different States participated and about 60 expert lectures on topics related to conservation of indigenous breeds of cattle were delivered. In the valedictory programme on 25<sup>th</sup> November, 2019, Padma Shri & Arjuna Awardee Krishna Poonia- MLA, Sadulpur was Chief Guest.



## Visit of KVAFSU Students:

A batch of 63 final year B.V.Sc. & A.H. students of Veterinary College, Bidar, Karnataka visited RAJUVAS on 24<sup>th</sup> November and 56 B.V.Sc. & A.H. final year students of Veterinary College, Shivmoga, Karnataka visited RAJUVAS on 27<sup>th</sup> November. They were astonished to see the facilities created for the treatment of livestock and other animals.



## Workshop:

A workshop was organised by Placement Cell, RAJUVAS, Bikaner on the topic "Different Career Opportunities for Veterinarians in academia and corporate in India and Abroad" on 03.12.2019. Dr. Amit Sharma, Director Merck Animal Health, New Jersey and Dr. Sangeeta Bafna, Licensing Officer, UMASS Medical School, Boston, USA were speakers on this occasion.



## Pashu Kalyan Pakhwara:

"Pashu Kalyan Pakhwara" was organized from 14<sup>th</sup> - 3<sup>rd</sup> January. General health check up camp for animals, vaccination camp, awareness training programmes for livestock owners, debate and painting competitions for students etc. were organized during this pakhwara.

## Release of RAJUVAS Calendar -2020:

RAJUVAS Calendar-2020 prepared by Public Relations Cell of the university was released by the





Vice-Chancellor Prof. Vishnu Sharma on 30<sup>th</sup> December, 2019. Prof. Vishnu Sharma said that in this multi-colored table calendar, month wise scientific instruction and details of the animal husbandry related work for the farmers has been included along with important activities and programmes of the University.

## Batch Meet:

37<sup>th</sup> Batch: Batch Meet was held by the 37<sup>th</sup> Batch on 25<sup>th</sup> December. 27 alumni of batch participated in this along with their family members. Students of CVAS, Bikaner were also awarded on this occasion by various medal started by the alumni's of the college.



## 71<sup>st</sup> Republic Day:

71<sup>st</sup> Republic Day was celebrated with great fervour and gaiety on 26<sup>th</sup> January 2020 at University Campus, Bikaner. Hon'ble Vice Chancellor Prof. (Dr.) Vishnu Sharma hoisted the national flag. The



whole campus came alive with spirit of patriotism. Students presented a colorful cultural programme. University Merit Holder students were felicitated on this occasion. A friendly cricket match was held after the function between students and faculty members.

## Animal Welfare Awareness Programme:

Animal Welfare awareness programme was organized on 29<sup>th</sup> January in the Department of Clinical Medicine, Ethics & Jurisprudence, CVAS, Bikaner. Topic for Poster Presentation was "Prevention of cruelty on animals" and topic for Debate was "प्लास्टिक का दैनिक जीवन में प्रयोग एक उपयोग या दुष्प्रभाव"

## Fresher's Day:

"Fresher's Day" was organized on 11<sup>th</sup> February to welcome the newly admitted students in the B.V.Sc. & A.H. Course. The function was presided over by Dean, CVAS, Bikaner. He formally welcomed the students and briefed them about the different activities of the institute. Later, the newly admitted students introduced themselves one by one and presented songs, dance, mimicry etc.



## MoU with SKRAU, Bikaner

A MoU has been signed between RAJUVAS and SKRAU, Bikaner on 30<sup>th</sup> December 2019. Agriculture and animal husbandry are complementing each other and with the signing of this agreement, both





university scholars and teachers will have the opportunity to learn new techniques of quality production by using technical resources available in both the Universities. Vice-Chancellor Prof. R.P. Singh said that by this mutual agreement, co-ordination and cooperation among scientists of both universities.

## RAJUVAS at Agriunifest:

RAJUVAS won two medals in All India Agricultural Universities Youth Festival "Agriunifest 2020" held at Raipur, Chattishgarh from 08-12<sup>th</sup> February. RAJUVAS won second prize in SKIT and third prize in Mime competitions.



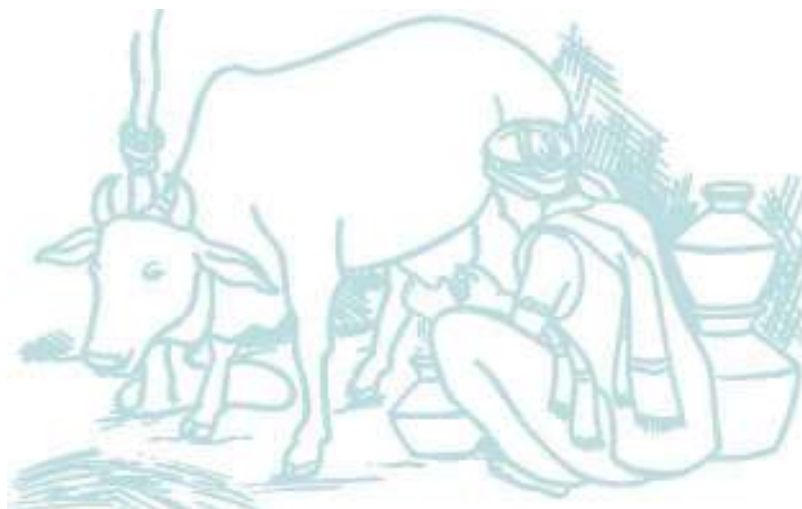
## MoU with RWIA

A MoU has been signed between Rajasthan Woolen Industries Association and RAJUVAS, Bikaner on 10<sup>th</sup> January 2020. Under this MoU work will be done on sheep health, nutrition, quality wool production, carpet manufacturing and processing and utility of sheep wool wastes as fertilizer.



## MOU with NABI, Mohali (Punjab)

RAJUVAS have entered into agreement with the National Institute of Agricultural Food Technology, Mohali (Punjab), Department of Biotechnology, Government of India. Vice-Chancellor Prof. Vishnu Sharma said that this mutual agreement will be useful for both the institute in the field of animal husbandry through biotechnology techniques for better quality of food production.





## College of Veterinary and Animal Science, Navania, Vallabhnagar, (Udaipur)

### Introduction :

It is the second constituent veterinary college of the RAJUVAS, which is situated in the southern region of Mewar in Udaipur district. The foundation stone of this college was laid by the Chief Minister of Rajasthan Smt. Vashundra Raje Sindhia on 15<sup>th</sup> April, 2007. This college was registered under registration No.P.14 (18) Edu.-4/2007 dated 28.5.2007 and the first batch of B.V.Sc. &A.H. was started on 10<sup>th</sup> September, 2007. The two year Animal Husbandry Diploma Programme, M.V.Sc. and Ph.D. programme have also been started at the College from academic year 2009-10 and 2014-15 on self-finance basis, respectively. College has been included in the first schedule of Indian Veterinary Council act 1984.



### Student's Strength

B.V.Sc. & A.H.					Total	M.V.Sc.		Total	Ph.D.			Total	2-years Diploma in A. H.		Total	Grand Total
I	II	III	IV	V		I	II		I	II	III		I	II		
89	67	63	61	85	365	28	20	48	01	02	08	11	44	48	92	516

### Scholarship and Endowments

Name of scholarship/allowance	No. of recipient
Post metric scholarship	34

### Detail about Exhibition/Fairs/Seminars/Conference

Name of Event	Objective	Duration	Implementing Agency	Venue	Sponsorship	Expenditure Incurred	No. of farmers participated/ Visited
One Day Seminar	Newer approaches and strategies for prevention & control of FMD	one day 1st Oct. 2019	Department of Veterinary Medicine	CVAS Navania Udaipur	Intas Pharmaceutical and Venky's pharma companies	30,0000 rupees by sponsored agency	85 field veterinarian including faculty of the college
Exhibition	A stall of different exhibits related with scientific animal husbandry production was put in the Kisan Mela	One day 03 September, 2019	(MPUAT, Udaipur)	KVK, Udaipur-II	-	-	1,500
One Day Seminar	A one day seminar for milk entrepreneurs on milk and milk products	13 <sup>th</sup> October 2019	CVAS, Navania and R. K. Sansthan, Udaipur.	CVAS, Navania	-		



## Detail of the training programme

S. No.	Date	Topic of training programme	Sponsoring agency	No. of beneficiary		
				Male	Female	Total
1.	June-2019	Goat Breeding and management	AICRP on Goat Improvement (Sirohi Field Unit)	01	03	04
2.		7 Visit of Animal farm/ 9 Lectures	ICICI-RSETI, Udaipur.	-	412	412
3.	July-2019	Goat Breeding and management	AICRP on Goat Improvement (Sirohi Field Unit)	12	01	13
4.		7 Visit of Animal farm/ 9 Lectures	ICICI-RSETI, Udaipur. Department of Animal Husbandry, Udaipur.	-	292	292
5.	August-2019	5 Visit of Animal farm/ 2 Lectures	ICICI-RSETI, Udaipur. SevaMendir Udaipur.	32	158	190
6.	September-2019	2 Visit of Animal farm/ 4 Lectures	ICICI-RSETI, Udaipur. SevaMendir Udaipur.	-	190	190
7.		पशु पालन आय में वृद्धि की उन्नत तकनीकें	LFRMTC Bikaner	50	00	50
8.	October-2019	3 Visit of Animal farm/ 7 Lectures	ICICI-RSETI, Udaipur. SevaMendir Udaipur.	-	235	235
9.		One day seminar on "Processing of milk product"	R.K. Sansthan, Sawaimadhopur	40	-	40
10.	November- 2019	1 Lecture	SevaMendir Udaipur	-	24	24
11.	December-2019	Goat Breeding and management	AICRP on Goat Improvement (Sirohi Field Unit)	21	05	26
12.		Six days skill development training programme on "Processing of Milk & Food products" for milk and food entrepreneurs	R.K. Sansthan, Sawaimadhopur	25	-	25
13.		Goat Breeding and management	AICRP on Goat Improvement (Sirohi Field Unit)	13	19	32
14.		Goat Breeding and management	AICRP on Goat Improvement (Sirohi Field Unit)	12	22	34
15.		1 Visit of Animal farm/ 4 Lectures	ICICI-RSETI, Udaipur.	-	158	158
16.	January-2020	2 Visit of Animal farm/ 1 Lectures	ICICI-RSETI, Udaipur.	-	101	101
17.	February-2020	3 Visit of Animal farm/ 1 Lectures	ICICI-RSETI, Udaipur. Anand Agricultural University, Gujarat. SevaMendir Udaipur	75	94	169
18.	March-2020	3 Visit of Animal farm/ 1 Lectures	Department of Animal Husbandry, Jaipur. ICICI-RSETI, Udaipur.	50	60	110



## Conference/Seminars/ Symposia/Workshops

1. Dr. R.K. Nagda attended 19<sup>th</sup> Annual Review Meet of Goat Improvement at NASC, Complex, New Delhi on 20-21 November 2019.
2. Dr. M. L. Gurjar attended and presented a paper on "Sojat Goat Rearing in Marwar Region of South Western Rajasthan.: A good source of Income for Farmer in above National Conference.
3. Dr. Hina Ashraf Waiz, Dr. B.S. Saini and Dr. Monika Joshi attended XXVII Annual Convention of the Indian Society of Animal Production and Management on "Paradigm shift in Livestock Management to obtain high quality animal products for enhancing farm economy and entrepreneurship" organized by Department of Livestock Production and Management, PGIVER, Jaipur, (RAJUVAS) on 4-6 February, 2020.
4. Dr. kamal Purohit, Dr. Goverdhan Singh, Dr. Anita Rathore and Dr. Mamta Kumari attended Seminar on "Newer Approaches and Strategies for Prevention and Control of FMD" Organised by College of Veterinary & Animal Science, Navania, Vallabh Nagar, Udaipur at CVAS Navania, Vallabh Nagar, Udaipur on 1 October 2019.
5. Dr. Rakesh Kumar Khinchi and Dr. Sandhya Morwal attended 1<sup>st</sup> Annual convention and National symposium of VIPM on "Sustainable improvement in Animal Health Production -Bridging Science and Policy for economics Upliftment of Farmers, organised by Department of Veterinary Medicine, COVS, DUVASU, Mathura and CIRG-Farah, Mathura on 8-9 November, 2019.
6. Dr. B.S. Saini, Dr Sunil Arora, Dr. Vikash Kumar Sharma attended International Conference on Environmental & Climatic Consequence: Challenges & Mitigation Strategies (ICECC-2019) at Sangam university, Bhilwada organized by Department of Science & Technology, Govt. of Raj., from 21- 22, December, 2019.
7. Dr. Naresh Singh Kuntal attended VII<sup>th</sup> Annual Convention of SVSBT First Alumni Meet and National Seminar on "Biotechnological Advances for improving Animal Health and Productivity" during 5-6 December, 2019.
8. Dr. Dinesh Manoharrao Chavhan attended XIX Annual Conference of "Indian Society of Veterinary Pharmacology and Toxicology" and National Symposium on "Pharmacogenomics in the development and validation of indigenous drugs" by Department of Veterinary Pharmacology and Toxicology at College of Veterinary and Animal Sciences, Mannuthy, Thrissur, Kerala Veterinary and Animal Sciences University on 18-20 December 2019.
9. Dr. Rahul Swarnkar and Dr. Dinesh Manoharrao Chavhan attended Symposium on Veterinary Laboratory Diagnosis by Apollo College of Veterinary Medicine, Jaipur on 6 April 2019.
10. Dr. Monika Joshi attended One day workshop on organic poultry production under Niche Area of excellence entitled "Development of production and protection technologies for organic poultry farming" at MPUAT, Udaipur on 13<sup>th</sup> march, 2020.
11. Dr. Mahendar Singh Meel attended INCAN-2019 which was held during 17-19 December, 2019 at Biswa Bangla Convention Centre, West Bengal University of Animal & Fishery Sciences, Kolkata and ISAPM-2020 which was held during 4-6 February, 2020 at SIAM, Durgapura, Jaipur.
12. Dr. Tikam Goyal attended 3<sup>rd</sup> National Conference of SVAHE on 'Livestock development for societal needs: extension and allied sectors initiatives' from 03-05 April, 2019 at CVAS, GBPUAT, Pantnagar, Uttarakhand.
13. Dr. Sanweer Khatoon, Assistant Professor, Veterinary Parasitology, Participated as Parasitologist in a four days network workshop from 4-7 February 2020, organized by Indonesian University on childhood infections and pollution with one pre day lab visit on 3<sup>rd</sup> February 2020 as Jakarta Indonesia.





## Winter /Summer School Training Attended by Faculty (2019-20):

S. No.	Name of Faculty	Summer /winter school/ training
1.	Dr. M. L. Gurjar, Dr. Goverdhan Singh, Dr. Rakesh Kumar Khinchi, Dr. Monika Joshi, Dr. Arun Kumar, Dr. Tikam Goyal	21 Days Training on " Teaching Methodology" organized by Directorate of Extension Education , at Rajasthan University of Veterinary and Animal Sciences, Bikaner ,Rajasthan on 10-30 May,2019.
2.	Dr. Kamal Purohit, Dr. Anita Rathore, Dr. Sandhya Morwal, Dr. Kavita A. Shende, Dr. Hakim Manzar Alam, Dr. Sunil Arora	21 Days Training on " Teaching Methodology" organized by Directorate of Extension Education , at Rajasthan University of Veterinary and Animal Sciences, Bikaner ,Rajasthan on 21 <sup>st</sup> June to 11 <sup>th</sup> July, 2019.
3.	Dr. Mamta Kumari, Dr. Hina Ashraf Waiz, Dr. Dinesh Manoharrao Chavhan, Dr. Rajesh Singathia, Dr. B.S. Saini	21 Days Training on " Teaching Methodology" organized by Directorate of Extension Education , at Rajasthan University of Veterinary and Animal Sciences, Bikaner ,Rajasthan on 28 March to 27 April, 2019.
4.	Dr. B.S. Saini	21 days Winter School Training Programme on "Current Status, Emerging Issue and future Scenario regarding Conservation of Indigenous Breeds of Livestock", Department of LPM, CVAS, RAJUVAS, Bikaner from 05 to 25 November 2019.

## Research Paper Published in Journals

1. Abhishek Sharma, Monika Joshi and S.K. Sharma December 2019 .Effect of Feeding Hydroponics Maize Fodder on Milk Yield and Milk Constituents in Gir Cows. Vety. Practitioner, 20 (2): 276-277
2. Acharya, M.K., Gurjar, M.L. and, Meshram, B.N. (2019). Evaluation of various biochemical parameters to Nitrazepam, Pentothal sodium and Ketamine anaesthesia in selected freshwater fishes. Journal of Veterinary Research Advances. 1(1): 45-50.
3. Anirudh Khatri, Anita Rathore and C.P. Jain. (2019) Investigation of phytoconstituents along with total phenolic and flavonoids in methanolic and aqueous extract of bark of Prosopis cineraria (L.) Druce. International Journals of Chemical Studies. 7(3):4261-4264.
4. Anita Rathore, Hemant Dadhich and Sunita Rani. (2019) Pathohaemorrhagic lesions of ovary and uterus in cattle. Ruminant Science. 8(2): 225-226.
5. Anita Rathore, Rohitash Dadhich, Kamal Purohit, S.K. Sharma, C.S. Vaishnava, Bincy Joseph and Anirudh Khatri. (2019) Phytochemical screening and total phenolic and flavonoid content in leaves of Prosopis cineraria (L.) Druce. International Journals of Chemical Studies. 7(3):1853-1855.
6. Anita Rathore, Rohitash Dadhich, Kamal Purohit, Shiv Kumar Sharma, Chandra Shekhar Vaishnava, Bincy Joseph and Anirudh Khatri. (2019) Biochemical effect of induced sub acute toxicity of Parthenium hysterophorus L. and its amelioration with Prosopis cineraria (L.) Druce leaves in wistar albino rats. Veterinary Practitioner. 20(2):188-190.
7. Anita Rathore, Rohitash Dadhich, Kamal Purohit, Shiv Kumar Sharma, Chandra Shekhar Vaishnava, Bincy Joseph and Anirudh Khatri. (2019) Impact of Prosopis cineraria (L.) Druce leaves on hematological parameters against induced sub-acute toxicity of Parthenium hysterophorus L. in wister albino rats. International Journals of Chemical Studies. 7(1): 294-296.
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- Khatri.(2019). Phytochemical screening and total phenolic and flavonoid content in leaves of *Prosopis cineraria* (L.) Druce. 7(3):1853-1855
9. Aziz, P.R., Sharma, S.K., Kuldeep, S. K., Yadav, H. S. and Kuntal N. 2019. Hemato-biochemical and electrolyte alterations in a flock of goats affected with peste des petits ruminants. The Pharma Innovation Journal. 8(4):318-321.
10. Bhagat Singh Saini and Nalini Kataria (2020). Analysis of Abiotic Stressor Vis-À-Vis Stress in Female Non- Descript Indigenous Cattle from Arid Tracts of Rajasthan. European Journal of Pharmaceutical and Medical Research, 7(6), 720-728.
11. Bhagat Singh Saini and Nalini Kataria (2020). Investigation of Fluid Status of Female Non-Descript Indigenous Cattle from Arid Tracts of Rajasthan during Extreme Environmental Temperature Periods. World Journal of Pharmaceutical Research 9, Issue 6, 1974-1986.
12. D. Choudhary, S. S. Shekhawat, A. Gaurav, H. Kumar and N. Kumar (2019). Molecular characterization of *Staphylococcus aureus* isolated from foods of animal origin by targeting virulence and antibiotic resistance genes. Int.J.Curr.Microbiol.App.Sci 8(12): 700-707.
13. Devendra Singh, Shweta Anand, Rahul Swarnkar and Abhishek Choudhary (2019). Evaluation of anti-oxidant potential of *Pithecellobium dulce* fruit against fipronil induced toxicity in rats. Journal of Pharmacognosy and Phytochemistry. 8(4):1362-1367.
14. Dhanraj Meena, U.S. Suradkar, D.M. Chavhan, Harpreet Singh, Surendra Yadav. (2019) Effect of different level Aloe vera gel and int extract incorporation in the development of chicken meat cutlets. Int. J. Chem. Studies. 7(1):964-967.
15. Goverdhan Singh, R. Dadhich, K. Purohit, M. Kumari, M. Mehra, B. Joseph, S.K. Sharma, C.S. Vaishnava. 2019. Pathomorphological & hemato-biochemical studies on oral tumors in digestive tract of sheep (*Ovis aries*) in southern region of rajasthan. International journal of chemical studies. 7 (2) 1581-1583.
16. Harpreet Singh, Devendra Singh, Shantanu Kumar Kuldeep and Mohd Ali (2020). Marketing behavior of camel livestock owners during puskar livestock fairing rajasthan. Journal of Entomology and zoology studies, 8(1):1116-1119.
17. Hitesh Kumar Meena, S.K. Sharma and Monika Joshi June 2019. Therapeutic Efficacy of Arazyme alongwith Some Antioxidants, Vitamins and Minerals in Subclinical Mastitis in Sirohi Goats. Indian Journal of Veterinary Medicine. 39 (1) 39-42.
18. Hiteshwar Singh Yadav, Shiv Kumar Sharma, Naresh Singh Kuntal, Peer Rayees Aziz and Shantanu Kumar Kuldeep (2019). A study on babesiosis in HF cattle. Journal of Entomology and zoology studies, 7(3): 624-626.
19. Kamal Purohit, Goverdhan Singh, Sanweer Khatoon, Anita Rathore, Sudeep Solanki, Naresh Singh Kuntal and Ajay Kumar (2019) "Gastric myiasis by *Oestrus ovis* larvae in a sirohi goat : A case report." Indian Veterinary Journal 96 (4): 65-66
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## Mera Gaon Mera Gaurav

**Name of Institute:** College of Veterinary and Animal Science, Navania, Udaipur

Presently 8 teams of multidisciplinary scientists involving 29 scientists in total are remain in touch with their adopted villages.

- Regular submission of monthly, quarterly and annual progress reports (MPR, QPR and APR) since the implementation of the programme.

### Institution-wise Summary

Name of institute	Total No of groups formed	No. of scientists involved	No. of villages covered	No. of field activities conducted	No. of messages/ advisory sent	Farmers benefited (No.)
CVAS, Navania, Vallabh Nagar	8	29	29	1146	540	12771

The groups have conducted different activities like farm and home visits, demonstrations, trainings, interface meetings, mobile based advisories, awareness on common problems faced by rural farm families and literature support on key topics (in local language) for overall development of rural people under the umbrella of MGMG programme.

### Activities organised by the institute under MGMG

S. No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	21	645
2.	Interface meeting/ <i>Goshthies</i>	8	207
3.	Training organized	-	-
4.	Demonstrations conducted	2	29
5.	Mobile based advisories (No of message)	540	5267
6.	Literature support provided (No)	559	5966
7.	Awareness created (No)	13	612
8.	Input support provided	3	45
	<b>Total</b>	<b>1146</b>	<b>12771</b>

## Veterinary Clinical Complex

This Veterinary hospital has various facilities for diagnosis and treatment of animal diseases which includes clinical examination and treatment under outdoor, indoor wards for livestock and pet animal patients, advanced diagnostic procedures like radiography, sonography etc., investigation of clinical samples of blood, serum, urine and faeces, medical / surgical / gynecological treatment of diseases including operation theaters for livestock and small animal patients. There is also facility for stay of attendants of animal patients. Facilities for training of farmers, veterinary and para-veterinary students have also been developed.

### Executive Summary of Progress

- Total 11218 cases of different diseases were treated at outdoor including 8034 medical, 1933 surgical and 1251 gynecological cases in different species of animals.
- Total numbers of indoor patients were 367 during report period (Medicine 129; Surgery 156; Gynaecology 82).
- Under preventive and control measure taken against parasites, ecto-parasiticide spray and deworming was done in 3209 and 1776 animals respectively. Vaccination of 284 animals under health camps.



- Total 512 clinical samples were investigated.
- Total 130 ambulatory cases (critically ill animals) were transported from 56 different villages by the large animal ambulance.
- Total 4 training programmes were organized during current year which were sponsored by different agencies. Total beneficiaries were 150.
- Total 3 animal health camps organized during current year. Total beneficiaries and treated animals were 213 and 1329 respectively.

## Detail of The Health Camps Organized:

S.No	Date	Name of village	No. of beneficiary	No. of animals
1.	18/05/19	Nctavala	130	507
2.	6/07/19	Tarawat	41	323
3.	24/01/20	Rundera	42	499
<b>Total</b>			<b>213</b>	<b>1329</b>

## Collection of clinical samples for investigation:

S. No.	Type of Sample	No. of Sample collected
1	Blood	82
2	Milk	85
3	Urine	78
4	Faecal	164
5	Skin scrapings	11
6	Ruminal fluid	92
<b>Total</b>		<b>512</b>

## Detail of the training programme organized:

S. No.	Date	Topic of Training Programme	Sponsoring Agency	No. of Beneficiary
1	8/07/19	Health Care & Management of Dairy Animals	Shri ji Animal Husbandry Training Institute	34
2	17/10/19	Intra Rastriya Krishak Training Programme	-	29
3	30/01/20	Health Care in Animals (School Students visit)	Quality Education Academy	64
4	18/02/20	Health Care in Animals	Govt. Animal Husbandry Training Institute, Udaipur	23
<b>Total</b>				<b>150</b>



**Table 1: Number of case attended report (month wise):**

MONTH	CATTLE			BUFFALO			SHEEP			GOAT			OTHERS			TOTAL			G. TOTAL
	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	MED.	SUR.	GYN.	
APR., 2019	207	53	48	255	33	24	32	0	0	147	10	14	72	19	6	713	115	92	920
MAY, 2019	205	44	52	194	38	22	46	0	0	48	13	14	28	25	22	521	120	110	751
JUN. 2019	274	101	26	249	45	44	30	0	0	73	8	3	23	10	34	649	164	107	920
JUL. 2019	235	131	20	258	48	36	15	0	0	102	10	11	22	7	29	632	196	96	924
AUG. 2019	187	158	6	231	76	70	10	0	0	110	5	18	15	33	21	553	272	115	940
SEPT. 2019	226	108	19	165	105	48	25	2	0	122	11	12	28	25	21	566	251	100	917
OCT. 2019	185	60	12	203	63	34	10	0	0	166	16	8	16	20	16	580	159	70	809
NOV. 2019	163	86	5	156	49	62	15	0	0	194	5	12	126	36	2	654	176	81	911
DEC. 2019	170	72	35	162	28	45	0	0	0	84	7	37	20	25	3	436	132	120	688
JAN. 2020	167	30	33	193	54	34	0	0	0	149	6	29	17	16	14	526	106	110	742
FEB. 2020	187	53	53	185	29	45	0	0	0	95	4	20	36	2	6	503	88	124	715
MAR. 2020	92	26	49	123	117	41	0	0	0	99	8	26	56	3	10	370	154	126	650
HEALTH CAMPS	41	0	0	54	0	0	1087	0	0	143	0	0	6	0	0	1329	0	0	1329
TOTAL	2339	922	358	2428	685	505	1270	2	0	1532	103	204	465	221	184	8034	1933	1251	11218



## Extra Curricular Activities

### College Foundation Day

College Foundation Day and Birth Anniversary of Dr. B.R. Ambedkar were celebrated on 15<sup>th</sup> April 2019. Dr. S. K. Sharma, Academic Coordinator emphasized on Veterinarian's role in the economic upliftment of animal owners. Dr. Balwant Meshram, Associate Professor expressed his views on life philosophy of Dr. B.R. Ambedkar. Students also expressed their views on this occasion.



### Earth Day Celebration

Earth Day was celebrated on 22<sup>nd</sup> April. Prof. R.K. Dhuria, Dean appealed everyone to conserve our resources, plant trees, abolish the use of plastic and conserve water to reduce the effect of global warming and protect our nature. A pledge to save our nature was taken by teaching and non teaching faculty members and students. A poster competition on My Earth My World theme was organized for the students.



### World Veterinary Day

World Veterinary Day was celebrated on 27<sup>th</sup> April. Dr. S.K. Sharma, Academic Coordinator delivered a lecture on the theme Value of Vaccination. Faculty



members, non teaching staff and students participated in the programme.

### RAJUVAS Foundation Day & Decade Year

RAJUVAS Foundation Day & Decade Year was celebrated on 18<sup>th</sup> May with great enthusiasm. A Vaccination and deworming camp was organized in village Netavala under the vaccination and disease eradication campaign. Total 219 animals were vaccinated against FMD, HS and BQ and 17 animals affected with different disease were treated.



### World Anti Tobacco Day

World Anti Tobacco Day was celebrated on 31<sup>st</sup> May. To mark World No-Tobacco Day an awareness rally was organized at village Ranchorpura (Vallabh Nagar) in which students and NCC Cadets



participated. The rally was flagged off by Dr. S.K. Sharma, Academic Coordinator and Lt. Col. (Dr.) Thomas J. Thomas, NCC Commanding Officer.

## World Milk Day

World Milk Day was celebrated on 1<sup>st</sup> June with the theme Drink Milk Today and Every Day. On this Occasion Academic Coordinator, Dr. S.K. Sharma emphasised on the importance of milk and milk safety issues. All students, teaching and non teaching faculty members participated in the event.



## International Yoga Day

International Yoga Day was celebrated on 21<sup>st</sup> June. Prof. R.K. Dhuria, Dean emphasized on the importance of yoga and its balance with environment. One hour yoga and pranayam session was performed by all the students, NCC cadets, teaching and non teaching staff under the guidance of yoga trainer Smt. Seema Sharma and Dr. Trilok Chand.



## Director and PI, CIRB, Hisar visited LRS, Vallabhnagar

Dr. S.S. Dahiya, Director and Dr. K.P. Singh Project Incharge, CIRB, Hisar visited National Project on Buffalo Improvement, LRS, Vallabhnagar and CVAS, Navania (Udaipur) on 9<sup>th</sup> May 2019. Dean,



Prof. R.K. Dhuria informed about the contribution of Surti Buffalo in southern Rajasthan. A hindi folder on "सूरती भैंस एक दृष्टि" for Livestock owners was released.

## Annual Training Camp of NCC

A 10 days Combined Annual Training Camp of NCC was organized from 07-16 June 2019 at Kanore Udaipur by 2 R&V Regiment CVAS, Navania, Udaipur. In which 59 NCC cadets of CVAS, Navania and Udaipur participated. During camp cadets won the prizes in the various events viz. first in Drill, tug of war, solo dance, solo song, group song, extempore, kabbadi and volleyball.



## Educational Tour

A ten days educational tour was conducted for fourth year B.V.Sc. & A.H. students from 19.07.19 to 28.07.19. The Dean, Prof. R.K. Dhuria flagged off the tour. The students visited the reputed institutions and centres of Veterinary importance in North India eg. IVRI (Izzatnagar), NDRI (Karnal), Wildlife Institute of India (Dehradun), Central Institute for Research on Buffaloes and National Research Center on Equines (Hisar), Nahargarh Biological Park, including Veterinary colleges at Pantnagar, Mathura and Jaipur. The renowned scientists of the respective institutions delivered lectures and





updated the knowledge of students pertaining to Veterinary and Animal Science including wildlife. The accompanying faculty members were Dr. Mahendra Singh Meel and Dr. Bhagat Singh Saini.

## One student-One Plantation Campaign

One student-One Plantation Campaign was organized on 13<sup>th</sup> August in the presence of Shri Ajit Singh Rajawat, Registrar, RAJUVAS. He inspired everyone to plant and protects trees. Dean, Prof. R.K. Dhuria, said that 500 plants will be planted under this campaign by students and staff members.



## Ek Vidhyarthi Ek Vraksharopan programme

A plantation programme was organized on 17<sup>th</sup> September in continuation of "Ek Vidhyarthi Ek Vraksharopan programme". Dean, Prof. Tribhuwan Sharma initiated the event by planting Ashok sapling in the Campus. Teaching and Non Teaching



staff and Students also did plantation in the Campus and took pledge to protect trees and conserve environment.

## Student's Union Election - 2019

Student's Union Election - 2019 for the different posts of Central Student's Union and Veterinary Student's Association was held peacefully on 27<sup>th</sup> August. Kailash Kumar, M.V.Sc. 1<sup>st</sup> Year was elected as President (VSA), Kailash Lohar (3<sup>rd</sup> Yr B.V.Sc. & A.H.) as Vice President (VSA). Oath to winning candidates was given by the Dean.



## Health check-up and counseling camp

Health check-up and counseling camp for student, teaching and non teaching faculty members were organized on 2<sup>nd</sup> July in joint aegis with J.K. Fortis Hospital, Udaipur. Dean, Prof. R. K. Dhuria emphasized on importance of regular exercise, good food habits and regular health check-up. A total of 150 students and faculty members were benefitted by the health checkup.



## World Zoonosis day

World Zoonosis day was organized on 6<sup>th</sup> July 2. Dr. S.K. Sharma and Dr. Abhishek Gaurav delivered a talk on various zoonotic diseases and their control measures. Pamphlets on TB and brucellosis were





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distributed to livestock owners for causing awareness among them. A total of 65 animals were vaccinated against rabies in a camp organized at village Tarawat.

### 73<sup>rd</sup> Independence Day

73<sup>rd</sup> Independence Day was celebrated at CVAS, Navania, Udaipur. Dr. S.K. Sharma, Academic Coordinator hoisted the tricolour national flag and paid homage to the freedom fighters. He addressed the gathering which was followed by the cultural programme performed by the students enthusiastically & plantation programme by teaching, non-teaching staff and students.



### World Rabies awareness Programme

World Rabies awareness Programme was organized on 28<sup>th</sup> September. An awareness programme about Rabies disease its symptoms, preventive major and



importance of vaccination was organised at Government Senior Secondary School, Navania.

### First RAJUVAS Parlour

First RAJUVAS Parlour was inaugurated by Prof. R.K. Dhuria at CVAS, Navania, Udaipur on 15<sup>th</sup> July 2019. A single-window facility will be provided for the sale of products like paneer, khoya, shrikhand, lassi, dogs, Azolla grass etc. to various stakeholders.



### One Day Seminar

A one day Seminar on “Newer Approaches and Strategies for Prevention & Control of FMD” was organised on 1<sup>st</sup> October 2019 at CVAS, Navania, Udaipur. A total of 25 Veterinary officers and faculty members participated in the training. A Seminar booklet and folder were released by dignitaries.



### Orientation Programme

An Orientation programme for newly admitted first year B.V.Sc & A.H. was organized on 17<sup>th</sup> September. Prof. Tribhuwan Sharma, Dean Informed the student about importance of Veterinary profession, its challenges and possibilities. The students were acquainted about various academic Co-Curricular, NCC, NSS and sports activities of the college.

### Sports and Cultural Week

The Sports and Cultural Week was organized from 22<sup>nd</sup> to 28<sup>th</sup> November. Various sports competitions





like Badminton, Cricket, volleyball, table tennis, chess, basket ball, lawn tennis, Kabaddi, discus throw, shot puts & javelin throw and 100 & 200 meter races were organized. Interclass competitions for events of Elocution, Debate, Extempore, Poster, Clay Modeling, Quiz, On Spot painting, Cartooning,



Mehandi Rangoli, song and Group dance programme were also organized during the week.

## Seminar For Milk Entrepreneurs On Milk And Milk Products

A one day seminar for milk entrepreneurs on milk and milk products processing was organized on 13<sup>th</sup> October in joint Collaboration with R. K. Sansthan, Udaipur. In Seminar various lectures were given by experts on processing of milk and milk products and their future opportunities.



## Cancer Awareness Rally

A Cancer awareness rally was organised on 7<sup>th</sup> November by NCC cadets, Dean Prof. Tribhuwan Sharma flagged off the rally. Cadets carried poster & slogans related to cancer awareness and made people aware about the fatal effect of cancer.



## Motivational Lecture

A motivational lecture for final year B.V.Sc. & A.H. students was organized on 20<sup>th</sup> November. Mr. Khemraj Choudhary, Former Additional Chief Secretary (IAS), Govt. of Rajasthan graced the occasion as key note speaker and invoked the students to recognize their strength and use their creativity and skills for leading a successful life.

## Fresher's Celebration

Fresher's Day was organized on the theme of NAVYAM-2019 on 28<sup>th</sup> November for welcoming the first year B.V.Sc.&A.H students. Event was started with the introduction of first year students and subsequently various cultural programmes were organized.



## Prof. Tribhuwan Sharma took over the charge

Prof. Tribhuwan Sharma took over the charge of Dean, College of Veterinary and Animal Science, Navania, Vallabh Nagar (Udaipur) on 16<sup>th</sup> September 2019.

## Special Preparatory Classes for RPSC Veterinary Officer

A special preparatory classes for RPSC Veterinary Officer Exam 2020 was organised from 25<sup>th</sup> November 2019 to 13<sup>th</sup> February 2020. Dean, Prof. Tribhuwan Sharma explained the aspirants about importance of classes for their examination as well as interview.

## Training for Processing of Milk and Food Products

A 6 days training programme on "Processing of Milk and Food Products" was organised at Department of Livestock Products Technology under their i-STED project from 10-16 December. Dean, Prof. Tribhuwan Sharma inaugurated the programme and expressed his views about the immense possibilities in the field of food products. Training certificates were distributed to the participants after competition of training.

## Voluntary Blood donation camp

A Voluntary Blood donation camp was organised on 11<sup>th</sup> December in joint aegis with RNT Medical College, Udaipur. Faculty Members, NCC officers, Non teaching staff and students donated a total of 105 Units of blood. NCC and NSS cadets of college showed their true enthusiasm in donating the blood.



## Swachhata Pakhwada

Swachhata Pakhwada was organized by NCC unit from 1 December to 15 December. In which various events like, plogging, Shramdam activities, jagrukta abhiyan, cleanliness drive, and personal hygiene lectures were organised.

## 150<sup>th</sup> Birth Anniversary Mahatma Gandhi

150<sup>th</sup> Birth Anniversary of Father of Nation, Mahatma Gandhi was celebrated on 2<sup>nd</sup> October. Celebration started with the cleaning work in and



around the campus by NCC and NSS students followed by poster and essay writing competition. An oath on "Not to use single plastic" was given by Dean, Prof. Tribhuwan Sharma to all teaching, non-teaching faculty member and students.

## National Unity Day

National Unity Day was celebrated on 144<sup>th</sup> birth anniversary of Sardar Vallabhbhai Patel on 31<sup>st</sup> October. Prof. Tribhuwan Sharma, Dean briefed about the role of Sardar Vallabhbhai Patel in unity and integrity. A pledge was taken by teaching and non teaching faculty members and students for unity and integrity of Country. An essay writing and poster making competition was held.

## NCC Day Celebration

NCC day was celebrated on 25<sup>th</sup> November at 2 Raj R&V Regiment, NCC, CVAS, Navania, Udaipur. Dean, Prof. Tribhuwan Sharma and NCC Commanding Officer, Col. (Dr.) Thomas K. Thomas observed the march-past by NCC cadets. Certificate "B" were distributed to 3<sup>rd</sup> year NCC cadets.



## 70<sup>th</sup> Anniversary of Constitution day

70<sup>th</sup> Anniversary of Constitution day was celebrated on 26<sup>th</sup> November. Dean Prof. Tribhuwan Sharma urged the students and faculty members to respect





the constitution and work hard for the development of our Nation. The preamble to the constitution was read out. 300 students, teaching and non teaching faculty participate in the event.

## Run for Disabled Soldiers

NCC Cadets of 2 Raj R&V Regiment welcomed "Run for Disabled Soldiers" on 30<sup>th</sup> December. Indian Army organised this run to generate awareness about the next of kins who look after the disable soldiers as a reassurance. NCC cadets of college followed the soldiers from Dabok to Bhatewar and became the part of the national campaign.

## First Female Associate NCC Officer

Dr. Sanweer Khatoon, Asst. Prof., Department of Veterinary Parasitology became the first female Associate NCC Officer of 2 Raj R&V, NCC Regiment. She was honoured with the designation on successful completion of pre concision training at RVC center & Couge, Merut Cant, U.P.



## Annual Training Camp of NCC

A 10 days Combined Annual Training Camp of NCC was organized from 14-23 October 2019 at Udaipur by 2 R&V Regiment CVAS, Navania, Udaipur. In which 77 NCC cadets of CVAS, Navania, Udaipur participated. During camp cadets won the prizes in the various events.

## 71<sup>st</sup> Republic Day

The 71<sup>st</sup> Republic day was celebrated with great enthusiasm at CVAS, Navania, Udaipur. Prof. Tribhuwan Sharma, Dean, hoisted the National Flag followed by March past by the NCC cadets.



## Farmers Visited

Farmers from different villages located in tribal or non-tribal areas of Udaipur, Pratapgarh, Bhilwara, Banswara and Jaipur district visited the Gir cattle, Surti buffalo, Sonadi sheep, Sirohi goat & poultry units of the LRS and VCC of CVAS, Navania. The visit was organized by CVAS, Navania in collaboration with 'Governmental and Non-governmental organizations' working in these areas.





## **Post Graduate Institute of Veterinary Education and Research (PGIVER) Jaipur**

### **Introduction:**

Post Graduate Institute of Veterinary Education & Research (PGIVER) is one of the premier Institutes which has contributed a lot in the growth of animal husbandry sector with its continuous teaching, research and extension activities in Rajasthan. PGIVER was established in 2012 at Jaipur, as constituent college of Rajasthan University of Veterinary and Animal Sciences, Bikaner with the financial provisions from Government of Rajasthan (State Plan) and Rashtriya Krishi Vikas Yojna (RKVY) of Government of India. PGIVER has started



B.V.Sc. & A.H. course at Jaipur after duly granted permission of Veterinary Council of India, with effect from 29.10.2015. Intake capacity of the institute is 80 students per annum.

The main campus of the Institute is located at National Highway-11, Agra Road, Jamdoli, Jaipur on 18.90 acre (75608 sq.m.) of land allotted by Government of Rajasthan where a newly constructed academic and administrative building with library, Veterinary Clinical Complex Building including OPD and IPD. Livestock Farm Complex having dairy, sheep & goat and poultry unit has been also established.

Besides the main campus, Institute is in possession of 1.52 acre land at B-2 Bypass, Mansarovar, Jaipur, where AHDP course is being conducted along with research projects of university office. In addition to this, Institute has 14.22 acre of land at Kho- Nagorian, Jaipur for the purpose of feed and fodder production and NCC unit including equine unit.

### **Mandate:**

Mandate of the Institute is to develop skilled expertise in different areas of Veterinary & Animal Sciences and pursue livestock owners/farmer's need based research, extension and development activities.

### **Objectives:**

- Higher education (PG & Ph. D. ) in various disciplines of Veterinary Science & Animal Husbandry.
- Research programmes in line with the need of the state to enhance livestock health & productivity.
- Act as a coordinating institute for various tele medicine centers in different parts of the state and creating a data base and network system for feed, fodder, diseases, animal products and by products.
- On campus and off campus Post Graduate diploma, certificate programmes for skill development to promote entrepreneurship and business activities in livestock sector.
- Act as a referral institute for diagnosis and treatment of sick animals.
- Act as a platform to disseminate advance technologies to the farmers for enhancing livestock productivity.
- Liaisoning with various premier institute of national and international repute for development of animal husbandry sector in the state and provide consultancy to government and non-government organizations.
- To pursue research and development in frontier areas like wild life, climate and weather based programme, nanotechnology, organic animal husbandry, bio-diversity and other areas of emerging importance.



## Academic Profile:

### Academic Departments:

Total seventeen academic departments have been created by the University as per norms laid by Veterinary Council of India (VCI) under MSVE Regulations, 2016 and are functional along-with procurement of necessary infrastructure and resources in terms of equipments, contingencies etc. The college also has one AHDP institute providing two year diploma programme in animal husbandry after senior secondary education. The institute for AHDP was established in the year of 2010.

### Staff Position:

#### Teaching Staff (Faculty):

As per MSVE 2016 Regulations, Teaching staff (Faculty) there are total 74 posts, (broken up into 17 posts of Professors, 16 posts of Associate Professors and 41 posts of Assistant Professors) are required out of which 15 posts of Professors, 23 posts of Associate Professors, 43 posts of Assistant Professors and 1 post of assistant production manager are sanctioned for various academic departments. As on March 31<sup>st</sup>, 2020 posts of 9 Professors, 6 Associate Professors and 52 Assistant Professors are posted to the Institute. Teaching Associates and Retired Officers from Government sector have been engaged against sanctioned vacant posts in various academic departments.

#### Non-Teaching Staff:

Out of total 104 Administrative, Technical and Supporting nature of posts, 57 are sanctioned as regular posts while 47 posts are sanctioned to be engaged on job basis. Out of 57 sanctioned regular posts, 10 posts are filled with regular employee. The persons have been engaged on job basis as per need against the sanctioned supporting nature of posts.

### Students' Profile:

The overall strength and academic performance of the students of the Institute is summarized as under:

#### Students' Strength

B.V.Sc.&A.H.					Total	M.V.Sc.		Total	Ph.D			Total	2 Years Diploma in A.H.		Total	G. Total
I	II	III	IV	V		I	II		I	II	III		I	II		
82	73	69	49	55	328	30	26	56	6	8	7	21	45	39	84	489

## Research Activities:

The faculty and the students of the institute have remained actively engaged in basic as well as applied research, in order to facilitate the solutions for different health and productivity linked issues of livestock and other related concerns of livestock owners. Barley fodder is being grown and increase the production of green fodder through Hydroponic Technology under RKVY.

RKVY project "Epidemiological Mapping of Antimicrobial Resistant and its Underlying Genetic Mechanisms for Improvement in Health of livestock & Poultry Sector" is being implemented smoothly.

RKVY Project "Centre for Diagnosis, Surveillance & Response of Zoonotic Diseases" is running with its objective of creation of State-of-Art Facility for 'Zoonoses Control and Risk Assessment' by strengthening local capacity to diagnose zoonotic diseases. In this project mainly five most prevalent zoonotic diseases like Brucellosis, TB, Para-TB, Salmonellosis and Rabies are covered. Infrastructure of laboratory has been completed and some of the important laboratory instruments has been procured.



## Students' Academic Performance

Course	Year 2019-20	No. of Students Appeared	No. of Students Promoted	No. of Students Secured I Division (Above 60% Marks)	No. of Students Secured University Merit Position
AHDP	I Year	45	45	Promoted due to COVID SITUATION	-
	II Year	39	39		-
B.V.Sc. & A.H.	I Year	77	77		-
	II Year	73	73		-
	III year	69	69		-
	IV year	49	49		-
	V year	55	55	54	3
M.V.Sc.	I Year	28	28	28	-
	II Year	26	26	26	-
Ph.D.	I Year	6	6	6	-
	II Year	8	8	8	-
	III Year	7	7	7	-

Capacity Building for Detection of Newer synthetic ingredients, highly pathogenic microbial presence, drug and pesticides residues, Pollutants etc. by establishing high end milk quality testing research laboratory at Jaipur has run successfully in the Institute.

Research on various aspects of Veterinary and Animal Sciences is being conducted by M.V.Sc. and Ph.D. students by institute.

## Research Project In operation

S.No.	Title of the project	Name of PI	Funding Agency	Amount (in lakh)
1	Monitoring of Nutritional value and pesticide residues in milk of lactating mother from various region of Rajasthan	Prof.(Dr ) Kapil Garg (SMS Medical College, Jaipur) Prof. (Dr ) Sanjita Sharma (Co-PI)	ICMR Sub -Centre	19.59
2	Epidemiological Mapping of Antimicrobial Resistant and its Underlying Genetic Mechanisms for Improvement in Health of livestock & Poultry Sector	Dr Sandeep Kumar Sharma	GOR under the plan of RKVY	250.00
3	Centre for Diagnosis , surveillance & Response of Zoonotic Disease	Dr D.S Meena	GOR under the plan of RKVY	210.00





## Extension Activities:

### *Mera Gaon Mera Gaurav (MGMG) Scheme:*

Under this scheme the faculties have to remain in touch with the adopted villages for providing information to farmers on technical and other related aspects in a time frame through personal visit and other means.



### List of villages adopted by the faculties of PGIVER, Jaipur

- |                        |                 |                 |
|------------------------|-----------------|-----------------|
| 1. Ballupura           | 2. Mohanpura    | 3. Vijaipura    |
| 4. Mukandpura          | 5. Raithal      | 6. Deoliya      |
| 7. Teelawas            | 8. Dahmi Khurd  | 9. Sanjariya    |
| 10. Prithvi Singh Pura | 11. Shivdaspura | 12. Bhojya Dand |
| 13. Teetriya           | 14. Chandlai    | 15. Udaipuria   |
| 16. Aleewas            |                 |                 |

### Activities performed by faculties under Mera Gaon Mera Gaurav (MGMG) Scheme

- Teams conducted 6 interface meetings/Goshthies with livestock owners and panchyat representative in which 161 farmers participated & benefitted.
- Total 13 mobile based advisories were provided to 55 farmers and 5 literature support were provided to 160 farmers.
- A total of 26 activities were conducted in which 376 farmers benefitted.

No. of Team of Scientists	No. of Scientists	No. of Villages	No. of Blocks	No. of Districts	Bench Mark Survey conducted (No. of villages)
03	16	16	03	01	16

### Activities undertaken :

S. No.	Name of activity	No. of activities conducted	No. of farmers participated & benefitted
1.	Visit to village by teams	02	161
2.	Interface meeting/ <i>Goshthies</i>	06	161
3.	Training organized	---	---
4.	Demonstrations conducted	---	---
5.	Mobile based advisories (No. of message)	13	55
6.	Literature support provided (No.)	05	160
7.	Awareness created (No.)	---	---
8.	Other, if any	---	---
	<b>Total</b>	<b>26</b>	<b>376</b>



## Livestock development activities:

To disseminate advance animal husbandry technologies in the state, PGIVER has intensified efforts for enhancing livestock productivity through its extension education system. PGIVER organise training, campus visit, awareness programme and also provide the resource person to other institutions for livestock development.

Faculty of PGIVER delivered lecture as resource person for state level training Institute on following topic-

- Conservation and Management of Monkey population in Rajasthan at Model Training Course on "Management of Vertebrate Pests in Dry lands for Enhancing Farmers Income" sponsored by Ministry of Agriculture & Farmers Welfare (GOI) at CAZRI, Jodhpur on 17/10/19.
- Role of vitamins and minerals in infertility, mastitis and heat stress in dairy animals : Participants ( Veterinary Officer ) on 10<sup>th</sup> June, 2019.
- Refresher course on Animal Husbandry practices and provide training to VO's and SVO's of Dept. of Animal Husbandry on 13<sup>th</sup>, 23<sup>rd</sup> & 30<sup>th</sup> May 2019.
- Improved surgical technique: 'Caesarean Section' to VO'S & S.V.O'S on 17.02.2020 and 24.02.2020.
- Refresher course for veterinary officer of Department of Animal Husbandry, Govt. of Rajasthan.
- Animal Health Management for 40 days under ASCI organized by DEE, RAJUVAS, Bikaner from 07.02.2020 to 17.03.2020.
  - Poultry farming in Farmers' training held at Government Poultry Farm, Khatipura, Jaipur. 11<sup>th</sup> meeting of Veterinary Hospital Planning and Surgical Instruments Sectional Committee MHD 13<sup>th</sup> at Green meeting room, Manak Bhavan, Beuro of Indian Standards, 9, Bahadur Shah Zafar Marg, New Delhi on 26.02.2020.
- **IAEC meeting :**
  - a. CSWRI, Avikanagar on 20<sup>th</sup> July, 2019.

b. Banasthali Vidyapith on 16<sup>th</sup> January, 2020.

## • Live TV talk :

- a. Jiwanu Yukt Sade Gale Bhojan Ke Sewan Se Utpann Gambhir Rog- Botulism on 31<sup>st</sup> December, 2019 on the topic .
- b. Pashu poshan evam pashu prabandhan under "Chopal" on 10<sup>th</sup> July, 2019.
- c. Sardiyon mei pashu prabandhan aur pashu poshan chaupal as expert on 08.11.2019 at 4:30 p.m..
- d. Uttam Pashu Prabhadhan Aay Ka Aadhar.
- Technical evaluation of medical equipment for PGIVER at 'Indian Oil Corporation Limited' office on 24.02.2020.

Educational Tour of final year B.V.Sc. & A.H. students was carried out from 12<sup>th</sup>-21<sup>st</sup> October, 2019. Dr. M.C. Parashar, Assistant Professor, Department of Veterinary Surgery & Radiology and Dr. Anurag Pandey, Assistant Professor, Department of LPT were the Tour In-charges.

- Awareness programme : Veterinary Education and Zoonotic diseases among school students .
- Entrepreneurship Bootcamp organized by Livestock Innovation Knowledge and Entrepreneurship Skill (LIKES) for PGIVER, Jaipur.

## Treatment camps organized:

- Reducing the incidence of Bird mortality in Sambhar Lake on 14 and 22 November, 2019 for attending.
- A free Rabies Vaccination-cum-Treatment Camp was organized on the occasion of "World Veterinary Day" on 27<sup>th</sup> April, 2019. A total of 49 canines were vaccinated against rabies and the dog owners were enlightened about the zoonotic diseases.
- Three day free treatment camp for injured birds was organized from 13<sup>th</sup> to 15<sup>th</sup> January, 2020 at PGIVER, Jaipur. A total of 36 injured birds were treated in the camp. Dr. D.S. Meena, Associate Professor & Head, Department of Veterinary Medicine coordinated this camp.



## Livestock Farm Complex:

### Farm Activities:

- Tharparkar, Gir, kankrej and Rathi cows and Murrah buffaloes are maintained at livestock farm complex as demonstration unit for UG and PG students.
- Poultry farming has considerable stock of layer and broiler birds as per MSVE 2016.
- Routine farm practices viz. de-worming and vaccination of livestock and poultry at LFC have been conducted wherever sick animals were served with the appropriate treatment.
- Demonstration sessions on different livestock units at LFC have been conducted for the various

batches, of trainee farmers and animal owners, from the Rajasthan State Livestock Management and Training Institute Jaipur, Department of Animal Husbandry, Govt. of Rajasthan.

- Cow and buffalo milk produced at LFC is being sold at daily basis.

## Veterinary Clinical Complex:

### Clinical OPD:

The faculty of the Institute at outdoor clinics of Veterinary Clinical Complex (VCC) have been involved in providing treatment to sick animals and extending consultation to the livestock breeders /animal owners throughout the year.

### Total no. of cases examined and treated at OPD

Species	Large Animals			Small animals			Birds	Others	Total
	Cattle	Buffalo	Horse & Camel	Dogs	Cat	Goat & Sheep			
Number of Cases	931	336	127	4832	111	2161	182	83	8763

**Veterinary Surgery:** A total of 45 Major surgeries, 145 ultrasonography and 440 radiological examinations were performed in large and small animals.

### Veterinary Clinical Diagnostic Laboratory:

Veterinary Clinical Diagnostic Laboratory has remained functional to cover various diagnostic and analytical aspects related to blood, urine, milk and feed from the clinical and other samples. A total of 516 samples were analysed for antibiotic sensitivity (ABST), blood, urine and faecal examinations whereas 8 samples of feed were analysed for Nutritional Parameters and Proximate Principles respectively.

### Dignitaries' Visits:

Name	Designation	Purpose of Visit
Shri Lal Chand Katariya	Cabinet Minister, Agriculture and Animal Husbandry, Rajasthan	Formal visit and released RAJUVAS e-bulletin
Shri Bhajanlal Jatav	State Minister, Agriculture and Animal Husbandry, Rajasthan	
Shri Rafeek Khan	M.L.A, Adarsh Nagar, Jaipur	
Shri Pawan Kumar Goyal	Secretary, Department of Agriculture and Animal Husbandry, Rajasthan	Formal Visit
Dr. Sailesh Sharma	Director, Department of Animal Husbandry, Rajasthan	
Prof. M.K. Mehta	Professor, College of Veterinary and Animal Husbandry, Mhow	VCI visit for inspection of PGIVER
Prof. Sanjay Sharma	Professor, College of Veterinary and Animal Science, Pantnagar	
Prof. Rashmi Singh	Professor, College of Veterinary and Animal Husbandry, Mathura	
Dr. N.S. Rathore	Director General (Agricultural Education), ICAR	Formal Visit
Dr. G.N. Mathur	Retd. Prof. RAJUVAS, Bikaner	Informative talk on Azolla Farming



## Organised National Conference

Name of event	Objective	Duration	Implementing Agency	Venue	No of Participant
Annual Convention of Indian Society of Animal Production and Management (ISAPM)	Paradigm Shift in Livestock Management to Obtain High Quality Animal Products for Enhancing Farm Economy and Entrepreneurship	4 <sup>th</sup> -6 <sup>th</sup> February, 2020	State Institute of Agriculture Management, Durgapura, Jaipur and PGIVER, Jaipur	PGIVER, Jaipur	More than 450 Animal Scientists, Veterinarians, Researchers and Students



The conference was inaugurated by Sh. Lal Chand Kataria, Hon'ble Minister for Agriculture, Horticulture, Animal Husbandry and Fisheries, GOR on 4<sup>th</sup> February, 2020 in the presence of Dr. A.K. Srivastava, Member, ASRB, New Dehli; Dr. B.N. Tripathi, DDG (Animal Science), ICAR, New Delhi; Dr. Rajesh Sharma, Secretary, Animal Husbandry, GOR; Prof. K.K. Sarma, Padmashree Awardee; Prof. K.N Wadhvani, President ISAPM; Prof. G.C. Gahlot, Dean, PGI-VER, Jaipur and Prof. Sanjita Sharma, organizing secretary of the conference.

Sh. Kalraj Mishra, Hon'ble Governor of Rajasthan and Chancellor, RAJUVAS was the Chief Guest in the valedictory ceremony on 6<sup>th</sup> February, 2020. Different awards of the ISAPM society were presented to the scientists. On this occasion, Hon'ble Governor Sh. Kalraj Mishra also visited RAJUVAS exhibition and Vice-Chancellor Prof. Vishnu Sharma appraised the university activities for well being of farmers. University publications were also released by the guest of the function during the conference. Prof. A.K. Gahlot, Former Vice-Chancellor RAJUVAS; Prof. G.K. Singh, Vice-Chancellor DUVASU, Mathura, Prof. J.S. Sandhu Vice-Chancellor, Agricultural University, Jobner also expressed their views during valedictory ceremony.





## Contribution as Resource Person:

1. Prof. (Dr.) Sanjita Sharma, Dean & Head, Department of LPM participated as an invited member in meeting of BSMA, LPT & LPM, held at Hyderabad from 21<sup>st</sup> to 23<sup>rd</sup> May, 2019.
2. Prof.(Dr.) Sanjita Sharma, Professor and Head and Dr. Sunil Kumar, Assistant Professor, Department of LPM attended CEC meeting at AAU, Anand from 15<sup>th</sup> -16<sup>th</sup> September, 2019.
3. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended a meeting as member of Regional Advisory Group, NABARD at Jaipur on 26<sup>th</sup> June, 2019.
4. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended a meeting at Directorate of Animal Husbandry, Jaipur on 27<sup>th</sup> June, 2019 regarding formulation of draft for Agriculture Export Policy for Livestock Products of the state.
5. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended National Conference on "Enhancing Farmers' Income through Integrated Farming System (IFS) Approach" organized by Indian Society of Agribusiness Professionals at Birla Auditorium, Jaipur from 10<sup>th</sup> -11<sup>th</sup> April, 2019.
6. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended National Workshop on "Academic Excellence through Building Partnerships and Resources Generation" held at ICAR- National Academy of Agricultural Research Management (NAARM), Hyderabad from 30<sup>th</sup> April -1<sup>st</sup> May, 2019.
7. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended the 10<sup>th</sup> Brain Storming Session of Indian Agricultural Universities Association (IAUA) at Chaudhary Sarwan Kumar Himachal Pradesh Agricultural University, Palampur (H.P.) from 28<sup>th</sup> -29<sup>th</sup> June, 2019.
8. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur inspected the general facilities and manpower available as per MSVE Regulations-2016 for final recognition of B.V.Sc. & A.H. course at ICAR- Indian Veterinary Research Institute, Bareilly, Uttar Pradesh from 25<sup>th</sup> -27<sup>th</sup> July, 2019.
9. Prof. (Dr.) Sanjita Sharma, Head, Department of LPM participated and presented a lead paper in International Conference on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production" organized by Animal Nutrition Society of India at West Bengal University of Animal and Fishery Sciences, Kolkata from 17<sup>th</sup> to 19<sup>th</sup> December, 2019.
10. Prof. G.C. Gahlot, Dean, PGIVER & HOD and Dr. P.C. Sharma, Assistant Professor, Department of Animal Genetics and Breeding attended National Symposium on "Enhancement of Farmers' Income through Management of Animal Genetic Resources" and "XVII Annual Convention of Society for Conservation of Domestic Animal Biodiversity (SOCDAB)" at College of Veterinary Science and Animal Husbandry, Mhow (Madhya Pradesh) organized from February 10-11, 2020.
10. Dr. Barkha Gupta, Assistant Professor, Department of Veterinary Physiology & Biochemistry attended "GeM Samvad" at OTS on 17<sup>th</sup> January, 2020.
11. Dr. Y.P. Singh, Assistant Professor, Department of Veterinary Surgery and Radiology attended meeting of the committee for improvement of ICU of 'Hingonia Gau Punrvas Kendra' on 26.09.19.
12. Dr. Y.P. Singh, Assistant Professor, Department of Veterinary Surgery and Radiology attended Indian VETopia- 2020 (RACE Approved CE Programme) and FASAVA CPD -2020 at Marriot Hotel, Jaipur, Rajasthan from 13.02.2020 to 16.02.2020.



## Seminars, Symposia, Workshops, Trainings

S. No.	Title	Institution and Place where Organized	Date(s) when Organized	Name of faculty Participated
1.	National Conference on "Enhancing Farmers' Income through Integrated Farming System (IFS) Approach" organized by from	Indian Society of Agribusiness Professionals at Birla Auditorium, Jaipur	10 <sup>th</sup> -11 <sup>th</sup> April, 2019.	Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur
2.	National Workshop on "Academic Excellence through Building Partnerships and Resources Generation"	ICAR- National Academy of Agricultural Research Management (NAARM), Hyderabad	30 <sup>th</sup> April -1 <sup>st</sup> May, 2019.	Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur attended
3.	10 <sup>th</sup> Brain Storming Session	Indian Agricultural Universities Association (IAUA) at Chaudhary Sarwan Kumar Himachal Pradesh Agricultural University, Palampur (I.P.)	28-29 <sup>th</sup> June, 2019.	Prof. (Dr.) Sanjita Sharma, Dean, PGIVER, Jaipur
4.	International Conference on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production" from	organized by Animal Nutrition Society of India at West Bengal University of Animal and Fishery Sciences, Kolkata	17 <sup>th</sup> to 19 <sup>th</sup> December, 2019.	Prof. (Dr.) Sanjita Sharma, Head, Department of LPM
5.	National Symposium on "Enhancement of Farmers' Income through Management of Animal Genetic Resources" and "XVII Annual Convention of Society for Conservation of Domestic Animal Biodiversity (SOCDAB)"	College of Veterinary Science and Animal Husbandry, Mhow (Madhya Pradesh)	February 10-11, 2020.	Prof. G.C. Gahlot, Dean, PGIVER & HOD and Dr. P.C. Sharma, Assistant Professor, Department of Animal Genetics and Breeding
6.	National Conference on "Paradigm Shift in Livestock Management to Obtain High Quality Animal Products for Enhancing Farm Economy and Entrepreneurship" and 27 <sup>th</sup> Annual Convention of Indian Society of Animal Production and Management (ISAPM)		4 <sup>th</sup> -6 <sup>th</sup> February, 2020 at State Institute of Agriculture Management, Durgapura, Jaipur.	All faculty members of PGIVER, Jaipur
7.	21 days Orientation Training Programme on "Teaching Methodology" organized by Directorate of Extension Education, Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), Bikaner	Directorate of Extension Education, Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), CVAS, Bikaner.	21 <sup>st</sup> June-11 <sup>th</sup> July, 2019	Dr. Jitendra Bargujar, Veterinary Medicine; Dr. Mukesh Chand Parashar, Veterinary Surgery and Radiology; Dr. Sunil Kumar, LFC; Dr. S.K. Rewani, Veterinary & A.I.I. Extension Education; Dr. Amit Kumar Pandey, Veterinary Physiology & Biochemistry; Dr. Anurag Pandey, LPT and Dr. Sarjna Mocna, Veterinary Pathology





S. No.	Title	Institution and Place where Organized	Date(s) when Organized	Name of faculty Participated
8	21 days Orientation Training Programme on "Teaching Methodology"	Directorate of Extension Education, Rajasthan University of Veterinary and Animal Sciences (RAJUVAS), CVAS, Bikaner.	10 <sup>th</sup> -30 <sup>th</sup> , May 2019	Dr. Madan Mohan Mali, Veterinary Medicine; Dr. Satyaveer Singh, Veterinary Surgery and Radiology; Dr. Bincy Joseph, Veterinary Microbiology and Biotechnology; Dr. Bhavana Rathore, Veterinary Parasitology; Dr. Monika Karnani, Animal Nutrition; Dr. Sumit Prakash Yadav, Veterinary Gynaecology and Obstetrics; Dr. P.C. Sharma, AGB; Dr. Navav Singh, LPM; Dr. Ashok Baindha & Dr. Subhash Chand, Veterinary & A.H. Extension Education; Dr. Umesh Suradkar, LPT and Dr. Barkha Gupta, Veterinary Physiology & Biochemistry
9	21 days Orientation Training Programme on "Teaching Methodology"	DEE, RAJUVAS Bikaner from at CVAS, Bikaner.	28 <sup>th</sup> March – 17 <sup>th</sup> April, 2019	Dr. Rashmi Singh, Dr. Nirmal Kumar Jeph & Dr. Nazceer Mohammed, Veterinary Medicine; Dr. Y.P. Singh, Veterinary Surgery and Radiology; Dr. Sandeep Kumar Sharma, Veterinary Microbiology and Biotechnology; Dr. Vikas Galav & Dr. Manish Agrawal, Veterinary Pathology; Dr. Manju, Animal Nutrition; Dr. Amit Kumar, Veterinary Gynaecology and Obstetrics and Dr. Surendra Singh Shekhawat, Veterinary Public Health
10	International Symposium & Conference "IMSACON-IX"	DGCN College of Veterinary and Animal Sciences, CSK Himachal Pradesh Agricultural University, Palampur, Kangra (H.P.).	6-8 November, 2019	Dr. Anurag Pandey and Dr. Umesh S. Suradkar, Assistant Professors, Department of Livestock Products Technology
11	Education participated and presented country paper in workshop on "Rural Community Development for Sustainable and Inclusive Growth"	Asian Productivity Organization (APO) and Fiji National University (FNU) at Nadi, Fiji	18-22 November, 2019	Dr. Ashok Baindha, Assistant Professor, Department of Veterinary and Animal Husbandry Extension
12	Short Course on "Evaluation and Improvement of Backyard Poultry for Livelihood and Women Empowerment"	Faculty of Veterinary Science & Animal Husbandry (SKUAST), Srinagar	20 <sup>th</sup> -29 <sup>th</sup> February, 2020.	Dr. Ashok Baindha, Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education



S. No.	Title	Institution and Place where Organized	Date(s) when Organized	Name of faculty Participated
13	"Stem cell technologies for augmentation, restoration and enhancement of male and female fertility and its clinical application"	DUVASU, Mathura.	1-21 November, 2019	Dr. Barkha Gupta, Assistant Professor, Department of Veterinary Physiology and Biochemistry
14	Advances in the management of drug resistance in economically important parasites"	IVRI, Barcilly.	04-13 November, 2019	Dr. Bhavana Rathore, Assistant Professor, Department of Veterinary Parasitology
15	National Symposium on "Sustainable improvement in animal health and production- Bridging science and policy for economic upliftment of farmers" and 1 <sup>st</sup> Annual Convention of Veterinary Internal and Preventive Medicine Society from at College of Veterinary Science and Animal Husbandry	DUVASU, Mathura	08-09 November, 2019	Dr. D.S. Meena, Associate Professor and Dr. Madan Mohan Mali, Dr. Rasmi Singh, Dr. Nazeer Mohammed, Dr. Jitendra Bargujar and Dr. Nirmal Kumar Jeph, Assistant Professors and Dr. Jitendra Kant Nagar, Teaching Associate, Department of Veterinary Medicine and Dr. Sandeep Kumar Sharma, Assistant Professor, Department of Veterinary Microbiology and Biotechnology
16	SAPI Conference	CSWRI, Avikanagar, Tonk	18-19 February, 2020	Dr. G.S. Gottam, Associate Professor, Dr. Barkha Gupta, Assistant Professor and Dr. Pavan Kumar Mittal, Teaching Associate, Department of Veterinary Physiology & Biochemistry
17	International Conference on "Advancements in Veterinary sciences for Wildlife Conservation" and 13 <sup>th</sup> Annual Meeting of Association of Indian Zoo and Wildlife Veterinarian	LaCONES (CCMB), Hyderabad.	13-15 November, 2019	Dr. Hemant Joshi, Assistant Professor, Department of Veterinary Anatomy
18	International Conference on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production"	organized by Animal Nutrition Society of India at West Bengal University of Animal and Fishery Sciences, Kolkata	17 <sup>th</sup> to 19 <sup>th</sup> December, 2019.	Dr. Monika Karnani and Dr. Manju, Assistant Professors and Ph.D. and M.V.Sc students, Department of Animal Nutrition
19	34 <sup>th</sup> Annual Convention of Indian Association of Veterinary Anatomists & National symposium on "Recent Advances in Veterinary Anatomy and its Application in Clinical Sciences"	Bengaluru	28 <sup>th</sup> November, 2019	Dr. Pankaj Thanvi, Assistant Professor, Department of Veterinary Anatomy
20	3 <sup>rd</sup> National Conference of Society for Veterinary and Animal Husbandry Extension on "Livestock Development for Societal Needs: Extension and Allied Sectors Initiatives"	G.B. Pant University of Agriculture & Technology, Pantnagar (Uttarakhand)	3 <sup>rd</sup> -5 <sup>th</sup> April, 2019.	Dr. S.K. Rewani and Dr. Ashok Baidha, Assistant Professor, Department of Veterinary & A.H. Extension Education



S. No.	Title	Institution and Place where Organized	Date(s) when Organized	Name of faculty Participated
21	National Workshop on "New Frontiers in Agricultural Extension"	National Institute of Agricultural Extension Management (MANAGE), Hyderabad	29 <sup>th</sup> -31 <sup>st</sup> May, 2019.	Dr. S.K. Rewani, Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education
22	XXXV Annual Convention of The Indian Society for Study of Animal Reproduction and International Symposium on "Global Perspectives to Enhance Livestock Fertility through Modern Reproductive Techniques for Doubling Farmer's Income"	Veterinary College and Research Institute, Namakkal (TANUVAS), Tamil Nadu	18 <sup>th</sup> to 20 <sup>th</sup> December, 2019.	Dr. Sumit Prakash Yadav and Dr. Amit Kumar, Assistant professors, Department of Veterinary Gynaecology and Obstetrics
23	4 day training course of "Laboratory Quality Management Systems & Internal Audit as per ISO/IEC 17025:2017" from	IIQM, Jaipur	30 <sup>th</sup> July- 2 <sup>nd</sup> August, 2019.	Dr. Vikas Galav, Assistant Professor, Department of Veterinary Pathology
24	one day orientation workshop on "Emergency Preparedness against Zoonotic Diseases"	NRCE, Hisar	18.09.2019.	Dr. Vikas Galav, Assistant Professor, Department of Veterinary Pathology and Dr. Sandeep Kumar Sharma, Assistant Professor, Department of Veterinary Microbiology and Biotechnology
25	43 <sup>rd</sup> Annual Congress of Indian Society for Veterinary Surgery and National Symposium on "Recent advances on amelioration of anaesthetic and surgical stress in farm and companion animals" from	organized by Department of Veterinary Surgery and Radiology, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar	14-16 November, 2019.	Dr. Y.P Singh and Dr. Satyaveer Singh, Assistant Professors and Dr. Vimlesh Kumar, Teaching Associate, Department of Veterinary Surgery & Radiology
26	Hands on Practice for use of Laparoscopic Equipment" for minimum invasive surgery in from	Department of Veterinary Surgery & Radiology, CVAS, Bikaner	23 <sup>rd</sup> -25 <sup>th</sup> June, 2019.	Dr. Y.P. Singh and Dr. Satyaveer Singh, Assistant Professors, Department of Veterinary Surgery and Radiology
27	Indian VETopia- 2020 (RACE Approved CE Programme) and FASAVA CPD -2020 at from	Marriot Hotel, Jaipur, Rajasthan	13.02.2020 to 16.02.2020.	Dr. Y.P. Singh, Assistant Professor, Department of Veterinary Surgery and Radiology





## Publications:

### Research Papers in Journals

1. Pal, V.K., Rewani, S.K., Singh, A., Sengar, S.S. and Diwakar, R.P. (2019). Haemato-Biochemical Response in Cattle Vaccinated with Bm95 Recombinant and Local *Boophilus Microplus* Whole Extract Antigen (BmWE<sub>Ag</sub>). *Multilogic in Science*, **8** (Spl.): 7-11.
2. Singh, V., Rewani, S.K., Rajoria, S., Choudhary, N., Garg, S. and Singodia, M. (2019). Technological Empowerment of Women through Dairy Cooperatives in Jaipur (Rajasthan). *International Journal of Livestock Research*, **9** (4): 103-107. doi: 10.5455/ijlr.20181111043134.
3. Meena, P., Pandey, A., Saini, A., Gurjar, A.S., Raman, R., Meel, S.K. and Chauhan, V.K. (2019). Cost economics of chevon nuggets incorporated with green coffee and grape seed extracts. *Int. Jour. of chemical studies*, **7** (3): 2707-2710.
4. Rajoria, S., Rewani, S.K., Singh, V., Bhumra, H., Singodia, M. and Nanda, B. (2019). A Comparative Analysis between Advance and Conventional ICT tools in Information Dissemination in Jaipur District of Rajasthan. *International Journal of Livestock Research*, **9** (5): 206-213. doi: 10.5455/ijlr.20190216112511.
5. Saini, K., Jaiswal, M., Rathore, B., Varshney, R. and Panwar, P. (2019). Therapeutic management of concurrent infection of coccidiosis and theileriosis in a calf. *The Pharma Innovation Journal*, **8** (6): 843-845.
6. Kumar, A., Mehta, J.S., Kumar, A. and Purohit, G.N. (2019). Effect of non enzymatic antioxidants on serum glucose level in Magra rams in arid region of Rajasthan, India. *International Journal of Current Microbiology and Applied Sciences*, **8** (6): 2145-2150.
7. Kumar, A., Mehta, J.S., Purohit, G.N., Kumar, A. and Narula, H.K. (2019). Effects of non enzymatic antioxidants on serum total proteins and its fractions in Magra rams in arid region of Rajasthan. *The Pharma Innovation Journal*, **8** (6): 542-547.
8. Singodia, M., Rewani, S.K., Baindha, A., Chand, S., Rajoria, S. and Singh, V. (2019). Constraints Faced by Livestock Farmers in Utilization of Livestock Services in Jaipur District of Rajasthan, India. *Indian Res. J. Ext. Edu.*, **19** (2 & 3): 104-107.
9. Baindha, A., Sankahla, G. and Chand, S. (2019). Entrepreneurial Behaviour of Milk Processors. *Indian Res. J. Ext. Edu.*, **19** (2 & 3): 29-33.
10. Kumar, P., Kumar, A., Jaiswal, M., Kumar, D., Kumar, K. and Yadav, S.P. (2019). Contagious ecthyma (Orf): A disease of goats and sheep. *The Pharma Innovation Journal*, **8** (7): 374-377.
11. Purohit, G.N., Kumar, A., Gaur, M. and Mehta, J.S. (2019). Uterine torsion in a non-descript cow with twins: A case report. *The Pharma Innovation Journal*, **8** (7): 707-708.
12. Saini, A., Pandey, A., Sharma, S., Ambedkar, Y.R., Suradkar, U.S., Meena, P., Raman, R. and Gurjar, A.S. (2019). Effect of Rosemary (*Rosmarinus officinalis* L.) Leaves Extract on Quality Attributes of Chicken Powder Incorporated Fried Chicken Snacks. *Journal of Animal Research*, **9** (4): 01-07.
13. Kumar, N., Gaurav, A., Shekhawat, S.S., Joseph, B., Kumar, H. and Choudhary, D. (2019). Physico-Chemical Assessment of Drinking Water in Urban and Peri Urban Areas of Udaipur, India. *International Journal of Current Microbiology and Applied Sciences*, **8** (8): 2314-2326.
14. Singodia, M., Rewani, S.K., Rajoria, S., Singh, V. and Saini, G.R. (2019). Perception of Livestock Farmers towards Existing Livestock Service Delivery Systems in Jaipur District of Rajasthan, India. *International Journal of Livestock Research*, **9** (8): 111-119. doi: 10.5455/ijlr.20190327091331.
15. Karnani, M., Sharma, V., Sharma, S., Choudhary, S., Saini, S., Manju and Singh, N. (2019) Effect of linseed oil supplementation on performance and carcass traits of broiler chickens. *Indian Journal of Animal Production and Management*, **35** (1-2): 68-73.
16. Singh, N., Sharma, S., Sharma, V., Saini, S., Joshi, R. and Karnani, M. (2019). Effect of non-genetic factors and body condition score on udder health and milk composition traits of Rathi cattle. *Indian Journal of Animal Production and Management*, **35** (1-2): 1-5.



17. Sharma, P.C., Meena, R. and Kumar, S. (2019). Genetic and phenotypic parameter for growth traits of Sonadi Sheep. *Indian Journal of Animal Sciences*, **89** (9): 970-973.
18. Meena, S.C., Gaurav, A., Shekhawat, S.S., Joseph, B., Kumar, H. and Kumar, N. (2019). Isolation and identification of *Bacillus cereus* from milk and milk products in Udaipur, Rajasthan, India. *Int. J. Curr. Microbiol. App. Sci.*, **8** (9): 2783-2787.
19. Soni, M., Gaurav, A., Joseph, B., Shekhawat, S.S. and Meena, S.C. (2019). Prevalence and Drug Resistance of *Escherichia coli* strains isolated from milk and milk products. *Int. J. Curr. Microbiol. App. Sci.*, **8** (10): 1338-1346.
20. Choudhary, D., Shekhawat, S.S., Gaurav, A., Joseph, B., Kumar, H. and Kumar, N. (2019). Molecular Characterization of *Staphylococcus aureus* Isolated from Foods of Animal Origin by targeting Virulence and Antibiotic Resistance Genes. *Int. J. Curr. Microbiol. App. Sci.* **8** (12): 700-707.

## Articles:

1. Mittal, P.K., Gottam, G.S., and Gupta, B. (2019). Pashuon ke swasthy, prajanan kshamata tatha utpadakta par jalwayu parivartan ka prabhav. *Pashupalan Naye Aayam*, **6** (8): 5.
2. Yadav, S.K., Singh, N., Sharma, S. and Singh, P. (2019). Summer management of breeding bull for quality semen production. *Pashudhan*, May-2019.
3. Kumar, P., Kumar, A., Yadav, S.P. and Sharma, S. (2019). Garbhasay me mawad (Pyometra). *Krishak Bharti*.
4. Meena, N.S., Singh, R. and Singh, A.K. (2019). Pashuon me cyanide ki vishakttata. *Krishak Aradhana*, 24-30 June, 2019.
5. Brahmanand, Kumar, R. and Singh, A.K. (2019). Pashuon me garbhdharan ki janch. *Krishak Aradhana*, July 2019, Pageno.7.
6. Rathore, P.S., Sharma, S.K. and Arora, N. (2019). Review on Alternatives to Antibiotic: Probiotics as Growth Promoter. *Poultry Technology*. August Issue.

7. Kumar, A., Sharma, S.K., Joseph, B. and Yadav, S. (2020). Rabies: Significant Zoonotic Implication on Human and Animal Health. *Livestock Technology*, **9** (9): 36-37.

## Book Chapter:

1. Singh, D., Yadav, S.K., Singh, N. and Dhakad, G.S. (2019). Farm Waste Recycling and Utilization, In: Climate Change and Sustainable Agriculture, S.F. Publication.
2. Kumar, R., Meena, D. and Sharma, S.K. (2019). Cattle Bio Security: Welfare Programs and Veterinary Surveillance: In Deora A., Kumar, P., Maherchandani, S. (1<sup>st</sup> Edn.) Cattle Health Concerns In India. ISBN: 9788193467398, Agrobios (India).

## Book:

1. Book entitled "Practical Veterinary Physiology" written by Dr. Govind Sahay Gottam, Dr. Pavan Kumar Mittal, Dr. Barkha Gupta, Dr. S. K. Jindal and Dr. Desh Raj Bilochi was published.

## New Projects sanctioned

### Three new RKVY projects were sanctioned at PGIVER, Jaipur:

1. "Strengthening of Residential Accommodation at Post Graduate Institute of Veterinary Education and Research for Farm practices of Veterinary and Animal Science students". Prof. (Dr.) G.C. Gahlot, Dean, PGIVER, Jaipur is the P.I. of the project.
2. "Capacity Building of Secretaries of the Milk societies and laboratory personnel of Rajasthan Cooperative Dairy Federation (RCDF) for Clean Milk Production, Milk Quality and Safety". Dr. Anurag Pandey, Assistant Professor, Department of Livestock Products Technology is the P.I. and Dr. Manish Agarwal, Assistant Professor, Department of Veterinary Pathology is the Co-P.I. of the project.
3. "Establishment of poultry germplasm multiplication unit for indigenous poultry". Dr. Samita Saini, Assistant Professor, Department of Animal Genetics and Breeding is the P.I. of the project.



## Co-curricular Activities:

### Independence Day Celebration:

73<sup>rd</sup> Independence Day was celebrated, Dr. D.S. Meena, Head, Department of Veterinary Medicine hoisted the national flag. A Plantation Drive was also organized on this occasion.



### Fresher's Day:

Fresher's Day was organized on 27th January, 2020 to welcome the newly admitted students in the B.V.Sc. & A.H. Course. The function was presided over by Prof. (Dr.) G.C. Gahlot, Dean, PGIVER, Jaipur. He formally welcomed the students and briefed them about the different activities of the institute.



### International Day of Yoga:

International Day of Yoga was celebrated on 21<sup>st</sup> June. All teaching and non-teaching staffs and students practiced different Yoga and Pranayam under the guidance of Yoga Teacher Dr. Ramavtar.



### One Student One Plant Programme:

"One Student One Plant" Programme of RAJUVAS was initiated at PGIVER, Jaipur on 2<sup>nd</sup> August, 2019. All the teaching and non-teaching staffs and students actively participated and planted different types of trees.



### Sports & Cultural Week-2019:

Sports & Cultural Week was organized from 25th November-1st December. Various competitions Tug of war, Volleyball, Table Tennis, Chess, Carom,



Kabbadi, Badminton, Kho-Kho, Cricket, Athletics (Disc Throw, Javelin Throw, Shot Put Throw, Race, Long Jump etc.) were organized. Various competitions in Music, Dance, Skit, Mime, Painting, Collage, Clay Modeling, Literary events etc. were also organized for the students. Valedictory Function of "Sports & Cultural Week-2019" of PGIVER, Jaipur was organized on 2<sup>nd</sup> December, 2019. Dr. S. Sengathir, Inspector General (IG) of Police, Jaipur Range was the Chief Guest.





**Teacher's Day:**

A Cleanliness Drive was organized on the occasion of Teacher's Day on 5<sup>th</sup> September, 2019. All teaching and non-teaching staffs and students participated in this drive to clean the various parts of the institute premises.

**Anti ragging awareness Programme:**

A lecture on "Awareness and prevention of ragging in the campus" was organised on 04<sup>th</sup> September 2019 for B.V.Sc. & A.H. students.

**Voters Awareness Oath:**

A programme was organized on 3<sup>rd</sup> May, 2019 to sensitize all staffs and students about importance of voting. All teaching and non-teaching staffs and students took "Voters Awareness Oath" on this occasion.

**MoU with Indian Oil Corporation:**

A MoU has been signed between Indian Oil Corporation and RAJUVAS on 31st May, 2019. Vice-Chancellor Prof. Vishnu Sharma and DGM (HR) of Indian Oil Corporation Mr. Shashank Shekhar signed the mutual agreement and handed over the documents to each other. Under this agreement Haemo-dialysis services will be started for diagnosis of kidney related diseases in animals at PGI-VER, Jaipur. Initially in the first phase, two haemo-dialysis units will be set up at PGI-VER, Jaipur



campus and in second phase at CVAS, Bikaner and CVAS, Navania (Udaipur) campuses.

**Road Safety Awareness:**

An interactive session on 'Road Safety Awareness' was organized on 15<sup>th</sup> May, 2019 to acquaint the staffs of the institute about different rules and regulations of the transport department and safety measures for a safe driving.

**Training of Para-Veterinary Staffs of SSB:**

Two days training for Paravet staffs of Shashtra Seema Bal (SSB), Alwar was organized at PGI-VER, Jaipur from 16-17 September, 2019. They were given training on various aspects of animal husbandry like restraining, vaccination, feeding, management, first aid and bandaging techniques, examination of animals, breeding techniques etc. especially of equines and canines through lectures and practical demonstrations.



**World Zoonosis Day:**

Institute celebrated World Zoonosis Day on 6<sup>th</sup> July, 2019. A free Rabies vaccination-cum-health check up camp was organized on this occasion. Shri Debasish Prusty, IAS & Secretary to Governor, Government of Rajasthan was the Chief Guest on this occasion.

**Republic Day:**

71<sup>st</sup> Republic Day was celebrated, Prof. (Dr.) G.C. Gahlot, Dean hoisted the National Flag and addressed the august gathering. Different cultural programmes like patriotic songs, group dance, poetry etc. were presented by the students. University Merit Holder students were felicitated on this occasion.

**Inspection of PGI-VER, Jaipur by VCI Team:**

A team of Veterinary Council of India (VCI), New Delhi consisting of Prof. M.K. Mehta, Veterinary



College, Mhow, Prof. Sanjay Sharma, CVAS, Pantnagar and Prof. Rashmi Singh, Veterinary College, Mathura inspected PGI-VER, Jaipur from 13-15 October, 2019. The team members visited different units of the Institute and assessed various facilities available with them.

**MoU with Startup Oasis:**

A MoU has been signed between Startup Oasis- a Center for Innovation, Incubation and Entrepreneurship (CIIE), Jaipur and RAJUVAS on 6<sup>th</sup> November, 2019. Vice-Chancellor Prof. Vishnu Sharma and CEO of Startup Oasis Chintan Bakshi signed the mutual agreement. Under this agreement technical guidance will be provided by Startup Oasis for organizing entrepreneurship development camps at RAJUVAS for increasing the business skills of selected students and stakeholders.

**National Unity Day:**

On the occasion of 144<sup>th</sup> Birth Anniversary of Sardar Vallabh Bhai Patel, "National Unity Day" was celebrated on 31<sup>st</sup> October, 2019. Run for Unity was organized in which a large number of teaching and non-teaching staffs and students participated and took National Unity Pledge. Poster Competition based on the life of Sardar Vallabh Bhai Patel was also organized for the students.





**MoU with SAHAJ, NGO:**

A MoU has been signed between Sahaj (Sahaj Inclusive Opportunity India Pvt. Ltd.), Jaipur and RAJUVAS on 31st December, 2019. Vice-Chancellor Prof. Vishnu Sharma and Managing Director and CEO-Sahaj Mr. Vigyan Gadodia signed the mutual agreement. By this agreement, RAJUVAS and Sahaj Institute will work together to promote entrepreneurship development among the livestock owners and farmers.

**International Day of Non Violence:**

On the occasion of 150th Birth Anniversary of Mahatma Gandhi, different programmes were organized on 2nd October, 2019 Dr. Ashok Baindha presented a lecture on "Swatchh Campus and Jal Shakti". All teaching and non-teaching staffs and students participated in the Cleanliness Drive organized on this occasion. Poster, Slogan etc. competitions and Social Media Awareness based on life of Mahatma Gandhi were also organized for students.

**National Milk Day:**

On the occasion of Birth Anniversary of Dr. Verghese Kurian, institute celebrated "National Milk Day" on 26<sup>th</sup> November. A technical seminar was organized on this occasion. Dr. Himmat Singh,



Director, Dairy Industry Conference, Jaipur was the Chief Guest.

**World Milk Day:**

One day Awareness Training Programme was organized on the occasion of "World Milk Day" on 1<sup>st</sup> June. Chief Guest Mr. Pawan Kumar Goyal, Additional Chief Secretary, Department of Agriculture and Animal Husbandry, Special Guest Dr. Sailesh Sharma, Director, Department of Animal Husbandry.

**Foundation Day of RAJUVAS:**

PGIVER, Jaipur celebrated "10<sup>th</sup> Foundation Day of RAJUVAS" on 18<sup>th</sup> May, 2019. On this occasion of Decade Year Celebration, 'animal health checkup & treatment camp' and 'awareness programme for livestock owners regarding animal welfare issues, vaccination & disease control measures' were organized.

**Orientation programme:**

Orientation programme of newly admitted B.V.Sc. & A.H. students was organized on 16<sup>th</sup> November. Prof. (Dr.) Sanjita Sharma, Acting Dean, PGIVER, Jaipur welcomed the students and enlightened them about the activities and achievements of the institute.



## World Veterinary Day:

PGIVER, Jaipur celebrated "Annual Day" and "World Veterinary Day" on 27<sup>th</sup> April, 2019. Prof. (Dr.) Vishnu Sharma, Hon'ble Vice Chancellor, RAJUVAS was the Chief Guest and Dr. Sailesh Sharma, Director, Department of Animal Husbandry, was Special Guest. Different cultural programmes like songs, group dance, skit, monoacting etc. were presented by the students. A free anti-rabies vaccination and free health check up camp was also organized on this occasion. Dr. M.M. Mali presented a lecture on the theme of World Veterinary Day "Value of Vaccination".



## Earth Day:

PGIVER, Jaipur celebrated "Earth Day" on 22<sup>nd</sup> April, 2019. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER delivered a lecture on this occasion. All teaching and non-teaching staffs and students of the institute participated in this programme.



## National Youth Day:

National Youth Day was celebrated on 12<sup>th</sup> January, 2020. All teaching and non-teaching staffs and students paid homage to Swami Vivekanand.

## Innocity Entrepreneurship Boot Camp at PGI-VER, Jaipur:

A three day Innocity Entrepreneurship Boot Camp was organized at PGI-VER, Jaipur from 22-24,



January, 2020 for developing entrepreneurial skills among undergraduate and post-graduate students of the institute. This camp was organized by Livestock Innovation, Knowledge & Entrepreneurship Skill (LIKES) Cell of PGI-VER, Jaipur in collaboration with Startup Oasis. Total 49 students participated in this camp and got acquainted with different entrepreneurial skills like business idea generation, project formulation, implementation of ideas etc. Startup Oasis gave a cash prize of Rs. 2500.00 to the team producing best business model.

## Orientation of PG Students by PGI-VER, Jaipur:

Orientation programme of newly admitted Ph.D. and M.V.Sc. students of session 2019-20 was organized on 22<sup>nd</sup> January, 2020 at PGI-VER, Jaipur. Prof. G.C. Gahlot, Dean, PGI-VER, Jaipur welcomed the students and enlightened them about the activities and achievements of the institute.



## Shahid Diwas:

PGIVER, Jaipur celebrated "Shahid Diwas" on 3<sup>0th</sup> January, 2020. An essay competition was organized for the students on this occasion.

## World No Tobacco Day:

World No Tobacco Day was celebrated on 31<sup>st</sup> May, 2019. Prof. (Dr.) Sanjita Sharma, Dean, PGIVER

delivered a lecture to the students on this occasion. The students also took a pledge for not consuming tobacco.

## World Rabies Day:

World Rabies Day was celebrated on 28<sup>th</sup> September, 2019. A free Rabies vaccination-cum-health check up camp was organized on this occasion in which 30 dogs were vaccinated against Rabies.

## Constitution Day:

70<sup>th</sup> Anniversary of "Constitution Day" was celebrated on 26.11.19. On this occasion Prof. (Dr.) G.C. Gahlot, Dean, PGIVER read the preamble of the constitution before the gathering of teaching and non-teaching staffs and students. Arrangement was also made in the institute to watch the live telecast of the commemoration function of the Constitution Day address by Hon'ble President, Vice President and Prime Minister of India at the Central Hall, Parliament House.



## Pashu Kalyan Pakhwara:

"Pashu Kalyan Pakhwara" was organized from 14<sup>th</sup> to 31<sup>st</sup> January, 2020. Different programmes like general health check up camp for animals, awareness training programmes for livestock owners, debate and painting competitions for students etc. were organized during this pakhwara.

## Student Union Election-2019:

Student Union Election-2019 was conducted successfully at PGIVER, Jaipur on 27<sup>th</sup> August, 2019. The results for the institute posts were as follows: Rohit Kumar Damor, President; Karan Singh Gurjar, Vice President; Avinash Atal, General Secretary;



Pawan Kumar Yadav, Joint Secretary-cum-Treasurer; Vishal Yadav, Sports Secretary; Shiv Kumar Basotia, Cultural and Literary Secretary and Gazal Chawla, Class Representative. Nikhil Pal Bajia was elected for the post of President of Student Union of RAJUVAS, Bikaner.

## Campus Visit:

- Final year students from College of Veterinary Science and Animal Husbandry, JAU, Junagadh on 13<sup>th</sup> January, 2020.
  - Final year students from Veterinary College, CVAS, Bikaner on 15<sup>th</sup> July, 2019.
  - P.G. & Ph.D. students of CVAS, Bikaner on 06.11.2019.
  - Final year students from Veterinary College, CVAS, Navania on 27<sup>th</sup> July, 2019.
  - Students of Veterinary College, Anand Agriculture University on 21.02.2020.
  - Educational awareness visit and training for 101 Animal Science students of J.N.U., Jaipur was conducted for 2 days.
- Educational Tour of students of Veterinary College, Hassan (Karnataka) on 26.11.2019







## 5. RESEARCH

### Directorate of Research for Veterinary and Animal Science, Bikaner

Directorate of Research governs the research activities at Eighth Livestock Research Stations located at Chandan (Jaisalmer), Nohar (Hanumangarah), Beechwal (Bikaner), Navania (Vallabh Nagar), Kodamdesar (Bikaner), CVAS, Bikaner, Bojunda (Chittorgarh) and Dug (Jhalawar). Institutional as well as project research in different disciplines at College of Veterinary and Animal Science, Bikaner, College of Veterinary and Animal Science, Navania, Vallabh Nagar (Udaipur), Post Graduate Institute of Veterinary Education and Research, Jaipur and Apex Centre, Bikaner. Four types of research works are being conducted at Rajasthan University of Veterinary and Animal Sciences, Bikaner are Farm Based Research, Field Based Research, Institutional Research and Student's Research.

The Directorate is functioning with following mandate:

1. To plan, initiate, guide, co-ordinate and monitor the production oriented research in the field of veterinary and animal sciences.
2. To formulate veterinary and animal science research programmes and proposals, their effective implementation, co-ordination and progress monitoring.
3. To supervise and control the Livestock Research Stations of the university.
4. To maintain liaison with State and Central Government, ICAR, DST and other national and international funding agencies for obtaining the financial support for various veterinary and animal science research programmes for the State.
5. Transfer of technology at grass root level in the form of package of practices for improved animal husbandry and production.
6. To extend consultancy and expertise in the field of veterinary and animal sciences.
7. To monitor animal health programme through disease investigation and surveillance by the Research Centre for Livestock Health and

Production to prevent animal morbidity and mortality.

### Research Stations

#### On Campus Research Stations

1. Livestock Research Station, Bikaner
2. Apex Centre, Bikaner
3. Institutional Research at CVAS, Bikaner

#### Off Campus Research Stations

1. Livestock Research Station, Beechwal (Bikaner)
2. Livestock Research Station, Kodamdesar (Bikaner)
3. Livestock Research Station, Nohar (Hanumangarh)
4. Livestock Research Station, Chandan (Jaisalmer)
5. Livestock Research Station, Vallabh Nagar (Udaipur)
6. Livestock Research Station, Bojunda (Chittorgarh)
7. Livestock Research Station, Dug (Jhalawar)
8. Post Graduate Institute for Veterinary Education and Research (PGI-VER), Jaipur
9. College of Veterinary and Animal Science, Navania, Vallabh Nagar (Udaipur)

### Farm and Field Based Research:

The farm based research is being conducted at all the Livestock Research Stations, viz., Chandan, Nohar, Beechwal, Kodamdesar, Vallabh Nagar, Bojunda and Bikaner for improvement in performance traits and enhancement of livestock feed and fodder production.

During year 2019-20 a total of 43 research schemes were operational.

Funding Agency	No. of Schemes
ICAR	06
State	18
RKVY	09
Revolving Fund	10
Total	41





## ICAR Scheme:

- All India Coordinated Research Project on Goat Improvement (Sirohi Field Unit), Vallabhnagar
- Network Project on Buffalo Improvement (NPBI)
- Mega Sheep Seed Project (Sonadi Sheep)
- All India Network Programme on Diagnostic Imaging and Management of Surgical Conditions in Animals
- Characterization of Sojat Goat (CSG)
- All India Coordinated Research Project on Goat Improvement (Marwari Field Unit), Bikaner

## State Plan Scheme:

- Evaluation, Improvement and Conservation of Tharparkar Cattle Germplasm LRS Chandan
- Conservation, Evaluation and Improvement of Tharparkar Cattle through breeding Livestock Research Station Beechwal
- Evaluation and Improvement of Rathi cattle through breeding Livestock Research Station Bikaner
- Conservation, Evaluation and Improvement of Rathi cattle through breeding Livestock Research Station Nohar
- Conservation, Evaluation and Improvement of Kankrej Cattle through breeding Livestock Research Station Kodamdesar
- Sahiwal Cattle Breeding Farm at Kodamdesar Bikaner
- Gir Cattle Breeding Farm Livestock Research Station Vallabhnagar
- Apex Centre, Bikaner Animal Disease Investigation, Monitoring and Surveillance
- Centre for Ethno-Veterinary Practices and Alternative Medicines
- Animal Bio-Medical Waste Disposal Technology Centre
- Centre for Conservation of Animal Biodiversity
- Centre for Disaster Management Technology for Animals
- Centre for Organic Animal Products Technology
- Engineering and Technology Centre
- Centre for Use of Space-based Technology in Animal Science

- Centre for Studies on Wildlife Management and Health
- Livestock Feed Resource Management and Technology Centre
- Vaccinology & Biological Products Research Centre

## RKVY Schemes:

- Establishment of Malvi Cattle breeding farm and setting up of an institute for starting Diploma in Animal Husbandry (AHDP) in Dug, (Jhalawar)
- Establishment of Goat Breeding Farm for Demonstration and Dissemination of Remunerative Goat Farming System Angai, Sarmathura, Dholpur (MGDC)
- Centre for Diagnosis, Surveillance and Response of Zoonotic Diseases, PGIVER, Jaipur
- Capacity Building of secretaries of the milk societies and laboratory Personnel of Rajasthan Cooperative Dairy Federation (RCDF) for Clean Milk Production, Milk Quality and Safety at PGIVER, Jaipur"
- Establishment of poultry germplasm multiplication unit for indigenous poultry, Post Graduate Institute of Veterinary Education and Research, Jaipur
- Strengthening of Rathi cattle farm for organic dairy farm Practices and Capacity Building, Livestock Research Station, Bikaner
- Strengthening of Residential Accommodation at Post Graduate Institute of Veterinary Education & Research Jaipur for Efficient Clinical & Farm Practices to Veterinary & Animal Science Students, Jaipur
- Genetic Improvement of Tharparkar Cattle Breed to be Implemented in Jaisalmer (RKVY) Livestock Research Station Chandan
- Demonstration and Dissemination of More Remunerative Sirohi Goat Farming System Livestock Research Station Bojunda Chittorgarh (NMPS- RKVY)

## Revolving Fund Schemes:

- Conservation and Development of Marwari Goat LRS Chandan
- Fodder and Fodder Seed Production LRS Chandan
- Sirohi Goat Breeding Project LRS Beechwal

- Green Fodder and Seed Production LRS Beechwal
- Income Generation through Farming Activities LRS Bojunda
- Preparation and Supply of ORS for Animals
- Pilot Project on Alternate Energy Generation through Biogas Based Electricity Production, CVAS Navania Udaipur
- Preservation and Articulation of Bones of Different Species of Animals to Enhance the Teaching Quality of Veterinary Education
- Pilot project on production of indigenous milk products, College of Veterinary and Animal Science, Bikaner
- Revolving Fund Project on "Processing and Marketing of Milk & Milk Products, Department of LPT, CVAS, Navania, Vallabhnagar, Udaipur

## Livestock Research Station, CVAS, Bikaner

### Evaluation and Improvement of Rathu Cattle through Breeding

Rathu is a well-known cattle breed of North-Western desert of Rajasthan State. The purebreds are maintained in Bikaner, Sriganganagar and Hanumangarh districts. With the onset of cross breeding programmes this pure bred indigenous germ plasm of cattle was endangered. Therefore it has become necessary to conserve Rathu breed in its home tracts along with evaluation and improvement for utilization in the field for upgrading and selective breeding.



#### Objectives:

- Improvement, evaluation and conservation of Rathu cattle germ plasm.
- To study genetic aspect of performance for improvement in milk production.
- Distribution of elite germ plasm of Rathu cattle to the farmers and development agencies.
- Transfer of production technology at grass root level.

To evaluate the performance of purebred Rathu cattle the information's regarding important characteristics like reproduction, production and mortality were recorded.

#### Herd strength of Rathu Cattle

S.N.	Category	Opening Balance 01-04-19	Additions			Reduction				Closing Balance 31-03-20
			Birth	Transfer	Total	Death	Sale	Transfer	Total	
1	Female	268	22	48	70	07	109	48	164	174
2	Male	59	47	24	71	-	56	24	80	50
3	Total	327	69	72	141	07	165	72	244	224

## Production performance:-

The production traits including Total Lactation yield, 300 days yield, Lactation length, Peak Yield, Dry Period, Wet average and herd average is given below.

Sr. No.	Production trait	Average of Rathi
1.	Total Lactation yield (lit.)	2023.18
2.	300 days yield (lit.)	2016.60
3.	Lactation length (Days)	271.37
4.	Peak Yield (Lit.)	12.10
5.	Dry Period (Days)	137.29

## Wet average and herd average of Rathi cattle

The highest wet average 8.56 litre was recorded in the month of March and lowest 7.19 litres in the month of November. The overall wet average was 7.77 litre and herd average 5.09 litre was observed.

## Reproduction performance:

The average reproduction performance of cattle of LRS like Age at first service (AFS), Age at first calving (AFC), Calving interval (CI) and Service Period (SP) is given in below table.

Sr. No.	Reproduction trait	Time in days
1.	Age at first service (AFS)	1140.25
2.	Age at first calving (AFC)	1421.86
3.	Calving interval.	408.63
4.	Service Period.	127.74

## Income:

The income generated at LRS, Bikaner during the year 2019-20 total income generated by sale of milk, sale of animals, sale of vermicompost and farm yard manure is 52,35,820 (Fifty two lacs thirty five thousands eight hundred twenty only.)

## Other management practices:

Vaccination against hemorrhagic septicemia, black quarter and foot and mouth disease done prior to monsoon session to prevent any outbreak of these diseases. Regular de-worming of the herd was done to control internal and external parasites to make the animals healthy.

## Salient Achievements:-

### Distribution of elite germ plasm:-

The improved germplasm is sold to the Department of Animal Husbandry, Gaushalas, Gram Panchayats, NGOs, farmers and other development agencies. During year of 2019-20 total 165 Rathi animals including 56 male and 109 females were distributed.

### Inauguration of RAJUVAS Milk Parlour:

- Inauguration of RAJUVAS Milk Parlour on dated 13 December 2019 by Dr. B.D. Kalla, Hon'ble cabinet minister, Sh. Bhanwar Singh Bhati Hon'ble minister of state & Prof. (Dr.) Visnu Sharma hon'ble vice chancellor, RAJUVAS, Bikaner.
- Different milk products like Paneer, Shri khand, Full cream lassi and chhach of indigenous Rathi cattle is being prepared and distributed to the consumers at parlour



### Strengthening of Rathi cattle farm for organic dairy farm Practices and Capacity Building

#### Objective

- Enhancing the farmers income
- Disseminate knowledge to the farmers
- Promotion of organic farming
- Hygienic milk production
- Collection of milk samples for detection of Antibiotics, Aflatoxins and Pesticide residue
- Promotion of conservation and propagation of indigenous livestock.
- Trainings to students, farmers and entrepreneur on latest animal husbandry.



## Achievements

Four cattle sheds have constructed with advance techniques. In which two sheds for milking animals, one for dry animals and remaining one for heifers.



## Livestock Research Station, Beechwal

Three Projects are running at LRS, Beechwal

### I. Conservation, Evaluation and Improvement Tharparkar Cattle Farm (RKVY/ State Plan)

Livestock Research Station, Beechwal was established in the year 2000 on 233 ha land allotted to it.

#### Objectives wise Targets and Achievements

Since September 2011 LRS Beechwal is acting as cooperating unit of main RKVY project on establishment of Tharparkar cattle farm at LRS Chandan.

- The sub unit of Tharparkar cattle project under STATE PLAN/ RKVY at LRS Beechwal is functioning with objectives of main unit at LRS Chandan.
- To increase population of upgraded and improved Tharparkar germplasm through selective breeding.
- Distribution of improve Tharparkar germplasm for Upgradation of animals in field beneficiaries.

### Herd Strength of Tharparkar cattle

S.N.	Category	Opening Balance April 2019	Addition				Reduction				Closing Balance March 2020
			Birth	Transfer	Purchase	Total	Death	Sale	Transfer	Total	
1.	FEMALES	113	23	105		128	08	07	105	120	121
2.	MALES	34	24	74	01	99	05	15	74	94	39
3.	TOTAL	147	47	179	01	227	13	22	179	214	160

- During year of 2019-20 total 21 Tharparkar animals including 14 male and 7 females were distributed to Rajasthan and other states.
- Total milk production during the year was 114584.0 lit. The wet average and herd average was 8.55 and 5.62 respectively.



## II. Sirohi Goat Breeding Project (Revolving Fund)

A Goat Unit was started at LRS, Beechwal on 18.09.2017 to strengthen the livestock activity with the objective to develop as a model sirohi goat breeding farm for demonstration of farmers which are willing to start goat farm to raise their socio economic status under arid conditions.

### Objectives:

- To increase population of upgraded and improved Sirohi Goat germ plasm through selective breeding.
- Distribution of improve Sirohi Goat germ plasm for upgradation of animals in field.

### Flock Strength Sirohi Goat (2019-2020)

The opening balance of the flock was 90 (27 male and 63 female) and Closing Balance was 136 (44 male and 92 female). During the year 38 kidding took place (11 male and 27 female). The average body weight of kids 2.29 kg and average body weight of dam at kidding was 43.11kg.



## III. Green Fodder and Seed Production

### Objectives wise Targets and Achievements

#### Seed/Grain Production

Looking to large number of animals at various units of RAJUVAS at Bikaner and their green fodder requirement major thrust was given towards the green fodder production. Fodder varieties of pearl millet, sorghum, oat, lucerne and Chinese cabbage were sown for fodder production programme under revolving fund at the agriculture farm of the station.



During the year 5537.0.Qtl of green fodder was produced of which 2550.20.Qtl was used for the farm animals at LRS Beechwal and remaining 2986.80.Qtl was sold to other units of RAJUVAS. The other crops were cultivated as per requirement for the purpose of feed and fodder for animals of the station and other units of the University and revenue generation.

During the year 2019 total seed/grain production was around 409.70 Qtls. For the rabi season crop of wheat was harvested whereas during Kharif season cultivation of groundnut, guar, moong and moth crops was done.

Recently Sewan and Napier grasses (prepared at nursery of LFRMTC) has also introduced at LRS, Beechwal for animals under revolving fund.

Total revenue generated during 2019-20 was 70,39,494/-

### New Initiative during Decade year

- The organic production certification of agricultural land and goat farm
- RAJUVAS Mineral Mixture Production
- Fortified Feed for Bird (Kachroda, Sambhar, Jaipur)

- Artificial Insemination (A.I.) started from August onwards
- Cattle Feed Processing
- Rehabilitation of Sewan grass
- Establishment of Hybrid Napier
- The Organic production certification of agricultural land and goat farm are in process. Certificate issued for First year by OneCert International Private Ltd. dated on 30/08/2019 (for period 15/07/2019 to 14/07/2020) for Livestock (Organic Goat farm) and on 08/08/2019 (for period 17/07/2019 to 16/07/2020) for Agriculture land production.

## RAJUVAS Mineral Mixture Production

- RAJUVAS mineral mixture was manufactured with the team work of LFRMTC & LRS, Beechwal.
- Sale rate of 1Kg, 5 Kg and 25 Kg is Rs. 100/-, Rs. 400/- and Rs.1800/-, respectively as decided by the committee constituted by Director Research, RAJUVAS
- Till now, 3500 Kg of RAJUVAS mineral mixture was manufactured and sale is in progress to various LRS of RAJUVAS.
- Farmers are also benefiting by getting RAJUVAS mineral mixture on payment basis.



## Fortified Feed for Bird (Sambhar):-

- During disaster at Sambhar lake, Fortified Feed for Birds was manufactured and handed over to rescue centre at Kachroda, Sambhar and appreciated by the wildlife functionaries..
- Maize Soybean based fortified feed including minerals, herbs, liver stimulant and toxin binder was planned for better recovery of migratory birds.
- Artificial Insemination (A.I.) also started from August onwards. Semen doses purchased from CVAS, Navania and Semen station, Bassi, Jaipur
- Rehabilitation of Sewan grass with the team work of LRS, Beechwal through the development of Fodder nursery established at LFRMTC field

## Livestock Research Station Kodamdesar

### Three Projects are running at LRS, Kodamdesar

The livestock research station, Kodamdesar, Bikaner is situated 30 Km away from the district headquarter and RAJUVAS university. Kankrej, Sahiwal cattle and Bikaneri Chokla (Magra) sheep are being maintained at the station.

### I. Conservation, Evaluation and Improvement of Kankrej Cattle through Breeding Objectives

- Improvement, evaluation and conservation of Kankrej cattle.
- To study genetic aspect of performance for improvement in milk production.
- Distribution and sales of Kankrej germplasm to the farmers and development agencies.
- Transfer of production technology at grass root level.





**Herd strength of Kankrej Cattle**

S. No.	Category	Opening Balance	Additions			Reduction				Closing Balance
			Birth	Transfer	Total	Death	Sale	Transfer	Total	
1	Female	364	31	76	107	10	268	76	354	117
2	Male	189	35	32	67	7	174	32	181	43
<b>Grand Total</b>		<b>553</b>	<b>66</b>	<b>108</b>	<b>174</b>	<b>17</b>	<b>442</b>	<b>108</b>	<b>567</b>	<b>160</b>

Total milk production during the year was 86898.00lit. The wet average and herd average was 6.6 and 3.3 respectively. Revenue generated in LRS Kodamdesar Kankrej Cattle breeding farm fund during 2019-20 is 4718923.

**Distribution of germplasm of Kankrej cattle**

A total of 442 animals (174 bull calves, 160 female calves/heifers and 108 adult cows) were distributed and sold to different gaushalas / farmers / developmental agencies during this financial year.

**Future targets**

- To increase the area of land for organic crop production.
- Efforts would be done to reduce the mortality by providing better managerial practices.
- Efforts would be made to enhance milk production and overall income of the station.
- Massive plantation at the station.

**II. Magra Sheep unit**

LRS is also maintaining Magra sheep flock. It is one of the superior carpet wool producing breeds which can be used for genetic improvement in the farmers flock. Superior rams/ewes are made available to the farmers. During this financial year a total of 40 animals (17 female and 23 male) were sold to different farmers / institute/NGOs.

**Flock Strength of Magra sheep**

Particulars	Sex	Age Group				Total	Grand total
		0-3 month	3-6 month	6-12 month	adult		
<b>Opening Balance (01/04/2019)</b>	Male	16	24	13	08	61	<b>204</b>
	Female	12	28	06	97	143	
<b>Closing Balance (31/03/2020)</b>	Male	11	14	23	37	85	<b>244</b>
	Female	10	16	19	114	159	

**III. Sahiwal Cattle Breeding Farm**

The project was implemented from the year 2013-14 at Livestock Research Station, Kodemdesar for undertaking conservation, evaluation and improvement of Sahiwal cattle germplasm through selective breeding. Superior Sahiwal germplasm is made available to the farmers. Sahiwal bulls are provided to the farmers/ gaushalas/ village panchayats for genetic improvement purposes.

**Objectives**

- Evaluation, improvement and conservation of Sahiwal cattle.
- To study genetic aspect of performance for improvement in milk production.
- Distribution and sales of Sahiwal germplasm to the farmers and development agencies.
- Transfer of production technology at grass-root level.

## Herd strength of Sahiwal Cattle

S. No.	Category	Opening Balance	Additions			Reduction				Closing Balance
			Birth	Transfer	Total	Death	Sale	Transfer	Total	
1	Female	201	42	4	46	3	47	4	54	193
2	Male	72	38	-	38	5	49	-	54	56
Grand Total		273	80	4	84	8	96	4	108	249

## Percent Mortality

The overall percent mortality was recorded as 3.11 % during 2019-20.

Total milk production during the year was 153711.70 lit. The wet average and herd average was 7.84 and 4.13 respectively. Revenue generated in LRS Kodamdesar Sahiwal Cattle Breeding Farm fund during 2019-20 is 4204648.00

## Distribution of superior germplasm

A total 96 (45 female and 51 male) animals (cows, male, female calves, adult bull) were distributed and sold during the present financial year 2019-20.

## New Initiatives:

1. Regular culling of surplus animals.
2. Procurement of Cryocans, Semen straws and starting of Artificial Insemination.
3. Supplementation of RAJUVAS mineral mixture.

## Livestock Research Station, Nohar

### Conservation, Evaluation and Improvement of Rath Cattle through Breeding

Livestock Research Station Nohar is maintaining a herd of Rath cattle to disseminate superior germplasm is only in Hunumangarh, Sri Ganganagar and adjoining districts of Rajasthan and Hariyana.

### Objectives:

- Conservation, Improvement and evaluation of Rath cattle germ plasm.
- To study genetic aspect of performance for improvement in milk production.
- Distribution and sale of Rath germ plasm to the farmers and development agencies.
- Transfer of production technology at grass root level.



## Herd Strength of Rath Cattle

S. No.	Category of Animal	Opening Balance	Addition			Reduction				Closing Balance
			Birth	Transfer	Total	Death	Sales	Transfer	Total	
1.	Female	174	42	142	358	11	15	145	171	187
2.	Male	70	40	175	285	07	-	213	220	65
3.	Grand Total	244	82	317	643	18	15	358	391	252

Total average milk production per lactation per Elite cow 2510.19 lit. Total milk production during the year was 128779.00 lit. The wet average and herd average was 7.39 and 3.94 respectively. Revenue generated in LRS Nohar Rath Cattle Breeding Farm up to 31.03.2020:- 83.87 lac.

## Livestock Research Station Chandan (Jaisalmer)

### I. Genetic Improvement of Tharparkar Cattle Breed (RKVY)

### II. Evaluation, Improvement and Conservation of Tharparkar cattle germplasm (State Plan)

The Tharparkar breed evolved as a drought resistant, heat tolerant and disease resistant breed of cattle, suitable for hostile climatic conditions and scarce feed resources. As per the central and state Government cattle breeding policy, this Native germ plasm is being improved through selective breeding at Livestock Research Station, Chandan. The breeding tract of Tharparkar is Jaisalmer along with parts of Barmer and Jodhpur districts.



#### OBJECTIVES (RKVY):

- To enhance production and productivity of existing Tharparkar herds by upgrading genetic merit of Tharparkar cattle for increasing number of high quality Tharparkar Cattle.
- To make available elite male germ plasm of hi genetic merit of Tharparkar cattle by application of breeding technologies for semen collection and natural breeding for long term usage and dissemination to improve productivity of off farm animals.
- To undertaken ancillary studies with respect to reproduction, nutrition and management by generation of new technologies and application of available technologies and knowledge for refreshing demonstrable ideal practices.
- To utilize cow waste material (dung, urine, etc.) by making products for demonstration and training to cattle rearers.
- Studies on value addition of milk and milk products by making various products for assessing their shelf life as well as liking by people for searching and demonstrating additional income possibilities.

#### OBJECTIVES (State Plan):

- Evaluation, Improvement and Conservation of Tharparkar cattle germplasm.
- Distribution/Sale of improved Tharparkar cattle germplasm to the farmers and development agencies.
- Demonstration of livestock production technologies to the livestock owners on their visit at the farm.

### Herd Strength of Tharparkar Cattle

S. No.	Category of Animal	Opening Balance on 01.4.2019	Addition			Reduction				Closing Balance on 31.03.2020
			Birth	Transfer	Total	Death	Sales	Transfer	TOTAL	
1.	Females	240	50	272	562	12	26	272	310	252
2.	Males	43	42	109	194	03	37	109	149	45
3.	Total	283	92	381	756	15	63	381	459	297

Total milk production during the year was 129105.50 lit. The wet average and herd average was 7.05 and 4.45 respectively.

### MORTALITY :-

The mortality percent is presented in table. The percent mortality was recorded 1.98 percent during in this year, It was noted lower from previous year 3.54 percent.

Sr. No.	Age- group	No. of animal exposed to risk	No. of death	Percentage of Mortality
1.	Females	562	12	2.13
2.	Males	194	03	1.55
3.	Total	756	15	1.98



## Prophylactics:

H.S., B.Q. & FMD disease are highly prevalent in this area, so vaccination of the herd shall be done twice a year. Regular deworming of the herd is done minimum twice a year with Albendazole & Fenbendazole to control the internal parasites.

## I. Conservation and Development of Marwari Goat (Revolving Fund)

This Livestock Research Station was established in 1964 at Chandan village of Jaisalmer district. Marwari goat is a dual purpose breed and raised for meat and milk production both. This breed is also known for its capabilities of disease resistance and capabilities of thriving in very harsh nutritional conditions.

### Objectives:

- Conservation and development of Marwari Goats.
- Distribution & Sale of improved Marwari Germ-plasm to the progressive livestock breeders.
- To transfer improved livestock techniques to the progressive animal breeder on their visit at the farm.
- Generate and increase the revolving funds of the station
- It is helpful for AHDP Programme.



### Achievements:

- **Flock Strength of Marwari Goat**

S. No.	Category	Opening Balance	Additions		Reduction			Closing Balance
			Birth	Total	Death	Sale	Total	
1.	Female	142	63	205	21	-	21	180
2.	Male	45	63	108	05	40	45	65
Grand Total		187	126	313	26	40	66	245

## Summary:

1.	Increase the Flock Strength	187 to 245 (Goat 75, Female kids 105, Male kids 63 and Breeding bucks 2)
2.	Generate the Income	Rs. 3,17,500.00
3.	Improved Germ plasm supplied	40 male
4.	Total birth recorded during the year	126 Numbers
5.	Mortality rate	5.95 percent
6.	Average age of first Kidding	17 months
7.	Average age of kidding intervals	07 months
8.	Average age of maturity	12 months
9.	Total Allocation (In Rs.)	8,50,000.00
10.	Total Refunded (In Rs.)	5,00,000.00

## IV. Fodder and Fodder Seed Production (Revolving Fund)

This Station is established for fodder and fodder seed production to full fill the requirement of farm animals in terms of green and dry fodder for maximize the milk production as well as improving the health. These shall be income generating as well as strengthening and extension of this station.

## Objectives:

- To increase the green and dry fodder production for fulfill the requirements of the animals
- To generate the income from sale green and dry fodder as well as fodder seed also
- To mix the sufficient fodder for preparation of balance ration fed to different categories of animals
- To increase the milk production of the herd through the balance feeding of animals

## Achievement.

- Green fodder production: total 625 Qtl. green fodder produced during this year
- Dry fodder: total 50 Qtl dry fodder produced during this year
- Fodder seed production: total 1 Qtl. fodder seed produced during this year
- Total income: total one lac sixty eight thousand seven hundred rupees incomes were generated from green fodder..

## Livestock Research Station Vallabh Nagar

### I. Gir Cattle Breeding Farm

The Gir Cattle Breeding Farm was established in 2010 under RKVY. The Gir cattle breeding farm is not only conserving the Gir breed but also improving the milk production performance of Gir cattle.

#### Objectives:

- Evaluation, Improvement and Conservation of Gir cattle germplasm.
- Dissemination of improved Gir cattle germplasm.
- Demonstration of modern livestock production and management practices to the livestock owners on their visit at the farm.



#### Achievements:

#### Herd strength of Gir Cattle

S. No.	Category	Opening Balance	Additions			Reduction				Closing Balance
			Birth	Transfer	Total	Death	Sale	Transfer	Total	
1.	Female	211	29	41	281	23	116	41	180	101
2.	Male	73	32	27	132	25	37	27	89	43
Grand Total		284	61	68	413	48	153	68	269	144

Total milk production during the year was 94617 lit. The wet average and herd average was 6.29 and 3.4 respectively.

### II. All India Coordinated Research Project on Goat Improvement (Sirohi Field Unit)

Sirohi breed has proved as an excellent goat breed with respect to disease resistance, adaptability in dry & hot climate, growth and production performance under poor quality range condition.

#### Objectives:

- To assess the production performance of goat breeds in farmers flocks under village management system and improve the germ plasm through selection.
- To evaluate the socio-economic status of goat breeders and the economics of goat production in farmers flocks.

- To disseminate the pro-poor goat based technologies under field conditions and assessment of their impact on goat production.

## Salient Achievement

- Total 54 breeding bucks were distributed to registered farmers during the report period for further genetic improvement in the field.
- The total female strength of the project is 2168.
- The overall population growth was 77.64%.
- The overall average lactation yield and lactation length was  $99.77 \pm 4.27$  lit. and  $152.82 \pm 1.34$  days, respectively.
- 66.82 per cent breeding efficiency were observed on basis of does available, during report period.
- Kidding rate (1.11) was observed during the report period
- The overall mortality was 4.53 %.
- During report period deworming of 3611 animals and 7272 animals were treated to control ecto-parasite, 1987 and 2192 animals were vaccinated against ET and PPR, respectively
- The major diseases observed in the registered animals were enteritis and pneumonia.
- 788 animals were sold during report period. Out of which 700 (88.83%) animals were sold for breeding purpose.



## III. Network Project on Buffalo Improvement (NPBI)

### Objectives:

- To establish elite herd of 50 Surti for the production of genetically superior young bulls.
- To evaluate sires through institutional/ field progeny testing.
- To produce, test, propagate and conserve high genetic merit male germplasm.

### Herd Strength of Surti Buffalo

Sr. No.	Category	Addition			Disposal			CB
		OB	B / P	T	D	T	S	CB
1.	Female	89	12	42	10	42	07	84
2.	Male	40	23	29	11	29	10	42
3.	Grand Total	129	35	71	21	71	17	126

OB = Opening Balance as on 1<sup>st</sup> April D = Deaths, S = Sale, B / P = Birth / Purchase, T = Transfer, CB = Closing Balance

### Salient Research Achievements:

- Five Set of bulls completely evaluated with 7424 doses of Proven Surti Bulls.
- Test mating from VII set completed.
- Test mating of VIII set underway.
- Training of bulls for X set started.

### Socioeconomic impact/ Success stories:

The supply of high pedigreed test bulls as well as semen of test bulls and progeny tested bulls has helped in improving the scenario of Dairy Farming in the region. Farmers of the region are showing interest towards buffalo rearing for milk production as evident from positive growth rate of buffaloes in comparison to cattle in addition.



## Livestock Research Station Bojunda Chittorgarh

### Demonstration and Dissemination of More Remunerative Sirohi Goat Farming System (NMPS- RKVY)

Livestock Research Station, Bojunda, Chittorgarh sanctioned in the year 2014 with an area of about 481 Bigha. A NMPS Project has been started at LRS, Chittorgarh and 300 goats of Sirohi breed established purchased for conservation and improvement of the breed and improved bucks will be distributed to goat breeders. Fodder crop production is currently undertaken at the station for feeding of livestock and income generation of the station.



### Flock Strength of Sirohi Goat

Category	Opening Balance	Addition			Reduction			Closing Balance
	1-4-19	Birth Add.	Draft	Total	Death	Sold	Draft	Total
								31.03.2020
Male	101	81	125	307	50	65	125	240
Female	386	89	216	691	101	94	216	411
Grant Total	487	170	341	998	151	159	341	651

- Total 65 breeding buck were distributed to NGO, govt. and farmers.

### Income Generation through Farming Activities (Revolving Fund)

#### Objective:

Develop and utilized the land of station and generate income through farming activities such a fodder production, seed production programme and growing of commercial crops.

#### Green fodder, Dry fodder and Grain Production:

Total 1607.02 Qtl. Green fodder, 542.90 Qtl. Dry fodder and 688.52 Grain were produced during the reporting year.



## Livestock Research Station, Dag, Jhalawar

### Establishment of Malvi Cattle Breeding Farm and setting up of an Institute for Starting Diploma in Animal Husbandry Programme. (AHDP)

#### The main goal of the project is as under:

- To conserve the Malvi breed of cattle in its breeding tract, efforts need to be done for pure breeding among the Malvi animals. This would require good quality germplasm to produce bull calves. Therefore, establishment of Malvi cattle Breeding Farm at Dug is urgently required.

## Objective wise Targets and Achievements

- To establish a herd performing Malvi cows to act as open nucleus farm of this breed and its conservation to strengthen Heritage Gene Bank of the state:
- The closing balance as on 31.3.2020 was 395. During report period addition in the herd strength due to 119th births. During report period only 11 animals were died in different age group. The details of herd strength as on 31.3.2020 was as follows:

### RKVY/State Plan Project on Malvi Cattle

#### A. Herd Strength of Malvi Cattle

S.No	Category	Opening Balance (1-4-19)	Additions			Reduction				Closing Balance (31-3-2020)
			Birth	Transfer	Total	Death	Sale	Transfer	Total	
1.	Female	251	65	290	355	5	-	290	295	311
2.	Male	94	54	164	54	6	58	164	228	84
Grand Total		345	119	454	573	11	58	454	523	395

#### B. Production/Reproductive Performance:

##### i. Lactation Length & Lactation Yield

The average lactation yield and lactation length of Malvi breed at this farm were noted 453.16 kg. and 178.80 days respectively of 113 cows out of 133 cows. Total milk production during the year was 57720.25 lit. The wet average and herd average was 2.87 and 1.4 respectively.

##### ii. Dry Period & Calving Interval

The average Dry period and Calving Interval were noted 96 cows out of 133 cows. The period and Calving Interval were noted 219.15 and 420.15 days respectively.

##### iii. Age at First Calving

The average Age at First Calving of the farm were noted 46 Months and 6 Days. Total 20 heifers were calved during the reporting year.

##### iv. Germplasm supplied

Total 58 male Calves and Bull were supplied to the different animal breeders and farmers during this year.



MALVI HERD



WHEAT CROP 2019-20

## State Plan Project:-

### Apex Centre for Animal Disease Investigation, Monitoring and Surveillance

The Apex Centre was established to meet out the needs of the field veterinarians for prompt diagnosis of diseases of livestock and poultry in the state.

### Objective-wise targets and achievements:

The specific objectives of the project are:

- To attend and investigate outbreaks of various diseases in animals and poultry in the state to determine etiology and to recommend suitable treatment and control measures to check future livestock losses.
- To collect epidemiological data from various departments regarding the range and magnitude of livestock disease problems in different districts of the state.
- To prepare epidemiological maps of each district of the state with respect to various prevalent diseases on the basis of information collected by Apex Centre, Animal Husbandry and other organizations / agencies.
- To conduct laboratory examinations of various clinical and morbid samples received from field veterinarians and various other agencies.

- *In vivo* testing of animals for diseases like TB, JD, etc.
- To arrange in-service training programmes in advance diagnostic techniques for the field veterinarians and short term vocational training programmes to animal owners to acquaint them with the modern livestock management techniques.

### Work Done:

### Samples Analyzed in laboratory

- Bacterial infections including Culture and antibiotic sensitivity (Blood, Milk, Urine, Pus, Uterine discharge, Faeces, Impression smear, Swab, Aspiratory fluid) 178
- Parasitic infections (blood protozoan, GI & mites) 15
- Urine microscopy and biochemical examination 04
- Brucellosis testing 219
- CMT, Somatic cell count, Milk ring test, Gram staining, DNA isolation, Species specific PCR 276

### Total samples analysed 692

- Outbreaks attended in field 03
- Post-mortem examination 07

### Disease Outbreaks Attended

S. No.	Date	Species Affected	No. of Deaths	Place	Diagnosis
1	05.04.2019	Poultry	15	CVAS, Poultry Farm, Bikaner	Marek's Disease
2	03.09.2019	Cattle	60	Panchmukhi Gaushala Samiti, Chhilra, Nagaur	Inanition
3	14.11.2019	Birds	25,000	Sambhar, Jaipur	Avian Botulism



Avian Botulism



## Centre for Ethno-Veterinary Practices and Alternative Medicines

To derive information on ethno-veterinary practice and alternative medicine and development of protocol for their use in veterinary and animal science to support health and production and to make livestock rearing economical.

### Objectives

- To Arrive at low cost alternative to allopathic treatment
- Generation of information regarding occurrence of medicinal properties in plants rich in secondary metabolites with reference to specific use in animal health and production.
- Identification of different plants and their components having therapeutic properties and validation of therapeutic properties through animal experimentation or clinical trials in veterinary hospital or field.
- The Establishment and quantification of medical properties of Ethno-Veterinary Medicines in the laboratory and field trials for confirmation of laboratory results.
- Development of protocols and formulations for use of these Ethno-Veterinary Medicines as well as practices as therapeutic agents.
- Development of ready to use form of Ethno-Veterinary drugs in extract form or otherwise as prophylactic/therapeutic/supplementary agent by clinicians and or livestock owners.

### Work done :

- The clinical trial work on the two herbal formulations (Herbal formulation No. 1 and Herbal Formulation No. 2) developed by the centre during 2015, for dermatological disorders is still in progress, in the field and in clinics of College of Veterinary and Animal Science, Rajasthan University of Veterinary and Animal Sciences, Bikaner. The formulation is still under study and the trials are carried out in clinics as well as in field cases.



### Screening of Herbal medicines and extracts for clinical use

- The centre has extended technical/ laboratory support and help for the 3 masters and 2 doctoral research work entitled 'Study of therapeutic potential and anti oxidative potential of Prosopis cineraria, in subclinical Mastitis in crossbred cattle, Dalbergia sissoo and Aegle marmelos on Colibacillosis and calf diarrhoea'
- Herbal mixture has also been developed in two forms in different composition as like herbal formulation A and herbal formulation B for treatment of impaction. The developed mixture packed in 50 gm packing and also providing to animal owner on free of cost in VCC, RAJUVAS, Bikaner.
- Antiseptic and soothing herbal soap in being developed.

### Animal Bio-Medical Waste Disposal Technology Centre

The Animal Bio Medical Waste Disposal Technology Centre (ABMWDTC), RAJUVAS, Bikaner was established to create awareness among health professionals and public for safe disposal of animal bio-medical waste as this is the most neglected aspect of health care centres and to train different groups of health professionals for collection, segregation, safe disposal and treatment of bio-medical waste to safeguard the life of themselves, whole society and the environment.

### Objective:

- To develop the centre as knowledge centre in biomedical waste disposal technology



- To test and develop different methods of animal bio medical waste disposal to improve status of health and to prevent hazards
- To impart trainings on biomedical waste disposal target groups
- To augment and strengthen facilities for the state in respect with animal bio medical waste disposal.

## Achievements:

- First hands on training was organized by the centre on 12th July 2019 to Deputy Directors posted in Veterinary Polyclinics, Department of Animal Husbandry, Govt. of Rajasthan on regarding safe disposal of bio-medical waste. Total 35 personals were trained during this training.
- A second hand on training was organized by the centre on 06/12/2019 to Scientist, Technical Assistants and Lab workers of ICAR Institutes situated in Bikaner, Bikaner on जैव चिकित्सकीय अपशिष्ट का उचित प्रबंधन एवं निस्तारण Total 40 personals were trained during this training.
- A third hand on training was organized by the centre on 26/02/2020 to Livestock Assistants, Department of Animal Husbandry, Nursing Staff, Railway Medical Hospital, Lalgah and Nursing staff of M.N. Hospital and Research centre, Bikaner on जैव चिकित्सकीय अपशिष्ट का उचित प्रबंधन एवं निस्तारण Total 53 personals were trained during this training.
- Agreement with Common Biomedical Waste Disposal Centre (E-Tech Project) has been done by the College of Veterinary Animal Science, Bikaner.

## Centre for Conservation of Animal Biodiversity

This centre is proposed with mandate to document, conserve and propagate Animal Biodiversity in the state of Rajasthan.

### Objectives of projects:

- Identification of biotic and abiotic stress threatening diversity and to mark the species of most concern.
- Characterization and conservation of Animal Genetic Resources of domestic and wild animals which includes reproduction and molecular techniques for gene characterization, genome analysis and evolutionary relationships.

- To improve genetic base of domestic animals, strengthening the availability of superior germplasm of domestic animals.
- To conduct various research activities in respect with conservation of animal biodiversity of the state
- To provide care and treatment to the livestock and wild animals concerned.
- Collaborate with other institutes for knowledge and technology transfer.
- Impart training and education to communities, NGO's, wild life workers and other officers concerned.
- Impart training and education to farmers and villagers for knowledge and technology transfer.
- Handling of the economic data and its extrapolation to forecast.

## Achievements:

- Awareness regarding conservation of Biodiversity is spread through various on campus (Farmers and officers) and off campus training, increasing farmers interaction and their knowledge about role and benefits of animal biodiversity and rearing of indigenous cattle in improvement of their economy.
- SMS advisory system is very beneficial for disseminate the knowledge among farmers and other concern person.
- Lectures in different school and colleges for spreading awareness about biodiversity loss and its conservation.
- **Health care camp** - Three health care camp were organized in different villages like Likhmisar, Sajrasar and Kaporiasar (Total 102 farmers/pashu palak and 449 animals were benefited in these camp.)

## Centre for Disaster Management Technology for Animals

### Objectives:

- To develop the centre as vision to be recognized as a vibrant centre of excellence for knowledge and capacity building on disaster management.
- To initiate and take up research in the field of disaster management so as to develop strategies for adoption to protect and manage animals in the event of disaster.

- Development of package of practices and training modules for officer and staff to be deputed to deal with disaster management specific to the activities of target groups.
- Impart trainings on disaster management specific to target groups.
- To prepare policy adviser for state Govt. for system development and expertise promotion for effective disaster preparedness and mitigation in the state.
- To augment and strengthen facilities for the state in respect with disaster mitigation and management through resources development.
- To coordinate the establishment of a data base for rapid dissemination of information and knowledge.

## Animal Disaster Management Awareness Trainings

- Total 24 trainings organized by the centre from April 2019 to March 2020.
- Centre organized training on disaster management in collaboration with the NDRF team on 19th July 2019. In this training the NDRF team demonstrated various equipments and procedures for the rescue during any disaster. A total of 110 participants attended this training.
- Two days trainings organized for the officials of the Dog Squad of the Rajasthan Police from 5th to 6th September 2019 regarding the use of the trained police dogs during any disaster for the rescue of the animals. A total of 15 personnel from different zones of the Rajasthan Police participated in the training.
- Two days trainings organized for the camel handlers of border security force. A total number of 22 BSF personnel from Jodhpur frontier, Rajasthan participated in the training.

## Participation:

- The team of the CDMTA attended a mock drill organized jointly by NDRF and District administration on "Railway accidents Disaster Management Mock Drill" on 5th July 2019.
- CDMTA faculty participated in five days national level training program on forestry wild life and disaster risk reduction training at Dehradun from 16th to 20th September 2019.



- Mr. Shailendra Singh, Teaching Associate, participated in 3 days international conference entitled "disaster resilient smart cities" at Jawahar Lal Nehru University, New Delhi from 4th -6th December 2019.
- CDMTA faculty participated in one day Consultative Workshop on "Capacity building for Animal inclusive Disaster Risk Reduction (AiDRR)" the Workshop organized by National Institute of Disaster Management, Ministry of Home Affairs,(GOI) New Delhi on 9th January 2020. Dr.Praveen Bishnoi, Principal Investigator, present a Paper entitled "A Step Ladder Approach for Mitigation of Animals during Disaster".
- The centre preparing module on **Drought and famine module.**
- A Fire-Proof Cattle Shed model developed by the centre
- Total number of 11 livestock cases of heat stroke and burn were treated in air condition ward

## Centre for Organic Animal Products Technology

The centre is proposed with mandate to develop knowledge centre to impart, disseminate and promote organic animal products husbandry in the state and to encourage and carry out research in identified areas for promotion of organic livestock production and processing. In recent years organic farming is emerging and demand for organic animal products is high. Very less organic animal products such as milk and meat are available and are not getting proper market value. This centre will work as knowledge centre on latest technology in this field and promote the organic livestock production and processing.



## Objectives:

- To develop the centre as knowledge centre in organic animal production.
- To develop modules, package of practices and literature on organic animal production.
- To develop modules of organic animal production for different animal products.
- To impart trainings to farmers, industrialist and entrepreneur and officers of line department in respect with significance, advantages and technologies of organic animal production.
- To promote and disseminate organic animal husbandry in the state.
- To develop standards and references indicators for various organic animal products.
- To initiate and coordinate research in identified areas for development of packages of practices as well as technologies in the field of organic animal production.
- To test and refine the available cottage animal product processing technologies for transforming cottage animal product processing to be organic animal product processing in the state.

## Achievements:

- Establishment of Organic farm at LRS, Beechwal: Organic certificate for 90 hectare land and 103 goats at LRS, Beechwal has been given by the One cert International. Now the centre is established as a organic cluster.
- Establishment of Organic Poultry Farm : Initial inquiry form for certification of 300 poultry birds at poultry section, CVAS, Bikaner to develop as organic poultry unit have been send to Rajasthan State Organic Certification Agency and initial inspection of the poultry section have been completed.
- Establishment of Organic farm at LRS, Kodamdeser: Initial inquiry form for certification of 65 hectare land have been send to Rajasthan State Organic Certification Agency and initial inspection of the land have been completed.



*Organic Milk Products of RAJUVAS*

- Establishment of Organic farm at LRS, Chandan: Initial inquiry form for certification of 100 hectare land and 50 goat unit have been send to Rajasthan State Organic Certification Agency and initial inspection of the land have been completed.
- Vermi compost unit : A vermicompost unit being maintained as organic manure production at LRS, Bikaner for income generation as well as demonstration purpose for farmers and students at college.
- Azolla Unit: A unit of azolla production being maintained at LRS, Bikaner as a sustainable organic feed for animals and for demonstration of farmers as well as students.

## Engineering and Technology Centre for Animal Sciences

The main aim of establishing engineering and technology centre is to utilize the importance of engineering and technology in the field of veterinary and animal sciences.

### Achievements:

- Engineering and technology centre has implemented Model of Nipple Drinking System for Poultry Farm at RAJUVAS.
- Poultry drinking systems are designed to supply sufficient clean water for chickens. It is suitable for various types of chickens, including broilers and layers.

### Temperature control system for poultry

Engineering and technology centre developed A Temperature control system for poultry. A



temperature sensor captures the temperature of the surrounding environment and sends it to the microcontroller.

## **Rajuvas Solar Power Plant:-**

Engineering and Technology centre maintain solar power plant and record how much electricity is generated and how much earning RAJUVAS is getting and how much CO<sub>2</sub> and diesel is saved etc. E&T centre also record all the data related to solar generation through DELREMO (online platform). RAJUVAS saved approx. 12 Lacs in electricity bill till date.

## **Planning of Various Design of Shed :-**

The centre provided drawings of sheds considering climate condition for Gir cattle at Udaipur, Rathu cattle at Bikaner, Sahiwal and Kankrej cattle at LRS Kodamdesar and various other sheds used at various LRS in different parts of Rajasthan with the help of concerning shed designer and architect.

## **Develop Prototype Animal Travis's:-**

Engineering and technology centre developed Travis for cow, horse, camel, dog etc. This innovative activity has provided comforts for treatment of animals. Engineering and Technology centre install Travis at different location like veterinary hospital RAJUVAS, Bikaner.

## **Perform Various Test Related to Civil Works in E&T Centre:-**

In engineering and technology centre, different types of civil works tests has been performed like Cube test, mortar test, brick test, tensile test, compression test in Quality Control Test.

## **RATE ANALYSIS AND G SCHEDULE:**

These departments perform rate analysis as well as made G -Schedule of all the civil work which is take place in RAJUVAS in the direction of estate officer.

## **PROVIDE SUMMER TRAINING TO ENGG STUDENTS:-**

8 students have received training in this new field through this centre.

## **PERFORM ALL CARPENTRY AND WELDING WORK:-**

Engineering and technology centre perform all carpentry and welding work of RAJUVAS, Bikaner.

Their task include repairing of cattle shed, fencing, repairing of damaged windows, doors, vents, aluminium door, channel gate etc.

## **Centre for Excellence for Use of Space-based Technology in Animal Science**

### **Executive Summary**

During 2019-2020 data on disease outbreaks, disease prevalence and raptors migrating to and fro Jorbeer Conservation Reserve, Bikaner were collected. The district-wise data were analyzed and mapping of prevalence of most common diseases viz. Brucellosis, Babesiosis in cattle & buffalo and Rabies was done

### **Objective wise target and achievement**

Mandate of the project is to develop and make use of space-based technology in improvement of animal science sector for improved management and production. In this direction prevalence and outbreaks of diseases in Rajasthan were analyzed and tried to associate them with environmental factors like temperature, relative humidity and THI so that explore the optimum environmental conditions to get better performance and production from animals. GIS mapping of farms and gaushalas were also help in better management of land and to provide better atmosphere to animals to perform well.

Mapping of disease prevalence and disease outbreaks, Prevalence of S.aureus and E.coli in Gaushala, Antibiotic sensitivity and resistant pattern of S. aureus in milk samples, Parasitological examination of fecal samples obtained from various Gaushala and Mapping of Migration Patterns of birds at Jorbeer Conservation Reserve, Bikaner.

The GIS mapping of Two LRS, three gaushalas and one college campus Jaipur was done, namely Livestock Research station, cvas, Bikaner, Livestock Research station, PGIVER, Jamdoli, Jaipur, Krishna sudama goshala jasusar gate, Om shree Krishna goshala samiti Karmisar, shree shiv gorakh goshala samiti shobhasar, and PGIVER, Mansarover, Jaipur was carried out.

## **Centre for Studies on Wildlife Management and Health**

The centre is involved in educating students and masses for wildlife conservation, providing training to foresters and forest guards on various aspects of wildlife management.

## Mandate:

To work as knowledge centre for wildlife protection and propagation and to design strategies for protection of endangered species of wildlife.

## Work done

The centre is looking after disease control programs, surveys, research on gastrointestinal parasitic and microbial infection in captive animals, educating students and masses for wildlife conservation.

## Studies on native wild birds at Jorbeer Conservation Reserve, Bikaner

The centre is continuously carrying out studies on migration patterns of native wild birds to and from Jorbeer Conservation Reserve, Bikaner in regards to their type and population. In order to assess the impact of temperature, humidity and wind velocity, these factors were recorded continuously at every 10 days interval along with the number and species of native wild birds to predict the factors for their population variations at this reserve.

## Livestock Feed Resource Management and Technology Centre

### Objectives -

- Analysis and interpretation of feed resource availability so as to derive strategy for optimum use of available feed resource.
- Identification of potential non conventional feed resources and exploration of the possibilities of their utilization at optimum level in animal diet by animal experimentation and validation.
- Formulation of least cost economic rations for various categories of animals in respect with production and physiological stage of life.
- To derive and develop area specific feeding strategy for various categories of animals in different regions of state.
- Development and refinement of feed technologies to improve efficiency of feed utilization particularly low quality crop residue.

### Achievements-

- A total of 6982 Kg of mineral mixture was



*Rehabilitation of Sewan Grass*

manufactured at this plant by O/I LRS, Beechwal, with technical support by LFRMTC. Mineral mixture sale is in progress to various LRS of RAJUVAS and Farmers are also benefiting by getting RAJUVAS mineral mixture on payment basis.

- Sewan development Work- LFRMTC is developing suitable method of sewan grass propagation for improving survival of sewan grass.
- Establishment of mother plot of Sewan grass: Centre established two mother plots of Sewan grass at its own field.
- Sewan grass seed collection: Superior quality Seeds of sewan grass is rarely available at Market and if available it is very costly. So LFRMTC collected seeds from own farm and 25.20 kg seed was collected in 2019-20.
- LFRMTC transplanted of 5100 seedlings at pasture land of Jaimalsar, 2100 transplant at LRS, Beechawal, 700 transplant at RD-489 and 350 transplant of sewan grass at Raisar village of Bikaner Districts. Jaimalsar is a Rajuvas's adoptees village.
- LFRMTC developed a Hybrid Napier grass field at Shri Ganga Jubali Pinjara Poll Gaushala, Jaimalsar (Bikaner) and propagated 1000 Hybrid Napier cuttings on this field. This centre propagated 6300 hybrid Napier cuttings at LRS, Beechhawal Farm and 500 cuttings at Mr. Umesh Singh farm, Raisar.
- Seven on campus farmer's trainings were



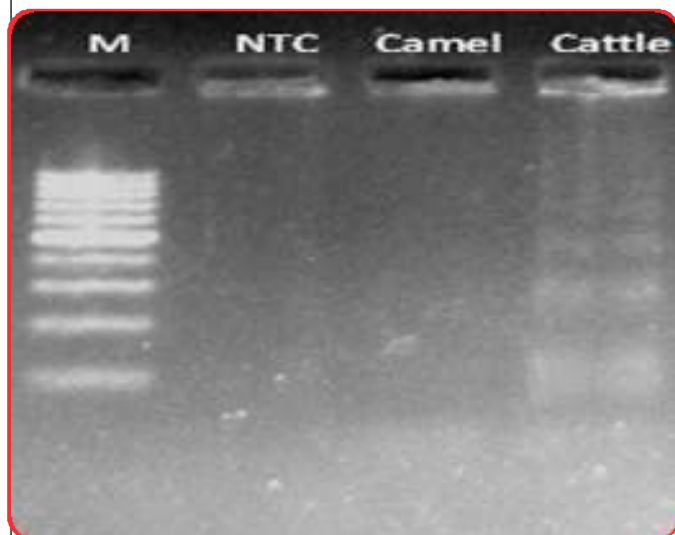
organized for livestock holders and progressive farmers by this Centre in collaboration with Agriculture Department under ATMA project, Bikaner and benefited 210 persons.

- LFRMTC prepared RAJUVAS fortified feed for migrated birds during disaster at Sambhar lake according to direction of University Administration and this fortified feed was handed over to rescue centre at Kachroda, Sambhar.
- LFRMTC produced 300 kg of vermin- compost and 135 Ltr. of vermin-wash.
- LFRMTC produced 100 kg azolla in month of April to December.
- LFRMTC, Bikaner published four quarterly Hindi bulletin "PashuAahar Evam Chara Bulletin" for farmers' community.
- Released of Five Technical Folders-LFRMTC, Bikaner published of five technical folders.
- A total of 364 samples were analysed by feed and fodder analysis laboratory.

## Vaccinology & Biological Product Research Centre

### Objective wise targets

- Amplification of bovine  $\beta$ -Lacto globulin gene
- Amplification of BMPR1B gene from wild and Garole sheep
- Filed provisional specification
- Collection of pre- & post-vaccination serum samples.
- Examination of purity of poultry vaccine



- Collection of bacterial cultures
- Trainings
- **Amplification of bovine  $\beta$ -Lactoglobulin gene**
  - $\beta$ -lactoglobulin ( $\beta$ -LG) is present in cattle milk while completely absent in the humans and camel milk.  $\beta$ -LG is a common cause of allergy through milk. Standardization of PCR & LAMP technique.
  - Contamination of avian viruses (*viz.* chicken Astrovirus, chicken Adenovirus, Newcastle disease virus (NDV) & Avian Infectious Bronchitis virus (AIBV) in Newcastle Disease (R2B, Lasota, B1), Avian Infectious Bronchitis Virus (AIBV), Infectious Bursal Disease Virus (IBDV) vaccine formulations were examined for purity.

### Achievements:

- Evaluation of the effectiveness of commonly used vaccine candidates.
- Analyze new generation veterinary vaccines for their immunogenic potential.
- To devise strategies in the field of DIVA.
- To maintain a stock of bacterial type cultures for use in veterinary biologicals. Isolation of bacterial type cultures for *E.coli* and *Pseudomonas spp.*
- Human resource for use and maintenance of veterinary biologicals. Training of 5 batches of internship students. Training imparted for culture media preparation. Bacterial culture, vaccines, types of vaccine, molecular imprinted polymers as ligands for diagnosis, antimicrobial peptides, application of rec-DNA technology for vaccine production, application of CRISPR/Cas9 technique for vaccine production, use of lateral flow assay for detection of infectious agents molecules.
- To develop models of estimation of vaccine impact in animal population of Rajasthan. Preparation of vaccine for *pseudomonas aeruginosa* using CRISPER/Cas9 technology in progress.
- To formulate policy, communication and ethical issues related to vaccine production and their application.



- A total of 97 interneers were trained at Vaccinology Centre on the topics related with types of vaccines, its production methods and uses.

## RKVY Projects

### Centre for Diagnosis, Surveillance & Response of Zoonotic diseases

#### Objective wise Targets and Achievements

##### i. Hiring Services of Contractual Research/Field Staff:

There are two Project Associates, one skilled contractual and one unskilled contractual staff are working in the Laboratory for diagnostic research work, Field sampling and survey.

##### ii. Data Collection and Data Mining for Historical Zoonotic diseases:

As per the objectives of the project, Different type of Samples like Blood/Serum, Faecal sample, Cloacal swab, Ceacal content etc. were collected for diagnosis of the different zoonotic diseases. Samples are processed by diagnosis procedures like ELISA, PCR and RT-PCR etc. Awareness seminars were organized every year on the occasion of 'World Rabies Day', "World Zoonosis Day" and "World Veterinary Day".

##### iii. Standardization of Laboratories, preparation of SOP's and procedures for diseases:

Some of the diagnostic protocol has been standardized and continuing. SOPs and logbook for all the procured instruments are prepared. SOPs of the different laboratories have been developed.

### Establishment of Goat Breeding Farm for Demonstration and Dissemination of Remunerative Goat Farming System Angai, Sarmathura, Dholpur

#### Objectives:

- Breed improvement in goat for the milk and meat purpose.
- Conservation of indigenous breed of goats.
- Increase animal protein availability to fulfill the nutritional requirements to reduce malnutrition of the human population of the state.
- Enabling the small producer to have better forward and backward linkages specially

marketing to livestock and products, participate in the process of globalization, growth and modernization of the livestock sector.

- Self-employment.
- To utilize goat as a tool for economic and social development and gender equity.

#### Achievements

- On the left side of Kachhpura road Farm and Office building work has completed and handed over by The Director Works in Sept 2019. Electricity connection has been done.
- Furniture & Computer has purchased.
- Feed-fodder, Mineral Mixture, Concentrate feed has been purchased and fed scientifically as per physiological requirements.
- Trainings for farmers are initiated to enhance their livelihood.
- Creation of facility of drinking water through tankers for farm and office building is under process.
- Goat, bucks has been purchased are rear scientifically at the Farm.
- Curtains are fitted at Goat Farm to protect animals from unfavourable weather conditions.
- Plantation has done at Farm.
- Constitution of animal purchase committee has been done for purchasing of more animals.
- The Geo-Tagging of site has been done.
- Faeces of animals is used to make manure.
- Required procedures for getting Organic Certification of farm animals and other Farm products are initiated.
- Man power hired as farm workers, technical assistant etc.

**RKVY Project "Capacity Building of secretaries of the milk societies and laboratory Personnel of Rajasthan Cooperative Dairy Federation (RCDF) for Clean Milk Production, Milk Quality and Safety at PGIVER, Jaipur".**

#### Aims and Objectives:

Capacity Building of secretaries of the milk societies and laboratory personnel of RCDF for clean and safe milk production.

## Achievement

Only one training programme of Two days (5th & 6th march 2020) has been organized in the financial year 2019-20. Training was imparted to the secretaries of the milk societies and laboratory Personnel of Rajasthan Cooperative Dairy Federation (RCDF) for Clean Milk Production, Milk Quality and Safety. Total numbers of registered trainees benefited so far were 21. Trainees were from 2 districts Hanumangarh and Shriganganagar.

## Establishment of poultry germplasm multiplication unit for indigenous poultry, PGIVER, Jaipur

### Aims and Objectives:

- Establishment of infrastructural facilities for germplasm multiplication.
- Knowledge dissemination of germplasm multiplication to needy farmers and entrepreneurs.

## Achievement

- ❖ The map and layout for civil work has been prepared.
- ❖ Planning for purchase of equipment is under process.

## Strengthening of Residential Accommodation at Post Graduate Institute of Veterinary Education & Research Jaipur for Efficient Clinical & Farm Practices to Veterinary & Animal Science Students

The construction work of Ist Floor of Boys & Girls Hostel are completed and remaining works i.e. boundary wall etc. is in progress. The purchases of Furniture and student amenities for these hostels of Rs. 40.00 Lacs are in Process.

## ICAR Projects

### Mega Sheep Seed Project (Sonadi Sheep)

Mega Sheep Seed Project aims at improvement of indigenous breed through distribution of elite germplasm in native tract selection for better growth

and wool production. In order to improve the Sonadi sheep for growth and wool production, CSWRI-ICAR established a coordinating unit at College of Veterinary and Animal Science, Navania (RAJUVAS). The unit includes farm and field based centers for genetic evaluation of Sonadi sheep.

### Salient Achievements:

- A total of 56 (31 free+26 sold) breeding rams were disseminated in field for breed improvement.
- Improvement recorded in 12M body weights in 2019 from previous year.
- Significant increase in ADG2 (3-6) & ADG3 (6-12M) from last year and both were highest among last five years.
- Significant improvement recorded in adult six monthly GFY & adult annual GFY.
- Improvement observed in reproduction parameters from last year
- In 2019, a sum of total 117250/- Rs. revenue was generated from.
- Ear tagging of 1002 animals at farmers flock
- Three times, one day training programme were organized for ST farmers of TSP area.
- Khadi blankets, Kishan torch, umbrella, wormi compost, azolla seeds, concentrates feed and feed mangers were distributed to ST farmers of tribal area under TSP scheme.





## Population Statistics:

Group	Death		Reduction								Total		Closing Balance	
			Internal transfer		Culled		Free distribution		Sale					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total	46	186	185	199	9	69	31		25		296	454	84	186
Group total	232		384		78		31		25		750		270	

M=Male; F=Female

## All India Network Programme on Diagnostic Imaging and Management of Surgical Conditions in Animals (AINP on DIMSCA)

### Objectives:

- To study the diverse imaging techniques and surgeries of soft tissue, bones and joints, ophthalmic by using advance surgical equipments i.e.
  - ❖ CT Scan
  - ❖ Ultrasound with Colour Doppler
  - ❖ Phacoemulsification unit
  - ❖ Electro-retinography equipment
  - ❖ Microsurgery unit
  - ❖ Laser Surgery equipment
- To develop and evaluate diverse ophthalmic surgery techniques in canines
- To develop and evaluate diverse dental surgeries in canines and large animals
- To develop and evaluate diverse orthopaedic and spinal surgery techniques including advanced fracture fixation and joint replacement techniques in canines

### Achievements (2019-20):

- Computed Tomography (CT scan) examination was performed in 48 clinical cases in dogs and cats affected with various disorders.
- Ophthalmic affections were treated in 120 small and large animals.
- Cataract surgery done in 10 cases using Phacoemulsification and ESE
- Electroretinography (ERG) was done in 58 canine cases of cataract
- Minimum invasive surgery by diode & CO<sub>2</sub> LASER in canines was done
- Orthopaedic affections in 245 small animals were treated by internal fixation technique and external fixation techniques

- Orthopaedic affections in 414 large animals were treated by splints, walker splints, POP/Fibercast and ESF as external immobilization technique.
- Orthopaedic affections in 28 wild animals and birds were treated
- Spinal injury in 15 canines were managed by cart and 49 downer large animals by orthopaedic rehabilitation with slings and "Downer Animal Bay"

### CT examination of different anatomical regions in dog



REGION	NO. OF CASES
Head	07
Spine	11
Thorax	10
Extremities	06
Pelvis	03
Thoraco-Abdomen	11
Total	48

## Following activity is run under the project:

### 1. Clinical Study on the Diagnosis of Thoracic/ Thoraco-abdomen Disorders using Computed Tomography in Dogs

#### Objectives:

- To carry out clinical and computed tomographic (CT) examination of thoracic disorders or thoraco-abdomen in dogs.

#### Conclusions:

- Computed Tomography proved to be an invaluable technique in characterising thoracic pathological findings compared to conventional radiography.
- Thoracic Computed Tomography facilitated the more precise characterisation and localisation of subtle changes for the screening of pulmonary and thoracic malignancies for tumour staging.
- The haemato-biochemical alterations observed in the cases were better predictors of the pathological conditions in most of the presented thoracic affections.

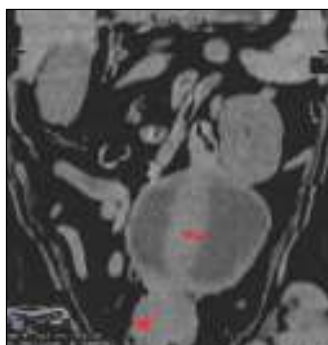
### 2. Comparison of Abdominal Disorders after Imaging of Ultrasonography and Computed Tomography in Canines

#### Objectives:

- To carry out ultrasonographic examination and computed tomographic (CT) examination for diagnosis of various abdominal disorders in canines.
- To compare the imaging of both the modalities to reach an accurate diagnosis of selected abdominal disorders.



CT image of enlarged liver with abdominal fluid density



CT image with enlarged prostate and fibrous band on urinary bladder wall



CT image of hypoattenuating nodular density in spleen



CT image of hypoattenuating density in spleen

### Distribution of abdominal disorders according to organ involved

S.No.	ORGAN	NO. OF CASE
1.	Liver and gall bladder	10
2.	Spleen	4
3.	Stomach and intestine	2
4.	Kidney, urinary bladder and urethra	10
5.	Uterus	5
6.	Prostate	2
7.	Abdominal cavity	2
8.	Multi-organ	3
Total		38

#### Conclusion

- Ultrasonography was found a reliable, non-invasive imaging modality to detect diverse pathological conditions of canine abdomen.
- Computed tomography (CT) provided additional and detailed information of the abdominal organs and the pathological lesions
- Ultrasonography and computed tomography proved complimentary imaging technique to each other in diagnosing the affections of canine abdomen.
- The hemato-biochemical alterations in these cases were well corroborated with the imaging diagnosis of the pathology involved in canine abdomen.

#### Section: Minimum Invasive Surgery

### 3. A Clinical Study on Use of Carbon Dioxide LASER for Various Soft Tissue Surgeries in Dogs

## Objectives:

- To perform surgery using Carbon Dioxide LASER in dogs.
- To record the intra-operative and post-operative evaluation.

## Conclusions:

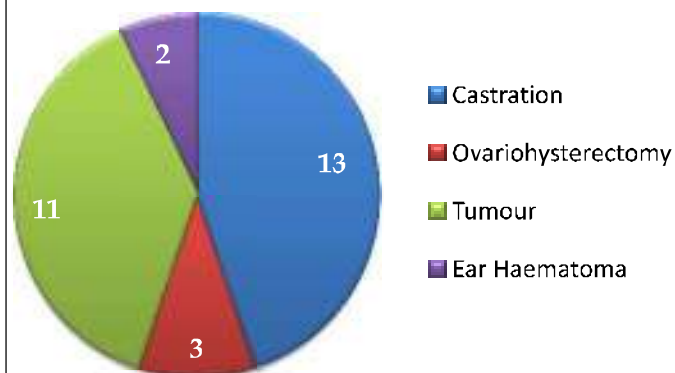
- Carbon Dioxide LASER was an efficient modern surgical tool
- Carbon Dioxide LASER beam results in instant haemostasis.
- Minimal postoperative complications were found with good wound healing.
- It was suited for both major and minor soft tissue surgeries.
- It could be only used for soft tissue surgery.
- Proper safety measures must be considered before and during surgery.

## Objective: -

- Evaluation of soft tissue surgery by Diode LASER in canines
- Evaluation of diode LASER surgery for diverse surgical affections in canines.

## Surgical affections operated by Diode LASER

Affection	No. of cases
Castration	13
Ovariohysterectomy	03
Tumour	11
Ear Haematoma	02
Total	29



## Objectives:

- To evaluate diverse ophthalmic surgery techniques in canines
- Evaluation of diverse ophthalmic disorders for possible treatment

## Cataract Surgery in Dogs

Treatment	No. of Cases
Phacoemulsification	07
ECCE	03

## Electroretinography in Dogs

Treatment	No. of Cases
ERG	58

## 4. Clinical diagnosis and management of ocular affections in cattle

## Objectives:

- To diagnose ocular affections by ophthalmological examinations in cattle.
- To carry out hematobiochemical examinations of these cattle.
- To carry out surgico-therapeutic treatment of these ocular affections.

## Conclusion:

- Extra capsular cataract extraction lands to better results.
- Periodic ophthalmic examination of cattle can help in early diagnosis.
- Early surgical management of ocular dermoids in cattle increases chances of restoration of vision along with their productive efficiency.
- Early diagnosis and surgical management of cataract in cattle results in better restoration of vision.



## Diagnosis and management of Orthopaedic affections

### Orthopaedic Affections

Bone Species	Humerus	Radius & ulna	Meta carpal	Femur	Tibia & fibula	Meta tarsal	Phalanx	Mandible	Others	Total
Cattle	08	09	24	15	40	28	03	01	53	181
Buffalo	06	01	03	09	09	04	-	-	26	58
Sheep & Goat	05	09	53	11	19	24	11	02	29	163
Camel	02	-	07	-	04	05	01	22	1	42
Dog	25	37	19	66	39	05	05	05	29	230
Cat	03	02	-	08	04	01	-	-	04	22
Horse	01	01	02	-	01	04	01	-	04	14
Rabbit	02	04	-	14	03	-	-	-	01	24
Birds	02	08	-	01	07	01	01	-	01	21
Wild Animals	-	-	08	-	05	07	-	-	01	21
<b>Total</b>	<b>54</b>	<b>71</b>	<b>116</b>	<b>124</b>	<b>131</b>	<b>79</b>	<b>22</b>	<b>30</b>	<b>149</b>	<b>776</b>

### Management of Orthopaedic Affections

Method of Immobilization	POP	IMP	ESF	IDW	Plating	ILN	Blister	RJB	Supportive	Other	TOTAL
Species											
Cattle	77	-	14	01	-	01	35	-	25	12	165
Buffalo	17	-	-	01	-	-	17	-	02	06	43
Sheep & Goat	101	-	03	02	-	-	04	05	34	-	149
Camel	12	-	10	12	-	-	02	-	05	-	41
Dog	15	43	39	03	07	18	-	37	46	06	214
Cat	-	06	-	-	-	-	-	04	07	03	20
Horse	08	-	-	-	-	-	-	-	07	01	16
Wild Animal	-	-	-	-	-	-	-	-	05	04	09
Rabbit	-	08	-	-	-	-	-	*	03	-	11
Birds	-	05	-	-	01	-	-	-	13	-	19
<b>Total</b>	<b>230</b>	<b>62</b>	<b>66</b>	<b>19</b>	<b>08</b>	<b>19</b>	<b>58</b>	<b>46</b>	<b>147</b>	<b>32</b>	<b>687</b>

### Types of cataract



Mature cataract



Mature cataract with ant. Synechia and medial location



Hypermature cataract with ant. lens luxation



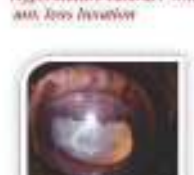
Hypermature cataract



Mature cataract with synechia



Mature cataract

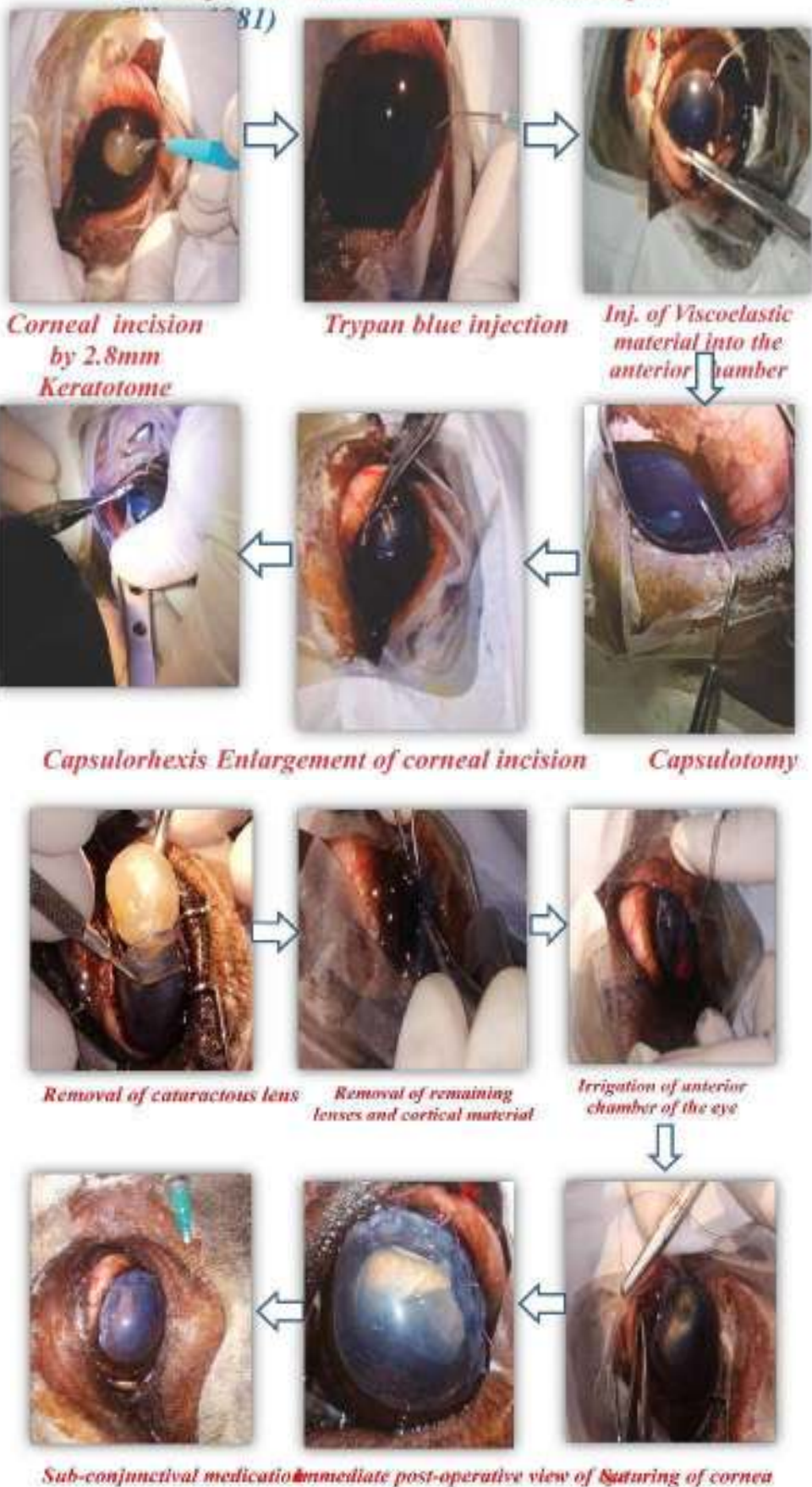


Hypermature cataract



Hypermature cataract with chunky fragments

### *Extracapsular cataract extraction technique*





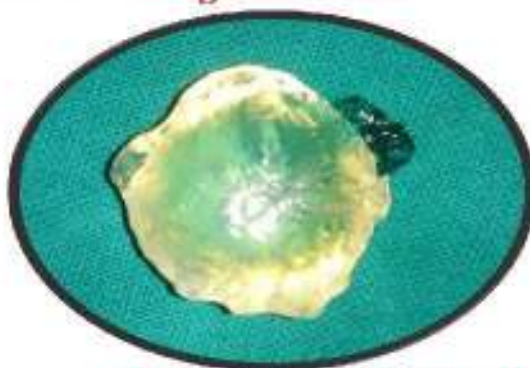
*Tarsorrhaphy*



*Post-operative  
drug instillation*



*Post-operative  
bandaging of  
operated eye*



*Recovered cataractous lens*

## 5. Linear External Skeletal Fixation of Long Bone Fractures in Dogs

### Objectives:-

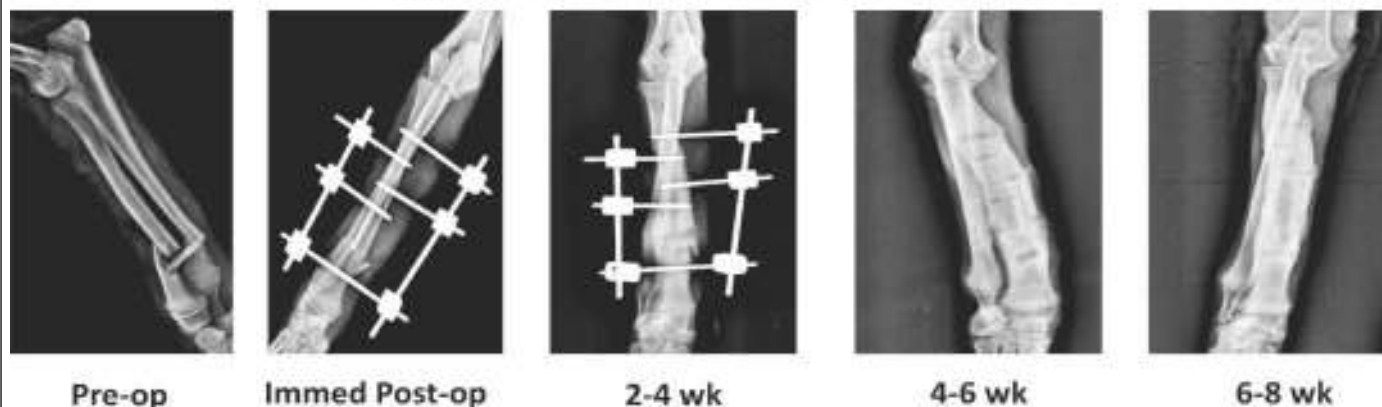
- To evaluate the linear external skeletal fixation for stabilisation of long bone fractures in dogs.
- To evaluate fracture healing in long bones of dogs stabilised by linear external skeletal fixation system.

### Conclusions:

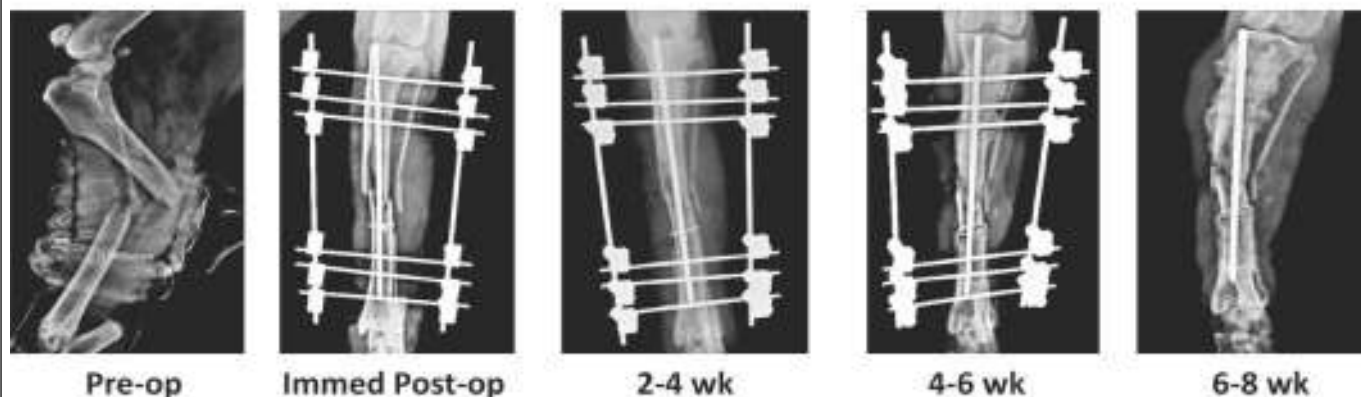
- The linear type Ia ESF and type IIa ESF provided stability of a comparable duration in the upper and lower limb fractured bones, respectively.
- With both type Ia and type IIa linear ESF, limb usage with good weight bearing was initiated within the 1st post-operative month.
- With linear uniplanar ESF, radiographic fracture healing was achieved earlier in upper limb bone compared to lower limb bone fracture cases in dogs.
- Intramedullary pinning along with the unilateral uniplanar ESF provided good fracture reduction and stability to upper limb bone fractures in dogs.
- Occurrence of linear ESF related complications were minimal in the long bone fracture treated cases of dogs.



### Type IIa ESF in R-U Fracture



### Type IIa ESF + IMP in Tibia Fracture



#### 6. Efficacy of Demineralized Bone Matrix (DBM) Graft and Tissue Adhesive in Healing of Long Bone Fractures Stabilized with Interlocking Nailing in Canines

##### Objectives:-

- Clinical and radiographic assessment of the efficacy of Demineralized Bone Matrix (DBM) graft in healing of long bone fractures stabilized by interlocking nailing in canine.
- Clinical and radiographic assessment of the efficacy of Demineralized Bone Matrix (DBM) graft with Tissue Adhesive in healing of long bone fractures stabilized by interlocking nailing in canine.

##### Conclusions:

- Application of Demineralized Bone Matrix (DBM) as xenograft in long bone fracture repair along with Interlocking Nail (ILN) resulted in clinical and radiographic union of long bone fractures in dogs.

- Tissue adhesive when used with Demineralized bone matrix at the fracture site prevented callus formation and resulted in delayed union.
- The osteoinductive and osteoconductive property of DBM promotes the fracture healing and results in early weight bearing.

#### Characterization of Sojat Goat Project (CSGP)

##### Objectives wise Targets and Achievement:

- Marwar region of Rajasthan comprises five districts, viz. Jodhpur, Jalore, Nagaur, Pali and Barmer districts of Rajasthan.

##### Phenotypic Characteristics

- Perhaps one of the world's most unusual looking goat breeds and one of India's most popular breed, the Sojat goat.
- This breed is famous for their good height, health and for their white color. Skin color of this breed is pink.



- The overall mean for body weights at birth, 3, 6, 12, 15 months and adults were observed as 3.64, 21.95, 36.19, 53.38, 57.66 and 68.39 kg., respectively.
- The overall mean body measurements of adult Sojat goat Body Length, Body Height and Body Girth were 89.62, 89.25 and 92.04 cm. , respectively in project area.
- Ear Type - Very long, flat and pendulous ears, Ear Length- 30 to 41 cm. Ear Width - 13 to 15 cm. Short and thin tail.
- Feeding Practices - Semi stall feeding with day time grazing. This breed good for stall fed goat farming system. Maximum farmers Khajri loom feeding to their animals.
- Breeding Practices - 100 per cent Natural service. Kidding in this breed Single (60%) and twin (40%). Bucks are larger in size than female and beautiful.  
First oestrus duration: 317.89±0.18 days  
Age of male at first mating : 408.60±0.02 days  
Age at first kidding: 540.75±0.16 days  
Kidding interval: 419.87±4.08 days  
Average litter size: 1.95±0.01  
Lifetime number of kidding: 16.67±2.40
- Milk production  
DMY: 991.02 gm/ animal in surveyed area  
Fat: 3.29 % SNF: 8.27 %.

## All India Coordinated Research Project on Goat Improvement (Marwari Field Unit)

### Objectives:

- To enhance productivity of goat genetic resources of the country in their habitat.

- To develop germplasm resource centers for goat breeds.
- To validate and implement breeding, feeding, and health control technologies in the field for improved goat production and health
- Capacity building of stakeholders and goat keepers for sustainable and profitable goat husbandry.
- To determine the role of goat husbandry in livelihood and food security of goat keepers.

### Salient Achievement:

- 2025 adult does were registered from 70 goat farmers and covered 5 clusters of Marwari goats in breeding tract of this breed.
- Animal identification, pedigree and performance recording of 1457 goats.
- 20 young elite buck of Marwari breed have been disseminated to goat keepers during the financial year in addition to rotation of bucks with in cluster.
- The body weight at birth (2.58kg) was improved by 14.31 % over the baseline performance (2.257 kg).
- The mortality was reduced up to 2.18 % in the registered flocks. The age at first kidding, first kidding interval and kidding rate showed improved pattern.
- Eight training in different villages for Capacity building of 126 farmers in goat rearing has been carried out.
- Around 27,767 goats were covered under health coverage which included both prophylactics (66.32 %) and curative (33.68%) measures during this financial year (2019). Prophylactic measures includes Deworming (7293), Vaccination against FMD, ET and PPR (2010), Dipping (2851).
- 12 shoes, 10 water bottles, 10 umbrellas, 93 mineral mixture block and 20 measuring tapes were provided as a centric incentives to the registered goat keepers.



## Revolving Fund Project

### Preparation and Supply of ORS for Animals

#### Mandates of the Project:

Preparation & supply of ORS for animals to correct the dehydration, loss of energy and electrolyte imbalance in animals affected with various diseases.

#### Outcome of the project:

- Total 1340 Packets (128gm of each Packet) of ORS for animals were prepared.
- Income of Rs 23040/- during FY 2019-20.
- Availability of ORS for animals to correct the dehydration, loss of energy and electrolyte imbalance in animals affected with various diseases.
- Rs. 5, 000/- (10 % of the sanctioned amount for first financial year) returned to the Comptroller office during 2017-18.
- Rs. 10, 000/- (20 % of the sanctioned amount for second financial year) returned to the Comptroller office during 2018-19.
- Rs. 15, 000/- (30 % of the sanctioned amount for second financial year) returned to the Comptroller office during 2019-20.
- Income of Rs. 23040/- during FY 2019-20.

### Pilot Project on Alternate Energy Generation through Biogas Based Electricity Production CVAS Navania Udaipur

The present project entitled "Pilot Project on Alternate Energy Generation through Biogas Based Electricity Production at CVAS, Navania, Udaipur Campus" has got sanctioned for establishment of biogas based electricity production system for effective management of animal bio-waste in the campus and to develop a model for animal waste management with conversion of it in to bio-energy and bio-fertilizer. It has following objectives.

#### Objectives:

- Establishment of bio-energy station cum bio-fertilizer factory at C.V.A.S. Navania
- Establish a model of effective conversion of animal bio-waste in electricity and bio-fertilizer.
- Reduce the green house effect of bio-methane by converting it in to CO<sub>2</sub> and H<sub>2</sub>

- Meet hands in clean and green India movement through developing an effective animal bio-waste management system model for village level utilization.
- Research on enhancement of Methane gas production in bio-digester plant for effective utilization of animal bio-waste.
- To meet the hand with clean India campaign by effective system of bio-waste disposal in college campus

#### Technical achievements:

##### 1. bio-fertilizer range developed-

- Enriched vermi-compost with Earthworm gut microbe has been developed and is being marketed with name of Mrida amrit
- Mrida amrit liquid fertilizer- has been developed and is being marketed with name of Mrida amrit liquid
- Mrida amrit-culture -Earthworm gut microbe culture for enrichment of soil fertility and seed treatment has been developed and marketed as

##### 2. Biogas and electricity production-

Establishment of the project has been completed and it is in working condition biogas production is at its full capacity. Electricity production is there and at present we are producing, 30 kva electricity with two hrs continuous power backup for hostels of the college.

##### 3. Agricultural land developed-

By product of the biogas digester has been utilized to convert the waste land in to cultivable land. In current financial year 5 acre land has been converted in to agricultural land.

##### 4. Green fodder production-

Fodder production during last year 2 tons. And Azola production was 2 tons.

##### 5. Farmers training-

Forty three exposure training of farmers (total 1232 farmers) on vermi-compost production, Azola production and an orientation on proper animal waste management has been given during the financial year 2019-20

##### 6. Cooking gas supply to girls hostel-

with kind permission of Dean CVAS and this has been started





## Preservation and Articulation of Bones of Different Species of Animals to Enhance the Teaching Quality of Veterinary Education

### Objectives:

1. Creating the interest and generosity in learning the anatomical structures among graduating students.
2. Students to be instigated for involvement into the anatomical studies.
3. Enrichment of Department of Anatomy and Histology, College of Veterinary and Animal Science, Navania at the cost of this project.
4. To make reach of our Institution's name to those Institutions/ State which are the beneficiary of our product.

### Achievements:

Supplied product to the following clients:

- Animal Husbandry Polytechnic, Hassan (Karnataka).
- LRS, Dug.
- LRS, Bojunda.
- CVAS, Navania.
- Animal Husbandry, Polytechnic, Chamaraj nagar (Karnataka).
- Various AHDP institutions in the State of Rajasthan
- PGIVER, Jaipur
- Mewar University F/o Vety. Sciences, Chittourgarh
- Students are instigated for involvement while creating the interest and generosity in learning the anatomical structures.
- Enrichment of Anatomy Department, College of Veterinary and Animal Science, Navania is being done at the cost of this project.

## Pilot project on production of indigenous milk products, College of Veterinary and Animal Science, Bikaner

### Objectives

- To explore entrepreneurial skill among veterinary students.

- To encourage students for self employment generation in processing and development of indigenous milk products.
- To generate the revenue through selling of various milk products.

### Work done during 2019-20

- The department of LPT, CVAS, Bikaner was manufactured and sale various milk products like Paneer, lassi, shrikhand.
- Detailed of sale of milk products
  - a. RAJUVAS Paneer-318 packts @75/-
  - b. RAJUVAS Shrikhand -55 packts@55/-
  - c. RAJUVAS Lassi—200@30/-

## Revolving Fund Project on “Processing and Marketing of Milk & Milk Products CVAS, Navania, Vallabh Nagar, Udaipur

### Objectives

- To generate the revenue through selling of various milk products.
- Upgrading infrastructure to increase learning outcomes, employability and entrepreneurship among the students.
- To train the farmers, farm women and youths.

### Programme organized:

- Exhibition of stall of Milk Products in Kisan mela at KVK, Siyakheri, Vallabh Nagar on 03.09.2019.
- A one-day seminar on dated 12.10.2019 was organized on “Processing of Milk” for progressive dairy entrepreneurs of Udaipur in joint collaboration with an NGO, R.K. Sansthan, Sawai Madhopur.
- Six days skill development training programme on “Processing of Milk & Food Products” for milk and food entrepreneurs was organized from 10th to 16th December, 2019. The financial support was given by an NGO, R.K. Sansthan, Sawai Madhopur. In this training programme total 30 progressive milk entrepreneurs from Vallabh Nagar and adjoining area were participated.

## Research Council Meeting

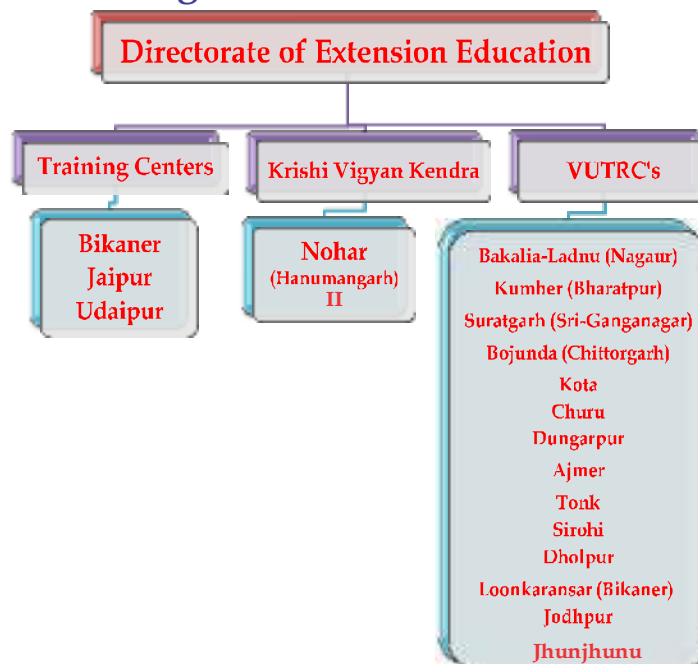
The 6<sup>th</sup> meeting of the Research Council was held under Chairmanship of Vice-Chancellor Prof. Vishnu Sharma on 14<sup>th</sup> February 2020. In this meeting it has been decided that the process of organic certification of products and land should be initiated at eight LRS of the university. Prof. R.K. Singh, Director Research presented the agenda of the 6<sup>th</sup> Research Council meeting. It was resolved to adopt the solar energy and water conservation system for agricultural production at all LRSs. Animal feed plants will also be set up at all LRS. Organic certification of products and LRS land should be initiated at earliest possible at all the LRSs like Beechwal and Kodamdesar. Patenting of RAJUVAS research technologies and NABL accreditation of advanced laboratories should be the top priority of the LRSs and Advanced research Centers. A proposal for extensive use of advanced and sensitive equipment in research was also discussed. Vice-Chancellor Prof. Vishnu Sharma also instructed that all the PI and incharge should ensure utilization of financial resources within the stipulated period. Directives were also given to all officers of LRSs and Advanced Research centers for face lifting and their visibility in the state. In the meeting, all Principal Investigators presented progress reports of ongoing research projects at different centers. Sh. Ajit Singh-Registrar; Dr. Mahesh Sharma-Managing Director Urmul; Dr. S.C. Mehta-Head, NRCE; Dr. Sumant Vyas-Principal Scientist, NRCC; Dr. Virendra Netra, Deputy Director of Animal Husbandry; nominated members Sh. Mohan Lal Gorachia, Sh. Naveen Singh Tanwar, Dean-Director, Head of Departments and Officers of LRSs attended the meeting.



## 6. Extension Education

The Directorate of Extension Education is the nodal agency of Rajasthan University of Veterinary and Animal Sciences, Bikaner for promoting livestock development in the State through quick transfer of technology by providing scientific training, advisory and forecasting of disease outbreaks and their prevention for the benefit of farmers. Extension Education is one of the pillar of the University an working for the technology transfer to the farming communities through its various programmes. Under an umbrella of the Directorate of Extension, the work of the field extension is mainly carried out through University's colleges, Krishi Vigyan Kendra (KVK), Veterinary University Training and Research Centre (VUTRCs) and Centres sanctioned under State plan for the livestock, dairy, poultry and fish farmers. These imparting skill based training for strengthening the entrepreneurial activities in the rural areas. The Directorate is actively involved in training and capacity building initiatives for the farmers and the unemployed youth across the state. The Directorate being a crucial organ of the University also provides guidelines as well as monitor and evaluate the extension programmes carried out by these units. Taking the problem from the field to the research units and bringing the solutions for the farmer's problem is a crucial function and the extension is striving to build this linkage in the most effective manner through various outreach programmes. It also involves organization of animal treatment & infertility treatment camps, farmers training, exhibition, farmers- scientist interaction, front-line demonstration etc. For strengthening the extension activities, various programmes are being implemented through projects sponsored from the agencies like ICAR, RKVY, ATMA and other government and non-government organisations. Use of traditional and modern technology transfer for effective outreach is the prime objective of the University. The University is routinely carrying out

### Organizational Structure



technology identification, assessment and technology transfer to the farming communities with active collaboration with the various departments of the Centre and State Government. With a view to extend the outreach programmes of University, efforts are being made to strengthen the extension wing of the university as well as the college to make reasonable impact in the technology dissemination. Extension is striving to bring the changes through the modern technology adoption in animal husbandry, dairy technology and fisheries for sustainable development and improved productivity for the farming communities. The Directorate also extends its support to the State Animal Husbandry Department by publishing literature on different disciplines of veterinary and allied sciences. Thus, three principal functional areas of the Directorate of Extension Education, RAJUVAS are training, advisory and communication.

RAJUVAS has been a leader in the rapid development of its infrastructure of extension education since 2011. The Directorate of Extension Education is headed by the Director of Extension Education, who is assisted by Additional Director,



Deputy Director, and Assistant Director. At present positions of Additional Director, Deputy Director, and Assistant Director are vacant.

## Broad Objectives

- To formulate and impart in-service training to different categories of officers and functionaries from line departments of Government of Rajasthan and Non-Government Organizations.
- To conduct short and long duration vocational trainings for farmers, farm women, youth and school dropouts of the State.
- To assess and refine the latest Animal Husbandry technologies through front-line demonstrations for their wider adoption.
- To provide farm information services through various extension activities including literature for quick dissemination of technology.

## Over View of Directorate of Extension Education, Bikaner

- Veterinary University Training and Research Centres (VUTRCs) have been functional at Bakalia (Nagaur), Suratgarh (Sri Ganganagar), Kumher (Bharatpur), Bojunda (Chittorgarh), Malpura (Tonk), Dungarpur, Sirohi, Kota, Ajmer, Churu, Dholpur, Loonkaransar, Jodhpur, Jhunjhunu and Jhalawar and Jalore are under construction.
- A Krishi Vigyan Kendra (KVK) at Nohar (Hanumangarh) has been established and functional.
- Radio Programme "Dhine Re Batyaa" for livestock farmers from 17 All India Radio Stations of Rajasthan is broadcasted on third Thursday at 5:30 to 6:00 PM every month.
- Trainings for the livestock farmers are conducted regularly by DEE, VUTRCs and KVK.
- Animal treatment camps on tackling infertility are organizing regularly.
- DEE is regularly bringing out monthly publication "Pashu Palan Naye Aayam".

- Toll free helpline i.e. 1800 180 6224 is working for the benefit of livestock farmers, veterinary doctors and students.
- Arranging exhibitions in State and National level fair organized for the farmer's community.

## Krishi Vigyan Kendra, Nohar (Hanumangarh-II):

The first "Krishi Vigyan Kendra" was sanctioned to the University by ICAR, New Delhi at Chak-27-NTR, Nohar (Hanumangarh) on 100% financing basis. From the available land of LRS, Nohar 81 bighas land was allotted for the KVK by the University. The KVK started its functioning on 9<sup>th</sup>



April, 2012. The KVK is actively engaged in on farm trials, front line demonstrations, on campus and off campus farmers and farm women trainings and other extension activities such as field day, kisanmela, kisangosthi, exhibition, method and result demonstrations, scientific visit to farmers field, exposure visit of farmers, animal health camps and farm science club and self help groups conveners meet etc. The KVK is very helpful for transfer of new techniques and technology to the farmers and livestock owners. The University is marching ahead to transform it to a model KVK where provisions will be made to provide latest knowhow and new technologies to the farmers besides updating their skill and competence.



## Extension Activities Organized by KVK (2019-20):

Centre	Off Campus Training	On Campus Training	Demonstration/ Transfer of Technology/ (FLD/CFLD)	Vichar/ KishanGosthi	Farmer Scientist Interaction	Field day	Success Stories	Total Training	Total Participants
KVK, Nohar	14	22	290	6	0	3	4	36	1043

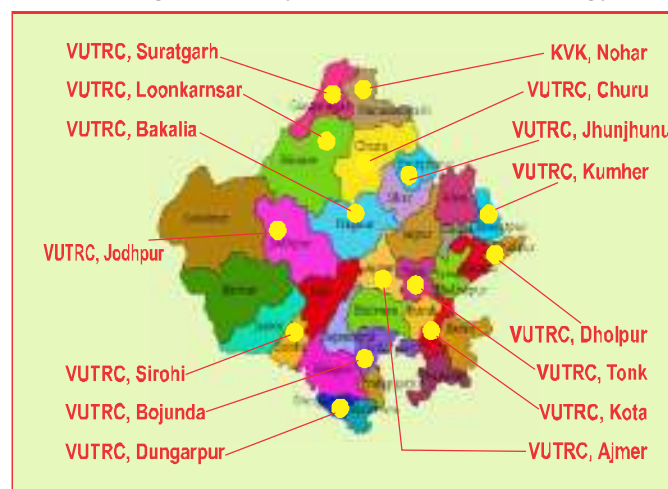
## Veterinary University Training and Research Centers:

Extension Education is one of the pillar of the University, is working for the technology transfer to the farming communities through its various programmes. Under an umbrella of the Principal Investigator, Veterinary University Training and Research Centres, the extension work in the field is mainly carried out through Veterinary University Training and Research Centre (VUTRCs) in 14 district of Rajasthan. VUTRC at district level is venturing to penetrate up to each livestock owner of the state for enhancing animal productivity and profitability from livestock sector. This project has been appreciated as well as accepted by the Government of Rajasthan and the activity has been included in the plan of State. Establishment of centre at district level enables the dissemination of latest fruitful technologies at faster rate to the end users. Livestock owners are envisaged to have a direct communication with scientists and extension workers not only to solve their immediate problems but also to receive trainings and technologies. The farmers and field staff will receive services of subject matter specialists for adoption of technologies in addition to facilities of diagnosis and treatment of diseases and testing of feed quality as well as animal produce. All these centers are expected to improve the status of animal husbandry in all dimensions for improvement in status of animal production, productivity and health of animal for better livelihood of farmers.

VUTRCs imparting skill based training for strengthening the entrepreneurial activities in the rural areas. The VUTRCs are actively involved in training and capacity building initiatives for the farmers and the unemployed youth across the state. The Principal Investigator being a crucial organ of

the University provides guidelines as well as monitor and evaluate the extension programmes. Taking the problem from the field to the research units and bringing the solutions for the farmers' problem and the VUTRCs are striving to build this linkage in the most effective manner through various activities. It also involves in organization of animal treatment and infertility treatment camps, farmers' training, exhibitions, farmers- scientist interaction, demonstrations etc. For strengthening the extension activities, various programmes are being implemented through ATMA and other government and non-government organisations. Extension is striving to bring the changes through the modern technology adoption in animal husbandry, dairy technology and fisheries for sustainable development and improved productivity for the farming communities. VUTRCs are also providing consultancy services to the livestock farmers according to their problems in the field of animal husbandry and providing disease diagnostic services to them by testing of blood, faecal, milk and urine samples at VUTRCs laboratory.

Thus, four principal functional areas of the VUTRCs are training, advisory, transfer of technology and





diagnostic facilities. The Veterinary University Training and Research Centres are headed by the Principal Investigator, VUTRC, RAJUVAS, Bikaner. Other faculty members of different VUTRC are working under the technical support of Principal Investigator, Veterinary University Training and Research Centre.

Veterinary University Training and Research Centre at Bakalia (Nagaur), Suratgarh (Sriganganagar), Kumher (Bharatpur), Bojunda (Chittorgarh), Churu, Malpura (Tonk), Dungarpur, Sirohi, Kota, Ajmer, Dholpur, Loonkaransar (Bikaner), Jodhpur and Jhunjhunu have become operational and Jhalawar and Jalore are under construction.

## Mandate

The mandate of Veterinary University Training and Research Centre (VUTRC) is to impart service of trainings to farmers on new technologies of animal husbandry and veterinary science to sustain and improve production of animal for better livelihood of farmers.

## Objectives

- To impart trainings, enhance awareness and to conduct demonstrations regarding breeding, feeding, management and health care of various

species of animals to enhance animal productivity.

- To disseminate technology at grass root level for improvement in animal productivity as well as socio-economic status of rural masses.
- Identification of local problems and to impart knowledge as well as prepare technology modules to mitigate the problems.
- To provide livestock and farm advisory services through various extension activity including literature for quick dissemination of technology.
- To assess and refine the latest technologies developed under control condition in field for their wider adaptation and collecting feedback information from field and generate production data for livestock farming.
- To have provision of services for animal disease diagnosis and treatments testing of feed & fodder as well as animal products.

## 1. Organization of Training Programmes:

The trainings are regularly imparted as an extension service to the livestock owners and farmers on all aspects of animal husbandry, so as to improve animal husbandry practices in the state for improved productivity of animals and better livelihood of the farmers.

## Training Programmes organized by VUTRCs (2019-20)

Centre	Training Programme					
	Off campus	On campus	Total Trainings	Male	Female	Total Participants
VUTRC, Churu	60	12	72	1186	581	1767
VUTRC, Kumher	60	12	72	1050	81	1131
VUTRC, Tonk	70	4	74	1582	130	1712
VUTRC, Bakalia	57	12	69	1662	66	1728
VUTRC, Dungarpur	60	12	72	529	1743	2272
VUTRC, Kota	61	12	73	1211	772	1983
VUTRC, Suratgarh	63	13	76	2182	221	2403
VUTRC, Chittorgarh	60	12	72	1231	613	1844
VUTRC, Sirohi	60	11	71	896	912	1808
VUTRC, Ajmer	55	0	55	908	727	1635
VUTRC, Loonkaransar	63	11	74	1907	47	1954
VUTRC, Dholpur	60	12	72	368	1531	1899
VUTRC, Jodhpur	68	8	76	1557	277	1834
VUTRC, Jhunjhunu	21	4	25	619	91	710
<b>Total</b>	<b>818</b>	<b>135</b>	<b>953</b>	<b>16888</b>	<b>7792</b>	<b>24680</b>





### Training Programmes organized by VUTRCs



### Participants Benefitted by Trainings organized by VUTRCs





## Technical Achievements:

Name of Achievement	Target (Annual)	Achievements	Participants								Grand Total
			Male				Female				
			SC	ST	Others	Total	SC	ST	Others	Total	
Off Campus Trainings	840	818	2113	950	11281	14344	1315	2422	3545	7282	21626
On Campus Trainings	168	135	520	306	1718	2544	126	169	215	510	3054
Transfer of Technology/ Demonstration	336	300	136	140	1075	1351	143	370	198	711	2062
Laboratory Diagnosis	8-10 sample per day for each VUTRC	2580	219	184	1378	1781	66	110	127	303	2084
Blood Sample		466	57	18	285	360	5	40	24	69	429
Faecal Sample		947	67	59	412	538	51	14	32	97	635
Urine Sample		82	2	5	72	79	0	0	3	3	82
Milk Sample		1036	83	102	571	756	10	56	67	133	889
Skin Scrapping		49	10	0	38	48	0	0	1	1	49
Vichar-Gosthi	336	238	603	222	2030	2875	199	498	735	1433	4308
Farmer- Scientist Interaction	168	113	311	140	1313	1879	61	250	173	489	2368
Awareness camps in school/college/ Panchayat etc. Regarding Veterinary Profession	336	174	845	269	3007	6855	523	315	1363	4206	11061
Development of region wise specific Mineral Mixture	Need based	0	0	0	0	0	0	0	0	0	0
Field visit to provide Veterinary Consultancy services	672-840	496	281	201	1453	1987	146	86	401	637	2624
PashuMela/ Kissanmela	At least once in a year for each VUTRC	5	215	225	485	1275	108	388	107	753	2028
Review (Feedback) of Livestock Farmers	840 (Review of least 5-10 farmers from the villages (after 2-3 months) for each VUTRC)	418	83	17	268	368	10	16	28	54	422
Success Story		48	4	0	42	47	0	0	1	1	48
Total		5325	5330	2654	24050	35306	2697	4624	6893	16379	51685



## Training programmes organized by other Centers of RAJUVAS (2019-20):

Centre/Scheme/Project	No. of Trainings	Participants		Total
		Male	Female	
Livestock Research Station, Chandan (Jaisalmer)	6	-	-	251
Centre for Diagnosis, Surveillance & Response of Zoonotic Diseases	14	211	44	255
College of Veterinary and Animal Science, Navania, Vallabh nagar, Udaipur	74	138	2161	2299
Animal Biomedical Waste Disposal Technology Centre, Bikaner	3	108	14	122
Centre for Studies on Wild Life Management & Health	3	237	20	257
AICRP on Goat Improvement, Livestock Research Station, Vallabh nagar	5	-	-	109
Livestock Feed Resource Management and Technology Centre, Bikaner	7	209	1	210
Centre for Conservation of Animal Biodiversity, Bikaner	15	401	263	664
Centre For Organic Animal Production Technology, Bikaner	2	58	-	58
Center for Disaster Management Technology for Animals, Bikaner	22	589	197	786
<b>Total</b>	<b>151</b>	<b>1951</b>	<b>2700</b>	<b>5011</b>

## Publication of Monthly Hindi Bulletin "PashuPalanNayeAayaam":

"PashuPalanNayeAayaam" a monthly bulletin is published by Directorate of Extension Education of the University. The bulletin contains information on animal husbandry practices, diseases and their prevention, improved feeding, breeding and management aspects for the use of livestock owners. In addition to this, important news in animal husbandry and agriculture sector, disease fore-warning and schedule of broad cast of "Dhine Re Batya" on AIR is also given. The bulletin is published on 1<sup>st</sup> of every month and 5000 copies disseminated to the farmers by post and during trainings. The bulletin has received wide appreciation and has been reported to be very useful by the farmers.

## Dhine Re Batya"Radio Programme:

University in its outreach activities exclusively for the farmers started a sponsored programme entitled "Dhine Re Batya" on All India Radio from 10<sup>th</sup> January, 2013 from Bikaner Aakashwani Kendra. The programme was broadcasted on every Thursday from 7.15 PM to 7.45 PM. Later, with the success of programme and upon receiving vast appreciation from farmers, on 14<sup>th</sup> May 2014 the broadcast of programme was extended to entire State i.e. now the programme is broadcasted from all the 17 Aakashwani Kendras of Rajasthan for half an hour from 5.30 PM to 6.00 PM on first and third Thursday of every month. The sponsored programme is entirely on animal husbandry sector for livestock owners and farmers. The subject matter specialists of different disciplines of veterinary and animal science deliver talks and discuss about various problems of livestock, adaptable technologies, scientific knowledge and other updates that may help the livestock owners for better livelihood from animal husbandry sector and scientific practices in terms of feeding, breeding, management and health control, may be adopted by livestock owners for improving productivity and health status of animals. In 2019-20, total 24 programmes of "Dhine Re Batya" were broadcasted through 17 Aakashwani Kendra of Rajasthan.



## DEE Organization of Exhibitions:

The major activities of DEE is to prepare exhibits, models, display boards, etc., arranging exhibitions, highlighting research achievements of the University in the fields of veterinary and animal science, and also to participate in exhibitions organised by other institutions/organisations at National and State levels. Directorate of Extension Education arranges several exhibitions at National, State, Zonal and District levels.

S.No.	Event	Place	Date
1.	VaghyanikSangosthi	CSWRI, Bikaner	30 <sup>th</sup> August, 2019
2.	KisanMela	CAZRI, Jodhpur	16 <sup>th</sup> September, 2019
3.	KisanMela	DIPR, Jaipur	17 <sup>th</sup> December, 2019
4.	ISAPM Conference	Durgapura, Jaipur	4-6 <sup>th</sup> February, 2020
5.	PUSAKrishiVighyanMela 2020	PUSA, New Delhi	1-3 <sup>rd</sup> March, 2020

### RAJUVAS exhibition at CSWRI, Bikaner

An exhibition was organised at CSWRI, Bikaner on 30 August 2019. Union Minister of State for Agriculture and Farmer Welfare Govt. of India Sh. Kailash Chaudhary observed models, charts, and panels, clolourful pictures of modern techniques and innovation of veterinary and animal husbandry.



### RAJUVAS exhibition at CAZRI, Jodhpur

An exhibition was organised at CAZRI, Jodhpuron 16th September, 2019. The fair was inaugurated by Sh. Kailash Chaudhary Union Minister of State for Agriculture and Farmer Welfare Govt. of India.

In this Kishan Mela modern techniques and innovation of veterinary and scientific methods of animal husbandry were displayed through models, charts, and clolourful pictures. This exhibition stall displayed by RAJUVAS was awarded the Second prize.



### RAJUVAS exhibition stall DIPR, Jaipur

RAJUVASexhibition stall was setup in the state level exhibition and kishan sammelan at Vidyadharnagar, Jaipur on 17<sup>th</sup> December, 2019. In this exhibition the concept of heritage gene bank of indigenous cattle breed promotion and upgradation work were modelled through the achievement of education, extension, research and developed by University. Farmer's innovative techniques and other activities were displayed through charts, models, flex and other materials. Thousands of farmers and livestock owners visited this exhibition and got information about the new techniques of animal husbandry.



### RAJUVAS exhibition at ISAPM Conference, Jaipur

RAJUVAS exhibition stall was organised at Durgapura, Jaipur on 4-6th February, 2020 during ISAPM Conference. On this occasion Hon'ble Governor and Chancellor Kalraj Mishra visited RAJUVAS exhibition and Vice Chancellor Prof. Vishnu Sharma appraised the University activity for well being of farmers.



## RAJUVAS Exhibition at PUSA, New Delhi

An exhibition was arranged by Directorate of Extension Education, RAJUVAS, Bikaner at PUSA, New Delhi on the occasion of PUSA Krishi Vigyan Mela from 1-3 March, 2020. Latest technologies of RAJUVAS in the field of veterinary science, animal husbandry and livestock production were exhibited. Many dignitaries and farmers visited and appreciated the university activities conducted for farmers.



## VUTRC Organization of Exhibitions:

VUTRCs also organize exhibitions, highlighting research achievements in the fields of veterinary and animal science, and also participate in exhibitions organised by other institutions/organisations at District level.

S.No.	Event	Place	Date
1.	PabulavTalabPashuMela	Pabulav, Jaswantgarh, Ladnoo	2 <sup>nd</sup> Sep to 5 <sup>th</sup> Sept, 2019
2.	Exhibition on 71 <sup>th</sup> Republic Day	Indira Gandhi Stadium , Chittorgarh	26 <sup>th</sup> Jan, 2020
3.	Farmer Fair And Jal Shakti Abhiyan	KVK, Chittorgarh	17 <sup>th</sup> Sept, 2019
4.	Exhibition stall	Farmers fair Sujangarh and Bidasar	3 <sup>rd</sup> Sep 2019 and 20 <sup>th</sup> Sep 2019
5.	Exhibition in KissanMela	CAZRI	16 <sup>th</sup> Sept, 2019

## Sixth Meeting Extension Education Council:

The 6<sup>th</sup> meetings of the Extension Education Council of the University was held on 14<sup>th</sup> February, 2020 under the Chairmanship of Prof. Vishnu Sharma, Vice Chancellor, RAJUVAS, Bikaner. Hon'ble Vice-Chancellor in his opening remarks stated that University playing an important role in transfer of technology through one KrishiVigyan Kendra at Nohar, Hanumangarh and fourteen Veterinary University Training and Research Centres (VUTRCs), established in various district of Rajasthan i.e. Suratgarh (Sri Ganganagar), Bakalia (Nagaur), Bojunda (Chittorgarh), Kumher (Bharatpur), Dungarpur, Dholpur, Lunkaransar (Bikaner), Sirohi, Tonk, Jhunjhunu, Kota, Churu, Jodhpur and Ajmer and covering 15 districts of Rajasthan. These centres are actively involved in the extension activities and working with the aim to uplift the socio-economic status of the rural masses. He also said that Local problems of the district should be identified and respective VUTRCs should provide the trainings and services to the livestock farmer according to the need identified. Every VUTRC should be expertized in one or two specific aspects of Animal Husbandry and Veterinary Science so that each VUTRC should make the identity of the centre in the whole district. Prof. A.A. Gauri, Director Extension Education presented the agenda of the 6<sup>th</sup> Extension Education Council meeting. Principal Investigator, Veterinary University Training and Research Centre, Prof. R.K. Dhuria informed to house about the major achievements of the VUTRCs during the year 2018-19. Officer Incharge of all the VUTRC and KrishiVigyan Kendra, Nohar, Hanumangarh presented their progress reports.







## Mera Gaon Mera Gaurav Programme:

After launching of the “Mera Gaon Mera Gaurav (My Village My Pride)” by Hon'ble Prime Minister on July, 2015 and the directives received from the ATARI, Jodhpur, Rajasthan University of Veterinary & Animal Sciences, Bikaner constituted 41 teams of multidisciplinary scientists. These teams have adopted 142 villages. Out of these villages 134 villages has been covered and activities carried out during the year 2019-20. Teams have conducted 236 visit to village, 200 interface meetings, 18 demonstrations related to animal husbandry and 42 training programmes covering animal nutrition, breeding, health care and reproduction, 434 Mobile



based advisories, 220 Literature support provided and 166 General Awareness created aspects in adopted villages. In these activities total 19389 farmers and livestock owners were benefitted. Activities have been carried out through creating strong linkages with Government, Non-government, Cooperatives and NGOs in convergence mode. The teams are regularly visiting the selected villages and imparting the latest information on animal husbandry and agriculture to the farmers through different extension tools like gosthi, mobile phones, literature, community radio etc. They are also sensitizing them with issues of national interests

S. No.	Activity Name	PGIVER, Jaipur		CVAS, Udaipur		CVAS, Bikaner		Director Research, RAJUVAS, Bikaner		Director Extension Education		Total	
		A	P	A	P	A	P	A	P	A	P	A	P
1	Visit to Village	2	161	0	0	72	1994	15	100	147	2796	236	5051
2	Interface Meeting/Gosthies	6	161	21	276	33	1321	8	250	132	2402	200	4410
3	Trainings conducted	0	0	0	0	9	927	10	22	23	526	42	1475
4	Demonstration Conducted	0	0	0	0	6	391	0	0	12	115	18	506
5	Mobile based advisories	13	55	0	0	85	462	20	20	316	452	434	989
6	Literature/ Publication/ Pamphlate	5	160	21	276	59	1296	0	0	135	1477	220	3209
7	Awareness created	0	0	0	0	88	1086	5	45	73	2618	166	3749
	<b>Total</b>	<b>26</b>	<b>537</b>	<b>42</b>	<b>552</b>	<b>352</b>	<b>7477</b>	<b>58</b>	<b>437</b>	<b>838</b>	<b>10386</b>	<b>1316</b>	<b>19389</b>

Note: A: Activity, P=Participate

## Three days Gaushala Managers/ Dairy Moderators Training Programmes:

Three days training programmes were organized for gaushala managers/ dairy moderators of Bikaner division at Rajasthan University of Veterinary and Animal Sciences, Bikaner campus on 18-20 July, 9-11 October and 11-13 December 2019, respectively. These training programmes were organized in collobaration with Department of Gopalan, Govt. of Rajasthan and Directorate of Extension Education, RAJUVAS, Bikaner. Total 109 gaushala managers/ dairy moderators participated and were benefitted.





**Orientation Training Programmes for faculty of RAJUVAS:**

Three orientation training programmes were conducted for newly recruited Assistant Professor of Rajasthan University of Veterinary and Animal Sciences, Bikaner on "Teaching Methodology" to strengthen the faculty performance organized by Directorate of Extension Education, RAJUVAS, Bikaner on 28 March to 17 April 2019, 10-30 May 2019 and 21 June to 11 July 2019 and 33, 35 and 32, total 100 faculty members were participated and benefitted, respectively. Hon'ble Vice-Chancellor, Prof. Vishnu Sharma said that these orientation training programmes are an opportunity which helps in understading the scientific approach of effective teaching methods by increasing the efficiency of administrative, financial and management skills. He called upon the Assistant Professor to improve their personality by addressing their doubts with experienced faculty. He also said that the orientation training programme has been designed in such a way that the teachers can help in effective training by upgrading contemporary knowledge science.



## 7. Dignitaries Visit

1. Dr. N.S. Rathore, Deputy Director General (Education), ICAR, New Delhi visited PGI-VER, Jaipur on 11<sup>th</sup> April, 2019. Dr. Rathore emphasized on the role of agricultural graduates in the future in his address to the faculty and post-graduate students. He advised everyone to proceed towards their goals with a positive attitude in life. Prof. Vishnu Sharma, Vice-Chancellor, RAJUVAS acquainted him about the recent achievements of RAJUVAS like 12B Certification to RAJUVAS by UGC; inclusion of CVAS, Navania into First Schedule of VCI, New Delhi; excellent position of RAJUVAS in NIRF Ranking and others. Prof. Sanjita Sharma, Dean, PGI-VER acquainted him about the various activities and achievements of PGI-VER.



Animal Husbandry Sh. Bhajanlal Jatav, MLA Adarshnagar Rafeek Khan, Vice-Chancellor Prof. Vishnu Sharma and Dr. Shailesh Sharma, Director, Animal Husbandry visited PGI-VER, Jaipur on 21<sup>st</sup> October, 2019. They visited different departments, LFC VCC, and other units of the institute and get acquainted with the available facilities.

4. The Chairman of Rashtriya Kamdhenu Aayog Dr. Vallabhbhai Kathiria visited RAJUVAS on 13<sup>th</sup> October 2019. Dr. Kathiria interacted with Dean, Directors, Heads of Department, PI of research projects and M.V.Sc and Ph.D students. Vice-Chancellor Prof. Vishnu Sharma appraised about the heritage gene bank concept of RAJUVAS and conservation and up-gradation work on indigenous cattle i.e. Rathi, Tharparkar, Kankrej, Sahiwal, Gir and Malvi at eight Livestock Research Station of the University. Dr. Kathiria called upon the scientists of the university to make scientific verification of cow products and Kamdhenu Aayog will accord necessary financial resources.



2. Dr. S.S. Dahiya, Director, CIRB, Hisar along with Dr. K.P. Singh Project Incharge visited LRS, Vallabhnagar and CVAS, Navania (Udaipur) on 9<sup>th</sup> May 2019. Dr. S.S. Dahiya praised the work of National Project on Buffalo Improvement project and assured the students to provide resources and facilities available at CIRB, Hisar for research work. Dean, Prof. R.K. Dhuria informed about the contribution of Surti Buffalo in southern Rajasthan. A Hindi folder for livestock owners on 'Surti Buffalo at a Glance' was released. Event was coordinated by Dr. Mitesh Gaur, Project Incharge.
3. Hon'ble Cabinet Minister of Agriculture and Animal Husbandry Sh. Lal Chand Kataria, Hon'ble State Minister for Agriculture and



5. Formal Vice-Chancellor of MPUAT, Udaipur and Ex-DDG (Education), ICAR Prof. S.L. Mehta along with Director-ATARI, Jodhpur Dr. S.K. Singh have made formal visit at RAJUVAS on 13<sup>th</sup> December, 2019. Vice-Chancellor Prof. Vishnu Sharma appraises all the activities of RAJUVAS. An interaction meeting with Dean, Directors and Head of departments was also organized. Former Vice-Chancellor, RAJUVAS Prof. A.K. Gahlot and distinguished guests also interacted with Gaushala Managers of the Bikaner division.
6. Chief General Manager of NABARD Sh. Suresh Chand visited RAJUVAS on 3<sup>rd</sup> October 2019. Vice-Chancellor Prof. Vishnu Sharma appraises all the activities of teaching, research projects, different animal welfare works and schemes of RAJUVAS. During interaction with Dean-Directors of the University, Head of Department and PI of Research Projects, CGM Sh. Suresh Chand said that NABARD and RAJUVAS will work together for animal welfare schemes to doubling the income of farmers. Sh. Ramesh Tambia, Regional Manager, NABARD, Bikaner was also present.



7. Mr. Pawan Kumar Goyal, Additional Chief Secretary, Department of Agriculture and Animal Husbandry visited PGI-VER, Jaipur on 1<sup>st</sup> June 2019 on the occasion of world milk day and participated as chief guest in one day Awareness Training Programme.
8. Dr. Sailesh Sharma, Director, Department of Animal Husbandry visited PGI-VER, Jaipur on 1<sup>st</sup> June 2019 on the occasion of World Veterinary Day and "Annual Day" of PGIVER, Jaipur. On



this occasion different cultural programmes like songs, group dance, skit, monoacting etc. were presented by the students. A free anti-rabies vaccination and free health check up camp was also organized on this occasion.

9. Air Commodore R. M. Kumarasami, Deputy Director General, NCC Directorate Rajasthan, Jaipur visited 1<sup>st</sup> Raj R & V SQN, CVAS, Bikaner on 05.11.2019. Horse show was held on this occasion by the cadets of unit.
10. Prof. Bhagirath Singh Bijarniyan, Vice-Chancellor, MGSU, Bikaner, Prof. H.D. Charan, Vice-Chancellor, Bikaner Technical University, Bikaner, Dr. N.V. Patil, Director, CIRC, Meerut and Dr. S.S. Dahiya, Director, CIRB, Hisar visited RAJUVAS, Bikaner on 18<sup>th</sup> May on the occasion of RAJUVAS Foundation Day. Decade year of RAJUVAS was celebrated with great enthusiasm. Hon'ble guests of the function released the 'logo' of the decade year celebrations. RAJUVAS has signed two separate MoUs with Central Institute for Research on Buffaloes, Hisar and Central Institute for Research on Cattle, Meerut.
11. Hon'ble Minister of Animal Husbandry Sh. Lal Chand Kataria, Hon'ble Minister of State for Higher Education Sh. Bhanwar Singh Bhati, MLA Khajuwala, Sh. Govind Ram, Chairman, ASRB, New Delhi and Prof. A.K. Mishra graced the occasion of Third Convocation of RAJUVAS on 8th August. Prof. Vishnu Sharma, Vice-Chancellor RAJUVAS read the convocation message of Hon'ble Governor of Rajasthan and Chancellor Sh. Kalyan Singh Ji.





## 8. Memorandum of Understanding

S.No	Date of Start	MoU Between RAJUVAS
1.	05/08/2014	Indian Institute of Technology, Kharagpur, (IIT)
2.	27/12/2014	Sahaj Inclusive Opportunities (India) Pvt. Ltd. Jaipur
3.	28/02/2016	Ayurvet Limited
4.	20/01/2017	Extension Reliance Industry Limited
5.	11/05/2017	Animal Breeding Centre, Salon, Raebareilly- U.P. (Embryo Transfer technology)
6.	16/04/2015	शहर नव्यानीयान गोचर भूमि संरक्षण एवं विकास समिति, बीकानेर
7.	18/12/2015	MicroGram Social Development Foundation, Bengaluru
8.	18/12/2015	Prakartik Trust Bangalore
9.	28/12/2015	URMUL TRUST, Bikaner
10.	25/04/2016	Mahavtar Babaji Kamdhenu Goshala, Kanak, Vrindava
11.	08/02/2017	Agriculture Skill Council of India (ASCI)
12.	29/04/2017	Indian Veterinary Research Institute Deemed University, Izatnagar-U.P.(IVRI)
13.	25/05/2017	CCS National Institute of Animal health, Baghpat (Post Graduate Training and Research)
14.	05/08/2017	NATIONAL RESEARCH CENTRE ON CAMEL, BIKANER (NRCC)
15.	18/05/2019	ICAR- Central Institute for Research on Buffaloes, Hisar
16.	18/05/2019	ICAR- Central Institute for Research on Cattle (CIRC)
17.	20/05/2019	Indian Oil Corporation Limited (IOCL)
18.	05/07/2019	National Agri-Food Biotechnology Institute (NABI)
19.	05/11/2019	Startup Oasia and Rajasthan Veterinary University, Bikaner
20.	30/12/2019	Swami Keshwanand Rajasthan Agricultural University (SKRAU)
21.	30/12/2019	Extension Ayutvet Limited
22.	31/12/2019	Extension Sahaj Inclusive Opportunities (India) Pvt. Ltd. Jaipur
23.	10/01/2020	Rajasthan Woollen Industries Association
24.	16/01/2020	Umbrella ICAR
25.	18/03/2020	Extension Reliance Industry Limited



## 9. Award

The following students of the University felicitated for appearing in the University merit list

S. No.	Name	Rank	College
<b>First Year B.V.Sc. &amp; AH - 2019</b>			
1.	Kshitij Pareek	I Rank	AVC, Sikar
2.	Anmol Singh	II Rank	ACVM, Jaipur
3.	Jove Jacob	III Rank	ACVM, Jaipur
4.	Rahul Singh Rathore	IV Rank	MJFCVAS, Chomu
5.	Anima Sharma	V Rank	MJFCVAS, Chomu
<b>Second Year B.V.Sc. &amp; AH - 2019</b>			
6.	Tejpal	I Rank	PGIVER, Jaipur
7.	Kamalesh V.	II Rank	ACVM, Jaipur
8.	Hardik Arya	III Rank	ACVM, Jaipur
9.	Ranveer Godara	IV Rank	PGIVER, Jaipur
10.	Sakshi Poonia	V Rank	PGIVER, Jaipur
<b>Third Year B.V.Sc. &amp; AH - 2019</b>			
11.	Yogesh Dokwal	I Rank	PGIVER, Jaipur
12.	Akansha Sharma	II Rank	CVAS, Bikaner
13.	Meenu Todwal	III Rank	PGIVER, Jaipur
14.	Divya Choudhary	IV Rank	CVAS, Bikaner
15.	Yamini Khatri	V Rank	CVAS, Vallabhnagar, Udaipur
<b>Fourth Year B.V.Sc. &amp; AH - 2019</b>			
16.	Priya Darshika Shekhawat	I Rank	PGIVER, Jaipur
17.	Bhavneet Singh Wadhwa	II Rank	AVC, Sikar
18.	Keshav Gaur	III Rank	CVAS, Bikaner
19.	Vishal Yadav	III Rank	PGIVER, Jaipur
20.	Garima Rathore	IV Rank	CVAS, Vallabhnagar, Udaipur
21.	Praveen Kumar Gill	V Rank	AVC, Sikar
<b>Final Year B.V.Sc. &amp; AH - 2019</b>			
22.	Inupala Sreenavya	I Rank	MJFCVAS, Chomu
23.	Manju Alexander	II Rank	AVC, Sikar
24.	Silpa S.	III Rank	AVC, Sikar
25.	Parvathy R.S.	IV Rank	AVC, Sikar
26.	Priyanka Kumari	V Rank	CVAS, Navania, Vallabhnagar
27.	Battagiri Sangita	V Rank	MJFCVAS, Chomu



## Award received by CVAS, Bikaner during 2019-20

S.No.	Name of Faculty	Name of Award	Awarding Authority
1.	Dr. Ashok Kumar	Research Article with NAAS rating 8.05	Journal Cryobiology
2.	Dr. S.K. Jhirwal	Gold Medal for the best paper presented	42 <sup>nd</sup> Annual congress of ISVS at Navsari, Gujarat.
		Gold Medal for Best Clinician Award	43 <sup>rd</sup> Annual Congress of ISVS at JUVAS, Hisar from 14 to 16 November 2019
3.	Prof. R.K. Dhuria	Fellowship	Indian Society for Advancement of Canine Practice (FISACP).
4.	Prof. Anil Ahuja	ISACP Award -2020	17th National Seminar of Indian Society for Endowment of Canine Practice held at Jabalpur from 21-23 January, 2020
5.	Dr. Rajesh Nehra	Best Oral Presentation	International conference on nutritional strategies for improving farm profitability and clean animal production organized at West Bengal University of Animal and Fishery Sciences, Kolkata from 17-19 December, 2019
6.	Dr Neeraj Kumar Sharma.	Young Scientist Award	ISAE National Seminar-2019 on "Holistic Approach for Enhancing Agricultural Growth in Changing Rural Scenario" Swami Keshwanand Rajasthan Agricultural University held during 14-16 November, 2019
7.	Dr. J.P. Kachhawa-	Appreciation Award	National symposium on "Sustainable Improvement in Animal Health and Production-Bridging Science and Policy for Economic Upliftment of Farmers" held at DUVASU, Mathura on November 8-9, 2019
8.	Dr. Sunita Choudhary	Best oral presentation	National symposium on "Sustainable Improvement in Animal Health and Production-Bridging Science and Policy for Economic Upliftment of Farmers" held at DUVASU, Mathura on November 8-9, 2019
9.	Prof. R.K. Dhuria	Fellowship	Indian Society for Advancement of Canine Practice (FISACP).
10.	Dr. Pramod Dhatarwal	Best Research Paper Presentation Award	XXXV ISSAR and International Symposium on Global Perspective to Enhance Livestock Fertility through Modern Reproductive Technique for Doubling Farmers Income, TANUVAS, Tamilnadu 18-20 Dec. 19
11.	Dr. Deepika Dhuria	Best Poster Award	National symposium on "Sustainable Improvement in Animal Health and Production-Bridging Science and Policy for Economic Upliftment of Farmers" held at DUVASU, Mathura on November 8-9, 2019
12.	Dr. Tara Chand Nayak Ph.D. Scholar	Best Participant Award	National symposium on "Sustainable Improvement in Animal Health and Production-Bridging Science and Policy for Economic Upliftment of Farmers" held at DUVASU, Mathura on November 8-9, 2019
13.	Dr. Siddharth Singh Rathore M.V.Sc. Scholar	Best M.V.Sc Thesis Award	3 <sup>rd</sup> National Conference of "Society For Veterinary and Animal Husbandry Extension" 3 to 5 April, 2019 Organized by GBPUAT, Pantnagar (Uttarakhand).
14.	Dr. Abhilasha Dadhich Ph.D. Scholar	WAAVP Students travel award	World Association for the Advancement of Veterinary Parasitology held in Madison, USA from 7 <sup>th</sup> to 11 <sup>th</sup> July 2019
15.	Dr. Saurabh Singh Singhal Ph.D. Scholar	First prize in Poster presentation	International Conference on "Environmental & Climatic consequences & mitigation strategies" organized by Sangam University, Bhilwara from 21-22 December 2019.
16.	Dr. Abhishek Kain PG Scholar	Second prize in Oral paper presentation	International Conference on "Environmental & Climatic consequences & mitigation strategies" organized by Sangam University, Bhilwara from 21-22 December 2019.





RAJUVAS won two medals in All India Agricultural Universities Youth Festival “Agriunifest 2020” held at Raipur, Chattishgarh from 08-12.02.2020. RAJUVAS won second prize in SKIT and third prize in Mime competitions.

## Award received by CVAS, Navania, Udaipur during 2019-20

S. No.	Name of faculty	Name of award-details	Awarding authority
1.	Dr. Sudeep Solanki	Bharat Ratna Rajiv Gandhi Gold Medal Award	Global Economic Progress & Research Association, New Delhi
2.	Dr. Shantanu Kumar Kuldeep	Bharat Vikash Award	Institute of Self Reliance at Bhubaneswar, Odisha
3.	Dr. R.K. Khinchi	Best Participant Award	Veterinary Internal and Preventive Medicine society (VIPM), DUVASU, Mathura
4.	Dr. Sandhya Morwal	Young Researcher 2019	Centre for Education Growth and Research (CEGR) New Delhi
		Best Participant Award	Veterinary Internal and Preventive Medicine society (VIPM), DUVASU, Mathura
5.	Dr. Dinesh Manoharrao Chavhan	Best Oral Presentation Award	Association of Animal Scientists (AAS), CVS & AII, Mhow, Madhya Pradesh
6.	Dr. Monika Joshi	Distinguished Woman Award	5 <sup>th</sup> International Woman Award VIWA, Chennai, India 7 <sup>th</sup> March 2020
		Official Spotlight Award	At Bangalore by Education Expo EET CRS Research
		Best PhD Thesis Award	International Seminar on Modern Agriculture Approches in 21 <sup>th</sup> Century on 2019
7.	Dr. B.S. Saini	Best oral presentation	ICECC-2019 at Sangam university, Bhilwada.
8.	Dr. Sunil Arora	Best Poster presentation	ICECC-2019 at Sangam university, Bhilwada.





## Award received by PGIVER, Jaipur during 2019-20

S.No.	Name of Faculty	Name of Award	Awarding Authority
1.	Dr. Anurag Pandey	1 <sup>st</sup> Prize in Poster Session	International Symposium & Conference "IMSACON-IX" during 6-8 November, 2019 CSK Himachal Pradesh Agricultural University, Palampur, Kangra (H.P.)
		2 <sup>nd</sup> Prize in Oral Presentation	
2.	Dr. Shrawan Kumar Meel M.V.Sc. Scholar	3 <sup>rd</sup> Prize in Poster Session	International Symposium & Conference "IMSACON-IX" during 6-8 November, 2019 CSK Himachal Pradesh Agricultural University, Palampur, Kangra (H.P.)
3.	Dr. Monika Karnani	Best Prize in Poster Session	International Conference on "Nutritional Strategies for Improving Farm Profitability and Clean Animal Production" from 17 <sup>th</sup> to 19 <sup>th</sup> December, 2019 at West Bengal University of Animal and Fishery Sciences, Kolkata
4.	Dr. Navav Singh	Society Journal Award- Dr. Maheswar Mishra Award	ISAPM held from 4 <sup>th</sup> -6 <sup>th</sup> February, 2020 State Institute of Agriculture Management, Durgapura, Jaipur
5.	Dr. Nirmal Kumar Jeph	Appreciation Award	1 <sup>st</sup> Annual Convention of VIPM Society from 08-09 November, 2019 DUVASU, Mathura
6.	Dr. S.K. Rewani	Young Extension Scientist Award	SVAHE National Conference 3 <sup>rd</sup> -5 <sup>th</sup> April, 2019 at G.B. Pant University of Agriculture & Technology, Pantnagar (Uttarakhand)
7.	Dr. Sandeep Kumar Sharma	Best Oral Presentation Award	1 <sup>st</sup> Annual Convention of VIPM Society from 08-09 November, 2019 DUVASU, Mathura
8.	Prof. G.C. Gahlot	Fellow Award	Society for Conservation of Domestic Animal Biodiversity, CVSAH, Mhow from 10-11 February, 2020.
9.	Dr. Sandeep Kumar Sharma	best oral presentation	1 <sup>st</sup> Annual Convention of VIPM Society from 08-09 November, 2019 DUVASU, Mathura
10.	Dr. Sanjita Sharma	Society Patron Encouragement Award	Annual Convention of ISAPM held from 4 <sup>th</sup> -6 <sup>th</sup> February, 2020 State Institute of Agriculture Management, Durgapura, Jaipur
11.	Dr. Sanjita Sharma	Appreciation Award	Hindi Granth Academy, Govt. of Rajasthan
12.	Dr. Satyaveer Singh	Gold Medal' in oral presentation and 'Appreciation Award'	43 <sup>rd</sup> Annual Congress of Indian Society for Veterinary Surgery 14 - 16 November, 2019 College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar
13.	Dr. Y.R. Ambedkar Ph.D. Scholar	2 <sup>nd</sup> Prize in Poster Presentation	International Conference organized by SKNAU, Jobner, Jaipur and National Agriculture Development Co-Operative Ltd., Zainakotte, Srinagar, Jammu & Kashmir from 7 <sup>th</sup> to 9 <sup>th</sup> December, 2019.





## 10. University Publication

**पशु पालन नए आयाम**  
 Volume 18  
 Issue 18  
 April-June, 2019  
 Rajasthan University of Veterinary & Animal Sciences, Bikaner

**कोशल विकास व दक्षता संवेदन हमारा लक्ष्य**

कोशल विकास व दक्षता संवेदन हमारा लक्ष्य है। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें।

**सुलभता संवेदन**

सुलभता संवेदन हमारा लक्ष्य है। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें।

**RAJUVAS Newsletter**  
 April-June, 2019  
 Volume 18  
 Issue 18  
 Rajasthan University of Veterinary & Animal Sciences, Bikaner

**From Vice-Chancellor's Desk**

Dear Readers,

I feel pleasure to start with my views regarding the development of RAJUVAS. The development of RAJUVAS is a continuous process and we are committed to providing the best quality education and research facilities to our students and faculty members.

**पशु आहार एवं चारा बुलेटिन**  
 Volume 18  
 Issue 18  
 April-June, 2019  
 Rajasthan University of Veterinary & Animal Sciences, Bikaner

**स्वस्थ और उत्पादक पशुधन ही है, हमारी बहुमूल्य पूंजी**

स्वस्थ और उत्पादक पशुधन ही है, हमारी बहुमूल्य पूंजी। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें। यह एक ऐसी अवस्था है, जिसमें हमारे देश के पशुपालक अपने पशुओं को उचित देखभाल दे सकें और उन्हें उच्च उत्पादन दे सकें।

**RAJUVAS**  
 At A Glance  
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 Toll Free Helpline : 18001806224

**e-Bulletin**  
 FOR VETERINARY SCHOLARS  
 VOLUME : 1  
 FEBRUARY, 2020  
 ISSUE : 3  
 Vice-Chancellor's Message  
 Vice-Chancellor's Message  
 Vice-Chancellor's Message

**राजुवास स्वर्णिम दशक 2010-2020**  
 राजस्थान पशुचिकित्सा और पशु विज्ञान विश्वविद्यालय  
 बीकानेर (राजस्थान)

**Annual Report 2018-19**  
 Rajasthan University of Veterinary and Animal Sciences  
 Bikaner-334 001 (Rajasthan)

**पशुपालक कैलेंडर 2020 मासिक निर्देशिका**  
 विश्वविद्यालय मुख्यालय  
 नव वर्ष की हार्दिक शुभकामनाएं  
 शुभेच्छु  
 प्रो. (डॉ.) विष्णु शर्मा  
 कुलपति  
 राजस्थान पशुचिकित्सा और पशु विज्ञान विश्वविद्यालय  
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**वार्षिक प्रगति प्रतिवेदन 2019-2020**  
 राजस्थान पशुचिकित्सा और पशु विज्ञान विश्वविद्यालय  
 बीकानेर (राजस्थान)



# विश्वविद्यालय कुलगीत

वन्दन राजुवास, अभिनन्दन राजुवास  
राजस्थान पशुचिकित्सा पशु विज्ञान विश्वविद्यालय  
ज्ञान विज्ञान, प्रशिक्षण, शिक्षण, प्रसार और नवशोध आलय  
राजस्थान पशुचिकित्सा पशु विज्ञान विश्वविद्यालय  
लक्ष्य चिकित्सा, पशु स्वास्थ्य व आर्थिक युग का अवलंबन  
नवल नस्ल संधान, नई तकनीक विकास, प्रगति का स्पंदन  
व्याधि नियंत्रण, खाद्य प्रबंधन, पशु उत्पाद प्रवर्तन  
कृषि नीति का पंथ प्रदर्शन, शस्य श्यामला संवर्द्धन  
गौरव प्रदेश का शीर्ष देश का, मरु संस्कृति की लय  
राजस्थान पशुचिकित्सा पशु विज्ञान विश्वविद्यालय  
पशुधन का कल्याण सर्वदा, दुग्ध, दधि, लवनी आह्लाद  
मरुभूमि की सरस सम्पदा, सत्यं शिवं सुन्दरं नाद  
पर्यावरण प्रिय, सत्व सखा, और ग्राम्यजन उपकारी  
कृषक मित्र पशुधन संरक्षक, यही सर्वजन हितकारी  
सर्वे भवन्तु सुखिनः दृष्टा, कारक जगत निरामय  
राजस्थान पशुचिकित्सा पशु विज्ञान विश्वविद्यालय  
पशुधनं नित्यं सर्वलोकोपकारकं  
जय पशुधनं, जय जय पशुपालकं  
जय जय राजुवास, जय जय राजुवास, जय जय राजुवास



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